

Leadership Dilemmas and Dynamics in research projects – entrepreneurial leadership?

by

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1. Theoretical positioning and problems:

One of the major problems of organising research in universities (and public business schools as well) is the fact, that it is only a part-time activity with teaching, administration and recently also research communication being the other pillars. This situation (often described as mode two science-situation (Nowotny 2001) is constantly creating complex conditions for long time planning and execution of research. The result is often a need of a special creativity and a growing degree of dependency on innovative leadership in order to create the foundation for new research funds and human resources, and in this way develop a strategy for expanding toward both study and teaching as well as research communication in the institution.

The new type of leadership demanded by the abovementioned changes and the ongoing competition with management of teaching and administration illustrates the actual dilemmas of leadership in research in public universities and thereby create a good point for analysis of leadership and construction of space for scientific projects.

The focus of the paper is on scientific leadership as leadership in and of a complex field. Research leadership now operates in situations with open boundaries, where trust, reputation and outside recognition is more important than traditional management in order to produce knowledge under conditions of high level of complexity and decentralised knowledge. Thereby we have introduced new perspectives on leadership and management where dilemmas, uncertainty and complex relations to other managerial systems is in the forefront. The research question in the paper is constructed in order to investigate the dilemmas between managing an organisation, teaching and administrative tasks of staff, and leading the unknown route of investigation into new knowledge and creating a platform for research. The focus is looking for new and innovative approaches or role models to these dilemmas between different types of managerial constraints or pressures from administration, teaching and research as well as recent changes in the constitution or construction of science as reflected in the Mode 1 and 2 discussion.

Emphasis on the innovative or creative part of the research and the creation of space for research clearly points to the fact that research is squeezed and researcher have to create new goals or a constant reorganization of goals as it may be reconstituted as avenues or opportunities to be exploited.

In order to produce empirical evidence to the relations and problems of leadership and management in science, we will use 2 case stories from our own institution with the case of constructing and developing the sections of the rather new department of Management, Politics & Philosophy at Copenhagen Business School. The cases will show interesting dilemmas and competition for positions, new teaching fields and other resources. The emphasis in the analysis is on constructing new themes and fields in a complex new department, where a number of very different research groups, different in disciplinary history, in relations to the traditional business school environment are creating a new joint setting for research and teaching. The development in the Policy Group is instructive for a very entrepreneurial and complex strategy in a kind of processes we want to investigate. Another case of the business history group is about how large external funded research projects are generated and how the relationship with the department develops and especially what are the long-term effects – seen from an organisational point of view.

As ex post factor cases we do not aim to give a valid picture of what was major problems related to leadership and managing. Through interviews with central actors and research “entrepreneurs”, they will present the kind of reflexive story-telling they have of their own actions. By doing this we will be able to analyze different kinds of constructions of leadership dilemmas in action. The dilemmas and reflection on how to establish research within competing tasks helps us understand the process of self-management and leadership in this type of knowledge based organisations.

2. The CBS case-framework

There are major differences between classic universities, most business schools and the Copenhagen Business School from the early 1990'es. CBS differs from most universities in its non-disciplinary and problem oriented approach to teaching and research and from most business schools by its integration of social science and humanities together with more traditional business economics. The framework for research management is a university business school with teaching at Bachelor, Master of Science, Ph.D, executive master

programmes, and diplomas as evening programmes, and with part time research as a right and obligation

The management structure in the Copenhagen Business School is a matrix structure, where the head of department is responsible for research, for administration and for supplying teaching to different studies. The head of department is also responsible for the staff to fulfil these obligations. The study directors on the other hand are responsible for the studies, and may choose to recruit external teachers, if the local teachers offered by departments are not considered good enough, or they want a cheaper recruitment of teachers for the undergraduate programmes¹. The study programmes all include input from different departments and disciplines, such as marketing, accounting, organisation theory etc.

The lack of clear discipline based educations, also imply, that there is not a fixed study programme, but a combination of compulsory and a variety of choices, where only the courses chosen as first priority by more than 40 students are established. This profile of optional courses creates a flexibility to take up themes drawing on different disciplines, but also in a management perspective and staff perspective introduces an uncertainty on the ability to secure the teaching hours that each member of the academic staff has to provide for.

