# La résolution de paradoxes : « moments clés » dans le processus de transformation organisationnelle

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Résumé

Cette étude remet en cause l'idée dominante selon laquelle la mise en place de formes organisationnelles « émergentes » s'accompagne de la disparition complète de leurs formes « conventionnelles » antérieures. Nous soutenons que la transformation organisationnelle a pour effet la création d'organisations hybrides dont l'émergence est rendue possible par la résolution d'un certain nombre de paradoxes. Cette recherche poursuit trois objectifs : premièrement, en positionnant sa problématique au centre du débat relatif au processus de création de nouvelles formes organisationnelles (« évolution » ou « révolution »), elle cherche à expliquer les causes d'apparition d'organisations « hybrides » et à identifier les attributs qui caractérisent ces hybrides. Pour éclairer ce débat, elle propose l'hypothèse d'un décalage entre un discours révolutionnaire ancré sur des archétypes et une mise en œuvre pratique évolutionnaire confrontée à des pratiques en décalage avec les discours. Deuxièmement, mettre en évidence les défis de conception et les paradoxes qui apparaissent au cours du processus de mise en place des nouvelles formes organisationnelles, paradoxes liés à la confrontation entre d'anciennes pratiques ancrées et de nouvelles pratiques souhaitées. Nous montrons en particulier comment la résolution de ces paradoxes est une étape importante de la mise en œuvre des nouvelles formes organisationnelles et comment les résolutions successives constituent autant de « moments clés » pour d'une part la définition du contenu de la nouvelle forme organisationnelle elle-même et la mise en œuvre effective de celle-ci en pratique. Enfin, nous mettons en évidence le rôle des différents acteurs de l'organisation dans ce processus, et en particulier du management, en illustrant les difficultés concrètes auxquelles ils se trouvent confrontés. Notre étude s'appuie sur une étude de cas au sein de la société Calvi qui décide, sous l'impulsion de son PDG, de mettre en place une nouvelle forme d'organisation basée sur l'idée de réseau alors qu'elle est caractérisée par un héritage administratif organisationnel plutôt conventionnel. Principalement basée sur une analyse qualitative issue de 65 interviews réalisées auprès de membres de tous niveaux dans cette dans les 7 filiales et 3 pays où est implantée la société, cette étude présente une première version des résultats d'une équipe internationale d'enseignants chercheurs.

Mots clés: nouvelles formes organisationnelles, organisations hybrides, transformation organisationnelle

### 1 INTRODUCTION

Over the last 20 years, a new stream of research has emerged which has claimed that the future of organization lies into more network-centric type of organizations. Based on an antibureaucratic paradigm, a corresponding literature has developed characterized by a "blizzard" of metaphors (Palmer et al. 2007) in a number of special issues of academic journals<sup>2</sup>. Different factors have been identified to explain the emergence of "new organizational forms" but the basic premise upon which this movement is based relates to the idea that bureaucratic forms are no longer adapted to the context of massive change and uncertainty characterizing the information age. Beyond an apparent consistency, this literature is characterized by "great confusion" (Child and Mc Grath, 2001) as most of the "new" terms that are used result from various case studies within firms that have implemented new organizational forms. Moreover, as evidenced in Palmer et al. (2007), the assumptions underlying the researchers' use of this term is diverse, which has led Palmer et al.' to call for a "generative dialogue" between researchers. In the absence of a unifying theory (Pettigrew et al.2003), new Organizational forms are described without us being sure neither that they indeed represent the same phenomenon nor that their emergence is driven by a common "debureaucratization" force.

A sample of the metaphors used to characterize "new organizational forms" from Child & Mc Grath (2001) and Palmer et al. (2007): "post bureaucratic" and "post-modern" organization (Clegg, 1990). The "post entrepreneurial organization" (Kanter, 1989), "flexible firm" (Volberda, 1998), "intelligent" (Pinchot and Pinchot 1994; Quinn 1992), "boundaryless" (Ashkenas et al. 1995; Crosset al. 2000), "self-managing" (Purser and Cabana 1998), "virtual organization" (Davidow and Malone 1992; DeSanctis and Monge 1999), "cellular organization" (Miles et al. 1997), "modular organization" (Galunic and Eisenhardt 2001), "federalism" (Handy, 1992), the "network organization" (Castells, 1996; Nohria & Eccles, 1992), "reengineered corporation" (Hammer & Champy, 1993), the "knowledge-creating company" (Nonaka & Takeuchi, 1995), the "ambidexterous organization" (Tushman & O'Reilly, 1996), the "high performance" or "high-commitment work system" (Garvin & Klein, 1993; Pfeffer, 1998), the "hybrid organization" (Borys & Jemison, 1989), and the "transnational solution" (Bartlett & Ghoshal, 1989)

<sup>&</sup>lt;sup>2</sup> Based on recent extensive literature review by Palmer et al. (2007) eight special issues or journals devoted to new organizational forms and related subject were published in recent years: Organization Science 1996 and 1999, Academy of Management Journal 2001, International Journal of Economics of Business 2002, Journal of Management Studies 2003, Leadership and Organization Development Journal 2003, American Behavioral Scientist 2006, and Journal of Organizational Change Management 2006.

Although based on a case-study, the purpose of this paper is not to "coin" a new term on new organizational forms. Its aim rather is to look at the process that is taking place when a company decides to implement a new organizational form. Notwithstanding the limits related to the heterogeneity of the new organizational form concept, our literature review indicates that scholars disagree with regards to the process of new organizational form creation. Some see it as an "evolution" whereas others consider it as a "revolution" (Palmer et al. 2007). The thesis of this paper is that the creation of new organizational forms departing from a bureaucratic paradigm results in the actual appearance of an organizational hybrid, which for shaping, involves the resolution of a number of paradoxes. In accordance with scholars that have been interested in hybrid forms, we believe there is something wrong with the assumption that the "conventional" and "emerging" models are discrete. To support this view, we analyze the conflicting forces at play during the transition to new forms (the paradoxes) and try to show how the resolution of those is a key part of the transformation process.

