

Organizational Inertia in a Strategic Public Sector Merger: Case Aalto University

Markus Heimonen



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Abstract

Aalto University is a new Finnish private university that was created 1.1.2010 through the merger of three nationally leading universities of their own fields. The merger incorporated a strategic change effort in all significant activities of the organization, including management system, organizational structure, personnel, and culture in a short timeframe dictated by external political and economic forces. The overall rate of reforms that have been actually implemented during a relatively short transformation period challenges the picture of universities as extremely static organizations. This study focuses on explaining the organizational phenomena observed during the transformation effort by creating a grounded framework of organizational inertia.

The study clearly illustrates the importance of organizational inertia as a concept, and its power to explain and classify complex organizational phenomena as a framework. The developed theory manages to provide an explanation for most of the relevant phenomena encountered during the study, with an apparent focus in institutional, political, legitimacy, and information issues in the public sector case. The study illustrates the significance of cultural, institutional, and decision-making issues, making a university organization a mess of politics, rivalry, problematic leadership, and complex social networks. The results suggest that it may be very hard to lead the people in a university, but the management can certainly make an effort to lead the image of a university by creating a compelling transformation story as well as positive examples and role models, which may be powerful drivers of change.

Furthermore, organizational inertia emerged not only as a force making the change more difficult, but the inertial themes observed in the pre-merger organization formed the rationale for the change itself, suggesting that certain forces can act simultaneously to initiate and inhibit strategic change by increasing the need while decreasing the ability to change.

Keywords organization, inertia, transformation, change management, university, merger

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Organisaation inertia strategisessa julkisen sektorin yhdistymishankkeessa – Tapaus Aalto-yliopisto

Julkaisija Perustieteiden korkeakoulu**Yksikkö** Tuotantotalouden laitos**Sarja** Aalto University publication series CROSSOVER 5/2011**Tutkimusala** Organisaatiotutkimus**Tiivistelmä**

Aalto-yliopisto on uusi suomalainen säätiömuotoinen yliopisto, joka muodostettiin 1.1.2010 yhdistämällä kolme omien alojensa kansallisesti johtavaa yliopistoa. Yhdistyminen piti sisällään yliopiston kaikkien ydintoiminnallisuuksien strategisen kehittämisen, mukaan lukien esimerkiksi johtamisjärjestelmän, organisaatiarakenteen, työsuhteiden ja kulttuurin uudistamisen ulkoisten poliittisten ja taloudellisten voimien sanelemassa tiukassa aikataulussa. Merkittävä osa suunnitelluista muutoksista on myös kyetty implementoimaan lyhyessä ajassa, mikä osin haastaa käsitystä yliopistoista erittäin staattisina organisaatioina. Tämä työ keskittyy selittämään muutoshankkeen aikana havaittuja organisatorisia ilmiöitä havaintoaineiston pohjalta luodun inertiamallin avulla.

Tutkimus osoittaa selvästi organisaation inertian merkityksen konseptina, sekä inertian kyvyn selittää ja luokitella organisatorisia ilmiöitä mallina. Työssä luotu teoria onnistuu tarjoamaan selityksen useimpiin tutkimuksen aikana havaittuihin merkittäviin ilmiöihin, nostaten esiin tutkitun julkisen sektorin yhdistymishankkeen tapauksessa erityisesti institutionaalisia, poliittisia, legitimeettiin liittyviä ja informaatiotekijöitä. Tutkimus osoittaa kulttuuristen, institutionaalisten ja päätöksentekokysymysten merkityksen yliopistoille, joista piirtyy kuva politiikan, omaneduntavoittelun, ongelmallisen johtamisen ja monimutkaisten sosiaalisten verkostojen värittämänä sekasotkuna. Tulokset antavat syytä olettaa, että ihmisten johtaminen yliopistossa on haastavaa. Johto voi kuitenkin selvästikin johtaa yliopiston imagoa luomalla onnistuneen muutostarinan sekä tuottamalla esimerkkejä ja esikuvia, ja nämä voivat toimia tehokkaina muutosajureina.

Lisäksi tutkimuksessa osoittautui, että organisaation inertia ei toimi pelkästään muutosta vaikeuttavana voimana, vaan tosiasiaassa muutosta edeltävässä organisaatiossa havaitut inertiatekijät muodostivat perustelun itse muutokselle. Näin ollen vaikuttaa siltä, että tietyt organisaatioissa vaikuttavat tekijät voivat samanaikaisesti aikaansaada ja estää strategista muutosta lisäämällä tarvetta mutta heikentämällä kykyä muutokseen.

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Markus Heimonen

Otaniemi, June 2011

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1.Introduction

"The history of any one part of the Earth, like the life of a soldier, consists of long periods of boredom and short periods of terror."

-Derek Victor Ager

1.1 Background and motivation

The Finnish system of higher education is in turmoil. Universities are facing growing pressures of global competition for the best talent, of national private sector –driven demand for well-educated workforce with diverse problem solving skills, and of decaying public funding. The very foundations of the Nordic well-fare state itself are at risk. As an answer to the challenges, a major national university reform is taking place, including changes in legislation, funding and goals concerning the universities. All universities have been given more economic freedom through transforming their legal persons from government agencies to autonomous entities. Furthermore, a number of new universities have been formed through mergers.

Spearheading the entire reform is the forming of the new Aalto University, a project officially started in 2007 under the label "Innovation University". Aalto is an ambitious endeavor of national scale, striving to be recognized globally as a top-class university in 10 years and being created through the merger of three national number one universities in their own fields: Helsinki University of Technology (TKK), Helsinki School of Economics (HSE) and University of Industrial Art and Design Helsinki (TaiK).

To make the Aalto-project possible, the Finnish government has made the new university major contributions both in funding and in customizing legislation for the needs of Aalto. In addition, Finnish industries have played a major part in lobbying for and funding the university. This "special treatment" has ensured Aalto a place at the heart of Finnish public debate concerning the university reform and geographic distribution of government funding across the country, contributing to high political stakes and ensuring continued media attention with the project.

Aalto University formally started its operations 1.1.2010, forcing a number of fundamental changes to the old organizations it is based on.

These include, but are not limited to, a new top management, new management system and complete reorganization of central administration, new private foundation -based organizational form with increased financial responsibilities, moving the whole personnel from public civil service positions to private contracts, major organizational restructuring, and a stated goal of the new top management to change the culture of the university.

Indeed, such a profound transformation would be challenging for any organization. An important further flavor here, however, is that we are considering a public university transformation. Several writers have described the general characteristics of university organizations. For instance Hannan and Freeman (1989: 113) described modern universities as “holding companies” with limited central authority causing several problems such as strategic focus shifts based on popular trends and PR-value, difficulties in setting up and closing down subunits, and resource reallocation from good-performing units to bad ones. Mintzberg (2009: 241-273) gives universities as an example of organizations with a diversity of internal political games. Meyer and Rowan (1977) argued that universities, R&D units and government agencies maintain a façade of standardized, legitimated, formal structures while actually allowing variation in internal processes because of practical considerations. Furthermore, Cohen, March and Olsen (1972) introduced universities as a prime example of their “garbage can model” where decision making is accidental and is the product of problems and solutions that get associated randomly. Scott (2003) describes the problems of overconformity and goal displacement typical in large bureaucratic organizations. All in all, it should be safe to claim that most common features of universities do not make organizational changes easier, but rather more difficult.

Obviously, this highly volatile combination of extraordinary ambition, exceptional possibilities and great challenges makes Aalto University both an organization in demand of outstanding leadership, and a test platform providing a most interesting setting for scientific study. This study makes an effort to contribute both, management and science.

From a managerial point of view, the challenge is how to simultaneously affect a turnaround and a merger in a set of traditional academic institutions with strong and diverse cultures and long histories. Here the key contribution of organization science is a reality check. Therefore, my purpose is not to tell the management how to make good decisions, or, even less, what decisions to make. My purpose is to point out and explain organizational phenomena, affecting and limiting the consequences of

managerial decisions. I try to provide insight to the question, why organizations often are difficult to change. In particular, I seek to find out why there is observable inertia also in this merger of three universities, and what could be done about it. Moreover, I believe that during the course of creating this study, I have had the chance to ask a number of difficult questions from the correct people, sparking new ideas and focusing managerial attention to relevant areas, even if these issues are outside the scope of this work and thus not documented here.

The starting point of my scientific perspective is the fundamental thesis of organizational ecologists who claim that organizations have trouble changing because of structural or organizational inertia (see e.g. Hannan and Freeman (1977, 1984, 1989), Barnett and Carroll (1995), Aldrich (1999), Scott (2003), Hannan, Pólos and Carroll (2003), and Pólos and van Witteloostuijn (2004)). Even though organizational ecology as a whole may lie quite far from the mainstream of strategic research (Mintzberg 2009: 367, 384), I embrace this school of thought as a starting point for three main reasons.

First, I expect many of the challenges involved in Aalto project to revolve around organizational inertia. Because the whole concept of inertia has been developed by the ecologists (Hannan and Freeman 1977, 1984) and it remains at the core of their research, I believe the organizational ecology perspective to be the most refined in advancing understanding of inertia.

Second, despite the efforts to explain organizational inertia and the fact that basically all organizational research has taken inertia into account at least to some degree since its introduction, the theoretical concept of inertia remains somewhat ambiguous. The question “What is organizational inertia?” remains largely unanswered, and there is room and need for further research.

Third, I believe that by choosing a less charted path my chances are increased to contribute fresh approaches not yet covered in the theoretical background of the Aalto planners.

Finally, a great motivation for this work is the very fact that Aalto University is the spearhead of the Finnish higher education reform. It is much more likely that Aalto will be the beginning, not the end of the reform. Thus any understanding of Aalto will contribute to the future of the entire Finnish system of higher education.

1.2 Objectives and Research Approach

From the setting of making a study of organizational inertia in an ongoing public university merger, and the need to both contribute scientific

understanding of inertia and to provide tools for the management in their challenging task, we arrive to the following research question I seek to answer:

How has organizational inertia affected the forming of the Aalto University?

- Which are the most significant causes of inertia in the forming of Aalto University?
- What features of universities make them more susceptible to inertia?
- What are the characteristic features of Aalto University and how do they contribute to inertia?
- How have the management's plan and actions to control the merger contributed to inertia?

By answering these questions, I construct a set of data that can be grouped into theoretical categories. Once formed, these categories represent different root causes of inertia. Answering the questions provides insight to the Aalto project, but also contributes to the knowledge of organization theory about university mergers.

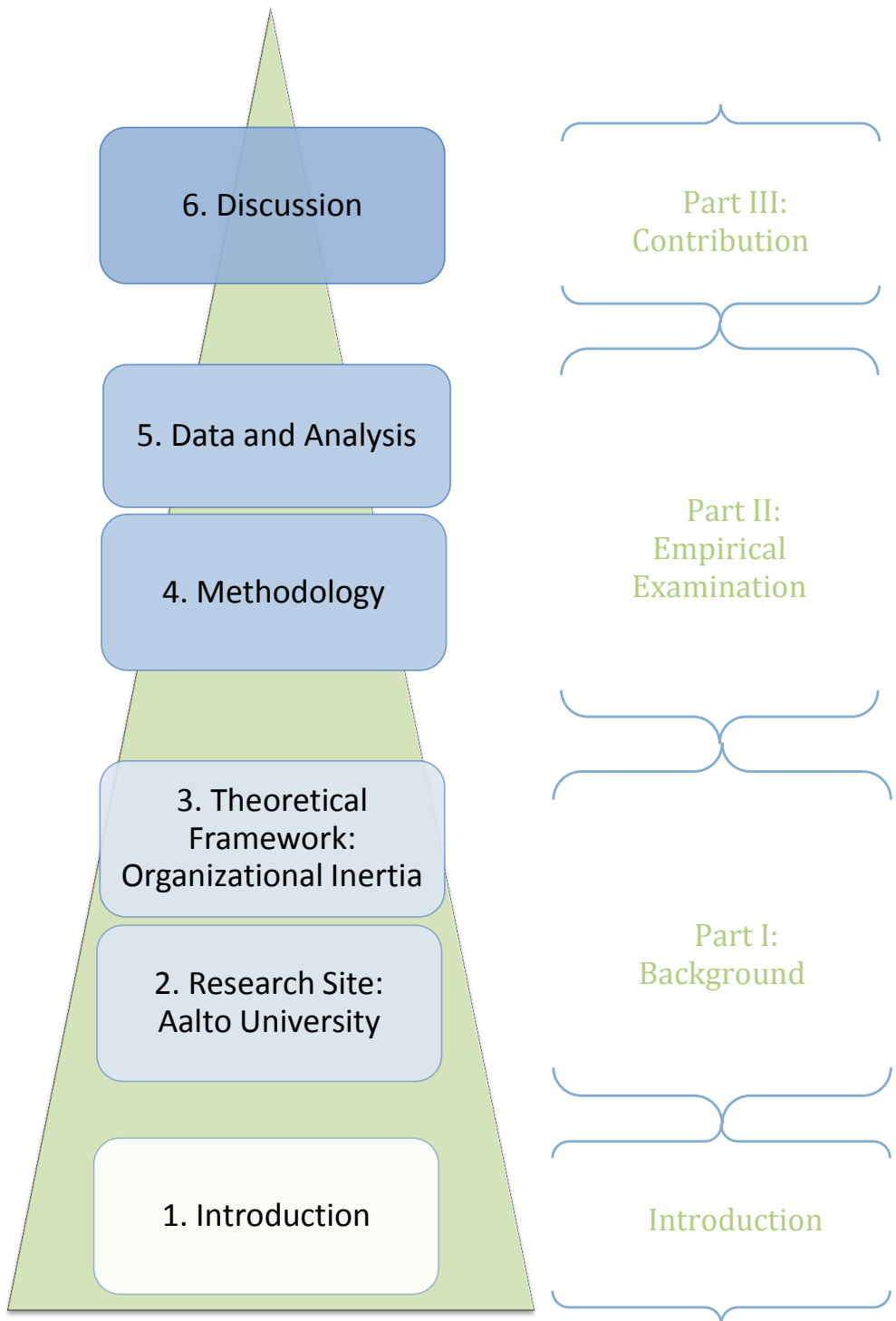
1.3 Structure

The contents of this study are organized as follows. The structure is visualized in Figure 1 on the following page.

This subchapter concerning structure is followed by a brief overview of general organizational theory that binds the perspective of this work to wider context of organizational studies. The Introductory part is followed by Part I: Background, the two chapters of which chart the physical and theoretical premises of the thesis. First, the starting point of Aalto University is explained through an overview of the three old universities it is based on, and a brief history of the merger itself. Then a literature review follows, discussing organizational inertia as a whole as well as its most essential component parts as identified by this study.

After setting the scene for this research, we proceed to Part II: Empirical Examination, which comprises the empirical contribution of this work. The research methods are explained in Chapter 4, after which the empirical data is presented and analyzed in Chapter 5.

Finally, the study is concluded in Part III: Contribution, discussing the theoretical and practical findings of the work in Chapter 6.



1.4 A Perspective on Organizations

Organizations are the dominating force responsible for most of the activities that take place in our world. In the social sciences, organizations are the object of analysis for a number of disciplines, such as sociology, economics, political science, psychology, management, and organizational communication. The variety of disciplines interested in organizations illustrates both their significance and the diversity of different possible perspectives that can be chosen for their research.

Because it is difficult to cover the different sides of organizations from a single point of view, three perspectives are used for the purposes of this thesis. As we are studying here a planned organizational change, and the effects of inertia on it, it is natural to choose the perspective of organizational planning as our first point of view. After discussing the organizational planning view we are left with the “reality” of the organization. Obviously one fundamental aspect is the social reality of the organization, that is, the organization as a social system. This ‘social system view’ is our second perspective. Finally, it is also necessary to consider the interactions of the organization with its environment, namely to consider the organization as an open system. Therefore we end up with three lenses through which to review the literature for general properties of organizations.

The purpose of this Chapter is to introduce these lenses and the general perspective of this thesis on organizations, to make it easier to see what lies beyond the focus of this work and where we stand.

1.4.1 Organizational Planning View

The name of this chapter could as well be for instance ‘strategy making’, ‘rational control’, ‘prescriptive school’ or ‘managerial’ view. The point is to elaborate the side of organizations literature providing managers tools and approaches for rationally controlling and shaping their organizations.

The organization science itself has its origins in the work of the numerous founding fathers of this field. Frederick Taylor (1911) with his followers started the era of scientific management with mechanistic optimization of routines. Philip Selznick (1957) and Henri Fayol (1949 trans.) emphasized the role of the top management in rationalizing the organization from top down. Weber (1968 trans.) defined different forms of authority, each associated with a distinctive administrative structure, and introduced the modern bureaucracy with specialized administrative staff as

the most highly developed form of formalization. Chandler's (1962) maxim that organizational structure must follow strategy is influential even today.

Writers like Igor Ansoff (1965) and Kenneth Andrews (1971) have provided tools and instructions for analysis and strategy making process while Michael Porter followed the footsteps of military strategists like Sun Tzu (1971 trans.) and Carl von Clausewitz (1968 trans.) when he provided the management his famous tool box of "Competitive Strategy" in (1980) which he later supplemented with "Competitive Advantage" (1985). To support understanding of change management, Danny Miller (1976) introduced different archetypes of strategy formation that were either successful (like "The Dominant Firm") or unsuccessful (like "The Aftermath", where a new team is trying to affect a turnaround with scarce resources and inadequate experience). The idea was later further developed by Mintzberg (1989) into organizational configurations that define the fit between different dimensions of organization during its life course. Miller and Friesen (1980) also introduced the concept of "quantum change" between stable periods during the life cycle of organizations, a theme advanced further by Pettigrew (1987).

Considering change management, one of the central debates is the one between top-down and bottom-up change. The former has been traditionally the dominant view – that it is the job of top management to envision, initiate and see through major transformations of the organization (see e.g. Beatty and Ulrich (1991), Baden-Fuller and Stopford (1992) and Kotter (1995)). However, the latter view emphasizing long-term impact of change through involvement and commitment of participants has been gaining more ground since the 1990s (see e.g. Beer, Eisenstat and Spector (1990), and Dickhout, Denham and Blackwell (1995)). Instructions for managers to enforce top-down or enable bottom-up transformation are illustrated in the following "checklists".

Top-Down: "Eight steps to Transforming Your Corporation" by Kotter (1995: 61)

- 1. Establishing a sense of urgency**
- 2. Forming a powerful guiding coalition**
- 3. Creating a vision**
- 4. Communicating the vision**
- 5. Empowering others to act on the vision**
- 6. Planning for and creating short-term wins**

- 7. Consolidating improvements and producing still more changes**
- 8. Institutionalizing new approaches**

Bottom-Up: “Six Steps to Effective Change” by Beer, Eisenstat and Spector (1990: 161-164)

- 1. Mobilize commitment to change through joint diagnosis of business problems.**
- 2. Develop a shared vision of how to organize and manage for competitiveness.**
- 3. Foster consensus for the new vision, competence to enact it, and cohesion to move it along.**
- 4. Spread revitalization to all departments without pushing it from the top.**
- 5. Institutionalize revitalization through formal policies, systems, and structures.**
- 6. Monitor and adjust strategies in response to problems in the revitalization process.**

These “checklists” illustrate well the two sides of the coin that I have called here the “organizational planning view”.

On one hand, they illustrate the need for management science to come up with concrete hands-on tools that can readily be utilized by decision makers in the hectic pace of real life challenges faced by organizations. At their best, such recipes can bring some order in the often chaotic reality by introducing frameworks and structured approaches for solving difficult problems. This field of organizations theory also provides ammunition for the consultants of the strategy industry and professionals of the planning departments, defining the discourse and language of management. As such, the impact of such practical approaches may be great indeed.

On the other hand, however, such “no-nonsense approaches” are severely limited in their power to explain and control complex phenomena inherently present in real organizations. These limitations are discussed in following chapters.

1.4.2 Social System View

The purpose of this chapter is to elaborate the approaches of sociology and psychology to consider organizations as complex social systems.

Things always start to get messy, when the dreaded human factor is involved. For instance Scott (2003: 28) defines organizations as follows:

Organizations are collectives whose participants are pursuing multiple interests, both disparate and common, but who recognize the value of perpetuating the organization as an important resource. The informal structure of relations that develops among participants is more influential in guiding the behavior of participants than is the formal structure.

Therefore an organization is not just formal structure plus the idiosyncratic beliefs and behaviors of individual participants, but rather both a formal structure and an informal structure: informal life itself is structured and orderly. There is also a disparity between the stated and the "real" goals pursued by organizations, and even the real goals are not the only goals pursued, but organization has to expend energy to "support" or "maintenance" goals to maintain itself. Yet there is one even more important goal, survival, which governs formal organizations like all other social groups (ibid.: 57). Also Hannan and Freeman (1989: 6) note that organizations have the tendency to live a life of their own, and that they are an expensive means for accomplishing their goals. Furthermore, Selznick (1948: 29) emphasizes the primitive reactions of the collective system:

A given empirical system is deemed to have basic needs, essentially related to self-maintenance; the system develops repetitive means of self-defense and day-to-day activity is interpreted in terms of the function served by that activity for the maintenance and defense of the system.

Michels (1949 trans.: 390) continues that if the interests of the rank-and-file members diverge from those of the leaders, the former are likely to be sacrificed.

From the social point of view, it becomes more reasonable to examine what is really done rather than what is decided and planned. In such case commitment and motivation also become more relevant variables than search and choice, if action rather than "talk" is the focus (Scott 2003: 59).

McGregor (1960) notes that highly centralized and formalized structures are doomed to be ineffective and irrational in that they waste the organization's most precious resource, namely the intelligence and initiative of its participants.

Another early theory development is the concept of authority in social systems. For instance Pelz (1952) suggested that a supervisor's relation to his or her own superior, and specifically his or her influence upward, is a powerful determinant of the supervisor's influence over his or her own subordinates. Barnard (1938: 163) stated that the decision as whether an order has authority or not lies with the persons to whom it is addressed, and does not reside in 'persons of authority' or those who issue these orders. Because of these limitations to authority, he continued that the most critical ingredient to successful organization is the formation of a collective purpose that becomes morally binding to participants. The developing and imparting of such mission and the creation of moral codes for others is the distinctive function of the executives (*ibid.*: 279).

What makes the situation for executives here difficult, however, is that to survive the organizations may change their reasons for existence and thus their unifying purposes (*ibid.*: 89). Furthermore, as Scott (2003: 70) notes, the very process of making critical decisions to change the structure or purpose of the organization alters the character of the organization.

This perspective forms much of the foundation on which the examination of internal causes of inertia in later chapters is based.

1.4.3 Open System View

The previous two chapters have introduced two perspectives for considering the internal activities of a well-defined entity called organization. The purpose of this chapter is to introduce a third view that places the organization into the context of its environment and considers it as a systemic part of a larger system.

For instance Aldrich (1999) defines organizations as "goal directed, boundary maintaining, activity systems". The organizations face four main challenges, which are (*ibid.*: 113)

- i. mobilizing knowledge and resources
- ii. using them effectively
- iii. reproducing organizational knowledge
- iv. maintaining organizational boundaries

Here the concept of organizational boundaries is essential. What happens within organizational boundaries must matter to enough members so that organizational routines and competencies are replicated from one day to the next, and organizational boundaries are maintained. However, except for ‘total institutions’ such as prisons or armies (see e.g. Goffman, 1961) members have control over their entry or exit to/from the organization, and most people are members of multiple organizations, resisting the idea of being resources of any particular organization (McPherson, 1983). This creates an intricate network of memberships and loyalties blurring the organizational boundaries.

Furthermore, this is in line with Scott’s (2003: 29) definition that “organizations are congeries of interdependent flows and activities linking shifting coalitions of participants embedded in wider material-resources and institutional environments”. This is also a process view of organizations, focusing not on the static structure but on the dynamic action keeping the organization alive. Or, as Scott puts it (ibid.: 100):

If structures exist it is because they are continuously being created and recreated, and if the world has meaning, it is because actors are constructing and reconstructing intentions and accounts and, thereby, their own and others identities.

The process perspective allows for a multitude of nonconventional interpretations for organizations. For instance Nohria and Eccles (1992) describe organizations as networks, Cyert and March (1963) as shifting coalitions, Jensen and Meckling (1976) as a nexus of contracts and Czarniawska (1997) as ongoing narratives and conversations among participants.

Environments influence organizations in numerous fundamental ways. One example is what Pondy and Mitroff (1979: 7) called the “law of limited variety”, meaning that a complex system cannot maintain its complexity in a simple environment, and that a system will not exhibit more variety than the variety to which it has been exposed in its environment. The flipside of this interpretation is that an organization has to develop a complex form to successfully interact with a complex environment.

Another example is the contingency theory coined by Lawrence and Lorsch (1967) and Galbraith (1973), who lists the basic assumptions of the theory as

- 1) There is no one best way to organize; however

- 2) Any way of organizing is not equally effective.
- 3) The best way to organize depends on the nature of the environment to which the organization relates.

Here the contingency theorists challenge those administrative theorists who have sought to offer general recipes applicable for any organization. Instead they claim that a successful organization forms a fit between its internal capabilities and the demands of its environment.

Third example of profound interaction between an organization and its environment is that the environment is the context in which the process of selection in ecological sense takes place. The concept of organizational change through processes of selection and adaptation is discussed in the next chapter.

1.4.4 Organizational Change

By definition, “organizational change” involves a transformation of an organization between two points in time, distinguishing the organization “before” and “after” the change. The change itself can be analyzed from two main perspectives, namely from the process or content point of view (Barnett and Carroll, 1995).

The process view concentrates on the transformation itself, examining for instance the speed of change, the sequence of activities, the decision-making and communication system and the resistance encountered (ibid.). Another possibility is to compare what actually differs in the organization after the change, which is the approach of the content based view (ibid.).

It is typical that many theories of organizational change discuss only one of these perspectives. However, in practice they can seldom be analyzed independently, as portrayed for instance by Johnson (1987):

It is likely that the change process that occurs will be, relatively speaking, ill-defined and general. Members of the organization will know that change is occurring but may not be that clear about where it is leading or what it signifies. However, it may be that this process of change is a necessary precursor to the introduction of specific strategies.

What is it then that changes in an organization during a transformation? For instance Hannan and Freeman (1984) classify changes to core and peripheral changes. Peripheral changes are easier and not as risky as core

changes, which are rare and costly and seem to subject an organization to greatly increased risks of death. According to Hannan and Freeman these core features are in hierarchical order organization's mission, its authority structure, its technology and its marketing strategy. Here a change of mission represents the most fundamental possible change for an organization, requiring also a change in all the other core features lower in the hierarchy.

Another important aspect of organizational change is the idea of organization's development through time. Van de Ven and Poole (1995) identify four different approaches to change:

- 1) **Life cycle theories** embrace a metaphor of organic growth and attempt to identify stages in the development of the organization from its initiation to its termination. Change is viewed as immanent: the organization is thought to contain an underlying logic or program that regulates the process of change. Here the idea is that as an organization grows, also certain structural transformations should occur. A typical example would be that a successful and growing start-up company cannot retain its system of direct and informal control by owner-managers after some point in its evolution.
- 2) **Teleological theories** posit that the organization is purposeful and adaptive and goal-directed. Development is viewed as an iterative process of goal setting, implementation, evaluation and goal modification.
- 3) **Dialectical theories** assume that the organization exists in a pluralistic world of conflicting forces that compete with one another for domination. Stability and change are explained by alterations in the balance of power among opposing entities.
- 4) **Evolutionary theories** assume that change occurs through a continuous cycle of variation, selection and retention. New elements such as rules or routines arise through random change and selection occurs primarily through the competition for scarce resources, and retention preserves them through some type of copying or reproduction process.

These perspectives underline the fact that the selection of a relevant perspective is of great importance when trying make relevant observations about complex organizations. The chosen perspective dictates what can be seen and what escapes attention.

1.4.5 Adaptation or Selection?

For decades, the field of organizational research has been much divided in two separate camps, whose main debate revolves around the question how flexible and thus how able to change organizations are considered to be.

The followers of the adaptive camp assume that change in the world of organizations occurs mainly through the adaptive responses of existing organizations to prior changes in their environment (Barnett and Carroll 1995). The camp is supported for instance by such influential proponents of generic strategies like Porter (1980) and Miles and Snow (1978), and the proponents of configuration theory like Mintzberg (1989) advocating that the main concern of organizations is to find an optimal configuration of key organizational attributes. A switch to a more advantageous configuration is defined as adaptive, while a switch to a less advantageous configuration is defined as deleterious (Amburgey et al 1993). Other theories that can be placed in the adaptational camp include contingency theory (Lawrence and Lorch 1967), resource dependence theory (Pfeffer and Salancik 1978), institutional theory (Meyer and Rowan 1977) and transaction cost economics (Williamson 1975).

On the contrary, the selection camp assumes that individual organizations cannot change easily, and even if they do they still cannot change as fast as their environments. Change is both difficult and hazardous. Therefore when the environment changes, some existing organizations fail, making room for new ones with a better fit with the new environment. According to the selection camp, most fiercely defended by the organizational ecologists, this cycle of selective replacement is the main source of change and diversity in organizations (Barnett and Carroll 1995).

Some advocates of the selection camp emphasize internal factors of the organization inhibiting adaptation, such as how change is often opposed by organizational members (Coch and French 1948). Even when change is supported by some members, established roles and formal organizational rules are difficult to alter quickly (Tsouderos 1955, Stinchcombe 1965, McNeil and Thompson 1971, Hannan and Freeman 1977 and 1984). Other writers focus on the external linkages between the organization and its environment and suggest that resistance to change occurs because organizations are embedded in the institutional and technical structures of their environment (Granovetter 1985, DiMaggio and Powell 1983, Scott 1987). Zajac and Kraatz (1993) claim this kind of behavior to be particularly common in non-profit industries. The key concept of the selection camp is

that of *organizational inertia*, i.e. lack of ability to change, which will be discussed in depth in chapter 3.

For the purposes of examining organizational inertia, the work of the selection camp will have a more prominent role in the following pages. Naturally, this is very much a matter of choosing a *relevant* perspective, meaning that it is not necessarily the *only* possible perspective.

Even though the division in the field of organizational theory seems sometimes impregnable, in practice the camps have successfully influenced each other during the past decades. Selection theorists admit that individual organizations do sometimes successfully change, and adaptation theorists recognize that some organizations fail because they do not change when and how they should (Barnett and Carroll 1995). For instance Amburgey et al (1993) suggest that organizational change can be both disruptive and adaptive, and organizational inertia can actually increase the likelihood of organizational change.

Zajac and Kraatz (1993) note, that the nature of the disagreement between the camps is rooted partly in the fact that different researchers often emphasize different aspects of environmental or organizational forces. The selection theorists emphasize those forces that inhibit the ability of organizations to change, while the adaptationists focus on the forces that initiate change. Furthermore, the researchers focusing on the same forces may fail to consider that certain forces can act simultaneously to initiate and inhibit strategic change by increasing the need while decreasing the ability to change (ibid.).

Finally, Hannan and Freeman (1977) argue that a subtle relationship exists between adaptation and selection: Adaptive learning for individuals usually consists of selection among behavioral responses, and adaptation for a population involves selection among types of members. Aldrich (1999: 194) sums this by concluding, that an organization that is unable to change is always at risk in a changing environment. Then if most of the members in a population are unable to change, the population can survive only through two methods, namely through new organizations being born into the population, or through copying the methods of such members that have successfully lived through the inevitable change. If both of these methods fail, the population itself can be overrun by another more successful population.

2. Research Site: Aalto University

2.1 General

Aalto University is a new Finnish foundation based university that started its operations January 1st 2010. Aalto was created through the merger of Helsinki University of Technology (TKK), Helsinki School of Economics (HSE) and University of Art and Design Helsinki (TaiK), all being the oldest and largest institutions in Finland within their own field. Private foundation based universities have been extinct in Finland since 1970s, and therefore Aalto also incorporates a new organizational form with the sole other foundation university in Finland, Tampere University of Technology, which was created at the same time but without a merger.

As of May 2011, Aalto University operates on three main campuses around the Helsinki metropolitan area representing the three preceding universities, and has additional specialized smaller units in Mikkeli, Lahti, Pori and Vaasa, and internationally in Singapore and Shanghai. The organization of Aalto University is based on central administration with support services, and six academically independent schools, four of which specialize in technology, one in business and one in art and design.

To make the Aalto-project possible, the Finnish government has made the new university major contributions both in funding and in customizing legislation for the needs of Aalto. In addition, Finnish industries have played a major part in lobbying for and funding the university. This “special treatment” has ensured Aalto a place at the heart of Finnish public debate concerning a wider university reform spearheaded by Aalto, and geographic distribution of government funding across the country. The limelight of publicity has contributed to high political stakes and ensured continued media attention with the project.

The goals of the new university have been set high, as it aims to be globally recognized as a top-class university by 2020 (Aalto University Strategy 2010).

