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Reflexive Power(s)?

Exploring the Dynamics, Contradictions
and Paradoxes of Evolving Political Forms
in Innovative Organizations.

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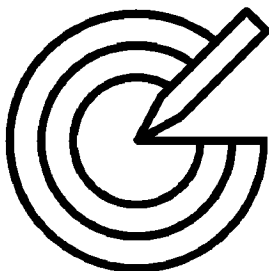
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Summary

How do reflexive political forms within organizations and the design of innovation processes co-evolve? This paper focuses on emerging *reflexive* forms of power and authority, considered as regimes beyond pure domination (Clegg et al. 2006: 330 f.). We assume that preserving freedom and initiative of individuals, while not undermining the power of organizational top elites, is particularly essential for business success of organisations operating in high-tech, innovative sectors. Up to now, however, neither the development of related political forms within organisations, nor their intertwinements with innovation processes have been very well understood. Therefore this paper studies the linkages between innovation processes and reflexive political forms of organizations. More specifically, the paper aims to explore in detail the contested, antagonistic and paradoxical processes an organisation must undertake in designing a reflexive political form, a “political hybrid” (Clegg et al. 2006: 333), conducive to innovation capabilities and innovation processes in high-tech companies. Theoretical reasoning is underlined by first insights from a longitudinal case study, being part of a comparative case study program, focusing on the co-evolution of political forms and innovation process design in a SME in southern Germany.

The paper contributes to the debate on power and innovation in several respects. First, we will propose a *dynamic* approach to exploring change and development of political forms within organisations. Most of the literature concerned with different political forms and political regimes within organisations is still centred on static typologies and its comparison (Clegg et al. 2006: 332). Second, we will examine the often neglected, *contradictory* processes shaping hybrid political forms in organisations. Third, we will conceptually and empirically explore *linkages* between *innovation processes* and emerging *political hybrids* within organizations. This study is, to the best of our knowledge, a research desideratum both in the literature on power and the literature on innovation processes (e.g. Hage and Meeus 2006; Poole and Van De Ven 2004; Vigoda-Gadot and Drory 2006; Clegg et al. 2006).

The Issues of Power, Reflexivity and Innovation

Our concern with the co-evolution of reflexive kinds of power/authority and innovation originates from the debate on dynamic capabilities (Teece et al. 1997; Zollo and Winter 2002; Moldaschl 2006; Schreyögg and Kliesch-Eberl 2007). Hence, in this paper we are not concerned with reflexivity as means of organization research itself (e.g. Weick 1999; Alvesson et al. 2004).

In short, dynamic capabilities are conceived of as prerequisite for innovation, as means of overcoming potential rigidities of previous organizational capability building and innovation (e.g. capability traps, lock-ins, etc.; Leonard-Barton 1992; Burgelman 2002). The current debate on dynamic capabilities, however, shows that the concept suffers from inherent contradictions, running the risk of dissolving the original idea and the strength of organizational capability building. In particular, it is debated how *dynamic* capabilities really can be (Schreyögg and Kliesch-Eberl 2007).

Regarding this debate, with respect to our research perspective, the main points here are the focus on capability monitoring, on second order observation processes and on reflexivity. These are considered core means to preserve the innovation capability of organisations (Moldaschl 2006; Schreyögg and Kliesch-Eberl 2007). Second-order observation is seen as a means to put the framing of first-order practices into perspective (Giddens 1984; Antonacopoulou and Tsoukas 2002). And it is seen as a means to reflect upon the specific links between the theories-in-use (Argyris and Schön 1978) and the specific use of various resources that make for capability formation. Second-order observation is not considered as part of first-order acting-practice. Through second-order observation, the organization takes time out for a moment, reflecting on the reasons for a specific way of doing something. Our understanding of reflexivity is closely linked with this theoretical context. In particular, any means fostering deliberate, rule based (i.e., institutionalized) monitoring and critiquing of organizational first order routines and practices are considered as means of reflexivity (Moldaschl 2006). Scorecards, roundtables and reporting practices, surveys, after-action-reviews, OD-consulting, open-innovation practices and so forth, are considered as instruments, rules and practices of reflexivity. They supposedly foster reflexive forms of power and authority within innovative organizations.

The *political* character of second-order observation is principally acknowledged in the related literature. Reflexivity is seen as subject to political manoeuvring and resistance, embedded in power structures that potentially ensure or weaken such reflexivity. However, a fundamental political perspective on second order observation, conceiving of reflexivity and innovation as being embedded in *political regimes* within organisations, particularly a focus on their co-evolution, is missing.

Our study sets out to deal with this research gap. To do so, we take a ‘political regime perspective’, in order to study the co-evolution of political forms enhancing reflexivity within organisations and the designing of innovation processes preserving the innovation capability in the long run.

