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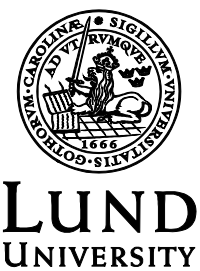
University and Culture

University and Culture

a Phenomenological Analysis of Formal and Informal Discourse on education and research at Universities in Sweden and China.

Josef Mörnerud



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Abstract

In this research, science and its political appearance are studied through an empirical exploration of their representations in narrative expressions. The field of investigation is allocated to formal and informal discourse on education and research at universities in Sweden and China. The analysed expressions were taken from 202 written reports, as students and personnel in both countries answered an open ended-question, and four formal documents: the Chinese and Swedish laws on higher education and documents on research, science, and technology. The narratives were processed through a Meaning-Constitution-Analysis (MCA), a tool used to perform a deep study of a text based on a phenomenological approach that aims at making the implied assumptions and worldviews explicit.

The analysis revealed a common representation of the university as an intermediary between the government and the student in the Swedish narratives and as a meta-character differentiated from the government in the Chinese narratives. Further, the meaning of science appeared as an adjective that characterizes a certain sphere of life in the informal narratives and as a dynamic behind a desired development in the formal narratives. The meaning of politics emerged in the Swedish narratives as the formation of an environment, mainly for activities in an institutional balance between input and outcomes. In the Chinese narratives, politics appeared as a competition for status, in which both academia and the government claim the recognition awarded for successful development. These representations of politics can guide the interpretation of the otherwise quite general understanding of education as a structure to be filled with activities in the Swedish narratives and an object for a discussion based on values in the Chinese narratives as well as the representation of research as an asset in the Swedish narratives and a source of legitimacy in the Chinese narratives.

Key words: University, Culture, Science and Technology Studies, Phenomenology, Research, Education, Meaning-Constitution-Analysis, formal and informal discourse, Sweden, China

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University and Culture

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Coverart: Arne Mörnerud. The Magpie is a common bird both in Sweden and China, but it is a symbol with different connotations in the two countries, and can thus be illustrative to the present exploration.

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To Alvin, Emelie and Maria,
and in memory of Anders Ringblom

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Abbreviations

CCP	Chinese Communist Party
CHE	Chinese Law on Higher Education
CPe	Chinese Personnel
CS&T	Chinese Law on Science and Technology
CSt	Chinese students
HSV	Högskoleverket (the old National Agency for Higher Education)
MCA	Meaning-Constitution-Analysis
ME	Ministry of Education (in China)
MOST	Ministry Of Science and Technology (in China)
NGO	Non Governmental Organization
NPC	National People's Congress (in China)
OECD	Organization for Economic Cooperation and Development
PRC	Peoples Republic of China
S&T	Science and Technology
SHE	Swedish Law on Higher Education
SPe	Swedish Personnel
SS&T	Swedish Government Bill on Research
SSt	Swedish Students
STS	Science and Technology Studies
UKÄ	Universitetskanslersämbetet, (the Swedish Higher Education Authority)
UNESCO	United Nations Educational, Scientific and Cultural Organization

Summaries

English summary

In this research, science and its political appearance are studied through an empirical exploration of their representations in narrative expressions. The field of investigation is allocated to formal and informal discourse on university, education and research in Sweden and China. The analysed expressions were taken from 202 written reports, as students and personnel in both countries answered an open ended-question, and four formal documents: the Chinese and Swedish laws on higher education and documents on research, science, and technology. The narratives were processed through a Meaning-Constitution-Analysis (MCA), a tool used to perform a deep study of a text based on a phenomenological approach that aims at making the implied assumptions and worldviews explicit.

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The narrative contexts are similarly shaped by representations of an acting government, but they are different as the government takes the initiative in Swedish narratives in a task-oriented discourse, while it gets involved in ongoing academic life in the Chinese narratives in a process-oriented discourse. The narrative contexts in the

formal narratives are mainly centred on the outcomes, regarding a development that is the result of a dynamic, while the informal narratives are centred on the drivers.

The revealed dimensions were analysed in relation to theories on historical phases as stories, inspired by Hayhoe (1996), and science cultures, inspired by Elzinga and Jamison (1995). The approaches in the Chinese narratives indicate a tension between academic/civic and bureaucratic/political science cultures which are advantageously framed by the differences in imperial and nationalist stories in contrast to a socialist story. The analysed Swedish narratives indicate a homogeneous representation of a dominant bureaucratic/economic science culture, in which the universities and their staffs represent the government and are centred on the rights of the students and an expected outcome. The central concerns appear in the light of attributed tasks and invested means, and is advantageously framed by a story of an increasing focus on the uses of the university on the potential expense of academic concerns.

Svensk sammanfattning

I forskningen som presenteras här görs en empirisk undersökning av vetenskap och dess politiska gestaltning, i en analys av vad dessa begrepp betyder i olika sammanhang. Undersökningen är inriktad på en studie av formell och informell diskurs rörande universitet, utbildning och forskning. Den informella diskursen består av 202 skriftliga intervjuer, där elever och personal i båda länderna svarar på en öppen fråga, och fyra formella dokument: Högskolelagarna i de båda länderna, och utvalda dokument rörande forskning, vetenskap och teknik. Texterna bearbetades genom en menings-konstitutions-analys (MCA), ett verktyg för djupstudium av text med en fenomenologisk ansats, och syftar till att göra implicita antaganden och världsbilder explicita.

Analysen visade en gemensam bild av universitetet som en mellanhand mellan regering och student i de svenska narrativen och som en sorts meta-personlighet som är tydligt skild från regeringen i de kinesiska narrativen. Vetenskap framträdde främst som ett adjektiv kännetecknande en viss sfär av livet i de informella narrativen, och som en dynamik bakom en önskad utveckling i de formella narrativen. I de svenska narrativen var politik främst kopplat till bildandet av en institutionell miljö för verksamhet, och bedömdes i balansen mellan insats och utfall. I de kinesiska narrativen var politik främst kopplat till en konkurrens om status, där både akademiska aktörer och regeringen gör anspråk på det erkännande som är belöningen för en framgångsrik utveckling. Dessa två bilder av politik kan vägleda tolkningen av den annars allmänna förståelsen som framträder av vad utbildning är, eftersom utbildning främst ses som en struktur som skall fyllas med verksamhet i de svenska narrativen och ett föremål för en diskussion grundad på olika värden och ideal i de

kinesiska narrativen. Bilden av politik som formandet av en miljö eller en jakt på status kan också vägleda tolkningen av vad forskning är, som en resurs i den svenska narrativen och en källa till legitimitet i den kinesiska narrativen.

De två narrativa kontexterna liknar varandra i det att de formas av den roll som regeringen tilldelas, men de skiljer sig i det att regeringen tar initiativen i de svenska narrativen i en uppgiftsorienterad diskurs; medan den ingriper i ett pågående akademiskt liv i de kinesiska narrativen, i en processorienterad diskurs. De formella narrativen är huvudsakligen inriktade på resultatet av en utveckling, medan de informella berättelser är inriktade på dess drivkrafterna.

De avslöjade aspekterna placeras också i historiska och teoretiska perspektiv, i relation till faser som berättelser, inspirerade av Hayhoe (1996) och vetenskapskulturer inspirerade av Elzinga och Jamison (1995). Ansatserna i de kinesiska narrativen tyder på en spänning mellan akademiska/medborgerliga och byråkratiska/politiska vetenskapskulturer, som med fördel ramas in av de kejserliga och nationalistiska berättelserna i kontrast till en socialistisk berättelse. De analyserade svenska narrativen tyder på en homogen representation av en dominerande byråkratisk/ekonomisk vetenskapskultur, där universiteten och deras personal representerar regeringen. Den viktigaste frågan rör studenternas rättigheter, och det förväntade utfallet i förhållande uppdrag och investerade medel. Dessa aspekter kan med fördel ramas in av berättelsen om ett ökat fokus på universitetets nytta, eventuellt på bekostnad av akademiska värden.

Acknowledgement

'To work with meaning is a dangerous business,' my teacher Roger B. Sages frequently told me when I came to him in the struggles of writing. 'Why is it that no one would let a person deal with nuclear physics without proper training, while the meaning of words and actions that form our world-view, which, are at the root to peace and conflicts and great and terrible deeds, is often handled so carelessly?' The work of the analysis of the constitution of meaning would have been impossible, or significantly poorer had it would not been for a number of persons which have contributed, some of whom I would like to mention especially.

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naming a few friends, it is important for me to mention the invaluable fellowship of Mikael, Linus, Bengt, Andreas, Kristofer, Zhouyi, Oscar, and Samuel.

However, I stand as responsible for the errors in form and content of the proceeding text.

Chapter one: Positioning

Representations of 'science' appear in a variety of narratives in modern societies, and at times it seems that they have little to do with scholarly and theoretical definitions. The representations of 'science' also appear to be involved in a 'political' life, as 'research' is used in the debates over policies. The institutional organization in which 'science' takes place is itself also subjected to such debates and policies. In these varied uses of the concepts, there is a risk of increasing confusion of what is intended, but in the mist of this potential confusion, there is a practice in which 'science' potentially appears in concrete narratives, such as in the organisation of 'research' and 'education' at 'universities'. It is a practice in which the realised meaning of the phenomena might be essential to understand in the studies of the social role they take and the way they shape and are shaped by the policies they appear in. The exploration presented in this essay is directed towards an empirical study of the meaning of 'science' and its 'politics' as narrative phenomena in such concrete expressions. An initial measure to establish an appropriate attitude is taken through a preliminary reference to the phenomena. Quotation marks are used as concrete symbols for the uncertainty of the meaning of the central concepts, such as 'science' and 'politics', mainly with apprehension for their appearance in the contexts of their use (Husserl 1931, chap. IV).

The exploration aspires to contribute with a study of the underlying frames of meaning, or the narrative context, in which the 'politics of science' appear, reaching for a closer understanding of its practice. The frames of reference in a narrative often remain implicit even though they are essential to understand the actual meaning intended with a reference to the phenomena. The study is realized as a careful progression towards something that is simultaneously known and unknown. It is known in the sense that we have a number of ideas about the phenomena, and we have encountered something that has caught our interest. However, it is unknown in the sense that we are intrigued and ponder on the diversity of its appearances as well as its implied dimensions, and the research is performed to reach into these unknown spheres. In other words, it is an approach founded in the affirmation of a lack of knowledge about the meaning in the 'politics of science', and the empirical investigation is meant to address this lack.

The essay is, in these terms, founded in a turn from questions of existence towards questions of meaning (Husserl 1935). This turn is realized in an open empirical enquiry into concrete narrative contexts, rather than searching for the existence, or validity, of given ideal or theoretical models. It can be seen as an archaeology into the layers of meaning in which the phenomena appears, or making the implied dimensions of narratives explicit. The ambition is that the empirical representation of the object of the investigation, in its contextual complexity and potential cultural variation of ways of appearing should be given precedence, in an attempt to form a narrative on its meaning and function, as opposed to the tradition of referring to existing descriptions and ideas (Latour 2005; Sages, Lundsten, and Jakobsdottir 2004). This is realized through an empirical exploration into formal and informal narratives and a deep analysis of semantic material, a Meaning-Constitution-Analysis (MCA) reaching beyond the first-hand and obvious formulations. In this case, the addressed arena where the 'politics of science' might appear is mainly represented by the 'education' and 'research' taking place at the 'university' in Sweden and China.

As a study in the field of science and technology Studies (STS), it takes place in a wider tradition of studies of the sciences in the making, investigating its procedures and demystifying its creation (Latour 2002). The reintegration of the activities of the 'sciences' from a sphere of ideas to the common and social realms of human concerns (Latour 2004; Pestre 2004), has mainly been done through studying the process in which they are formed, regarding historical, social, psychological, cultural, and political dimensions (Elulle 1981; Latour 1987). Understanding the meaning of the phenomena with further detail is essential to a number of 'political' and 'scientific' activities and questions, and it is a general intention that the ST-studies aspire to contribute to (Elzinga and Jamison 1995).

Reflections on the similarities and differences between ways to understand the phenomena can be crucial not only for a mutual understanding and the cooperation between Sweden and China but also as a source of inspiration for development in the two countries. There appears to be an increasing difficulty as regards the systems for the 'production of knowledge' understanding their roles, what quality might be, and, also, to be open for an appreciation of alternatives such as might appear in an encounter with the 'Other'. The meticulous processing of the constitution of meaning intended in this work is an invitation to reflect on our frames of mind and worldviews and on how they shape the 'politics of science'; hopefully, it might enable further learning in the encounters between cultures, reaching for mutual understanding as well as revealing new approaches.

A field of interest and a question of research

At the end of the Second World War, Bush (1945) proposed to the president of the USA to consider significant investments in the 'sciences', with the intention to transform the way of life in the country as well as to advance the national esteem and prosperity. Soon thereafter, UNESCO was founded, proposing increased 'scientific' exchanges intending to unite Europe and prevent a feared Third World War, as well as a common development of wealth and health (Proulx 16:50:31). About four decades later, Deng Xiaoping proposed an inclusion of 'scientists' in the labour force (Spence 1999), intending their work to realize the formation of the new Socialist China and a rapid development of the country torn by the cultural revolution. These three proclamations represent events in which the 'political' concerns with the 'sciences' take a turn towards concrete involvement through directive policies. The three propositions are similar in their expectations that 'science' would fill quite vague but important roles and transform our common society. The propositions also come with different connotations and contexts, such as the advancements related to the WWII and the Manhattan Project in the report Bush presented and more careful expressions of UNESCO and Deng Xiaoping, mindful of human catastrophes, in WWII in Europe and the Cultural Revolution in China. The policies that have followed the three mentioned events use some common expression about 'science' and 'politics' and refer to implied contexts and narratives with a potential variety of connotations that can be difficult to extract, but still are essential to understand their meaning. As we now stand in these traditions, in which the 'sciences' take place in a 'political' arena, there appears to be connotations and expectations which play important roles but seldom are made explicit. The research in this essay is not intended to investigate the historical origins of such connotations; rather, the primary intention is to make the implied dimensions explicit and then, secondary, to reflect on the narratives and their origins.