Our research is based on the study of seven subsidiaries based in France, Italy and Germany of an international mid-sized company operating in the special steel industry called Calvi. Although operating in a conventional sector the originality of this case lies in the will of the CEO to build an organization based on the "idea of network". In line with prior studies on the topic, our research is mainly based on a qualitative analysis. A team of researchers including sociologists with field experience and a doctorate student collaborated over an 18-month period to carry out and analyze about 65 interviews including CEO, Board Members, Managers and Employees. This paper presents a first version of the results of this study.

This paper is structured as follows: first we review the literature on new organizational form creation with a focus on (a) characterizing the move from "conventional" to "emerging" forms and (b) looking at the design challenges and corresponding theoretical paradoxes associated with the process. We then relate it to Calvi by showing how (a) the rhetoric of leaders and employee supports the position that a debureaucratization is indeed taking place and (b) how this process requires solving a number of design paradoxes which leads to a discussion on the central role of paradox resolution in the process of new organizational form creation. We conclude by characterizing the resulting organizational form as an hybrid under constant movement which emergence relies on both the leader's ideological alignment and ability to adjust along the transformation process an ideal model to the reality of the field.

### 2 PRIOR STUDIES ON THE PROCESS OF "CREATING NEW ORGANIZATIONAL FORMS"

### 2.1 MOVING FROM "CONVENTIONAL" TO "EMERGING" ORGANIZATIONAL FORMS: DUALISTIC vs. HYBRID VIEW

In their 2001 paper, Child & Mc Grath show that "conventional" and "emerging" organizational forms differ from the perspective of the three key sets of activities to which organizations are essential based on Aldrich (1999): "(1) setting goals: identifying and disseminating the collective aims of an organization, (2) maintaining integrity: regulating the flow of resources into and out the organization, and (3) differentiation rights and duties: identifying and governing duties and rights, as well as functions and roles, of members of the organization (Aldrich, 1999)".

Table 1 – Main differences between conventional and emerging forms.

Org. activity	Conventional Perspective	Emerging Perspective
Setting Goals	- Top-Down Goal Setting	- Decentralized Goal Setting
	- Concentrated Power	- Distributed Power
	- Preference for larger units	- Preference for smaller units
	- Leaders control, monitor and set	- Leaders provide guidance, and manage
	objectives through authority	conflict
	- Vision is dictated	- Vision is emergent
	- Hierarchy sets goals	- Teams and Workgroups set goals
Maintining	- Firm as unit of analysis	- Production system or network as a
Integrity	- Boundaries clearly specified and	primary unit of analysis
	durable	- Boundaries permeable and fuzzy
	- Reliability and replicability	- Flexibility
	- Vertical	- Horizontal
	- Rule-Based	- Relationship-based
	- Assets linked to organizational	- Structure independent of assets
	units	
Differentiating	- Specialized roles	- General roles
rights and	- Clear role definition	- Fuzzy roles definition
duties	- Uncertainty absorption	- Adaptation

Org. activity	Conventional Perspective	Emerging Perspective
	- Efficiency orientated	- Innovation orientated

Adapted from Child and Mc Grath (2001)

In the case of Child and Mc Grath (2001), a dualism is posited between "conventional" and "emerging" forms. In this way, a significant disjuncture between the two forms is created as if the two "archetypes" were dichotomous. According to Child and Mc Grath (2001), bureaucracy's familiar forms include "hierarchical control and authority relations, relatively fixed boundaries and top-down authority". According to Miller and Droge (1986) or Van de Ven (1976), several elements of formal structures can be identified including (1) Centralization (2) Formalization and (3) Specialization as displayed in Miller and Droge (1986) or Van de Ven (1976). At the other end of the continuum, a different model, taking almost the opposite characteristics on each dimension is characterized as being a different model of "emerging" organizations. However, when attention is focused on the practical reforms attending those who try and modernize an existing "conventional" structure one thing appears clearly: the creation of a new form does not consist of the "simple" replacement of a new form by another. Rather, the process of creating an "emerging" form is nourished by the existence of the "conventional" form. This view was supported by Du Gay (2004) who challenged the opposition between "bureaucracy" and "enterprise" as sheer dualism.

Challenging "archetypical" models to suggest that in-between hybrids exist is not a new idea. After Williamson (1975, 1985) suggested that two models had to be considered, markets or hierarchies, critics emerged. Stinchcombe (1985), for one, saw strong elements of hierarchies and domination within contracts; Eccles (1985) observed that large firms rely on market-like methods such as transfer-pricing and Goldberg (1980) noticed that many market exchanges had been replaced by interorganizational collaborations. A decade after, in a different settings and context, after Powell (1991) suggested that a third "network" model has to be distinguished from both market and hierarchy others argued that there was no clear demarcation justified by operational differences and that these dichotomous distinctions created for academic stakes turned a blind eye on organizational hybrids.

Examples of such hybrids have been displayed in more recent literature through Du Gay (2004) as described above, Ashcraft (2001) or Bigley and Roberts (2001). Ashcraft (2001), in an organization she calls SAFE, which is dedicated to helping women suffering from abuse,

describes an organization whose members are consciously attempting to go beyond bureaucratic principles but who are unable to abandon them. Instead organizational members create tactics that enable them to continue using bureaucratic tools whilst retaining a bureaucratic ideology. Bigley and Roberts (2001) show how through the implementation of an Incident Command System, a typical bureaucracy (in this case a Fire Department manages to couple an explicit structuring with improvisation, with each contributing uniquely to the flexibility potential of the overall system. In this view, there is space for organizational hybrids that display conflicting characteristics such as a "virtual organizations with horizontal relationships" (Ahuja and Carley, 1999) or a "transnational organization that retains hierarchical governance as an overriding feature" (Gooderham and Ulset, 2002). Behind this idea of hybridity, it is in fact the complexity associated with the process of new organizational form creation which is at stake. Tom Peters acknowledged this as he was one of the "early zealots" (Palmer et al. 2007) urging the practitioners to get rid of "vertically-orientated, thickheaded" organizations". He later recognized that he had been "thriving a little bit too much on chaos" and that bureaucracies still had their utility (Peters 1992: 13). This simple evolution of statement at two different period in times illustrates that the process of new organizational form creation is more complex than it appears.