The balance between departments and study lines is delicate, and difficult, but has proven very strong for the creative development of new study-lines and -programmes. The matrix inserts some marketing principles in the offered teaching, and management has to open up for some of the issues known in other open multiple task organisations. The incomes from the Ministry of Research are tied to the number of students going through exams and the final examinations (annual student years), and positions are tied to educational programmes. Assistant professors have 50 % of their time for teaching and administration, the professors and associate professors who are both categories on permanent employment have 65 % of their time for teaching and administration. The residual is for research.

The management structure was until recently (2004) based on a president of the Business School heading two faculties: economic and a language faculty, each headed by a dean

¹ The external teachers count less hours of preparation per teaching hour, and in the budget of the study programmes they are less expensive than internal staff.

with economic responsibility. The heads of departments and the study directors are under the deans. Until 2004 all these positions elected members of staff among associate and full professors. A Government law changed this (2004), and now there is a board with a majority of people from outside, mainly from industry, with a chairman from industry as well. The position as president, dean, head of department, and study directors are employed for the position, and not elected among the academic staff. The growth and management of research processes described were however under the former type of structure, i.e. a very traditional framework, but with flexibility for building up new educational programmes, and a willingness to do so.

From being a traditional business school, a number of new programmes have been launched mainly combining business economics with language and area studies, mathematics, ICT, philosophy, corporate communication, and a broad social science education is launched last year. An international business economic education offered in English has also been part of the expanded profile.

Demographically recent years have been discussed as problematic as the number of young people in the ages graduating from high-school is declining, which could create problems of declining intake of students. CBS has been under growth in number of students applying for being enrolled in the whole period.

3.. Department level of management

One rather unique part of the history of the CBS is related to one of the first larger research evaluations performed at the institution in the early 90ties (Foss Hansen and Borum 2000) and paved the way for new mergers of groups from other departments into a new department.

One of the important outcomes of a national debate on university research evaluations in the 90ties was a decision at CBS to set up department research evaluations from a bottom up perspective, i.e. involving the local research groups and researchers in formulation evaluation problems and agenda. Especially when the peer review based evaluations of the departments was discussed locally the bottom up process showed its strengths because the

interpretation of results was seen just as much from an ownership position in the local research environments as in the faculty. In short, the evaluation of one large and heterogenic department managed to formulate the problems made visible by the evaluation in some very constructive ways, more or less paving the future discussion on reconstruction of this department into what became the department of Management, Politics & Philosophy later on. This department was also the one where a later survey showed the greatest satisfaction with the whole evaluation process.

The new department of Management, Politics & Philosophy was established in 1995 as a merger between a number of smaller groups and the department of management and strategy. The head of the department professor P.O. Berg created motivation and mobilised the groups involved to form the new department, and managed to get support from the president and dean to get a number of positions to establish the different groups in a growth process. The group of philosophers already employed moved to the department. They had been involved mainly in method and philosophy of science courses. The group of political scientists was coming from a centre based on a network (COS), and a few positions to recruit a core of three researchers were established. The centre for innovation and Entrepreneurship became part of the new department as well. The business Historians joined the department later in 1999.

The general purpose of the Department is to develop research and teaching within Management (including strategy and innovation), Politics and Philosophy. The purpose of building up research from different disciplines but all related to leadership and management. This was one of the interesting strategies to form a joint theme, and trying to get also disciplines such as philosophy and political science to contribute to a business School perspective on management, where relations to firms and management was the core theme for all. The framework for the following story of growth is tied to both a social construction of legitimacy, of a space of opportunities waiting for entrepreneurial initiatives, and an entrepreneurial culture of the school supported strongly by the president Finn Junge-Jensen.

The management at the department level tried to open space of opportunities and encouraging making new educational programmes, while also stimulating the effort to get external funding as a part of the culture, which was not a dominant feature at that time.

The merging of a number of groups to form a new department was not done only as a top-down process, but an effort to build up a platform of joint understanding to get together, where the responsibility for the younger staff was stimulated, and where researchers perceived it as an interesting challenge and actually the department concentrated on increasing the growth potentials.

The time for applications and R&D in educational programmes is a heavy investment from the start, and began as a process not only by one or two people, but by several, and a number of important research grants were won to sustain growth.

The development of new profiles of educations such as the combined educations with philosophy and the master in Knowledge Management is a collective effort, often initiated by a group of researchers. The role of management is both to stimulate initiatives, and allocate resources, but is much more involved in organising the framework and create conditions, than in the implementation.