The reflection on differences between the meaning of similar words depending on their contexts and the implied challenges to the 'politics of science' is an initial taste of the general questions that are raised and the field of research that has emerged in this initiative. Any text or speech imply a number of dimensions which are thought to be shared with the expected readers, but the work to make these references explicit demands a journey that holds serious challenges. A general attitude in this text is a progression from concrete to abstract, or the specific to the general; consequently, this first part of this chapter is mainly devoted to an introduction to the thoughts and acts of this actual initiative and to the choices of field of interest and the objects of concern which drives the research. The intention is to constitute an introduction of the ways in which the phenomenological and the STS traditions are interwoven in

this empirical approach. A first establishment of the reasons and consequences of the empirical nature of the exploration is followed by a short description of the background of the initiative and concluded in the establishment of a reflexive approach. The second part this chapter places this specific approach in some broader aspects with regard for the general phenomenological and STS traditions.

An empirical exploration into the meaning in the 'politics of science

The overall aim of this research is to explore the constitution of meaning in the 'politics of science' in an empirical exploration. This kind of broad point of entry to the questions with an empirical procedure is quite uncommon. Most approaches establish an understanding of the meaning of central concepts in the initial phase through definitions and hypothesis, and a theoretical background constitutes a narrative which then is confirmed or falsified. This alternative procedure is meant to realize a research which does not build on an existing theoretical narrative, but, rather, attempts to establish the approach in the field and an understanding of the meaning of concepts based on the encounter with the phenomena. The reasons for this point of departure is founded in the realization that the narrative in which the problems are defined and the issues of concern are formulated also has a tendency to shape the potential ways to answer the questions and understand the outcomes. Through a preliminary attitude and an emergent empirical and reflexive approach, this initiative is intended to be exploratory, investigating unknown dimensions of the phenomena in their context, and to reach for a closer understanding than would be possible with previously formulated narratives. The habit in the phenomenological tradition of turning to the big questions such as 'What is science?' and 'What is politics?' does not initially expect answers in ideological and general frames, but rather in close contact with examples of concrete expressions revealed through empirical investigations.

Both 'politics' and 'science' are in some sense everyday phenomena that most people would have a natural or naive impression about, and the empirical enquiry presented here approaches them primarily as phenomena of our common world, as narrative objects. This means that the reference to general ideas and abstract narratives on their nature are held back until the later chapter concerning contextualization and analysis, and we turn towards concrete discourses in which the concepts take place in ongoing life. The identification of such broad concepts as 'science' and 'politics', and their crossroads, is, among other reasons, founded in the general nature of the wonder about the many shapes that the phenomena take in their practical realization, and they are not defined with detail in the initial phases, but rather explored in the later chapters in relation to the outcomes of the research. The 'politics' that are addressed

in the expected empirical field appear, in a general sense, in the Arendtian tradition as the formation of a common or public sphere, as the establishment of shared ways of living and thinking. It is thus a general aspect of human interaction that constitutes a collective of people which is 'political' as it 'gathers us together and yet prevents our falling over each other' (Arendt 1950; Arendt 1958). The 'science' that is addressed is equally broad, as Whitehead (1926) formulates an aspect of a mind concerned with the 'passionate interest in the relation of general principles to irreducible and stubborn facts' (pp3). This general understanding of 'science' as a human activity appearing in the relation between concrete experience and descriptive narratives and something that takes multiple forms in the common spheres of 'politics' is an approach intended to prepare a space for the phenomena in their context. The main method of observation and later of theoretical construction is then allocated to the description of similarities and differences according to the appearance of the phenomena in their narrative context. At this early stage, the challenge is primarily tackled through a preliminary reference to the key concepts, placing the central words of the exploration, such as 'science', within quotation marks. The concrete use of such a sign is intended to remind of this preliminary approach, that the concepts refer to a meaning allocated to an empirical field and of which we do not yet know.

The 'politics of science' is a broad empirical field and an object of study with boundaries that are difficult to establish. It is a field that goes beyond conventional disciplinary division of the world as it appears in numerous contexts in our modern societies, and with numerous ways of interaction among people. The establishment of the limits in this study will, thus, not follow academic lines or disciplinary traditions, but rather be guided by the encounter with a concrete context in which the empirical investigation takes place. The explicit exploratory nature of the question, searching for an unknown meaning in concrete contexts, makes it difficult to start and be guided by a hypothesis; rather, it is expected to emerge in the encounter with the empirical material. Thus, this initiative will not be guided by definitions and a hypothesis in a traditional meaning, but rather expects the guiding lines to be shaped as the outcomes appear. There are, of course, a number of precepts and choices which guide the research, but it is explicitly accepted that they are building on naive impressions and that they, thus, have to remain under continuous and reflexive examination through the analytical procedures. The consequent careful position from which the research proceeds carries a number of challenges, mainly through a constant vigilance with regard for the uses of words, an approach which might make the reading of the text somewhat more laborious. This ambition also faces challenges with regard to the initial vagueness consequent to the preliminary and reflexive point of departure, explained by the respect for the complex procedures of attribution of meaning.

The chosen empirical field is mainly concentrated on the appearance of 'research' and 'education' at the 'university' in Sweden and China. These are evidently quite restrained fields in relation to the extent of the general appearance of the 'politics of science'. The potential other fields in which the phenomena appear are innumerable in modern societies, and there are important dimensions of the 'politics of science' which falls outside of its expressions in the 'university'. The increased focus on 'knowledge' and its 'uses' in political, economical, and social discourses appears to multiply the arenas in which the 'sciences' appear, and increases the expectations on 'education' and 'research' (Latour 1998), especially relating to a perception of the increased importance of the 'production of knowledge' in the societies (Simons 2007). This field is, however, also quite comprehensive with regard to the extent of the realization of the 'university', and the number of people involved in 'education' and 'research', as well as the policies and procedures governing their organization. However, the empirical approach to a few narratives can be exemplary as it enables an encounter with the phenomena which is both broad and narrow enough as a field of research. Understanding a sphere such as the 'university' can also indicate a narrative context that is valid for the broader appearance of the 'politics of science'. A study of the meaning of 'education' and 'research' can give examples both of the governmental positions and of attitudes with regard to the 'politics of science' and to the individual encounter with the phenomena.

A study of the realization of the 'politics of science' in the context of the 'university' in Sweden and China holds a number of further positive effects and some challenges. There are numerous descriptions of the 'universities', both in classical ideologies (Humboldt and Burrow 1969; Newman and Turner 1996) and in more recent attempts (Barnett 2000), but as Kerr famously wrote on its rapid development, 'History moves faster than the observers' pen' (Kerr 1963, pp.6). This indicates that an empirical investigation of its meaning may not be misplaced. Some advantages are related to the important role of the 'university' in the Swedish and Chinese societies, as well as its everyday appearance. The approach can enable many dimensions and points of reference to reveal similarities and differences and gives quite concrete examples on how the general narratives on principles relate to 'stubborn facts' in the public spheres. A challenge also might be implied as the phenomena appear to be too familiar, too well known to simulate the distance necessary to study it as something unknown. On the other hand, it is also a phenomenon with many layers of meaning embedded in cultural and historical settings, coloured by more or less hidden ideals, with a complexity of life and a multiplicity of appearances of the different relations, roles, and expectations of the realized 'research' and 'education' in Sweden and China. The broad conceptualization of the 'politics of science' and the empirical approach is intended to reveal potential variations of meaning embedded in different types of narratives.

The choice to study the Swedish context was consequent to its Swedish origin, as it is fostered within its academic traditions and organization, and is a necessary dimension of the reflexive position. The Chinese context was chosen because of the interesting tradition of exchange between the countries, which appears to be increasing, and also because it is culturally and geographically distant, showing a different way to realize the 'politics of science'. China appears to have a fascinating combination of a rich tradition and a recent boom of growth that brings both advantages and challenges to the formation of its 'politics'. There are also indications of similarities and differences which reveal a spread of the potentialities of the 'politics of science'. There are, for example, similarities in the blends of competition-driven and state-driven policies and differences in the size of the countries and their traditional views of intellectual authority, which can provide interesting contrasts and points of contact. The choice of two different contexts is intended to simulate a distance to the particular ways of realizing the 'politics of science' and to reveal ways that are taken for granted, possibly unveiling alternative ways of doing.

In sum, it is established that the initial position is not a formulated hypotheses but an interest in an empirical field; it is an acknowledgement of a 'something' that has attracted our interest, something that is unknown and that we want to understand, and that we will try to encounter in given narratives. The attempt to do an object-centred study with an open and explorative approach presents a number of challenges to the procedures, method, and vocabulary of the research, but it is expected to result in closer contact with the investigated phenomena. The reasons for the position of departure are explained as steps towards dealing in direct contact with empirical sources for the claims, with an emphasis on the properties and dimensions that are given in the narrative context in which they appear. In other words, through a rigorous study of concrete appearances of meaning in given narratives, the intention is to contribute with an understanding of the function, practice, and complexity of the phenomena in traceable steps from the concrete perspectives to general claims (Husserl 1931; Sages 2000).

Background of the initiative

The analysis presented here does not answer to any order (external demands). It neither follows a programme, nor is it directed towards any given policy process; nevertheless, the motivation to explore the 'politics of science' in Sweden and China is primarily founded in a personal interest and an observation of a potential contribution to academic fields. The applications of the research are, thus, not

directed to answer specific a priori questions, or to satisfy a specific stakeholder, but have enjoyed both the benefits and the challenges of less external guidelines. The research is performed as a part of a PhD programme and is realized within the research Policy Institute at Lund University, which is characterized by the interdisciplinary setting typical to the STS field as it is primarily united by a common field of study rather than a tradition, a common method or terminology. The approach in general terms and the methodical frame comes from the psychology of culture and organization with a Husserlian phenomenological approach, carrying the desire to study the process of constitution of meaning.

The STS and the phenomenological tradition have many common concerns, but the explicit crossroads between the two traditions are few. Both traditions aspire to examine the constitution of 'scientific' narratives, and they both examine concrete appearances of 'knowledge in the making' and its discursive establishment (Latour and Woolgar 1986). This text cannot present a comprehensive introduction to both fields as they are both quite developed and the space it would require to do them justice would restrict the space needed to perform the empirical investigation. The consequent intention is, rather, to exemplify the encounter of the traditions through an investigation that carries questions relevant to both traditions. However, this point of departure presents a challenge since the vocabulary and the considerations stretch through thoughts that go beyond the boundaries of the explicit narrative presented in this text. The initial chapters make somewhat more reference to the phenomenological tradition, in an attempt to establish a foundation for the empirical approach, while the later chapters place the outcomes within an STS tradition. The crossroads between the phenomenological and STS traditions thus takes place in an empirical exemplification, investigating the 'politics of science' revealed in 'education' and 'research' at the 'university' in China and Sweden. The bulk of this presentation will, therefore, also be present in the empirical outcomes of the research as it is considered to be the unique dimension and the central contribution of the initiative.

The distance between the investigated contexts increases the demands for cultural reflexivity, and the issues of language as well as the traditions of thought are challenges that have to be met with care. The point of entry has mainly resided in a knowledge about inter-cultural encounters in general more than of the specific knowledge about the involved cultures; in particular, the encounters with the Chinese culture and language were not of a deep nature before the start of the research. It has, however, involved a period of residence in China and numerous journeys within this vast country, which has given a lasting fascination and attraction to its cultural expressions. The task of handling the different languages have mainly been addressed

through external help and extensive discussions on the translations, with kind students and friends in both countries.

The composition of the text will also be formed by the somewhat unusual empirical point of departure as it is not formed with ready questions and a series of expected answers, but rather, stretches into the spheres of the unknown. The motivation is, in this sense, based on a wonder about the phenomena and, in a broader scope, to understand what role they play. In the STS tradition, there has been a division between something called 'applied research' and 'basic research' (Bush 1945), a division that has been heavily challenged and criticized (Godin 2006). The ways of describing 'basic research' and the ways of expecting benefits from its achievements are, however, possibly the best descriptions of the expected outcomes of the research presented in this essay. As an initiative driven by curiosity and personal involvement, it does not expect to solve applied problems or answer ready-made questions, but, rather, to attempt a reflection on a more fundamental level than what is common. With the increased importance of 'science' in modern societies and the equally increased involvement of 'politics' in its organization and realization, it may be increasingly vital to find occasions to take a step back and reflect on what we are actually doing as we engage with the 'politics of science'.

The expected value of the initiative resides both in the open exploration of the constitution of meaning and as an illustration of the methods and procedures. The analysis of the 'politics of science' in Sweden and China are scarce; the fundamental analysis of narratives is quite rare and has not, to the best of my knowledge, been performed in any way similar to this. The value and potential contribution of such a study goes back to the value of understanding different aspects of the phenomena on a fundamental level. It is primarily driven by a general curiosity, but it is evident that the interaction and communication involved in the encounters between Swedish and Chinese actors might suffer without a deeper understanding of what the 'sciences' and their 'politics' mean in their different contexts. A careful investigation might also enhance the self-understanding in both countries, as well as provide an inspiration pointing at further potentialities for development in both systems as their similarities and differences are described.

Performing research for a public institution and being driven by personal motives does not necessarily make the position less intricate as regards transparency as the motives and hierarchical interactions may be less apparent and their effects are less visible. This position, and these circumstances, primarily characterized by a lack of external guidelines, and reposing on a personal interest, accentuates the need to

reflexively address one's own narrative context, something which involves both practical and existential challenges. To explain and interpret world-views are acts imbued with the need to see and understand the perspective from which they are done. The implied struggle has to be taken seriously in the encounter with the 'Other', the foreign, with respect for the diversity of potential ways to constitute meaning (Levinas 1966). The challenges bound to the context are primarily faced with a preliminary tone and an intention to achieve a reflexive position, aware of the perspective from which the statements are issued. The exploration touches matters of potentially great importance both to individuals and communities, not only regarding existential questions, such as the nature and function of the phenomena of 'politics' and 'science' to the search for a good way of life, but also materially, as it is the location of personal and collective investments, expectations on careers and potential ideas for development. The exploration in this essay is neither intended to avoid the existential dimensions, as is often done in explicit scientific discourse (Pestre 2004), nor to be normative and establish a standard. It is rather to describe, if found important in the material, the existential logic implied in the experience of a public in relation to the formal establishment of discourse. Bridging the gap between formal and informal narratives is, in this way, expected to be a way to frame the policies and counteract their potential alienation from the public they aspire to, in a loss of 'political life' (Arendt 1950).