In this view of organization as hybrids, "dualistic entities" could exist (Pettigrew and Fenton, 2000a) which would combine "traditional or hierarchical practices" with "new more flexible, market-based practices" (Holland and Lockett 1997). Palmer et al. (2007) bring light to the debate as to whether new organizational forms are dichotomous or hybrids through a different angle. They identify that the literature on new organizational form is inconsistent as regards to how it considers the switch to new organizational forms. On the one side a "revolutionary" change, supported by theories such as information processing assumes that building a new organizational form represents "a complete departure from past practices instead of incremental improvements" (Brynjolfsson and Renshaw 1997: 37) whereas for Bartlett and Goshal (1994) the transnational solution represents a "fundamental shift in structures, process and decision-making". From this perspective there is incompatibility between "traditional" and "emerging" forms. On the other side, an "evolutionary change" supported by theories such as feminist theory or population ecology perspective assumes that "emerging" forms grow out of "traditional" ones which suggests compatibility between both. In this evolutionary view, new organizational forms are viewed as "recombinations of previously successful organizational forms" (Bruderer and Singh 1996: 1328). Although Lewin et al.

(1999) try to reconcile both views by suggesting that, "both evolutionary and revolutionary perspective may spark new organizational forms", this area remains under researched.

As illustrated by Palmer et al. (2007), the current organization literature offers two opposite explanations for the same phenomenon: depending on the theoretical background of the researchers, new organizational form creation is whether a "revolution" or an "evolution". Despite extensive research in the field of new organizational form creation, we still do not seem to fully understand the related dynamics and processes. On the one side a "revolution" perspective assumes "duality" whereas on the other side an "evolution" perspective assumes "hybridity". Beyond this apparent contradiction, it is our assumption that there is probably a disconnect between the "idea" and the "reality" of new form. On the one hand, from a rhetorical and discursive point of view, the target new form is indeed one that completely departs from past practices supporting a revolution perspective. On the other hand, from an implementation perspective, paradoxes and contradictions emerge between past and new practices resulting into the appearance of hybrids supporting an evolution perspective. Thererfore, in line with previous studies, we see the new organizational form creation as a socially constructed process (Galunic & Eisenhardt, 2001). As a possible reconciliation vehicle between these two conflicting perspectives, we look at this process from the angle of the design challenges emerging between discourse and reality in the following chapters.

### 2.2 DESIGN CHALLENGES AND DESIGN PARADOXES IN NEW FORM CREATION

According to Child and Mc Grath (2001) there are 4 key design challenges that "the dialectic" of new organizational forces face. Each of them reflects an issue created by the "unfettered" nature of operations related to the switch from a "Production" to an "Information" era. These include (1) Interdependence, (2) Disembodiment, (3) Velocity and (4) Power.

(1) Interdependence challenges the presumption that there is advantage in controlling resources within the boundaries of a given firm and that the functioning of a given structure can be understood without reference to the others. (2) Disembodiment challenges the presumption that an organization has to own its assets to utilize them for efficient production and that organizational routines should be associated to particular physical resources or locations. (3) Velocity challenges the presumption that decision-making is faster when decisions are made in a top down fashion in a hierarchical organization structure.

(4) Power, and accountability for its use, which in the traditional bureaucracy was presumed to be placed in the control of top executives is no longer centralized but distributed throughout the organization in emergent organisational models.

Based on the above described challenges facing new organizations, several "design paradoxes" or tensions could be identified when designing new organizational forms.

Related to the (1) Interdependence challenge, there is a paradox for instance as to how the autonomy of the subsidiaries could be enforced as a guiding principle while by construction this autonomy creates potential side effects for the units belonging to the systems. Acknowledging that the functioning of any given structure cannot be understood without references to the others raises complex questions with regards to the measurement of the managerial impact for instance: how could the role of some be isolated if their contribution could not be understood without reference to the other managers within the system? Solving such issues requires the invention of new regulation models with regards to autonomy, cooperation and competition between managers and units which emergent organization face. On (2) Disembodiment, some profound challenges need to be solved such as enabling cooperation between teams that are not based in the same physical location. As Montoya-Weiss et al. notice (2001), "teams can not work virtually and behave as they would if they were physically together". On the one hand, people are working in different places with different cultural background and languages to enable flexibility and adaptation whilst on the other hand they are required to work using the same standards and policies. Consistent with Galunic and Eisenhardt (2001) we believe this is the source of paradoxical tensions which require some investment in standardization as a prerequisite to effective modular cooperation. On (3) velocity, there is a tension between the benefits of a vertical line of command for speed and horizontal line of command for reactivity. On the one hand, "Top-down decisionmaking allow for changes to be rapidly executed" (Child & Mc Grath 2001) whereas "loosely coupled organizations, can more easily locate a problem and respond quickly to challenges" (Child and Mc Grath 2001). Behind this point, we touch on the difficult arbitrages that need to be made just for the sake of increasing the velocity of organizations and see that the answer is not black or white. From that perspective, it is hardly surprising that the switch from one triggers misunderstanding and resistance. On (4) Power, a paradox could exist between a non bureaucratic ideology and tactics or behaviour that go against this ideology as displayed in Ashcraft (2001).

Moreover there could be another tension between a discourse displaying a will to empower decentralized actors on decisions whilst still willing to preserve some centralized power on others as we will see in the Calvi case.

