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THE ECONOMICS OF HYBRID ORGANIZATIONS

By

Claude Ménard

Centre *ATOM*

University of Paris (Pantheon-Sorbonne)

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Claude Menard, University of Paris (Pantheon-Sorbonne)

I: INTRODUCTION

The idea of this address grew out of a comment from Ronald Coase on a paper I published in 1996. The title of the article was: “On Clusters, Hybrids, and other Strange Forms”¹. Ronald’s comment was about my use of the term “strange forms” in the title: he pointed out that the modes of organizations I analyzed in that paper represented the dominant form in business activities. The research underlying my 1996 paper was inspired by the seminal article of Oliver Williamson on “Comparative Economic Organization”, in which Oliver also emphasized the importance of what he identified as “hybrids” (Williamson, 1991)².

The blooming literature on these arrangements provides a clear indication of the increasing interest for the issues they raise. Until the mid eighties, beside some pioneering papers on inter-firm contracts (Klein, Crawford and Alchian, 1978; Ouchi, 1980; Eccles, 1981; Cheung, 1983) or franchising (Rubin, 1978) and notwithstanding efforts from Williamson (1975) who emphasized the role of “non-standard contracting”, very little was published. A turning point is the transformation in the mid-1980’s of transaction cost economics into an empirical research program (e.g., Williamson, 1985; Masten 1984; Palay, 1984; Joskow, 1985) that rapidly became influential in managerial sciences (Thorelli, 1986) and sociology (Granovetter, 1985)³. However, the real takeoff happened in the 1990’s, with the majority of contributions in non economics journals. In a survey from 1995, Grandori and Soda reviewed over 160 papers (but only 16 from economic journals) on “inter-firm networks”, among which a very significant number were inspired by transaction cost economics. In 1999, Ghosh and John began an influential paper in emphasizing the dominant role of transaction cost economics in studies on inter-firm relationships in management and marketing sciences⁴.

Although some questions have been raised about the importance of studying hybrid organizations in economics (Nickerson, 2001; Hodgson, 2002), the probability is high that the

¹ The exact reference is: “On Clusters, Hybrids and Other Strange Forms: The Case of the French Poultry Industry”. *Journal of Institutional and Theoretical Economics*, 1996, 152 (1): 154-183

² This is also in line with an earlier comment from Klein, Alchian and Crawford (1978) according to which “business relationships are often structured in highly complex ways not represented by either a simple rental or by simple vertical integration”.

³ The development of agency theory is also part of the story, particularly when it comes to the analysis of franchising (see Brickley and Dark, 1987).

⁴ « Transaction cost economics has become the dominant paradigm for analyzing issues in several areas of marketing, including inter-firm relationships, channel structure, foreign market entry, and so on » (Ghosh and John, 1999, p. 131). This is confirmed by many other sources (e.g., Gulati, 1998; or Anderson and Gatignon, 2002).

considerable role of these arrangements in shaping and monitoring economic activities will generate a growing flow of theoretical models and empirical studies. And I expect new institutional economists to take a significant share of these researches. This prediction is based on the pioneering contributions made by the heirs of Coase to the exploration of the diversity of governance structures, which should be no surprise. It is also a logical anticipation if we consider the full meaning of the concept of “institutional structure of production” (Coase, 1991) and the ongoing developments in the analysis of the institutional environment and of its impact on how transactions are organized (North, 1991). Indeed, the choice of a specific governance structure, the development and stability of hybrid organizations, and their characteristics are deeply embedded in their environment (Oxley, 1999).

In the following pages, I shall substantiate these views. I do not intend to review the impressive literature already available. I will rather focus on some fundamental properties of hybrid organizations, with a particular emphasis on contributions coming from a transaction cost perspective. The paper is organized as follows. Section II describes the heterogeneity of arrangements that can be labeled as “hybrid organizations”, but also identifies some empirical regularity in the extensive literature on the topic. Section III analyzes some characteristics of the transactions monitored by hybrids. Section IV examines what I consider the core mechanisms that define their governance. The underlying framework is derived from the “discrete alignment principle” (Williamson, 1991). Section V concludes with a quick glance at some critical issues and challenges for future researches on hybrid organizations. Although I refer mostly to published papers, drawing my conclusions from a diversified set of empirical studies, I will also substantiate my analysis with researches to which I have been associated over the last years⁵.

II: WHAT ARE HYBRID ORGANIZATIONS?

Although the institutional dimension of markets is much more important than what economic theory suggests, there is a sense of common knowledge about them, with the mechanics of supply and demand at the core and the role of prices as the key to adaptation. Similarly, and notwithstanding challenges regarding their main characteristics and their blurred boundaries, firms represent a familiar object, with the central role of hierarchy in making decisions and adjusting. When it comes to arrangements “in between”, the terrain is moving. The vocabulary itself is not stabilized: besides hybrids, one can read papers about clusters, networks, symbiotic arrangements, supply chain systems, administered channels, non standard contracts, and so forth. My starting approach to this apparently

⁵ I would like to thank all my colleagues from ATOM, with whom I have developed many of the following ideas over the last ten years. For this paper, Loic Sauvee, from ISAB, deserves a special mention, since he considerably extended my knowledge of the literature in management sciences.

undefined set of organizations will be empirical, with a quick description of forms recurrently identified as distinct from markets and hierarchies (subsection 1). I will then emphasize some regularity in the abundant literature on these forms (subsection 2).

II.1: A collection of weirdos?

From loose clusters of firms to quasi-integrated partners, the set of arrangements that rely neither on markets nor on hierarchies to coordinate is wide and potentially confusing⁶. There is indeed a great diversity of agreements among legally autonomous entities doing business together, mutually adjusting without the help of the price system, and sharing or exchanging technologies, capital, products and services without unified ownership. These characteristics are likely minimal to encapsulate the variety of hybrid forms. Let us start with a quick view at some forms more extensively documented.

In a pioneering study, Eccles (1981) showed how subcontracting uses mechanisms that are distinct from markets and hierarchies. Using a sample of 38 homebuilders, he analyzed the relationships between general contractors and their subcontractors. Over 80 % of subcontractors were selected through negotiations, the remaining 20% being chosen through formal competitive bidding⁷ in order to maintain some market pressures. Moreover, although contracts are of the short term type, related to specific projects, the contractual relationships were durable, the general contractors largely doing business with the same partners. In almost all cases, they have been working together for over five years; in one case the relationship has been going on for 37 years. Numerous studies have been published since on subcontracting based on durable relationships and on its role in coordinating more efficiently than through market, without integrating⁸.

Another concept developed a bit later was that of network of firms (Thorelli, 1986; Powell, 1990). It is a very generic term, widely spread in sociology and management sciences, and that covers about all arrangements defining a set of recurrent contractual ties among autonomous entities. Two subsets have been more extensively studied. One is the supply chain system adopted to coordinate in many industries, with the typical example of the agrifood industry⁹. Coordinating quantity or quality, or both, seems to be the engine here, and the stability of the arrangements a very sensitive issue (Fearne, 1998; Raynaud, Sauvée, Valceschini 2002). The other subset is about distribution channels (Brown, 1984; John and Weitz, 1988; Ghosh and John, 1999; Anderson and Gatignon, 2002). The

⁶ « ... the increase in the number of studies [on inter-organizational relations and networks] has contributed to a rather messy situation marked by a cacophony of heterogeneous concepts, theories, and research results ». (Oliver and Ebers, 1998)

⁷ The bidding usually involved the same set of subcontractors.