An initial position of reflexivity

The 'politics of science' is the object explored in this essay, but it also uses tools from the studied 'sciences', and it is organized in a 'political' frame, which creates a situation that demands reflexivity. You could also say that it is a narrative directed towards the study of narratives and a constitution of meaning exploring another constitution of meaning. This acute need for reflexivity is, however, not unique, but intertwined with the STS field, initiating the reflexive act of making a 'science' of the studies of the 'sciences in the making'. The sociological, historical, and philosophical contextualization of the procedures, the organization, the decisions, and the debates forming the 'sciences' does not, however, have to be a way of undermining its authority or validity; on the contrary, it can be a way of establishing the quest for knowledge on safer ground (Latour 2002). The ambition in the STS traditions to contextualize the claims of knowledge has a variety of motivations, stretching from a relativistic critique of the power involved in the claims of 'science' to an ambition to provide an expertize for an enhanced technocratic efficiency. The paradox of applying its tools on its own constitution in the STS tradition is close to the position proposed in the phenomenological tradition, which is echoed in our search for knowledge about our acquisition of knowledge. In this tradition, our experience of the world is taken as evidence for the foundation for the grounding of the 'sciences' (Husserl

1931). The ambition to analyse 'constitution of meaning' demands special care in the uses of the key concepts, investigating their implied concerns and approaches.

A reflection on the meaning of 'science' is, according to Husserl (1935), needed in every 'scientific' investigation, something that indicates a demand for humility before the complex appearance of the world and a scepticism towards simplified representations. This carefulness is reflected in the purpose to reveal the meaning of the phenomena in their empirical context rather than relying on their potential theoretical constructs. The reflexivity mainly takes shape in a preliminary approach that affirms a careful point of departure demanded to unveil the meaning we want knowledge about, and it establishes a consciousness of the perspective from which the interpretation is performed. The reflexive point of departure is, in some sense, taking a step back from some common polemics and struggles in the STS field as it is not intended to engage in debates on the relativism of claims. This polarization of approaches, with different degrees of criticism, is described by Slaughter (2001) as a dichotomy between modernism and post-modernism, and has been experienced as a threat with relativistic tendencies, and some parts of the scientific communities have perceived it as a degeneration or a heretical tradition (Latour 1989). The debates have been described as a 'science war' between scholars doing 'science' and scholars studying 'science' (Latour 2002). The position of an approach to 'science' as a narrative phenomenon does not address, as such, the levels of relativism or how valid or reliable scientific narratives are; rather, the initiative attempts a reflexive and careful progression towards the description of phenomena as encountered through a methodical approach to an empirical study.

In the perspective of an analysis of science-policy, Elzinga and Jamison note that the field is especially fragmented with regard for national boundaries: 'The fragmentation may be explained by the variation in national context in which science policy and its academic study are carried out, including differences in intellectual traditions as well as different patterns of institutionalization' (Elzinga and Jamison 1995). The cultural differences in the process of constituting meaning have often been underestimated in scientific analysis (Valsiner 2009), and cultural reflexivity has been also foregone in an unconsciously colonial heritage (H. Zhao 2008). The analysis presented in this essay takes its point of departure in a Swedish context and tradition, with its setting of 'politics of science' and accepts that there are traits of naivety in this initial phase. The preliminary approach and the deeper analysis of how meaning is constituted is intended to be able to point at potential alternative ways to understand the phenomena and thus attempt to trigger a reflection on one's own context (Valsiner 2009; H. Zhao 2008). The need for reflexivity is also at the foundation of many of the methodological considerations in the research. In the ambition to aid the

interaction and communication between two systems with different ways of understanding what the 'sciences' and their 'politics' mean, an underlying goal is to unveil unconscious naturalizations embedded in world-views. In other words, we want to understand the potential 'Swedishness' and 'Chineseness' of the given contexts and perspectives; nevertheless, even these categorizations are evidently broad generalizations.

The ideal dimension of language (Husserl 1929) and the finite form of communication of written media, in which the reference to the context of reading is severed (Ricoeur 1991), are important arguments for a reflexive position, but as a discourse is established step-by-step in this narrative, the distinctions of concepts are established progressively. The need for reflexivity is mainly centred on a confrontation of the 'natural' supposition of a neutral perspective, in relation to the contexts in which the studied narratives are founded. As an illustration, we can relate to a classic proposition in intercultural psychology that there are no 'culture-free' zones and that it is not possible to describe a culture from 'the outside'; it is rather done from other cultural spheres (Valsiner 2009). It is a 'natural' mistake to attempt to describe, for example, 'Swedishness' as an entity with a consistent essence, while it is a stereotype that would be described differently with a 'Chinese' stereotype or a 'North American' stereotype in mind. Even though we can speak of, and imagine, general concepts, it is not something we can experience; what we experience is specific examples and particular realizations. This illustration explains the need for a reflexive approach in the sense that even though the study of the 'politics of science' may appear to belong to a general sphere, the aim is to understand it in the specific occurrences that take place in Sweden and China, building an understanding bottom-up, from the specific to the general. In other words, the mentioned example reminds that all occurrences of the 'politics of science' are happening in specific contexts and that the choice to explore specific narrative approaches in given examples is thus not a step away from the understanding of the general dimensions, but a step closer.

The reflexive scepticism towards the narratives on the meaning of 'political' dimensions of the 'sciences' that shapes the point of departure inevitably still has naive dimensions, and there has been a number of natural assumptions involved in the procedures of this research. That is the main argument for the reflexive and preliminary attitude in the initial steps, and it is explained as an attempt to come closer to the ways in which the phenomena appear and to build a sound foundation for general descriptions. It is not intended to be a solution to all the methodological impasses empirical research has to go through (Lynch 2000), but, rather, an affirmation of the complex appearance of the field and preparation for necessary steps and considerations given through the outcomes of the analysis. The open and

preliminary approach is a way to reintroduce a reflexivity, and the encounter with the foreign is the primary path in this essay to realize an explication and interpretation building on a reflexive position as the understanding of different perspectives is intended to reveal the assumptions we did not know we had naturalized.

Between a narrative context and the targeted phenomena

This essay is not introduced by a theoretical chapter as the custom generally dictates in the academic tradition and the STS field. The reasons for this absence are intimately related to the ambition to explore the meaning of empirical phenomena and to give initial priority to the context of the use of the concepts rather than ideological precepts. The study will be situated in the traditional STS theory in the later chapters of this text, when the narrative context of the empirical field is established. The initial position of an open study of a field is directed towards an unveiling of the phenomena as they are given meaning in the occasion of its narrative expression, thus enabling a deeper study of the interaction between the central concerns and their contexts (Sages 2000). This open approach does not claim, however, neutrality; rather, it builds on an approach that is based on the phenomenological philosophies as they are put into practice in an encounter with the STS field.

The second part of this chapter, establishes some wider perspectives from the STS and phenomenological traditions and addresses the more specific choices and approaches presented in the first part of the chapter. The act of positioning here continues into attitudes that are going to be involved in the later analysis, such as to the analysis of conceptual images (Miettinen 2002; Elzinga 2004) and of science cultures as presented in Elzinga and Jaminson (1995). The last part of the chapter thus establishes some driving questions of the relation between the narrative context and the central phenomena that are intended to guide the coming analysis.

‘Politics of science’ as a phenomenon and a narrative object

> ‘The new images of scientific knowledge production have a social epistemology that is rather limited in scope. They are ideologically coloured totalizations of a small segment of the knowledge production landscape’. (Elzinga 2004, 120)

This quote appears in a review in which Elzinga (2004) describes Miettinen's (2002) analysis on the emergence and uses of the concept of National Innovation System (NIS). The general question in the analysis is whether NIS is a scientific concept or a

political phrase used to legitimize arguments and priorities. The review places this approach in a broader perspective and identifies a threat as the concepts and languages used create images for the complex encounters between the worlds of 'science' and the worlds of 'politics' which might not be representative of the phenomena. The threat is in the contexts of the analysis and the review primarily identified with new and specific concepts such as NIP, second wave, or triple helix, but an argument here is that even more fundamental concepts such as 'science' and 'politics' can be subject to similar tensions in the variety of their meanings. The open approach in this initiative is an attempt to invite images or narratives which establish the function, content, and meaning of the concerned words based on the ways they appear in examples of their ongoing uses, avoiding the 'ideologically coloured totalizations' of theoretical approaches.

The philosophies in this initiative that establishes the 'politics of science' as a phenomenon and a narrative object are thus not only a method or a set of tools but rather an approach: a path to a description of a 'phenomenon'. This approach is adopted with regard for the 'object' of interest as it appears (Latour 2005). In the phenomenological tradition, the position of departure is given in an investigation of the kind of 'object' we deal with. In Cartesian tradition, Husserl proposes that there are different spheres which require different methods and give different kinds of results (Sages 2003; Husserl 1935). The study of the 'politics of science' cannot find grounds in what we call nature, but, rather, in the sphere of human sciences, where meaning is formed in human consciousness and interaction, among individuals and collectives, and it is in narratives that this constitution is expressed. The phenomenon of 'science' itself belongs to the human sphere as it becomes an object of study—it is, so to say, not a 'natural object' with given measures. Therefore, when we want to study it, we cannot apply tools to measure it which are independent of the human endeavour to constitute meaning. In order to study what 'science' is, we have to study the way in which we perceive reality as proposed in the phenomenological tradition, and 'science' itself has to be studied within the realm of human 'sciences'. There might be an idea of 'science', transcending the human communities, but this is not the primary object of study in this narrative; rather, it is the 'politics of science' as a narrative phenomena, with its reality not in ideal principles, even though these might be important to understand, but its reality is allocated to the place where it is given in the narratives of the communities (Husserl 1931; Husserl 1957).

The approach established here is, therefore, centred on the consideration of a phenomenon, as the dialogical encounter between actors and a 'something' that appears, where a meaning is expressed in narrative form. Thus, it is neither a procedure of research to analyse 'an object out there' nor only a process to understand

it 'in our mind'; rather, it is a combination of the two simultaneous processes that are significant for the constitution of meaning. In other words, it is a position and an approach to the 'politics of science' that prepares for an encounter with the phenomena in the narratives in which they appear instead of confirming or falsifying theoretical propositions and already existing narratives. There are a number of consequences to this approach, and some questions are raised that are often avoided in the name of objectivity (Pestre 2004; Calhoun 2006), which also can imply a critique to the institutions and power that 'underpin'(Pestre 2004) the 'political' roles of the 'sciences' as its 'making' is contextualized, mainly in historical, political, and sociological perspectives (Latour and Woolgar 1986). These questions will be further addressed in the concluding part of this chapter and then elaborated in relation to the outcomes of the research in the later parts of analysis.

The phenomenological approach and the STS tradition have similar ambitions in their critique of the naturalization of 'scientific' rationality and the exploration of the contextualization of the 'scientific' claims. It is an ambition that is visible, for example, as Miettinen (2002) traces the origins of the concept of NIS, asking whether the 'political rhetoric' that emerged is based in a more descriptive 'scientific concept' than the earlier vocabulary, and whether there is any 'content' in its uses. In these terms, the analysis allocates the actuality of the concept to 'scientific' narratives. The research presented here follows similar lines of thought but allocates the actuality of the words to their ongoing uses in formal and informal narratives. This distinction between spheres of reference can be seen as a consequence of the different intended concepts, as NIS appears with a number of scientific connotations, while 'science' and 'politics' appear in a general public.

The variation of concepts according to contexts can also be understood through references to different cultural spheres. Such an approach is presented in further detail as Elzinga and Jamison (1995) identify four science cultures shaped by communities gathered around common concerns and traditions and establish different contexts for the 'sciences'. The economic, bureaucratic, academic, and civic science cultures propose a theoretical classification of the narrative contexts that indicate a variation of appearances of the phenomena. There are, for example, different ways to understand the forms of a 'political' field according to the cultural contexts, such as the economic science culture in which it appears as a market, while the academic science culture sees a collegial arena. These observations are an initial contact with the theoretical narratives that will also be used in the later parts of this text to frame the outcomes and is a narrative approach which should preferably not colour the way that the empirical material is presented. The approach to the object of interest as phenomenon

and a narrative object is open, but there are still threats of naive propositions, and some may not be revealed until the encounter with the empirical material.

Other positions in this narrative are consciously chosen, giving emphasis to the reflexive approach, such as the maintained identification of nations, even if China and Sweden are evidently varied contexts. This position is also reflected in Miettinen's approach (2002) in the conception of an NIS which establishes the nations as political fields homogeneous in their common reference to the governing state as well as the legal and institutional contexts. The approach to the Swedish and Chinese contexts in this research is one of the precepts that is building initially on similar simplifications. The propositions are, however, intended to be tested against the emerging empirical material and are thus placed within the preliminary and reflexive approach.

The ways of addressing the object of study as a phenomenon taking place in a culture and expressed in a narrative context also leads to one of the main methods used to formulate a descriptive narrative in which the results will be presented—through the observation of similarities and differences. Instead of presenting a frame of reference from a theoretical narrative, where the questions in the beginning of the text leads to the formulation of conclusions in the end, focus in this initiative will be given, rather, to a study and identification of variations of the emerging appearances of the phenomena. The different references in cultures are not necessarily exclusive or contradictory, but they reveal a variation of associations and implications that invite an image of the phenomena that can give a narrative that is in close contact with its actuality. The study of similarities and differences in the narrative appearances of the 'politics of science' is intended to propose reflections on what meaning 'politics' and 'science' have in their respective contexts. The renewed position towards the actuality of the phenomena is also expected to point at the issues that the political acts are addressing, what it is that is negotiated and what politics might mean in the narratives of each context. The emerging nature of the objects and their origins in the empirical material are meant to validate the quality the subsequent idealization: the building of theories. This said, there are still no guarantees that the emerging image of the 'politics of science' in this exploration is free from the 'ideologically coloured totalizations of a small segment of the knowledge production landscape', but the preventive measures are intended to generate images that might be valuable in the quest to understand the concerned phenomena.