### 3 CALVI HOLDING STUDY AND METHODOLOGY

#### 3.1 CALVI

Our study is based on an analysis of a process of new organizational form creation in a company called "Calvi". This case is used to further test our understanding of the process of new organizational form creation. Calvi's core activity is the production of special steel profiles using different technologies (cold drawn, hot extrusion, hot rolled profiles, ). The founding company which includes two sales subsidiaries (CALVI & SIPA) was created in 1950 by an entrepreneur - Omar Calvi - who sold it to the current CEO and owner - R.Chini in 1998. By the time it was taken over by R.Chini the company's sales had reached around 30 Million Euros. Since 1999, Calvi initiated an external growth strategy which led it to reach about 250 Million Euro of sales at the end of 2006. Between 1999 and 2006 several acquisitions of companies operating in the "special steel" took place: CEFIVAL (a French based company) was acquired in 1999, SIDERVAL (an Italian based company composed of two sales subsidiaries) joined Calvi in 2001, HOESCH SCHWERTER (a German based company) was acquired in 2002 and CEREC (a French based company) was acquired in 2006. In 2008, the company further expanded through three major acquisitions in the US, Canada and Italy and has now reached an annual sales of about 500 Million Euros. The scope of our study included the seven companies that composed Calvi by the end of 2006 that is without the three additional acquisitions that took place in 2008.

Each new company joining the Calvi group would be invited to join a "Network" which purpose would be to leave each of them still pretty independent whilst making it possible to create some interactions between them when required. In the CEO's view, this organizational model that is called "organization network" would be based on the following idea: "we need a new way of management in a form that works like a brain with synapses. Each company is the neurone & we should define a content of information & services between them that will create the synapses". The idea of "network" and the subsequent autonomy associated to it was relatively well received within the top management of the Calvi member firms although we noted that different people put different realities behind the term.

People tended to mix it with the "Sales Network" which was based upon the same idea but focused on the collaboration of the Calvi subsidiaries with external Sales Agent

#### 3.2 METHODOLOGY

In our analysis we concentrated on the implications of "change" from an employee, manager's and top management perspective after joining the "Calvi Network". The key idea was to check how this network was shaping as an hybrid between a new form under construction and its former bureaucratic state. We also studied the perceptions of the employees with regards to the associated structure, processes and identity and also asked some supporting documentation to check the forms of collaborations between the companies.

We could interview managers and other organizational members and examine all kind of company's material (company's reports, figures, sales presentation kits, business cards, web sites, factories visits, ..). Our intent was to collect complementary sources of data and use multiple methods of analysis as *multimethod approach* is recommended for case studies that intend to reconstruct actual processes and events (Langley, 1999). This is particularly useful in the case of discourse analysis, examining not only discourse *per se*, but also the social conditions and practices with which the discourses are intimately linked (Phillips and Hardy, 2002).

Our analysis is therefore qualitative and focuses on how the CEO, Board members, managers and other organizational members viewed the change to the network form. Drawing on this we highlighted a number of paradoxes stemming from the transformation and showed how those had to be solved as part of the network creation process. In this analysis, we drew from interviews with organizational members and various company documents. We interviewed 65 people spread over 7 companies in 3 countries (Italy, Germany and France). Those included 10 top managers, and bout 55 middle managers or employees involved into various activities (sales, production and industrial activities, R&D, finance, procurement,...). After a first meeting with the company's CEO in March 2007 where he explained to us his idea of the "network", we were given access to the seven subsidiaries of Calvi in the three countries. Accordingly, we met several members of the company's board and the CEO a couple of times in 2008 to complete our understanding. These interviews were conducted by a team of 5 researchers located in 4 countries mainly in three languages (Italian, French and German)

although some were also conducted in English. As we were invited to different company's events (Annual Sales Agent Meeting), we also had the opportunity to meet informally with several employees and also Sales Agent working for Calvi in countries where the company doesn't have physical presence. Further we gathered all the available material concerning the company's presentations as well as evidences supporting collaborations between the different subsidiaries (ex: project outcomes from joint initiatives between subsidiaries). Based on this material we identified perceptions about the change process related to joining the Calvi network in general, and in particular with regards to collaborations between member firms.

### 4 DISCUSSION OVER THE TENSIONS & PARADOXES AT CALVI IN THE PROCESS OF CREATING A NEW ORGANIZATIONAL FORM

### 4.1 MOVING FROM "CONVENTIONAL" TO "EMERGING" ORGANIZATIONAL FORMS: ILLUSTRATIONS AT CALVI

One of the salient aspects of debureaucratization, from a postmodernist perspective is that the "production of physical things is gradually being surpassed by production of information goods and services in economic importance" (Quinn, 1992). This is also what Child and Mc Grath (2001) identify as being the main trigger for new organizational form creation.

Based on the interviews which we carried out in Calvi, we identified what the "idea" of the new form involved and to what extent this idea departed from the "past" practices of each of the Calvi subsidiaries. We then confronted this view with the reality of practices through the interview of different employees where we tried to identify whether tangible signs of change with regards to their practices indeed indicated that the building of an "emergent" model was underway. To characterize whether or not these elements refer to rather a "conventional" or an "emerging" model we refer to the model proposed by Child and Mc Grath (2001) which we described in the second section of the paper.

The "idea" of network organization from the leaders' perspective...

Based on an interview with two key leaders (one of which was the CEO) we tried and identify what they would describe as "organizational efficiency", assuming that the new organization that they would build would lean towards this ideal. We also asked the leaders about their vision with regards to the level of autonomy that each subsidiary should have towards the Headquarters. Lastly we also asked them how they would think a "network" organization

should work. The following statements, in quotes, are extracts from the interviews illustrating how leaders view an "efficient" organization. To qualify whether their statement related more to "conventional" or "emerging" perspective we used Child and Mc Grath's (2001) model (Cf. table 1) to characterize their statements as whether belonging to "conventional" or "emerging" organizational types.