⁸ The literature on subcontracting and how it operates is particularly abundant in the automobile industry. See for example, Aoki (1988), Dyer (1997), Sako and Helper (1998)

⁹ The literature here is huge. There are even specialized journals (e.g., *Supply Chain Management*). For a good overview, see the collection of papers from an international Conference in Tienekens and Zuurbier (2000).

emphasis is about how partners coordinate in order to minimize costs and to create value by capturing or developing markets through signaling, services etc.

One variety that deserves particular attention is franchising. Likely because of its rapid development in the provision of final goods and services to consumers in the 1960's and 1970's, it attracted interest quite early (Rubin, 1978; Klein et al., 1978; Mathewson and Winter, 1985; Williamson, 1985). Initially viewed as “brand-name leasing companies” (Klein et al., 1978), franchise systems unveil problems that are relevant for a very large number of contractual arrangements. The right to use a brand name generates complex agreements because since it must be backed by guarantees of quality, visibility of services and/or goods, and the capacity to monitor users who have strong incentives to free ride. Agency problems emerge, but also complex issues of governance that go beyond incentives (Dnes, 1996; Lafontaine and Slade, 1997; Lafontaine and Raynaud, 2002). Formalized procedures, standardization of inputs and /or outputs, centralization of functions (uniform accounting, training of personnel, information system) are part of the toolbox involved. Another important issue is the puzzling presence, simultaneously and durably, of competing governances within the same system, namely, company-owned and franchise stores¹⁰.

Collective trademarks and their supportive organization share some characteristics with franchising (Dwyer and Oh, 1988; Valceschini, 199 ; Menard, 1996; Sauvée, 1997, 2002a). As in franchising, one major goal is to reduce customers' search costs and to benefit from joint marketing. There are also important differences. Collective trademarks usually involve backward coordination and often originate from suppliers, although it can also be developed by retailers (e.g., wholesalers associations and dealers cooperatives in the hardware industry, Dwyer and Oh, 1988). Because of the number of partners involved, usually large, risks of opportunism are high, while monitoring and control are difficult. In franchising, the existence of a franchisor makes it a problem of principal-agent. In collective trademarks, the arrangement is most of the time implemented by a group of peers, so that control, monitoring and enforcement raise specific difficulties. Self-enforcing mechanisms are central to the implementation of the governance.

In a certain way, partnership presents similar problems. Loosely defined, it has many characteristics of a network. Links among partners can be more or less formalized, as illustrated in the biotechnology sector by teams of researchers “organized” in a “firm” maintaining very permeable boundaries with other firms and with universities (e.g., Powell, 1996). More strictly, it corresponds to a specific mode of governance adopted by professionals, initially mostly lawyers and mostly in the US (Farrell and Scotchmer, 1988). Partners are usually associated to take advantage of a “brand-

¹⁰ The problem was noticed by Rubin (1978) and developed by Brickley and Dark (1987). There is now an important literature on this (more in Lafontaine and Shaw, 1999).

name” (often that of the founder) and to coordinate complex services in situations in which human assets play a crucial role and can hardly be monitored, so that decisions have to be decentralized. Problems of incentives clearly combine with problems of coordination. The standard mode of governance adopted is a complex mix of strict hierarchy and strong decentralization.

Last, there are alliances among firms, particularly frequent when the development or transfer of technologies is at stake. Here, we are closer to standard contractual practices. A spectacular example is provided by airlines that progressively coordinated their schedules (in order to facilitate connections), flights, maintenance, reservation, frequent flyers programs, and, in many cases their tariffs (Holmstrom and Roberts, 1998). An extensive study by Gulati and Shingh (1998), who looked at 1570 alliances over 230 years (1970-1989) among US, Japanese and Europeans firms in biopharmaceutical, new materials and automobile sectors, showed the importance of anticipated coordination costs and the role of contractual hazards in the choice of a governance structure. This is confirmed by other studies (e.g., Hennart, 1988b; Oxley (1999) that also exhibited the role of the institutional environment, particularly the regime of property rights, in the choice between non equity and equity (joint ventures) forms of alliances.

This review of different modes of arrangement among firms does not pretend to be exhaustive. I could have also mentioned the development of “virtual firms” that are systematically built on networks, or the clusters of venture capitalists analyzed by Aoki (2001, chap. 14). And I have referred only to the tip of the flow of studies published on these modes of governance. To my knowledge, there is no extensive survey of the literature on hybrid organizations in economics. But at least two relatively extensive surveys on papers published in sociology or management journals are available. One, by Grandori and Soda (1995) surveyed 167 contributions, mostly from management sciences and organization studies. The other, by Oliver and Ebers (1998) systematically analyzed 158 papers published on networks loosely defined in four major journals in management sciences and sociology, from 1980 to 1996¹¹. Combined with my own knowledge of the literature in economics, it suggests that beyond the heterogeneity of cases, there is some regularity.

II.2: Regularities

The surveys mentioned above emphasize the limited number of concepts and theories involved in research on hybrids. They also pointed out the limited number of “configurations” segmenting the field, bounded by a social network perspective at one end and a governance perspective at the other. Before entering into the analytics of hybrids, let me summarize empirical

¹¹ The journals reviewed are : *Administrative Science Quarterly*, *American Sociological Review*, *Academy of Management Journal*, and *Organization Studies*

regularities that are recurrent in the papers referenced here. Three headings encapsulate these regularities: pooling, contracting, and competing.

Pooling. All studies focusing on hybrids, whatever the form they take, show that they are systematically oriented towards organizing activities through inter-firm coordination and cooperation, so that key investment decisions must be joint ones. Hybrid organizations exist because markets are perceived as unable to adequately bundle the relevant resources and capabilities (Teece and Pisano, 1994), while integration would represent a loss in flexibility and incentives. Indeed, economic incentives are a driving force in the choice of these arrangements. They act both positively, search for rents being the engine to pooling strategies of pooling resources; and negatively, sharing rents requiring difficult choices that can easily destabilize an agreement. Several consequences follow, all related to coordination requirements. First, hybrids are selective rather than open systems. Choosing partners is a key issue, whether they can provide complementary resources (thus creating dependencies) or generate a multiplier effect (as in collective trademarks). Second, as noticed early (Brown, 1984), they always involve forms of joint planning. The anticipated complexity of decomposing tasks among partners and of coordinating across organizational boundaries is a major factor in the choice of a mode of governance and in the mechanisms designed for monitoring the arrangement (Gulati and Singh, 1998, p. 782 et sq.). Planning may concern inputs, quality standards, training of personnel, but also prices and quantities. Third, information flows among parties to an agreement is a crucial issue. Some authors have even qualified hybrids as “a cooperative game with partner-specific communication” (Grandori and Soda, 1995, p. 185; their emphasis). Developing an adequate information system among partners is central to the survival of hybrids, but informational asymmetries also represent a major challenge (Mathewson and Winter, 1985). Potential asymmetries in bargaining power may also result, particularly if the arrangement is organized around a leader, thus threatening the continuity of the relation. In that context the role of the new technologies of information and communication has not been much investigated.

To summarize, pooling resources does not make sense if there is no continuity in the relationship among partners. This continuity requires a certain level of cooperation, so that partners lose part of the autonomy they would have in a pure market relationship, while they do not benefit from the constraints that a hierarchical coordination could provide. Hence a major problem for hybrid organizations: how can they secure cooperation in order to achieve coordination at low cost without losing the advantages of decentralized decisions?