4. The case of the policy group and the centre for business history

The process of constructing a research group takes a number of different routes some depending on the discipline and on traditions in the research community and some related to the specific themes in a research organizational context. Basic questions to be solved setting up a new research unit independent of discipline and institution is how to define or set up the agenda, how to recruit and especially how to select key personnel, how to secure funding. In a longer time perspective also, how to transform the group from an upcoming and promising initiative to a stable and influential part of the larger research organization maybe even on a more permanent basis.

The following section will discuss our case story with special regard to how the two research groups were set up and how they grew into what after some years has become a more stable situation.

In the cases discussed here, the two research groups in focus have some important common features but also some marked differences in their history. The common feature relates to the role of participating in teaching programmes in the mother institution, i.e. CBS. The differences relate to mainly two aspects of the group construction, the role of and the relation to the disciplinary system in (social) science and the construction of the leadership roles in the group.

Seen in relation to the disciplinary structure of traditional business schools both research groups were living on the edge, that is their major research questions and disciplinary core was and probably still is on the borderline of what conventionally is understood as related to business economics and relevant to a business school perspective. It goes for both the research group on public policy and the group on business history. Both groups faced the same kind of basic problem of establishing space and recognition inside the organization in order to survive and expand. In some aspects they chose the same strategy but in others, and on other dimensions they chose very different ways of expanding and establishing the internal coherence of the groups.

Both group leaders stressed in the interview that a fundamental strategy was to focus on teaching if one wants to set up a new research group in the disciplinary borderlines.

Teaching is both a strategy to get resources to the group but also, and more importantly, a strategy to get legitimacy to the group and their research from other parts of the institution and at the same time construct new dimensions and new substance in the teaching.

4.1. The Policy group

. The group established itself over a period of 5-6 years with a well-defined profile in public policy analysis both in research and in teaching. In the last couple of years, the group has developed collaboration with organisations and institutions and made room for a couple of external funded research projects on the borderline between private and public policy, especially the role of NGO's. This process has made its own spin-off in both

teaching and research profile for the whole group. This kind of entrepreneurial spirit in relation to research and teaching is not very well understood in the literature on scientific leadership and managing of departments.

The leader of the policy group stated the basic strategy using teaching opportunities to build a new group this way:

“..you participate in constructing your audience by setting up new expectations for what is teaching in management and organization by asking how to make myself relevant. We started by producing a number of electives and in this way it slowly developed into new expectations among students. It is a long struggle over many years to produce a teaching strategy, at the same time both creating our own teaching responsibilities but also a strategy for how we can contribute to other teaching programmes.” The same strategy was used by the history group even if they experienced a more explicit resistance from other researchers in traditional business school disciplines and had to make alliances with economists and others to demonstrate the relevance of business history in a business school. In both cases the two research groups chose a strategy explicitly aimed at getting a large share or portfolio in teaching on different levels for a couple of reasons. First to win legitimacy and respect from other researchers and departments, then to get a solid resource base for the research group for seeking external funding, and especially for the policy group by participating in a master programme they were able to get a number of valuable external contacts outside the business school. The teaching policy also had the function of being a major recruiting mechanism, especially in the first years before the groups had been recognised and internal and external funding could recruit new phd students and junior and senior researcher.

The two groups differ on important dimensions like the emphasis on external funding and how they combine teaching and recruiting policy.

The policy groups was very explicit on not “ to define or establish the group on a specific object or disciplinary problem, but on the idea of how to research on the tensions concerning the conditions for management in organizations, and in the meeting between private and public and public and NGO. Policy could of course be one object but it could also be a certain perspective. .. This way one open up for having a dynamic object that did not set up blockings for having playmates from other subject areas in the group....so we

defined a special way of working as agreeing on being able to disagree on the discursive analysis strategy as our basic idea.”

In the eyes of the research leader if such a new research group should move on, it had to give everybody the impressing of something new was happening all the time, “you cannot think in the framework of a zero-sum game or economy, because then you won’t get any new ‘playmate’, at best you might secure a small and stable number of positions.I think very important for the group to be a dynamic research environment and the very active doctoral school [at MPP] was decisive in producing expectations setting up new phd’s all the time.One of the advantages of having phd’s is in this connection, that they last for 3 years², so you have all the time a pressure to get new people in the group. ..It might sound cold and cynical but it means much life because it demands that you constantly set up new research projects, and look around at other institutions to see who can we invite?”