The Regime Perspective

A regime perspective connects power with the social fabric of various organisational forms, acknowledging that concrete modes of rule will be in struggle with each other and no ‘one best way’ of implementing a political structure exists (neither in terms of content nor process) (Clegg et al. 2006: 331). A regime perspective stresses the hybrid character of organisational power structures, which are considered here as polyarchic systems (Clegg et al. 2006: 331). In short, polyarchy constitutes political structures offering space to a great diversity of actors, while not disrupting the power of organisational elites (e.g. owners, top managers etc.) and their right to govern. Polyarchic political forms combine different natures and cultures of power, e.g. bureaucratic and professional. In line with this reasoning, we consider the focus on evolving polyarchic political systems to be an appropriate starting point for a better understanding of reflexivity and innovation.

Reflexivity, as a prerequisite for innovation, is considered to be ‘planned irritation’ of extant organisational practices. In terms of political regime analysis, this means encouraging actors to take the role of legitimate adversaries, thereby strengthening their role as corporate sub-elites in decentralized, knowledge intensive, innovative organisations. However, legitimate adversaries and their relations need to be ordered symbolically and structurally within (and across) organisations, in order to preserve the right of top elites to govern. Assuming there is no one best way (or pure type) of organizational political form, focussing on polyarchic

systems and its co-evolution with reflexivity and innovation again appears as a promising avenue for research.

Process Characteristics of Regime Evolution

Regarding the co-evolution of polyarchic forms, reflexivity, and innovation within organisations, we are specifically interested in the *processes* that make for this co-evolution. We suggest considering and studying three variables (or dimensions) as key characteristics of these processes:

1. the contested character
2. the paradoxical character
3. the designed character.

1 The contested character: Even the mainstream literature on innovation and dynamic capabilities acknowledges the contested character of capability development and innovation (e.g. Frost and Egri 1991; Kanter 1983; 2001; Burgelman 2002; Markham 2000; Schreyögg and Kliesch-Eberl 2007), notwithstanding the predominantly functional conceptions of power and the focus on champions of innovation. In short, innovators need power to overcome resistance against innovation, in order to put day-to-day activities into perspective, to call into question the theories-in-use, to legitimize one's own projects and de-legitimize the claims of rival projects in the innovation game. Consequently, we assume that changing the 'meta-rules' of second order observation and innovation games (in our perspective: changing parts of the organisational political regime) will also be subject to contest and political manoeuvring, as meta-rules itself are to be seen as sources of innovators' strategic agency.

When taking a political regime perspective, the co-evolution of reflexivity, innovation processes and political regimes within organisations unavoidably appears to be contested because organizations principally are conceived of as controversial social constructions. Here, "legitimate enemies" (Clegg et al. 2006: 331) and their relationships are constitutive. Hence, a focus on the contested character of the co-evolutionary processes we are studying is obligatory. Main research questions are: *who* does *what*, for what *ends*? How are conflicts dealt with? Which forms of power are prevailing?

2 The paradoxical character: A political form conducive to reflexivity and innovation is supposed to be self-reflexive, at least to some extent. We believe that developing this form proves to be dilemmatic, if not paradoxical.

Our main argument is that reflexivity will most probably make visible the fabric of organisational life. If taken seriously, reflexivity will not stop short of also making visible formerly invisible aspects of power practices, particularly when actors become aware of its relevance for innovation processes. This will in turn potentially weaken the effectiveness of power and the strength of incumbent power holders, since power is most effective in its invisible, taken-for-granted forms (soft powers e.g. in soft authoritarian systems) (Courpasson 2006). Hence, political regimes fostering reflexivity and innovation, regardless of their concrete characteristics, run the risk of undermining their political performance.

Yet, in line with the dynamic capabilities discourse, we argue that reflexivity is a very relevant form of fostering innovation. As we conceive of reflexivity as a practice *not separated from* the political character of organisational life, it must be conceived of (and managed) as *incorporated in* the political regime within organisations. Therefore, the mentioned paradox arises. We believe that the co-evolution of reflexive political forms and innovation practices in business organisations will hinge upon the capacity of actors to handle related paradoxes, and a political form/regime that merges the belief in the owners' right to govern (their legitimate authority) with professional and collegial forms of power and authority, supplemented with the instrumentation of management systems that allow for reflexivity (Moldaschl 2006). Hence, main research questions are: How is the balance kept between the elites' right to govern, and the need to reflect as means of fostering innovation? How does the threat of failed innovation influence such balancing processes? Related to this: how and by whom is soft power used? How are management instruments and systems used to foster reflexivity?