Turning from a question of existence to a question of meaning

As an example, it appears that an initial reference to formal documents suggests different meanings of 'science'. The Swedish government for example explicitly establishes that the aim of 'research' is to 'strengthen Sweden's position as a research nation and thereby increase its scientific competitiveness in a globalized world' (Swedish Ministry of education and research 2008). The somewhat older but still valid Chinese Law for science and technology rather establishes it as a base to build on: 'The State practises a basic guideline of basing economic construction and social development on science and technology' (Second Meeting of the Standing Committee of the Eighth National People's Congress 1993). These two approaches are not meant be representative of the two systems, but to illustrate that the meaning of the phenomena of interest appear in different contexts. They are not proofs that establish what the phenomena are, but understanding the narratives is intended to provide the tools to reveal the intended meaning. The ways of a competition and of a construction are not necessarily opposed, but they are different contexts which establish different meaning. The propositions carry references to world-views and perceptions which are inseparable from the meaning of the actual phenomena and shape the way that 'politics of science' are realized in Sweden and China. The ideals also tend to become lenses through which the experience of the phenomena are interpreted, forming the frame or the structure through which we identify its meaning. As we proceed into the phenomenological approach to our field and take a step back, we do not at this stage actually question whether Sweden actually takes place in an international competition or whether China actually builds with given means of production. Rather, we turn from the question of existence—what is or is not—to the question of meaning—what is meant with the propositions.

The conceptualization of levels in the constitution of meaning is primarily a reference to implied dimensions of a narrative, what is called partial intentions in phenomenology. We can, for example, observe a materialistic way to consider the collective implied in the way that the cited Chinese extract, as the meaning of 'science' is given as a 'means of production'. This narrative context forms a collective based on a concern for resources, implying a shadow of a greater goal of the production of something else. On the other hand, in the conception of 'science' as an 'international competition', a collective is formed around a perception of common values in a nation-centred identification, in which common values appear to shape a context where the 'competition' takes place. This kind of attempt to identify the implied layers of meaning in the 'politics of science' reaches for dimensions that are inter-subjectively shared, in other words, that establish common understanding, from which the organization and actions are formed.

The diversity of potential ways to constitute the meaning of the 'sciences' and the intricate relation among its layers of meaning does not diminish the threats of erroneous interpretations; the complexity is rather an important argument for a fundamental approach to the phenomena. The narrative contexts appear to shape the imagination in which the phenomena appear and bares consequences on potential questions, such as what quality is or what challenges it faces. An impression of endless potential ways to constitute the meaning of the 'sciences' threatens to conceal the actuality of the realized possibilities, and even if our imagination might involve more or less absurd images of the 'sciences', both these imagined pictures and the perception of the reality are dependent on the narratives in which they appear, are interpreted, and potentially misunderstood. It would, for example, be unwise to draw the conclusion from a legal formulation that the Chinese government would be less interested in an international competition of the 'sciences' than the Swedish government or that it would be more interested in its actual potential means of production, but as narrative contexts, they identify structures of meaning embedded in specific world views and values. The mentioned short extracts would not be, in the least, foundation enough to make claims of that nature; rather, what is needed is a rigorous analysis following the constitution of meaning. Such an analysis could reveal the implied frames in which the phenomena appear and potentially enable such general claims, as long as the chain of arguments is relayed to their origin in the specific expressions.

To enable a contribution with a deeper study of the implied narrative context, this initiative aspires to proceed with the challenges of identifying the central phenomena as a non-definite set of 'something' that has caught our interest and which awaits the 'definitions' emerging from the empirical investigation. In this approach, the studied narratives, issued by a person or appearing as defined in a law, in a theory, or any form, become indicative of an approach rather than a definitive claim. With this intention in mind, it is apparent that flexibility as regards potential alternative ways to constitute the meaning of 'science' or 'politics' is essential. This opens for a broad inclusion of various potentialities which might be related to the phenomenon and give a fuller picture of the object of study. The kind of outcomes that can be expected of this study is thus centred on the contribution to an understanding of a constitution of meaning, in other words, a descriptive narrative with a careful investigation into specific contexts with propositions that are traceable (Polkinghorne 2003).

Exploring the constitution of meaning is an attempt to understand the various layers and dimensions of how it appears in practice, not by allocating the 'reality' to the empirical findings, but rather searching for the indices that can lead to an

understanding of the procedure in which it appears, or in other words, to retrace the constitution of meaning from the 'bottom up'. In this approach, the specific exemplifications of the concrete appearances of narratives are the base, the ground from which we attempt to abstract inter-subjective and theoretical dimensions (Ricoeur 1991; Sages 2000). The ways of processing a narrative through the MCA include the context in which an expression is formed, in the broader narratives as a network of interconnected and mutually characterizing structures. It is a procedure that is opposed to the attempt to isolate specific dimensions or variables.

The turn towards a study of 'meaning'—in contrast to a study of 'existence'—contains further depths (Husserl 2001), but for the moment, it primarily directs our attention to narratives as the context in which 'meaning' is constituted. This turn towards the study of meaning challenges the belief that 'variables' could only be united in time and space by external connections, that the parts of a whole of a phenomenon could be juxtaposed but still alien to each other, independent like cogwheels, and not mutually essential to the constitution of their meaning (Bachtin 1991). The consequences of this approach on the ways of posing the questions that drive the analysis are, in other words, not directed towards an isolation of variables, searching for simple relations of causality and effect, but rather towards an understanding of contexts and processes in which the meaning of interdependent phenomena is constituted. The philosophies guiding the methodology of this research thus shapes an approach which considers the dialogical encounter between the actors and the phenomena. The dialogical encounter with the empirical field is the main guide for the direction and boundaries of the investigation, allocating the main concern to the study of encounters between the appointed objects and constituting subjects, in which a narrative can appear where the constitution is expressed and available to our analysis. The inclusion of the wider processes is an attempt to avoid an atomification of perspectives, going amiss of the meaning-baring context. It is a traditional phenomenological approach to the world, rejecting the presumption of simple and linear causal relations between isolated variables and, rather, embracing complex appearances of heterachical relations among phenomena formed as networks of meaning (Maykut and Morehouse 1994).

A further challenge in the study of meaning concerns a certain 'fluidity' in its appearance. The point in emphasizing the fluidity of a concept is an acceptance that appearance and essence are not given in a direct relation and that they are not static but vary between different perspectives, contexts and people; a careful approach to these two parts might enable a closer understanding (Arendt 1971). The fluid nature of meaning is, in this context, not avoided through definitions but rather engaged through assuming a preliminary approach to the concepts and proceeding towards a clarification of the networks of meaning and the nodes of concepts step by step during this essay (Ricoeur 1991; Sages 2000; Husserl 2001). A definitive approach to

a vocabulary, a set of concepts or a tradition might appear to ease communication, but it also risks being illusory as the meaning of words changes both over time and according to context. This variation demands a use of language which avoids falling into both a belief in an exact or 'natural' meaning of language or in pits of relativization, mainly through the care taken to build on an attempt to make the meaning of the vocabulary explicit, (Husserl 1929) going beyond the spontaneous trust in the established meaning of the words we use.

Analysing the narrative context of the emerging 'politics of science'

In the quote above, Elzinga (2004) focused on images of 'knowledge production', and the intention behind this initiative is primarily to provide empirical grounds for reflections on such images. As an illustration, we could consider a person imagining how to build a university which in his or her eyes would be successful, a practice that, in its singularity, can contain a diversity of layers and references. Earlier examples could propose the 'university' in wider contexts of markets, collegial arenas, materialistic world views, or competitive nations, and the potentialities may seem endless, but the actual expressions of the involved narrators and the fruit of their imagination establish an empirical field in which the phenomena appear in their practice. In such a free narrative expression, the person reveals ways to understand the world and constitute the meaning of phenomena appearing to him or her. The choice of topics to address the references, tensions and questions reveals worlds of connotations and meaning which might have a number of similarities and differences between narrators, which, brought together, reveal an inter-subjective and practical appearance of the phenomenon. As the image of the phenomena of interest (such as the 'university') appears in practical narrative contexts, it is possible to extract images of, for example, the 'knowledge production' to which the theoretical images may be reflected.

In the light of this introduction, the narrative contexts are not merely different environments in which similar actions take place; rather, they are the structures in which the phenomena are given meaning. In this sense, we approach the study well aware of the potential variation of the function of such fundamental concepts as 'politics', 'research' or 'education'. The exploration is, in other words, open for a meaning of 'politics' that is constituted in different ways, that the very things that keep the addressed communities together and that explain their reasons of existence are potentially different. As mentioned, the study of such differences involves both existential and material challenges, and the potential revelation of different ways of constituting meaning is expected to pose valuable questions to they ways that we

think about 'politics' and 'science' and to give a further space to the object of study (Latour 2005). The general approaches to Arendtian 'politics' in the constitution of communities, and to a Whiteheadean 'science' between general principles and concrete, stubborn facts come together in the encounter with the empirical field.

The validity of the approach resides in the realization of the reflexive approach, as a tool to bridge the gap between the specific appearances of concrete phenomena and the more general claims and descriptions of the scientific ambitions (Polkinghorne 2003). The choice to study the specific realization of the 'university' as a field for the 'politics of science' is not meant to be exhaustive, but rather exemplifying or illustrative, and to potentially indicate the wider meaning of the phenomena (Godin and Gingras 2000). A traceable reflexive approach is taken with regard for the gap between specific appearances and general claims and aspires to contribute to the theoretical field mainly with a descriptive understanding of the object of concern, as well as a potential reflection on alternative perspectives. The empirical field is not expected to appear with a ready-made unison image for theoretical abstraction; rather, the inter-subjective layers of meaning are expected to contain contradictions and a range of approaches. Depending on their contexts, the similarities and differences between the narratives is hoped to reveal more or less conscious negotiations between approaches. In this perspective, a general impression would appear in the acts of negotiation in a collective, something that will be investigated in particular as a 'political' sphere forming the 'sciences' (Foucault 1972) in potential clashes or synthesis.

The exploration into the meaning in the 'politics of science' is centred on a study of the narrative field that involves the role phenomena play in the communities that are addressed, and it is intended to be broadened depending on the phenomena that emerge in the empirical material. The frames of mind, the world-views and the perspectives in which meaning appears at this point are the portal to a number of questions on the effects of different ways to constitute meaning and on the wider phenomena involved in the 'politics of science', such as the aforementioned 'production of knowledge'. The investigative endeavour thus proceeds in the bottom-up approach with the theoretical reflections on the meaning and role of the 'sciences' and the understanding of 'politics'.

The descriptive narrative resulting from the empirical investigation will address actual issues of the STS field, such as the establishment of actors, the negotiation on the roles of government, the institution, the scholar and the public, as well as the different kinds of motivations. The addressed structures of meaning also involve the

role of rhetoric in the establishment of a discourse on 'science' and the consequent shaping of the 'political' and public roles in which it is realized (Elzinga and Jamison 1995). An approach to the 'politics of science' that takes place at the 'university' and includes both 'education' and 'research' also involves a broad spectrum of issues which might be quite unusual to the field. It is, for example, common to reflect on the relevance of 'research' in the formation of 'education'; however, the effects that go the other way are not usual, that is, how the approaches to 'education' shape the development and the potential for future 'research' (Chong and Hamilton-Hart 2008).

There are many points of contact between the academic institutions in Sweden and China, both on individual and institutional levels. The intention to ease the dialogue through a deeper understanding opens for a wide range of possible applications, such as for the ambition to attract gifted students and researchers from other countries (Yang 2010; Barry, Berg, and Chandler 2003). There are also indications that the 'politics of science' play a greater role in the general national politics, both concerning desired economic and material growth and as a source of legitimacy for the governing parties. There are also indications of a greater importance given to the initiative as the Swedish government justifies its investments in 'research' by asserting the desire to perform well in the international competition and by the Chinese government's investments in the means of production. The implied importance as regards the latter appears to be directed toward both a material growth and to further the 'status' related to the positions of 'winning' or of 'owning' the means of production.

The contribution of this essay is mainly intended to be a description and analysis, with a reflective approach that is not intended to silence alternative approaches, but rather to propose traceable paths of argumentation that provide an understanding that is based on concrete experience and which is potentially new in both settings. The ambition is to explore the object in a way that is founded on the experience of the actors and potentially make a theoretical contribution based on an understanding that is closer to the life-world of the people involved in the phenomena, something which also has broader existential bearing. As Husserl proposes in the following quote, that there would be something more to the understanding of humanity and the world than positive and exact accounts suggest, we proceed into an exploration of the ways that the 'politics of science' potentially moulds different societies.

> While the contemporary positive sciences, and even the exact sciences, initially fill the novice with enthusiasm and in fact spiritually enriches him, in the end they leave him deeply dissatisfied; notabene: provided that he wants to be more than a professional and a specialist, provided that he wants to understand himself as a human being in the full and highest sense and wants to understand the world, and wants to pose to himself and to the world questions of ultimate knowledge and conscience. (Husserl 2001)

Chapter two: Method

The empirical investigation into the appearance of the 'politics of science' that shortly will be presented is performed as a Meaning-Constitution-Analysis (MCA), and this shapes the whole approach (Sages 2014). It is a rather recent and little known approach, but it belongs to a broader tradition in the human sciences as it realizes a philosophical position in a practical procedure directed towards a study of how meaning has been constituted through processing narrative material (Sages and Lundsten 2004). The MCA primarily constitutes an approach to the study of implicit layers of meaning in diverse narrative expressions. It proceeds through steps in which the narrative material is collected, divided, categorized and extracted in order to unveil dimensions of expressions that go beyond the first hand and explicit interpretations (Sages 2000). This interpretation of the phenomenological tradition and its realization in the study of the 'politics of science' is intended to enable an object-centred process (Latour 2005) that leads to a descriptive narrative and a reflection on the meaning of the phenomena.