On the "Setting Goals" dimension, we noticed a very clear alignment amongst the leaders with regards to defining a target that borrows from the "emerging" organization type as opposed to the "conventional" on all dimensions. On (a) decentralized goal setting: "We think that each companies should be run autonomously"; on (b) distributed power "Management can not be centralized" or "we consider that Decentralization brings value and growth"; on (c) preference for smaller units: "For us an efficient organization is one that has a light holding structure"; on (d) the role of leader as being one of providing guidance rather than controlling: "Calvi Holding is the advisor of companies that should be run autonomously"; On (e) the vision being emergent rather than dictated: "Each company should have its own board, strategy and organization"; and finally on (f) the role of workgroup rather than hierarchy in setting goals: "Decentralization triggers initiatives and motivation which enable the company to get better results"

On the "Mainting Integrity" dimension, the results confirmed the analysis made on the "Setting Goals" dimensions supporting an "emergent" type of model. On (a) Production system or network as a primary unit of analysis: "[...] the companies should be independent and part of a network but not part of a financial holding running factories which are part of business units"; on (b) Flexibility in structuration: "Consistency of organizations across companies is not a goal"; on (c) Relationship-based rather than rule based system: "synergies should be developed but at the subsidiaries initiatives – spontaneously & self generated"

On the **Differentiating rights and Duties dimension**, the leaders were in favour of General Roles rather than Specialized roles: "The real problem is not to find specialists at the Holding level it is to find entrepreneurs that can support the model"

Based on the above described elements the leaders' discourses is clearly depicting a preference towards building a non-bureaucratic organization that favours "initiative", "local decisions" and decentralized "power".

### The "idea" of network organization from the employee's perspective

This leader's view was confirmed by the interviews of a number of employees who were asked how they viewed the way the company was actually operating after they would join the Calvi network from different perspectives. No contradictions were identified in the discourse of the employees and that of the leaders. For instance, the employees confirmed several items mentioned above for instance on (a) Decentralized Goal Setting orientation: "Apart from [the financial targets] they give us a total autonomy"; on (b) distributed power: "There is undoubtedly a will to not interfere too much and to leave us with a certain freedom"; on (c) Preference for smaller units: "The decision time is shorter & there are less people between the requester and the person making the final call which has a positive effect on motivation"; on (d) the role of leaders as being one providing guidance rather than controlling: "there are shorter decision cycles with a greater decision ability and greater autonomy"; on (e) general role rather than specialized role definition: referring to the appointment as member of the board of one of the board members in one of the subsidiaries one employee commented: "The position of M.X in our company was not formally communicated to us. It was said that he enters the organization chart but this was never written"

All these elements support the thesis of the will to implement a model that is based on an anti-bureaucratic paradigm. Based on the Child & Mc Grath (2001) model, evidence supporting an emergent perspective has been identified in the three dimensions ("Goal Setting", "Maintaining Integrity" as well as "Differentiating Rights and Duties" both from a leader's as well as an employee point of view). However some signs showing limits to the above were also identified.

### Limits of the discourse: signs of traditional authority and difficulties in practice

Signs of "conventional" perspectives also appeared especially with regards to decision-making and centralization of authority (leaders and employees acknowledged that in reality there was still a certain will to centralize "key decisions" which were still all made centrally as well as "power"). This shows that beyond a very "emerging" discourse, in the reality of actions the leaders still wanted a minimum level of control to still "harness" the network. It is

worth mentioning that the practice of network led to some confusion within the employees who were experiencing difficulties related to the "network organization" implementation which was indeed departing a lot from their past practices.

Moreover we also noticed contradictions between the "idea" and "reality" of organization that were not expressed in the form of quotes but that we noticed through various signs, document analysis, behaviours or even informal discussions. The first reason probably lies in the "administrative heritage" of both the French and German companies where signs of working habits pertaining to a traditional authority line of command were observed. Most individual companies within the network had a very long history (between 50 and 100 years) before they joined the Calvi Network. This was evident in the habits and ways of working that some employees had when they were referring to their working habits (multiple references to the bosses, very strong involvement of the bosses in decision-making, etc...). Although most employees acknowledged that indeed there was a will to decentralize, we noticed some differences between the leaders' view willing to favour initiative and the habits of work that people seemed to have (we could only derive this from our discussions with them rather than based on an ethnographic type of study). Some people who – despite their appreciation of the increased freedom that the company gave them – had not been used to taking initiatives and somehow had to be directed to do so. This indicates by no means that the leader's discourse was a manipulation but rather that the "debureaucratization" process involved significant changes in behaviours which created a dissonance between "idea" and "practice". This is not surprising though when considering how opposite the two archetypes are. The "cascading" of this new company's way of working will probably require more time for the vision to be translated and incorporated in every day's practices (work habits, symbols, & rituals) of the employees and was not fully deployed at the time of our last interviews. This probably suggests also that the implementation of new organizational forms requires frequent and organized integration mechanisms for existing working habits to be developed and new working practices to be established that could overcome the administrative heritage.

Secondly we noticed that the system of authority in each of the companies was very hierarchized with roles and status being very clearly described and constant over time (analysis of the organization charts). The structure of each of the individual companies in terms of organization chart had not evolved very much and was still based on a very vertical line of command. A sign was that the tasks of the inviduals were pretty explicit with some

very specific roles, rather than general ones, and more importantly had remained constant over time. Lastly, and as we saw earlier according to the leaders themselves, beyond the discourse of decentralization, they recognized that the "key decisions" – without those being qualified clearly in terms of what they are - were still made by the corporate headquarters even in a "network" model.

At this stage of the analysis, we could say the following with regards to the debureaucratization process that we saw sat Calvi. Signs undoubtedly indicate that a "debureaucratization" was under way in this company. This was rendered possible by the strong alignment of the leaders with regards to the benefits of "an emerging model". At the same time, not all aspects of the emergent model were implemented which supports the view that a debureaucratization in practice does not result into "discrete" organizational forms but could shape as a hybrid forms. In addition, we also identified that in parallel to the debureaucratization process, some signs of traditional form kept existing due to the "administrative heritage" and the will of the leaders to still keep some power on key decisions. This leads us to the next section where we would like to reflect on the different paradoxes that we observed as being at the center of the "new organizational" model implementation.