3 The design(ed) character: In addition to our focus on the contested and paradoxical character regarding the evolution of political forms fostering innovation within organisations, we propose studying these processes from a scientific "design perspective" (Jelinek et al. 2008). A scientific design perspective helps to explore how the contradictions and paradoxes are *practically* dealt with. A scientific design perspective is probably more focused on tasks,

work processes and workers than the scientific perspective on political forms and regimes. It fruitfully supplements our analysis of political regimes evolving within organisations. Regarding our research questions, a design perspective helps to focus on the concrete work of innovation, on the constituting elements of innovation systems, on the underlying “construction principles” (Dougherty 2008) and work design specifications of reflexive organisational systems, enabling and constraining innovators’ work and their social and task-related interdependencies. Focusing on concrete work processes and its construction principles will also allow us to discern the deeper meanings, intentions and interests of the actors involved, as well as its contradictions and conflicts. Hence, a design perspective usefully complements our political perspective. Taking this perspective, main research questions are: What are characteristics of the innovation work studied? What are guiding design principles of the innovation processes studied? How, by whom and for what ends are these characteristics and processes reflected upon when re-designing innovation systems? How are practices of designing enabled and constrained by existing political regimes of the organisation under study?

Research Methods and Case Context

RESEARCH METHODS: Our overarching research program is designed as a comparative case study approach (Yin 2003) with several longitudinal cases aimed at exploring the conditions, processes and effects of developing more reflexive organizations. Within this research program we are still in the first exploratory phase. Thus, the insights presented in this paper serve as first assumptions of the field, rather than final results. The case presented here is revealing because we have had the opportunity to comparatively study the co-evolution of innovation systems and reflexive power forms in this organization. The case may potentially serve as a revelatory case (Yin 2003:43): we have gotten, and most probably will continue receive, encompassing access to actors, processes and documents of the contested change under study. As the processes are both relevant for the competitiveness and political by their very nature, they are usually treated as confidential and access for researchers is denied. Hence, in terms of data quality, it is of utmost importance to get as open access as possible to the political key players in the arena when studying political maneuvering ‘behind the scenes’ and the use of different forms of power. So far, starting with a kick-off meeting attended by the owners, managers and R&D-professionals, data collection has included 1 individual

interview with the owner, 4 group interviews as well as participatory observation of laboratory work and of 2 OD workshops conducted by an external consultant (see appendix). Additionally, organizational documents particularly referring to innovation projects have been analyzed. Data are stored in field notes, memos and contact summary sheets, stenographic notes from interviews, photos and maps from workshops and in interaction-process-analysis sheets. We have been very cautious so far with “prior instrumentation” (Miles and Huberman 1994:36) of the research process, putting emphasis on the well-grounding of our concepts, on contextual richness (thick descriptions) and close connection with the lived experience of the people in our case (Miles and Huberman 1994:34 f.; Eisenhardt 1989; Yin 2003). Consequently, data coding and data analysis has been kept very open minded up to now, avoiding premature closure of conceptual reasoning and data interpretation. Drawn from our basic concepts, we have applied a simple start list of codes, referring to actors’ interests and conflicts among them, to potentially contradictory design principles regarding innovation processes as well as emerging paradoxes. We have scrutinized and re-ordered our data accordingly, so far by hand (see research results, table 2).

BUSINESS CONTEXT: The company, TSBT¹, is located in Bavaria, a southern part of Germany, was founded in 1996 by two individual entrepreneurs. Both founders are still owners and managing directors of the company, which has now grown to some 35 employees. Until now, TSBT has been operating in a relatively stable business environment, in which all fundamental technological specifications are determined by international standards and the range of potential customers is clearly delimited.

Strategic considerations led to attempts to build up a second area of business in order to reduce dependency on the extant business domain. Since then TSBT has been striving to establish a new area of business within the medicine market, representing a much more complex and turbulent field of business. This in turn raises the requirements of innovation capability, both in terms of technology and organizational issues.

¹ To preserve anonymity, all names are changed and the exact business domain is withheld.

HIERARCHY: Until recently the company mainly has been managed on an informal basis. There are only a few explicit rules assigning authorizations and responsibilities to particular positions or persons, or defining standard approaches to recurring tasks. Formal job descriptions, although existing on the paper, have almost no practical relevance.

Within the hierarchy, the two managing directors rank first. Most of the employees work at the bottom of the hierarchy in R&D, with only a few employees in the production department. R&D is organized by projects, each with a project leader and additional support staff, if necessary. Additionally, between the top elite level and the project manager level there are several other positions which we will refer to as “middle managers”. These managers have coordinating functions, rather than the formal authority to govern an area of responsibility on their own.

PROJECT MANAGEMENT: All R&D projects are directly supervised by the managing directors in weekly meetings, attended by the relevant project managers and middle managers as well as the managing directors. These meetings are intended to keep the top management informed about all projects and, if necessary, to make decisions on projects. Neither project managers nor middle managers have their own budgets.