In the first period of establishing the policy group the diversity of teaching in a variety of programmes produced a stable foundation for the group. From here the strategy was one of creating good and exciting research environments to enrol and inspire the members. In this process the research leader saw himself as a resource person, a coach, creating the best environment for the others, even if it meant “moving away from one’s own research agenda in order to make space for new and young members of the group,it is like being simultaneous a colleague and a coach.”

In the more mature state of the policy group the resources to the group came from both teaching and external funding. Because of the cross-disciplinary core of the group, conditions for leadership in different organizational settings, the group has constantly to interact with other research groups and centres at the business school as well as outside, working with the field of management and leadership in relation to teaching as well as research. The constant interaction and boundary crossing has made the group become more and more central and visible in the business school environment. A good example of how successful the group has become is the fact that the group managed to launch a completely new social science master programme in political leadership and communication in the framework of the business school. In relation to the research agenda first formulated by the group leader, on ‘how to research on the struggle on the conditions for management in organizations’, this thematic core slowly worked its way deep into one

² In Denmark Ph.d Students are young researchers employed on normal academic terms for 3 years on a specific Ph.d project.

of the traditional objects of business schools, management. In order to keep a special profile for the group and to avoid the research agenda to be 'inflated' by disciplinary traditions, but at the same time to create some kind of identity, the group's research programme has developed its own combination of social theory, especially Luhmanian systems theory and Foucaultian power analysis with a discourse analytical approach. This development is very clearly reflected in the group's new flagship, the master programme in political communication and leadership.

Being a successful and growing research group with responsibility for teaching programmes as well as for a number of external funded projects emphasised another dimension in the research leadership in this group. It is open around the leadership functions. "At the department we have tried to redefine leadership into a responsibility one has for one's own work." The redefinition of leadership in this network based research group creates dynamics, though also problems. Being so close to colleagues in the group and acting as a coach makes it difficult to act as a leader-manager in situations of conflict and f.ex. dismissals, or not recruiting Ph.D.s for assistant professorship. In such situations is the close almost personal relations between members of the network a personal problem for the leader, and after experimenting with different models a solution was found, where the personnel management aspects in the group was handed over to the head of department. Another important thing when the group is established and have passed the first years of enthusiasm is to create a feeling of growth and change and to reach out to other environments – "it is not necessary to have constant growth if you have important circulation, it is important to have a flow in and out of co-researchers. Here time limited appointments are important, guest professors but also phd's with their 3 years project time. The research group has to be a group, a network, and not a department."

4.2 The history group/centre for business history

The history group took a quite different road. It is reflected in the teaching strategy as well as in the recruiting. Instead of defining the group around a special approach to a broad problem area like the policy group, the history group expanded on the idea of developing the discipline of modern history into the area of economic and especially business history. The overall strategy was like the one used by the policy group, starting on teaching through collaboration in teaching with an economist from one of the old departments at the business

school in order to present a historic perspective on business areas like finance, international trade, mergers and acquisitions, but closely related to recent development in these fields. The teaching program took off from the well-defined sub-discipline of economic history, a field with a long tradition for empirical studies and a distance toward social science theory. Eventually it developed to a new subject area at the business school, business history but it took “a number of internal disputes on the relevance” to establish the field as teaching area. Besides a number of internal disputes to gain recognition from other departments in business economics, the field of business history demanded a redefinition of the economic history with an approach to social and economic theory not normally used or accepted in the discipline of history.

At the same time business history became a research program based on a number of large projects based on external funding, especially by companies who wanted a research based business history. Much of these company history projects were initiated by the senior researcher, who originally took the initiative to introduce this subject area at the business school. The idea was to produce serious and well documented studies, produced with no strings attached concerning access to sources or the publication of results – but also studies that would have a larger public than traditional academic historians. Because of the external funding the history group could recruit, first a senior researcher and then a number of post.docs.

The recruitment was quite different from the one in the policy group, who could recruit young researchers from other parts of CBS as well as from outside. The history group/centre with a much more disciplinary profile had to recruit young and open-minded historians from University of Copenhagen, where the future for phd’s was more or less without perspectives with no growth and an age-profile leaving no new positions in the next few years. First after a first consolidation period the history group or centre as it has been established later on began to fund and recruit its own phd’s. Mainly based on the considerable external funding the group was able to offer at professorship to a professor in banking history from another Danish university.