The MCA was first adapted to studies in psychology, with specific interests in inter-cultural encounters and the psychology of work and organization, but it has now been applied to a diversity of fields and objects of concern (Sages and Lundsten 2004). The inter-cultural approach is an important part of the method in this research in several aspects as it aids in unveiling layers of meaning that are taken for granted through an examination of similarities and differences of basic expressions. In other words, we could say that an approach to the appearance of a phenomenon that is viewed in a cultural dimension is a path to simulate a distance to one's own context, which gives a new perspective to the known phenomenon (Polkinghorne 2003; Sages and Lundsten 2004; Valsiner 2009). The inter-cultural nature of the research also poses further demands on the study as the attempt to understand the different meanings of similar words and phrases proceeds through the identification of their narrative contexts (Sages and Lundsten 2009).

The methodology has played a central part in this study, as an attempt to perform a phenomenological exploration in the STS-field. A fundamental postulation formative

to the transcendental logic that carries the phenomenological procedure is that language – use of words and expressions – reflects the perspectives and world-views of the narrating person (Husserl 1929). Use of similar words by different persons does not necessarily reflect a similar meaning-constitution, even within a common culture, and with an inter-cultural aim, there is an increased need to reach for the way in which meaning is constituted by different individuals or cultures. Through an analysis of language, this research intends to unveil inter-subjective structures of meaning, that is, patterns and ways forming the meaning of the phenomena as they appear in the collected narratives (Husserl 1900; Sages 2000). The 'politics of science' in Sweden and China is introduced in the first chapter as a narrative object that has diverse appearances, so the attempt to perform a methodical investigation has to be open for a diversity of potentialities. The metaphor of an archaeology illustrates the act pertaining to describing the process of constitution of meaning, not primarily, in an extension of time, but rather in such mentioned diversity of layers in the meaning of an object (Foucault 1972).

The approach of an archaeology reveals another aspect which is central in the MCA since it was first applied in the field of psychology as the layers are not seen with regard to historical extensions, but in different levels of consciousness, or regarding an expression, different layers stretching from the explicit to more and more implied dimensions. In the MCA, we consider different layers of meaning, both in our own interpretations as researchers and in the life-world intended by the studied narratives. When a text is divided, the obvious, first-hand meaning is veiled, and in order to unveil the assumptions behind the propositions, we have to proceed in the methodical archaeology. The organization of meaning that the MCA allows can be described as a way to avoid seeing the obvious patterns that our preconceived understanding of the world gives in the first place; rather, it allows for a number of contingent horizons. Archaeology is a science searching for the foundations of our knowledge in history, and a general image of its practice is digging in the ground for artefacts that can be used as evidence to explore the past. Foucault (1972) used this picture as he set out to study social perceptions of reality, the metaphor is in this analysis used in a psychological perspective.

The Meaning-Constitution-Analysis (MCA)

The design directs a collection of narrative material which gives glimpses from specific realizations of 'education' and 'research' at the 'university' in China and Sweden. The procedures resulted in eight different narratives, which are studied in an exploratory way (Sages 2006); building on a descriptive approach to the field and an evidence-

based explication and a subsequent interpretation, intended to study how meaning is attributed to a phenomenon. The material on which the study reposes is supposed to keep a closeness to the individual occasions in which it was collected since its contextual foundations are key issues to its validity and reliability; this is the reason flexibility is central to the quality of the design. The way the sampling and collection of narratives was designed is intended to open the field of study that enables the closest contact with the most specific expression possible. This first part of the chapter of method consists of a description of the concrete steps and procedures of research, and the second part places the acts and thoughts within broader traditions and provides some general reflections on the approach. Each segment of the description of the measures taken are complemented with both positive and negative side-effects of the design.

Sampling and collection of eight narratives

Narratives have been established as the empirical field, but narratives are primarily dialogical expressions: they carry the reaction of a context and hold indications of the world-views in which they are based. The sampling of formal and informal narratives was primarily based on the principles of both a purposive and a convenience sampling. Purposive sampling is a process of gathering material to a study according to its purpose, in this case, collecting varied perspectives from the arenas in which 'education' 'research' 'education' and 'research' are realized in Sweden and China. Convenience sampling is a process in which the material is chosen because it is at hand, and, in this case, it indicates the way contact was taken in the practical realization of the research. The idea of a purposive sampling guided mainly the appointment of locations, and the principle of convenience sampling guided the collection of actual reports at the appointed locations. In accordance with the principle of emergent design, sampling can be done respecting earlier steps and might be varied and enriched according to how the procedures evolve.

Informal reports from students and personnel

In total, 202 written reports were collected as answers to an open question given to students and personnel at 25 Swedish and Chinese universities, and these constitute the informal narrative material. The choice of which empirical locations to investigate was made to reach a wide range of participants as contact was taken with major universities and university-colleges around Sweden and China. The project involved three visits to China, amounting to about ten months, primarily in the regions of Beijing in the north-east, Ningbo in the central-east and Kunming in the south-west. The choice of these three regions is based on representing key differences in this vast country: respectively, the proximity to the political centre in the capital, to economic

growth in the eastern and coastal regions and to a region distant from both the political and economic centres. The intention is not initially to perform a deeper exploration into the similarities and differences between the regions in the countries, but rather to find a broad representation of a field. There will, however, be a continued consciousness of the origins of the different reports and follow up of the eventual variations based on location. Universities of different levels were contacted at the different locations – including national, regional and local impact – to reach a wide range of representation. In Sweden, the choice of sites mainly involved a desire for wide representation of both universities/university-colleges and different regions throughout the country, from Malmö in the south to Umeå in the north.

Contacts with the universities and their representatives came from a combination of personal relations, institutional exchanges and new initiatives. The purposive contact with the sites of learning according to the desire for a wide range of representation was followed by the convenience sampling of individuals at the location, either through random contact at locations for encounters or through the direction of people of contact at the location to willing students and personnel. This procedure of collecting narratives is not aimed at a statistical representation and is, to some extent, based on circumstantial and random development of the design, something that is intended to befit the general approach to the narrative contexts. The resulting repartition of gender, age, majors and institutions of the participants is further introduced in the chapter of outcomes and in the appendix.

The first step of the research consisted of the formulation of a single, wide and carefully written open-ended question. Ten different alternatives were created and tested, to produce one single question, intended to open an area of interest to the participant, but not direct the content of his/her thought more than what is controllable. Generally, its primer end is to encourage creativity, empower the respondent to give his/her own views and enable the participants to formulate a descriptive narrative, while the researcher gives as little input as possible. It is important to let the participant express what occurs to them, even if it does not directly connect to the question of research. It is also a question of equity in the situation of the research as imposing a narrative expressions as usually is done in questionnaires robs the participants of their own power of expression (Sages 2003). Moreover, the procedure is built on these values because of the explorative nature of the initiative as it is directed towards investigating unknown dimensions of the phenomena, opening a creative space (Sages, Lundsten, and Jakobsdottir 2004). This procedure is established to increase the validity of the result, which is not related to the correlation between question and answer, but rather to the proximity to authentic expressions in the narrative context. The procedure is also designed to handle effects

such as the researcher effect, through vague and broad presentations and questions, to prevent that the researcher, perhaps unconsciously, manufactures the outcomes.

The question is in written form because there is so much other information in a verbal narrative which is nearly impossible to get a hold on and analyse methodically. The intonation, gestures, looks and glances of the eyes can formulate dimensions of communication that are difficult to catch, put in words and analyse – especially when we address participants of different cultures. When a participant is writing, he/she is conscious of the limits of the written text as the expression of thoughts in the text replaces the spoken dialogue (Ricoeur 1991), and a text is a stable narrative which we can come back to during the analysis, posing different questions to it, and also elaborate a translation in a calm situation separated from the occasion of expression. The written text can then be analysed in tranquillity and be referred to, as the participant of the study also has full control over the procedure of transmission. In this way, a participant chooses the words and formulates his/her own narrative, and this allows the possibility for an analysis that goes deep, beyond the first-hand, obvious meaning. The way in which the participants value, perceive and, in the end, construct their understanding of reality leaves tracks in their choice of words and formulations, a process that the archaeology traces. It can be added that understanding that the question lacks importance to the participants might be an important result (Sages 2000).

By an unclear formulation, the open-ended question is intended to open an area of interest to the participants forming the informal narratives, but not to direct the content of their thought. The two questions chosen from ten tested alternatives both figure an imaginative situation to the participants; in the first question, which was given to students, the participants were asked to imagine how they would introduce their university to a stranger, as follows:

> Imagine that someone from another country come to a university in Sweden/China. What would be your advice, and how would you introduce him/her? You can freely express your feelings and what you think when you read this.
>
> You do not have to worry about spelling or how to write as this is not a spelling test – as long as I can understand it.
>
> Do not worry that someone will read what you write. It will remain anonymous, so do not write your name. Thank you.

The imaginary situation appeared to activate a free expression in the participant, with a sense of empowerment, since it included the action of giving advice. However, the question also indices some perspectives, such as a national approach, an inter-cultural encounter, and the importance in the

national belonging of the 'university.' These dimensions were intended, and are expected, to enable an exploration of the perception of the different contexts, and the perspective of similarities and differences was a part of the ambition. We accepted this, with an awareness of the eventual effects. The choice of guiding the participants into giving narratives on their university was based mainly on the ambition to connect the narratives to their everyday lives and to ensure that it was a part of their horizon. It was also to give them the space to not give priority to any phenomena that we can call 'politics of science', but the idea is that the more concrete way of formulating the question and the relation to their personal lives would reveal their opinions and their ways of constituting the meaning of the phenomena.

The second question was given to university personnel involved with education, research and leadership, building on a similar hypothetical situation, asking for their advice to a foreign leader on the building of a successful university, as follows:

> Imagine that a leader of a university from another country would come to you and ask for advice on how to make a good university. What would you say? What would be important? What would you recommend the person to think of according to your experience? What are your feelings and your thoughts?
>
> It is not how you write that is important, but what you write. I only need to understand your thoughts, feelings, impressions and opinions, so please write as freely as possible.
>
> I will be careful to keep what you have written strictly for myself. Please do *not* write your name.

The question for the students was handed out on paper to the participants mainly in person and was either returned directly or posted for later return. However, some students, when asked, preferred to complete a form with the same question on a web page (created with the help of Wufoo.com). However, there were some difficulties when the same procedure was attempted with the personnel in China. Because of what is interpreted as a tradition of hierarchies, none of the personnel accepted to fill in the form as it was given by a PhD student, so a different approach was required. Directors were asked to help by giving the questionnaire to their subordinates. Further, to make the process easier, it was made available on the Internet, and, with this method, all the chosen participants answered. To maintain the same circumstances, we decided to use the same method in Sweden. It was more difficult to encourage the Swedish personnel to fill in the forms, and contact was primarily taken through e-mail. These procedures show a positive effect of an emergent design as the difficulties would not have been foreseen with our precomprehension. On the other hand, some students in China took their own initiative and copied the questions and handed them out to their friends and classmates, leading to an increased number of student participants, which was unforeseen.

Confidence is central to the honesty of the narratives, and it is much easier to gain in person than through indirect contact. The general principle is, however, to give as little information before the narrative is written as possible in order to avoid the researcher effect. However, according to research-ethics it is important to inform the participants what the research is for and to get their consent to use their narratives. There are some simple measures which can be taken if the researcher senses mistrust or anxiety in a participant during the process of collection, such as providing information about the university the project belongs to, reaffirming that their opinion is important and reassuring that what they write will stay anonymous. In the end, the narratives are completed with questions on demographic data, such as gender, age, academic field and mother tongue. Demographic questions were given in the end so as not to sub-consciously enforce categorical identities giving 'more typical' answers before the participants gave their narratives. (Maykut and Morehouse 1994)

The participants were encouraged to write in the language in which they were the most comfortable, preferably in their mother tongue. During the visits to the Chinese universities, students gifted in English were helpful both in providing live interpretation during encounters with the participants when needed and in their involvement in a careful procedure of translation. All reports, both Chinese and Swedish, were translated to English, together with students when needed, in discussion and careful annotations regarding ambiguous expressions and potential different values embedded in the words and phrases. There is a risk that some meaning is distorted with such a procedure, especially with respect to the deeper investigation into the wordings that are intended with the MCA, something that has to be kept in mind during the subsequent phases. However, a number of trials have been performed with the MCA method in which translated reports were revealed to show little variation from the original ones, even though different persons performed the analysis.

Positive side effects of the way the student participants were encountered is a high level of control under the personal supervision of the researcher: if there the situation could affect the research it can be read by the researcher. An example of such a situation can take place if the participants appear to misunderstand the question, or not to take it seriously, and in such a case measures can be taken to keep these attitudes from disturbing the research. The positive effects of the way the participating personnel were encountered is that there is no restraints as regards geography or time: the teacher can access the questionnaire at all times and places with a computer and Internet connection.

A negative side effect with the personal encounter is the unavoidable threat of a transfer of information in a meeting, which might reveal the expectations of the researcher, threatening the validity of the answer. Interaction between researcher and participant is, in many ways, uncontrollable and has to be taken into account. The negative effect of digital communication with the participants is, on the other hand, the lack of knowledge about the situation in which the narrative is given: various circumstances could affect the respondents in a way that can be controled by the researcher in a personal encounter. While digital communication might appear as safer, it leaves much uncontrolled.