BUSINESS PHILOSOPHY / NEED FOR INNOVATIONS: Top management is very aware that technological brilliance alone does not keep the business going. They constantly emphasize that the main focus of product innovation has to be customer needs, as it is the customer on whom the company ultimately depends. In their view, the R&D experts are still not aware of this market logic, which they feel might emerge as a major problem for the market driven innovations needed by now. In addition, producing successful innovations, especially in the new and complex market, has turned out to be a demanding challenge, in terms of R&D expertise, market expertise and internal organizational structures and processes. Agreement has been achieved among the owners, middle managers and R&D experts that the existing organizational structures and processes are not appropriate for stimulating the innovation output. The company is now facing the challenges of reorganizing authority structures, reorganizing the innovation processes and investing in HR-development in order to keep the enterprise under control of the owners during further growth, while still providing space for creativity and innovation. While all actors are aware of the need to re-

design the organizational structure, hitherto no consent has been reached about the final organizational design that could serve as an ultimate vision for the change process. The owners consider R&D experts still not having the necessary business acumen and therefore see their training in suitable methods (innovation methods, project assessment, etc.) as an essential prerequisite for further changes in authority structures. Middle managers and project managers, however, regard a revision of task and responsibility assignments as the most pressing issue, which is in turn refused by top management.

Research Results

a) The old political form as point of departure

As we are especially interested in the evolution of a political form, we will first reflect on its “original” characteristics in order to obtain a point of departure with which further evolutions can be contrasted.

Clegg et al. (2006: 334) suggest a typology of political forms based on five dimensions, which we apply as a guideline for our analysis. Our findings show that the old political form which has been prevalent at TSBT has strong paternalistic characteristics. Of course, there are indications that do not match with the ideal type of “patriarchy” (e.g. the existence of middle management positions, as they are an element, which does not fit in the logic of exclusive power concentration). However, many of these indications can be seen as first steps of an evolutionary process towards a more democratic political form.

FEW FORMAL RULES: The absence of almost any formal rules has led to a very central, therewith strong position of the organizational top elite. Even though all major issues on R&D projects are discussed among the relevant actors in the weekly project meetings, the ultimate power of decision is held by the managing directors. The implicit agreement between the organizational top elite and the subordinates, from which this distribution of power has drawn its legitimacy for about a decade, is that the managing directors are in charge of strategic decision making while the project managers focus on their operational work. In return, the managing directors are responsible for reliable and good decisions, which are the basis for business success and thus for safe jobs. In short, this has been the mode of operation until now.

The nature of authority in the extant political regime is deeply vested in the two managing directors and based on two pillars. On one hand their authority is based on their position as company owners. There is a strong awareness among all employees that the owners are bearing the business risks. On the other hand, the authority is based on the owner’s business expertise, which has led to constant business growth so far. In line with this, the owners’ hierarchical status has not been subject to any discussion. However, within the group of project leaders and even between project managers and middle managers, hierarchical differences are hardly noticeable.

| | |
|--------------------------|--|
| Nature of authority | <ul style="list-style-type: none"> • Vested in individuals • Based on ownership and business expertise |
| Type of hierarchy | <ul style="list-style-type: none"> • Strong vertical hierarchy between top management and employees • Collegiality among employees |
| Decision-making process | <ul style="list-style-type: none"> • Dominated by top elite • Focused on practical problem solving |
| Core values | <ul style="list-style-type: none"> • “Just do your job” • Loyalty to the owners |
| Nature of social control | <ul style="list-style-type: none"> • Direct control |

Table 1: Paternalistic political form

Summing up, the present political form can be characterized as a paternalistic form, with the entrepreneurs as central power holders. Clegg et al. (2006) put up a continuum of political forms, reaching from rational-based bureaucracy as an oligarchic political form, to collectivist democracy as a democratic one. We would suggest that the paternalistic form depicted here falls into the oligarchic range of this continuum, maybe even left of the rational-based bureaucracy.

b) New challenges for the extant political form

This simple, yet effective distribution of power has been working well as long as the number of employees was not too high and TSBT operated a in a relatively stable environment. On one hand the involvement of the owners in all R&D projects ensured that the projects are strictly aligned with the business needs. On the other hand, all decisions on the projects are highly dependent on the knowledge and intuition of a few individuals. However, the R&D

professionals unequivocally perceive the owners as being authoritarian when making decisions about promising future research fields, highlighting the contested character of the company's political regime.

Now, as the company is growing and deliberately moving into a more complex and unstable environment by making use of its own resources in order to produce innovative products, the actors become more and more aware of the prerequisites and shortcomings of the extant political practices (the "political form" in scientific terms). When taking the regime-based research perspective, the occurring problems appear to be intertwined with and can be interpreted as directly related to the political form. In daily working life it is merely their concrete aspects which prominently stand out.

On one hand, the growth in the number of employees in combination with top management's central position simply takes a bottleneck effect on decision making processes and internal workflows. On the other hand, the complex and partly "unreadable" character of the medicine market and its development is rendering an orientation towards a more reflexive, flexible and self-managing innovation system, as means of coming to terms with the fundamental uncertainties in this business field (reflexivity in terms of second order observation, Moldaschl 2006; Schreyögg and Kliesch-Eberl 2007). One of the most pressing questions concerns the fuzzy front-end-stage of innovation processes (i.e. which of the more or less inchoate projects or project ideas within the human medicine domain are most promising and therefore should be promoted most). According to their self-assessment, neither the owners nor the other employees, including R&D professionals, have sufficient individual market expertise to decide this on a well-founded basis. The traditional decision making model, based on the expertise of individual actors, shows glaring deficiencies at this point.