2.2 History

2.2.1 Predecessors

2.2.1.1 *TKK - Helsinki University of Technology*

Engineering education in Finland began at the Technical School of Helsinki in 1849. Later the school was renamed Polytechnic School in 1872 and Polytechnic Institute 1879, which received university rights and was renamed the Technological University of Finland 1908. The university moved from its old premises at Hietalahti Market in Helsinki to Otaniemi, Espoo in 1950s, creating the first American-style integrated university campus in Finland (Nykänen 2008). During its last operating year 2009 TKK employed 3979 people, of which 215 were professors, and had 15 000 under- and postgraduate students. The total funding from state and other sources of the university was 313 million euros (TKK annual report 2009). Basically all fields of engineering were researched and taught at TKK.

Several TKK key strengths are listed in Aalto University project plan analysis (Aalto University 2008). These include high industry relevance with good and multiple relations with industry, and several world-class research groups with competitiveness in EU and industrial programs. The international reputation of TKK is considered “satisfactory”, but nationally the majority of the best students are believed to prefer TKK, it being the largest, oldest and most popular place to study technology in Finland. Also the foundations of most high technology businesses and especially the traditional key areas of Finnish industry, such as pulp and paper and telecommunications, are believed to be based on TKK expertise. Furthermore, the Finnish economy is dominated by top management educated at TKK.

Aalto planners (ibid.) have also recognized several internal challenges preventing TKK from harnessing its full potential. Focusing resources was difficult contributing to heterogenic research culture and results. Bureaucracy loaded the academic staff, and rigid governance model, control culture and inefficient and costly processes burned-out people. Infrastructure needed enhancement, and there were far too many students per teacher contributing to long studying times. Most teaching and research was chronically underfunded, and the gathering of research funding was further hindered by lack of long-term partnerships. It had also proven difficult to create startup spin-offs that would grow and operate internationally.

2.2.1.2 HSE - Helsinki School of Economics

Helsinki School of Economics was established by the business community in 1904 and got its university standing 1911. New law guaranteed the private university 70% state support 1950, when its current main building was also inaugurated in Töölö, Central Helsinki. In 1970s HSE became a state university, and started its Executive Education program, which has since produced a sizeable portion of the total funding of the university through a separate HSE-owned company (Aalto University 2008). During its last operating year 2009 HSE employed 546 people, 46 of which were professors, and had 4000 students. The total funding of the university from the state and other sources was 42 million euros (HSE annual report 2009).

Aalto planners (Aalto University 2008) characterize the strengths of HSE as follows. HSE was small and agile with a strong community feeling. It was the leader in management education in Finland, and had extensive MBA and eMBA programs abroad. The university distinguished itself internationally with several high-profile accreditations. Cooperation with companies was successful, contributing to practice-oriented teaching and professors active in boards and consulting. Also language training was of high quality and the international exchange program was extensive.

However, also HSE faced many internal challenges (ibid.). Little time was committed to research, and there was a lack of researcher exchange programs, career paths and focus areas, and salaries and compensations were not perceived as competitive. As in TKK, the student/teacher –ratio was perceived as too high, and studies were often characterized by lack of commitment on both sides, which was emphasized by a wide variation in the performance of students. The pedagogical skills of faculty were limited, and there were little incentives to improve teaching. Furthermore, the Aalto-merger was partly seen as a threat to the identity and independence of HSE.

2.2.1.3 TaiK - University of Art and Design Helsinki

“Pro Arte Utili – for useful art” had been the motto of the University of Art and Design Helsinki and its predecessors for the past 139 years. Originally founded as the School of Arts and Crafts in 1871, TaiK got its university status in 1973. In 1990s TaiK started consistent efforts to focus on new media, and has since internationalized rapidly with applications from 54 countries and growing to be the largest university on its own field in Scandinavia (Aalto University 2008). During its last operating year 2009 TaiK employed 430 people, of which 39 were professors, and had 2000

students. The total funding of the university from the state and other sources was 38 million euros (TaiK annual report 2009).

TaiK had many positive features characteristic for a successful top-class university. It boasted a small fraction of accepted students from all applicants (7,6% in 2009) and excellent student/teacher –ratio (11,4 in 2009) (ibid.). TaiK had a strong identity and its culture was considered open and discussing with active international contacts with the best universities such as MIT, Harvard and Stanford, and with global corporations such as Nokia, Toyota, Hyundai, Canon, ABB and Panasonic (TaiK annual report 2009). TaiK was also an active participant in Finnish cultural life, and a strong tradition of entrepreneurship existed among alumni (Aalto University 2008). The teaching culture in TaiK was considered student based with integration of practice and theory in teaching and a tradition of problem based collaborative learning. TaiK was also a worldwide pioneer in research in its own field (ibid.).

However, also TaiK had a number of challenges (ibid.). Tradition of interdisciplinary collaboration within the university was weak, and the culture was very individualistic. There was little interaction between teaching and research, and not much ability to rethink and reform teaching traditions and conventions. The career management for researchers and doctoral candidates was insufficient, and the numerous start-up companies rarely grew or even less operated internationally. TaiK also needed yet to become a strategic asset in Aalto, and had to develop its abilities to fully benefit from the Aalto-platform. Furthermore, there had been much skepticism toward Aalto especially in the more art-oriented departments of TaiK.

2.2.2 The Purpose and Goals of Aalto University

“The University’s role is to advance independent research and scientific and artistic education. In the University, there is a freedom of science and education. The University operates in fields of technology, economics, and industrial arts. The responsibility for research and teaching in these fields are in the respective autonomous schools, which are based on the founding schools’ entities and brands.

The national task of the University is to support Finland’s success by means of high level research and teaching. The University supports in a positive way the Finnish society, its

technology, economy, culture and international interest toward it.“

-Translated from the Sailas Report (2007)

The Finnish system of higher education as a whole is facing new demands and challenges (Aalto University 2008). There is an increasing competition from top universities in the West and new successes in the East. The increased competition contributes to increased resource requirements to remain competitive. The world is becoming multi-disciplinary, with research problems more complex and multi-faceted, and new skills required from students, but current research and teaching mostly focused around single disciplines. The old university model still in use during the planning of Aalto University also considered universities to be a part of the government bureaucracy, contributing to a lack of dynamism.

Aalto University was meant to be a national level response to these demands with a task of supporting Finland's success. The university would contribute by "coaching skillful and responsible experts, leaders, entrepreneurs and artists to renew and lead the society, doing research that aims for breakthroughs on chosen fields of science and art, and being in active international interaction with the society and producing with the means of science and art proactive perspectives and solutions to social challenges" (ibid.).

The early Aalto planners set their goals accordingly. Aalto should focus on selected spear heads in research on a world class level, encourage risk taking in potential breakthrough initiatives, and provide better framework and infrastructure in addition to long term funding for research. The focus of recruiting and evaluations was set to be in quality of research and teaching, and the university should provide better opportunities for innovation through cross-disciplinary research. Culturally a major goal was the creation of an inspiring learning centric culture with an increased commitment to teaching and learning from both staff and students (ibid.).

The Aalto planners believed that the university could reach its goals by providing clear career paths, providing mentoring and support on career development to all faculty and staff, offering competitive salary and incentive systems, encouraging open communication and involvement, increasing international co-operation, supporting and rewarding excellence, and providing increased resources (ibid.).

2.2.3 Timespan

An important context of the Aalto transformation is the timespan of the project, consisting of strongly distinctive phases between which there have been significant discontinuities as the makers, owners and nature of the project have abruptly changed. The timespan is illustrated in Figure 2 below, with three major phases: 1) Preparation -> 9/2007, 2) Planning 9/2007-3/2009, and 3) Implementation 3/2009 ->.

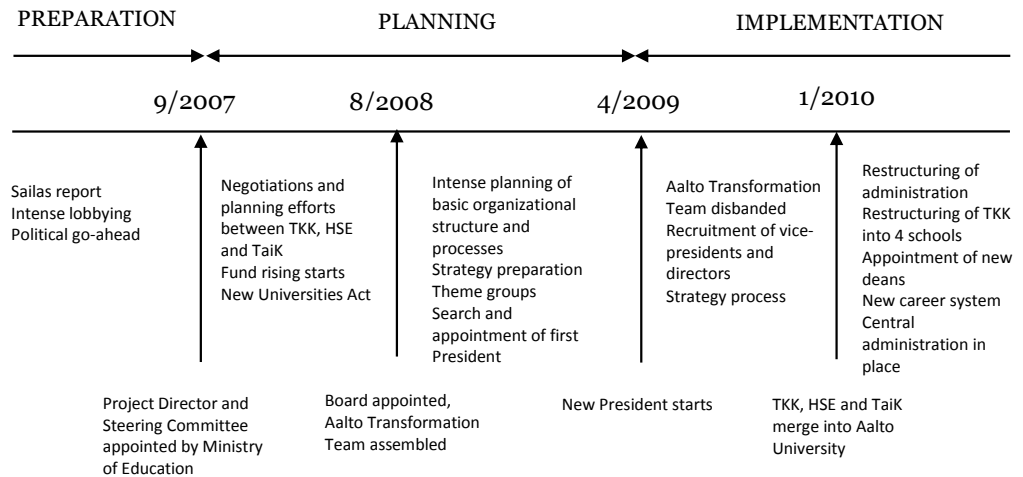


Figure 2: Timespan of Aalto Project

Preparation. It is impossible to announce any certain point of time when the Aalto University project could be said to have begun. The possibilities of a private university for gathering private funding were discussed by TKK and HSE top management already in the 1990s. The President of TaiK Yrjö Sotamaa introduced the idea of a merger of TaiK with TKK and HSE in his opening speech of academic year 2005, and the Ministry of Education had ordered several reports to investigate possibilities for reforming the higher education system, the most significant of which were the reports by Jääskinen and Rantanen (2007) and Sailas et al (2007). The 137-page Sailas report that was released in February 2007 became the backbone for all successive planning of the Aalto project. The Sailas report was important not only because of the contents of the actual paper, but also because of the composition of the so called Sailas group that produced the report. All members were high-profile individuals, and the group included the presidents of TKK, HSE and TaiK.

Planning. Soon after the Sailas report was released, the government announced that the new university would be realized before the next general parliamentary elections in spring 2011 and that the Ministry of Education would coordinate the project. The Ministry of Education announced that the project would be based on the Sailas report, and appointed a project leader and a steering committee in September 2007. The project had essentially a shared ownership between the Ministry of Education, the Federation of Finnish Industries and the merging universities. Also the leadership structure was complex with the steering committee, a project management team consisting of the project director appointed by the ministry and project managers from the three universities, and a troika of three standing presidents, all making their own decisions. A major issue was the renewal of Universities Act in Finland, and the legislation process was closely coordinated with the progress of Aalto.

The planning phase entered a much more focused and effective era in August 2008 when the new Board of the Aalto University was appointed, and the Aalto Transformation Team (A8) was formed to take control of the practical preparations under the supervision of the Board. The A8 then created “theme groups” consisting of hundreds of volunteers across the academic community (including students) to take part in the planning effort and, perhaps most importantly, to facilitate communication and commitment. As the Board was a clear legitimate owner for the project, the Ministry of Education and the Federation of Finnish Industries retreated much to the background, and the Board and the A8 claimed the strategic leadership of the project. However, the Federation of Finnish Industries retained responsibility for gathering the private funding required by the university.

Implementation. Because the Board and A8 had avoided making strategic decisions that would bind the hands of the operative management of the university, most importantly the President, the actual implementation phase of the project can be considered to have begun in April 2009 when the first President started at her post. The first focus of the implementation phase was recruitment of key leaders and budget and strategy preparation issues, with the new management eventually reaching limited operational capability in late 2009, just before the responsibilities of the old universities were transferred to Aalto that started as a university 1.1.2010. It took until summer 2010 that the Aalto central management had completely emerged and reached full operational capacity.

2.3 Aalto University in Numbers

Some key figures of Aalto University as of year 2010 can be found in Table 1. For consistency the abbreviations TKK, HSE and TaiK are used to refer to the schools, even though the formal 2010 names would be Aalto School of Science and Technology for TKK, Aalto School of Economics for HSE and Aalto School of Art and Design for TaiK. Furthermore, since 2011 TKK has been split into four separate schools.

	TKK	HSE	TaiK	Aalto
Bachelors' theses	688	357	101	1146
Masters' theses	1887	246	179	2312
Doctoral dissertations	153	19	12	184
Bachelor- and Master students	10792	3443	1822	16057
Doctoral students	2933	280	246	3459
Total staff	3187	524	402	4685
Professors	234	58	46	338
Space used on campus (m²)	250 000	30 000	40 000	320 000

Source: Aalto University

Table 1: Key figures of Aalto University (2010)

3. Theoretical Framework

3.1 Overview

The central theme of this thesis is describing the effects of organizational inertia in a strategic public university merger. That said, we obviously have to know something about universities. But above all, we have to know about inertia. Despite a wide range of research about inertia and change, and the at least partial integration of inertia to practically all relevant organizational theories, the whole concept of inertia remains somewhat ambiguous.

Nevertheless, an effort must be made here to answer the question “what is organizational inertia”. The concept of inertia is opened up by using the framework of organizational ecologists as a starting point, but not limiting the analysis to their ideas. In practice this is done by splitting the concept of inertia to its component parts, as originally defined by Hannan and Freeman (1977) and supplemented by the work of Hannan, Pólos and Carroll (2003). The division of chapter 3.2 to subchapters is based on this framework. Relevant organizational and sociological theories and concepts are then discussed under the subchapter that draws most from the particular theory, such as institutional theory under chapter 3.2.4 ‘Internal Institutional constraints’ and the concept of power under chapter 3.2.3 ‘Internal political constraints’.

The idea here is not to claim that this would be the only suitable division of the topic, or that it would cover all aspects of inertia. However, my belief is that the division is illustrative enough for approaching a complex subject and that at least all the most important aspects of inertia are covered. It also makes it possible to gather together the maximum number of aspects of inertia without using the limited space and time available for describing in detail such aspects of extensive theories that are not relevant for the scope of this work.

Even though the theoretical framework is presented here in the beginning of the thesis, the construction of the emergent theoretical framework has in practice advanced iteratively on par with the developing empirical evidence as a grounded theory approach.

Change and Universities

Returning to the main research question, the role of organizational inertia during the formation of a university, it becomes relevant to consider how applicable the reviewed theory is to universities. Actually it turns out that if any of my references have commented on the applicability of their research to either private or non-profit organizations, they have claimed that if their research is applicable anywhere, then in non-profit organizations. University is clearly the most commonly cited example of organizational type that faces the problems of inertia. Therefore it should be safe to assume that if the theoretical framework presented here is feasible anywhere, then it is feasible for analyzing universities. Some examples follow.

Mintzberg expresses the matter quite bluntly (2009: 387) and suggests that no great turnarounds should be expected in professional organizations such as hospitals or universities, but instead continuous and incremental learning-based renewal of actual operations takes place all over the organization.

Aldrich gives universities as an example of loosely coupled organizations that maintain a façade of pretending to follow institutionalized rules (1999: 51), an example repeated also by Scott (2003: 303), who continues (ibid: 285) that universities adopt to conflicting demands by creating appropriate programs and offices at the administrative level that create the required reports, but then decoupling these offices from the operational level. Acknowledging the concept of organized anarchy by Cohen and March and Olsen (1972), Scott also suggests that the task of university presidents is especially problematic, and offers solutions for academic leaders to “maintain their sanity and, sometimes, make a difference in the decisions made” by (Scott 2003: 306):

- Carefully timing issue creation
- Being sensitive to shifting interests and involvement of participants
- Recognizing the status and power implications of choice situations
- Abandoning initiatives that have become hopelessly entangled with other, originally unrelated problems
- Realizing that the planning function is largely symbolic and chiefly provides excuses for interaction

Also Hannan and Freeman (1984: 78, 113) underline the interdependencies of power, internal politics and resource distribution, particularly in university context. They describe the modern university as a “holding

company” of different disciplines and departments. The resourcing of the disciplines fluctuates along trends and fashions, and the political costs for creating or disbanding organizational units is extremely high. This requires long time resourcing and recruitment planning, which creates continuous income transfers from successful to unsuccessful units. Therefore the best units are under-resourced and understaffed, while the poor-performing units are over-resourced and overstaffed.

Cohen, March and Olsen (1972: 11-13) claim that “if [their garbage can] model [of organized anarchy] is applicable anywhere, then in universities”. They find that university decision making frequently does not solve problems and any choices are often made through flight (moving the decision somewhere else to be made) or through oversight (making a decision because it is possible with little knowledge about the decision’s implications). University decision makers often move around the organization offering their standard solutions to any problems they encounter, and also problems circulate around the organization through a series of decision making opportunities, where the same decision makers often meet the same problems over and over again. Also the most important choices, such as board meetings generally or strategy decisions particularly are the least likely to solve problems in a university.

Cohen, March and Olsen continue (ibid.) that a university organization is likely to become very bureaucratic for a number of main reasons. First, there is little slack of resources and much heterogeneity, which create a need for strict controls. Slack would be a substitute for technical and value homogeneity by providing resource buffers between parts of organization. Second, high administrative power or high interrelation of problems will lead to a hierarchical decision structure. Furthermore, a key issue is the energy distribution of participants within vs. outside the organization. The decision makers have alternative opportunities for investing their time, and the stronger the relative outside demand on important people in the organization is, the less time they will spend within the organization and the more exit opportunities they have.

The examples suggest that organizational inertia has real explaining power as a concept when considering a university transformation.

3.2 Organizational Inertia

Perhaps the most influential description of organizational inertia has been given by Michael Hannan and John Freeman (1977, 1984).

They argue that even though organizations can change their structure and strategy, such a change is a rare event that cannot be well coordinated and timed with environmental changes favoring a particular model of behavior (1984: 66). This difficulty in changing core characteristics of organizations is a result of ecological selection among organizations (ibid: 67).

According to Hannan and Freeman, creating an organization is an expensive way for accomplishing a specific task, because the maintenance of the organization itself consumes excessive resources. Organizations also have a tendency to develop into ends in themselves as well as gather such resources and create a complex structure that are not necessary for fulfilling the purposes the organization exists for (ibid: 73).

However, Hannan and Freeman claim (ibid: 74-77) that organizations are still necessary for their two most important positive characteristics, which are

- 1) Reliability of performance
- 2) Accountability

Inability to fulfill these universal stakeholder expectations hinders an organization's chances for gathering resources during its emergence, and later for attracting additional resources and encouraging participant commitment. The expectations can be met through elaborate institutionalized and standardized routines which can be reproduced without error from one day to the next. But the institutionalization is a two-edged sword: Even though it makes the reproduction of the unquestioned structure easy, at the same time the institutionalization makes the structure difficult to change. Any attempted change becomes a political question of principles instead of being simply a technical problem.

Thus, according to Hannan and Freeman, the social selection processes favor organizations with high levels of reliability of performance and accountability, and reliability and accountability in turn depend on a capacity to reproduce a structure of high fidelity (ibid: 245), which contributes to inertia. Therefore most successful (large, old) organizations are likely to have high inertia.

A number of internal and external factors contributing to inertia can be identified (Hannan and Freeman 1977, Hannan, Pólós and Carroll 2003).

One possible illustrative list for structuring the concept of inertia is as follows:

1. Sunk costs
2. Information constraints
3. Internal political constraints
4. Internal institutional constraints
5. Barriers of entry/exit
6. External legitimacy constraints
7. Limitations of collective rationality
8. Limitations of learning

These factors will be discussed in the following chapters.

3.2.1 Sunk Costs

Sunk costs are retrospective (past) costs that have already been incurred and cannot be recovered. For instance organization's investment in plant, equipment and specialized personnel constitute assets that are not easily transferable to other tasks or functions, thus constraining adaptation options. For instance Aldrich (1999: 30) writes that organization's documentation, buildings and systems guide the organizational memory. Scott (2003: 317) continues that "elaborate and almost invisible controls are embedded in the organizational structure itself", namely in the layout of offices, functions, rules and policies.

Also early recruitment decisions concerning which people to hire, how their jobs are structured, and how new members interact, may have a long-lasting effect on organization (Aldrich 1999: 119). DiTomaso et al. (2007) found that characteristics individuals hold as salient components of their self-identities become favorable bases for the evaluation of others, whereas dissimilar characteristics are viewed less favorably. Founders and managers tend to recruit people similar to themselves, and organizations tend to attract people who believe that the organizational members are similar to themselves. When the reality of work is revealed, those are the most likely to leave who have misinterpreted the work environment (and who in reality are not similar to people around them). Over time these processes create psychologically homogenous workgroups, even though in emerging organizations with members totally engrossed in their tasks, they may be willing to tolerate dissimilar others thus sustaining a potential source of organizational variability (Aldrich 1999: 122-125). Furthermore, initial junior idiosyncratic jobs created in emerging organizations can have significant effect on the future organization (ibid: 130). A position and work

description customized for and by a particular individual can survive in the organization long after it has lost its original purpose.

Colombo and Delmastro (2002) have analyzed a large sample of manufacturing plants observed from 1975 to 1996 and found evidence that the presence of sunk costs figures prominently in explaining structural inertia of business organizations. Rauch (1993) argues that the sunk costs resulting from the operation of many firms at a particular site creates a first-mover disadvantage that can prevent relocation. Ichniowski and Shaw (1995) expand the traditional concept of sunk costs further into individual level. They show that in addition to inertia caused by company level sunk costs resulting from adaptation of advanced human resource practices, also individual level sunk costs of workers' personal investment in task-specific and firm-specific skills to master work routines creates a major inertial force opposing change.

3.2.2 Information Constraints

The situational awareness of decision makers is seldom perfect. On the contrary, the information available for decision making is normally severely limited, which creates delays and often limits the scope of decision making to issues which are believed to be understood with reasonable accuracy. Some common information related issues in organizations are misunderstandings and communication failures, selective gathering of information, selective use of information, selective activation of organizational members, and information as power.

One example of consequences of information constraints is the "liability of newness" of emerging organizations described by Hannan and Freeman (1984). New organizations are vulnerable because their members are strangers and withhold crucial information from one another. Efficient operations become possible only after the trust has been established between members. Aldrich (1999: 96) continues that fatigue, which is common among key decision makers during critical times, contributes to the use of cognitive shortcuts such as optimism, overconfidence and selective use of information.

Another example is the goal displacement and sub-goal formation introduced by March and Simon (1958: 150-158). Groups within organizations can become the primary groups for their members, and since goals are divided and factored among individuals and groups, goal displacement is encouraged by selective perception and attention processes among individuals, the selective content of in-group communication, and

the selective exposure to information occasioned by the division of labor within the larger organization. Goals assigned to individuals and groups as means easily come to be viewed as ends in themselves.

Cohen, March and Simon investigate in their infamous “garbage can model of organizational choice” (1972) how organizations can make choices without consistent, shared goals, and how members are activated, i.e. how attention is directed toward, or away from, a decision. Understanding attention patterns is important, since not everyone is attending everything all of the time. They claim that variations in behavior in organized anarchies (the model of which describes a portion of almost any organization’s activities) are largely due to who is attending to what.

In many cases the processes how an organization assesses its environment may have even greater influence on change than the environment itself. The problem of *bounded rationality* surfaces when the amount of information available for decision making grows so large, that the mechanisms of focusing attention and refining information become more important than the concept of choice (Scott 2003). Some information will turn influential only because it is collected and thus readily available to support decision making. Importantly the strategies in use (Daft and Weick, 1984) and organizational structures in place, especially information-processing structures (Thomas, Shankster, and Mathieu, 1994), play significant roles in guiding interpretation. According to Thomas and McDaniel (1990), the organization’s strategy amounts to a statement of intention that influences top management’s perceptions of key issues, and tightens top management’s interpretive focus (Daft and Weick, 1984).

Another human limitation for organizations making sense of their environments is the process of *enactment*. The organizational actors, particularly top management, interpret their environment subjectively and create a collective “rational” explanation for challenges and phenomena they face and thus enact the environment around them. They can also actively alter anything they focus their attention to, thus producing e.g. self-fulfilling prophecies (Scott 2003)). Also here the strategy in use is an important element in the institution’s enacted environment (Weick 1979).

Furthermore, there is the common fallacy of *retrospective sense-making*. People are apt to give logical explanation for their actions after the act, although in reality the action often precedes interpretation and the interpretation creates a context for action (Aldrich 1999). It should be noted here as well, that the retrospective sense-making also creates significant challenges for research trying to figure out, why did people act as they did.

Most information biases apply both internally and externally in organizations. As Hannan and Freeman (1977) note, gathering information from critical external environments is especially expensive during turbulent times, when the information would be most valuable. Also the type of professionals the organization uses influences what kind of information

- 1) the organization is likely to gather
- 2) the organization is capable of processing
- 3) the organization is capable of using

Scott (2003: 56) concludes the discussion about limitations in processing information stating that an individual is incapable to anything even close to rational decision making, because the enormity of possibilities is incomprehensible. Therefore the choice is made among “given” alternatives.

In addition to the numerous intrinsic difficulties organizations have in information gathering, processing and distributing, also a more blunt force often hinders the flow of information. Because information is power, deliberate distortions of meanings and withholding of information are also strategies to gain power (Aldrich 1999: 153). Scott puts it nicely (2003: 291):

Effective participation is not closely related to rank in the formal hierarchy of the organization. Power is assumed to pass down from the pinnacle. This happens, but only in very simple organizations – the peacetime drill of the National Guard or a troop of Boy Scouts moving out on Saturday maneuvers. Elsewhere the decision will require information. Some power will then pass on to the person or persons who have this information. If this knowledge is highly particular to themselves then their power becomes very great.

The effect of power games and politics on inertia is discussed in the next chapter.

3.2.3 Internal Political Constraints

Variations are generated within organizations as people cope with problems involving the reproduction of their organizations from one day to the next (Aldrich 1999: 54). This reproduction depends on participants continually negotiating a shared understanding of what they are doing. However, dominant groups and coalitions may constrain opportunities for variation to prevent challenges to their power and privilege.

A *dominant coalition* includes all the groups, whose interests have to be taken into account while making decisions (Scott: 2003). The groups may agree to compensate each other to make others support their cause, and thus advance causes that are irrelevant or even harmful for themselves for tactical reasons. The more complex the environment and the more uncertainty there is, the larger the dominant coalition is likely to become.

Tilly (1998) writes that different status-based groups within the organization dynamically attempt to preserve and expand their advantages by limiting access to others outside their status group. Groups excluded from participation will then tend to devise means to usurp status monopolies, either by directly challenging a superordinate's advantages or by monopolizing other resources (Parkin 1979).

Scott (2003) emphasizes the significance of resource distribution as an indicator of power and "true" goals of management. He suggests that in differentiated and loosely coupled systems such as universities the balance of power between units is not reflected as much in direct attempts to influence the goals of the organization as a whole, but instead in attempts to gain access to disproportionate share of resources. The more powerful units are also better able to influence the resource allocation principles for their own favor. Thus the "golden rule of power" applies: "He, who has the gold, makes the rules."

The labor process school in the sociology of work has emphasized the relative power of actors—owners, managers, and different groups of workers—to influence the technical and social organization of work (e.g., Edwards 1979, Hodson 2001, Vallas 1993). Another approach advocated e.g. by Scott (2003: 133) is to consider two possible conflicting roles available for organizational participants. The *users* need to learn only the organizational knowledge serving their own interests, and for them the organization has value mostly as a resource. However, the *supporters* need to learn their part of the organizational knowledge that fully reproduces the organization's form, and for them the organization itself and its cause are valuable. Especially in new organizations growth by adding members may increase the tension between user and supporter orientations, as the supporters that have likely created the organization are suddenly overwhelmed by the normally more abundant user types.

Stainback, Tomaskovic-Devey and Skaggs (2010) see inertia as built around cognitive, interactional, and institutional processes that create and reinforce power and status distinctions and expectations. The relative power of internal workplace constituencies (e.g. dominant managerial coalition opposed by professional staff) also influences change in divisions

of labor, human resource practice, and the allocation of organizational resources.

Adler and Borys (1996) consider the effect of politics on implementation of new technology (methodology or processes) in organizations. In worst case the introduction of a new technology can have no determinate effects on organization, because the change is primarily an opportunity for various social forces to play out another round in their rivalry.

Hannan and Freeman (1977), bring together the key political issues causing inertia. Any alteration of organizational structure disturbs the political equilibrium and causes a redistribution of the limited resources. Furthermore, even if the reorganization is considered as beneficial as a whole, most benefits will be shared and are realized only in the long run. On the contrary, most disadvantages of the reorganization normally affect only a part of the organization, and are realized immediately. Thus it should not be surprising that political resistance to change exists.

Mintzberg (2009: 273) concludes that “it hardly makes sense to describe strategy formation as a process devoid of power and politics.” He continues that the significance of politics is especially great

- a) during periods of *major change*, when significant shifts in power relationships inevitably occur and so conflicts arise
- b) in *large, mature organizations*
- c) in *complex, highly decentralized organizations of experts* (such as e.g. universities), where many actors have the power and inclination to further their own interests
- d) during periods of *blockade*, when strategic change is stopped
- e) during periods of *flux*, when organizations are unable to establish any clear direction and so decision making tends to become a free-for-all

As examples of different possible political games played in organizations, Mintzberg (2009: 245-246) gives the following:

Insurgency game: Usually played to resist authority, or else to effect change in the organization; is usually played by 'lower participants', those who feel the greatest weight of formal authority.

Counterinsurgency game: Played by those in authority who fight back with political means, perhaps legitimate ones as well (such as excommunication in the church)

Sponsorship game: Played to build power base, in this case by using superiors; individual attaches self to someone with more status, professing loyalty in return for power.

Alliance-building game: Played among peers – often line managers, sometimes experts – who negotiate implicit contracts of support for each other in order to build power bases to advance selves in the organization.

Empire-building game: Played by line managers, in particular, to build power bases, not cooperatively with peers but individually with subordinates.

Budgeting game: Played overtly and with rather clearly defined rules to build power base; similar to the last game, but less divisive, since prize is resources, not positions or units per se, at least not those of rivals.

Expertise game: Non-sanctioned use of expertise to build power base, either by flaunting it or by feigning it; true experts play by exploiting technical skills and knowledge, emphasizing the uniqueness, criticality, and irreplaceability of the expertise, also by keeping knowledge to selves; non-experts play by attempting to have their work viewed as expert, ideally to have it declared professional so that they alone can control it.

Lording game: Played to build power base by 'lording' legitimate power over those without it or with less of it (i.e., using legitimate power in illegitimate ways); manager can lord formal authority over subordinate or public servant over citizen, etc.

Line versus staff game: A game of sibling-type rivalry, played not just to enhance personal power but to defeat a rival; pits line managers with formal decision-making authority against staff advisers with specialized expertise; each side tends to exploit legitimate power in illegitimate ways.

Rival camps game: Again played to defeat a rival; typically occurs when alliance or empire-building games result in two major power blocks; can be most divisive game of all; conflict can be between units (e.g. between marketing and production in manufacturing firm), between rival personalities, or between two competing missions (as in prisons split by conflict between some people who favor custody and others who favor rehabilitation of the prisoners).

Strategic candidates game: Played to effect change in an organization; individuals or groups seek to promote through political means their own favored changes of a strategic nature.

Whistle-blowing game: A typically brief and simple game, also played to effect organizational change; privileged information is used by an insider, usually a lower participant, to 'blow the whistle' to an influential outsider on questionable or illegal behavior by the organization.

Young Turks game: Played for the highest stakes of all; a small group of 'young Turks,' close to but not at the center of power, seeks to reorient organization's basic strategy, displace a major body of its expertise, replace its culture or rid it of its leadership.

3.2.4 Internal Institutional Constraints

Opportunities to construct new worlds are limited because of the historical accumulation represented by existing organizations, populations, and social structures. When the social world becomes a taken for granted reality, people often decline to challenge it. Evolutionary theory thus posits a world where people are intendedly rational, can't always get what they want, and certainly don't always get what they need.

Howard Aldrich (1999: 41)

History, established culture, routines and structures are strong determinants for an organization's ability to cope with change. In many cases a strong heritage works to anchor organization to its recognized and respected past.

A distinctive culture is something that an organization has, but it is also something that an organization is. On one hand the culture can be manipulated, on the other hand the culture affects everything that takes place in an organization. A strong culture has also its downsides, because as it attracts the like-minded, at the same time it also repels those who think differently. Homogeneity improves an organization's controllability but simultaneously impairs its problem solving capabilities. Aldrich (1999) writes that the selective refining of information emphasizes the views supported by the majority, and gradually the heterogeneity of organization is likely to diminish. The social reality created by early generations limits the ability of later actors to interpret their environment.

As a starting point, Hannan and Freeman (1977) suggest two main causalities how normatively agreed routines and tasks contribute to inertia:

- 1) Normative approval grants justification and organizing principle to forces that wish to oppose change by providing a common cause above mere self-interest.
- 2) Normatively agreed processes and behavior limit a serious consideration of different options to only a few alternatives.