Four formal documents from different fields and periods

The ambition to understand the narrative contexts directed the choice of documents in a way similar to the purposive sampling. Among the wide set of existing documents on 'education', 'research', 'science', and 'technology', four were handpicked. The choices were made with an idea of balance of the four categories of informal narratives in the Swedish/Chinese, student/personnel groups. Among the possible formal narratives that regulate the sphere in which 'education' 'research' take place at the 'university', the laws of higher education in the two countries offer some dimensions of comparability as they have similar statutes and purposes. The law on the development of science and technology in China was picked to offer a similar comparability between the fields of 'education', 'research', 'science', and 'technology', but there is no such regulating law in Sweden, which also offered an occasion to broaden the field through a policy-document of a different character. The laws fundamentally establish a framework in which the institutions operate and establish a constitution of meaning which is explicitly general in some terms.

The choice of formal documents already reveal some differences between the approaches to the phenomena in the two countries as the Chinese ministries divide the ministerial responsibilities between a ministry for 'education' on one side and a ministry for S&T on the other; the Swedish organization gathers a ministry for education and research, but lacks an explicit organization for S&T in the way it appears in China. The two countries are, however, similar in their legal regulation of 'higher education', and the two legal texts offer a convenient comparison, but in the choice of the two other texts, there are a number of challenges. The Chinese law on the development of science and technology is older and, rather, represents a phase in the political attitudes which might be outdated, even if the law still is valid. On the other hand, it can provide a comparability with regard to the approaches to 'education' and 'research'. The closest at hand in the Swedish context are the

propositions for research that the government presents with their ambitions to finance research in different ways. Since the text is longer and more varied, the use of the official summary provided a further comparable scope. The choice of these documents is not intended to represent a totality of the formal approaches, but, rather, an exemplary specimen, as guided by the principle of purposive sampling in the choice of one document on 'education' and one on 'research' in each country. These four texts are available in official English translations on the websites of the respective governments and ministries, but they contain provisions declaring the priority of the original language and that the texts do not have the weight of the originals.

The Swedish Higher Education Act (SHE) was issued 17 December 1992, and it has been amended a number of times since then, most recently in 2010. The text was prepared by, and primarily concerns, the Swedish Ministry of education and research. The text describes itself as containing 'the provisions about the higher education institutions that are accountable to the government, local authorities or county councils', and as carrying the authority of an established law. The text was chosen as a formal narrative as it has an official position in the role, function and policies that the public agencies hold on education (Swedish Parlement 1994). Even though the law has long remained unchanged, there have been considerable changes in the structure of education since its establishment (Bragesjö, Elzinga, and Kasperowski 2012)

The Chinese law for Higher Education (CHE) was adopted in the 4th Meeting of the Standing Committee of the Ninth People's Congress on 29 August 1998, and the version used for the analysis was issued 27-01-2005. The law is described as 'enacted in accordance with the Constitution and the education Law with a view to developing higher education, implementing the strategy of developing the country by relying on science and education, and promoting socialist material and ethical progress.' It is, in other words, comparable to the Swedish Higher education act as it also shapes the formal approach to higher education. (4th Meeting of the Standing Committee of the Ninth People's Kongress 1998)

The law of the People's Republic of China (PRC) on science and technology Progress (CS&T) was adopted at the Second Meeting of the Standing Committee of the Eighth National People's Congress (NPC) on July 2nd,1993, and was promulgated by Order No.4 of the President of the PRC, and effective as of October 1,1993. The law describes its own purpose as follows: 'this law is formulated in accordance with the Constitution with a view to promoting science and technology progress, assigning priority to the development of science and technology and bringing the role of science

and technology as the primary productive force into full play in socialist modernization drive, so as to improve the service of science and technology to economic construction.' (Second Meeting of the Standing Committee of the Eighth National People's Congress 1993). The NPC and the Chinese Communist Party (CCP) have only uttered a handfull of directives to govern the S&T, but their impact have been considerable, even though they have been challenged by struggles among the ministries, as well as uttered from the Ministry Of Science and Technology (MOST) (Liu et al. 2011).

The Swedish bill on research (SS&T) is a government bill (2008/09:50) and is called 'A Boost to research and Innovation' published 31 August 2009 by the Swedish Ministry of education and research. The text is not a law, which means both that the formulations can be expected to be somewhat different from the other formal documents, and indicate a broader difference in the approach to 'science' in Sweden. Its is mainly intended to inform about priorities and not to legislate as a governmental bill for 'research'. It describes its own main message as follows: 'The overall policy of the Swedish Government is to strengthen Sweden's position as a research nation and thereby increase its scientific competitiveness in a globalized world' (Swedish Ministry of education and research 2008).

The eight gathered narratives represent only a small portion of the field they are intended to exemplify; however, they are illustrative and important productions of semantic material in which an analysis of the constitution of meaning is expected to indicate similarities and differences. The intended procedure of generalization of the outcomes does not reside in an idea of statistical representation or of isolation of variables, therefore, there is no claim of validity through such procedures. On the contrary, as the expected value of the outcome resides in its connectedness to the context in which it appears, it is a necessity to choose a scope of material which is traceable through an analysis (Polkinghorne 2003). The four documents are also too comprehensive for a complete MCA as it is a tool for a deep analysis, and the amount of information and detail would make it difficult to discern the broader patterns. There are efficient ways to approach them as regards specific areas of concern, based on the choice of meaning units which contain references to the chosen phenomena of concern. This formal narrative establishes a somewhat more narrow focus on the central phenomena of 'education', 'research', 'technology', and 'science', as examples of the narrative contexts. There is a common procedure in the MCA in which the entire text is divided into meaning units, but only the meaning units that has a reference to the central phenomena are processed through further. This means that the meaning units that lacks a reference to 'education', 'research', 'technology', or 'science' in their different forms are excluded from the analysis. The more narrow

focus on the uses of the key phenomena of interest comes with a potential cost of a loss of some of the context, but the length of the narratives compensate with the many occurrences giving many predicates. This proposes a material in a scope that is accessible to the MCA, as indicated in figures in Table 01:

Table 01, on the choice of MUs in the formal narratives

	CS&T	SS&T	CHE	SHE	Total Corpus
Total number of words	7257	2842	4918	3848	18865
Words in chosen MUs	2101	1555	2745	1683	8084
Number of chosen MUs	276	147	241	127	791

This will be further introduced both in the coming exposition of the analysis and in the introduction to the outcomes. The positive effects of this sample appear in the comparability of the three laws, with similar positions as laws and carriers of a language and vocabulary which in their position might reveal interesting similarities and differences. The fourth document can constitute a way to broaden the approach, and give a more recent narrative example, of the constitution of meaning, while its origin and executive role also have some similar traits. They are all official translations to English, diminishing the dangers of translation-related distortions. There are negative effects of the choice of documents for the comparability of the texts that represent the field of 'research', regarding both their forms and their age. The image that will appear in the analysis has to be considered with regard to the time in which they are given. The Chinese documents are at risk of being outdated, but they still provide important pictures of the narrative contexts as the laws are juridically valid.

The craft of analysing the constitution of meaning

The procedures of a text-analysis with an MCA, as described by Sages (2000), consists of three steps. The first step is focused on breaking down the narratives into meaning units (MUs); the second step gathers a new structure to the narratives through categorization into modalities and extractions through entities and predicates, and is the foundation for the interpretation in the analysis; and the third step consists of a reconstitution of a descriptive narrative. There are a number of advantages and disadvantages with this approach which will be presented at the end of the chapter.

Step one, division into Meaning-Units

In the first step, the narratives are divided into MUs. It is a simple way of cutting the sentences into pieces, which is done manually by the person performing the analysis, and the software mainly offers a handy frame for the craft. The principles governing these divisions can vary according to the person performing the analysis or to the intentions and concerns that are studied. The divisions can be grammatical measures,

such as determining an MU according to a verb or a clause, and they can be rather discursive, dividing the text into separated propositions, which often gives longer MUs than a strict grammatical approach. The different methods of using the MCA-approach gives longer or shorter MUs. The shorter MUs are more helpful in an analysis of the basic way in which a participant has constituted meaning, which is preferable in an analysis of a single narrative, identifying concerns and horizons according to more fundamental positions. This approach not only makes the categorization of the second step easier but usually also gives shorter predicates to the entities. The longer MUs enable the retention of more context, which is helpful in reaching an inter-subjective understanding of a phenomenon in a wider study with more participants. This can complicate the categorization into modalities but enable more precise, and longer predicates in the third phase of extraction. In this project, there is a much higher amount of MUs than the usual smaller studies, and the main perspective has been to analyse the inter-subjective shared horizons. Therefore, the MUs will be on the longer side of the spectrum to keep an increased contact with the narrative context of the expression, which also follows the concern for the more inter-subjective dimensions and less for the dimensions which were specific to an individual way of perceiving the phenomena.

The division of narratives into MUs is also an essential step through which the material from the formal narratives was reduced to a graspable size. As each text was divided into MUs, these were screened, and those containing the central concepts in this analysis were kept for the further analysis; the others were sorted into another table, only to be used in as required in case voids were revealed in the analysis. The main concepts were identified as ‘education’, ‘research’, ‘science’ and ‘technology’, as well as the different forms which the root of the word can take, such as ‘scientific’, ‘technological’ and so forth. It is a method that has been frequently combined with the MCA method, mainly for the same purpose of enabling an analysis of longer texts.

Step two, categorization into modalities

The MUs that resulted from the previous are in this second step categorized in a number of modalities according to the way in which they are expressed. Husserl describes a set of ways in which a ‘cognition’ – and act of perception – is done: when we experience something it is in a number of forms. Through an analysis in these forms we can get a further understanding of the ways in which a phenomenon appears in a narrative. The number of modalities and the alternatives within the modalities can be varied according to the aim of the study. There are in short three modalities that directly relates to the phenomenological study (modalities of function, belief and affect), then the number can be extended to mirror other interests in the

study (like subject, will, belonging and so on). This study has used these three modalities in the analytical phase, but it can be added that a number of other categories relevant to the studies were attatched to the MUs depending on their appearance in the narratives. For example the demographic data of the respondents, or the University and major they belong to, which then follows the MU through the analysis. This enables a cross-checking of structures of meaning to see if they relate to certain country, gender, major, or site of learning.

The primary phenomenological modality is the modality of function, in which the MU is categorized in relation to what sphere of the experienced reality the MU is expressed. Husserl proposes that all experience of something has to be in a perceptive, imaginative or signitive function. In the perceptive function something appears to us as a reality, as a direct experience (e.g., 'I am at the university'). We can also experience something that we know is unreal; we have no problem of thinking and relating to things we know are unreal, such as a unicorn or a possible career–in the imaginative function (e.g., 'I could go to the university'). Between these two categories, a third category can be seen in the Husserlian texts, as explained by English (2006), a signitive modality appears as we can experience something as true and real even if we have not seen it or experienced it. We believe that the earth is round, that people exist in distant countries, that it is probably a person who wants to come in if we hear a knock on the door and a wide range of other truths that are mediated through a variety of signs. As we categorize the MUs in a signitivefunction, it is possible to relate and, to some extent, correlate what entities are approached as true, as mediated truths or as fantasies (e.g., 'get an education at the university'). These categories can also be expressed in with combined of functions, such as in a combination of the perceptive and signitive function (e.g., 'I am here to get an education').

The modality of belief describes the way in which the experience is expressed in relation to how sure the narrator is. As we state something, we have to do it in a specific tense, according to our belief. It can be doxa-affirmative, that is, that we say with a strong belief that something is in a given way, or doxa-negative, that it is not. We can also express a probability, a possibility or a question. This modality can be extended with forms, depending on the narratives which might be harder to reveal, such as irony or an explicit lie. In this analysis the form of an imperative is added in the categorisation of the laws, as important parts of the formal narratives are expressed in a prescriptive tense that implies an expected fulfilment of a command (e.g., 'go to the university').

The third modality in which an MU is categorized is the modality of affect which relates to the affective value in which it is expressed. An affect can be positive, negative, neutral or ambiguous. In this modality, time is included as the modalities which have an affective load relate to an origin either in a hope or an experience, thus either in the future or in the past. The alternatives that the MUs are categorized in are positive-prospective/negative-prospective (directed towards the future), positive-retrospective/negative-retrospective (directed towards the past), neutral or ambiguous. The alternative of ambiguous is added for cases when the affect is hard to tell with certainty; there are cases when there are words which apparently contain an affective load but might be with a touch of irony or with something that might attract interest, but not be clearly positive or negative, or a combination of affects (e.g., 'Don't do too much of the fun things around the university').

Step three, extraction of partial intentions through entities and predicates

The third step of the analysis consists in a major work with the narrative through extracting the entities and predicates. Entities are the things which appear in the expression; they are what the narrative refer to as existing. Predicates are the form in which the entity appears, that is, it answers the question of how the entity is. As the theory of intentionality states that all experience is experience of something, in the same way, all things that exists do so with some characteristics or qualities, which are presented in the predicates. The point of departure is that an object is given in a specific mode, in other words, in a particular time, place, particular belief, and function. An experience is a complex combination of intentions. From this, the potential modes of consciousness are detracted. The variations, in which the object might be otherwise but intended as the same, within the unity (ultimately) of all conceivable possibilities gives the object within a possible conscious life (Husserl 2001). This procedure can also be adapted according to persons and to concerns, and be more or less detailed. But to illustrate, we can use the example phrase: 'I dream of going to the university so I can get an education'. A procedure with the example phrase is illustrated in Table 02:

Table 02, on an example of entities and predicates

Entity	Predicate
I	that dream of going to the university to get an education
to dream	that I do of going to the university to get an education
to go	that I dream of doing to get an education at the university
university	that I dream of going to, to get an education
purpose	that I have for going to the university, that is to get an education
I	that can get an education, which is why I dream of going to the university
Can	that I can get an education, which is why I dream of going to the university
to get	that I dream of doing with an education at the university
education	that I dream of getting at the university

Table 2 presents the list of entities and predicates from the example. It is also intended to illustrate the way that the tables are shaped in the presentation of the outcomes. However, in these tables, figures on modalities are placed in a column between the entities and the predicates for the reason that they are used to sort the predicates. The predicates in the coming tables may not always maintain entirely correct language, partially to adapt to the expressions of the narrators and partially to adapt to their descriptive function in relation to the entities. The procedure of extracting the entities and predicates provides lists of what appears and what is implied in the narratives with the corresponding qualities of appearance. The main aim of such a work is to extract all partial intentions, the latent meaning, and carry the traces of the process through which it was constituted. As a sentence is fragmented into the composing parts of entities and predicates, the world-view is unveiled through all a wide range of layers of underlying meaning.