Contracting. This problem is partially dealt with through contracts that can be more or less formal. Indeed, contracts linking partners for a significant period of time provide means for regulating relations among transactors, creating a “transactional reciprocity” (Park, 1996) with forms

of profit sharing. The importance of relational contracting has long been acknowledged when cooperation carries advantages but entails risks (Goldberg, 1980; Williamson, 1985; Gibbons et al., 1994; Baker et al., 2002). But it has also been emphasized, particularly following Williamson (1985), that these contracts are largely incomplete and subject to unforeseeable revisions since they are about transactions that involve specific assets and that are often plagued by uncertainties (e.g., joint ventures in R & D). Part of the difficulty comes from the maintained autonomy of partners, who remain legally (and actually) independent in making decisions. Ultimately we have a typical transaction cost problem. As confirmed by recent studies on franchising (Lafontaine and Slade, 1997) and contrarily to what agency theory would predict, when transactions are complex, contracts are not tailored to suit characteristics of the transactor or the transaction; they rather provide a relatively simple and uniform framework. Hence the central role of the governance structure to be chosen¹², since mechanisms must be designed that will fill the blanks left in contracts, monitor the arrangement, and solve problems. I will come back more extensively to contracts in the next section. But we can already summarize a second problem which is recurrent in the literature on hybrid organizations: how to secure contracts while minimizing costly and often difficult, if not impossible, negotiations or renegotiations?

Competing. A third regularity in the literature on hybrid arrangements is that, contrarily to an integrated firm, they maintain a central characteristic of markets, namely competition. The presence of significant competitive pressures operates in two dimensions. First, partners to an agreement compete against each other. This can take many different forms. The agreement can be designed in a way that put them recurrently in competition against each other, as in subcontracting (Eccles, 1981; Dyer, 1997). Notwithstanding contractual restrictions (geographical, etc.), their activities may overlap so that they try to attract customers from the same subset (Raynaud, 1997). Another possibility is that they cooperate on some activities (R & D, products) and compete on others (Gibbons et al., 1994). Second, there are usually competing hybrids. Indeed, a significant part of the literature (particularly on distribution channels) shows that the standard neoclassical explanation to hybrids as rent seekers oriented towards market power does not usually hold (Menard, 1996; Gulati, 1998; Gosh and John, 1999). Hybrids tend to develop in highly competitive markets in which pooling resources is viewed as a way to deal with significant uncertainties and to survive. Competing hybrids may also have another effect: if specific investments are moderated, there can be incentives for some partners to switch, making the arrangement highly unstable. A fundamental consequence of all this is that the

¹² « ... it appears that firms, in responding to risk, incentive and monitoring-cost issues, adjust by changing how much they use franchising more than by altering the terms of their uniform franchise contract” (Lafontaine and Slade, 1997, p. 16)

implementation of an internal mode of regulation is a central issue in hybrid organizations. As pointed out by Madhok and Tallman (1998), partners tend not to recognize ex-ante the nature and extent of transaction-specific investment that is required in the collaborative relationship. Hence a third problem: what mechanisms should be designed for delineating to delineate decisions to be shared, for disciplining partners, and for solving conflicts while preventing free-riding?

To summarize, important regularities emerge from the abundant literature on the apparently heterogeneous forms labeled here as hybrid arrangements. These regularities are rooted in the mix of competition and cooperation that characterizes and plagues these arrangements (Jorde and Teece, 1989; Gibbons et al., 1994; Grandori and Soda, 1995; Menard, 1997). As a result, they are confronted to specific problems that require specific answers. This is consistent with the model developed by Williamson (1991), according to which hybrid organizations are neither markets nor hierarchies and have characteristics of their own. I now turn to the analysis of these characteristics.

III: DETERMINANTS OF HYBRID FORMS.

Although I will use some elements coming from a resource based approach, according to which asymmetries in resources and information provide the incentives to pool assets, the fundamental framework underlying what follows is derived from the “discrete alignment principle” (Williamson, 1991). Hybrid organizations and the specific forms they adopt are chosen in an effort to align governance structures with exchange attributes so as to minimize transaction costs. Ghosh and John (1999) suggest interpreting these costs as, ex-ante, the costs of contracting cumulating with the opportunity cost of foregone transactions; and ex-post, the costs of enforcing the agreement added to the opportunity cost of not shifting to more profitable activities in the light of new information. I do not intend to discuss the trade-off that governs the choice of hybrids as opposed to markets or hierarchies. My goal is rather to take advantage of existing studies to substantiate the specific properties of hybrid organizations as governance structures. Let us assume that a hybrid way of organizing transactions has been chosen. What determines the choice of a specific form among the variety of possibilities mentioned in the previous section? I start with the now standard question of interdependent investments (subsection 1), then turn to the underestimated role of uncertainties (subsection 2). Mechanisms implemented to deal with these issues and that give governance its “personality” will be examined in the next section.

III.1: Investments and Bi- or Multilateral Dependence.

Following the seminal contributions of Williamson (1975, 1985), hundreds of papers have been published on the role of specific investments in choosing to organize transactions through

markets, within firms, or by inter-firm agreements¹³. My goal, here, is different. I want to examine how investments decisions help to understand what specific forms of governance will be chosen within a hybrid arrangement.

A fundamental issue for partners choosing a hybrid organization is the commitment to make investments that create significant mutual dependence. Two strategies are available. Either each partner develops specific assets, with the resulting network based on their complementarities; or partners decide to pool resources and to create mix investments. The first aspect was explored early by transaction cost economists, e.g. Palay (1985) about the arrangements between railroads and automakers in developing rail auto racks, or Joskow (1985) in his now classical analysis of the relationship linking electricity plants and coal mines. The second aspect is typical of agreements regarding the development and transfer of products with minimum efficiency scales differing according to production levels (Hennart, 1988a, about the aluminum and tin industries; ??? about the dairy milk industry) or involving technologies (Teece, 1992; Gulati, 1998; Oxley, 1999). In both cases, problems arise when the weak redeployability of related investments creates mutual dependence, i.e., when durable investments made by partners become customized to their mutual needs. As it is now well-known, this lock-in situation represents a fertile ground for opportunistic behavior. Devices for piloting this dependence must be designed accordingly (see Section IV).

The examples mentioned above referred to investments in physical assets. Actually most tests by economists on the impact of specific investments on inter-firm agreements have been inspired by the paradigmatic analysis of vertical integration, and its emphasis on the role of physical capital (site specificity, physical specificity, dedicated assets)¹⁴. One important contribution of the literature on hybrid arrangements is that it has explored more intensively the role of human assets. It is so in the studies on franchising, with their emphasis on agency problems. But it is also true in studies on other forms of hybrids, such as the mutually-dependent investments in human resources among biotechnology firms (Powell, 1996), the interdependence growing out of transfer of competencies (Teece, 1992), or the complex arrangements implemented to monitor sales forces (Anderson and Schmittlein, 1984; John and Weitz, 1988). Moreover, as noticed by Palay (1985) in his pioneering paper, the very existence of agreements in which firms develop significant mutual dependence of their physical assets requires also investing in training managers that can monitor the arrangement. It

¹³ Partial surveys can be found in Klein and Shelanski (1995) and Coeurderoy and Quelin (1997).

¹⁴ One possible exception could be in the literature on contracting schemes in the automobile industry, in which emphasis has been put not only on the high level of relationship specific investments by both sides in the Japanese automakers (slowly imitated by the US, particularly Chrysler-see Dyer, 1997), but also on the importance of investments in training and communication among parties to the agreements (e.g., in Aoki, 198A, 1988; Williamson, 1985; Helper and Levine, 1992).

takes time and effort for that personnel to acquire inter-firm specific knowledge, and this human capital is highly regarded by firms.