Concerning normativity, a unique and important phase in an organization's development is the *period of founding*. Scott (2003: 70) writes that even the processes of decision making themselves, through which the structure of the organization is altered, shape the character of the organization. Aldrich (1999: 91-92) continues that much of the improvisation in shaping

an organization is limited to the period of founding, and even then the choice possibilities are perceived as limited because most managers simply try to reproduce normatively recognized structures.

Any routines dating back to the period of founding are especially resilient to change because they are associated with the strong emotions of organization's early development. The excitement and intensity of the period of founding also drive the key personnel to carry a tremendous burden of work creating heroic stories difficult to match later. The idiosyncrasy of actors to existing routines occurs not only for organizational reasons but also because the routines ease the lives of participants (ibid.). After the routines have been in place long enough to be institutionalized, people no longer do something because it is the normatively "correct" or rationally "the best" thing to do, but because it is the *only* thing to do (ibid: 51).

Barnett and Burgelman (1996) emphasize the significance of the period of founding for the organization's strategy making process. In the beginning the top management sets a structural framework for all activities, the most significant of which are the resource allocation principles. Resource allocation is a strong indicator of the true goals and motives of an organization, regardless of strategic rhetoric. And when the resource allocation principles have once been set, they are very difficult to change.

Another interesting dimension of institutional limitations is the legitimacy of leadership. During a major organizational crisis or turnaround the significance of charismatic leadership may be great. However, as time goes by even charisma can be routinized and institutionalized, i.e. encoded into organizational structures (Barley and Kunda 1992, Aldrich 1999). When power is legitimate, it is also normatively constrained – the rules of authority limit as well how the power *cannot* be used (Scott 2003: 314). Furthermore, *legitimate power* is normally *endorsed power*, meaning that subordinates collectively enforce limitations to the use of power. Thus any change proposed by management can be challenged, delayed and even stopped by powerful subgroups within the organization, should it be viewed as illegitimate. According to Clemens and Cook (1999: 19) this means that when political entrepreneurs seek to transform the overarching institutions, they face high demands to keep their calls for change within accepted models, and the most ambitious innovators may well cloak their efforts for change in appeals to restore tradition. Consequently, as written by Riker (1995: 121), "no institution is created *de novo*".

On the other hand, the power of a legitimate order is great indeed. When a person is presented with a demand in a situation that has all the earmarks

of legitimacy, he does not usually ask himself what he would like to do. Instead, the central question he confronts is what he must do or should do – it becomes all about his obligations rather than his preferences (Scott 2003: 314). Because of this great power of legitimacy, the most intense struggles within organizations develop over who will have the power to shape rules and norms (Aldrich 1999: 51).

Scott (2003: 181) notes also that a particular problem of leadership exists as an organization moves from one stage to another during its life cycle. According to Scott, each stage requires different type of leadership, and the solutions for each stage become the problems of the next. Each stage ends in a crisis that the organization has to survive to enter the next stage, but normally the solutions the management has to offer for solving the crisis are the solutions of the past.

Stainback, Tomaskovic-Devey and Skaggs (2010) emphasize the cognitive foundations of institutions and have reviewed extensively organizational theory to explain processes causing inequality in organizations. They find a key feature of formal organizations to be that they are designed to outlive their participants. Organizational routines, status distinctions, and divisions of labor become the taken-for-granted framework for habitual action, and the formalization of the rights and privileges attached to the hierarchy of jobs contribute to maintaining the status quo. The division of labor typically codifies workplace inequality because it determines the scope and possibility for upward mobility, structures the form and content of social interaction, and defines compensation structures. Stainback et al. (ibid.) conclude that in the presence of status or class inequalities, all these factors are likely to reinforce the cognitive foundations of organizational inertia.

Another interesting recent study by Willer, Kuwabara and Macy (2009) focuses on the enforcement of norms, and more exactly on the false enforcement of unpopular norms. Many such unpopular norms exist, that people compel each other to do things that they privately disapprove. Peer sanctioning is a ready explanation for why people conform to unpopular norms, but the question why people *enforce* unpopular norms is more interesting. Willer et al. (ibid.) suggest that people enforce unpopular norms to show that they comply out of genuine conviction and not because of social pressure. The results demonstrate the potential for a vicious cycle in which perceived pressures to conform to and falsely enforce an unpopular norm reinforce one another.

3.2.5 Barriers of Entry/Exit

In addition to internal factors contributing to inertia, organizations are also susceptible to inertial pressures from their environment.

An obvious example are the barriers of entry and exit limiting an organization's chances for diversification into new markets or areas of operation, or its possibilities for abandoning established activities. The significance of entry barriers has been covered extensively in the organizational literature (see for example Porter 1980, Bain 1968 or Ferguson 1974). A readily available university related example would be a state licensed monopoly position for providing certain types of education. However, in the context of inertia the exit barriers are perhaps even more interesting (Hannan and Freeman 1977), as there are numerous instances of political and legal limitations that prevent organizations from abandoning certain operations. For a university, for instance, the political and fiscal barrier for exiting bachelor level education might be very high. All such constraints on entry and exit limit the breadth of adaptation possibilities.

Research discussing directly the impact of mobility barriers on inertia is not very excessive. One example are the findings of Barnett and Sorenson (2002), who suggest that competition triggers organizational learning, which in turn intensifies competition and this cycle (the so called "red queen model") leads some organizations to grow and evolve quickly and establish strong barriers to entry while limiting the choice available for the organizations involved. Fiegenbaum and Thomas (1993) report a low level of mobility between different strategic groups in conditions of high inertia and mobility barriers. Furthermore, Munene (1995) has studied innovation in private sector and found that there were significantly less entrepreneurial innovations because the institutional environment was characterized by entry as well as exit barriers. These included dependency and isolation from foreign technology, political patronage and a high level of moral hazard. These barriers made innovations a costly and expensive venture into which organizations entered reluctantly so that the bulk of innovations were of the type that consolidated existing ventures or prevented their demise.

3.2.6 External Legitimacy Constraints

The concepts of legitimacy and institutionalized rules play a major part not only in the internal but also in the external constraints to organizational change. All the legitimacy that an organization has been able to gather constitutes an important resource that the organization can utilize to manipulate its environment. Thus any change diminishing the organization's legitimacy causes significant costs (Hannan and Freeman 1977). The key success factor for private sector organizations is efficiency, but on the public sector the success is largely based on isomorphism to institutionally accepted behavior (Hannan and Freeman 1984). Therefore any change in the institutionalized rules may be even fatal for public sector organizations that cannot credibly show that they are conforming to the new rules.

Meyer and Rowan (1977) discuss the character of legitimacy constraints in depth in their report "Institutionalized Organization – Formal Structure as Myth and Ceremony".

Meyer and Rowan suggest that modern societies are filled with rationalized bureaucracies for two main reasons (ibid: 345):

- 1) Rational networks become increasingly complex as societies modernize.
- 2) Modern societies are filled with institutional rules which function as myths depicting various formal structures as rational means to the attainment of desirable ends.

Perhaps the most influential of these myths in our society is the myth of rationality that has a vast organizing potential after the myth has become institutionalized (ibid: 346). The pressure to establish certain structures and practices may arise from such sources as the state, public opinion, or professional organizations (Stainback et al. 2010).

Isomorphic changes may also arise from mimetic processes in which organizations facing uncertainty alter or adopt behaviors and structural forms that are similar to existing organizations within their field (DiMaggio and Powell 1983). Organizations tend to model themselves after other similar organizations they perceive as legitimate, but the change can be incremental or even unintentional if following environmental shifts such as variation in labor force supply and demand (Stainback et al. 2010).

An organization can demonstrate its social fitness by incorporating structures with high ceremonial value, such as those reflecting the latest expert thinking or those with the most prestige. Also units within the

organization often use ceremonial assessments as accounts of their productive value to the organization, which makes the ceremonially fittest units also the most powerful internally (Meyer and Rowan 1977: 351).

However, organizations are not merely at the mercy of the externally imposed institutional contexts, but they can play active roles in shaping those contexts. Many organizations actively seek charters from authorities and manage to institutionalize their goals and structures in the rules enforced by the authorities (Pfeffer and Salancik 1978). This external influence can take place in different scenes (Meyer and Rowan 1977: 348):

- 1) Powerful organizations force their immediate relational networks to adapt to their structures and relations.
- 2) Powerful organizations attempt to build their goals directly into society as institutionalized rules.

A problem for organizations trying to follow the rules arises because the myths are generated in different parts of the environment, and thus may conflict with one another. Furthermore, a conflict is likely to arise between categorical rules and efficiency, because institutional rules are very general. Therefore organizations are faced with four “partial” solutions for handling the inconsistencies between institutionalized myths and efficiency (ibid: 355):

- 1) **Neglecting myths:** However, organization that neglects ceremonial requirements and portrays itself as efficient may be unsuccessful in documenting its efficiency.
- 2) **Conforming to institutional requirements by cutting out external relations:** However, institutional organizations must not only conform to myths but must also maintain the appearance that the myths actually work.
- 3) **Cynically acknowledging the inconsistency between structure and work requirements:** However, this denies the myths and illegitimizes the organization.
- 4) **Promising reform:** However, defining the valid structure lying in the future makes the current structure illegitimate.

Because all these solutions have significant disadvantages, Meyer and Rowan (1977: 357) offer two mechanisms to attempt a complete solution, namely **loose coupling** of formal structures and actual work activities, and **the logic of confidence and good faith**.

To achieve a *loosely coupled state* institutionalized organizations protect their formal structures from evaluation on the basis of technical performance by emphasizing the “professionalism” of organization, such as the “academic freedom” in a university. Inspection, evaluation and control of activities are minimized, and coordination, interdependence and mutual adjustments among structural units are handled informally. Ambiguous goals and categorical ends are substituted for technical ends, for instance schools produce students, not learning. Integration is avoided, implementation is neglected and inspection and evaluation are ceremonialized. This effort is supported by making human relations very important. The ability to get along with other people is highly valued, which contributes to ability to coordinate things in violation of the rules (ibid., Hannan and Freeman 1984, Scott 2003).

The key concept of *the logic of confidence and good faith* is the maintenance of face. Assuring that individual participants maintain face sustains confidence in the organization, and ultimately reinforces confidence in the myths that rationalize the organization’s existence. This can be accomplished through avoidance, discretion and overlooking (Meyer and Rowan 1977: 358).

March and Simon (1958) wrote that delegation, professionalization, goal ambiguity, the elimination of output data and maintenance of face are all mechanisms for absorbing uncertainty while preserving the formal structure. Effectively absorbing uncertainty and maintaining confidence requires people to assume that everyone is acting in good faith (Meyer and Rowan 1977: 358). This assumption that everything is as it seems, allows an organization to perform its daily routines with a decoupled structure.

Professionalization is not merely a way of avoiding inspection, but it also binds both supervisors and subordinates to act in good faith. The same is required in the public displays of morale and satisfaction, and the more an organization is derived from external legitimacy requirements, the more it maintains elaborate displays of confidence, satisfaction, and good faith, both internally and externally (ibid.). The participants do not only commit themselves to supporting an organization’s ceremonial façade, but also commit themselves to making things work out in the backstage. The committed participants engage in informal coordination that keeps technical activities running smoothly and avoids public embarrassments, even if the methods may be formally inappropriate (ibid.).

However, not everything that goes on in the backstage is necessarily for the overall good. Adler and Borys (1996) note that even though most organizations emphasize enabling and empowerment rhetoric in their

public communication, behind the façade many activities are still based on coercion. Enabling and empowerment are considered more legitimate, and so if any issues of coercion are brought into limelight, they are often justified as the “necessary evil”.

Institutionalized organizations also seek to minimize inspection and evaluation by both internal managers and external authorities. Evaluation is harmful, because it can uncover events and deviations that undermine legitimacy, and because it is an assertion of social control which violates the assumption that everyone is acting with competence and in good faith. This violation lowers morale and confidence, and therefore undermines the ceremonial aspects of organization (Meyer and Rowan 1977: 359).

3.2.7 Limitations of Collective Rationality: The Garbage Can Model

Organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work.

-Cohen, March and Olsen 1972

As noted in last chapter from the work of Meyer and Rowan (1977), one of the most powerful myths of modern world, especially forceful in the Western societies, is the myth of rationality. Ever since this myth has been institutionalized, and thus been taken for granted in our society, it has set the standards for most formal decision making (as opposed to for instance medieval decision making, heavily influenced by the institutionalized myth of divine intervention by God). In the context of examining inertia, the picture will be left incomplete if this standard of rational decision making is left unquestioned. Therefore I introduce here the “Garbage can model of organizational choice” introduced by Cohen, March and Olsen (1972).

Cohen, March and Olsen first define a type of organization called ‘organized anarchy’. Such organizations have three general properties:

- 1) Problematic preferences:** Organization discovers preferences through action more than acts on the basis of preferences.
- 2) Unclear technology:** Organization’s own processes are not understood by its members.

- 3) **Fluid participation:** Participants vary in the amount of time and effort they devote to different domains, and involvement varies from one time to another.

Cohen, March and Olsen claim that these properties are characteristic for any organization in part, but only part of the time. Therefore the theory of organized anarchy will describe a portion of almost any organization's activities, but will not describe all of them.

Where goals and technology are hazy and participation is fluid, many of the axioms and standard procedures of management collapse. One of the key concepts of Cohen and his co-writers is that a decision is actually an outcome or interpretation of several relatively independent streams within organization:

- 1) **Problems:** Concerns of people inside and outside organization requiring attention.
- 2) **Solution:** Somebody's product. An answer actively looking for a question.
- 3) **Participants** come and go.
- 4) **Choice opportunities:** Occasions when the organization is expected to produce behavior that can be called a decision.

Cohen, March and Olsen introduce also three available decision styles for organized anarchies (ibid: 8):

- 1) **Decision by resolution:** Normal problem solving; some choices resolve problems after some period of working on them. The length of time required varies by the number and difficulty of problems. The outcome is often a less-than-perfect solution.
- 2) **Decision by oversight:** If a choice becomes available when there are problems attached to other choices, and there is energy available to make the new choice quickly, it will be made without any attention to existing problems and with a minimum of time and energy. Essentially making a decision with little knowledge about its implications.
- 3) **Decision by flight:** In some cases choice opportunities are associated with problems (unsuccessfully) for some time until a choice more attractive to the problems comes along. The problems leave the choice, and therefore it now becomes possible to make the decision. The decision resolves no problems, however, because they

have attached themselves to a new choice. Essentially moving a decision somewhere else to be made.

In their empirical research concerning adversity in university decision making, Cohen, March and Olsen found that actually almost all decisions were made through flight or oversight. They also observed that both decision makers and problems tend to move together from choice to choice. This means that many decision makers have the feeling that they are always working on the same problems in somewhat different context and mostly without results, while the problems meet the same people wherever they go with the same result. Furthermore, they found out that the segmentation of problems reduces the number of unresolved problems, but slows down the solution (ibid: 10). Important choices are less likely to resolve problems than unimportant choices. Important choices are made through oversight and flight while unimportant choices are made through resolution.

Cohen, March and Olsen conclude it to be clear that the garbage can process doesn't resolve problems well. However, it does enable choices to be made and problems resolved, even when the organization is plagued with goal ambiguity and conflict, with poorly understood problems that wander in and out of the system, with a variable environment, and with decision makers who may have other things on their minds.

3.2.8 Limitations of Learning

Organizational learning obviously has many virtues. It could be argued that a successful "learning organization" could live its life effortlessly adapting to its environment and overcoming the obstacles of inertia. However, it should be noted that processes of organizational learning are subject to some important limitations.

Levinthal and March (1993) remind that learning has to cope with confusing experience and the complicated problem of balancing the competing goals of developing (exploring) new knowledge and exploiting current competencies in the face of dynamic tendencies to emphasize one or the other. They identify three forms of "learning myopia", namely the tendency to overlook distant times, distant places, and failures. Furthermore, they find that learning processes contribute to organizational tendency to overinvest in exploitation at the expense of exploration.

Salaman (2001) writes in his critique of the learning organization that the learning processes are limited by conventional organizational structures and hierarchy, by organizational cultures that frequently encourage anti-

learning values and routines, and by shared structures of organizational cognition. Salaman also claims that the learning organization overlooks the extent to which standards of rationality within organizations arise from dominant external discourses of government and other authorities. Contu, Grey and Ortenblad (2003) concentrate on the political character of learning discourse which, they argue, “works as the surface of intelligibility pro-posing the reality of work, self-hood, citizenship and society”, but has little real value.

The strategic drift introduced by Johnson (1987: 244-247) is an extreme example of uncontrolled learning: an overemphasis on learning may lead an organization to learn away from what works. Staw (1976) reminds of the possibility of negative learning in his notion of ‘escalating commitment’: As you fail, you keep investing more in the hope of recouping your losses, not recognizing that the situation may be hopeless.

Even Mintzberg, recognizing himself as “an enthusiastic adherent” of ‘learning school’, uses six pages (2009: 233-238) for discussing the limitations of learning organization, highlighting the risks associated with too much focus on organizational learning, which can lead to an organization with ‘no strategy’, ‘lost strategy’ or ‘wrong strategy’. Mintzberg (ibid: 238) also notes that learning can be very expensive and it takes a lot of time. Learning can go off in unexpected directions, resources must be invested in false starts, people have to be convinced of the benefits of one initiative over another, and the organization may be forced to bounce around indefinitely, thus paying the price of not settling down quickly enough to concentrate its resources.

All in all, it can be concluded that even though processes of learning are crucial for making organizational adaptation possible, the very same processes also contribute to organizational inertia in their own right.

4. Methodology

4.1 Research Design and Analytical Approach

As the purpose of this study was to provide insight into what was going on in a particular poorly understood organizational transformation, it was natural to adopt an exploratory case-study-based research design (Eisenhardt 1989). The data set available enabled a longitudinal design covering one year before and one year after the merger under study.

I chose a grounded and interpretive approach for analyzing the data as my goal was to reach deep explorative richness. As Van Maanen (1988) points out, an interpretative approach gives voice in the interpretation of events to the people experiencing them, and this “native’s point of view” is an important constituent of the analysis. Obviously this approach doesn’t imply that the researcher wouldn’t be an active participant in interpreting and structuring the data based on existing theory and other contextual factors (Strauss and Corbin 1990). I had no theoretical preferences or a priori hypotheses, but let my research question “How has organizational inertia affected the forming of the Aalto University?” be the lens through which to seek and view my data (Eisenhardt 1989).

In data collection, I followed the principles of constant comparison (Glaser and Strauss 1967) and naturalistic inquiry (Lincoln and Guba 1985), inductively analyzing the data as it was gathered. I employed the processes of theoretical sampling, pursuing data that was relevant to the themes and grounded theory emerging from the on-going analysis. The data was constantly compared across informants and over time, allowing the search for new informants and to guide the focus of the ongoing interviews based on prior information. This approach created a constantly evolving and increasingly focused data set, until a “theoretical saturation” defined by Glaser and Strauss (1967) was reached.

The basis of analyzing the data was identifying initial concepts in the data and grouping them into categories through open coding (Strauss and Corbin 1990). Actual phrases used by the informants (in-vivo codes) were used whenever possible. Next I searched for relationships between the early categories through axial coding, which enabled the establishment of higher-order themes, and assembling these into overarching dimensions.

Furthermore, after this data structure had emerged, it proved useful to split the data again into three original subsets representing the different

groups of participants: pre-merger transformation team, post-merger management team, and ordinary employees. Through this arrangement it was possible to first identify the patterns, categories and overarching dimensions relevant to the whole without bias induced by informant-group-specific preferences, and then compare these preferences through a common framework.

The trustworthiness of the data was ensured by careful management of the gathered data, and peer reviews with other researchers not engaged in this study as well as periodic discussions with informants aimed at assessing the plausibility of conclusions made during the course of research.

4.2 Data Collection

I relied on multiple primary and secondary data sources while conducting the research. There were three primary sources: 1) Interviews of Aalto University top management, committed by myself between November 2010 and January 2011 (60% of the primary material), 2) Interviews of “Aalto University Transformation Team”, committed by researcher Jari Ylitalo between October 2008 and March 2009 (20% of the primary material), and 3) Feedback gathered by Aalto University top management from all departments of Aalto University in November 2009 (20% of the primary material).

In addition to these primary sources, additional data could also be gathered from 4) documentation 5) non-participant and participant observation, and 6) I had been involved in Aalto University project as a representative of a central stakeholder 2008-2009 and therefore had understanding of the key dynamics of the project even before this research. These secondary data sources acted as important triangulation and supplementary sources for understanding events and phenomena encountered during the research. The secondary data sources also assisted in finding the most relevant primary data sources.

1) Interviews of Aalto University Top Management

Prior research by e.g. Kiesler and Sproull (1982), Isabella (1990) and Kumar, Stern and Anderson (1993), has identified top managers as key players in perceptions about change in organizations, and key informants as active participants in the change itself. They have unique access to information about the strategies, plans and organizational structures, and they wield an important insight into an organization’s intended identity

before it has realized for the organization as a whole. Therefore it was natural to choose the university top management as the core source of information about the organizational change. It was, however, also important to ensure that the informants would represent a variety of backgrounds to avoid bias towards the views of any particular interest group within the top management.

The informants and their different roles during the transformation are listed in Table 2. Only executive roles within Aalto University or the old three universities are listed. The 11 informants representing the Aalto University top management interviewed for the purposes of this study are marked with 'x' in the last column labeled 2010/11.

Informant	Position of Informant			Interviewed		
	Old Universities	Aalto planning phase	Aalto University	2008*	2009*	2010/11
1	-	-	President	-	-	x
2	President of University A	President of University A	Dean	-	-	x
3	President of University B	President of University B	Dean	-	-	x
4	Administrative Director of University C	Member of Transformation Team	Administrative Director of School C	x	x	x
5	VP of University A	Member of Transformation Team	Dean	x	-	-
6	VP of University B	Member of Transformation Team	Vice President	x	x	x
7	VP of University B	Member of Transformation Team	Associate Dean	x	-	-
8	-	-	Vice President	-	-	x
9	-	Project Leader	Director	x	x	x
10	Administrative Director of University B	Member of Transformation Team	Manager	x	x	-
11	-	Member of Transformation Team	-	x	x	-
12	-	-	CFO	-	-	x
13	-	-	HR Director	-	-	x
14	-	-	Director	-	-	x
15	-	-	Member of the Board	-	-	x

* Interviews by Jari Ylitalo

Table 2: The Informants

The purpose of the interviews was to obtain multiple perspectives on the strategic change effort from the people who were key players in the transformation and were supposed to have the best overall picture of what was going on. To ensure heterogeneity of the information I wanted to make certain that I had representation from the different organizational and social sub-groups of the top management: the President of Aalto University,

the Presidents of the old universities, the Board of Aalto University, academic vice-presidents, management that had worked both in the old universities as well as in Aalto, new management that had not worked in the old universities, professional managers with private sector background, people involved with the Aalto project from the very beginning, people who had been involved only in the beginning, and people who had been involved only in the end, as well as people from all the three old universities as well as people without history in any of the old universities.

The goal of reaching this diversity of informants was the other key principle in their selection in addition to the need to find the best informed informants. Third principle was snowball –technique, starting from the top with informants capable of recommending informants through all the levels of organization, and then using their suggestions in finding the best candidates. I could also use the existing interview material from 2008 and 2009 to sort out which interviewees would be the most potential for the purposes of this study.

It is worth noting that almost all informants continue to work in the top management of Aalto University during the publishing of this thesis, and the researched transformation is still ongoing. This fact gives rise to certain sensitivity and political issues. Therefore the informants are not quoted by name or title, except in certain occasions where this has been absolutely necessary to put the quote to a correct context. If there have been strongly disagreeing views among the informants, an effort has been made to illustrate the points of the different sub-groups. I have also tried to make a distinction if a certain theme has been generally supported by all or most informants, or if only a few have commented for its favor.

The final interviews ranged from 45 to 120 minutes in length, and were recorded and transcribed verbatim. Most interviews had informal “off-record” parts that were not recorded. These parts were either small-talk or meant to increase the awareness of the interviewer in some sensitive matters. The interviews were semi-structured with some customization for position and organizational tenure. The idea was to keep the conversation in organizational phenomena, but otherwise to keep the scope as wide as possible to allow the informants to concentrate on what they considered most significant.

The interviews included questions about the informants’ tenure in universities in general and in Aalto project, how they saw their own contribution to the project, what they thought to be characteristic for universities in general and if Aalto was somehow different from the rest, what were their personal goals in the project and why they thought that the

construction of Aalto was necessary, what challenges they had faced and what they had done to overcome them, and how the decision making in universities worked in their opinion. Subsequent interviews became progressively more structured and focused as themes emerged from the data, which allowed for concentrating data collection to identify patterns across informants and consistencies and inconsistencies across the organization.

All other informants were interviewed only once except informants 1 and 9 (Aalto University President and Aalto project director), who were interviewed three times, with the initial two interviews aimed at guiding the research into relevant direction. These initial interviews were not recorded but notes were taken.

2) Interviews of Aalto University Transformation Team

When studying an organizational transformation, the longitudinal perspective – before vs. after – is paramount. This posed a challenge as the time frame of a master's thesis –scale research project is limited and the transformation of interest had already passed many critical periods. Furthermore, natural human behavior like retrospective sense making and enactment (Scott 2003, Aldrich 1999, discussed in chapter 3.2.2) make it difficult to obtain unbiased information about the previous doings of informants. To overcome these shortcomings, it became necessary to obtain such material from the earlier phases of the transformation that was actually gathered during the early events.

Luckily, such raw data did exist, gathered in 2008-09 by researcher Jari Ylitalo for his research (unpublished) that takes a leadership perspective on the Aalto project. As we saw out perspectives as mutually supportive rather than competitive, it became beneficial to share our raw data. Naturally I had no chance of influencing the course of these interviews as they had already taken place, but they were semi-structured in nature and many topics revolved around themes that were relevant also for my perspective, such as the goals of the project management, breakthroughs and challenges, and internal dynamics of the project team. This material was also processed and analyzed with exactly the same process as my original material to ensure comparability. Even though this set of raw data was almost identical in size with my original material, it contributed only about 20% of findings of my primary data, compared to 60% of my customized interviews. However, as already mentioned, this set of data was crucial in establishing the longitudinal element of my study, and I wish to express my deep gratitude to Mr. Ylitalo for making his material available.

The informants covered in 2008 and 2009 interviews are listed in Table 2.

3) Feedback from the Departments and Units

To support the Aalto transformation effort, the university top management instructed the department and unit leaders of the university to arrange discussion sessions for their own personnel in October or November 2009, and chart the worries and open questions of the academic and administrative staff. The leaders were given pre-prepared material for communicating the undergoing change with a focus in university strategy, policies and a new career system. The leaders were also asked to gather the current issues causing concern among the staff and report these issues to the President of the university.

The unit leaders were given three weeks to arrange the discussion sessions. Only general level instructions were given about practical arrangements of the sessions and how the results should be reported, but the minimum requirement was to provide the key concerns as a list of bullet points. Many units reported the discussion and atmosphere of the events with considerable detail, while others were more compact.

Reports from 48 units were received on time. All academic units of the School of Economics (ASE) and the School of Art and Design (AAD) responded. In the School of Science and Technology (AST) feedback was received from 16 units out of 32. Concerning administrative and support services, the AST central administration reported as one unit, while the service units of ASE and AAD reported individually. All received reports totaled 56 pages, mostly bullet point –type listings of concerns and open questions of the staff.

Analyzing this feedback material provided an important ‘reality check’ of the management’s plans, goals and situational awareness. Combining these reports with my other primary data made it possible to assess to what degree the management seemed to concentrate its efforts to solving such problems that were deemed relevant by the majority of the organization. Because this data came automatically structured by the organizational structure, it was also possible to analyze how the concerns and attitudes towards the merger differed e.g. between administration and academic units, between disciplines and between types of units.

4) Documentation

I had access to all key documentation related to organizational planning and goals of the Aalto project. Most of the material of 38 documents was

intended for internal use only, but there were also i.e. slideshow presentations the purpose of which was to communicate the Aalto message and the status of the project to external stakeholders. The material was generated quite evenly between 2007 and 2010, and included data sets such as blueprints for possible organizational configurations, analysis of the current strengths, weaknesses, opportunities and threats of the emerging university, reports from different teams planning various details of the organization, and international best-practice benchmarking. Significant amount of the strategic planning was done with the aid of external consultants especially during the early phases of the project, and some reports were also provided by external sources.

Such documentation provided an interesting contextual secondary data source for better understanding the key organizational choices made by the management, but also worked as a tool for focusing the interviews to relevant topics. Because the available documentation was also well distributed along the entire time span of the Aalto project, it became possible to see the development of the goals and plans through the years as well as periods of discontinuity providing an interesting longitudinal element to this study.

5) Non-participant and participant observation

I was employed as a project developer in the strategic planning department of the Aalto University from early 2010 until the completion of this thesis. Prior to focusing to this research, I took part in the planning of several strategic development projects to support the university management. This work provided practical insight to issues discussed in this thesis, but also allowed non-participant observation of the ongoing transformation from internal perspective and meeting with various people. Furthermore, I took part in the weekly briefings of our team and several larger events aimed at university staff, and in most cases I had the chance to take notes also for the purposes of this thesis.

The trustworthiness of such data may be lower due to the involvement of the researcher into the research subject, but on the other hand such data can be collected from the natural environment without the research setting causing bias to the data. Nevertheless the possibility to live through events as a member of the Aalto central administration has been a unique observation spot for developing deeper hands-on understanding about what is going on in the organization under study.

6) Prior knowledge of the Aalto project

It should be also noted that I have been involved with the Aalto project as a representative of a major stakeholder group in 2008-09. I worked as a member of the Board of the Student Union of Helsinki University of Technology and was responsible for the Aalto project in 2008, and 2009 I was the Chairman of the Board of the student union. Effectively this means that I have represented the largest internal stakeholder group of Aalto University during the key planning phase of the project. I have also held numerous positions of trust within TKK administration 2006-08, including being a member of the university Board in 2008. These years bring me a deep longitudinal understanding of the different phases of the Aalto project and knowledge of key informants. In order to ensure the scientific objectivity of this work, I have left the analysis of significant events involving the student community of Aalto University outside the scope of this thesis. For an analysis of these events, see e.g. Peltonen (2010).

Even though this prior involvement with the research subject inevitably has some effect on my approach as a researcher, I argue that in fact exactly this prior knowledge has made a pure grounded theory approach possible. As Strauss and Corbin (1990) point out, no prior hypotheses should be constructed on the basis of a literature review when choosing the grounded approach, but the study should start with data collection and the theory should then be allowed to emerge from the data. Essentially the process should be iterative with alternating phases of theory building and data gathering. Exactly this took place in this study. My prior knowledge of the subject aimed the literature review into explaining the observed phenomena, giving rise to an early model that worked as a starting point for the gathering of the primary data, after which it became possible to construct the final grounded model.

5. Data and Analysis

This study of a major university merger and turnaround involved a number of complex phenomena, but the framework of organizational inertia described in Chapter 3 proved capable for describing and explaining the observed organizational behavior. Tables 3, 4 and 5 portray the emergent data.

The original language of the interviews and feedback from the departments was Finnish, and therefore all quotes presented from the raw data are translations into English.

In-vivo codes or natural expressions used by the informants were used for labeling the first-order categories as extensively as possible (marked by category labels in parentheses), but occasionally I had to develop a descriptive label in the absence of a natural one. The 1st order categories can be found in the cells of Tables 3, 4 and 5.

Assembling these 1st order categories into 2nd order themes and further to aggregate dimensions, it soon became apparent that grouping the categories into a single tree-type data structure offered only a partial solution and dissatisfactory results. Instead, a more complete picture emerged by assembling the categories in two dimensions to produce a data matrix instead of a tree. The dimensions of this matrix can be seen in the columns and rows of Tables 3-5.

The first dimension (the rows of the tables) becomes evident when the empirical data is grouped through the lens of the research question “What are the most significant sources of organizational inertia in the forming of the Aalto University?” Although eight principal sources of inertia can be found from the integrated primary data, it is evident that four emerge as clearly dominant: information constraints, internal political constraints, internal institutional constraints and external legitimacy constraints. Also limitations of collective rationality and limitations of learning seem relevant to the overall picture. Furthermore, some findings support themes that can be classified as sunk costs or barriers of entry/exit, but this evidence is only limited.

It is obvious that the dimension that results from grouping the 1st order categories into themes representing sources of inertia is of great relevance to our main research question “How does organizational inertia affect the forming of the Aalto University?” However, the picture is still quite static. A more dynamic model emerges when it is noticed that the 1st order categories can be grouped into higher order aggregate dimensions (the columns of the

tables) that are independent from the 2nd order themes, namely separating the goals, process and tools of the transformation from one another.