The group moved from a loose research group to a centre and formed an advisory board with prominent historians and people from outside the university to create visibility and formalize the external recognition. Besides acting in relation to the outside world, the

advisory board also had an important function as a medium for corrections and reflections on the group's plans and strategy as well as it acted as an important mediator to external funding.

The sub discipline of business history is today an established field at the business school and the centre has established itself a leader in the field in northern Europe. In relation to the business school the staff at the centre is teaching in almost all programmes in the business school, with a heavy emphasis on the combined philosophy-business economic education. By introducing the business history approach the history group has introduced the idea of source critique, a classic methodology in history, but not always understood in social science and business economy.

The centre has during the last years been able to attract a number of large external programmes funding, especially related to Danish business history in the second world war. This funding has made the centre quite independent in relation to the business school and the department, and turned its relations in networks much more toward external partners than was the case with the policy group, whose networking with other research groups within the business school seems to increase rapidly.

5. Strategies for creating research

The case stories described above focus on different strategies in research leadership when a new unit is constructed in the framework of a large institution, the business school. One of the basic assumptions for the analysis is that business schools, especially one with a large university like teaching portfolio like CBS, have experienced the effects of the much discussed recent changes in science-society relation, discussed under headings like changes between mode one and mode two research programmes, triple helix or commercialization of research.

In our cases we have found interesting similarities and differences in the strategies used in order to build a new and stable research group. We find these differences very important

because they demonstrate that the conceptualization of research leadership and management is much more complicated and extend the level of implementation of traditional management concepts.

As a preliminary conclusion from this explorative case study we will argue, that ideas from entrepreneurship (Drucker 1999) seems to be much more relevant in order to describe the strategies used in the two cases. The description of the construction of a research platform and a strategy of how to form the agora is providing a platform for understanding how research in business schools may be seen as a type of mode 2 research management (Nowotny 2001) , where the relationship to practice provide the basis for research, both in relation to funding and access to data. The resources and researchers recruited in this way may be activated in the next round to create new platforms in terms of external funding or teaching as a basis for recruitment. The straddling on external funding – teaching- internal positions is a clear goal and strategy, and the turnover of staff in the temporary positions stresses not only the continuous partnering with organisations outside the business school, but also the input of new ideas.

The cases challenge the many complaints of the declining resources from the government (which is true), as this is a clear strategy to expand resources, bot directly by funding and indirectly through the development of interesting teaching profiles based on research, thus expanding the recruitment of students.

One of the similarities in strategy used in both cases was a conscious use of the very open and market-like teaching portfolio system at the business school. Both research leaders were very clear on how they in the beginning started to set up local teaching programmes in order to have a platform for further expansion, e.g. the resource argument, as well as a platform for recognition of the research agenda. It could be the new approach to management in public organizations, the struggle to manage, or the idea of constructing the field of business history founded on case studies on large companies in Denmark.

The main differences were based on the very specific profiles.

The history group/centre was from the beginning a disciplinary based project. Even if it has developed into a very advanced understanding of modern business history, where theory

and other disciplines are recognised, the group is still is a group of people all with at degree in history. From this point of view the group can be described as a rather traditional construction of a disciplinary empire, even if it is a very successful one, with an internal hierarchy based on the senior professors central positions in all kinds of networks of peers and managers of large firms around the centre. In combination with the ability to secure large external funding the centre is on one and the same time closely integrated in a growing number of teaching areas on the level of subcontractors, and on the other hand rather independent in relation to departments and other units at CBS.

The policy group on the other hand was from the beginning much more a network based organization, with an idea of defining the core on research, not as disciplines but by subject area and problems, specific approaches to how to understand the battlefield for leadership in organizations. The disciplinary openness in defining the group is reflected in the multi-disciplinarity of its members, the group has recruited its members from different social sciences and from different universities. This manifold is on the other hand centred on a certain approach and understanding. The group leadership is less formalised, as the group is not a centre, but an internal research group. Within teaching a new bachelor in communication and business economics, and a new master program in political communication and leadership. The research agenda has also extended the groups network into a number of central areas in the traditional research agenda of business schools, especially in management.