Another type of specific investments that play a key role in hybrid organizations is related to the importance of brand names. This aspect has been particularly exhibited in the abundant managerial literature inspired by transaction cost economics and focusing on distribution channels (Brown, 1984; Dwyer and Oh, 1988; John and Weitz, 1988; Fearne, 1998). The central status of such investments also appears as crucial in the literature on collective trademarks. When the reputation of a collective brand is based on the quality of products that highly depends on human assets, training and network-specific competences of partners represent a key factor in the capacity to establish and maintain reputation of the network (Menard, 1996; Raynaud, 1997; Raynaud, Sauvée and Valceschini, 2002).

The message of all this is unambiguous. Mutual dependence of assets developed within a hybrid arrangement makes securing these investments (and determining a rule for sharing rents) a key issue. Securing has different dimensions. Three aspects are particularly relevant for the choice of a specific mode of governance. First, monitoring partners presents specific difficulties compared to an integrated organization since partners remain legally autonomous and responsible for a very large set of decisions, even when the network is quasi-integrated (Eccles, 1981; Menard, 1996). Second, finding an adequate mechanism for solving disputes is an extremely sensitive issue, particularly disputes arising from appropriability problems. The greater the potential appropriation concern, which is usually related to more specific investments, the more hierarchical coordination mechanisms tend to be (Pisano, Russo, and Teece, 1988; Oxley, 1997; Gulati and Singh, 1998). Third, mutual dependence is accepted because it can generate gains. Hybrids have a strong incentive to protect their rents, thus preserving their stability, in “sheltering” from market forces (Goldberg, 1980, p. 341). They do so ex-ante, through a selection process¹⁵ (Menard, 1996, 1997); and ex-post through differentiation strategies that tend to reinforce mutual dependence (Gaucher, 2002).

To summarize, the implementation of interdependent investments while separate ownership remains and the intensity of that interdependence reflect in the specific mode of governance chosen, particularly its degree of centralization and formalization.

III.2: Uncertainties.

A second attribute of particular significance for understanding hybrid arrangements is the degree of uncertainty surrounding transactions. The literature on networks, alliances, and so forth, is quite unanimous in emphasizing the importance of uncertainties in the decision to pool resources in

¹⁵ This selection process is very similar to the creating barriers to entry, which raises serious difficulties with competition policies.

order to temper risks. This was a key element in Eccles' explanation of the contracting scheme adopted in the construction industry (Eccles, 1981) or in Ouchi's theory of clans (Ouchi, 1980¹⁶), and it remains a central determinant in recent studies on alliances (Gulati, 1998; Oxley, 1999). As with human assets, the economics of hybrid organizations provides insights on this attribute of transactions that has been neglected in the more classic studies on the "make-or-buy" trade-off¹⁷.

Uncertainties can be related to inputs required by a transaction, to outputs coming out of it, or to environmental factors. Problems with inputs are very often connected to issues of quality and the risk of free-riding. It can come from nonobservabilities among partners to the arrangement, as in supply chain systems (Fearne, 1998), or from difficulties in coordinating inputs, as in the construction industry (Eccles, 1981). Detailed contracts represent only a limited way to circumvent this difficulty since a key issue is to maintain flexibility to adjust. Uncertainty can also come from outside suppliers that have no specific commitment to the arrangement, particularly if they provide inputs that are hardly traceable (e.g., the provision of food to cattle farmers, as illustrated by the mad cow disease; see Maze, 2001). Uncertainties on output are related either to difficulties in quality control or to maladjustments to consumers' preferences or to changing demands. Several proxies have been developed to measure this last factor and its impact on governance: market share stability, industry volume, forecast accuracy, predictability based on demand variability and so forth (Anderson and Schmittlein, 1984; John and Weitz, 1988; Lafontaine and Slade, 1997, Ghosh and John, 1999). Between inputs and outputs, there is of course the transformation process itself, with specific problems of control and verifiability, particularly when it involves complementarities among autonomous partners, as is often the case with partnership in R & D. Risks of opportunism are particularly high when rules for claiming rent are not well specified, which is exactly the core problem when pooling is oriented towards innovation (Porter, 1996; Ghosh and John, 1999¹⁸). One last source of uncertainties, almost always mentioned but very rarely analyzed or tested, is associated to the institutional environment. North (1981, 1990; 1991) has repeatedly insisted on the importance of the rules of the game for understanding how actors will play the game, choosing specific ways to organize transactions. Similarly, Williamson (1991) introduced the possibility of shifts in parameters to explain changes in the modes of governance. Pioneering studies on hybrid forms, and particularly on alliances, have begun to explore this issue more systematically (e.g., Parkhe, 1993; Khanna, 1998; Oxley, 1999).

¹⁶ According to Ouchi, clans develop « when teamwork is common, technologies change often and therefore individual performance is highly ambiguous » (Ouchi, 1980, p.).

¹⁷ There are exceptions (e.g., Anderson, 1985; Saussier, 1999)

¹⁸ Indeed, as pointed out by these two authors, when comprehensive contracts are impossible or too costly to write, as is often the case when innovation is at stake, « organizing a satisfactory split of the gains becomes non trivial » (Ghosh and John, 1999, p. 131)

Beyond the sources of uncertainty, what matters most in understanding and characterizing hybrid organizations is whether these uncertainties are consequential or not. For lowly consequential uncertainties, efficient contractual clauses can be designed and planning can be implemented for coordinating partners at relatively low costs. Contract-based arrangements are even more likely to be chosen when investments can be redeployed, even if it is costly. For example, growers of fresh vegetables making specific investments for one or a few selected products (e.g., tomatoes, beans) within a hybrid structure while they maintain other autonomous productions to which they can switch will make the governance close to market arrangements (Valceschini, 1997; Sauvée, 2007, 2002c). When uncertainty becomes more consequential, contractual hazards develop. It can be so even with relatively low specificity of assets, as illustrated by the construction industry (Eccles, 1981) or the high quality segment of the poultry sector (Menard, 1996). Much tighter coordination is required, with more control and more dependence. The governance then leans towards quasi-integration.

It is so because with consequential uncertainty the “government” of a hybrid organization must combine adaptation, in order to keep the flexibility to adjust; control, in order to reduce discrepancies among inputs, outputs, or quality in the process itself; and safeguards, in order to prevent opportunistic behavior that uncertainties make more difficult to detect, whether opportunism result from false or empty threats and promises concerning future conducts or from selective or distorted disclosure of information. Looking at the intensity of needs for adaptation, control and safeguards provides a very good predictor of the specific mechanisms to be implemented for dealing efficiently with transactions at stake.

Before turning to the analysis of these mechanisms, let me emphasize one last point. Studies on hybrids converge on the idea that this arrangement develops when complementary or mixed investments are needed that can be spread over a set of partners without losing the advantages of autonomous decisions and when uncertainties are consequential enough to make pooling an advantageous alternative to the autonomy provided by markets. But there is more in the studies on hybrids. They show that specific assets as well as uncertainties generate opportunistic behavior **and** miscoordination. If one attribute only is present, the governance leans towards contract-based arrangements. When the two attributes combine, the governance becomes much tighter. Therefore, I agree with some critiques, including Ronald Coase (1988; 2001), that we may have put too much emphasis on opportunism in looking at contractual agreements. I would suggest that it is the combination of opportunism, or the risk of opportunism, and of miscoordination, or the risk of miscoordination, that largely determines the mechanisms characterizing hybrid organizations¹⁹.