First, all informants illustrate why Aalto University had to be done, and most arguments revolve around the inertial elements of the “old system”, in fact underlining that organizational inertia itself was a key driver for the whole transformation to take place. The arguments supporting this perception of inertia of the old system as a key trigger of change can be found in A-columns of the Tables 3-5. Second, informants also bring up the challenges they have faced during the transformation process, and again the vast majority of their arguments can be interpreted as fighting the inertia of the system that the key players struggle to change. The arguments supporting this perception of inertia as a key context of the change effort can be found in B-columns of the Tables 3-5. Finally, the informants also describe in detail what they have done in order to reach the goals of the transformation and to overcome the obstacles they have faced in the change process (C-columns of Tables 3 and 4). This made it possible not only to study how the inertial elements in a static (pre-merger) university environment differed from the inertial elements faced during a university transformation, but also which inertial elements the management had recognized and where they had concentrated their change management efforts.

The final dimension of the data is the emergence of clear eras or phases in the project, characterized by different management teams and operating models. In the description of the timespan of Aalto project in Chapter 2.2.3 the distinctive phases were labeled ‘preparation’, ‘planning’ and ‘implementation’. Because an adequate discussion of the preparation phase would require moving the perspective from the research site to a national perspective, it has been mostly left out of the scope of this thesis, and the analysis focuses on the differences of planning (Table 3) and implementation (Table 4) phases. Some phenomena originating in preparation phase are briefly mentioned in the discussion of the planning stage.

For clarity, the feedback data gathered from the staff is presented in its own table. The dataset obviously does not have the element of leaders’ responses. In principle the feedback could have been integrated with the implementation phase data based on when it was gathered. However, the feedback results from all events witnessed by the staff, including the planning and even preparation phase, and so it would have been misleading to associate it with a single era. The feedback data makes it possible to assess the management’s ability to identify and resolve key issues relevant

to the wider academic community, and even find out if the management itself had set into motion some inertial forces through its own actions.

Table 3: Planning phase 2007-09: 1st order categories by 2nd order themes and aggregate dimensions

1. Planning phase	Aggregate Dimensions		
Second Order Themes	A) Triggers of Change: Inertia in the old system	B) Change Context: Inertia in the Transformation	C) Leaders' Responses
i) Sunk costs	1.A.i) "Have to take care of students that take 7 years to graduate"	1.B.i) -	1.C.i) -
ii) Information constraints	1.A.ii) -	1.B.ii) "Unclear goals" "Communication challenges" "Hurry"	1.C.ii) "Meeting key people across organization" Informal communication "Move to transformation office"
iii) Internal political constraints	1.A.iii) "University democracy"	1.B.iii) "Internal politics and self-interests" Users vs. supporters Discontinuities between management teams	1.C.iii) "Converting key opponents" "Encouraging commitment" "Workgroups and discussion forums"
iv) Internal institutional constraints	1.A.iv) "Academic freedom" "Lack of trust between academic community and administration" "Bureaucracy"	1.B.iv) "Resistance to change" "Change has to be pulled through by present personnel" Scepticism: "Nothing will really change"	1.C.iv) "Avoiding the refreezing of organization" "Positive example" "New procedures" "New story", imposed cultural change
v) Barriers of entry/exit	1.A.v) "Lack of entrepreneurial spirit" "General negativity"	1.B.v) "Rearranging staff is a challenge" "Lack of resources"	1.C.v) -
vi) External legitimacy constraints	1.A.vi) External control by authorities Resource control Loose coupling	1.B.vi) "External pressure" Talk vs. action	1.C.vi) -
vii) Limitations of collective rationality	1.A.vii) -	1.B.vii) "No clear ownership or leadership"	1.C.vii) -
viii) Limitations of learning	1.A.viii) -	1.B.viii) Transformation team depending on own experience Lack of experience and necessary skills	1.C.viii) Use of external expertise

Table 4: Implementation phase 2009-: 1st order categories by 2nd order themes and aggregate dimensions

2. Implementation phase 2009-	Aggregate Dimensions		
<u>Second Order Themes</u>	A) Triggers of Change: Inertia in the old system	B) Change Context: Inertia in the Transformation	C) Leaders' Responses
i) Sunk costs	2.A.i) -	2.B.i) "Old people and new positions don't always meet" "We should focus our resources but don't know what to give up"	2.C.i) The early actors, structures and culture have a long lasting impact on the organization "A common dream" shared by the key actors, idiosynchronic jobs, homogeneity "We should get rid of symbols of power because they alienate people"
ii) Information constraints	2.A.ii) -	2.B.ii) "Communication challenges" "Controlling expectations" Management's limited situational awareness	2.C.ii) "Such organization where people don't complain about communication has ceased to exist." "Dialogue with the community" "Encouraging model behavior" "Matrix organization"
iii) Internal political constraints	2.A.iii) "University is an arena, not a line" "The ultimate power lies in the hands of professors" "Zero-sum game" "Laissez-faire leadership"	2.B.iii) "The more people involved, the more diluted the solution" "Any change needs the support of the academic community" The change in informal power structure "Internal politics and self-interests"	2.C.iii) Enabling activities that support management's goals Resource control "Using change agents within the academic community" "Encouraging commitment to change effort" Strengthening leadership to oppose political games
iv) Internal institutional constraints	2.A.iv) "Criticism" "Control culture" "Bureaucracy" "Government financial office culture"	2.B.iv) "You will fail anyway" "We like things as they are" "Passive resistance from key leaders" "If I need motivation, I don't go to meet my own subordinates" "We support all good changes and oppose all bad ones" "Nothing really changes" "People think the change won't happen if they fight against it" "Valuable traditions"	2.C.iv) "Attempt to rid the academic community of administrative duties and allow them to concentrate on research and teaching" "Implementing new procedures and policies" "Setting a new vision" "New leadership from outside" "Reorganizing personnel to break old ways of working."
v) Barriers of entry/exit	2.A.v) -	2.B.v) "The old universities have their distinctive responsibilities to the country"	2.C.v) -
vi) External legitimacy constraints	2.A.vi) Loose coupling	2.B.vi) Talk vs. action "External pressure from a wide variety of stakeholders"	2.C.vi) -
vii) Limitations of collective rationality	2.A.vii) "Tripartite decision making is the worst of systems" "Administrative efforts concentrate on avoiding mistakes"	2.B.vii) "Decisions are concentrated on few key leaders" "Decision making is slow"	2.C.vii) -
viii) Limitations of learning	2.A.viii) -	2.B.viii) "The new leaders have a lot to learn"	2.C.viii) Utilizing internal academic specialists in planning the change Utilizing and adapting theoretical models of controlling change Hiring external professional managers

Table 5: Staff Feedback 2009: 1st order categories by 2nd order themes and aggregate dimensions

3. Staff Feedback 2009	<u>Aggregate Dimensions</u>	
<u>Second Order Themes</u>	A) Triggers of Change: Inertia in the old system - Staff's hopes for a better future	B) Change Context: Inertia in the Transformation - Staff's fears and resistance
i) Sunk costs	3.A.i) "Aalto has better goals, mission, vision and strategy" Many units share the management's dream of Aalto "We are still a little cautious but with positive expectations"	3.B.i) Lots of talk, little action Personal fears about future employment in administration "Administrative staff overwhelmed by change"
ii) Information constraints	3.A.ii) "Good understanding of the transformation because we've been involved"	3.B.ii) "Transformation process is secretive and closed, administrative staff is left out" "It is unclear who is responsible for what" "Management is invisible and impossible to contact, contact attempts are not responded" "Strategy is complex and difficult to understand" "Most communication is very high level and abstract, information about acute practical issues cannot be found" Overall lack of understanding what is going on Rumors and gossip dominate over facts "Lack of professionalism in external and internal communication", heterogenous messages Unclear goals "Arrogant goals" "The goals are vague. Strategy should not be just a list of good things but there should be courage to choose what not to do." "Successful examples needed"
iii) Internal political constraints	3.A.iii) -	3.B.iii) "Career system encourages inequality between personnel groups, others than those in the tenure track are ignored" "Our opinion has not been listened to, or at least it has not been heard." "Encouraging personnel involvement has been only a façade" "Aalto is lead from Otaniemi, other campuses can only follow orders" "Everywhere the TKK's practices are becoming the practices of Aalto, the good practices of HSE are ignored" "We are concerned about the independence of our school" We want more resources for our school "Is the President calling all the shots in recruitment decisions?" "Transformation teams have been chaotic and poorly organized" "Internal administrative expertise has been ignored" There is suspicion between schools if the resources are distributed fairly "RAE was politically motivated and now Aalto

		<p>is using it to distribute resources to wrong places.”</p> <p>“Equality between schools means lower standards for HSE”</p> <p>How is the representation of our personnel group / school guaranteed in decision making?</p> <p>“There are no seats for all the subgroups of personnel in the council, will this cause tensions between the groups?”</p> <p>“Our unit is so much different from the rest of our department, so we wanted to comment separately”</p>
iv) Internal institutional constraints	<p>3.A.iv) “The transformation process has been inspiring”</p> <p>“Aalto has a more professional administration”</p> <p>“Aalto means better co-operation between administrative units”</p> <p>“Tenure track means more professional and better quality research”</p> <p>Efforts to improve management and leadership are welcome</p> <p>“Aalto is a good reason to improve internal processes”</p> <p>Professional managers from outside are welcome in administration</p> <p>“We will create Aalto”</p>	<p>3.B.iv) “It seems that there will be more bureaucracy in Aalto than in the old system because additional hierarchical levels”</p> <p>“We suspect that the Aalto central administration uses most of the extra resources”</p> <p>“How can we prevent mistakes in decision making if there are no officials controlling the procedures?”</p> <p>“There is no use for TKK-level in the organization”</p> <p>“The process for filling the key manager positions has been secretive and closed, competent internal applicants have been ignored”</p> <p>“The new career system should be an opportunity, not a threat to people who don't fit the model.”</p> <p>“What is so bad in the current system that it must be changed?”</p> <p>“Lack of concrete plans and practical decisions”</p> <p>“Don't the new leaders see how productive we have been” in our administrative unit?</p> <p>“The culture of efficiency and strong leadership fits poorly into a university”</p> <p>“Are our current good procedures saved or are they sacrificed to the altar of harmonization?”</p>
v) Barriers of entry/exit	3.A.v) -	3.B.v) “Tenure track is too slow to satisfy demand”
vi) External legitimacy constraints	3.A.vi) -	3.B.vi) “We understand that the progress has been hindered by the delays of the new law”
vii) Limitations of collective rationality	3.A.vii) -	3.B.vii) -
viii) Limitations of learning	3.A.viii) -	<p>3.B.viii) “The professional managers from outside don't have a deep understanding of academic world, cooperation requires a process of mutual learning.”</p> <p>“It is difficult to be creative in the middle of a terrible hurry.”</p>

Structure

Tables 3 and 4 are discussed in following Chapters 5.1-3. The Chapters are labeled by the emergent aggregate dimensions, with the triggers of change discussed in Chapter 5.1, change context in Chapter 5.2 and leaders' responses in Chapter 5.3. The staff feedback summarized in Column B of Table 5 is discussed in Chapter 5.4 as separate change context from Chapter 5.2, because from the staff's point of view also the leaders' responses are part of the context. The triggers of change as perceived by the staff (Column A from Table 5) are discussed in Chapter 5.1.3 alongside the other triggers of change.

The subchapters of Chapters 5.1-4 follow a unified structure based on the second order themes (rows) in Tables 3-5. The themes are discussed in the approximate order of their relative significance. Furthermore, the paragraphs of the discussion of a certain theme approximate the first order categories listed in the corresponding cells of the Tables 3-5.

Finally, the relative significance of different themes and the corresponding observed variation in foci between different project phases and aggregate dimensions is discussed in Chapter 5.5.

5.1 Triggers of Change: Inertia in the Old System

The purpose of this Chapter is to present the data showing how Aalto Transformation Team, Aalto University management and the university staff analyzed the starting conditions of the Aalto transformation. Key themes revolve around the perceived need for a change in the “old system” during different phases of the project. The Chapter illustrates how overcoming certain inertial elements in the old universities was actually a central driving force and motivation for the change itself.

5.1.1 Triggers of Change: Planning 2007-09

The Aalto Transformation Team was the driving force in the construction of the new university in 2008-2009 before the actual Aalto University management could be established. The team was essentially a handpicked voluntary group gathered from senior vice-president or administrative director –level executives of the old three universities.

Based on interviews it is apparent that the transformation team became a close-knit group that shared a common dream and mindset to build something new and extraordinary. There were some more conservative minority voices in the team as well, but these became marginalized as the project went on, and some of the original members left the team. All informants confessed that they worked mercilessly long hours at and beyond the limits of their skills and stamina. Many emphasized that the Aalto project was unique and of national significance, an once-in-a-lifetime opportunity to make a difference, and a chance to make history.

The informants shared a strong common perception what was wrong in the “old system”, meaning the Finnish universities as they were in 2008. They painted a rather grim picture of universities where the key features were inability to make decisions on all levels, lack of trust between academic staff and administration, and excessive regulation by external authorities.

Internal Political and Institutional Constraints

According to the informants, the **inability to make decisions in universities** originates from several reasons, mostly related to “how things are done in a university” representing internal institutionalized practices, as well as issues revolving around the internal power structure or internal politics. They claim that part of the problems is caused by characteristic features of the academic community itself, such as critical

researcher attitude and the overemphasized notion of academic freedom. Many emphasized that it was impossible to run a university like a company and the academic freedom and critical thinking were necessary prerequisites of any university's success, but that these fundamental and highly valued academic characteristics had also a significant negative impact on the university as an organization. As one informant put it:

In universities there's a lot of the problem that people are overtly critical. It's not enough to be critical but you should also have some answers and ideas. It's not enough to just ask tough questions like the opponents in the public defense of a doctoral thesis.

The critical and often also negative attitude towards any reforms was further amplified in the old system by the tripartite university democracy (the three parties being the professors, other staff, and students), characteristic for the Nordic universities. Another informant illustrates the downsides of the system:

The current committees [in our university] are just so frustrating. People drink coffee and occasionally come up with some kind of solution, and then the solution is slowly ground to dust in codetermination talks and especially in the Board, and then the deans after that, it just doesn't motivate people to get involved.

Furthermore, the informants widely saw the needs of the academic community for "endless" discussion and communication impossible to satisfy if anything wanted to be done. As one informant put it:

You can't always have a conversation with 20 000 people about everything, and that's what makes people pissed off.

The **lack of trust between the academic staff and administration** was another institutional key issue identified by the informants to make any reform more difficult. There seemed to be a shared feeling in the Aalto Transformation Team that they had inherited a university where the bureaucratic administration often made the lives of researchers and teachers more difficult instead of supporting them at their work. The case was not that the informants would have complained the administrative staff

to perform poorly in their tasks, but instead that the previous regulatory environment had forced the administration to concentrate on wrong things in a *force majeure* fashion eventually resulting in a controlling instead of supporting administrative culture.

Administrative staff was celebrating how they were successful in making the researchers and teachers use the new work hour allocation system. It's a tough process to learn away from this culture. When I'm talking with the professors, they ask how they should rethink this, they're used to this system.

A further problem was that some of the shortcomings of the old administrative culture had been identified and tried to be changed before, but the efforts had been unsuccessful due to the resilient nature of the ministry-sponsored control culture. This history induced skepticism also towards the work of the Transformation Team as an informant from the administration of one of the old universities points out:

This isn't the first time improvements have been promised. I just hope that now we could also keep those promises.

Some informants pointed out that there were some differences between the three old universities, however. It seemed that all the universities had some problems but the issue of trust between academic staff and administration became worse as the organization grew larger and the administration more complex and 'faceless'.

The value of trust between the academic community and administration is negative. I've noticed that the academic community is suspecting that there are again some administration's plots hidden in this project. I think this is mostly a problem in TKK. In HSE and TaiK there is more trust, based on direct communication made possible by the smaller size.

The culture in TKK is quite strict. In co-creation the decisions could be made through discussions with the subject. Here we don't have things like that. Everything comes from the top downwards through the line. And not necessarily even

through the line, but somehow from the administration. A little past the line.

External Legitimacy Constraints

The third large issue in the old system that the informants saw as a burden was the **excessive regulation by external authorities**. Many actors contributed to the regulation, most importantly the Ministry of Education, Ministry of Finance, the trade unions and the government-controlled sources of research funding.

If you try even a little to do things differently, there's always at least some organization that says you cannot do that, let it be the trade unions or Ministry of Education or someone else, that's why we have seen that [making any reforms] is very difficult.

The informants felt that the old universities were powerless to improve their governance processes because they were expected to adapt their internal procedures to the demands of the overseeing ministries. Universities really didn't have much power to choose what to research and teach because they were so dependent on the focus areas and metrics set by their funders. Furthermore, many informants felt that the government-style recruitment policy of filling official positions instead of hiring employees made a dynamic human resources management and hiring the best people very difficult.

All the important decisions concerning our recruiting, career system and strategic focus areas are made somewhere outside this university. Half of the research funding comes from the outside. It might be great if we could change the system so that we could make the strategic decisions by ourselves.

It was also interesting to note what the informants told about how the universities had adapted to these external legitimacy constraints. There were multiple hints of a system based on *loose coupling*, a notion supported by evidence from secondary data sources such as non-participant observation. An account from one of the informants illustrates the system:

There's something strange going on. It's like the Soviet Union that we have these so called official procedures and

administration, but then these academic units ... have developed their own ways of getting things done around the system. And the administrative procedures maintain all this.

5.1.2 Triggers of Change: Implementation

2009-

Most of the key executives of Aalto University were appointed by the university Board and the President during 2009 and 2010. The top management can be divided into three basic sub-groups: the academic presidents (professors), the top managers of different support services (external management professionals) and the academic deans (professors). In addition to this segmentation, some executives were executives also in the old three universities and many were also members of the Aalto Transformation Team, while others had their background in external organizations prior to being appointed Aalto executives.

It is worth noting that three of the informants had also been members of the Aalto Transformation Team (including the Aalto project director leading the Transformation Team and the whole project until the appointing of the President), six had joined the project only after being appointed executives in Aalto (including a member of the Board and the President and a vice-president of Aalto), and two were the presidents of the old universities, continuing as deans in Aalto for a short interim period. This dynamism in the roles of the key executives necessarily contributed to some degree of continuity issues and role ambiguity resulting in observable tensions between some of the informants. Therefore more divergence between the perceptions of different informants was evident compared to the interviews of the more homogenous Aalto Transformation Team.

However, the informants still identified largely similar issues failing in the 'old system' and driving the reform than the Aalto Transformation Team. Most serious concerns can be again classified as internal political constraints and internal institutional constraints, but in addition there was also substantial evidence of behavior indicating limitations of collective rationality, and some evidence suggesting external legitimacy constraints.

Internal political constraints

All informants produced vivid accounts how the very essence of **academic freedom**, characteristic and necessary for a university community, simultaneously produced a peculiar power structure that was very resilient to any attempts of strategic leadership.

The university was described as an "arena", instead of a line organization. The university organization received credit for being "more civilized" with brilliant people compared to most private sector organizations. In such an environment the role of the management was

seen as providing a “playground” or a “business park” for the professionals that “play the games they want”. However, this culture with individualistic professors “leading their own product lines with very long product cycles” made any changes very difficult to impose and everything was guaranteed to take an excessive amount of time. The informants saw the power to ultimately lie in the hands of the professors, which was the correct way to control the focus areas of the university, but effectively hindered any structural reforms. As one professional manager put it:

Every professor has his own hot-dog stand and they have the liberty to do almost whatever they want with their stand. And then the purpose of the university is to build the shopping mall around the hot-dog stand. I think this is what makes a university different from any other organization.

Another manager continued:

When I came here I was told to remember that this is not a university but a thousand small kingdoms.

Such distribution of power made also the task of a university president particularly challenging. One former president described the system as follows:

[The power structure] has been based on the collegial interpretation that we are all equal and doing this together, and there might be someone taking care of the common matters but he is not a superior. The professors ... have recognized only the President as their superior, occasionally.

The academic community also demanded to be involved in all decision making, which placed particular challenges for the communication efforts. Any message from the management was expected to create “excessive amount of speculation” and “the worst anti-aircraft fire [critique] comes from some department complaining that ‘nobody has asked us anything’”.

There was also a perception in the management that the prevailing system was suboptimal and something should be done about it. The informants recognized that a research group or similar unit was the correct level to lead the research of the university, but that sometimes the

professors overextended the concept of academic freedom and mingled with affairs they didn't have sufficient expertise of.

There's a belief that the academic freedom would not mean only academic freedom, but also for instance a freedom to hire whoever you like or use the university money to whatever you like. I think such is not academic freedom. Academic freedom means the freedom of research and teaching.

Another informant continued that the principles of collegial decision making had probably worked sufficiently well decades ago when the university had been small enough for the "staff to fit in one room and talk matters straight". However, the informant continued that

When [the organization grows and] splits into smaller segments, the ability to see the whole disappears, a shared sense of responsibility vanishes and people mostly look only after their own interests.

There were also differences in the power exercised by different professors. The academic community was described as a "meritocracy", where the power was associated with the scientific prowess of the member. Those with the most distinctive academic records could use their authority for instance in pulling the strings in and behind the various tripartite committees of the university.

Those who are recognized, say, have widely published internationally, they are respected. I think that sometimes it goes a little too far, because, well, you may have studied some particle a lot but it doesn't make you an expert of all fields.

Additional phenomenon affecting the university was the intense academic rivalry fueled by battle over limited resources. According to some informants, this created an atmosphere of a **zero-sum game**, where it was advantageous to oppose any changes that favored only a sub-group of the community.

Here people have got used to a zero-sum game, where any change in balance of power, or any change in general for that matter, may create a difference between you and me, and in a zero-sum game it means that if you are doing better, I'm doing worse.

A powerful term used by one informant to describe the leadership in a traditional Finnish university, was ***laissez-faire leadership***. Regardless of their background, academic or corporate, the Aalto management considered the overall quality of leadership in universities to be very bad.

Ultimately the problem had been that good leadership had traditionally been undervalued in universities. The only credits that had made it possible to advance in a university had been scientific credits, and this had not necessarily much correlated with leadership abilities. The academic community had favored leaders that “did not cause trouble by trying to lead”.

I've been voting for the president in a couple of universities, and the discussion has always been about finding a visionary person who wouldn't be too visionary. ... It's been also typical to vote against instead of for a candidate in an election.

The leadership had been regarded as a distasteful obligation circulated among the professors, with leaders “sacrificing themselves” for the community to carry the common burden, and receiving very limited support for their leadership.

The given governance model has lead into a situation where you cannot lead, and even if you have tried there has always been some committee that can have voted you over and announced that “we have decided not to do what the leader says”. That means you haven't had the mandate to lead.

These features had created a strong tendency for leaders to avoid and muffle conflicts trying to save everyone's face and to move the problems somewhere else, while trying to build a consensus that wouldn't hurt anyone.

For instance the President's possibilities for exercising power are almost zero outside the framework that on the other hand has been given to him from the Ministry of Education and on the other hand because he has been chosen by his community and he has to try to respect the wishes of the community.

Some informants saw the resource allocation models of the old universities to illustrate this lack of leadership. The models were also thought to encourage mediocrity, where everyone was treated the same way regardless of their accomplishments.

The weak leadership leads into constructing a mechanical resource allocation model, after which the model leads, not the President.

A typical example: I was listening in one Finnish university where they were introducing the results of their Research Assessment Exercise, and then someone asked how the results would be used. The answer was pretty much like 'we support those who did well, in addition to supporting those who did badly, while those who are in between are supported as well'.

Internal Institutional Constraints

The informants shared a view that there was definitely a certain way of doing things in a traditional Finnish university, and this traditional way was overtly **bureaucratic**, making the system static and responding to a changing environment difficult. As one informant put it:

I had been working in two ministries before coming here, and the life here was much more regulated.

Although most informants didn't express it directly, it was apparent that when talking about bureaucracy informants often described their impression about TKK administration or in some cases another large university, University of Helsinki. Problems caused by bureaucracy were seen in the administration of HSE and TaiK as well but to a far less extent (even though even there one informant told the bureaucracy to be "quite massive"). As one informant not associated with any of the old three universities said:

The character of the schools has been very different. I actually think that both HSE and TaiK have had less need to abandon the government bureaucracy than TKK, because their small size has allowed them to maintain a higher level of agility.

This is an important notion because it has a direct impact on the expectations concerning the merger in the different parts of the organization. If people are happy with the status quo more resistance to any change would be expected.

The informants gave two sources for the **control culture** contributing to bureaucratic processes in universities: in part the regulation was imposed by government policies that the universities had to comply with, but in part universities themselves were responsible for limiting their own actions.

Even though the governmental regulation could also be discussed later under the theme 'external legitimacy constraints', it is discussed here because the examples given imply internal enforcement of external policies, and because I find this structure to be more illustrative. One informant describes the system:

We have here a governmental work culture. People are used to certain processes and reward systems, and also people we have recruited and who have enjoyed working in such a system and sought to work there, such things have a major impact.

Another informant continued:

I think the Finnish universities are somehow introverted and staring into governmental and self-made regulation. Government pays for everything, it's the only customer we have. It encourages a system where you are never in a hurry and you don't have to respond to any customer needs but instead ... you are free to focus on the internal administrative needs of the administration.

One of the most serious constraints set by the government regulators was seen to be government recruitment policy. Many informants felt that the system was slow and incapable, and had made it very difficult for

universities to hire the best talent. Especially difficult was the hiring of foreign professionals and trying to convince young promising researchers to stay in a university instead of moving to private sector.

We haven't been able to control who we hire to our university. It's been a process with an open vacancy and you've not been allowed to talk with the applicants and definitely not allowed to influence them. And then the external reviewers make their choice and we have to take the applicant even if he wouldn't be good. And then we have bound our resources for twenty years into a person who wasn't the best possible match.

However, many informants with a background in the administration of the old universities confirmed that the universities couldn't blame only the government for their rigid governance model.

The universities are very good at generating more controls for themselves. We always find some new issue and think 'wait a minute, we haven't regulated that yet, we must do something about it'. I've been laughing at our process descriptions – there are an awful lot of those – that they have become so detailed that soon I'll have to check from the process chart how to say 'hello'.

Additional characteristics used by the informants to describe the typical behavior in university administration were for instance old-fashioned very formal decision making and meetings, a steep hierarchy, lack of ambition, lack of trust between academic staff and administration, and a critical attitude towards anything new.

Even though there were not many positive comments regarding the current state of the university administration, it must be emphasized that the informants didn't feel that the administration would cause all the problems in the university because they were incapable or 'evil'. Rather the message was that the administration was the most central part in a chain of bad policies and undesirable control culture originating in the ministries and amplified in the administration before taking grip of the academic departments. The academic staff wasn't left without critique either, as two different informants point out:

It is a different matter to be critical in such way that it constructs something new, than to be critical by complaining about everything.

Always when there are some new instructions from the central administration, the academic staff reads the instructions like the Talmud, trying to interpret what is being said between the lines instead of simply calling the administration and asking what something means.

Limitations of Collective Rationality

There were two issues brought up by the informants that suggested failures in the collective decision-making in a university, namely the downsides of tripartite system and the administrative culture concentrating on avoiding mistakes instead of making decisions.

When asked what was characteristic for a Finnish university, all informants mentioned the **university democracy** where all internal parties – the professors, other staff and students – were all involved in decision-making. However, most comments were formulated like “it is very nice to ask everybody how they feel about everything, but...” Even though many informants thought that it was essential to somehow involve the academic community to decision making, the current system was seen to have mostly a negative effect on the capability to make good decisions in a university.

I think this humboldtian university model is used again and again as a pretext for the mostly nostalgic descriptions of values of the Finnish university system. Since the 1970s it has been associated with the tripartite thinking representing a façade democracy. ... It's a very curious system where people are governing themselves and then someone else pays the bills.

According to informants, the most serious problems caused by the **tripartite system** were that it encouraged the internal parties to think only their own benefits at the expense of the whole, that the system lead to inability to make strategic decisions on strategic forums, and, consequently, the key decisions were tried to be made somewhere else. Therefore the discussion on tripartite forums was concentrated on encouraging commitment of internal parties to the decisions de facto already made

somewhere else instead of being true fact-based decision making, or often decision making at all. This applied especially to the university Board. A further challenge to fact-based decision-making presented by the tripartite system was that the different interest groups interpreted the “facts” differently, making rational decision even more difficult.

I think the tripartite system is the worst of all possible models, because it makes the internal groups to vote against one another. ... We have been forced to make poor compromises, because the three interest groups have been unable to reach a consensus.

Another informant continues:

I've been sometimes so frustrated with the decision making. The Board should be running the university, but the extremely narrow views of the interest groups dominate. Any big picture of where we are going was bound to be overruled by the tyranny of the details.

Much of the decision making was also seen by the informants to revolve around processes designed to prevent decision makers from making mistakes. The capability for dynamic decision-making was less important, as was concentrating on the essential. Instead often trivial details and formality issues had the tendency to dominate.

It's a world where your primary occupation is avoiding mistakes. ... It takes all your creativity, it takes all your entrepreneurial spirit, and you're only afraid to make a mistake. And then all your efforts focus on control because you are controlling not to make the mistake. It makes it also impossible to take any risks.

External Legitimacy Constraints

The informants brought up two clear ways how external interest groups had a significant effect on the old three universities: First, the government influenced the internal processes and contributed to the build-up of bureaucracy through **legislation and policies** (as discussed earlier under the theme ‘Internal Institutional Constraints’). Second, the institutions

providing most of a university's funding had a major impact on the focus areas of the university through their **resource allocation models**.

However, perhaps the most interesting phenomenon described by the informants was how the academic community really responded to the need to comply with government-induced regulation. Because many internal rules and policies within the universities were the result of the university being a government institution, the rules were deemed to be impossible to change, no matter how ridiculous they were perceived.

If I decided that the best way to improve the performance of my team was to organize a sauna party, to give a simple example, it just had to be 'fixed' somehow under the radar. It was possible to arrange but officially it wasn't allowed to show anywhere. ... In TKK people have actually been very creative and agile, but knowing that it won't necessarily go along the governance principles that are official and public.

Open disobedience wasn't a possible solution, but things weren't always done by the book either. This was seen as a characteristic feature of TKK, in particular. Another informant continued:

I think that the policy papers produced by the central administration didn't get much attention in the faculties and departments. ... Effectively this meant that there were two separate organizations: the official, and then the unofficial that operated in the space between the official rules.

All in all, the evidence suggests that at least some degree of behavior related to **loose coupling** has taken place in the old universities.

5.1.3 Triggers of Change: Feedback from the Staff – Hopes for a Better Future

Based on empirical data presented in Chapters 5.1.1 and 5.1.2, it is obvious that the key people building Aalto University have had a clear mission and a shared sense of urgency in trying to improve the shortcomings of the old three universities. It is interesting to compare how the broader academic community perceived the same situation and whether they found the same problems in the old system to be in need of a reform. For illustrative purposes the representative quotations have been classified by background organization (TKK/HSE/TaiK) and organizational function (academic/administration). It must be stressed that there is much heterogeneity beyond this simple division, but the most important trends relevant for the purposes of this study should become visible even without further segmentation.

Furthermore, it should be noted that the purpose of gathering the feedback from the academic and administrative units in fall 2009 was to collect feedback from the transformation process and give the staff a chance to list issues that caused them concern. This dataset concentrates primarily around these issues, and the pre-merger situation is commented only briefly. The context of these comments is most often being for or against some reform announced by Aalto management, making the dataset more suitable for the analysis in Chapter 5.4.

In general all units, both academic and administrative, expressed their support for the overall goals of the Aalto University. Almost everywhere the Aalto was seen to have much potential, and the ambitious strategy and vision of the university was welcomed. There were many concerns as well, but they were mainly focused on the practical implementation of the merger and were very similar across all units. These implementation issues are covered in the next Chapters. All-in-all, it can be stated that there was little feedback suggesting that the units would have considered the pre-merger operating environment so excellent that they would have been skeptical about a possibility of change to the better. On the contrary, the units brought up several practical issues which they hoped that could be improved by Aalto.

The creation of the Aalto University has made us think about the core of our activities and also to plan for significant reforms in the future. (TaiK, academic)

The goals are positive and ambitious. (HSE, administration)

We are doing well already and the coming of Aalto will support this good development. (TKK, academic)

The most of the academic units shared the management's view that the government career system had caused a lot of problems and were eager to get rid of the old system. Many considered a new career system to be the most important improvement offered by Aalto and believed it to provide a more professional impression of the university's research organization as a whole.

It's great to have a career system, because earlier we didn't have anything. (HSE, academic)

The academic units also saw the bureaucratic administration to make their life more difficult, especially in the TKK. The administrative units did not share the same hopes, except in TaiK where there was willingness for reform. The departments were hopeful that the administration could be turned more service-oriented, although they were also skeptical towards the growing Aalto central administration.

The amount of administrative routines has to be decreased: filling all kinds of coupons, bad IT-services, applications for funding and polls take a way too much time and get on people's nerves. (TKK, academic)

We hope that things would really change and that such a service organization would be built for Aalto where reporting would go in a line. We hope that next year [2010] there would be no more HSE administration, TaiK administration and TKK administration, but instead Aalto services. This would make it possible to professionally develop services. (TaiK, administration)

Third positive development brought up by the staff was the need for developing academic leadership and management from a level that was less than ideal. The staff believed that good leadership would enable everyone to better concentrate on research and teaching.