Reconstituting a descriptive narrative

The procedures that lead to this point have given extensive tables which can be sorted in numerous ways, according to the occurrences of the entities, predicates and modalities. We could understand the presented procedure as the first phase of a deconstruction of the narrative, which provides a new organization and reading of the content, and the following procedure is a reconstruction or the formation of a descriptive narrative that carries the analysis of the constitution of meaning. There are a number of immediate dimensions of the analysed material that appear, such as a list of entities according to their frequencies, and it is valuable just to identify the most common references. There are also the broad statistics on the whole narrative, based on the categorized modalities, which reveal a general tone and approach in the text. There are different ways to proceed thereafter depending on the intentions and concerns in the analysis. It is, for example, possible to focus on certain entities with a deeper analysis, attempting to categorize its predicates in groups according to various similarities and differences, or to focus on certain modalities, for example, identifying what entities and predicates are given in positive respective negative affect.

The proceeding work with the analysis can be seen as a process of interpretation, in which the different maps and tables are read by the researcher that conceptualizes his/her understanding of the area. As entities and predicates are presented in their connections, they can be visualized as a network of meaning, and the traditional next step in the MCA is an identification of the central horizons, which in the phenomenological terminology is a way to understand how the world view contained in the narrative is structured. The horizon appears in the various forms of interaction between related entities, predicates or modalities. There will be interactions that are

apparent, or obvious, as some entities will be rich and show a larger number of predicates if a predicate is repeated or if a pattern in the use of the different modalities appears as revealing specific sides of the constitution of meaning. The identification of the central horizons can be seen as an attempt to formulate and bring forth the nodes or centres around which the constitution of meaning revolves. The map presents what exists in the narrative and how the meaning-bearing entities, predicates and modalities are filled with an intentional content and relate to each other. The horizons can also be seen as a psychological logic, not primarily as a rationality, but rather with a specific set of rules and relations in the narrative which frames the perspectives. These relations can be identified through repetitions of certain entities, predicates and modal expressions; as general patterns; or certain breaks from an otherwise dominant pattern.

The act of exposing the central horizons, making explicit the implicit assumptions in the narratives, is a step into the analytical phase, as an involved reading of the extensive tables in which the outcomes are given. The outcomes are produced through identifying networks of meaning, recognizing nodes in the entities and exploring their constitution through connections in their modalities and predicates. The exploration of the constitution of meaning is primarily done through the restructured reading, or in other words, a reading based on the context in which the meaning appears in groups of entities, modalities and predicates. This last step of the procedure engenders a tentative formulation of the constitution of meaning in the narrative, an explicitation of the ways in which something appears in an expression. The images that appear in the network of interconnected entities, predicates and modalities is summed up in a formulation of horizons in one or a few words, which may or may not be explicitly stated in the narrative. The emerging silhouettes of meaning in which the propositions, with their connections, are interpreted with the guides provided by the variations in the narratives, as similarities and differences among them appear. The similarities and differences in the ways of approaching the phenomena indicate a frame of reference and a spectrum of potential ways of understanding which meaning is intended, as well as what is lacking.

This kind of outcome can take a more complicated form than a confirmation of falsification of a hypothesis, but it is a part of the turn from the question of existence to the question of meaning. It is an effect of the exploratory approach, as a journey into the unknown, with the intention to engage in an interaction with an unknown phenomenon. In this sense, it is vital to treat the pre-empiric conceptions with care and not to let these structures of meaning taint the ways in which the outcomes are reached, as the value of the approach is defended by the proximity to the empirical appearance of the object of concern and its potential originality.

Validity of MCA in the study of 'politics of science'

The MCA procedure was created based on the phenomenological philosophy to enable a deeper study of the narratives. As such it can be seen as a challenge to approaches which build on other principles and world views, but the defenders of the MCA often attempt to avoid certain methodological debates since the issues are framed in ways which are not considered to be productive to the cause of the investigations. For example, we have attempted not to become involved in a simplified qualitative versus quantitative debate since some aspects generally regarded as qualitative appear alongside some aspects generally regarded as quantitative. The polemic around the MCA procedure also tries to avoid a subjective versus objective polarization since the way to approach the problematic is different in the phenomenological tradition; rather, the focus is on an understanding of how the phenomenon is constituted in the encounter between object and subject (Sages 2000; Sages and Lundsten 2004; Husserl 1931). In this description of the MCA procedure, the intention is not to give a comprehensive reference to such polarized debates, but rather to develop the approaches behind the act of exemplification. The procedure is mainly thought to appear through the establishment of a qualitative descriptive narrative which builds on a number of careful quantifications. The central concern is the formation of a reflexive approach in which the involvement of the researching subject is traceable and invites a reflection on the ways that the phenomena appear in the narratives.

This second part of the chapter of method will attempt to place the presented concrete procedures in a wider setting, with some further reference to the reasons behind the choices that establish the approach. It is also a further argumentation and explication of the measures taken in the realization of the research, placing the different steps with regard to the tradition in which they take place. The general concern for the validity of the analysis is extended into the identification of further positive and negative side-effects of the chosen approaches and measures guiding the research. In this sense, it is also a further step in the reflexive and preliminary attitude which was established as characteristic for the initiative in the previous chapter. That chapter is introduced by an initial question on the strengths and challenges of the emerging nature of the MCA which are followed by an attempt to place the procedures in a wider context of thought and validity.

MCA as an emerging process

There are a number of aspects which has not yet been addressed, such as the challenges that appear as the realization of empirical research that take place in the

often complicated interaction between methodological principles and practical circumstances. There are also challenges bound to the nature of the involvement of the researcher in the procedures, in relation to the manual involvement in the analysis, reminding of the need for transparency regarding the principles and choices behind the acts. This introduction to phenomenological thinking based on an exemplification proceeds from a description of practical measures relating to the emergent design, and then continues towards increasingly general thoughts behind the approach, in a reflection on the researcher as interpreter, and finally on the process of formulating a descriptive narrative.

Emergent design and outcomes

The MCA method has been inspired by the general principles of emergent design (Maykut and Morehouse 1994) as a flexible research-design building on ideals that procedures may evolve and be adapted through encounters with the empirical field. It is a practical realization of the reflexive and preliminary attitude established in the previous chapter, and it proposes a formal theoretical cape in defence of flexibility in research-design. It can be seen as an answer to scientific traditions which measure reliability and the quality of a design according to its rigidity, in an idea of a correlation between the plans and the realization. In the research performed here, the ideal is rather openness for an exploration into the unknown and an argument for the need to be able to adapt to the ways in which the field presents itself (Maykut and Morehouse 1994).

The theory of emergent design is also an official statement that becoming aware of our own perspectives is a complex procedure and that our own preconceived structures of meaning threaten to reduce the results to attempts to confirm our own world views. The theory of emergent design is built on the idea that research may evolve as empirical material is accumulated, respecting the fact that research is a journey into the unknown. Many initiatives of research may, in practice, actually have an 'emerging design' of more or less intended reasons, but the theoretical frame of emergent design is mainly conceived to defend the validity of deliberately tentative planning. In this case, the emergent nature of the investigation mainly resided in an adaptation to the cultural norms and traditional ways of interacting in the different locations. There were also a few further steps of research that were planned and initiated, but these will not be presented in this text since the amount of outcomes grew larger than expected and are filling the available space of the text in this form.

It is not only the approach to the design of the research that is emerging; the outcomes emerge also from the encounter with the empirical field, and the forms of

their expression are adapted to their content. The established position in the preliminary attitude is, in this sense, transformed into a practical approach, identified as emerging in the ways that it proceeds towards the creation of a reflexive narrative. The coming presentation of the outcomes might therefore be given with a potential complexity since it intends to describe the constitution of meaning, which can be based in contradictions as well as different levels of emotional and rational dimensions. Both in formal and informal narratives, there is a first-hand, seemingly obvious, explicit understanding, which in the metaphor of an archaeology is the surface layer, but through the analysis, we reach for implicit foundations behind these first-hand layers, whereby the former sometimes modify or even contradict the latter. The complexity of this task is accentuated by the scope of the material, using not only extensive narratives but also narratives of different kinds, choices that are explained and defended by the desire for validity and reliability, but they make the pedagogical task of presenting the outcomes difficult.

When the approach and the attitude are established as emerging and reflexive, it is easy to forgo that they are emerging to and reflected by someone. Similarly, it is apparent that the reading of the tables, or the identification of patterns in the networks of entities, predicates and modalities, is performed by an interpreting subject. The phenomenological approach does not primarily divide statements into subjective and objective but rather establishes a concern for an object appearing to a creative subject and thus turns the attention from the statements to the interaction in which they are issued. The interpretative acts which are the foundation of the analysis are not intended to be veiled through the isolation of variables, but rather to be made openly, in traceable arguments, based on the encounter with the empirical material. In this sense, the claims that will be made through the research presented here reach for a validity through a meticulously established, open approach and through the transparent chains of arguments, as indicated in the phenomenological approach.

A reflection on a phenomenological approach to knowledge production

A short reflection on phenomenological philosophy can provide a somewhat closer understanding of the way in which the phenomena are studied. Firstly, it is important to distinguish between the three levels of subjectivity involved, of the participants, to the researcher, and in the ways you are addressed as a reader. The path to an understanding of the phenomena has to proceed through these three levels carrying the intention to present foundations for the exploration. In the phenomenological tradition, the encounter with the world is initiated in the natural attitude, the attempt to reach further is realized through a methodical epoche, which is intended to lead to

what s called the transcendental understanding. This turn is not a sceptical (or post-modern) relativism in the sense that it would question the 'reality' of the phenomena; it is an ambition to do the exact opposite. It is to turn to the ground on which we can establish knowledge – with a base in the practice of the experience, in a given time and place and in the narratives in which the objects are given meaning.

These perspectives on the appearance of the phenomena initially neither confirm nor falsify narratives; rather, they approach them as expressions in the natural attitude, as indices that have to be interpreted and through which we can encounter the object of concern. Through reflection on the conditions of such an encounter, precepts given in the natural attitude are intended to be unveiled in the ways in which they appeared. The understanding of the natural attitude is the essential path towards an understanding in the transcendental attitude. The approach thus establishes a double attitude, encountering something that we both have and lack knowledge about, a realization that shapes the two distinct parts of the process of analysis. A phenomenon appears in the natural attitude, with a 'spontaneous' character that is unaware of its origins or constitution. Propositions in the natural attitude are often given with number of contradictory appearances, with rational, ideal, practical and affective dimensions as well as personal traits which are essential to the whole of the phenomenon. The propositions can be valid, and hold a rhetorical authority since it builds on experience and on intuitive assumptions, but the main problem is their lack of traceability. The point of departure in the natural attitude is an essential step, which seems to be often misunderstood, as the naturalized positions are to be taken as evidence, as material to be analysed, not dismissed as vain presuppositions, nor accepted as trusted and valid observations (Husserl 1931). The transcendental attitude is built on considerations of the process in which the perspectives are constituted in the natural attitude and attempts to transcend the spontaneous perceptions through an understanding of how they were formed, gathering the general implied precepts they emerge from.

The epoche is the step between the two attitudes, and is, in this initiative, realized as the collected narratives are broken down into MUs, and their apparent and surface meaning is veiled. In this way, the obvious narrative context through which we would have understood its meaning is replaced by a gathered image of the components, such as an entity or a modal expression. The narrative context in which meaning is interpreted is thus founded on the different ways that the concept or word is given in the narrative as a whole. The extraction and categorization that have led to the tables in which the gathered narrative context is presented to the researcher enable a rigorous investigation of the ways in which the phenomenon appears, through an observation of emerging concerns and the modes in which they are expressed. The

change of attitude through the epoche turns the natural attitude into evidence of meaning and interrogates the origin of the various claims. Foucault (1972) expressed the ambition elegantly as not being about making visible what is invisible, but rather about pointing at what is on the surface of things which we are blind to by habituation.

The transcendental understanding thus stretches beyond a spontaneous interpretation, and rather embraces the whole procedure and the context in which meaning is constituted. The fragmented, categorized and extracted narrative is, in the latter phase of the analysis, reconstructed in a fundamental description of the phenomenon, including the implied structures of meaning. In this sense, the phenomenon appears in the gathered lists of entities, predicates and modalities, revealing what appears in the narrative, how it appears and how it is interconnected with the other appearing structures. The procedure identifies the nodes of meaning and the ways they are connected in a network of references forming a kind of gestalt of the phenomenon. In this phase, the methodical procedures demand an increased involvement of the interpretative craft of the researcher. It is a craft that is focused on the attempts to distinguish between the emerging networks and to identify the patterns in which meaning appears. The reconstruction of the narrative is intended to be traceable, building on visible structures revealed through the previous steps, and will mainly proceed in the method of exemplification, identifying and exposing the central phenomena and their ways of appearance and proceeding towards their narrative contexts. The MCA method is, in other words, directed towards the revelation of networks of meaning as they appear in their narrative context, through the tracing of the structures of their constitution through the fragmentation, categorization and extraction that organizes a reading that goes beyond the first, obvious interpretation (Sages, Lundsten, and Jakobsdottir 2004).

The MCA as a realized phenomenological approach

The Husserlian approach was chosen because of its comprehensive perspectives on how we constitute knowledge about the world. The space available in this format does not, however, allow an extensive introduction to the theories; rather, the focus is the way that the MCA represents an example of the approach. The main framing of the MCA is, in this part, intended to proceed through a short introduction of some relations to the wider phenomenological community of thinkers, as well as some earlier studies based on its principles.