In principle, these insights are accepted among key players in the company. However, there is neither a shared understanding of the full range of the problems nor a shared understanding of the measures to take. The problems emerging from the improper organizational structures are perceived in different ways by different actors.

One prominent concrete measure was a workshop, aiming at getting an independent evaluation of current project ideas by external consultants. In terms of our perspective on

reflexivity (Moldaschl 2006), this workshop gives a good example of institutionalized reflexivity, namely the deliberate utilization of third-party observation.

The owners are well aware that such institutionalized evaluation by external experts alone will not be sufficient for a general change of the innovation system and that a fundamental enhancement of innovation capability will require fundamental changes of organizational roles. Their long-term goal is to strengthen the role of project managers, i.e. providing them with both more autonomy and more responsibility on their projects.

According to many statements, this is a wholehearted change goal. It substantially challenges vested interests and the nature and culture of power, paving the way for legitimating and empowering a new corporate sub-elite who will most probably be more alleged to professional norms and rationalities than the current dominant elite. But as the envisioned entrepreneurial role(s) is (are) supposed to be regulated by rules, the owners seemingly inevitably run into the central power paradox rooted in “ruling by rule” (Clegg et al. 2006).

The managing directors are very suspicious of the project leader’s entrepreneurial mind because they regard them as not being accustomed to think in terms of business needs, customer needs and market needs, but rather in terms of technology.

It appears that the “regulation of identity” (Alvesson and Willmott 2002), the constitution of subjects who are both creative and obedient, i.e. the self-disciplined organizationally useful intrapreneur, is a major challenge for implementing a more reflexive political form. The managing directors seem to be aware of that, currently denying the coming intrapreneurs any budget control. From the perspective of the project managers the implicit signal seems somehow ambiguous. On one hand, top management propagates the ideal of an internal entrepreneur who is responsible (and held accountable) for his projects. On the other hand, the corresponding authorizations in terms of resource control and decision rights are constantly denied. Reframed in psychological terms, the actors appear to be entrapped in a double-bind situation.

However, moving into the medicine market will require the further involvement of R&D professionals into decision making in order to ensure their commitment. Thus, the fate of the company is becoming more dependent upon the knowledge and the expertise of R&D

professionals and their rationalities. This has deep implications for the implicit agreement about the traditional “nature and culture of power” (Clegg et al. 2006, 335). While involving the project leaders in decision making processes might not affect top management’s status as founders and owners, it definitely will challenge segments of their authority that are based upon their business expertise.

c) Changing the political form

REDESIGNING THE PROCESS OF INNOVATION: A prominent and important measure is setting up an organization development process in co-operation with an external change agent to provide a well established bundle of methods and techniques. Common to all these workshops is a strong focus on socio-technical design tools aimed at refining and redesigning the governance of innovation processes. The shared focus on design tools appears to serve as an instrumental bracket at the level of concrete operations and routines, bringing together different actors in the political arena despite their lack of a common change vision.

Within the last 15 months three OD-workshops have taken place, indicating the strong desire of owners, managers and professionals to foster innovation capability. These workshops focused on changes in authority structures and decision processes, innovation process refinements and radical product innovation techniques. Particularly the owners are pressing for more innovation output. They repeatedly expressed how proud they are of being independent from shareholder value driven short term profit maximization impertinencies. Their intention is to keep this independence and stay in control. In their view, innovation output and related changes in the political form of the company are means to these ends.

DIFFERENT PRIORITIES: Different opinions exist about the concrete goals that have to be reached within the OD workshops. For middle managers and project managers one of the most pressing issues is the revision of task allocation, as their (especially the middle managers’) role within the organization is not very well defined. In the owner’s opinion, however, this should be the *second* step. They argue that employees do not have the necessary business skills yet and that a clear definition of jobs would bring people to stick too closely to their defined tasks, not thinking “outside the box” any more. This argument, however, is not accepted among middle managers and R&D project managers. They argue that a few binding agreements would have a positive structuring effect on work coordinations, rather than

promote “thinking inside the box”. Again, the power paradox becomes obvious: ruling by rule inevitably also will commit the organizational top elite to the rules set.

PROJECT CONTROLLING AND RELATED TOOLS: Mainly driven by middle managers, project managers and the external change agent, another concrete step within the OD process has been the implementation of project management tools intended to make decisions more transparent, observable and justifiable from the perspective of the different actors involved. One of these tools is constantly updated project sheets on each project, providing an executive summary of all relevant information on a project (project status, potential customers of the intended product, legal situation regarding IP, estimated costs, etc.). In keeping with our notion of reflexivity (e.g. Moldaschl 2006), this is a small but concrete change towards a more institutionalized reflexivity, fostering critical distancing from organizational practices and project rationalities. These project sheets are appreciated for different reasons by both top management and project leaders.