It is positive that Aalto pays more attention to academic and administrative management. Leadership culture should be

consciously developed so that researchers and teachers would have more time to concentrate on their primary jobs.
(TKK, academic)

5.2 Change Context: Inertia in the Transformation

As discussed in Chapter 5.1, the Aalto project management shared a largely unified story of the shortcomings of the “old system” and had a vision what should be done differently in Aalto. Many of these thoughts were also shared by the staff. However, the largest challenges in such an ambitious project are rarely associated with the planning, but instead with actually pulling through the transformation. Overcoming the inertial elements associated with the pre-merger organization may have been an important motivation for the change itself, but when the change really starts to take place, the organizational inertia becomes a challenge for the change management. The inertial elements found to be at play during the change effort are discussed in this Chapter.

5.2.1 Change Context: Planning 2007-09

Based on the 2008-09 interviews of the Aalto Transformation Team, the project management ran across a broad range of inertial challenges. Almost all inertial themes discussed in this study are present, but the most dominant were problems associated with information constraints, internal political constraints, internal institutional constraints and external legitimacy constraints. Limitations of collective rationality and limitations of learning emerge as secondary themes.

Information Constraints

In a fast-moving and complex endeavor such as the Aalto Transformation the communication is likely to cause significant issues. Based on the interviews, this indeed was the case with challenges both in maintaining situational awareness of the management and in communicating the story of the management to the larger community.

The dominant factor limiting the situational awareness of the project management was simply the **lack of time** and resources. Almost all informants felt that they had been stretched to and beyond the very limits of their capability and had little time to communicate with others what they were doing. Combined with the heavy burden of expectations contributed to a high-stress situation, but on the other hand integrated the management into a close-knit team.

If you receive an e-mail from someone at 3 AM in the Sunday morning and then many people react to the mail, it's a sign that we're actually doing quite a lot.

I can't believe how anyone can pull through something like this in a year.

It's not easy, it's like a constant feeling of inadequacy.

The hurry contributed to **difficulties in maintaining situational awareness**. Many informants felt that even though they shared a common mindset of the grand goals of the project, on a more practical level the goals were often vague. Some informants also expressed concern that as a result the work on the different fields might not be compatible.

Well, we're dabbling around with terrible intensity, but it's not clear what we're doing.

There's a big risk that the project will split up into silos at this phase. We have to keep the big picture in mind.

The fragmented picture of the situation and lack of time caused also **problems for external communication**, telling the academic community and the outside world what the project management was doing. All informants recognized these challenges, but most thought that not much else could be done.

The professors don't have a clue of what is happening: "Does this affect us somehow?"

Communication is something that is always failing because it hasn't been completely thought through, but on the other hand you just don't always have the time to think it through.

Some informants thought that the Transformation Team needed extra help for handling the communication, while others dismissed the problem.

Communications is something where we need help both internally and externally.

I think the upcoming change is terribly small compared to how much it is feared.

The challenges in external communication were also one of the primary sources of negative feedback to the Transformation Team, which caused frustration.

Some of the feedback makes me astonished and also a little depressed. People are writing that nobody is telling them anything. There are like dozens of people working very hard to arrange all the time information sessions and everything, and it just feels so unfair to read such comments.

Internal Political Constraints

A major organizational transformation necessarily causes changes also in the power relations of the organization. Therefore it was not surprising to find plenty of evidence of internal politics being played out during the transformation. However, it was interesting to find out that much of the power games –related empirical evidence actually pointed to games where the Transformation Team itself was involved. Three different types of games emerged from the data: 1) games played by individuals, departments and schools to protect their self-interests against others 2) tensions between the “original” Transformation Team and “outsiders” joining the project, and 3) periods of discontinuity, where the leadership of the project was handed forward to a new team. All-in-all, the quite pessimistic expectations of one informant during the early phases of the project received extensive support from the empirical evidence:

I can't tell if there is any internal politics to be seen right now. But it's obvious that it will be there. It won't be any different from what we're used to.

All the three **old universities** preceding Aalto had their own strong identities, and especially during the early planning of organizational structure and decision-making system of the new university, most members of the academic community saw themselves primarily as representatives of one of these three original identities. After the Aalto University was officially formed these identities had little reason to change, because there were few visible changes in the work environment of the individuals.

Therefore the old identities were much inherited by the three original schools within Aalto. The setting encouraged key managers of the old universities to guard the interests of their own schools. As one HSE executive put it:

One of the neuroses of HSE and the other schools is to guarantee that they get enough power.

Another informant continued:

The trio of current presidents unavoidably looks at matters from the perspectives of their own schools.

The situation sparked frustrated comments from some informants, for example:

If the game has this far been about who gets what, we are now facing the fact that we really have to start thinking about and building the new university.

According to the informants, much of the same dynamics seemed to take place also in the lower levels of the organization, between departments and professors.

The situation is such that some are actively constructing the new university while others are preparing their own positions.

If someone would already know that he would become a dean in one of the schools, he would probably be building this with a little different intensity than now when there are still a couple of power struggles to be fought.

The power was a limited resource also within the **Aalto project management**. Although the members of the Aalto Transformation Team (also known as the ‘A8’) were well aware of the temporary and preparatory nature of their position, the immense work effort they had given to shape the form of the new university had also created a strong sense of “ownership” in “their university”. Their dedication to the task identifies the Transformation Team as “supporters” (see Chapter 3.2.3 or Scott 2003:

133) of the emerging organization, as opposed to less dedicated “users” normally much more abundant in organizations.

The deep commitment of the A8 meant that the team was anxious about what would happen after the actual Aalto University management, led by the new President, took over the project. The expectations of the informants seemed to be somewhat contradictory: on one hand they hoped that the new management would start as soon as possible to establish a clear leadership and ownership, but on the other hand they wanted to be there to ensure that the new management took the project in “right” direction.

It would have been good if [the new President] could have started earlier.

This process needs a leader capable of making decisions, and [the new President] is such leader.

There has to be some continuity. If the A8 would completely step aside and new people would be sought to pull through the implementation, it would not be optimal because we would lose an awful lot of tacit knowledge.

The Transformation Team was apparently expecting an incremental transition where the President would start as the chairman of A8, ensuring a controlled communication of tacit knowledge and an uninterrupted continuation of the A8’s work. Then eventually the President would have had time to gather her own management team, which might include some members coming from the A8, again ensuring continuity.

We have to hold on to these people, this is the team which is going to pull this through. Somehow we just have to get [the new President] in the team.

I hope that [the new President] will be chairing our meetings every Thursday.

I think that the coming of [the new President] won’t have much impact on our routines.

Furthermore, many members of the Transformation Team also faced significant personal ambiguity, as many had no positions to return to in the old organizations, should the A8 be disbanded.

Personally I don't know if there's any work for me after this ends, but I believe that I can come up with some job. Some people are just climbing the walls because they can't take the situation any more.

What actually did happen was that the new President disbanded the Aalto Transformation Team almost immediately and concentrated on creating the actual Aalto University management team, or 'President's Management Team'. The sudden shut down of A8 apparently caused much time to be lost during the final year of preparations before the new university was supposed to start its operations, as there was not yet any new management to take over the A8's work. However, all A8 members continued to work for the Aalto University, many of them in senior executive roles, so the fears of permanently losing tacit knowledge or the personal risks of the team members did not actualize. Yet still, the significance of sudden major changes in the power structure of the project management for the capability of senior leadership at the critical phases of the project should not be underestimated.

Internal Institutional Constraints

A multitude of institutional pressures affects the life in universities. A governmental work culture was merged with a culture of perceived academic freedom, producing a bureaucratic system where everyone expected to be involved in decision-making. The traditions are long and all the studied three old universities have played a central part in the century-long national success story. On the personnel side, the careers in these universities are long, circulation of staff is very modest and the average age of the work-force is very high (Aalto University 2008). All the studied universities are also large organizations, especially TKK and Aalto. All these factors contribute to the fact that there is certainly an established "right way of doing things" that may not be easy to change.

From the perspective of management trying to conduct some form of change management the institutional constraints often take form as "**resistance to change**" by the subjects of the change effort. The term is

quite ambiguous, but the corresponding phenomena were clearly evident in the data.

There's an immense source of well-founded and unfounded fears, like a thought that can't you just leave us alone and simply give us the money and we will continue just like before.

The informants perceived that personal fears contributed to resistance especially in the administration, while a “change of mindset” was necessary for the whole organization.

*Then we have this administration that has grown too large and where there is uncertainty about the future and probably also fears about what will happen.
Also the mindset of the teaching staff has to change quite a bit. Improving the quality of teaching will be a tough nut to crack for many.*

However, all informants saw it most difficult for the administration to take a constructive stance in the transformation.

The idea that the central administration must be determined to pull this transformation through, actually means in Finnish that the central administration must be determined to hold its own ground.

The last quote also illustrates the additional challenge resulting from the fact that the **transformation** really **had to be implemented by the existing personnel**. The informants were very well aware that it was impossible to recruit but a very limited number of new professionals from outside. Therefore it was important to try to circulate existing personnel to new jobs within the organization to ease a change in culture, habits and processes. At the early phases of the project, communicating this requirement to the staff seemed to pose serious challenges.

The key thing to be changed is the thinking of the community. The people are referring to some foundation that is like some god somewhere far away and they're waiting for the foundation to come like some god from a machine and to

save them. People don't understand that it's all of us together who will have to provide that salvation.

There was also a lot of skepticism questioning if Aalto really could fulfill its promises and if any of the changes would actually be implemented, because based on their previous experience people believed most changes to make things only worse. Therefore it was crucial to win key people with authority to the support of the cause.

Most people didn't believe this would actually happen before the Board was appointed. But if those people believe in this project, perhaps I should start believing too.

External Legitimacy Constraints

When discussing the impact of external interest groups on Aalto University, it has to be remembered that the whole university would not exist without a concerted effort of the government and the Finnish economy. Furthermore, the larger framework of national university reform came largely as a response to broader needs of the whole higher education sector, with Aalto spearheading the entire reform. Therefore the whole essence of Aalto was to have a broader societal impact, not to simply exist in isolation. This meant that there existed a broad range of interest groups with a stake in Aalto, and that there were a lot of **external expectations** that Aalto struggled to fulfill.

It's about a historical change, where the role of the whole university system is being rethought ... and frankly this has been understood only by a handful of people.

As the importance of Aalto was realized already during the first phases of the project, **many actors tried to code their own goals into the goals of Aalto**. This was evident especially during the creation of the so called 'Sailas report' that became the backbone of all later planning efforts.

The political lobbying was already fierce much before the Sailas report was published.

According to the informants, other key players included for instance the Ministry of Finance that tried to **regain government influence** on some

issues that the Ministry of Education had left for Aalto to handle as the university saw fit. Another game was apparently played by the University of Helsinki that used its influence to shoot down benefits and freedoms designed for the foundation-based universities by demanding changes to the proposed new Universities Act. Also the **other universities** resisted any “special treatment” and especially extra resources that would benefit only Aalto, and the **trade unions** lobbied fiercely against the abandoning of the government career system which was feared to have a negative impact on the benefits of personnel.

On this field the problem is that it's not about what we want but there is the surrounding society limiting and controlling what we're doing. If we change for instance any systems related to people's careers there is a lot to discuss with all the interest groups before anything can be realized.

Internally it was naturally the task of the management to create a positive and empowering atmosphere to make the change possible. In addition to this, the external pressures on Aalto project management demanded the creation of a successful external image of a rapidly progressing project. Obviously creating and communicating this image externally meant that it was also visible internally. However from internal perspective, it was possible to effectively observe the difference between what Aalto communicated that it wanted to be and the reality in the units what the situation really was. There had been no time to yet implement most of the plans and promises of the management, and therefore this difference between the external image and internal reality created some credibility problems perceived by the staff as **differences between talk and action**.

People know how to talk but the problems begin when you should really start doing things.

We should be doing and planning at the same time so that some corrective movement would be possible. But we have a lot of things that have been planned for half a year, and god dammit nothing has happened. ... The world has time to change in between if we try to plan everything ready before implementing any of it.

Limitations of Collective Rationality

As stated before, the Aalto project had a lot of inherent complexity and ambiguity. Especially in the turbulent earlier phases of the project with no established ownership, hierarchy or many other key organizational characteristics, also the decision-making processes seemed to be diverse and not always very deterministic.

The project has gone surprisingly well if we take into account that we don't have any owner at all.

During the planning phase when the Aalto Transformation Team (A8) was the driving force of the project, there were **three different decision makers** on the scene: the Board, the A8-team and the old universities. The formal ownership and ultimate authority was within the **Aalto University Board** that had been recently nominated in fall 2008. However, the Board had only limited time available as it was made up of high-profile external members and gathered on average once per month.

The challenge with the Board is that it's not very easy to understand the dynamics of this community and our ambitious goals if you spend only a day or two per month with this project.

Therefore the issues discussed in the Board meetings were prepared by the **A8**. A8 also had to take care of all practical matters, but they were careful not to make any such decisions that would have a fundamental effect on the university before the new President was appointed. Also the Board wanted to wait for the President in many significant matters.

I'm just paving the way for the [the President], that is my role.

The informants had also numerous other perspectives to the role of the Board, including readiness to make fast decisions and capability to steer the project towards the strategic goals, but also on the other hand tendency to mingle with affairs that the Board should leave for others to worry about. This suggests that the Board was willing to make decisions, but that some of these decisions should have been made somewhere else.

The people in the Board are used to making decisions, and it must be a strange culture for some of the university people. The Board has really taken the stance that we are now building a world-class university and not just some merger of three university administrations.

It annoys a bit about the Board that some members seem to have trouble understanding their role ... and to keep their fingers off the daily management.

The third potential level of decision-making was the **old three universities** which still had all the necessary structures and processes running. The problem was that the Transformation Team and the Aalto University Board didn't want the old universities to have a significant role in making decisions on behalf of Aalto, because their involvement was feared to require bargaining and compromising the goals of the project. Also the authority issues of the old universities to make key decisions on behalf of Aalto were problematic, and so the old universities were largely sidelined from the key decisions.

The three presidents [of the old universities] show themselves very little. I don't know if they show at all. I don't know what they are doing. ... Some have surrendered, some try to still keep up something from the old culture, and some don't have a clue what we are doing.

This setting effectively created a situation, where no one had the combination of capability, authority and willingness to make the important decisions, although the all three decision-making levels were capable of decision-making in smaller matters. In practice this meant that there was a power vacuum where the academic leadership, the President, of the Aalto University should have been. A picture emerges where many important decisions seem to have been made through flight and oversight as described in Chapter 3.2.7, while more trivial matters can have been settled through resolution but often by random decision-makers.

Limitations of Learning

As the change effort was rushed forward by the Aalto Transformation Team, the skills of the team obviously had a profound impact on the outcome of

the whole project. Because none of the participants had ever created a university before, the change was simultaneously a tremendous learning process for the change management. It was possible to learn some new skills, but the fact was that the members of the A8 were chosen for the task because they were **experienced professionals**. Therefore their key asset in managing the project was their experience, which set some limits to how innovative approaches they were capable of finding.

When there are people involved who have been running an organization before, including myself, there is a danger to stick with what you already know.

I think that we're not very close to creating anything new.

Even though there was the risk of **doing what was done before**, many informants emphasized that there was no cynicism in their approach and they managed to maintain a mindset encouraging new approaches.

There's a lot of enthusiasm that we're doing a good thing, there's no cynicism based on earlier experience.

However, the experience had also its limits. Some ideas and plans could not be implemented because of **insufficient skills**. Often progress was also slow because people without earlier experience were forced to learn the basics of a new field.

I haven't been running a large international group ever before.

We need some decent external HR-person to take these kind of things through, we don't have a single such person here.

5.2.2 Change Context: Implementation 2009-

The part of the data presented in this Chapter represents the perceptions of the Aalto University top management on the challenges they faced during the change effort. Capturing this perspective was the primary goal of the interviews, and luckily it also constitutes the largest category of the processed and analyzed interview data, signaling its significance.

Largely the same dominant themes emerge as in the earlier interviews of the Aalto Transformation Team: excessive evidence concerning especially internal institutional constraints as well as information constraints, internal political constraints and external legitimacy constraints. However, also limitations of collective rationality emerge as a new dominant theme. In addition also sunk costs and limitations of learning emerge as secondary themes.

Internal Institutional Constraints

Several inertial forces resulting from difficulties in altering established ways of doing things in a university were evident already in the planning phase of the Aalto project as demonstrated by the interviews of the Aalto Transformation Team in Chapter 5.2.1. However, the full force of internal institutionalized processes and culture became apparent only after the management really started implementing the plans.

The whole process started with a lot of skepticism towards the ability of the management to pull through a visible change.

There was certain slowness in the entire transformation process. Especially in the beginning people, most of all in the administration, just leaned back with their hands in hips and told that “you don’t have a chance”.

At the grass-roots level among the elder professors there’s certain cynicism questioning if anything will actually change.

One of the problems was that as there were also people looking forward to Aalto with enthusiasm and many positive expectations, but as implementing many improvements dwindled and took longer than people had expected, this was interpreted by the opponents as a proof that their skepticism had been justified. Much of this critique spawned because the academics perceived that the **extra resources** promised by the Aalto management were nowhere to be seen as of 2010. The situation wasn’t

helped by somewhat contradictory messages from the management. Some managers said that the allocation of additional resources progressed as planned and the resources were supposed to be distributed only after careful planning no sooner than 2011. But others claimed that much of the extra resources actually had been distributed, and most of the critique simply came from units where the management hadn't allocated more resources.

Many schools and faculties thought that the extra resources given to Aalto because of this transformation would have been visible in the schools' budgets already this year [2010]. But this has not happened, some money has been distributed, but nothing significant. And this is how it was originally planned.

When we are now progressing with the strategy first [in allocating resources], it's a very slow process and it gives currently rise to a lot of debate.

The management also believed that for some part the system would ultimately change only after a **“new generation” of academics and administrative staff** free from the old assumptions would get a foothold in the organization. The management didn't plan for any drastic measures to speed up the turnover of the staff, but rather believed that time and natural renewal of the staff through retirement would slowly but surely enable the organization to turn into a new course.

A great generational change is taking place among the professors, and there is a chance that professors with fresher ideas will emerge and take over the field.

However, most managers thought that the academics weren't the largest problem, but they faced the fiercest resistance within the administration, effectively within their own organization.

If I need some kind of motivation, I definitely don't go to seek it among my own subordinates because they think that we are scrapping many great things. Instead I go to meet students or researchers, because they are thinking about the possibilities and not the negative side, such as “before

everything was so well when we had the quality manual and the best processes". The patient died but we did everything by the book.

Naturally the distinction between good and bad processes depends on the point of view. As one informant (one of the old presidents) pointed out

The change, separation from the government, doesn't mean that there would be a lot of freedoms. It doesn't bring anarchy where everyone can do whatever he wants. Actually it brings in many cases at least as disciplined or even more disciplined ways of working for the administrative side, but on the other hand hopefully more possibilities for the core businesses [teaching and research].

Therefore the administrative change was more about replacing many of the old processes than significantly shutting down old services or starting new ones. As in many cases the old administrative professionals also continued in similar duties as before the merger, many new processes came under intense scrutiny. Often the new ways of doing things were perceived inferior to the "good old times". As another old president described the dynamics:

I just wrote that our school supports all good changes and opposes all bad changes.

The fact that the new management tried to establish a firm control over the support services but at the same time emphasized the freedom of academic activities, teaching and research, apparently caused some communication challenges. The problem was that the Aalto management wanted the academic leaders to really lead and "free them from the administration's oppression", but the efforts to standardize service processes gave contradictory signs of increased control, even though this was not the management's intention. The resulting confusion caused some frustration on all sides: the top management, the academics, and the administration.

People are shouting for more rules all the time. And then when we try to prevent this escalation [of control] and say that "no, you do it on your own", people ask "but where are the rules, what are we allowed to do?" And if you say "ok,

here are the rules,” then people answer that “we don’t want that kind of rules, we wanted different ones”.

If the management wanted the academic leaders to be more independent but had some trouble at least initially to get this message through, the straightforward way of reshaping the support services top-down gave out the opposite message for the administrative staff. Many support service professionals interpreted that the management didn’t value their expertise or the traditions of the old universities. Based on the feedback gathered from the administration there were some administrative units, especially in the TaiK, that saw the transformation process as inspiring and felt that they had been involved and committed to the change effort. However, in most cases this perceived Aalto management’s lack of respect for the previous administration was a major source of opposition, mistrust and demotivation among the administrative staff.

It is a great source of discontent that people feel in TKK now, as they felt quite strongly already during [the Aalto Transformation Team], that the skills and experience of our people in governing such a large university, has not been appreciated. At least people perceive it so that the new management thinks that nothing works here.

Actually the new management did recognize this problem, but the challenge was that they wanted to **change the mindset** and working culture of the administration from controlling to servicing, and didn’t know how to merge the story of valuable traditions with this story. As a result the communication was always about future, almost excluding the past.

Every now and then we make pretty serious communication failures when we never remember to respect the significant traditions of the three schools.

All-in-all, there was considerable evidence of organizational inertia observable in the accounts of the informants. Although there was also some evident frustration, in general the managers were very aware that a major change in processes, not to mention culture, could not take place overnight. Many of the managers were also confident that there were **different phases in the change** as experienced by the community, and that

skepticism and resistance to change were almost inevitable in the beginning.

Often it takes surprisingly long time, before people realize that this is actually going to happen. Some think that they can resist the change so that it won't happen. ... Some have thought that "I can continue my life as if nothing would have happened." ... But luckily there are others thinking that "wow, finally something is happening", and they start to move.

The managers recognized that individual members of the community experienced the change very differently. Some were optimistic while others pessimistic, and some could move through the change faster than others. The management also acknowledged that there would be a minority of the staff that could not or would not adapt, and would eventually leave the organization. Some had already left.

One strong visualization of the expected change behavior shared by many of the informants was a "change curve", a version of the Kübler-Ross curve (applied to change management as "The death valley of change" e.g. by Elrod and Tippet 2002). As a result of accepting this model as their tool the management was prepared to encounter a sequence of reactions from their organization, such as "shock, numbness, denial, fear, anger, bargaining, depression, understanding and testing before acceptance and finally moving on". The managers even believed themselves to go through the same cycle but faster than the others because they were better informed.

Usually it goes so that there is a phase shift between people. While some are already rising from the abyss, and you are at the same time desperate why people don't come along, but the other half of the organization is only just falling in the abyss.

If you look at an individual person, he will have multiple change processes one following another.

Everyone has a similar change curve, and the organization changes only after the people change.

This has also the curious side that the management will go through the cycle faster than the others, because the management knows about things, and is involved in making the decisions.

Information Constraints

As the Aalto Transformation Team, also Aalto University management saw communication challenges as a major factor making the change more difficult. The Aalto Transformation Team was still small and informal, and so most of the information challenges were external, even though the hurry contributed to problems with internal situational awareness as well. The Aalto management faced largely the same problems, but the fact that they really had to implement the change through transforming the everyday work of people within the organization made successful communication even more critical. Furthermore, they faced an additional challenge because they simultaneously had to construct their own management organization, giving rise to new internal communication challenges. More and more people were involved with cumulating responsibilities that no one else than the Aalto management would take care of.

Externally the management was primarily concerned with difficulties in **communicating** on one hand the **goals of the project** and on the other hand **what was being done**.

We haven't been very good at describing the journey into being a world-class university, what it means. ... Our message about what kind of university we want to be has not been clear enough. It's apparently very difficult to share even among our professors.

Many people don't know what the name of the game is. This lack of information, bad communication, is the partial cause of mistrust and people's concern over their own future.

All managers agreed that the principal cause of communication problems was the lack of time. However, some thought that the problems could have been helped if they would have had more communication professionals available to support the management, while others thought that the situation could not have been helped because only key leaders could

communicate the change effectively and their time was a very limited resource.

If I would do this again, I would demand a lot bigger team with the other half doing just communications.

The people who can tell where we want to go are huge bottlenecks. For instance [the President] should clear her calendar from everything else than communication and dialogue.

Some managers also saw the flawless communication of such a complex change inherently impossible task, and had given up trying to solve the problems beyond “appropriate” level of communication.

Such organization where people don't complain about communication has ceased to exist.

In any case, all informants strictly denied that the management would be secretive on purpose, or that limiting information would have been used as a source of power.

Finally, the informants also listed **managing expectations** as a key communication challenge. Again the issue was communicating the right goals.

Managing expectations both inside the university and externally is a huge challenge. How to keep the expectations high enough without giving such promises that turn out to be impossible to fulfill.

The other side of the coin was the challenge of maintaining a coherent **situational awareness** to ensure that the change effort was coordinated between different areas of responsibility. As in earlier stages of the transformation, the key problem was that the management was heavily overemployed with every manager having to build his or her own team and organization “from scratch”. However, in contrast to earlier stages also the size of **the organization had started to grow**, which effectively meant that everybody could no longer communicate with everybody. The situation was made more challenging by the fact that the organization itself and the management processes were still at their early stages of development.

People are talking on the campuses that all the things are happening in [Aalto central administration] and that they don't know what is going on in there. But unfortunately often the situation is that we who are not members of the [President's Management Team] don't know what is going on either. And this is caused by the hurry. ... Communication is based on informal occasions. And unfortunately it is also coincidental.

The informants reported at least four kinds of **problems in management's internal communication**:

- 1) Most important decisions were made by the President based on information she had been able to gather from the organization. However the information required was limited by the president's preferences and the information provided was limited by the capabilities of the still emerging organization. The whole process was limited by overextended resources, especially time.
- 2) The clear overall picture of the goals and recent developments was mostly shared only by the President's Management Team (PMT). The communication of this picture to the rest of the central administration was based on members of the PMT informing their subordinates. There were large differences to what degree this was done, again limited by the time resource. Therefore many managers within the central administration were not certain of the overall goals.
- 3) As a result of problem 2, the managers that were not members of the PMT had trouble in informing their own stakeholders within and outside the organization. In worst cases this could lead to sharing contradictory or outdated information 'on the field'.
- 4) There was no established way for managers below PMT to communicate and discuss with one another. Therefore the sharing of the situational awareness between the different responsibilities of the administration was based on informal ad hoc communication, in some cases resulting in "right hand not knowing what the left hand was doing".

Internal political constraints

Internal politics play a part in any organizational transformation. In the case of the Aalto transformation the politics seemed to emerge as three themes: 1) the imperative of the management to win the support of the academic community to make any tangible change possible, 2) the transformation of the informal power structure, and 3) self-interests and power battles between faculty members and organizational units.

The proponents and managers of the Aalto transformation saw the weak leadership a critical shortcoming of the “old system”, and therefore strengthening both academic and administrative leadership was one of the key goals. Nevertheless, the informants had also a clear understanding that this could not mean dictating an arbitrary change top-down, but for the change to actually occur, it would need the **support of the staff**. This was seen to be especially important in the case of the academic faculty, while the management of the support organization was thought to be more straightforward.

It's impossible to implement any change among the professors. Any change has to originate within the ranks of the professors themselves.

As long as people haven't emotionally bought all this, as long we're not moving optimally towards the target.

Actually the faculty had two principal ways of shooting down a change. First was that they could refuse to implement any new practices, or circumvent rules for instance under the flag of ‘academic freedom’. Therefore any leader would need the support of his or her organization to get anything done.

A leader may be nominated from above, but if he or she wants that the troops will follow, the leader must also earn their trust.

The second possibility for especially the best academics – as well as the best students – was to simply go somewhere else if they disliked the environment provided by the management. Many informants saw in particular this second option, the best talents voting with their legs, a serious threat.

In practice the ultimate power in a university lies in the hands of faculty and students ... Losing talent is the worst thing that can happen to a good university.

If for instance the President wouldn't have the support of the professors, she would be in trouble even though she's not nominated by the professors. If you can't attract and keep the faculty, they can always go somewhere else.

Obviously these requirements meant that any change had to result from a process of negotiation between the management and the academic community. However, a key issue here is how this negotiation could actually be done in a university employing thousands of people, hundreds of them professors. Apparently the top management had a simple method for choosing whom to listen: they simply chose the professors who had the most authority within the scientific community, which typically meant the professors who were academically most distinguished. This approach enabled the management to gain access to the informal power network of the academic community, but also made the key academics working as nodes in this system potentially powerful.

The power lies at the hands of opinion leaders and the best researchers. If someone gets a Nobel prize or has extensive co-operation with Nokia, he has also a lot of power.

The authorities are the top professors, and you always have to listen to them. ... When someone has a good competence, you have to listen to and respect it. If someone doesn't have a good competence, it should have its consequences as well.

The fact that distinguished academics had a lot of power in a university was nothing new, of course. They had had power in the old system as well. However, as the top managers of Aalto University had more power than their predecessors, this meant that also the people who the managers listened to became more powerful. On the other hand, some informants also thought that the more straightforward leadership structure in Aalto University would somewhat diminish the significance of behind-the-scenes operations. Furthermore, the influential academics in the Aalto weren't necessarily the same people who had had influence in the old universities, which demanded a **change in the informal power structure** as well. It

is even possible that some of the feeling of powerlessness or chaos experienced by some of the faculty during the transformation could have resulted from the redefinition of the informal structure of the organization, where the established ways of “getting things done” were no longer valid.

I got the feeling in the old university that strong professors talked with the president directly past the department manager. And the department manager was informed if someone remembered to.

We clearly went through a state where the informal decision-making structures were reformed. ... The most agile players established their own informal organization for instance by rebuilding their old relationship with some Board member, or a member of the A8.

Finally, there was also a number of **power games played between different organizational units** and also amongst the faculty. These were most prominent between the old university administrations in influencing the processes of the new university, and between the schools in influencing the principles of resource allocation and how centralized the management system should be. Also the trade unions and students were accustomed to being involved in tripartite decision-making and had to be kept calm. In many cases all sides felt that they had been somehow maltreated while the others were favored. As a result the management needed also political skills to keep the situation under control.

We're losing tremendous amounts of time in every single matter, because everybody feels that some other school is somehow favored or treated better than the others. (Aalto manager)

Why is it so that we have to always change the system and not the others? (HSE)

We feel that we have been the side that has had to give in all the time. (TKK)

All-in-all the change meant configuring the organization again and redistributing some of the resources, which meant more possibilities for some and more limitations for others forcing a new balance of power.

We have had here some age-old conflicts gnawing between people and between units, and now they all rise back to surface because of this transformation.

External Legitimacy Constraints

As stated before, Aalto University would never have been created without significant efforts of external stakeholders and consequently there were tremendous expectations to fulfill. On the other hand, because the very purpose of Aalto was to create something new and extraordinary, the informants saw it to be somewhat free from following the established ways of doing things in Finnish universities. These two conditions effectively meant that to justify its existence and privileges Aalto had to invent something new and couldn't keep doing the same thing as everyone else, but the solutions Aalto came up with had to satisfy the expectations of the various stakeholders. It could be almost said that Aalto was constructed to change the rules of the game, but the paying audience expected the new game to be better than the old. The setting is especially interesting from the legitimacy perspective.

The most important dynamism was the **legitimacy on the higher education sector**, where the key players were the universities and the Ministry of Education. In relation to the other universities Aalto had two contradictory roles. On one hand Aalto was spearheading a reform that would enable all universities to gain more liberties from the government, but on the other hand Aalto was the 'spoiled brat' hoarding the resources and talent from the others.

All universities are now seeking the limits how much independence they can get and how they can run themselves when they don't have to follow the government bureaucracy any more. ... Especially some smaller universities are interested in how we do things here and are asking us to share some of the new ideas.

We get feedback from the other universities that not only have we taken all the money, but we have also screwed up all their fancy systems, like "we have been building this new salary model for 14 years and now you come and spoil it with your local agreements".

The Ministry of Education, as well as for instance the Ministry of Finance, had similar dilemma in that the reason for creating Aalto had been to give universities more freedom, but they still wanted to maintain control. So the question was where the limits were, as Aalto tried to gain as much autonomy as possible.

The Ministry of Education in principle gave us autonomy at the university reform, but at the same time, for instance this year, I think we have seen that they gave us leach but now they have tightened it again. ... They want to control us the same way they control the municipalities.

As long as we are dependent on government funding, the government decision-makers are an authority. We just have to get along with them, and we are dependent on their decisions.

Other important external stakeholders were the **donators** and the **institutions providing external research funding**. All informants agreed that the donators didn't have any direct effect on how things were done in Aalto. In fact the informants didn't recall that the significant donators would even have tried to persuade the university management. Actually the donators did have influence, but this realized at a more abstract level: the informants told that the donators simply wanted Aalto to be internationally competitive quality university, and they wanted to ensure that the ambition level of the management remained high.

The CEO level stakeholders just think that they need talented workforce, but say that they don't have the competence to tell us how this goal can be accomplished.

On the contrary, the traditional providers of external research funding, TEKES, Academy of Finland and European Union, were seen to have a great influence on the internal processes and focus areas of the university. The university had to adapt to the whims of these institutions and follow the trends in choosing the research focus areas. The funding system was also regarded extremely bureaucratic and forced the university to allocate significant resources to manage the application process.