6. Dynamic Scientific leadership.

The history of general management theory provides us with three very basic management modes or paradigms. The first being the scientific management approach also labelled as the Tayloristic tradition (Taylor 1914, Drucker 1999). Metaphors such as brain, hand and tool illustrate a very straightforward form of management: division of labour of known tasks, rule and control. Within the second paradigm the organization of the firm appears as important conditions. Management is not just about ordering, but producing the right conditions for task accomplishment. It is a well known tradition with many faces (Mintzberg 1989, Simon 1996). In turn, the third paradigm focuses on complexity and self management in a fuzzy boundary context. Not only conditions are important but to an

extent the very definition of the task is open, as they are the goals. Here we encounter sets of reflective practitioners organising resources as well as themselves (March and Olsen 1979, Yukl 1989, Mønsted 2002, 2003, Hansson 2004).

One attempt to analyze academic research management is to establish a differentiation between what is defined as first, second and third order and research management and use the concept of entrepreneurship in order to do this. The combination of teaching and research as a complex structure, where effectiveness of the organisation is a complex issue is raised in Ramsden (1994), and the problems of breaking down bureaucratic and professional authority and create institutional innovation based on new disciplines are analysed at an institutional level in Blau (1994).

The cases demonstrates that the research leader had to handle complex internal organizational and managerial tasks (organize teaching, research programmes, as well as external (funding and networking for support). A useful analogy for the modern research leadership could be the literature on project management. The seemingly proximity between project management (Kreiner 1995, 1996) and creating projects and research leadership appears to provide some answers to problems currently encountered in research leadership. In reality, the majority of the project management models build on relatively clear linear templates for projects (Lientz & Rea 1995), and not on the open-ended complexity for creativity, research and expert knowledge in post-industrial research performed on part-time bases and under high level of uncertainty (Mønsted 2003, Lash 2003, Latour 1987, Alvesson & Wilmott 2003). The complexity of scientific leadership with conveying goals and different roles, styles and time horizons (Mayntz 1985, Liyanage 1999) may build on elements from project management as well as from studies of professional credibility (Ziman, 2000) and epidemic cultures in science (Knorr-Cetina 1999). The planning dimension so important in project management theory does not cover the multitasking demanded by research managers in modern ambivalent research and teaching organizations like modern business schools. The core of the concept of 3rd order management has the self management of the individual research as a central dimension, but for the successful research leader other dimensions than the organizational ones illustrated in the figure.