¹⁹ This has been somehow anticipated by Palay (1984; 1985) who emphasized the role of contractual clauses to protect against opportunism, and of managers specialized in monitoring the contracts with their partners and in coordinating

IV: A COMPLEX OF COMPLEMENTARY MECHANISMS.

When it comes to the choice of these mechanisms, the fundamental question has been expressed clearly by Goldberg (1976): “what imperfect institutions²⁰ should govern particular sets of transactions?” In my view, there are three dimensions to be taken into account. One has to do with the identification of contractual hazards and the contractual provisions to deal with them. The second concerns the protection and distribution over time of gains generated by the arrangement chosen. A third dimension is related to enforcement issues. In each dimension, contracts are an important part of the story. But they are only a part of it.

IV.1: Contracts for facing contractual hazards.

Contracts are often loosely defined in order to encapsulate all forms of agreement, whether they are explicit or not. I will stick to a more restrictive concept, following Macneil (1974, p. 693) who characterized contracts as “legally binding promises”. Most contracts, and almost all contracts within hybrid organizations, involve a relational dimension, with parties having to deal with each other regularly over a wide range of issues, many of them unknown in advance (Goldberg, 1976).

In market economies, legal contracts represent one of the most prominent safeguard to parties. Why are safeguards so important? Because of the many contractual hazards generated by: (i) bilateral dependency, (ii) measurement problems, (iii) changing conditions over time, (iv) weak property rights and, more generally, (v) weaknesses in the institutional environment (Williamson, 1996, p. 14; see also North, 1991). With parties remaining legally autonomous, these hazards are particularly challenging for hybrid organizations. Reducing them through contracts requires to select partners and to define clauses that can efficiently constraint opportunistic behaviors²¹.

Most studies on networks, franchise, etc., substantiate the crucial role of selecting partners and show that selection is rarely through purely formal rules. Bidding, for example, is used sparsely, mostly to “test the market” once and a while (Eccles, 1981; Menard, 1996) and to discipline partners (Knoeber, 1989; Dyer, 1997). As for provisions that can constrain opportunism, they are limited within a narrow band since comprehensive contracts fully binding parties are usually too complex

actions to be taken in order “to obtain the performance promised when the contract was not enforceable in court” (in this case because they were not in conformity with the Interstate Commerce Act).

²⁰ Goldberg is referring here to institutional arrangements as defined by North and Davis (1971) which I take as synonymous to modes of governance.

²¹ Ghosh and Jones (1999) usefully suggest to distinguish two varieties of opportunism: one in which parties engage in behavior that reduces their own cost regardless of its effects on total gains for the network of partners (e.g., shirking—see Brickley and Dark, 1988); the other in which parties engage in behaviour that impose costs on their trading partners to force a more favorable rearrangement of the original terms of trade (e.g., hold up—see Klein, 1987).

and/or too costly to design and implement²². Two well established observations in franchise systems show limits to contracting. First, the stable presence over time and across sectors of a mix of company owned units and franchisees suggests that contracting outside units do not provide enough information and safeguards. Second, and even more significant, contracts within a franchise system are very standard, they are not customized for meeting the various circumstances a franchisee has to deal with (e.g., location, overlapping territories etc.), as agency theory would suggest²³.

Hence, contracts provide a limited tool for piloting hybrids. Nevertheless, they play a very crucial role, based on several identifiable characteristics. Putting aside incentive issues for a moment, I will emphasize five characteristics²⁴. First there is the issue of the number of parties to an arrangement, with a difficult tradeoff between bilateral or multilateral agreements, when the choice exists, of course. The former is easier to monitor but involves higher dependency; the later makes the government of the relationship more complex but it allows comparisons and benchmarking, a powerful tool for constraining opportunism. Most contractual arrangements I am aware of, in my own research and in the literature on hybrids, are of the second type. One suspects it is so because they capture some positive properties of markets.

Second, duration also represents an important issue. Once more, contracts in hybrid arrangements have a distinctive characteristic: they are either long term contracts or very short term but automatically renewable. Moreover, there is a close relationship between duration and degree of integration or, at least, intensity of coordination (Dyer, 1996, 1997). Another consequence of the observation above is that contracts and contractual relationships are two different things²⁵, with the former embedded in the later.

Third, almost all contracts in hybrid arrangements contain detailed requirements. Specifications usually concern quantities and, above all, quality standards. When a contract provides only a framework, specifications are included in detailed annexes (e.g., the “list of specifications” in the label system in France –Menard, 1996; or the detailed requirements linking Carrefour, the world second largest distributor after Wal Mart, with cattle farmers from Normandy –Gaucher, 2002).

²² Complexity is well illustrated on the theoretical side by a model developed by Bai and Tao (2000). Using a multitask approach (Holmstrom and Milgrom, 1991) they described a two-tasks franchising system based on incentives to sell and on efforts to develop a brand name. The resulting contracts would present a complexity rarely observed in the real world.

²³ An excellent summary of these issues is provided in Lafontaine and Slade, 1997. See also Penard, Raynaud and Saussier, 2002

²⁴ This is based on an extensive review of the literature as well as on my own empirical research (see Menard, 1996 ; 1997 ; 2002)

²⁵ This was already noticed by Eccles (1981). In his sample of 32 general contractors, each managing a wide array of contracts with subcontractors, although all contracts were short term (related to a specific project), the average contractual relationship was for five years and more, with the extreme case of a relationship that has been going on for over 37 years. The same has been noticed by Coase (1988) and Dyer (1997) in the automobile industry, and by Menard (1996), Valceschini (1997) and Sauvée (2002a) in the agrifood sector.

Specifications carry three intertwined goals: they intend to make commitments as observable as possible; they try to standardize the different steps in production and/or distribution, in order to facilitate quality control; and they develop uniformity as a way to reduce the costs of monitoring partners. These provisions make sense because prices do not play a key role in constraining partners, as they do on markets, and because the autonomy of partners prevents the full use of a hierarchical mode²⁶.

Fourth, adaptation clauses are crucial, ranking from holding essentially to the original terms when transactions involve weakly specific investments and/or low uncertainty to relying on widely flexible clauses in order to deal with highly specific transactions and/or consequential uncertainties. The importance of adaptation clauses can be explained by the relatively weak role of prices. It does not mean that prices do not matter. Various methods of pricing are implemented, from fix prices (e.g., licensing) to internalized pricing (e.g., joint ventures). But contracts in hybrid organizations share one main characteristic: they are in most cases disconnected from spot market prices and determined through forms of negotiation (or, when there are some automatic price adjustments, they open room for renegotiations). Prices are operated within a “tolerance zone” (Williamson, 1985). Hence, the key role played by negotiations and renegotiations provisions, and the room they open for delegations of representatives or selected arbitrators in this process. Moreover, because mutual adjustments are possible, procedures must also be planned for revealing information *ex ante* (at the time the contract is established, in order to select partners) and *ex post* (in order to legitimate required adaptations).