[The providers of research funding] have incredibly bureaucratic criteria. This money is by no means free but you have to do a lot of work for it. Actually the cost of this money is so high that only about half of it ... ever ends to funding the research and the other half is needed for running this administration. ... I would rather get rid of the whole business.

When considering which operating models were deemed legitimate and which were not, one has to also take into account the **broader international perspective**. If Aalto was to answer to international competition, it had to also benchmark this competition and try to adapt internationally acknowledged best practices in addition to getting along with its local stakeholders. The benchmarking was extensive during the planning phase of Aalto project, and actually many European universities were currently doing exactly the same thing as Aalto. Also elsewhere the European universities were trying to reach the global markets, and were looking for models in the apparently more successful American universities.

Going yet one step further, the Aalto University project has to be placed in the context of broader national competitiveness, described by one informant as follows:

Aalto is strongly involved in the national development of Finland. For many reasons we have understood that the production-based thinking won't keep this nation on its feet. Then what is the option? Option is the information-intensive, service-based thinking. Well, how is such thinking powered? It is powered by basic research. Well, where is it done? It is done in the universities. Well, what about our universities? They haven't been shining too much lately. Well, what should be done? How about if we put there more resources to make them shine?

Limitations of Collective Rationality

During the planning phase of the Aalto project, coordinated by the Aalto Transformation Team, the organization remained small and informal. Often the processes were not very established and many members of the A8 also felt that the ownership of the project was more or less vague with no clear leadership until the President could be nominated.

After the President had been nominated the construction of the actual university central administration began with the President gathering a management team around her. The construction work took its time with much of the ambiguity of the earlier phases of the project still present, but eventually the new leaders could be recruited and new management practices established. The administration started to grow with explicitly defined roles and processes.

This new system didn't share the ambiguous features of the A8, but instead two new themes emerged from the accounts of the informants: 1) concentration of power – a theme not present anywhere before, and 2) slowness in decision-making – a theme the informants had earlier described as characteristic for the old universities.

Ensuring that the Board of the university and the key academic leaders – especially the President – would have sufficient freedom to act had been a key goal for the Aalto Transformation Team. This power, enabling the top management to really lead the university, was seen as an important asset for Aalto in the competition against other universities. This goal was largely reached and the new Universities Act made the **concentration of power** possible.

As you know, we have a very clear governance model that is based on excellent Board that has chosen an excellent President, who then yields very extensive power. The President then has all kinds of resources at her disposal.

However, after the system was in place, some Aalto top managers started to also get some second thoughts if the model had gone a little too far.

It took me a long time to understand that the management team actually doesn't decide anything. Actually we have two levels where some decisions are made: the President and the deans, with some department manager occasionally deciding something.

I'm thinking that this new model may have caused that a way too many decisions are piled on the President's desk. ... All the significant decisions go to the President and only some trivial matters are resolved elsewhere.

We were so relieved to get rid of the collegial decision making, but it may be that now we are going at the other extreme of the scale.

The President herself commented the system as follows:

There are an awful lot of decisions coming to this level. My decision making is based on good preparation and facts. I rarely make decisions based on instinct. ... Of course I have a vision about how to construct a good university, and it's naturally a pretty personal vision, but I discuss it with my management team because they are able to give me good advice. It's possible to influence me with good arguments.

The extensive concentration of decision-making may have made the system susceptible to for instance information constraints as described earlier in this Chapter, but also caused delays as the President wanted to ensure that she had the necessary information and understanding available before making a decision. The situation obviously presented challenges for a single individual to solve a vast number of issues through resolution (to use the terminology of Cohen, March and Olsen as discussed in Chapter 3.2.7) and made the system susceptible for decision-making through oversight. However, the centralized model clearly reduced decision-making through flight, which seemed to be a dominant model in the traditional collegial system.

The concentration of power and decision-making may have caused some delays in the management's capability to resolve issues in a dynamic situation. The other important cause for the perceived lag in the system was that as the organization grew and became more established, it gained more of the traditional properties of the very system that the management tried to reform, such as tendency to prefer talk over action and a need to get everyone involved in decision-making. This was not surprising, of course, as the organization had grown to its full size and most practical issues were handled between the same administrators and academics as before the transformation with very little time for any significant cultural change. That was also the level where the top management had to implement their plans. It was discussed earlier that the centralization of power in the top management decreased the amount of decisions that were made through flight, i.e. bouncing them back and forth between different decision-makers.

However, in the lower levels of organization this behavior did still happen, although possibly not so extensively than in the old system.

We're discussing and discussing and taking something into account or not taking something into account until finally possibly reaching a conclusion or, more often, not having the courage to decide.

There are things that have been waiting to be resolved since I started here [almost a year ago]. And they are still waiting. ... It's one of the principal sins of such a professional organization that we are afraid to make a decision until we are certain that we are 100% right.

It should be remembered that the Aalto project was very complex and actually it did progress very fast on many fronts. From the perspective of the individual members of the university community, however, the change process seemed often stagnated causing concern for the managers.

People say that it's better to do it well than fast. But the speed would have some value as well. ... We haven't yet fulfilled any of our promises. There's quite a bit of frustration among the professors.

Most of the talk has been about improving the research support services and such practical things, but they have been left as the last issues to be resolved. And these would have been the issues through which it might have been easiest to improve the spirits of the professors. ... The big picture has not been entirely under control.

Sunk Costs

In addition to the primary themes discussed above, also two secondary themes with less yet still clearly observable support emerged from the interviews. These were the sunk costs and limitations of learning.

Sunk costs represent quite an obvious source of organizational inertia. Large investments made in infrastructure and personnel necessarily limit the diversity of feasible alternatives in decision-making and make certain strategic developments such as moving facilities or shutting down operations with a large staff difficult. Therefore I did not deem the sunk

costs as especially interesting topic to discuss with the informants, but because of its clear significance it was brought up by many informants and it must be covered here as well.

In a university the cost structure has typically two dominant elements: salaries and real estate costs. This is also the case in Aalto University with almost two thirds of costs being salaries and almost one third being real estate costs. Necessarily this means that significant changes in personnel and real estate incur significant costs. During the Aalto transformation this obvious fact converged into two main debates: 1) what would happen to the administrative staff when the three old central administrations would merge into one, and 2) what kind of campus structure Aalto University should develop, with the three original main campuses scattered around the Helsinki area.

Considering the **personnel costs**, naturally one of the reasons why the change had to be pulled through by the old personnel was sunk costs. Of course there was also irreplaceable competence within the organization and several atmosphere-related reasons, but if the management wanted to affect a major cultural change, in theory it might have been much easier if a significant part of the personnel could have been replaced from outside by new people with no previous burden of history. However, sunk costs made such large scale changes impossible.

Building an organization has been also a painful process.

We have had three universities, the administrations of which have had to be partially merged. It means that we have people and we have jobs and these two would need to meet one another. I don't know, and I don't know if anyone else knows either, if all the people in administration and the tasks we have to offer will meet one another.

Also here the model of a change curve adapted by the management emerged. The management expected the personnel to go through a mental change adaptation process with early descent into “an abyss” of demotivation and fear before overcoming the change and adapting to the new status quo. However, they also expected that some minority of the personnel might not be capable or willing to adapt to the new system, arising the question what could be done about it.

You have to think what you will do with the people that will stay in the abyss. Either you have to do everything you can to

help them up, or then you eliminate them, as often happens in the corporate world. What causes the most damage is to leave part of your organization there in the abyss, which will ensure that you'll never get where you are going.

The other issue with the sunk costs was the costs associated with **infrastructure** and specifically with the real estate needed by the university. This discussion saw several twists and turns during the transformation process, but some prominent elements were the issue about creating a single Aalto campus in one place instead of three, the construction of a new landmark main building for the university and using the extra funding for creating more modern space for teaching and research. The simplified main argument of the proponents of creating a single Aalto campus by moving HSE and TaiK to TKK campus was that TKK was so much larger that moving TKK would have been economically impossible – essentially a sunk costs argument.

The discussion about constructing new buildings or refurbishing old ones was part of a debate how Aalto should use its extra funding, and many warned about spending the money that was meant to improve teaching and research to non-essential construction projects.

[One of our Board members] always says that, god dammit, don't spend your money to walls, spend it to people ... to get the best people to do the research.

The structure is always a product of history and we have been investing very broadly into this research environment, the maintenance of which incurs significant costs. It's very hard to think how we could release resources from this environment, because it is so difficult to see what we could give up.

Limitations of Learning

In short, the limitations of learning experienced by the Aalto management were largely the same as those experienced earlier by the Aalto Transformation Team. Almost all senior executives were manning a post that they had no previous experience of in any organization. Aalto was also a new and unique organization in its early development with no one to ask

for previous experience of a similar project. Therefore there were necessarily limitations in how much the executives could learn.

No one has been before a president, a vice-president, everyone is doing what they are doing for the first time. Many here hold for the first time such executive positions.

On the other hand the executives were very experienced, either in academic world or as private sector professionals. Therefore their previous experience dictated much of the models they followed and limited their capability to come up with something entirely new, with a focus in applying existing best practice models to Aalto context.

I don't have much ambition to try to come up with a unique way of arranging this particular support service. Let's look how the good universities have done it and just copy it. Just like Stravinsky has said that minor artists borrow but the great ones steal.

Change Context: Feedback from the Staff

The discussion about how the staff perceived the change would logically belong here as the next Chapter. However, from the perspective of a change effort coordinated by the management the staff had more the role of an object rather than a subject, making it difficult to make a distinction between the context of the change itself and the efforts of the management. That is, effectively the efforts of the management were an essential part of the change context as perceived by the staff. Therefore the leaders' response and actions are discussed first in the next Chapter, before discussing the perceptions of the staff in Chapter 5.4.

5.3 Leaders' Responses

The theme of Chapter 5.1 was to provide insight into how first the Aalto Transformation Team and later Aalto University management as well as ordinary people working for the university experienced the *status quo* before Aalto transformation. The structure of the chapter emerged from the data with the perspective of organizational inertia in mind, but the essential question answered in that Chapter was "Why did Aalto come to be?" and how can organizational inertia actually be seen as a driving force increasing

the need for a new university. In Chapter 5.2 the key question was “What happened during the transformation process?” and how inertial phenomena affected the change effort.

So the leaders of the Aalto project had an understanding about what they were trying to accomplish, and they also observed a number of emerging difficulties that made it more challenging for them to reach these goals. The natural third question to answer is “What did the management try to do about it?” Answering this question is the purpose of this Chapter. A question of equal importance is “What the management did not do?”

5.3.1 Leaders' Responses: Planning 2007-09

The Aalto Transformation Team (A8) had a fairly unified understanding about what they tried to accomplish as well as about issues that were causing trouble during the transformation. Above all information constraints, internal political constraints, internal institutional constraints and external legitimacy constraints emerged clearly from the data as serious causes of concern for the team. Naturally the A8 had to handle all these issues at least on some basic level, such as taking care of necessary communications, or taking into account costs sunk into infrastructure or limitations in their own capability to learn. Therefore some of the response was likely self-evident and thus not present in the data as an interesting interview topic (it should be reminded that the interviews of A8 had been conducted earlier by another researcher with another perspective). On the other hand the data also suggests that some themes may be absent because they were deemed ‘force majeure’ by the informants and out of their control (even if it wasn’t necessarily so), such as external legitimacy constraints and partially even information constraints.

However, two clear themes obviously highly relevant for the informants emerged from the data: Internal political constraints and internal institutional constraints. Information constraints and limitations of learning emerged as secondary themes.

Internal Political Constraints

The project management tried to overcome internal political obstacles to the change by various means, of which the most important were converting respected individuals to support the cause, and encouraging commitment through various means.

As almost all members of the A8 were already VP-level university executives when they joined the team, they understood well the internal dynamics of the academic community and knew that they had to **gain the**

support of the professors to get anything done. They also knew that on the academic playground not all animals were equal, but some were more equal than others, so to say. Therefore it was important to identify certain key professors and try to get their support, or at least try to ensure that they would not openly oppose the project.

It's imperative to find the change agents inside the community. Even though the press has been saying that all opinions are equally valuable, in reality they are not. Those based on deep experience and good argumentation are much more valuable than some first impression delivered by a text message.

Converting opponents to our side, it's not power games, politics or anything, but handling and manipulating people.

The project management had a clear understanding that even though it was “their” project and they had to keep it moving, the real change would materialize only if the university community as a whole would take the change as their own. The management had to also take into account the conversational tradition of the universities demanding a certain level of involvement in everything that took place.

If we try to make all the decisions somewhere in the top, and don't allow the people to influence anything, it's the biggest possible damage we can do for the motivation of these smart people, who think that they are even smarter.

The most important practical solution the A8 came up with for encouraging the commitment was creating dozens of so called “**theme groups**” contributing to the planning of practically all fields of the project. These groups had hundreds of members and for some part their work was also used as a starting point for future planning. However, the primary reason for the groups was to facilitate commitment and communication.

It's a great challenge to find a position for everyone willing to participate in the teams, because it's so important to get people in. To create change agents inside the schools.

There were also different discussion forums set up, where the project management tried to gather and address concerns of the community.

Trying to get the wider community involved with the transformation was not an easy task. Problem was that the message often depended on who was asked, and the academic community and its sub-groups often had difficulty in articulating what they wanted, which caused frustration in the project management.

I've given up trying to get inside the administration. Now I just make my own decisions.

Internal Institutional Constraints

Another clear theme emerging from the interviews was that the project management really wanted to combat the established institutionalized ways of doing things. Essentially they advanced on four fronts: imposing a cultural change, introducing new operating models, showing a positive example, and trying to prevent a too early re-freezing of the organization into a new form before the change had progressed far enough.

The most fundamental level of change was the **cultural transformation**. This took many forms as the project advanced, but some of the key themes were trying to replace “controlling” by “servicing”, encouraging risk-taking and multiculturalism, emphasizing separation from the “government bureaucracy”, and underlining the value of teaching and basic research.

We're going through a major change in mind set. This university is about to rise the research and teaching to an entirely new level, and all this other nonsense will be subject to these main functions.

The cultural aspect of change was important also for the motivation of the project management itself. Many commented that they were participating because it was a chance to make history, and some even saw themselves fulfilling a national mission. A story of Aalto was born from the language of the cultural change, multiplied by especially the mass media. The A8 made a conscious effort to keep the story intact by showing an external unified image regardless of sometimes heated debates within the team.

In practice a new story wasn't enough, but A8 had to also come up with **practical new procedures**. The themes that later became to characterize

the whole transformation story were already there: reducing bureaucracy, strengthening leadership and emphasizing Aalto as an independent actor. It was important to come up with even radical ideas to challenge people into rethinking the institutionalized ways of doing things. In part the system of the voluntary ‘theme groups’ served also this goal, as it enabled the people from the different schools to share their best practices. Effectively this meant creating new institutions to replace the old ones.

Designing an administration is no different from designing a “löylykauha”. The experience has to be positive, it has to be understandable, it has to be clear.

As the project management was demanding something “radical” and rather ambiguous, it was necessary to show by their **own example** what they meant with their transformation story. Eventually the informal work-culture of the ambitious and interdisciplinary A8 had great symbolic value for visualizing the change, and could even be seen as the original source of many elements now considered to be parts of the Aalto image. A8 was also necessary for creating momentum for the change with a “yes, we can” – attitude.

[The first offices of A8] didn’t create a sense of doing something top-notch. But the upside of the place was that it forced these guys to really give up their cozy old offices in their old universities. It was a strong symbolic signal of the upcoming change.

How do you get things done? Saying that you’re going to do it anyway and asking the others to join you.

As the A8 observed that at least some parts of the organization slowly started moving and the change effort gathered pace, they became worried that the organization could “refreeze” again before any significant changes could really have been implemented. Therefore it was critical to get the new key managers in place and to not allow for instance the old three administrations to negotiate any new processes between themselves. The project management also tried to prevent new procedures from emerging as combinations of the old ones as long as there was a possibility of coming up with completely new procedures.

When the year changes, we have to contend with simply combining old models on many areas. But it is a dangerous thought philosophically, as it may prevent creating anything new.

The project management actually went to great lengths to prevent the old institutions from re-establishing themselves within the new university. One of the principal reasons for disintegrating TKK into four separate schools later during the transformation, for example, was to break down the old institutionalized central administration, which otherwise would have remained largely intact after the transformation.

Information Constraints

All informants were painfully aware of shortcomings in external communication. Some thought, however, that not much more could be done because they were working at their limits already and simply did not have the time. Others thought that getting more communications professionals to help would do the job. In any case the primary remedy for trying to ease the communication pressures was encouraging the commitment of the academic community, especially its key members, to the project. This could mostly be accomplished only through personally contacting the people, and on the other hand through the people's involvement with the change effort such as the theme group organization.

The greatest challenge is how to get your message through on a broad front and manage your time so that you can meet the right people. Because sending letters and putting up web pages aren't enough in this job, you really have to meet people personally.

Considering the internal communication of the project management, it seems that even within the small Aalto Transformation Team some members were better informed and kept closer contact with one another than the others. These members in general perceived no significant problems in the internal communication of the project management, while the other less informed members reported significant confusion in what they were doing. In any case, the internal communication of the project management was largely based on informal contact, and was made possible by establishing a separate project office, where the A8 could do its work

together without being spread out across the campuses. In practice, however, this did not solve all internal communication challenges as eventually the participants did most of their work meeting people elsewhere in the organization and had little time to be in contact with one another.

Limitations of Learning

There were three basic learning-based challenges that emerged from the data: 1) the project management did not have all the necessary skills for actually running or planning a university, 2) many solutions the project management was capable of producing were based on their own earlier experience, and 3) the project management had insufficient experience in actual management of large projects and process design.

The informants recognized the first challenge, but were confident that even though the A8 members were not specialists on every field, they still had extensive experience, and as a whole the team was widely regarded as the “dream team” for the job: if they could not do it, no one could do it. The same largely applied to the second challenge. The A8 tried to foster an entrepreneurial spirit and atmosphere that would encourage fresh, even radical, thinking and this seemed to succeed at least to a certain extent.

However, the strategic planning of the change effort was deemed an overwhelming task and therefore the project management decided to use a major international consulting firm to support in orchestrating the transformation, to provide international benchmarking and to contribute to the design of new processes and create presentations and other material. Many of the informants were very impressed by the contribution of the consultants in conceptualizing the change and facilitating the early stages of the change effort.

Perhaps we should have been more reckless in spending money to consultants who could have facilitated certain processes more effectively. University people are lousy at it. Some consultant could be here breathing on our neck every week.

This contribution progressively decreased as the project started to take shape. Different consultancies were used to support the project on selected fields also during the later stages.

5.3.2 Leaders' Responses: Implementation

2009-

Based on the accounts of the informants, Aalto University Management had identified several issues in the “old system” that they wanted to resolve, and the most significant were classified as internal political constraints, internal institutional constraints and limitations of collective rationality in Chapter 5.1.2. Furthermore, the informants recognized several challenges to the transformation process itself, with the most significant categorized as internal institutional constraints, internal political constraints, information constraints, external legitimacy constraints and limitations of collective rationality in Chapter 5.2.2.

The data suggests that in tackling these challenges, the main response of the management was focused on internal political constraints, internal institutional constraints and information constraints. Sunk costs and limitations of learning emerged as secondary themes in the leaders' response.

Internal Political Constraints

The new leaders realized that they would face internal political opposition against many of the reforms that they struggled to implement. The management responded by strengthening the leadership across the organization, using their own power and resources to support initiatives that were seen as beneficial for the transformation while denying support from initiatives perceived to stall the reform, using change agents, and trying to inspire commitment to the change in as much of the community as possible.

During the earlier phases of the Aalto project most of the planners' attention was focused on developing the project management and the support organization management. As the project advanced and Aalto started its operations as a functional university, however, the focus eventually turned on **developing strategic and academic leadership**.

We have been talking a lot about if it is possible to lead a university. ... And when you want to go where Aalto is going, you'll have to lead. It's a different thinking and culture. These universities are so large that you actually have to lead them. You can't just administrate them anymore.

What is the point in having a common organization if you don't have any common goals?

Here the key players were the President, the deans and the department managers, who no longer received their mandate and therefore also its limits from below through the tripartite democracy. Instead in the new system the mandate came from above, from their own superiors, ensuring a more direct chain of command and responsibility.

I think my mandate [as the President] to make decisions is greater, because the mandate kind of comes from the owners of this university, the responsible Board of the university.

The new deans have not been chosen by the traditional selection method. Instead we have tried to find as good as possible academic-, above all, leaders.

Department manager is a leader. He or she has the power to say no, and it's not like before when you had to think about the other guy in your team taking the manager's role over after a couple of years, so better not upset him.

Both information and resources were supposed to move along this straightforward chain of command, suppressing any informal coalitions or other invisible power structures bypassing the formal organizational structure. To compensate the extended power of the leaders, the idea was to also make the leaders more accountable for their performance and make replacing them easier to make the construction of personal kingdoms or dynasties more difficult (see Mintzberg's power games in Chapter 3.2.3).

We have the strong President who uses her budgeting power to distribute the money between the deans. She has also announced that she won't control how the deans shall distribute the money forward, but the deans distribute the resources between the departments. And the department manager then has the undivided responsibility for the financial situation of the department.

In the previous system it was not very easy to dismiss for instance the president as he was chosen through election. On

the contrary, it's very easy to kick me out if I make some serious mistakes. I have to have the support of the Board to fulfill my task.

Even though the new leadership model was meant to give the key academic leaders better tools for controlling the organization, the informants did also realize that the particular characteristics and traditions of the university environment had to be taken into account.

What we are trying to do is to develop a new leadership model that fits into a university. It's completely clear that it will be a combination of these old and new ideas, because obviously we can't just copy and import our leadership model from some big company.

In addition to strengthening the leadership across the organization, another major approach for overcoming the political resistance was supporting beneficial activities within the university, while denying support for initiatives that were deemed to take the university into wrong direction. In some cases it was enough to simply give permission and symbolic support for "Aalto-minded" activities, but the more powerful control tool was **resource control**. The management also had the power to enforce rules and policies.

The university is like a garden. We cannot grow the plants, they grow all by themselves. But we have to put in the soil and the fertilizer, and then we have to root out weeds to make space for the nice plants, and use the pruning scissors and such.

There were two kinds of important resource decisions that could be made: budgeting decisions and recruitment decisions. In theory the budgeting power made it possible for management to create focus areas within the university or support certain broader trends, such as basic science against applied science. In practice, however, the management understood that such management through resources fitted very poorly in a university environment.

One important driver is the message coming from the university management, where the university is putting its money.

If you ask our top researchers what they find rewarding, they answer that resources to do their job.

Of course it won't work that way that the President would define that these are the focus areas. Instead the focus areas emerge bottom-up.

Therefore the most significant way of exercising resource control was through recruitment decisions, making the new career system, the 'tenure track', perhaps the most important resource control initiative of the project. By introducing a new career system the management created a new set of rules how the internal competition of the university community would take part, and which characteristics were the most valuable, renewing the scene for the power games within the community.

The tenure track system is the most strategic initiative of this entire reform, and the fate of the whole university depends on how well the system works. ... 2020 when all the systems are finally ready and all the money has been spent and all the people have been hired, everything is up to what kind of people we have been able to hire.

Lastly, the management also recognized the importance of finding **change agents** inside the community and **encouraging commitment** by trying to get as many people as possible involved with the transformation effort.

It's of great importance that there are people who have credibility within the community, and who want to believe with their words and actions that this change is possible, or at the very least that the change is a possibility.

The theme groups were valuable because they facilitated internal cohesion of the community and encouraged people to get to know each other. The results themselves weren't so special.

Internal Institutional Constraints

The management's effort to break and reform some of the institutionalized behavior in the organization started with defining a new desired end state that crystallized around a story of "freeing" the academic community to focus on teaching and research. Reaching the goal and gaining sufficient momentum required the implementation of new processes and ways of doing things, which were in practice accomplished by hiring new key leaders from outside and reorganizing the responsibilities of existing staff.

The informants shared an **ambitious vision** of helping the Aalto University to grow into something much more dynamic, competitive and international than it had been. Many saw themselves as missionaries that would just need to make the academic community to wake up, open its eyes and unleash its full potential. Most informants saw that there was a lot of talent in the organization but it was wasted because "the way how things had been always done" was often old-fashioned, bureaucratic and ineffective.

We created a vision and an idea about building something far enough from the present day, so that the mere setting of the goal created movement and dynamics.

We have taken the people outside of their comfort zone, to question the environment where they have been used to work.

We don't use the argument "it has always been like this, so we shall do it like this for all eternity."

The uncertainty you see now in the organization tells that we have been able to detach ourselves from the old world.

The story of "freeing" the academic community to focus on teaching and research was aimed at both the administration and the academics. An important point here is that the informants saw these two groups largely separate organizations, with the same mission but very different roles. The main problem with the administration was seen to be the control culture it exercised over the teachers and researchers making their life often more difficult instead of helping them out. On the contrary, the issue with the academics was the inability to focus efforts and lack of ambition. The challenges of the groups were naturally interrelated.

Administration cannot be the primary function of this organization, instead it has to be research, teaching and art.

We're not some police in here, we're here servicing the teaching and research.

Administration or service organization is not the same thing as the academic community. ... The academic organization does all the results and the purpose of the service organization is to support it.

What this dualistic model meant, as some informants brought up, was that the two organizations also had to be managed differently. Managing the service organization was seen as straightforward top-down management, while the key principle of managing the academic organization was the academic freedom. As these two organizations had become largely interrelated in the old system through the administrative control that influenced many academic affairs, some change efforts of the new management caused confusion. The management for instance talked about increasing the academic freedom, but when they reshaped the administration into more effective and straightforward direction, the changes were interpreted by some academics to involve them as well and saw the reform as an attack against the academic freedom.

The administration has to be managed top-down. You have to be able to systematically implement changes, to define processes and to build it to fulfill an exact mission. On the other hand the primary way of managing the academic organization is the tenure track, with a very different time span.

The informants also brought up examples how the **implementation of new ways of doing things** had advanced. On a more abstract level many informants thought that the management had been largely successful in revitalizing the environment and rehabilitating basic values and activities like teaching and research. The more practical examples of successful implementation involved issues like the successful establishment of certain services, the ability of key executives to gather their own teams, the tenure track system that had gained acceptance nationally, and certain test

platforms with symbolic significance such as the new teaching and research environment Design Factory.

All informants regardless of their background – academic or corporate – saw the **appointment of external professionals** to key management positions a crucial measure in the effort of changing the institutionalized behavior. The same applied to the fact that the President and the first vice-president had not held senior executive positions in any of the old three universities. The new professional managers were seen to serve the goals of the transformation by bringing in expertise rarely present in universities and challenging the established methods and processes. Also the process how the key managers were hand-picked for their tasks was expected to set the standards for the renewed recruitment policy in Aalto.

If we would have just hired for instance our communications director or finance director from some other university, I think there would have been a strong temptation to continue business as usual.

We have a new President and five out of six deans are new, it's a major change.

An interesting detail was that the professional managers with a corporate background saw their move from the private sector to a university as something very unorthodox, underlining the special nature of the Aalto project. They also shared the same ideology as the other builders of Aalto, seeing themselves as taking part into a historic endeavor.

When I told people in my old organization that I was going to move to Aalto, they asked me if I had turned mad. Who on earth would leave the private sector to join a university?

As a member of the management team I want to influence where Aalto is going ... The structure of the organization, the people who work here, and the strategies we use.

Some key managers could be recruited from the outside to facilitate the change, but it was evident that for any transformation to actually materialize, the people already working in the organization would need to change their behavior. The management understood that it was an impossible request to expect that people doing the same job with the same

people would all of a sudden simply start behaving differently, because the management asked them to do so and changed the name of the organizational unit. Therefore it was necessary to also **reorganize the responsibilities** and tasks of the existing staff.

It's very difficult to behave differently if you have the same people and the same structure. "I'm the same person as yesterday when we did business, but today I have a completely new agenda." We obviously have to get the organization out of balance.

We have opened up new positions and people have applied for them, and so we have enabled a large amount of transfers between the schools and organizations.

Information Constraints

The informants recognized several limitations in both external and internal communication, but the efforts to improve the situation concentrated on external issues. A common attitude seemed to be that "the communication is imperfect, but we are doing our best, and not much else can be done". Some of the practical themes that emerged as remedies were facilitating a dialogue rather than one-way communication and telling the story by promoting successful examples. Improving the communication was also given as one of the motivators for building a matrix-form service organization.

A constant dialogue between management and the faculty was seen as the only beneficial way of communicating, with any top-down announcements likely to face fierce opposition. Some informants perceived that this was also an important contrast when compared to the old system and had therefore symbolic significance, while others dismissed this notion and simply saw the dialogue the only way of communicating in a university. However, a lot of top-down announcements actually did take place, and some informants also expressed their doubts that some "Aalto liturgy" had taken hold in the message of the management, decreasing rather than increasing the management's credibility.

I wouldn't call it communication, which somehow reminds me of some kind of propaganda or a dogma that you share to the people. I would rather call it a dialogue.

In **promoting the successful examples** and achievements of the Aalto community the management tried to tell their favored story of Aalto through tangible examples, and to simultaneously create a virtuous cycle to power up the transformation. The management had also realized the significance of external communications in internal communications, as Aalto was closely followed by the national mass media. As the media had after initial skepticism established a relatively positive attitude towards Aalto, many of the published stories supported the management's goals of inspiring and empowering the community and created an air of rapid development, even if on many fields the actual progress was much slower than could be understood from the media reports.

Thank God we have the Design Factory. We have something concrete, new, different. Without it we would be a little helpless when people come to see what we are doing differently in Aalto. We would have nothing else to show than some powerpoint slides in old lecture halls about what we are intending to do. But there you can see and experience and sense the new culture.

Interestingly, some informants brought up the new **matrix organization** as a tool for improving communications. The point was that as the service organization had been constructed in matrix form with service personnel responsible both to their superior in the service organization and to their superior in the academic organization, it made it impossible for the service professionals to make decisions and plan reforms without consulting the academics. The organization was also intended to reveal any conflicts within the organization, without burying them behind the scenes of a faceless administration, promoting transparency.

In a matrix you cannot live like in a strict line organization, where you say that "my responsibility ends here, I take care of only these bullet points".

Sunk Costs

The new management was well aware that the large overheads associated with infrastructure and personnel costs of a university – typical sunk costs – limited the feasible options for reshaping the organization. Nonetheless, they made a serious effort to renew some visible elements where the culture

and power structure of the old system had become embedded in the everyday work environment. These elements with symbolic significance included issues like the office layout illustrating the authority of executives, decoration of offices symbolizing power and long history, and a general formalism encouraging for instance the use of people's last names instead of first names when referring to someone. The new management could have for instance taken over the TKK central administration and turned it into Aalto administration, but instead chose to use a significant amount of time and money to construct a **new environment visualizing the new culture** elsewhere.

I'm trying to show that the size of your office doesn't tell anything about your influence.

There's been a lot of management by fear.

The formal authority is empty, it's incredibly old-fashioned, you can't get very far with it.

As some of the old symbols of authority were brought down, the management had to try to redefine the desirable new end state through their own actions, realizing that the **structures and actors of the early days of the new organization would have a significant and long-lasting legacy**. This further amplified the need to find a like-minded team, "a coalition of the willing", with the energy and ambition to see that the transformation would meet its goals. Both the Aalto Transformation Team and Aalto University top management satisfied these requirements, with the shared dream ensuring homogeneity of the key players, who also largely defined their own goals. The homogeneity attracted like-minded and repelled critical voices, who either avoided the change effort altogether, were kept away from key positions, or left the project when they noticed that the critical thoughts were not welcomed.

I expect us to create an outstanding work culture here in [Aalto central administration]. Such work culture that we can proudly spread to the schools and from there to the departments.

Sharing a dream binds the people working with this project together. It binds the people who sacrifice themselves even on

the level of feelings for this goal. This brings the risk that you can also get insulted on the level of feelings.

X became a little side-lined when he started to question if there was any sense in what we were doing.

Especially in the earlier phases of the project, it was also evident that people participating in the effort were the key, not how these people were organized. This contributed to the birth of certain **idiosyncronic jobs**, where some of the participants effectively shaped their own job descriptions according to their own ambitions and abilities.

Limitations of Learning

Finally, the Aalto management knew, as did the Aalto Transformation Team, that they did not have all the necessary experience to take them where they wanted to go, and on the other hand the experience they had limited the set of solutions they were likely to come up with. An obvious solution for tackling both these challenges was the **hiring of the external professional managers** to take the lead on certain key areas and to bring their input to the discussions of the top management.

Another source of skills and knowledge was the **academic expertise within the own university**, especially on such relevant fields as strategy, management, leadership and work psychology. As most of the Aalto management had not been deeply involved in major organizational transformations before, some professors could contribute by giving a broader perspective to the change effort and explaining typical organizational phenomena.