### 4.2 DESIGN PARADOXES IN CALVI

During the implementation of the Network at Calvi, we have evidenced that such paradoxes have existed and that solving those is part of the process that the company had to go through to build its new organization model.

### Paradox 1: Formalizing rules or. keeping things informal

The Calvi group has been built through the acquisition of a number of companies operating in the special steel industry. The strategic rational for acquiring a company was that it would operate in the special steel segment and that it had a good mastery of some specific technologies (even if such technologies were already available within other member firms). In addition, most acquired companies were formerly part of bigger mother company firms, which for strategic reasons had decided to no longer continue in the "special steel" business and were therefore divesting some of their subsidiaries. This is how the group started to shape. Soon after they would be acquired, the new joining company could be integrated to

the "Calvi" sales network. This network includes a number of external companies which are "sales agents" and which are in charge of performing the sales of those companies in areas where they do not have a physical presence. One rule of the sales network given by the corporate headquarters is precisely that there is none with regards to choosing an agent. In other words, each company is allowed to use an existing sales agent or any other of their choice. This is how, for instance the same agent represents two Calvi subsidiaries (in Austria), four Calvi subsidiaries (in Turkey), or that in Italy some subsidiaries use agents whereas others do direct sales without using any agents. Each company is thus allowed to establish its own contract with their chosen agents in each country. The resulting network is based on the belief that a sum of chosen local optimums works better than a planned central one.

This freedom of choice and the historical antecedents of firms which for some were historical competitors before they joined Calvi led to situations where the same agent was suddenly asked to represent two subsidiaries belonging to the same company. This created some embarrassment within the agents which in case of an incoming quote from a client had to decide to which companies they should route the order. In the absence of any rule, the agent did not know how to behave which led to a lot of confusion. The philosophy of the corporate headquarters was that there was no need to formally explain what the process of allocating business to one company or the other was and that the situation would self regulate. However some arbitrages were ultimately done by some agents which led to some frustrations within the companies that later learnt that they had not been consulted for a given quote. An intermediary solution was found were the head supervising several Calvi subsidiaries was asked to which company the quote should be routed. However, this was slowing down the process and not working in an optimal way.

At the request of both the agents and the subsidiaries though, some rules started to be formalized. These rules were simple rules based on historical antecedent of the client and specialties of the firms. For instance if a client had once been the client of Company A, any new request for order coming from this client would rather be routed to company A in the first place. In addition, the "specialties" of each firms were explained to the agents (such as Company B is better at doing product x, and Company C is better at doing product y). These rules enabled to significantly speed up the process of allocating the requests for quote and hence providing proposals to the clients.

What is interesting in this case is that consistent with Galunic & Eisenhardt (2001), and Rindova and Kotha (2001) we identified that indeed the speed and flexibility of the network is dependant on rule formalization. Three interesting conclusions could be drawn from this example: (1) As opposed to the belief that building emerging organizational forms requires a decrease in rules formalization, we can see that in some cases it is rule formalization that enables a non-conventional organization to work. This is not to say that the network could not work in the absence of such rules but in this case it was working in a less efficient way because managerial decisions were requested for decisions that in turn could be more efficiently carried out by rules. As opposed to a "pure" bureaucratic model though, the difference is that the rule could be challenged by common sense or a management decision. (2) It is the specialties of the members of the network which enables to make sense of the network, especially when it had to be explained to a third party like an agent and we identified that this process of sense making is a key part in the process of building a network organization (3) The rule formalization almost "emerged" from an external and internal employee request and was finally imposed as opposed to what the leaders initially had in mind: no formalization required

Paradox 2: Organizing cooperation through Informal (Horizontal) or Hierarchical (Vertical) coordination mechanisms

The organizational structure of each subsidiaries of the Calvi group is a traditional functional one with a General Manager exercising vertical line of command over his staff in his country. The Corporate headquarter is a very light structure with about 5 people mainly dealing with legal, HR, controlling and financial operations. From this perspective, each subsidiary is very autonomous by design from the corporate headquarters with each CEO having full authority to develop their own structure. The board is composed of four members, amongst which the CEO. No clear operational role is devoted to any of them by design, but they still decided to attribute to each other some "informal" roles & responsibilities: one would manage "finance", the other "real estate", one would supervise the subsidiaries operating technologies based on "cold" processes and one would supervise the subsidiaries operating based on "hot" processes.

Each subsidiary operates technologies which are whether cold or hot, and one operates both. By construction the board members refused the idea suggested by consultants to create "divisions" that would be in charge of supervising the operations of all subsidiaries operating a given technology. According to the leaders this would have created "useless bureaucracy". Instead they relied on each CEO and employee operating in one subsidiary to connect with their functional equivalents operating in other subsidiaries in order to find collaboration and optimization opportunities. The leader's idea was that the network should be spontaneous rather than based on formally imposed structures. As part of our interview process, we asked employees and company's CEO to let us know which were the collaboration initiatives in which their subsidiary was taking part that would involve one or more subsidiaries of the Calvi organizational network. We identified about 10 collaboration initiatives involving 2 or more subsidiaries that had taken place in the previous three years. Those would include collaborations such as common procurement, maintenance workgroups, production rebalancing, etc... For the top management, this was the sign that the organizational network was indeed operating according to their model.

Through an analysis of these collaboration examples we noticed that all collaboration initiatives were taking place within the borders of the informal roles and responsibilities of the board members. For instance, there were a lot of initiatives between the companies operating within the "hot division". In addition we saw that most of these initiatives were actually initiated by one of the board members that had the oversight of the different subsidiaries.