The *managing directors* appreciate that project leaders are forced to collect all relevant information, which then can serve as the basis for further discussions and decision making in related meetings. Furthermore, the project sheets are considered a means of constraining project leaders’ autonomy and a guideline for project managers against the backdrop of their envisioned extended responsibility. Project sheets can thus be seen as both a means of delegating authority, measuring results and disciplining project leaders (disciplinary power, Foucault 1977; Miller and O’Leary 1987).

Project leaders welcome the structuring and committing effects the project sheets have on actual project work and partially on the decisions made on the projects. To enhance the self-committing effects on the managerial directors, they even suggested and pressed for obligatory countersignature of the project sheets by both project leader and managerial director in order to “be on the safe side”.

Particularly this episode highlights that, while attempting to change the political form of the organization, the actors are currently running into the power paradox rooted in “ruling by rule” (e.g. Clegg et al. 2006). It also reveals that creating legitimacy for new rules depends on the compliance of *both* the subordinates (the ruled) *and* those who have the formal power to change rules (the ruler).

Wrapping up, the episodes depicted here show how fundamental the regime change process really is, emerging around the intersection of contested design changes, a crucial power paradox and the constitution of obedient yet creative subjects, (i.e. the intrapreneurial project leaders).

All of the measures described can be interpreted as first steps of an evolutionary change process of the political form. The company is moving away from paternalistic-entrepreneurial forms of governing towards more decentralized forms, combining professional and collegial natures and cultures of power while not undermining the owners' ultimate right to govern. However, this process is in no way straightforward. Rather, it seems to be highly tentative.

Discussion and Conclusions

The aim of this paper is to study emerging *reflexive* forms of power and authority, considered as regimes beyond pure domination (Clegg et al. 2006: 330 f.), that are conducive to innovation processes in high tech companies. In this context, reflexivity is considered as prerequisite for innovation, as means of overcoming potential rigidities of previous organizational capability building (Moldaschl 2006; Schreyögg and Kliesch-Eberl 2007). In particular, any means fostering deliberate, rule based (i.e., institutionalized) monitoring and critiquing of organizational first order routines and practices are considered as means of institutionalized reflexivity (Moldaschl 2006). In this sense, reflexivity is deemed being conducive to *reflexive* forms of power and authority within innovative organisations.

We set out exploring the co-evolution of reflexive organizational regimes and innovations systems, proposing that processes bringing about reflexive political forms will be contested, antagonistic and paradoxical.

Summing up, first insights from the case study unambiguously underline the relevance of our analytical perspective, focusing on the contested and contradictory character of the co-evolutionary processes fostering reflexivity, innovation and conducive political regime. Contradictory “construction principles” (Dougherty 2008) are guiding the design processes towards a more reflexive innovation system in the company studied. The most important

findings from this study so far support the paradox-focused approach to exploring how a reflexive political form comes about. The actors permanently seem to be running into a fundamental power paradox (Clegg et al. 2006): “ruling by rule” is a means of domination and control for one side (owners) as well as of empowerment, discretion and resistance for the other side (managers, professionals). Struggles among the actors involved on how to change the innovation system of the company, have also revealed related contradictory construction principles, highlighting fundamentally conflicting interests in these processes.

CONTESTED DESIGN PRINCIPLES AND POWER PARADOX: While agreeing on the need for more reflexive innovation systems, conflicts regarding the guiding design principles undermine the efforts to successfully implement it. Both owners and key managers from R&D have realized that enhancing innovation capability will certainly result in developing new authority structures. The interdependence between the two issues is clearly seen.

Contrary to our initial assumption, keeping power processes as invisible as possible when turning the company towards more reflexive political forms is not a primary concern of power holders. In fact, a main barrier to more reflexive forms of power and innovation systems, are conflicts rooted in substituting impersonal rules of governing innovation processes for highly visible, personal supervision and power use. As changes in the innovation system towards more transparency, consistency and reflexivity unavoidably call into question established spheres of power, in particular the owners’ prerogative to define the criteria how to separate ‘good’ from ‘bad’ projects, the design principles and options are highly contested. The main confrontation with respect to redesigning the innovation system, its processes, and related tools persistently emerges between owners and R&D professionals acting as project leaders. It embodies the continuing struggle between different rationalities (Weber 1972, 1978) of governing and reasoning, more specifically, between substantive rationalities of R&D professionals and formal economic rationalities of the owners. Supporting Townley et al. (2003: 1064), our findings suggest that the tensions between these rationalities are “a continuing dialectic”, inseparable from power relations (Foucault 1977) and *therefore* simultaneously providing the social space for intervention and creative action, the “praxis” of actors in Bensons’ (1977) terms.