Fifth, notwithstanding the richness and complexity of these clauses, contracts in hybrid organizations remain incomplete. Therefore, complementary safeguards are almost always included. They can be formal, e.g., financial hostages (Klein, 1980), specialized investments guaranteeing mutual commitments (Williamson, 1983). They are more often informal, either relational (Braddach and Eccles, 1989) or reputational (Kreps and Wilson, 1982). Enters in the picture the controversial issue of trust. Several authors see trust as a way to secure transactions when contracts are incomplete (Zucker, 1986; Braddach and Eccles, 1989). Trust then operates as a way to alleviate opportunism and is made operational through recurrent transactions (which refers to reputation) and through social networks and social similarities among traders (Ouchi, 1980, on clans; Greif, 1993, on Maghribi traders). Another view insists on trust as a form of calculativeness (Axelrod, 1984; Williamson, 1993). Personally, I do not perceive these two approaches as antagonistic.

Taken in isolation, the above contractual devices are not totally specific to hybrid organizations. But their combination gives them a typical content in that they are oriented towards

²⁶ Although some hierarchical elements are present as we will show in the next subsection.

solving the fundamental problem of inter-firm networks: how to economize on contracting costs necessary to insure non opportunistic behavior among autonomous partners comparatively to the cost of administering a broader range of assets within one single firm (Klein, Crawford and Alchian, 1978)? A striking feature of contracts in hybrid organizations, however, is their standardization. Contrarily to what the standard theory of contracts would predict, they are almost never tailored for taking into consideration the specific characteristics of partners involved or of their situation. Clearly, the reason for uniformity lies in transaction costs, i.e., the cost of customizing and administering many different contracts and the room it would open to opportunism. This also means that devices complementing contracts are needed, a point to be developed in subsection 4.

IV.2: Sharing the quasi-rent.

So far I have put aside incentive issues. But of course firms engage in networking because they expect a quasi-rent resulting from their investments in specialized and complementary assets (Madhok and Tallman, 1998). While the resource-based view of hybrids put the emphasis on rents resulting from the possession of a unique and valuable resource, the transaction cost approach focuses on the nonredeployability of joint investments made in anticipation of benefits that must be shared. There is of course a contractual dimension involved in that contracts specify some rules for distributing the gains expected from combined actions. But the presence of specific assets (and even more so when uncertainty is high) generates potential for post contractual opportunism that is fed by the very existence of quasi-rents. Bargaining power, and bargaining costs, will result.

The problem is deeply rooted in the institutional arrangement that characterizes hybrid organizations, namely: the combination of legally distinct property rights²⁷ and the impossibility to fully specify **ex-ante** how residual claims will be shared since the mix of pooled assets and non observabilitier opens room for opportunistic behavior. Hence the question: how to avoid post-contractual opportunism when appropriable quasi-rents are present? What enforceable rules can be adopted? As emphasized by Ghosh and John (1999), in hybrid organizations claiming quasi-rents is as important an issue as creating them. Several studies suggest that the solution is a mix of rules based on observable components and of mechanisms that are non-contractual.

Observable components (e.g., increase in sales) leave room for formal rules that can eventually be enforced by the law. A classical example is provided by franchising, with fix payments and royalty rates, usually within a margin of 4 to 8 % (Brickley, 1999; Lafontaine and Raynaud, 2002). The decision about royalty rates is not neutral however, since it gives more or less incentive to franchisees for making efforts in developing sales, possibly to the point where it is detrimental to the

²⁷ By which I classically mean the right to use assets, to appropriate returns and to change the form and/or substance of assets.

efforts that the franchisor would expect for improving the reputation of its brand name²⁸. Another solution is an “equity principle” adopted in many partnerships. An example is provided by the fishing industry, with the distribution of revenues between the owner of the boat, its captain and the crew (Farrell and Scotchmer, 1988; Arrunada, Gonzalez-Diaz and Lopez, 1996). The Spanish case in the second of these papers showed a remarkable stability of sharing rules over centuries. A third situation is that of a hybrid with a leading firm that tightens the network through indirect redistribution of gains, e.g., favorable credit terms to followers that meet certain predetermined goals (Brown, 1984).

However, because of the attributes of transactions mentioned previously, nonobservable components are almost unavoidable that nevertheless contribute to the size of rents, thus creating problems with regard to residual claimants. It is so even with apparently simple criteria such as sales, as when they depend simultaneously on the quality of services provided by franchisees and on the effort made by the franchisor in advertising. Whenever there is a performance measurement problem, i.e. when contributions of the parties to an agreement are not verifiable ex-post or can be verified only at very high costs, the distributional issue is nontrivial (Barzel, 1989; Ghosh and John, 1999).

Three regulating mechanisms have received a special attention in the literature on hybrids. One is the reputation effect. Hybrid organizations are characterized by repeated transactions among partners. Frequency of transactions provides them with the possibility of withdrawing future business if “fair play” is not the guideline sharing gains generated by mutual efforts. Credible commitments embedded in contractual clauses are complemented by “credible threat”. A second possibility is the existence of formal negotiations, often monitored by well identified negotiators in charge of determining the distribution of residual gains (Palay, 1985). In the label system analyzed by Menard (1996) in the French poultry industry, large groups of producers delegate representatives to negotiate with transformers or distributors prices ex-ante and the distribution of quasi-rent ex-post. Sauvée (2002a) has described a similar arrangement among producers and distributors of high quality tomatoes. A third mechanism is the creation of a formal authority, through the creation of a specific entity in which delegates determine how to share gains from cooperation, as in joint ventures (Oxley, 1997); or through the creation of specific committees. Valceschini (199?) and Sauvee (2002a, 2002c) have analyzed how a large groups of producers contracting with a major company specialized in canned vegetables of high quality coordinate through a “joint committee” that meets periodically to adjust the distribution of quasi-rents. Although there is no systematic test to my knowledge, several studies referenced above suggest that the higher the uncertainty on the output and/or on the process,

²⁸ The two-task model developed by Bai and Tao (2000) can be interpreted as an exploration of this problem.

the more formal is the mechanism adopted among these three (Menard, 1996; Ghosh and John, 1999; Oxley, 1999; Sauvé, 2002a).

Notwithstanding these difficulties in determining rules for sharing quasi-rents, hybrid organizations exist and, for many of them, grow steadily. Why? Three main reasons can be identified. An obvious one is that quasi-rents result from interdependence, so that even if rules adopted are debatable, they still benefit even the less favored partners. Second, quasi-rents are continuously challenged because of technological changes, of the diffusion of the processes and methods adopted by successful hybrid organizations, of changes in the environment, so that there are powerful incentives pushing towards maintaining cooperation. Third, hybrid organizations maintain coherence through noncontractual modes of coordination that include some form of coercion. I now turn to this aspect.

IV.3: From Adaptation to Enforcement.

A fundamental characteristic of hybrids lies in the combination of mutual dependence and the need for continuity in the relationship. In a world of incomplete contracts, a way to guarantee that this combination is operational and stable is by creating mechanisms for coordinating activities, organizing transactions and solving disputes. These mechanisms are internal to the arrangement, although they can find legitimacy and support in the institutional environment.

One well known mechanism is the embedding of restrictive provisions in contracts. Contractual restrictions delineate the domain of action of partners to a hybrid form, limiting their degree of autonomy for a certain class of decisions, and identifying zones of overlapping where collective decisions must prevail. There is an abundant literature on vertical restrictions (for a survey, see Rey, 1994; also Rey and Tirole, 1986), much less on horizontal restrictions. The emphasis is usually on their consequences on prices and how it can distort competition, so that the message is oriented towards competition policies. This is a restrictive view that misses what is often the main goal of contractual restrictions, namely to facilitate coordination. The point was made almost twenty years ago by Williamson, in his discussion of the Schwinn case (Williamson, 1985, pp. 183-189). It has been largely substantiated, particularly when the quality of goods or services traded is a key issue. Franchising is a well-known case (Brickley, 1999; Lafontaine, 1993). Supportive are also numerous studies on supply chain systems, particularly in the agrifood sector, in which traceability and quality control have become an increasingly significant issue (Menard, 1996; Maze, 2001; Raynaud, Sauvé and Valceschini, 2002). Notwithstanding these contributions, the positive role of contractual restrictions as a coordinating device remains underexplored. But above all, contractual restrictions remain a limited tool for coordinating and adapting. First, it easily generates conflicts

with competition authorities (Junker, 2001). Second, their allocational effects are difficult to evaluate, so that partners tend to rely on other mechanisms (Goldberg already pointed this out in 1976).