This proved that, beyond the discourses of "spontaneous network" the initiatives were strongly relying on them being legitimized by one of the top hierarchical figures. This situation was in fact creating conflicts between "verticality" which was the official line of command and "horizontality" which was the line of "cooperation". Hence, collaboration within the network was possible only through the formal intervention – in one way or another – of a legitimate hierarchical figure that would activate a cross subsidiary collaboration. We also noticed that at the crossing of verticality and horizontality, a certain number of people were key in bridging the gap between the will of the board members to foster cooperation and the authority required to commit some staff members that would be asked to collaborate with other member firms. These people were very few which was both slowing down as well as limiting the potential number of collaboration between subsidiaries. Because only a few people were legitimate to activate such collaborations, this absence of formality was creating "bottlenecks" of cooperation. In addition, we noticed that the person in charge of "activating" the network had a dilemma between optimizing its own subsidiary or indeed activating a cross

subsidiary cooperation. In fact the network collaboration was not demultiplied as the "formal" organization did not render collaboration compulsory but rather optional.

This example brings an interesting light to theoretical developments related to hierarchical vs. lateral coordination mechanisms. According to Martinez and Jarillo (1989), who carried out an extensive literature review on coordination mechanism in multinational corporations, two generic types of coordination should be distinguished: (1) formal hierarchical structure and (2) informal lateral relations. According to the information-processing perspective, centralization is likely to have a positive effect on intrafirm-knowledge sharing because "centralization provides coordination and integration across the interdependency" (Egelhoff 1988). On the opposite, for Poppo (1995) "centralization can cause inefficiencies because the transfer of knowledge from organizational unit to corporate headquarters is prone to error and thus postpones decision-making". Also, "it is possible that centralization reduces the initiatives that a unit can take. Consequently, a unit in a highly centralized organization will not be interested in providing its knowledge to other units unless a higher authority requires the unit to do so. Such an inactive role reduces possible beneficial knowledge flows to other units in the same organization". As we can see in this example, different theoretical perspectives could lead to different results amongst researchers as to which coordination mechanism (hierarchical or informal) better fosters intra-firm knowledge sharing. Interestingly, in the case of Calvi what we saw in reality was the emergence of an hybrid model rather than one where top-down line of command was replaced by informal lateral relations.

This point raises interesting questions on whether collaboration should be optional or compulsory. It seems key to us that incentives be thought of related to fostering collaboration as their absence equates to having incentives to not collaborate. Solving the coordination mechanisms was one of the paradoxes which was key in making the organizational network operate.

### Paradox 3: Favouring cooperation or competition between subsidiaries

One of the ideas of the CEO was to let the subsidiaries compete against each other on certain deals thus creating situations were two companies of the same group would compete against a

sister company in answering a client's quote. The initial idea was that if the organizational network was working well enough, companies could speak to each other to make a proposition that would be differentiated from the other thus increasing the chances of final success at the boundaries of the companies. This kind of coordination required some coordination to take place between the companies before they would reply which is very close to what would be achieved through a hierarchical coordination but this model was not supported by the top management.

We noticed that even towards the client some kind of rationality was anyway required to justify why two bids were coming out of the same company at two different prices for instance. We noticed that this situation created some confusion between member companies which were at loss with regards to when they should compete or when they should cooperate. In this context the subsidiaries were asked to both "cooperate" and "compete" which was another paradox that companies had to deal with. As a result of this, the managers were asked to clarify the areas of collaboration and of competition more clearly through a set of rules. This point also raises the question of the permanence of such rules: one could well imagine that in a context of high demand collaboration could be an easier alternative (no capacity to deliver), but which might not apply in a context of crisis.

Paradox 4: changing or not changing organizational charts and structure to implement a new organizational form?

In a context where a shareholder takes over a company or a leader is entering into a new position, one generally observes the following: after a period of diagnosis, organizational and operational changes are shortly announced. These changes enable to materialize and provide tangible signs regarding the actions that a shareholder or leader is willing to undertake and the organizational chart is the visible part of this plan. In the case of Calvi, some of the company managers were striken by the fact that after joining Calvi "nothing was happening" from an organizational perspective. No changes were required with regards to organizational charts, no interference with the local management with regards to recruitment guidelines or salary scales, etc. The structure of the holding itself was not communicated in details. Being asked about it of one of the company's general manager replied "I can't tell you with certainty. This wasn't written anywhere..."

In the case of Calvi the implementation of the network model is based on several assumptions as we saw: "autonomy is good"; "network is spontaneous", ...As a consequence the top management is not intrusive at all and leaves a very strong autonomy to the subsidiaries. Several consequences arise from this situation. First as opposed to what usually happens in such cases where the new shareholder would usually not leave a lot of time for people to learn and change, this is not the choice of Calvi. Their bet is that autonomy brings benefits in the long run even if it requires some time and prevents some short term gains. Second, they accept that organization models between different countries might differ: similarity is not a goal and diversity brings benefits. Thirdly the coordination structures are not forced through "divisional" like models (new appointments) because this creates the need for "managers" and "useless reporting" which is counterproductive in their view. In the Calvi case the interesting paradox is that the will to implement a new organizational structure is not materialized by a change in the organizational structure itself (organizational charts). This requires a different approach to time and a strong bet on people as the model relies on "new behaviours" rather than new structures

### 5 CONCLUSION

Calvi's research serves as a revealing case that highlights the complexity of the process associated with "new organizational" form creation. We believe that our research contributes to the new organizational form creation literature through the three following conclusions.