If I have written a pile of articles around the world about strategic alliances, and nobody asks me anything when we are creating a strategic alliance, it's pretty stupid because I could probably tell you something about it. Similarly if someone is making something out of cellulose, perhaps it might be a good idea to ask the cellulose professor about it.

Also the external professional managers brought some **theoretical models** with them, defining the language for the management's discussion about the change. Creating an entirely new and unique organizational model from a scratch was considered unrealistic, because it was difficult to

learn fast enough to be able to build a system that would be better than the old one. Instead it was more feasible to create a model based on existing theory, and try to adapt this model to the actual environment of the Aalto University.

We look for theoretical models that could work in this kind of environment. Then we can start moving forward from some basic general model that we have taken from the literature or somewhere, and begin to build elements that have worked here in some earlier situation, or that some of our professors have been doing in the corporate world.

5.4 Change Context: Feedback from the Staff – Fears and Resistance

The previous Chapters have introduced already several aspects of the available research data. The emerging framework of organizational inertia and the aggregate dimensions of Triggers of Change, Change Context and Leaders' Responses have followed through the chapters, while the perspective has changed according to the primary data source from Aalto Transformation Team to Aalto University management and to feedback from the staff. These chapters have been an attempt to describe what the management has tried to accomplish, what challenges they have faced and what they have done to overcome the challenges. However, as one manager put it:

The transformation has to have a clear positive effect on the departments, the infrastructure, and the personnel. That is the reality check – if we can't show any progress there, there's no point of doing this. Then we should not have done this. If we only build the façade, a fancy graphical outlook and cool events, then we are on a very thin ice and will face the fate of the Irish national economy.

Therefore it was important to look into how the staff was experiencing the change. Chapter 5.1.3 also looked into the hopes and positive expectations of the staff in order to figure out if the management was responding to an actual demand. Putting together all the previous Chapters 5.1-5.3 a picture of the transformation effort emerges. The purpose of this final Chapter is to look into what kind of inertial elements seemed to emerge from this very effort, namely the actions of the management. Therefore "the management" in this chapter means both the Aalto Transformation Team and the Aalto University management, although earlier it referred only to the latter.

Again it should be remembered that the feedback material was originally collected for the purpose of giving the personnel a chance to express their concerns regarding the change. The structure of the chapter follows from the structure of the earlier chapters, as the perspective is how the staff experienced the management's actions. However, the feedback from the staff was gathered in late autumn 2009, a year before the interviews of the Aalto University management, and before the management had been fully assembled. Therefore the relationship between the actions reported by the

management and the staff feedback is not causal, but rather two different perspectives on the same themes.

As the management concentrated most of its efforts into overcoming the information constraints, internal political constraints, internal institutional constraints, and external legitimacy constraints, it should be expected that these themes are strongly represented in the staff's comments as well. This is indeed the case, excluding the external legitimacy constraints, as these actions were aimed outside the organization and did not therefore directly affect the personnel.

Information Constraints

Communication challenges were the shortcomings that the management was most willing to admit at all phases of the transformation. A lot of effort was put to improve the communication, but still the main focus was in doing rather than in telling what was done, and the time was the scarcest of resources. There were a few units that reported that they were happy with the information they got and knew what was happening, but the overwhelming majority of the units across the entire organization from administration to academic units reported some degree of discontent with how the change process was communicated. The most general type of critical feedback was that the people simply did not understand what was going on, and how the change would affect them personally.

The management had made creating a strong and compelling change story a priority. According to the feedback, the story was actually very well received in general, with the goals seen as good and ambitious. However, the story seemed to also slightly backfire, because many units pointed out that most communication was very high level and abstract, with information about acute practical issues nowhere to be found. This applied to some degree also to the new strategy that a few units commented to be complex and difficult to understand, leaving the goals of the project unclear and vague for some. There were also comments that even though the story was nice, it would have been better to see some successful examples explaining what the change meant in practice – a concern shared also by the management.

Our people feel that they are complete bystanders in the Aalto project, if they are informed about decisions only after the decisions have been made, and no chance for discussion,

comments and orientation is given during the preparation of the decision.

The goals are vague. Strategy should not be just a list of good things but there should be courage to choose what not to do.

The perceived communication problems were amplified for several reasons. First, the management tried to share information by meeting people on the field, but there were only a few managers and thousands of people in the organization. Furthermore, the internal situational awareness of the management was often less than perfect, meaning that the message carried by different managers might vary. Second, there was great variation in how much of help the established academic and administrative leaders through the organization were. Some tried to cooperate the best way they could, but didn't get sufficient information from the Aalto management to share it forward, while others were unwilling or incapable of helping the change effort. Naturally there were also successful examples. Third, the staff often reacted to the information shortages by trying to contact the Aalto management directly, but these efforts were rarely successful as the management was overstretched with their duties. As a result there was increasing frustration and discontent in the staff, with many units commenting that Aalto did little to respect its own values that included openness. Some of the sharpest critique was aimed at the Aalto University Board that disclosed little to none of its decisions or discussions to the public.

Transformation process is secretive and closed, staff is left out.

Management is invisible and impossible to contact, contact attempts are not responded.

The communication shortcomings also sparked some comments about the lack of professionalism of the management. However, likely the most serious problem was that there seemed to be an extended period during the critical phases of the transformation, when rumors and gossip dominated as a primary source of information instead of facts.

Internal Political Constraints

From the very beginning, the management was well aware of the significance of internal politics involved in the change effort and stated that for the transformation to be successful it would need the support of the academic community. The management tried to facilitate the commitment of the staff by arranging discussion events and creating the theme groups to support their own planning, and recruited change agents and tried to strengthen the leadership across the organization.

The feedback from the units suggests that the management's fears of the scale of the internal politics and power games were well founded. There was huge heterogeneity across different units and organizational functions, with the most units mainly concerned how they would succeed in rivalry against others within the same university. The smaller schools were concerned if they would get enough power to manage their own affairs, and complained that all the decisions were made in Otaniemi campus where TKK and Aalto central administration was located, and the other two campuses had no other role than following the orders. There was also suspicion that the resources would not be distributed "fairly" between the schools, with some even claiming that the recent Research Assessment Exercise had been "politically motivated" and now Aalto was using the results to make "wrong" resource allocation decisions. The administrative units were complaining that they had to adapt to the processes of other schools, and there were even some academic subunits of the departments that wanted to send their own feedback because they felt that they were so different from their department that they could not get their feedback through that way.

Will HSE be forced to decrease its quality so that all the schools can start from the same level?

We feel that we are sidelined and marginalized in our department both in the planning of teaching and in the distribution of resources.

Moreover, the only division did not go along the unit boundaries but also along the different personnel groups, such as professors, other academic staff and support staff. The management had promoted the tenure track career system as perhaps the most important improvement brought by Aalto, but in the first phase the system was opened only for researchers. This sparked bitter comments from the excluded personnel groups that the system encouraged inequality and most of the staff had been abandoned by

the management. There were also concerns how the representation of different personnel groups would be taken care of in the university administration, because, unlike earlier, all the representative councils of Aalto no longer had mandate seats for all the groups as in the old tripartite system.

There are no seats for all the subgroups of personnel in the council, will this cause tensions between the groups?

Some of the lecturers are worried about the distribution of the seats in the council, because the professors are getting 5 seats out of 11 while the lecturers have room only among the 3 seats reserved for other personnel.

The professors think that the aforementioned distribution of seats is satisfying, with them carrying the heaviest burden of responsibility.

There was also feedback commenting the change effort itself. The management had emphasized encouraging involvement and commitment of the academic community to the change effort. It seems, however, that the efforts did not satisfy everybody, as the process faced a lot of criticism especially from the TKK and HSE administration, as well as from certain academic units. Many administrative units complained that their expertise had been completely ignored, while others called encouraging staff's involvement just a façade.

Our opinion has not been listened to, or at least it has not been heard.

Internal Institutional Constraints

The management had set a cultural renewal one of their key targets, questioning the established ways of doing things and enabling the implementation of new processes and procedures. The new system was supposed to mean more academic freedom, less bureaucracy and professionally arranged support services for the teaching and research. This goal was widely accepted and supported in the academic units. In many units the efforts of the management to empower people seemed to bear

fruit, with comments lauding the transformation process as inspiring and the new administration as more professional. Even some administrative units that were in general very negative admitted that the new co-operation within administration was a positive trend, and that Aalto was a good “excuse” for improving internal processes. In some units the spirits were high enough to repeat the message that the management was most eager to hear: “We will create Aalto.” Despite the fact that most of the staff was actually still excluded from the tenure track career system, it was perceived to facilitate more professional and better quality research in general.

Not all were expecting for the things to change for the better, however. Some academic as well as administrative units pointed out that the culture of efficiency and strong leadership fitted poorly in a university. Concrete plans and more practical decisions were expected, and some were worried about the current good practices and if they would be “sacrificed to the altar of harmonization”. It was also pointed out that the management wanted change, but failed to explain what exactly was wrong with the present situation. Some of the new procedures had also not been completely planned through or were vaguely communicated, which gave rise to concerns if the new processes would do more damage than good.

How can we prevent mistakes in decision making if there are no more officials with the responsibility for the legality of their actions.

The new career system should be an opportunity, not a threat to people who don't fit the model.

The management had wanted to recruit external professionals for certain top management positions exactly because they wanted new input with an external perspective to challenge the internal institutions. This move backfired especially in certain administrative units, where the closed recruitment process with no possibility for the internal applicants to apply for the positions was used as an illustrative example of the lack of transparency and non-conversational leadership style of the top management.

The method of silent recruitment has been experienced as regrettable and demotivating, as we don't even know which posts are open to be filled.

Another source of great doubts was the management's promise of decreasing bureaucracy. Few units had yet witnessed any change to the better, and the fact that TKK still remained as a huge school with its own complex internal structure under the Aalto umbrella meant that from the perspective of TKK units, the university was actually even more bureaucratic and distant than it had been before. The feeling was shared in previously independent HSE and TaiK, but in TKK units the whole TKK level of the organization was widely regarded as obsolete and unnecessary. As of 2009 there were also few signs of the promised extra resources, and as most of the news was about the building of the central administration, many units believed that actually the new central administration spent most of the extra money.

All kinds of measurement and assessment seem to be increasing instead of decreasing.

The suggested administrative structure feels heavy, binds a lot of resources and widens the gap between management and teaching- and research units.

TKK was broken down to four schools based on the four TKK faculties in the end of year 2010.

Sunk Costs and Limitations of Learning

In addition to the primary themes mentioned above, there was also some evidence of staff's response to the management's efforts to curb the inertia caused by sunk costs and limitations of learning.

The close-knit management team had generated a strong transformation story and wanted to catalyze the change with their energizing example. Despite the generally positive response, there were still many that saw the management's efforts as "lots of talk, little action". Especially within the administrative staff the management's ambition, drive and small attention to the past created also a feeling of inadequacy as well as insecurity over personal employment. As a result of a number of major earlier transformations just recently e.g. in TKK, there was also growing weariness towards yet another transformation both in academic and administrative staff. The transformation also created a lot of extra work for the

administrative staff, causing many to complain that they were “overwhelmed” by the change.

Couldn't you just leave us alone and give us a chance to concentrate on our real jobs?

Concerning the limitations of learning, especially many academic units expressed their support for the professional managers with corporate background, but underlined that the new managers would have to learn how things were done in a university. However, some units expressed that they were also ready to learn from the external experience. Another learning-related issue was that some units commented that they were eager to develop their practices, but that “it was difficult to be creative in the middle of a terrible hurry”. The management was frustrated that it was difficult to get much of the staff involved with the change effort, but possibly the extra administrative work caused by the uncertainty of the transformation was a factor limiting the possibilities of the staff to contribute even if they would have wanted to.

The professional managers from outside don't have a deep understanding of the academic world, cooperation requires a process of mutual learning.

5.5 The Relative Significance of the Emergent Themes

Based on the analysis in the previous Chapters, it should be clear that the Aalto transformation was a very dynamic and occasionally even ambiguous project, with the goals, perceptions and responses constantly on the move. The dataset makes it possible to discuss the differences in what were the challenges of the old system that Aalto tried to solve, what were the challenges emerging from the transformation effort itself, and where did the management concentrate its efforts.

The relative significance of the different themes in the data is portrayed in Table 6. Themes with strong support in the data are classified as ‘primary’, themes with moderate support in the data as ‘secondary’, and themes which barely emerge from the data as ‘tertiary’. If there has been no clear evidence for a particular theme, the theme has been marked as ‘-’.

Table 6: The relative significance of emerging themes

1. Planning phase 2007-09			
<u>Second Order Themes</u>	<u>Aggregate Dimensions</u>		
	A) Triggers of Change: Inertia in the old system	B) Change Context: Inertia in the Transformation	C) Leaders' Responses
i) Sunk costs	1.A.i) Tertiary	1.B.i) -	1.C.i) -
ii) Information constraints	1.A.ii) -	1.B.ii) Primary	1.C.ii) Primary
iii) Internal political constraints	1.A.iii) Primary	1.B.iii) Primary	1.C.iii) Primary
iv) Internal institutional constraints	1.A.iv) Primary	1.B.iv) Primary	1.C.iv) Primary
v) Barriers of entry/exit	1.A.v) Secondary	1.B.v) Tertiary	1.C.v) -
vi) External legitimacy constraints	1.A.vi) Primary	1.B.vi) Primary	1.C.vi) -
vii) Limitations of collective rationality	1.A.vii) -	1.B.vii) Secondary	1.C.vii) -
viii) Limitations of learning	1.A.viii) -	1.B.viii) Secondary	1.C.viii) Secondary
2. Implementation phase 2009-			
<u>Second Order Themes</u>	<u>Aggregate Dimensions</u>		
	A) Triggers of Change: Inertia in the old system	B) Change Context: Inertia in the Transformation	C) Leaders' Responses
i) Sunk costs	2.A.i) -	2.B.i) Secondary	2.C.i) Secondary
ii) Information constraints	2.A.ii) -	2.B.ii) Primary	2.C.ii) Primary
iii) Internal political constraints	2.A.iii) Primary	2.B.iii) Primary	2.C.iii) Primary
iv) Internal institutional constraints	2.A.iv) Primary	2.B.iv) Primary	2.C.iv) Primary
v) Barriers of entry/exit	2.A.v) -	2.B.v) Tertiary	2.C.v) -
vi) External legitimacy constraints	2.A.vi) Secondary	2.B.vi) Primary	2.C.vi) -
vii) Limitations of collective rationality	2.A.vii) Primary	2.B.vii) Primary	2.C.vii) -
viii) Limitations of learning	2.A.viii) -	2.B.viii) Tertiary	2.C.viii) Secondary
3. Feedback from the Staff 2009			
<u>Second Order Themes</u>	<u>Aggregate Dimensions</u>		
	A) Triggers of Change: Inertia in the old system - Staff's hope for a better future	B) Change Context: Inertia in the Transformation - Staff's fears and resistance	
i) Sunk costs	3.A.i) Primary	3.B.i) Secondary	
ii) Information constraints	3.A.ii) Tertiary	3.B.ii) Primary	
iii) Internal political constraints	3.A.iii) -	3.B.iii) Primary	
iv) Internal institutional constraints	3.A.iv) Primary	3.B.iv) Primary	
v) Barriers of entry/exit	3.A.v) -	3.B.v) Tertiary	
vi) External legitimacy constraints	3.A.vi) -	3.B.vi) Tertiary	
vii) Limitations of collective rationality	3.A.vii) -	3.B.vii) -	
viii) Limitations of learning	3.A.viii) -	3.B.viii) Secondary	

As a disclaimer it must be remembered that the absence of a certain theme from the research data does not necessarily imply that the theme would have been absent in reality as well. The informants have had the chance to withhold information at their discretion, and some themes may have been left underemphasized simply because they have not been considered relevant or interesting by informants and interviewers. However, the themes identified as important by the informants should be appropriately presented.

Significance of internal political and institutional constraints.

Internal political and institutional constraints were easily the most prominent themes emerging from all sets of data and during all phases of the transformation. They emerged as primary goals and issues that were tried to be solved by the Aalto transformation as well as strong forces making the life of the change leaders occasionally very difficult. Accordingly the management also aimed the blunt of their efforts to resolving these issues. From the staff's point of view these managements' efforts were the source of much of the stress and opposition of the change effort as the traditional institutions and informal political structures were challenged. However, at the same time the staff recognized many of the shortcomings of the institutions of the old system and many were actually looking forward to the change, almost any change.

Information constraints caused by the transformation.

Information constraints were a major issue causing challenges for the management, and much of the change efforts were focused in trying to improve communication and gather better information to support decision-making. However, the information constraints did not emerge from any dataset as a significant issue in the old system, so it seems that communication was a very change management related issue. Nevertheless, this could easily be interpreted by the academic community so that communication in Aalto University is worse than in the old universities, which could have negative long-term consequences. The more centralized decision-making system with less members of the academic community directly involved in the decision-making and access to first-hand information may have contributed to the shortcomings perceived by the staff.

External legitimacy constraints perceived as a *force majeure* or a *tabu*? The external legitimacy constraints emerged as a strong theme characterizing both the goals of Aalto as well as the change process itself. The management identified the strong pressure and influence of external actors towards Aalto. Interestingly, based on interview data, the

management did nothing to the situation, implying that the externally imposed constraints were recognized as a *force majeure* that the Aalto simply had to take for granted. However, based on secondary information sources outside the interviews, it is likely that Aalto management actually contributed significant efforts to trying to change the external institutions, all the way down to trying to customize the reformed legislation to the needs of Aalto. Based on favorable changes that actually took place in the environment, this is the more likely case. It would suggest that the managers were relaxed to disclose their opinions on the internal state of their own organization, but the external issues were a *tabu* or a 'trade secret' that was not wanted to be documented in any study.

Limitations of collective rationality escaping the attention of the managers. Issues related to the limitations of collective rationality emerged as a significant theme explaining phenomena both during planning and implementation phases of the project. However, there was no evident management response to these themes. This should not be especially surprising, if the issue really is the shortcomings of the management's own rationality making the phenomena by definition difficult to identify. The other explanation is that the informants feared that suggestions for correcting measures would be interpreted as a critique towards their own team.

Sunk costs and barriers of entry/exit are not interesting. Regardless of their economic significance, sunk costs and barriers of entry/exit emerged only as secondary themes at their best from the data. The lame appearance would suggest that either the managers feel that these issues are so obvious that there's not much to discuss about them, or then the academic managers simply are not very interested in economic issues. Especially the last notion might have significant implications to decision-making in a university if it is true, but any such conclusions would require further studies.

6. Discussion

This final Part of the study begins with a discussion of the findings in Chapter 6.1. I present a critique and suggestions for further research in Chapter 6.2, and the final conclusions follow in Chapter 6.3.

Due to the broad scope of the observed phenomena and the resulting wide array of necessary interpretations, this discussion is not meant to be exhaustive. Rather my purpose is to highlight some representative observations as a starting point for interpreting the literature reviewed in Chapter 3 and the empirical data presented in Chapter 5.

6.1 Organizational Inertia in Aalto University

The starting point of this study was the expectation that organizational inertia would play some kind of role in the examined merger of TKK, HSE and TaiK to become Aalto University. Returning to the old debate between adaptation and selection (inertial) camps discussed in Chapter 1.4.5, it was never claimed that adaptation would not have happened in the studied transformation, or even that the inertial forces would have been more significant than adaptive capabilities. My claim has been simply to examine the inertial side of the story and leave the adaptive perspective for others to explore.

Be that as it may, but I claim that based on my empirical evidence there is ample proof of diverse and significant inertial phenomena in this particular merger. The inertial forces played a part not only in complicating the top-down controlled change effort, but they significantly contributed to the perceived shortcomings of the pre-merger *status quo* as well, therefore creating a rationale for the change effort itself.

6.1.1 Sunk Costs

Although one of the less prominent themes in the study, some interesting conclusions can still be drawn from the more elaborate sides of the sunk costs.

On a basic level, it can be said that sunk costs represented an obvious source of inertia during the change. Compared to the more elusive themes of inertia, basic resource-based sunk costs can also be easily understood by common sense. This brought sunk costs –related issues to the spotlight of public debate during Aalto transformation, which was evident for example in the heated discussion about what kind of campus structure Aalto should

have. Sunk costs –arguments dominated also the numerous ‘synergy’ – debates about finding savings through merging the support functions, which caused concern and major insecurity especially in the administrative staff.

More interestingly, it seems that the sunk costs contributed to the change resistance of administrative staff also on personal level. In line with the findings of Inchniowski and Shaw (1995), it seems that the personal investment of individuals to organization –specific and task-specific skills that were previously highly valued and that had taken a long time to accumulate might have made it rational to oppose Aalto transformation. This would not have been as important in any transformation, but because Aalto was labeled as the vanguard of a national reform, there was a risk of nation-wide degradation of prestige and career possibilities for the old-school professionals if Aalto would be successful in redefining which skills were valued and which were not. To a certain extent it may be that the same argumentation would apply also to certain academics representing the more applied fields of science that turned hostile against the change when the new management started to emphasize the value of basic research over applied research.

Another interesting notion is the valuation of mental and symbolic sunk costs over physical costs. Even though there were significant resources bound to the old infrastructure, the new management deemed that there were so many invisible controls embedded in it (Scott, 2003: 317), that it was more reasonable to create completely new “Aalto space” than try to convert and refurbish something old.

6.1.2 Information Constraints

Not surprisingly for a major change effort, information constraints emerged as one of the dominant inertial themes characterizing the whole transformation. This was further underlined by the fact that information constraints was the only primary theme emerging from the study with no evidence suggesting that communications would have been a particular problem before the transformation effort began.

The management was successful in creating a compelling vision of the desired future state of Aalto University that was widely accepted by the faculty, amplified by the national media distinguishing Aalto from the other universities, and ensuring Aalto privileges in funding and regulation. An ambitious vision worked also as a driver for the managers themselves, and attracted talented people to join the effort. However, the transformation story had one major flaw. One of the most significant early goals of the new

management was to transform the university administration, and because this had to be accomplished mostly with the existing people, it was necessary to win the support of the administrative staff. But the management was unable to create a story that would have empowered the administration, instead the story stigmatized the old administration as a failure that had to be repaired, and the message received by the academic units was that they would be 'freed from the old administration's oppression'. Unavoidably this failure in creating a more balanced story was a source of deep insecurity and open opposition to the change in the old administrative units. This negative effect may have been even more significant because the data suggests that the administrative staff may in general identify itself more closely with the organization than the academic staff that often sees the organization as a simple utility.

Another major set of information constraints evident through the transformation was the selective perception and exposure to information caused by the goal displacement of sub-groups within the organization (March and Simon, 1958: 150-158). In the case of Aalto transformation the issue was not so much the creation of new such sub-groups, because most of them were inherited by Aalto from its predecessors (notably the three original schools themselves), but the very diverse goals and perceptions of the existing groups. The only significant new sub-group of the organization was the Aalto management itself. There was no major change in the goals and perceptions when the sub-groups were formally integrated into a new organization, meaning that the content of in-group communication remained very selective. Therefore a homogenous message sent by the management was interpreted very differently in different parts of the organization.

Neither can the significance of information as power be downplayed. There is no evidence that the management would have used withholding of information as a source of power on purpose (Aldrich 1999: 153). However, it is evident that the *de facto* decision to exclude the boards and presidents of TKK, HSE and TaiK from the strategic discussions in Aalto Transformation Team and Aalto University foundation Board meant the takeover of the old universities under a new jurisdiction, regardless that the old institutions were required to formally approve certain decisions. A similar 'information coup' took place when the new Aalto management announced that they would inform the administrative units how the administrative processes would be structured. The other option would have been allowing the old administrations to negotiate a new structure that

would then have been assigned under a new manager, but this solution would have left the power of information lower in the organization.

Many writers (e.g. Cohen, March and Simon 1972, Hannan and Freeman 1977, Aldrich 1999 and Scott 2003) suggest that the partially irrational internal information processes in expert organizations such as universities make them especially prone to defective decision-making processes. Without doubt the collegial decision-making system in the old system had serious flaws. However, the centralization of power, lack of established processes and fatigue made information processing capabilities a critical issue for the Aalto management. The empirical evidence suggests that optimism, overconfidence and selective use of information degraded the management's situational awareness during the early phases of the project. It should be also be recognized that the social reality created by the early Aalto actors, especially the Aalto Transformation Team, set strong limitations for the later actors, such as Aalto University management, to interpret their environment. Furthermore, the collegial decision-making bodies had been important instruments for communicating important developments between the management and the academic community. Disbanding these forums made it much more difficult for the management to get their message through and gather real-time feedback.

As the project progressed and the new university management was appointed, it seems that attention patterns became more important, with variation in results by where the key leaders turned their attention to, and by who attended to what. As much of the strategic decision-making revolved around the President, the process how the President's attention was focused, who had access to the President, and where came the information that the President's decision-making was based on, became critical issues of the Aalto university decision-making.

6.1.3 Internal Political Constraints

Internal political constraints emerged from the data as an extremely prominent theme second only to internal institutional constraints. There was significant evidence supporting internal politics as a source of inertia across different phases of the project and all informant groups. This is not particularly surprising in light of existing literature, much of which suggests that for instance major change, large size, maturity and high decentralization in expert organizations generally make organizations more susceptible to political games (Mintzberg 2009).

Probably the most characteristic political feature evident in the data was the central position of the academic staff, especially the professors, in the

perceived dominant coalition (Scott 2003) whose preferences could not be neglected in the change effort. Even after strengthening the leadership across the organization, centralization of power and seeking to define academic freedom more narrowly than before, the new management recognized that the strategic leadership of the university's research and teaching was in the collective control of the academic faculty, and that the support of at least key academics was needed for other reforms as well. Therefore the core of the dominant coalition remained largely the same through the transformation. What did happen, however, was that the tripartite system was dissolved, meaning that the academics, other staff and students no longer had formal power in the decision-making system. Therefore it could be asked, did the other members of the academic community than the prominent professors lose their power, if the other staff and students were no longer part of the dominant coalition. The answer is yes and no.

On one hand all the tripartite groups of university democracy lost their formal power, and the representative democracy was replaced with a system where the formal power and responsibility was concentrated on certain leaders. Although the new leaders were more accountable for their decisions, the debate that previously could take place openly in formal tripartite decision-making bodies, had to move behind the scenes, where invisible lobbyists tried to influence the decision-makers. The power of the internal groups could remain high, but it became dependent on the goodwill and attention of the decision-makers, and unwanted voices could be simply ignored.

On the other hand, however, it can be questioned if the non-professor staff and students were members of an actual dominant coalition in the old system at all, and how open and transparent the decision-making in the tripartite bodies really was. If the old system is considered more like a decoupled façade of a democracy with the important decisions *de facto* arranged behind the scenes by key leaders, then the dominant coalition effectively remained the same in the transformation, constituting of all internal groups whose support was needed for a certain initiative, with the coalition constantly taking a new shape. In this interpretation the system simply became more effective with clearer responsibilities. In neither case, however, the actual decision-making system can be called especially open or transparent although forums for debate existed.

Another interesting topic emerging from the data is the issue of resource control. Scott (2003) argues that the resource distribution is a significant indicator of the "true" goals of the management, as opposed to the

ceremonial goals emphasized in political rhetoric. During the Aalto transformation the resource distribution gained a variation of this interpretation. As the academic community was expecting significant extra resources based on political rhetoric and public discussion in the media, but not much of the resources had actualized by 2009, much of the academic staff interpreted the lack of resources as an indicator that Aalto was just talk and that the rest of the promised positive reforms wouldn't actualize either.

Furthermore, much support could be found for the claim of Hannan and Freeman (1977) that any alteration of organizational structure would cause political resistance because even if the reorganization is considered beneficial as a whole, most benefits will be shared and are realized only in the long run, while most disadvantages of the reorganization normally affect only a part of the organization, and are realized immediately. Even though practically all Aalto's internal subgroups officially supported the merger as a whole, in practice many of the subgroups fought back fiercely to halt the entire transformation when they felt that their group was at a relative disadvantage. Interestingly the source of this most intense internal opposition seemed to circulate around the organization as the transformation process advanced: starting from TKK top management and TaiK students, moving to HSE top management and certain parts of TaiK, then to TKK and HSE administration, and finally to certain more applied science –oriented academic units of TKK and HSE.

Finally, the distinction between user and supporter –orientations available for organizational participants (see Chapter 3.2.3) is interesting in the context of Aalto transformation. An expected development is the change from the Aalto Transformation Team and early Aalto University management (that were heavily dominated by dedicated supporters) to the later much extended Aalto University management where participants with a more pragmatic user orientation were becoming more abundant. The shifting balance caused some tension between the different orientations. However, it seems that supporters were abundant not only in the Aalto proponents, the new management and early adopters, but also in the old universities with the dedication aimed at the existing structures instead of Aalto. In general, there seemed to be relatively more supporters of the old system in administration than in academic units, and more in HSE and TaiK than in the larger TKK. From this perspective, 'supporting a noble cause' was not the privilege of Aalto management as the new managers often liked to think, but rather a clash of supporters of different ideologies took place. If this has been the case, a transformation story based on past strengths might have been more effective than one based on future

opportunities in such units. However, such recognition of the past proved difficult to be integrated to the official story of a historical change.

6.1.4 Internal Institutional Constraints

Internal institutional constraints emerged as the dominant theme characterizing organizational inertia in universities. Much of the change effort culminated to the new management's attempt to change the "control culture" of the past to the "service culture" of the future, but more broadly the change was about trying to change how things were done in a university, which required challenging the institutionalized behavior. Simultaneously it was necessary to create a new pluralistic Aalto culture that would have something to offer for each of the old universities with strong, long and quite homogenous cultural roots.

The strong cultures of the old universities and their certain subunits were a decisive factor in shaping the debate around Aalto transformation. As Hannan and Freeman (1977) suggested, the normatively agreed processes seemed to significantly limit the serious consideration of different available options to only a few alternatives, which was evident for instance in the work of the 'theme groups' set up in 2008. Most of the suggestions made by the groups were incremental developments or compromises between existing solutions. The normative approval also granted justification and organizing principle to forces that chose to oppose the change by providing a common cause above mere self-interest. The ambiguous concepts of academic freedom and classical humboldtian university provided this ammunition for the opponents of national university reform. The power of such concepts was so great that they were actually used by the proponents of the change as well to support their own cause. The management claimed that they were paving the way for academic freedom, and even nurtured visions where the new Aalto University would restore the original humboldtian virtues (instead of the "misinterpreted" humboldtian virtues championed by their opponents) to value, such as bringing the students back to the core of learning in the university. This part of the management's rhetoric stemming from the recognized institutions bears echoes from the work of Clemens and Cook (1999), who claim that the most ambitious innovators may well cloak their efforts for change in appeals to restore tradition to keep their calls for change within accepted models.

In general, however, it seems that the Aalto management has had the courage to challenge the old institutions directly. Therefore the management must have seen the culture not only as something static and

institutionalized, but also as a malleable tool that can have been used in transforming the organization, as suggested by Gioia and Thomas (1997).

A further interesting reflection of some of the dynamics of Aalto project is the concept of enforcement of unpopular norms introduced by Willer, Kuwabara and Macy (2009). The writers suggest that people enforce unpopular norms to show that they comply out of genuine conviction and not because of social pressure. The first thought is naturally that this might be part of the explanation why undesirable behavior such as a control culture can develop among motivated professionals. However, it is worth thinking that neither all the reforms actually implemented by Aalto have been terribly popular. Might it be that some members of the university community help to enforce any reforms proposed by Aalto management mainly to identify themselves as genuine supporters of the new culture?

Guiding the organization through a major change necessarily demanded charismatic leadership. Supporting the notions of for instance Barley and Kunda (1992), Aldrich (1999) and Scott (2003), this leadership may have interesting implications for the future of Aalto. Firstly, any routines and processes dating back to the period of founding are resilient to change because they are associated with the strong emotions of organization's early development, increasing the vitality of cultural elements established by the early management. Secondly, the very processes how important decisions are made and how the structure of the organization is altered shape the character of the organization. Therefore the informal social structure of the Aalto University has likely adapted to maximize its influence on the early strategic decisions and key decision-makers, and will try to retain this influence if the decision-making structure is later tried to be changed. This will further encourage the encoding of charismatic leadership into the structures of the organization, meaning that even charisma can be institutionalized.

These examples underline that the establishment of new institutions is already rapidly progressing in the new organization, decreasing the flexibility of the management and making any major future change initiatives more challenging. Scott (2003: 181) has proposed that organization develops from one stage to another during its life cycle, with each stage requiring different type of leadership and the solutions for each stage becoming the problems of the next. Each stage ends in a crisis that the organization has to survive to enter the next stage, but normally the solutions the management has to offer for solving the crisis are the solutions of the past. It seems that Aalto has already moved to the second such stage as it progressed from the informal planning of Aalto

Transformation Team to the more serious phase run by the first Aalto University management with established leadership structure and the actual responsibilities of running a university. The university encountered a crisis as it was no longer possible to run it with the same informal principles which worked well while doing the planning, but simultaneously Aalto started to acquire certain unwanted bureaucratic features of the old system that it had tried to replace. Probably the most interesting question to be asked here is that if Scott's model still applies, what will be the next stage of development for Aalto University, and which will be the old solutions of the first Aalto University management that no longer apply for the future state of the organization. In such case the challenge for the present Aalto management is if and how it can maintain a degree of flexibility that will allow it to make future development of the organization possible.