In several papers, I have showed the presence of private administrative agencies (or “authorities” as I sometime called them) as a core element in the architecture of hybrid organizations (Menard, 1994, 1996, 1997, 2002). One main characteristic of these devices is that they combine the autonomy of partners with the transfer of a significant subclass of decisions to an entity explicitly in charge of coordinating their action. The presence of hierarchical elements in contractual agreements has been noted early (Stinchcombe, 1985, 1990). But the emphasis here is that there exist specific and identifiable organizational mechanisms voluntarily designed by partners in order to monitor their network and to control subclasses of actions and decisions of its members. The authority put in the hands of these coordinating mechanisms thus involves both intentionality and mutuality. This likely explains that they are usually built on principles respecting some symmetry among participants, at least formally. It is apparent in the case of joint ventures, but also when the coordinating mechanism operates through a common staff or delegates.

Moreover, converging empirical studies suggest that the degree of centralization of these “authorities” depends on the degree of mutual dependence and the complexity and turbulence of the environment in which a hybrid operates (Dwyer and Oh, 1988; Menard, 1996; Park, 1996). Let me illustrate with recent empirical studies. Raynaud (1997) has studied a group of 40 millers who created a brand name for high quality bread in France in the 1980’s. The millers select the wheat in order to produce high quality flour that is then dispatched to bakers who operate as franchisees. Some of these millers are competing against each other, e.g., they cover the same area and want to attract as many bakers as possible. But they are all subject to the same quality standards. The implementation of these standards, quality control and the monitoring of contracts is delegated to an organization created by the millers. The organization owns the brand name. Moreover, in order to solve dispute, the millers have created an internal “court”, with three delegates operating as private judges for solving conflicts. In another study (Valceschini, 1997; Sauvée, 2002a), the pattern is different but similarly oriented. In this case, a private firm has created a brand name of canned vegetables of high quality. Inputs are provided by farmers operating under contracts negotiated with the firm. So far, this is quite standard. The interesting point, though, is that the firm was rapidly confronted to monitoring thousands of contracts, and farmers, because of the success of its products. Progressively, a complex organization was developed. Producers are now grouped in several producers’ organizations, with delegates having the power to negotiate contracts and adjustments with the firm. In order to solve conflicts and facilitate the rapid adjustments required by a very fluctuating demand, a joint committee was also created with four delegates coming from the producers’ organizations and two from the firm. This

committee plays an important role in deciding and implementing rapid changes that affect all parties, and it is also very active in the negotiations for sharing gains.

The number of studies exhibiting similar arrangements is now impressive²⁹. It gives substance to the idea that there is a specific administrative architecture of hybrid organizations that does not operate mainly through price adjustments or through hierarchy. These administrative entities can be more or less formal and have more or less power. At one end of the spectrum, decisions are largely decentralized among partners, and coordination is implemented through “influence”, based on history of the arrangement, on acknowledged complementarity of competences, or on social “connivance”. This is the domain of “relational networks” (Ouchi, 1980) extensively analyzed by sociologists and in organization studies (Grandori and Soda, 1995; Powell, 1990) At the other end is the hybrid organization monitored by an ad hoc institution operating as a quasi autonomous entity, and often as a private ordering organization, as illustrated by joint ventures or by the case of the millers mentioned above. In between there are “authorities” based on trust or leadership. Here, I consider trust in a calculative perspective, rooted in the need for a continuing relationship and embedded in specific arrangements. A good illustration is provided by the specialized personnel in charge of monitoring agreements among partners in the rail freight sector (Palay, 1985³⁰). Leadership emerges as a way to coordinate when a firm establishes some authority over its partners because of specific competences, without changes in the relative symmetry of property rights and of power of decision. The case has been identified mostly in high technology sectors (Pisano, 1990; Powell, 1996).

Beyond legal safeguards, hostages, and self enforcing clauses, these administrative entities thus have significant authority for solving disputes. Because of their mutual dependence and the need for maintaining continuity, hybrids have a strong preference for this private order, avoiding the introduction of third parties. As emphasized by Brown (1984, p. 266): “Breaches of contracts are rarely taken to court, even in the litigious United States. This means that the contract can be renegotiated (or ignored) if need arises and the contingent claims problems are thereby avoided”. Arbitration being internal, with no hierarchy “own ultimate court of Appeal” (Williamson, 1985), the efficiency of these dispute solving devices depends on the commitments of parties to the entity they have created. The entity plays the role of a private court. Going to the judiciary is the exception.

It does not mean that the institutional environment is of no importance. In many cases, administrative entities are based on and backed by regulations. “Certifying organizations” in the French label system are embedded in laws and decrees. Cooperatives are everywhere regulated. And

²⁹ For a recent extensive study in the agrifood sector in seven European countries, see Raynaud et al., 2002

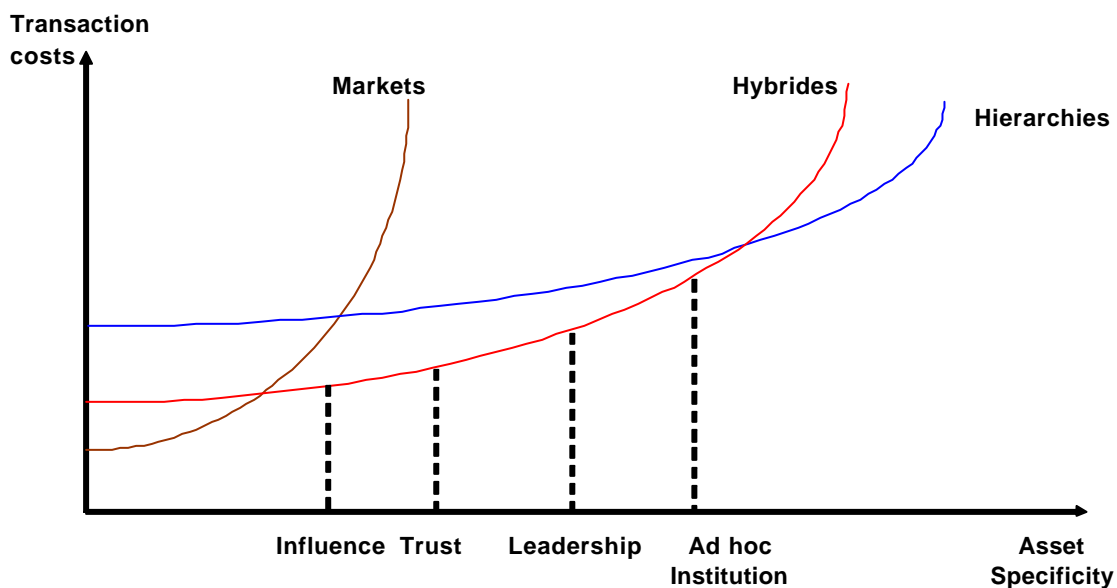
³⁰ In this case, coordination through contracts was prohibited by the Interstate Commerce Act, so that parties relied on a network of managers that Palay qualified as “high premium personnel with long memories, sound hearts, and a penchant for looking both ways before crossing the street” (1985, p. 164).

some recent studies have shown the importance of appropriability hazards resulting from specific institutional environments. For example, Oxley (1999) has shown the role played by intellectual property protection (including its enforcement) in the choice of piloting a hybrid through contract-based alliance or through equity joint ventures. However we still know very little about the interaction between institutional rules of the game and the choice and characteristics of specific forms of hybrid organizations.