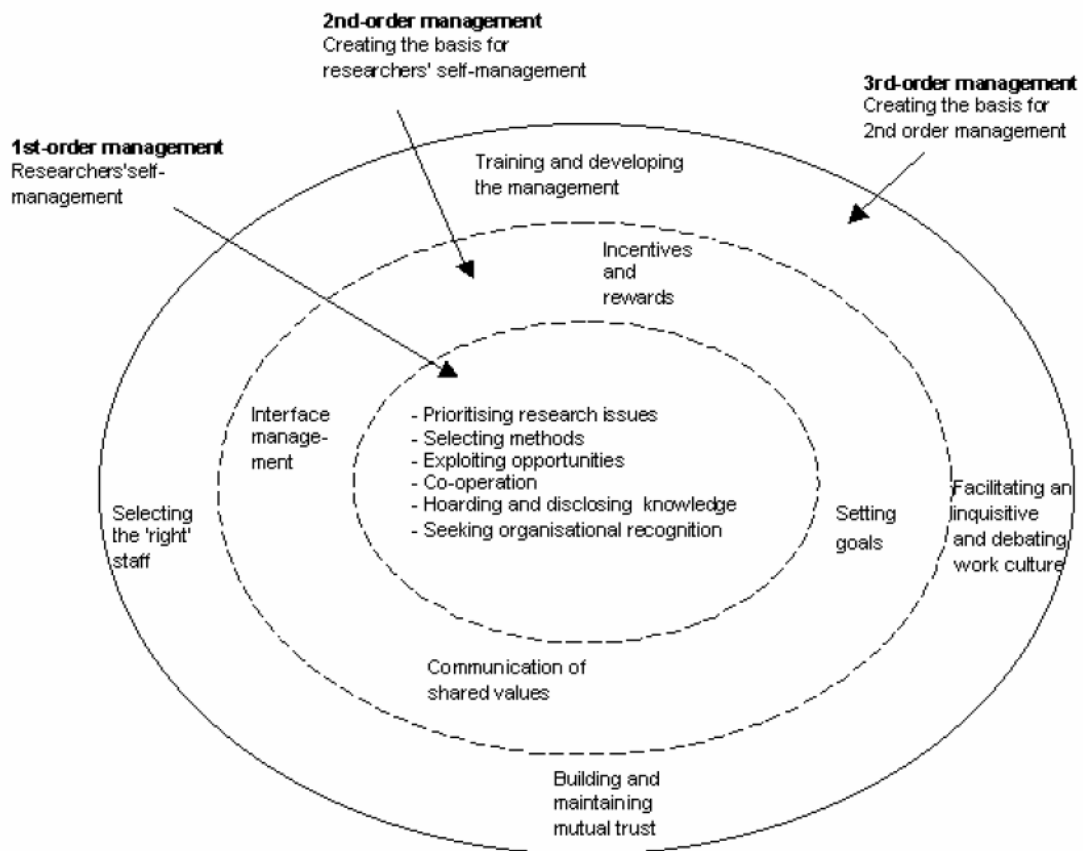


Figure 1. First–third-order management

(Ernøe et al.2001)

This figure is based on a study of literature on academic research management and the arguments for what is constitutive for the substance of the new third order management is also primarily based on combinations of the outcome of analysis of the changing world of science and research.

This paper analyses the empirical claims of the model in order not only to validate the model ,but primarily to develop a more refined and differentiated conceptual model for the understanding of the complexities and dilemmas surrounding managing research in the university.

The stories of the research expansion strategy are used to identifying some central dimensions of how to perceive scientific leadership not only as one of the dimensions or

fields, but how it as a social construction is touching upon both 1st, 2nd and 3rd order management. The impressive emphasis on the 3rd order management is interesting as a framework management of researchers, teams and formation of research environments. The personal qualities of the entrepreneur have to be combined with the concept of 3rd order research management (Thornton 1999, Boisot & MacMillan 2004).

7. The Organisational knowledge and learning perspectives:

The cases are emphasising the open space of opportunities and the limitation of zero-sum-game perspective waiting for exploitation of time for research. The institutional innovation processes are interesting to compare to other type of University renewal (Blau 1994, Ramden). The entrepreneurial development is reformulating not only a research platform and growth strategy, but also creates a flexible research environment, where part of the strategy is to initiate growth processes. The research manager has to be able to handle these demands as well as the ones bound up on special efforts to increase the capacity of the group to take in new assignments and create new relevant teaching, not only for the existing staff, but for further expansion. The research agenda in this context is to form an interesting and dynamic research environment. The organisation of seminars within networks including research groups from other universities as well as the inclusion of non-university key persons produced an outstanding reputation inside as well as outside the business school, and created an organisational potential for attracting very good researchers from other universities as well as good collaborations abroad. In terms of organisational learning a fundamental part of this process is tied to the knowledge and culture among younger members of the group, both assistant professors and Ph.D.s that they have responsibilities for generating new possibilities, both in research and teaching. The organisational culture of entrepreneurship and decentralised responsibility is an embedded part of the organisation, more in the policy group than in the history group. The young researchers also train the younger recruits to be aware of these features.

The creation of the modern research group in the agora is not a one-time creation, but it is a process of constant movement and mobilising resources, taking responsibilities to construct and reconstruct a learning milieu. It is an institutional innovation based on entrepreneurial behaviour of researchers and leaders. The individual responsibility for every researcher for contributing to the construction of the organisation is very clear. It is most visible in relation to the PhD's where a large number wanted, but not all succeed to stay in a research job at the department. The individual responsibility add pressures on the phd.s to create their own job as postdoc or assistant professor by applying for external funding. Also more senior groups of researchers are under constant pressure to contribute to a dynamic environment.

The training and learning to be active entrepreneurial members of a business school based on teaching and research, are then becoming the entrepreneurial management function at all levels in the research and teaching organisation. This implies concern for both the obligations at universities and business schools, high performance on theoretical research, partnerships with organisations to create funding and access to empirical research and clear teaching strategies as well. The creation of a market for expertise of a special kind such as disciplines on the boundary of business economics, need creative thinking and a dynamic leadership.

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