Within these power relations, when taking the perspective of the power elite (the company owners), project management tools are seen as means of disciplining R&D professionals and aligning them more with business needs. It is also meant as a means of “ruling by rule”, substituting for the personal supervision and control of innovation projects, being the traditional form of control in the company. Taking the perspective of R&D professionals, they partly agree with the owners’ intention to align project management with business needs. They also welcome the reflexive character of the instruments that are implemented, efficiently triggering second order observation, self-management and self-control. Hence, they do not principally resist the “regulation of identity” (Alvesson and Willmott 2002). The constitution of their subjects appear to be both creative and obedient. However, they also consider the project management instruments as means of *protection* against autocratic interventions of the owners. Taken seriously, the intended regime of numbers will subsume *both* project managers *and* owners. Therefore, the power paradox rooted in ruling by rule emerges.

“LOCK IN” IN THE COMMON SENSE OF GOVERNING: In a way, the system of actors seems also to be locked in, virtually entrapped in their commonsense of governing (Barratt 2008, 522) that has been learned, practiced and sustained over a period of over 10 years. On one hand, the above shown contradictions among rationalities and the pressure to radically innovate stimulates the creative reconstruction of social patterns of innovation behavior, to a certain extent, which can be seen, for example, in the OD workshops. On the other hand, however, the delimiting effects of the present social form become obvious in this very praxis, due to its embodied “know how” of practical reasoning (Townley 2002, 164 f.) and related power relations (power/knowledge-relations, Foucault 1977). Indicative in this respect are the persistent conflicts regarding the new project sheet. Owner and project managers alike welcome it as a new means of intrapreneurial development and reasoned project monitoring and control. Consistent with their past experiences in governing and being governed, actors also want to be “on the safe side”, thereby deliberately delimiting the social space for creating new patterns of behavior stimulating innovation processes.

Although somewhat speculative, first findings of our case study also alert us to take in account the effects that threatening external contexts may have on self-sustaining (or self-transcending) tendencies of organizational political forms (Courpasson 2006: 182 f.). While the market troubles in 2005, and the perceived threats and risks have stimulated and still

stimulate new praxis how to innovate, they also foster self-sustaining tendencies regarding paternalistic regime characteristics of the past (resembling a kind of threat-rigidity-circle, Staw et al. 1981). The well established commonsense of governing –members’ loyalty and acceptance of the owners’ dominance even in operational issues is deemed legitimate because the owners provide protection from market risks and secure workplaces- seemingly offers “safe” ways of controlling some of the vast risks rooted in the human medicine market entry.

With respect to these self sustaining regime characteristics and the above shown paradoxes, the OD-workshops are a particularly useful means of planned irritation and second order observation (Argyris and Schön 1978), providing social space for reflecting upon and distancing from these self-sustaining regime patterns and paradoxes. The workshops actually provide a useful arena for changing the well established rules and behavioral patterns regarding the relations of knowing, meaning, acting and membership. In terms of “circuits of power” (Clegg 1989; Flyvbjerg 1998), our findings suggest that the workshops provide an arena for mobilizing support among actors willing to break the self-sustaining tendencies of extant power circuits. Currently the workshops appear to be the most appropriate arena to incubate facilitative power circuits. Indicative in this respect is the obligatory project sheet, an OD-workshop outcome, a small change with far reaching consequences. However, no context stands outside power (Foucault 1977). Underlining our initial assumption, analyses of the workshop interactions (e.g. the conflicts regarding agenda setting, regarding the binding effects of workshop outcomes) particularly show that social spaces providing room for reflexivity cannot be conceived of as *separated from* the organizational regime. They must be conceived of (and managed) as *incorporated in* the political regime within organizations, virtually being part of the power/knowledge web and related circuits of power.

LEGITIMACY: After all, the findings suggest that the legitimacy of the current political form seems to be eroding in the long run. The persistency of a political form depends to a great extent on its perceived legitimacy. Legitimacy, in turn, roots in the persuasion that the prevalent distribution of power is “germane to a certain set of allegiance-generating values” (Clegg et al. 2006, 336; Courpasson 2006). The belief that this is the case has been prevalent to organizational sub elites, preserving them from market risks. As this seems to become more difficult, the traditional political form probably will not be able to persist in the long run. Without stating a causal determination the described efforts, which in official discourse are

presented as attempts to actively enhance innovation capability, can in this vein be interpreted as *reaction* to change pressure on the political form as well.