IV.4: The diversity of hybrid organizations revisited.

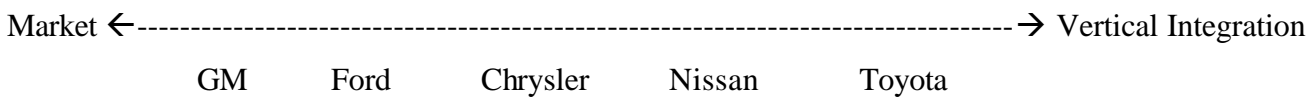
In the previous pages, I have identified several characteristics that make hybrid organizations a specific class of governance structures. Governance structures are interpreted here as “a shorthand expression for the institutional framework in which contracts are initiated, negotiated, monitored, adapted, enforced, and terminated” (Palay, 1984, p. 265³¹). Some main points I made are that contracts among parties are central and incomplete; that sharing rents among legally independent partners who remain fully responsible for a large set of decisions which impact on the network is a non trivial issue; and that specific administrative entities are implemented to solve these problems and to govern the arrangement.

I have also tried to show that the diversity of hybrids is not accidental, and that the choice of a specific form is not a random phenomenon. Indeed, an impressive set of studies support the idea that different forms of network are aligned to different properties of the transactions they are dealing with. Using now well-known framework (Williamson, 1991), I propose the following representation of the distribution of hybrids. Empirically observed forms of hybrids can be positioned, according to the nature of their monitoring entity and the role it plays in implementing contracts and sharing rents.



³¹ The more recent definition proposed by Williamson of a governance structure as “the institutional matrix in which the integrity of the transaction is decided” (Williamson, 1996, p. 378) is congruent.

This simplified representation requires at least two important qualifications. One is that uncertainty should be introduced in the model. Indeed, it is clearly an attribute as important as the specificity of mutually dependent investments for understanding which mode of hybrid organization is chosen with what characteristics. The second qualification has to do with a puzzling and challenging observation: in many cases, several modes of hybrid organizations with very different degree of integration exist simultaneously (Menard, 1996³²). Does this challenge the role of specific assets as an explanatory factor? A similar question has been raised by Dyer (1997), based on a very different set of observations. In an extensive study of supplier-automaker relationships in the US and Japan, he showed that automakers choose very different modes for monitoring subcontractors, from quasi-market relationships (GM) to quasi-integration (Toyota). Based on measures of site, physical and human assets specificity, he proposed a classification of automakers that I summarize as follow:



This is quite consistent with our theoretical framework, except for one important aspect. Japanese automakers took advantages of their close relationships with their suppliers, compared to the arm's length relationship developed by American automakers –notably GM-, to implement more specific investments on both sides of the agreements. They also made higher profits³³. At the same time, transaction costs, measured by the purchase volume of goods per person monitoring contracts with suppliers were significantly lower for the Japanese automakers³⁴. Is this consistent with transaction cost theory? On one hand, no: lower specificity of assets (at GM) should involve lower transaction costs. One could argue that there is measurement problems involved, or that the institutional environment reduces opportunistic behavior in Japan. But different measures give coherent results, and the environment could not explain significant differences between contractual networks operating under the same rules of the game. Dyer examined several different explanations and concluded that the reason lies in the endogeneity of specific assets. Japanese automakers would select a governance structure that minimizes transaction costs while supporting highly specific investments. This interpretation receives support from many studies in the strategic management literature: specificity

³² In this study on the label system in the poultry industry in France, I exhibited three significantly different arrangements: a relatively loose network close to market arrangements, a tightly coordinated cooperative, and a quasi-integrated group. The three forms have competed for over twenty years and have all took advantage of an expanding demand for high quality products to generate quasi-rents while maintaining their market shares

³³ For example the pretax return was 2.8% at GM and 13% at Toyota for the period under review

³⁴ The average volume of goods per person was estimated at \$1.6 million at GM, \$5.3 million at Ford, \$9.7million at Nissan and \$12.6 million at Toyota.

of assets matters a lot, but it is chosen simultaneously with the form of hybrid governance. Unfortunately we have very few empirical tests so far with specific assets as an endogenous variable.

To summarize, the empirical literature supports the view that there is **a significant relationship between the attributes characterizing the set of transactions that a hybrid arrangement organize and the mode of governance chosen**. There are however puzzling aspects that require more extensive investigation and more sophisticated models.

V: CONCLUSION.

In this paper, I have emphasized the significant progress made in our understanding of the nature and characteristics of hybrid organizations. Beyond numerous tests of the transaction cost explanation of tradeoffs among the three basic families of governance structures (markets, hierarchies, and hybrids), there is a growing literature on how the attributes of transactions determine the type of hybrid arrangement adopted, the contractual provisions implemented, the incentives rules selected, and the mechanisms chosen for solving disputes. The multiplication of studies in economics, but also in managerial sciences, marketing, and sociology has also expanded the set of issues to explore. One concerns the durable coexistence of different arrangements operating in the same sector and competing against each other, with homogeneous products, similar technologies, and very comparable assets. A second important and possibly related issue has to do with the typology of hybrid forms. Typologies matter in science because they require theoretically-based criteria to be established. A third and even more difficult issue is that of explaining the dynamics of hybrid forms, both their stability over time and the forces pushing towards change. A fourth issue has to do with much need researches on how the institutional environment impacts on the choice of a specific mode of hybrid and its characteristics. Last, hybrid organizations often represent a challenge to competition policies built on the simple trade-off between firms and markets. How these policies should be transformed remains an open question. Steps in exploring these issues have been made recently, some of which I have mentioned, but a lot remains to be done.

Is it worth the effort? The idea that hybrid organizations have characteristics of their own, or that they deserve extensive studies, has been challenged. Over ten years ago, Bradach and Eccles (1989) emphasized how prices, hierarchy and trust interact, thus creating a continuum of arrangements with so blurred limits that it would be almost impossible to identify discrete structures. This representation is shared in a certain sense by many contract theorists for whom all that exists is nexus of contracts. In a different perspective, Nickerson (1997) recently argued that the complexity of hybrid organizations is such that researchers would gain in focusing on the polar cases of markets

and hierarchies. From the opposite side of the fence, Hodgson (2002) reached a similar conclusion, emphasizing the confusion that the concept of hybrid would generate.

My approach on this is coasian. A very substantial part of transactions are organized through inter-firm agreements, with partners spending an incredible amount of time and resources in mutually adjusting their investments, negotiating provisions for sharing gains, dealing with measurement problems, and solving conflicts. Identifiable mechanisms and entities exist that provide support to the daily operations of these arrangements. In short, discrete hybrid organizations exist. We must explain why and what makes them viable substitutes to alternative modes of governance. I agree with Coase that hybrids are not “strange forms”. Rather, they are a major if not predominant mode of organizing transactions and, therefore, economic activities. But these forms are highly complex, which makes their study challenging. Challenging, and stimulating.

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