(1) In the process of building new organizational forms, organization hybrids appear as a compromise between a discourse promoting a revolutionary change and an administrative heritage characterized by conventional rooted practice which transformation is evolutionary

Starting from a divergence in the literature to explain new organizational form creation with a "revolutionary" change perspective on the one side and an "evolutionary" perspective on the other, we displayed evidence that one explanation might relate to the disconnect between the "idea" and the "reality" of new organizational form creation. The rhetoric of the leaders supporting the "network" idea is indeed rooted in a profound anti-bureaucratic stance which suggests a complete departure from bureaucratic practices considered as outdated. In their vision of "efficient" organizations, bureaucratic models are considered as the anti-model for efficiency. Consequently the leaders suggest building a model based on "an idea", which

interestingly does not necessitate strong organizational adjustments from a pure structural perspective. However, when reality strikes and the new ideas start being implemented in the field those collide with a set of past practices deeply rooted which creates a set of issues and confusion along the way. This supports the position that a new organization is not new per se but new taken a given context (administrative heritage, habits, available skills of the resources, etc...). Moreover, as part of the process of making the model real the rhetoric suggesting dualism between "traditional" and "conventional" model is reduced as an "hybrid" starts to shape which borrows from the two "archetypes" of "conventional" vs. "emerging" to build its own unique reality. It seems that two key factors could account for this hybridization and its level in the reality of the field: (1) the "administrative heritage", which was strongly bureaucratic in the case of Calvi, could create some inertia in the process of transition. In this case, the new organizational form which is created is a kind of compromise between an idea and a reality and the end point results into an hybrid. From that perspective the Calvi model resembles that of Ashcraft (2001) where the resulting hybrid enables to both "keep antibureaucratic posture while keeping bureaucratic practices". (2) An optimum of efficiency in a given context: this was the case of Bigley and Roberts's (2001) Californian firemen which enable to combine the advantages of a bureaucratic organization which brings the benefits of a unique line of command whereas the new system that is implemented enables to bring some flexibility. In both cases and consistent with the organization scholars that have resisted the idea of a complete disappearance of bureaucracies in the case of new organizational form creation we have explained the creation of hybrids as the result of a compromise between an "idea" and a "reality" and tried to bring the debate forward through the characterization of this hybrid. In a nutshell, beyond the conflicting perspectives of the evolutionary vs. revolutionary school of thought one possible explanation could be the dichotomy between the "rhetoric" of new organizational forms and the "reality" of those.

(2) In the process of building new organizational forms, paradoxes emerge the resolution of which represent "key moments" in the transition to the new organizational form.

We identified that the process of building new organizational forms was going along with a set of design challenges (Child and Mc Grath, 2001) each of which was creating design paradoxes. We then identified that the resolution of these paradoxes was a key part of the new organizational form process from the perspective that it is the resolution of those which enact the transition and the effective implementation of the idea at "key moments" on key subjects.

Those paradoxes were related to important questions as they referred to paradigms that were in conceptual opposition: should rules be formalized (conventional model) or not (emerging model)? Should cooperation be forced through hierarchical top-down decisions (conventional model) or through informal lateral relations (emerging model)? Should units and people rather compete (conventional model) or cooperate (emerging model)? Should the enactment of the new organization be written and officialised in an organization chart (conventional model) or rather take place "in the minds" and through new behaviours (emerging model)? Several things could be inferred from each of the paradox resolution process. The paradox resolution was required for the model to move to a new stage of equilibrium and until a resolution could be found the system was in a state of instability which was reducing its performance (cf. the agent's episode related to the absence of rules related to which subsidiaries the orders should be routed to). This supports the generally accepted idea amongst managers that implementing a new model has temporary adverse side effects on performance and confirms that time is a key factor to take into account when implementing a new organizational form: this time is necessary for the model to mature in the minds of all and for new routines be put in place. We also noticed that if the resolution of the paradoxes is a key step in the process, the paradox solving outcome could not always be easily anticipated because of the complex interactions which were taking place for its resolution as this is a social process: we saw for instance that the creation of rules although not wished by design from a leader's perspective, finally had to be implemented driven by the employees and agents which were confused by their absence.

This leads to an important conclusion with regards to the outcome of paradox resolution: the "new form" that emerges is not a static end point but rather a form in constant movement where a number of actors participate in creating, challenging, adapting to the new rules that they themselves contribute to create.

(3) the role of the managers is key not only with regards to setting a vision and promoting it through actions but also through their ability to solve the paradoxes or letting the time to the system to self regulate and find its own solutions

We first noticed that there was a top management alignment on what the new organizational model should be from an ideological perspective, which seems to be a prerequisite for a new model to shape. The interviews of two of the key leaders, which were done separately, were striking by the ideological consistency they displayed in depicting their target based on an

anti-bureaucratic paradigm. This alignment enabled the model to spread further down although we noticed that some people were confused and having different interpretations behind its meaning. Notwithstanding the interpretation differences, the key concepts of the network still were grasped by the employees. Therefore the key concepts matter more than the details. This point is illustrated in an even more compelling way when we notice that in terms of organizational structure no formal change to the organization charts supports factually the new model. We evidenced some limits to this absence of formalisation of the model through the bottlenecks that informality triggered and the options given to employees to collaborate or not. Still collaboration initiatives indeed took place although the "cooperation" was still operating at the borders of the "informal" roles and responsibilities of the leaders, which is another sign of hybridity. We also evidenced that the actual implementation of the model required an alignment between ideas and actions. This worked because the "anti-bureaucratic" rhetoric was indeed supported by a number of concrete actions in the field such as letting people make choices on subjects that they historically had no autonomy on. We also noticed that beyond the discourse of autonomy some implicit limits were given to the model by the leaders, which shows that the process triggers paradoxes that need to be solved at the top also.

We lastly noticed that the role of the leaders was key in setting the pace and span of the new form creation through their ability to let the model self regulate when required. We thus saw that as part of this process some adjustments had to be made between the "ideal" model that the leaders had envisaged and what the "real" model would be.

This research shows that there are some "critical moments" in the transformation to a new form and that these critical moments correspond to moments of paradox solving. The end result of this process is an organization hybrid which form is unique and hard to anticipate due to the social process involved in creating it. The answers given at these critical moments are the turning points of this new organizational form emergence. Because based on a single case study the generalization of the findings could be challenged although our approach is robust for the study of actual process reconstruction. Beyond the academic contribution, we believe this study also has some managerial implications as it displays concretely that paradox solving is something to be expected and anticipated when switching to a new organizational model. Top managers should be flexible in the details of how the organisation shapes due the social nature of the process involved and rather make sure that people understand the key concepts underlying their idea of efficiency instead of focusing on organization charts only.

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