LIMITATIONS AND CONCLUSION: The findings, their discussion and the conclusions must eventually be considered in light of its limitations. The study is subject to methodological limitations. As pointed out, the research is still at an early stage and confined to a single case. We have been very cautious so far with “prior instrumentation” (Miles/Huberman 1994:36) of the research process, so the data analysis leaves much room for interpretation open. In addition, our investigational focus is specifically concerned with the actors involved rather than with external situational factors and their effects. Regarding our theoretical approach so far, we suppose that the study will also benefit from linking it up more closely to critical theories of knowledge management (e.g. McKinlay 2005) and theories of organisation design and innovation (e.g. Dougherty 2008). In addition, reflections on reflexivity as means of organisation research might stimulate our conception of reflexivity in organizational contexts (Weick 1999; Alvesson et al. 2004).

Nevertheless, we would like to point out some implications for theory building and research on reflexive organizational forms of power. Implications are more or less tentative due to the early stage of our research. One implication has to do with the deliberate development of political hybrids, considered here as political structures conducive to reflexivity and innovation, offering space to a great diversity of actors, while not disrupting the power of organizational elites (e.g. owners, top managers etc.) and their right to govern. We set out exploring the supposedly contested, paradoxical and designed character of related regime development, and the interrelations of these proposed characteristics with innovation process design, to the best of our knowledge a research desideratum both in the literature on power and the literature on innovation processes (e.g. Hage and Meeus 2006; Poole and Van De Ven 2004; Vigoda-Gadot and Drory 2006; Clegg et al. 2006).

Taken together, the case study findings so far support the relevance of our research perspective. Findings particularly shed light on the fact that contested innovation design rationalities, power relations, the power paradox rooted in ruling by rule and beliefs in the legitimacy of a specific political form are very closely intertwined. These interrelations, their intricacies, tensions and contradictions virtually make for the social space allowing the co-

development of reflexive political forms and new innovation process design. Scholars have discussed some of these interrelations (e.g. Clegg 1989; Flyvbjerg 1998; Townley 2002, 2003; Clegg et al. 2006:240 f.; 328 f.). In addition and more specifically, our findings point out that the intricate interrelations among *all* these facets make for the co-development of reflexive forms of power (hybrids) and innovation design processes. Particularly against the backdrop of an intended regime change from an oligarchic-entrepreneurial type towards a more reflexive hybrid type (Clegg et al. 2006:334), which *combines* different natures and cultures of power conducive to innovation capability and innovation outcome, these interrelations are certainly striking. In line with this, the research perspective taken here appears as a promising avenue for further theorizing about the characteristics shaping the emergence of reflexive political forms fostering innovation, with respect to a specific context (SME's in high-tech markets).

A second implication has to do with how political dynamics are (should be) considered in theories of dynamic capabilities, in particular with respect to their conceptions of second order observation and reflexivity (e.g. Zollo and Winter 2002; Schreyögg and Kliesch-Eberl 2007). As mentioned in the beginning of this paper, the political context of second-order observation is principally acknowledged in this mainstream literature on dynamic capabilities. Reflexivity is seen as subject to political maneuvering and resistance, embedded in power structures that potentially ensure or weaken such reflexivity. However, based on our research results we argue for a more “pervasive” conception of power within the stream of dynamic capability research. More specifically, we suggest acknowledging that really no context stands outside power (Foucault 1977; Giddens 1984). Therefore, any rationality of second order observation is fused with power, affected by power and effects power. In this respect, organizations virtually *are* political regimes (Clegg et al. 2006; Courpasson 2006). All actors operate within existing structures of dominancy (Weber 1972, 1978) at any time, which provide the rules and resources to foster reflexivity and its practices (duality of structure, Giddens 1984). Taking this basic perspective a step further, our research results suggest that conceptions of power paradoxes and of continuing dialectics among different rationalities should become more important in the research streams concerned with dynamic capabilities, as well as conceptions of contradictions among different natures and cultures of power within political hybrids, to name a few.

Summing up, the case study shows how paradoxical it really is to develop a reflexive political regime conducive to innovation. Second-order observation, as prerequisite for reflexivity and innovation, is never free from interests, as any observation is observed by an interested actor. Scholars have argued that every social setting has its own politics of truth (e.g. Foucault 1980; Townley 2002; Alvesson et al. 2004). Analogously to this reasoning, when studying reflexivity in organizational contexts, and the design of reflexive innovation systems, respectively, we must carefully study the *politics of reflexivity*, particularly how power relations and related paradoxes as well as contested design principles and instruments favor a specific form of reflexivity. Otherwise, we will miss the point.

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Appendix: Interviews and Participatory Observations

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| (13 Feb 08 | Kick-off meeting of research co-operation) |
| 22 May 08 | Group interview (middle manager, support staff) |
| 27 Jun 08 | Interview (Smith) |
| 6 Aug 08 | Participatory observation in the laboratory |
| 17 Dec 08 | Group interview (Smith, middle managers) |
| 23 Jan 09 | Group interview (Smith, middle managers) |
| 27/28 Feb 09 | Participatory observation of second OD workshop |
| 03 Mar 09 | Group interview (middle managers, project managers) |
| 14-16 May 09 | Participatory observation of third OD workshop |