6.1.5 Barriers of Entry/Exit

Entry and exit barriers represent a rather obvious inertial element for any organization. Perhaps for this reason there was enough evidence in the data to point out that the barriers were there, but they provided little reason for extended debate and emerged only as a minor theme from the data.

However, there was some evidence that Aalto was trying some limits of the barriers. Previously the barriers had simply been taken for granted because a university was expected to fulfill a role assigned by the government, but now there was, for instance, debate about how extensively Aalto should continue bachelor-level education and if Aalto could divest some disciplines to better focus on its strengths.

A further interesting speculation is the significance of the "red queen model" suggested by Barnett and Sorenson (2002). According to their model, competition triggers organizational learning, which in turn intensifies competition and causes some organizations to grow and evolve quickly and establish strong barriers of entry while limiting the choice available for the organizations involved. In principle the Finnish higher education system was in a state of low competition before the university reform, but the reform encouraged national and international competition for resources and talent to boost the quality of the system. Now if the red queen model would apply, it would imply that if even some of the universities would increase their efforts to compete internationally, it would start a cycle of learning and competition requiring the other universities to join the game before the barriers of entry would grow too high. Through this mechanism Aalto University would work to fulfill its national mission of spearheading a wider reform.

6.1.6 External Legitimacy Constraints

External legitimacy constraints emerged as a significant theme characterizing both the old university system and Aalto transformation. There were a number of authorities and pressure groups whose expectations had to be satisfied, and that could influence Aalto through laws, policies, resources and public debate. In general this was something that the Aalto management thought that they could do little about, and in fact many of these stakeholders had proven invaluable assets for Aalto to reach its goals.

In light of the existing literature much of the observed behavior of Aalto University in relation to external established institutions is quite unorthodox. For instance Hannan and Freeman (1977, 1984) suggest that the key success factor for private sector organizations is efficiency, but on the public sector the success is largely based on isomorphism to institutionally accepted behavior. Meyer and Rowan (1977) continue that the best way for a complex organization of experts such as a university to manage the conflicting needs of external legitimacy and internal efficiency is to maintain a loosely coupled state with a legitimate façade and unofficial but efficient processes behind the scenes (see Chapter 3.2.6). These characterizations seem to describe rather well the old universities, particularly TKK and HSE, and are supported by the accounts of the informants. Nevertheless, it seems that Aalto University has been able not only to challenge and break many of the institutionalized models, but to actually make the system follow its own example. This sounds like a decisive breakthrough for the proponents of Aalto as the spearhead of national higher education reform. However, the actual interactions between different actors are likely more dynamic.

As Pfeffer and Salancik (1978) argued, many organizations actively seek charters from authorities and manage to institutionalize their goals and structures in the rules enforced by the authorities. Meyer and Rowan (1977) wrote that powerful institutions attempt to build their goals directly into society as institutionalized rules. But in the case of Aalto University it must be remembered that the university itself and the reform it is based on are products of the wishes and efforts of key stakeholders such as the government, the funders and even other rivaling universities. Therefore it is actually a false observation that Aalto would have changed the system, but rather that the collective need of the system to change has produced Aalto as a test platform with a limited free will. Such a collective change of institutionalized rules is an even more significant phenomenon than the breakthrough of a single organization.

If this is indeed the case, then the next question is where the new set of rules or new institutions came from. The answer is readily available: in the face of globalization pressures and increasing international competition, the universities with their most important stakeholders realized that the system had to be changed. If the universities wanted to compete in the international series, they could no longer use the national best practices as the basis of evaluating their institutionalized behavior, but had to search for new models internationally. This granted legitimacy to such models that could not have been fitted to the framework of old institutions, such as universities based on private foundations and run by external boards.

This unique situation allowed Aalto University to neglect established institutionalized myths and abandon its loosely coupled structure. However, it is less clear if the loose coupling still exists in some parts of the organization internally, as some functions and units have not necessarily been able to match the speed of the rapid change, and may seek to present themselves to the new management as effective without actually complying with the new procedures. Furthermore, it is possible that Aalto will later resume the partially loosely coupled structure as time goes by, regulatory environment tightens and the privileges of the university are scaled down.

6.1.7 Limitations of Collective Rationality

Limitations of Collective Rationality emerged as a primary theme especially in the accounts of the Aalto University management. Inconsistencies and shortcomings in decision-making were identified to be more the rule than an exception in the behavior of the old system, but they were present in all phases of Aalto project as well. However, these limitations of decision-making in old and new system were different in nature.

It seems that Cohen, March and Olsen managed to describe many features of the traditional universities with their 'Garbage can model' of organized anarchies (1972), see Chapter 3.2.7. In these organizations preferences were often discovered through action instead of acting on the basis of preferences, the universities' own processes were not necessarily understood by their members, and the participation of the members to different domains was often fluid. The decision-making had two dominant elements: the inefficient collective tripartite system where the groups had a tendency to vote against each other, and a strong tendency to avoid conflict, risk taking and mistakes. As a result the decision-making bodies were mostly capable to solve only trivial matters through resolution, and especially the most important decisions such as strategies were not likely to resolve significant issues. Instead the system had a tendency to resolve

issues through flight and assign them somewhere else to be made (for instance the President or deans), or through oversight if the true consequences of the decisions were not known. This caused many structural issues to emerge again and again in slightly different form with the system unable to resolve them once and for all.

Before the President was appointed there was similar ambiguity in the decision-making of emerging Aalto, as the project had no clear ownership or the decision-makers resorted to flight to avoid binding the hands of the upcoming President.

The new more centralized decision-making system in Aalto, on the other hand, was at least in theory much more capable in producing and implementing decisions, especially such decisions that did not enjoy the support of all internal groups. The strategic decision-making was almost entirely in the hands of the external Board and the President, who also had to address a diverse range of internal and external matters. The potential problems of the system were associated with the capacity and information biases of these critical decision-makers.

The external Board was free from the internal politics of the university, but on the other hand their time was limited and their decisions were heavily dependent on the preparations of the introducers. Thus there was a high risk that the Board would make decisions by oversight if the number of issues under discussion would not be very limited.

The President faced the same challenge, as the number of issues she had to resolve was immense, and the mechanisms how she focused her attention had significant effect on what happened in the organization. Many universities have tried to tackle the issue of President's limited resources by appointing a separate provost to take responsibility for the internal management. However, the centralized decision-making system obviously served to avoid decision-making by flight, and the system had the capability to resolve even strategic issues.

6.1.8 Limitations of Learning

Limitations of learning emerged as a moderately significant secondary theme across the data. The management faced a tremendous challenge in learning new skills while moving through uncharted territory in building a new organization. The managers were also aware of their own limitations in learning, and they resorted to hiring external management professionals, using consultants, and utilizing the academic change management skills of their professors.

Even though several writers such as Salaman (2001), Johnson (1987), Contu, Grey and Ortenbla (2003), and even Mintzberg (2009) remind of the limitations of the learning organization, it seems that the studied change process has been so rapid and dynamic that the human limitations of the management have been more significant in limiting learning than organizational phenomena. Neither is there significant evidence demonstrating where the learning would have failed, so learning-based issues have not likely been especially significant sources of inertia in the change process. On the contrary, the learning capabilities of the management seem to have been very good.

Nevertheless, one issue worth discussing is the notion of Johnson (1987) and Mintzberg (2009) that uncontrolled learning can lead to strategic drift, meaning that an organization can learn away from what works. If this is combined to Staw's (1976) notion of escalating commitment, it is possible to imagine a scenario where the new management is so focused on developing new processes and skills that the change that should be only a tool turns into a goal in itself, and the organization actually loses important knowledge by learning away from previous good practices. As Aalto works as a test platform for new ideas, there is also the risk that proponents of these ideas are ready to go to great lengths in trying to prove themselves right. Such behavior could lead to escalating commitment, where after initial failure the decision-makers keep investing more resources in hoping to recoup the initial losses and not recognizing that the situation may be hopeless.

Finally, it should be remembered that Aalto is not the first private university in Finland. There have been several, the last of which were taken over by the government in the 1970s. Furthermore, a large number of university mergers have taken place internationally, only a small minority of which have been considered successful. These facts remind of the warnings of Levinthal and March (1993), who identified the "learning myopia" – a tendency to overlook distant times, distant places, and failures.

6.2 Limitations and suggestions for further research

No empirical study is free of limitations, and this work is no exception. Hopefully the limitations identified here serve not only as qualifiers of this work, but also as pointers for future research.

The first obvious limitation is the perspective. As stated before, I believe that the perspective of organizational inertia has been fruitful in describing

the dynamics of a complex change effort and identifying issues that the management should be conscious of. However, it would have been equally possible to choose for instance the perspective of organizational adaptation, and focus on the dynamic characteristics of the organization making it more malleable.

The second limitation is the fact that this is a case study of a single case. Considering the uniqueness of the case I believe that it has been a well-founded decision to focus on only one case, but this can limit the transferability of the findings. On the other hand extensive studies of major public sector transformations have been almost nonexistent when compared to private sector studies, and hopefully this rather detailed analysis contributes to help this shortage.

Thirdly, part of the data used in this study, namely the interviews of Aalto Transformation Team in 2008-09 and the staff feedback of 2009 have not been originally gathered for the purposes of this study. Of course this may have also positive implications like reducing the researcher-generated bias, but this data can also have some gaps that could have been filled in a dedicated data set. A crucial benefit of this data, however, is that it has been collected in real time when the described events were still unfolding. Therefore it has been possible to make a longitudinal study with no problems of retrospective questionnaires.

Finally, I identify myself not only a researcher but also a previous active participant in the Aalto project, and a supporter of the new university, even though without any present role in the project. However, I have done my best to take any subjective biases into account and have focused this research on areas with little personal contribution. I also believe that the available tacit knowledge of the intricacies of the project has helped to guide the research into relevant areas.

6.3 Conclusions

In the beginning of this research project, I set out to serve two audiences: The Aalto University management and the scientific community. For the management I promised to find out what was going on in their university, and how had organizational inertia contributed to their change effort. For science I promised to do my best to put together the various fragments of theory about organizational inertia and see if they could actually explain the phenomena observed in a major university merger. I claim to have fulfilled both my promises, but leave it to my audiences to decide if the results were what they wanted to hear. In any case, I believe that the most important contribution of this work is not any single punchline extracted from the conclusions, but rather that the beauty is in the details, leaving room for knowledgeable people to draw their own conclusions. It must be also remembered that this study covers only the very first years of an ongoing transformation. Therefore the results provide no answer to the question, was Aalto University successful or not. This remains to be seen.

Scientifically the study clearly illustrates the importance of organizational inertia as a concept, and its power to explain and classify complex organizational phenomena as a framework. The model of eight sources of inertia emerging from this study resembles an expanded version of the model presented by Hannan and Freeman (1977) which was later supplemented by Hannan, Pólós and Carroll (2003). However, where this earlier work has been very general in defining and describing the concepts – only by a few sentences –, I have strived to create a framework that would have more depth and some real explaining power. Furthermore, even though I found the labels used by Hannan and Freeman illustrative, practically all concepts have been completely redefined, mostly independently from their work.

The grounded framework is also very flexible in nature. It manages to explain most of the relevant phenomena encountered during the study, with an apparent focus in institutional, political, legitimacy and information issues in the public sector case. However, there is reason to believe that if the same framework would be used to analyze for instance a private sector merger, the economically more significant themes such as sunk costs and entry/exit barriers would become more prominent.

The study also illustrates the significance of cultural, institutional and decision-making issues. Prominent writers like Richard Scott (2003), Howard Aldrich (1999), Henry Mintzberg (2009), and John Meyer and

Brian Rowan (1977) seem to have been right in most of their grim conclusions. A typical university organization is a mess of politics, rivalry, problematic leadership and complex social networks. However, it may be that there is more hope than these writers acknowledge, because the study also suggests that the university organization can be more malleable than expected. It has been asked if it is possible to lead a university. This study suggests that it may be very hard to lead the people in a university, but the management can certainly make an effort to lead the image of a university by creating a compelling transformation story, and such a story may be a powerful driver of change indeed. Gioia and Thomas (1996) gained similar results in their study of an American university, but as their focus was mostly in the sensemaking of top management they missed most of the significant inertial elements emerging from other parts of the organization.

Another significant observation is the fact that organizational inertia emerged not only as a force making the change more difficult, or change context in the terms of this study. Instead the inertial themes observed in the pre-merger organization formed the rationale for the entire change effort, in other words were key triggers of change. Therefore this study provides strong support for the subtle work of Zajac and Kraatz (1993), suggesting that certain forces can act simultaneously to initiate and inhibit strategic change by increasing the need while decreasing the ability to change.

For the Aalto University management my message is that the Aalto project has thus far gone surprisingly well considering that it has never actually been completely under control. The positive trend is even more significant as much of the organizational literature and international examples of past university mergers and turnarounds paint a rather grim picture of the odds for affecting a major change. The management has been able to identify and satisfy the needs of key stakeholders in the surrounding society and ensure broad external support, which has been decisive in gathering necessary resources (including talent) and maintaining public discussion that has supported the construction of a desired image for the new university. In general, the management's principal goals (even if not necessarily all of the means) are acknowledged also by their own academic community, and the management has been able to come up with a compelling story that has inspired some desired changes in the organization. The overall rate of reforms that have been actually implemented during a relatively short transformation period challenges the picture of universities as extremely static organizations.

However, the study also reveals much of the limitations for planning and pulling through such a complex transformation. Many of the frameworks used by the management were very basic tools incapable of explaining the complex social, political and cultural phenomena that actually dominated the organization. Management also had the tendency to emphasize principles of rational decision-making and planning, although their decision-making was only partially rational with serious limitations for instance in information, and many of the best results seemed to be a result of dynamic adaptation to a rapidly changing situation rather than complex plans that would turn out to be outdated when they were finally finished. The management had also been successful in creating a powerful future vision, but had trouble in communicating and implementing the vision effectively. Furthermore, the Aalto identity and culture remain shallow and recognized mostly by the relatively small elite when compared to the old still vital identities of TKK, HSE and TaiK. Moreover, it remains to be seen if Aalto will actually be successful in its goal of reducing bureaucracy, or if the control culture will simply evolve to take a different form.

Let us now conclude this investigation of organizational inertia with a quotation from Hedberg, Nystrom and Starbuck (1976). They suggest that in a turbulent environment, the correct solution might not be a complex and bureaucratic traditional organization - an organizational palace. Instead, they suggest building an organizational tent.

In constant surroundings, one could confidently assemble an intricate, rigid structure combining elegant and refined components – an organizational palace. ...

However, systematic procedures offer weak protection against unpredictability, just as increased rigidity does not effectively prepare a building for earthquakes. ... Residents of changing environments need a tent.

An organizational tent places greater emphasis on flexibility, creativity, immediacy, and initiative than on authority, clarity, decisiveness, or responsiveness; and an organizational tent neither asks for harmony between the activities of different organizational components, nor asks that today's behavior resemble yesterday's or tomorrow's.

Why behave more consistently than one's world does?

-Hedberg, Nystrom and Starbuck (1976: 44-45, adapted from
Scott 2003: 306-307)

Perhaps Aalto University should choose a tent instead of a palace?

References

- Aalto University. 2008.** "Aalto University Transformation Plan 18.10.2008"
- Adler, P.S. and B. Borys. 1996.** "Two Types of Bureaucracy: Enabling and Coercive" (Administrative Science Quarterly, Vol. 41, pp. 61-89)
- Aldrich, Howard. 1999.** "Organizations Evolving" (London: SAGE Publications)
- Aldrich, Howard and E. R. Auster. 1986.** "Even Drafts Started Small: Liabilities of Age and Their Strategic Implications." (Research of Organizational Behavior, Vol. 8, pp. 165-198)
- Amburgey, T.L., D. Kelly and W.P. Barnett. 1993.** "Resetting the Clock: The Dynamics of Organizational Failure." (Administrative Science Quarterly, Vol. 38, pp. 51-73)
- Andrews, K. R. 1971.** "The Concept of Corporate Strategy." (Homewood, Illinois: Irwin)
- Ansoff, H. Igor. 1965.** "Corporate Strategy" (New York: McGraw-Hill)
- Baden-Fuller, C. and J. M. Stopford. 1992.** "Rejuvenating the Mature Business: the Competitive Challenge" (Harvard Business School Press)
- Bain, J.S. 1968.** "Industrial Organization" (New York: Wiley and Sons)
- Barley, S.R. and G. Kunda. 1992.** "Design and Devotion: Surges of Rational and Normative Ideologies of Control in Managerial Discourse" (Administrative Science Quarterly, Vol. 37, pp. 363-399)
- Barnard, Chester I. 1938.** "The Functions of the Executive" (Harvard University Press)
- Barnett, William P. and Glenn R. Carroll. 1995.** "Modeling Internal Organizational Change." (Annual Review of Sociology, Vol. 21, 217-236)
- Barnett, William P. and R.A. Burgelman. 1996.** "Evolutionary Perspectives on Strategy" (Strategic Management Journal, Vol. 17, pp. 5-19)
- Barnett, W.P., O. Sorenson. 2002.** "The Red Queen in organizational creation and development" (Industrial and Corporate Change, Vol. 11, pp. 289-325)
- Barron, D.N., E. West, M.T. Hannan. 1994.** "A Time to Grow and a Time to Die: Growth and Mortality of Credit Unions in New York, 1914-1990." (American Journal of Sociology, Vol. 100, pp. 381-421)
- Beatty, R. W. and D. O. Ulrich. 1991.** "Re-energizing the Mature Organization." (Organizational Dynamics, Summer 1991: 16-30)
- Beer, M., R. A. Eisenstat and B. Spector. 1990.** "Why Change Programs Don't Produce Change." (Harvard Business Review, Nov-Dec 1990: 158-166)
- Burgelman, R.A. 1994.** "Fading memories: a process theory of strategic business exit in dynamic environments." (Administrative Science Quarterly, Vol. 39, pp. 24-56)
- Chandler, A.D. 1962.** "Strategy and Structure: Chapters in the History of the Industrial Enterprise." (MIT Press)
- Clausewitz, C. von. 1968 trans.** "On War" (Penguin Books)
- Clemens, E.S. and J.M. Cook. 1999.** "Politics and institutionalism: Explaining durability and change" (Annual Review of Sociology, Vol. 25, pp. 441-466)
- Coch, L., J.R.P. French. 1948.** "Overcoming Resistance to Change" (Human Relations, Vol. 1, pp. 512-532)
- Cohen, Michael D., James G. March and Johan P. Olsen. 1972.** "A Garbage Can Model of Organizational Choice." (Administrative Science Quarterly, Vol. 17, No. 1., pp. 1-25)

Colombo M.G., M. Delmastro. 2002. "The determinants of organizational change and structural inertia: Technological and organizational factors." (Journal of Economics & Management Strategy, Vol. 11, pp. 595-635)

Contu, A., C. Grey and A. Ortenblad. 2003. "Against learning" (Human Relations, Vol. 56, pp. 931-952)

Cyert, Richard M. and James G. March. 1963. "A Behavioral Theory of the Firm." (Prentice Hall)

Czarniawska, Barbara. 1997. "Narrating the Organization: Dramas of Institutional Identity." (University of Chicago Press)

Daft, Richard L. and Karl Weick. 1984. "Toward a model of organizations as interpretive systems." (Academy of Management Review, 9: 284-295)

Delacroix J., A. Swaminathan. 1991. "Cosmetic, Speculative and Adaptive Change in the Wine Industry: A Longitudinal Study." (Administrative Science Quarterly, Vol. 36, pp. 631-61)

Dickhout, R., M. Denham and N. Blackwell. 1995. "Designing Change Programs That Won't Cost You Your Job." (The McKinsey Quarterly, Vol. 1995:4, pp. 101-116)

DiMaggio, P.J. and W.W. Powell. 1983. "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields." (American Sociological Review, Vol. 48, pp. 147-160)

DiTomaso N., C. Post and R. Parks-Yancey. 2007. "Workforce diversity and inequality: power, status, and numbers." (Annual Review of Sociology, Vol. 33, pp. 473-501)

Edwards R. 1979. "Contested Terrain: The Transformation of the Workplace in the Twentieth Century." (New York: Basic Books)

Eisenhardt, K.M. 1989. "Building theories from case study research." (Academy of Management Review, Vol. 14, pp. 532-550)

Elrod, P. David II and Donald D. Tippett. 2002. "The 'death valley' of change" (Journal of Organizational Change Management, Vol. 15, pp. 273-291)

Fayol, Henri. 1949 trans. "General and Industrial Management." (London: Pitman, original 1919)

Ferguson, J.M. 1974. "Advertising and Competition. Theory, Measurement, Fact" (Cambridge, MA: Ballinger)

Fiegenbaum, A. and H. Thomas. 1993. "Industry and strategic group-dynamics – Competitive strategy in the insurance industry, 1970-84." (Journal of Management Studies, Vol. 30, pp. 69-105)

Galbraith, Jay R. 1973. "Designing Complex Organizations." (Addison-Wesley)

Gioia, Dennis A. and James B. Thomas. 1996. "Identity, image and issue interpretation: Sensemaking during strategic change in academia." (Administrative Science Quarterly, Vol. 41, pp. 370-403)

Glaser, B. and A. Strauss. 1967. "The Discovery of Grounded Theory." (Chicago: Aldine)

Goffman, Erving. 1961. "Asylums" (Garden City, New York: Doubleday, Anchor Books)

Granovetter, M. 1985. "Economic action and social structure: The problem of embeddedness." (American Journal of Sociology, Vol. 91, pp. 481-510)

Halliday, T.C., M.J. Powell and M.W. Granfors. 1993. "After Minimalism: Transformations of State Bar Associations from Market Dependence to State Reliance, 1918 to 1950." (American Sociological Review, Vol. 58, pp. 515-535)

Hannan, M.T. and J. Freeman. 1977. "The population ecology of organizations." (American Journal of Sociology, Vol. 82 (5): 929-964)

Hannan, M.T. and J. Freeman.1984. "Structural Inertia and Organizational Change." (American Sociological Review, Vol. 49, No. 2, pp. 149-164)

Hannan, M.T. and J. Freeman. 1989. "Organizational Ecology" (Harvard University Press)

Hannan, M.T., László Pólos & Glenn R. Carroll. 2003. "Cascading Organizational Change." (Organization Science, 14 (5), 463–482)

Hedberg, B, P.C. Nystrom and W.H. Starbuck. 1976. "Camping on Seesaws: Prescriptions for a Self-Designing Organization." (Administrative Science Quarterly, Vol. 21, pp. 41-65)

Hodson, R. 2001. "Dignity at Work." (New York: Cambridge University Press)

Huber, G.P., K.M. Sutcliffe, C.C. Miller and W.H. Glick. 1993. "Understanding and Predicting Organizational Change and Redesign." (Organizational Change and Redesign, pp. 215-63. New York: Oxford)

Ichniowski, C. and K. Shaw. 1995. "Old dogs and new tricks – Determinants of the adoption of productivity-enhancing work practices." (Brookings Papers on Economic Activity, Special Issue 1995)

Isabella, L.A. 1990. "Evolving interpretations as a change unfolds. How managers construe key organizational events." (Academy of Management Journal, Vol. 33, pp. 7-41)

Jensen, Michael C. and William H. Meckling. 1976. "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure." (Journal of Financial Economics, Vol. 3, pp. 305-360)

Johnson, G. 1987. "Strategic Change and the Management Process." (New York: Basil Blackwell)

Johnson, G., K. Scholes, R. Whittington. 2008. "Exploring Corporate Strategy", 8th edition (Prentice Hall)

Jääskinen, N. and J. Rantanen. 2007. "Yliopistojen taloudellisen ja hallinnollisen autonomian uudistaminen." (Ministry of Education 2007:2, Finland)

Kiesler, S. and L. Sproull. 1982. "Managerial responses to changing environments. Perspectives on problem sensing from social cognition." (Administrative Science Quarterly, Vol. 27, pp. 548-570)

Kimberly, J. 1976. "Organizational Size and The Structuralist Perspective: A Review, Critique and Proposal." (Administrative Science Quarterly, Vol. 21, pp. 571-597)

Kotter, J. P. 1995. "Leading Change: Why Transformation Efforts Fail." (Harvard Business Review, Mar-Apr 1995: 59-67)

Kumar, N., L.W. Stern, and J.C. Anderson. 1993. "Conducting interorganizational research using key informants." (Academy of Management Journal, Vol. 36, pp. 1633-1651)

Lawrence, Paul R. and Jay W. Lorsch. 1967. "Organization and Environment: Managing Differentiation and Integration." (Graduate School of Business Administration, Harvard University)

Levinthal, D.A. and J.G. March. 1993. "The Myopia of Learning" (Strategic Management Journal, Vol. 14 Special Issue, pp. 95-112)

Lincoln, Y. an E. Guba. 1985. "Naturalistic Inquiry." (Beverly Hills, Ca: Sage)

McGregor, Douglas. 1960. "The Human Side of Enterprise." (New York: McGraw-Hill)

McNeil, K. and J.D. Thompson. 1971. "The regeneration of social organizations." (American Sociological Review, Vol. 36, pp. 624-637)

McPherson, J. Miller. 1983. "The Ecology of Affiliation." (American Sociological Review, Vol. 48, pp. 519-532)

March, J.G. and H.A. Simon. 1958. "Organizations." (New York: John Wiley)

Merton, R. K. 1936. "The unanticipated consequences of purposive social action." (American Sociological Review, Vol. 1, pp. 894-904)

Meyer, John W. and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony" (American Journal of Sociology, Vol. 83, 2 (September), pp. 340-363)

Michels, Robert. 1949 trans. "Political Parties" (Illinois: Free Press, original 1915)

Miles, R.E. and C.C. Snow. 1978. "Organizational Strategy, Structure and Process." (New York: McGraw Hill)

Miller, D. 1976. "Strategy Making in Context: Ten Empirical Archetypes." (Ph.D. Thesis, Faculty of Management, McGill University, Montreal)

Miller, D. and P. H. Friesen. 1980. "Archetypes of Organizational Transition." (Administrative Science Quarterly, Vol. 25, pp. 268-299)

Mintzberg, H. 1989. "Mintzberg on Management. Inside Our Strange World of Organizations." (New York: Free Press)

Mintzberg, H., B. Ahlstrand, and J. Lampel. 2009. "Strategy Safari" 2nd ed. (Prentice Hall)

Munene, J.C. 1995. "The institutional environment and managerial innovations – A qualitative study of selected Nigerian firms" (Journal of Occupational and Organizational Psychology, Vol. 68, pp. 291-300)

Nohria, Nitin and Robert G. Eccles. 1992. "Networks and Organizations: Structure, Form and Action." (Harvard Business School Press)

Nykänen, P. 2008. "Kortteli sataman laidalla. Suomen teknillinen korkeakoulu 1908-1941." (WSOY)

Parkin, F. 1979. "Marxism and Class Theory: A Bourgeois Critique." (New York: Columbia University Press)

Peltonen, C. 2009. "Osapuolten ristiriidat ja epäselvä projektin omistajuus muuttuvassa projektiverkostossa." (MSc Thesis, Faculty of Chemical Technology, Aalto University)

Pelz, Donald C. 1952. "Influence: A Key to Effective Leadership in the First-Line Supervisor." (Personnel, Vol. 29, pp. 209-17)

Pettigrew, A. M. 1987. "Context and Action in Transformation of the Firm." (Journal of Management Studies, Vol. 24, pp. 649-670)

Pfeffer J., G.R. Salancik. 1978. "The External Control of Organizations." (New York: Harper & Row)

Pólos, L. and A. van Witteloostuijn. 2004. "Who should dare to change? Lesson from Organizational Ecology." (The Netherlands Journal of Social Sciences, vol. 40, no. 3, pp. 247-269)

Pondy, L.R. and I.I. Mitroff. 1979. "Beyond Open System Models of Organization." (Research in Organizational Behavior, Vol. 1, pp. 3-39)

Porter, M. E. 1980. "Competitive Strategy: Techniques for Analyzing Industries and Competitors." (New York: Free Press)

Porter, M. E. 1985. "Competitive Advantage: Creating and Sustaining Superior Performance." (New York: Free Press)

Rauch, J. 1993. "Does history matter only when it matters little – The case of city-industry location." (Quarterly Journal of Economics, Vol. 108, pp. 843-867)

Riker, W. 1995. "The experience of creating institutions: The framing of the United States Constitution." (Knight & Sene)

Sailas, R. 2007. "Teknillisen korkeakoulun, Helsingin kauppakorkeakoulun ja Taideteollisen korkeakoulun yhdistyminen uudeksi yliopistoksi (Finnish)" (Opetusministeriön työryhmämuistioita ja selvityksiä 2007: 16)

Salaman, G. 2001. "A response to Snell – The learning organization: Fact or fiction?" (Human Relations, Vol. 54, pp. 343-359)

Scott, W. Richard. 2003. "Organizations: Rational, Natural and Open Systems." 5th ed. (Prentice Hall)

Selznick, Philip. 1948. "Foundations of the Theory of Organization." (American Sociological Review, Vol. 13, pp. 25-35)

Selznick, Philip. 1957. "Leadership in Administration: A Sociological Interpretation." (Evanston, Illinois: Row, Peterson)

Stainback, K., D. Tomaskovic-Devey, and S. Skaggs. 2010. "Organizational Approaches to Inequality: Inertia, Relative Power, and Environments" (Annual Review of Sociology, Vol. 36, pp. 225-247)

Staw, B.M. 1976. "Knee deep in the big muddy: A study of escalating commitment to a chosen course of action." (Organizational Behavior and Human Performance, Vol. 16, pp. 27-44)

Stinchcombe, A.L. 1965. "Social Structure and Organizations." (In James G. March (ed.), Handbook of Organizations, pp. 142-193, Chicago: Rand McNally)

Strauss, A. and J. Corbin. 1990. "Basics of Qualitative Research." (Newbury Park, CA: Sage)

Sun Tzu. 1971 trans. "The Art of War." (Oxford University Press)

Taylor, Frederick W. 1911. "The Principles of Scientific Management." (Harper & Brothers)

Thomas, James B. and Reuben R. McDaniel, Jr. 1990. "Interpreting strategic issues: Effects of strategy and top management team information processing structure." (Academy of Management Journal, Vol. 33, pp. 286-306)

Thomas, James B., Laura Shankster and John Mathieu. 1994. "Antecedents to organizational issue interpretation: The roles of single-level, cross-level, and content cues." (Academy of Management Journal, Vol. 37, pp. 1252-1284)

Tilly, C. 1998. "Durable Inequality" (Berkeley: University of California Press)

Tsouderos, J.E. 1955. "Organizational Change in Terms of a Series of Selected Variables." (American Sociological Review, Vol. 20, pp. 206-210)

Vallas, S.P. 1993. "Power in the Workplace: The Politics of Production at AT&T." (Albany, NY: SUNY Press)

Van Maanen, J. 1988. "Tales of the field: On writing ethnography." (Chicago: University of Chicago Press)

Van de Ven, Andrew H. and M. Scott Poole. 1995. "Explaining Development and Change in Organizations." (Academy of Management Review, Vol. 20, pp. 510-540)

Weber, Max. 1968 trans. "Economy and Society: An Interpretative Sociology." (Ed. Günther Roth and Claus Wittich. New York: Bedminster Press, original 1924)

Weick, Karl E. 1979. "The social psychology of organizing. Reading." (MA: Addison-Wesley)

Willer, R., K. Kuwabara and M.W. Macy. 2009. "The False Enforcement of Unpopular Norms" (American Journal of Sociology, Vol. 115, pp. 451-490)

Williamson, O.E. 1975. "Markets and Hierarchies." (New York: Free Press)

Ylitalo, Jari. Unpublished. "Akateemisen johtajuuden kehittäminen - menetelmät ja mahdollisuudet." Aalto University.

Zajac, E.J. and M.S. Kraatz. 1993. "A Diametric Forces Model of Strategic Change: Assessing the Antecedents and Consequences of Restructuring in the Higher Education Industry." (Strategic Management Journal, Vol. 14, pp. 83-102)

Aalto University formally started its operations 1.1.2010, forcing a number of fundamental changes to the old organizations it is based on. These include, but are not limited to, a new top management, new management system and complete reorganization of central administration, new organizational form, moving the whole personnel from public civil service positions to private contracts, major organizational restructuring, and a stated goal of the new top management to change the culture of the university. Such a transformation would be challenging for any organization, but many writers have pointed out that many features of universities make them especially difficult to change. This study uses an extensive data set of staff feedback, top management interviews and Aalto project planning material to construct a model of eight principal sources of organizational inertia to explain and interpret the complex organizational phenomena encountered during the first years of the construction (2007-2010) of a new university.



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