The MCA and the wider phenomenology

Husserlian thoughts have inspired many thinkers, many of whom are more widely known to the general public than Husserl himself. Most of his disciples have, however, had more specific concerns, or applied the thoughts to different areas in life, while the general approach to a theoretical structure still is the most fundamentally elaborated in the original Husserlian frames. The different initiatives have applied the ideals to a spread of concrete fields of interest, such as power, religion, sexuality, gender, work, politics, language, and a set of existential interests into the experience of time and space, of the body, and of spirituality. Ricoeur would have said that phenomenology is the history of deviations from the Husserlian principles as a kind of history of heresies from the Husserlian proposition (Moran 2000). To some extent, we can see that the ideal of the phenomenological philosophies always has been to apply the approach to the studied object; thus, a variation in theoretical and methodical aspects can be explained by the variation of areas of interest, but there has also been a wide range of proposals which differ from the Husserlian approach.

The original phenomenological philosophy that Husserl proposed is the main inspiration in this work, and it is mainly due to its fundamentally grounded approach to the ways in which the world appears to us and its broad and rigorous theoretical analysis. The MCA-approach was conceived by Sages (2000) with a primary concern for the study of the psychology of work and organization, with a particular direction to inter-cultural contexts. It is building on the analysis of networks of meaning as they take shape in narratives, and it enables an exploration of diverse contexts with the intention to come closer to the phenomena that are studied (Sages, Lundsten, and Jakobsdottir 2004). The approach can, in some ways, also be said to be inspired by some of the development Heidegger proposed (1993), in an increased attempt to turn from idealized approaches towards the reflexive and preliminary attitude in the encounter with the appearing phenomenon. This shift is one of the grounds for the continuous attempt to challenge our own limited perspectives on the relation between being and expression of phenomena. The ways that other approaches have been developed by, among others, Merleau Ponty, Sartre, Gadamer, Levinas and Foucault is an important topic (Moran 2000) but one that cannot be properly developed in this context, without stealing attention from the empirical analysis that is the goal of the initiative. The MCA still includes many of their practical applications of the philosophical hermeneutic, such as in the development of a preliminary and reflexive position.

Regarding the actual approach in this initiative, a considerable inspiration has come of the ways that Arendt contributed with a study of the ways of human activity (Arendt 1958) and thinking (Arendt 1971). These contributions are shaping a political perspective that enables a phenomenological approach to political thinking, facilitating the encounter between the phenomenological and STS traditions. The application of the theories to a political framework are informative both regarding the later analysis and for the actual methodical issues. The proposed historical analysis of society has a value in its intellectual depth with human and moral perspectives, which also includes explorations of our understanding of totalitarianism as well as banal forms of evil as thoughtlessness. The Arendtian approach also shed light on the ways that a phenomenological rigour can contribute to the study of 'politics'. Similar inspiration has come from a general reading of Foucault, such as in the concern of an archaeology of 'science'. The historical analysis of madness, discipline and punishment, and sexuality are applications to questions which only distantly touch the field of this essay, which is why his contribution mainly is directed in the methodical approach (Allen 2002). Both Arendt and Foucault have, however, had historical foundations to their investigations and are thus quite different from the empirical approach presented here, which also explains a further importance of the return to the Husserlian frames.

There seems to be a renewed and growing interest for the Husserlian approach to scientific activity in recent years, and various understandings (and misunderstandings) of his propositions circulate in scientific networks (Dall'Alba 2009). This application of the theories can hopefully inspire a further interest in what the traditions can provide to the continued investigation of our common world.

Earlier research based on the MCA

There have been a number of studies performed with the MCA technique and philosophy, mainly within the fields of psychology of work and organization psychology and inter-cultural psychology, which have been an inspiration to this initiative. It is, however, a recent approach and is still in a stage of development which allows different researchers to form their own applications of the methods and interpretations. Sages, Lundsten and Jakobsdottir (2004) examined and compared the understanding of work in three industrial companies in southern Sweden. The first study analysed both white- and blue-collar views of work in a Swedish firm; the second study evaluated changes toward goal-steered, Kaizen-type organization in a traditional Swedish steel plant; and the third study investigated the work in a mechanical plant and the understanding the employees had of their work. The procedures were similar to those introduced in this text, building on a single open-ended question and mainly identifying differences in understanding between floor

workers and their managers regarding their common work-environment, revealing difficulties of communication.

The findings of the first study showed that some white-collar workers experienced a possibility to affect their own situation and the ways of working in the company which gave a significantly better affect for the company than the blue-collar workers. In the second study the main differences originated in differences of communication and influences on the development of the firm, the actual study seemed to have created a public space in which the categories of workers could start to communicate, it did however not directly solve the problems involved in the work but it offered ways to understand them and cope with them. The third study found that inadequate communication was the major source of difficulty in cooperation between management and workers, while they themselves believed that the communication was good (Sages, Lundsten, and Jakobsdottir 2004). The three studies pointed at problematic issues as groups of people have different understanding of their work-environment, and identified tensions between collectives depending on their potential to shape their common every day life. Beyond the contribution of a description of differences it also appeared that the studies in themselves shaped a space in which mutual understanding between the cultures of the white-collar and blue-collar workers could be developed.

Two MCA studies have given special attention to encounters between cultures, as Mörnerud & Yngström (2004) explored the process of integration in Malmö, Sweden, and Mörnerud (2005) explored multicultural visions in churches in Sweden. Both studies build on similar ways to analyse the answers of open-ended questions. They also both take a point of departure in the theoretical framework of Berry (1997), which proposes an approach to inter-cultural encounters based on either positive or negative attitudes towards the involved cultures. Depending on the affective disposition, a matrix of four attitudes emerged, giving encounters of integration, assimilation, segregation or marginalization. The first study investigated two different approaches in the teaching of Swedish for newcomers in Malmö, either encouraging or discouraging the students from using their mother-tongue. The result shows that even if the immigrants were positive to the culture to which they had arrived, they showed no tendency to identify with it, and they assumed the responsibility to conform, calling it to 'integrate', independently of the use of their mother-tongue, while it actually referred more to a process of assimilation. In other words, a dissonance appears in the procedures, in which the cultures were held at distance, even thought efforts were made on both parts to form an encounter. It is a result which challenges Berry's idea that a positive attitude to a culture is not enough to identify with it.

The second study analysed narrative in which leaders of organizations presented reasoning on their explicit visions to establish multicultural fellowships (Mörnerud 2007). The results reveal an ambiguous relation to the idea of multiculturalism even though the visions are explicitly expressed in positive terms. Both the positive ideal and a threat appeared in the descriptions, as the positive terms were expressed in more theoretical and theological explanations, while the threats relate to the practices, which in effect were dismissed. The threat was perceived as a 'price to pay' expressed in various ways and which created a dissonance to the ideal, maintaining the multicultural expressions to the ideological realm of visions (Mörnerud 2005). Both studies therefore reveal challenges in the social frames for the encounter among bearers of different cultures and point at a dissonance between expressions and affects.

There are numerous other studies based on the MCA, such as analysis of migration and health (Sages 2004), the politics of youth employment as well as the consequences for youths in different cultural contexts (Sages et al. 2010), the experience of transitions for exchange-students (Bayard 2008) and the concept of filial piety in China (Sages and Chen forthcoming).

An MCA realized in the STS field

The lack of a theoretical chapter increases a challenge to communicate the validity of these procedures to the theoretical approaches and fields. The open attitude towards the narrative appearance of the central phenomena, and the ambition to found the vocabulary in which it is expressed in an encounter with an empirical field, can be explained, however, by existing dimensions of theory and in examples of previous research. The critical analysis of the narrative context of the production of knowledge and concepts can be seen in important sources of inspiration to the STS field such as Kuhn (1996) or Feyerabend (1975). As such, they can also be related, for example, to some dimensions of the earlier references to STS theories, such as the uses of Miettinen's (2002), analysis of NIS and Elzinga and Jamisons (1995) science cultures. The challenge to place the analysis in this broad and somewhat segmented STS traditions is also, in some ways, a further argument for the empirical approach, as the theoretical polysemy caused by the variety of approaches is gathered by a field of interest (Benner 2009).

There are theoretical narratives which could be of value to the investigation, such as the sociological analysis of the intellectual field that Bourdieu (1992) proposes. It is

an approach that presents a set of advantages, such as the positional and relational attributes of ideas indicated by Ringer (1990), as well as its broader approach to cultural expressions than what is usual in the sociological sciences (Calhoun 1990). It also carries a number of challenges, such as being related to the broad and global realization of the studied phenomena (Marginson 2008). The approach is also inspiring in its empirical foundation, with a conceptualized field of actors and relations interactively established in step by step in investigations. The endeavour could have inspired a more structured approach to the field and possibly increased the level of detail in the approach, such as to the realization of the simple distinction between formal and informal narratives. However, the theories present a number of precepts which could colour the ways that the empirical fields are encountered, something that has been one of the most fundamental ambitions to avoid in this initiative. Examples of such precepts are the initial approach to the intellectuals as an elite, as a gathered collective with a given social role and their tension to other contexts, such as the political or economical elite. These might seem trivial, but they also shape the narrative contexts which colour the understanding of the involved constitution of meaning in several fundamental dimensions. Rather, such precepts will be the object of reference if they are revealed to correlate with the experience and practice as described in the outcomes, and in that case, they will be used in the analytical phase.

The priority given to the empirical findings as it is combined with an initial avoidance of the theoretical spheres can enable, in the latter phases, a valuable point of reference through which theories can be reflected. The chapter of positioning established a preliminary and reflexive approach to narrative phenomena, and the chapter of method mainly shaped attitudes that are open to the encounter with the empirical field. The critical dimensions of this approach are intended to establish points of reference in the revealed structures of meaning to which the theoretical frames are related in a potential mutual interpretation. In this sense, the whole procedure is intended to reach for a greater relevance in the establishment of a descriptive narrative with regard to the common uses of concepts and ideas, and, as such, it is a potentially excellent point of departure in a dialogue with other narratives and understandings of the field. The methodical approach of observation through contrasts, in which similarities and differences between perspectives guide the identification of relevant aspects is also a valuable attitude in the encounter with the theory. As a narrative phenomenon, the object of interest appears in human interaction, but the understanding of its structures can be given valuable contrast and clearer detail when related to ideal structures. It is an approach which risks alienating segments of the theory, but it is a risk that is preferable to the risk of saturating the understanding of the practice of the phenomena.

The turn from the 'question of existence' to the 'question of meaning' is possibly the most significant character of the way that the MCA-approach relates to the STS-field. In some sense, it is a general movement which can be recognized in the development of the field as it has grown in the critique of the naturalized 'scientific' study of existence, turning towards a study of meaning through contextualizing the statements in historical, sociological and philosophical narratives (Elulle 1981). This initiative addresses the existing theoretical field with an attempt to bring together a study of individual experience in narratives with larger principles and world views, and is thus 'scientific' according to the cited approach (Whitehead 1926). It is also a narrative with implied involvement in the shaping of our common world, indicating a shape of the public sphere, and thus moving into the broad understanding of 'politics' that was mentioned previously (Arendt 1958). The value of a study of meaning to the STS field is expected to reside in a reflection on the 'situatedness' of perspectives, affirming the study of narratives and their more or less implied world-views.

Chapter three: Outcomes

The chapter of outcomes consists of a description of the empirical encounter with the narrative appearance of the 'politics of science', and therefore, is at the heart of the initiative. The chapter is structured as eight separated expositions that intend to discern the networks of meaning with nodes in the entities and connections in their predicates and modalities. A concluding summary of each exposition is centred on the identification of the central horizons. Because of the challenge in the scope of the study, exemplification will be a method of presentation as this allows further access into the depth of the central concepts of 'university', 'science', 'technology', 'education', and 'research', with some variation depending on the patterns of expression in the narratives, such as in the deeper study of the meaning attributed to the actors in 'teachers' and 'students', as they emerge as important in the narrative produced by the Chinese personnel. The exemplifications of the networks of meaning are aimed mainly at revealing paths of arguments as fully as possible, giving the reader the means to both to follow the individual lines of thought and to gain an understanding of the narrative context which is analysed in a following more concise presentation.

The outcomes consist of an analysis of eight narratives: Chinese personnel (CPe), Swedish personnel (SPe), Chinese students (CSt), Swedish students (SSt), the Chinese Law on Science and Technology (CS&T), the Swedish bill on research (SS&T), the Chinese Law on Higher education (CHE), and The Swedish Law on Higher Education (SHE). At this point, the narratives are each explored in their own regard, and they are going to be juxtaposed in an exploration of similarities and differences in the analysis chapter. Each narrative will first be introduced in a broad sense, but as the exploration proceeds, it reaches into the details with an intention to identify the distinctions at the heart of the constitution of meaning. The entities and their predicates and modalities reveal structures in the narratives and indicate the main horizons. Table 03 indicates the sizes of the analysed material:

Table 03, on quantities in the narratives

	CPe	SPe	CSt	SSt	CS&T	SS&T	CHE	SHE	Total
Number of MUs	264	239	599	414	276	147	241	127	2307
Number of entities	1,537	1,524	3,996	3,686	1,908	1,088	1,804	898	10,661
Different entities	386	375	759	586	383	417	395	298	1,461

A first glance at the figures indicate that the Swedish narratives generally are shorter than their Chinese counterparts, but the relation between the different categories of narratives are comparable. To constitute the informal narratives, a total number of 202 reports were collected in Sweden and China 2008–2010: 101 reports in China and 101 reports in Sweden. Of these, 150 reports were collected from students and 52 from personnel in the two countries. The final number of collected reports in each group was during the procedure adjusted, with the intention to have comparable bodies of text in the categories of narratives; however, the outcomes still show some differences in the repartition as shown in Table 3. Further statistics and details on the demographic distribution are available in the appendix (p.269). Each entity and predicate keeps markers indicating the respondent/text it comes from, the modalities in which it is expressed, allowing studies of structures of meaning based on further categorizations (such as gender, age, country, etc.). The formal narratives were also concentrated with regard to the appearance of the central concepts, as indicated in the chapter on method.

The following eight presentations are similarly constructed as each narrative is introduced by figures and a table with general observations building on categorizations of the MUs according to form and content. The tables introduce the narratives through occurrences of the most common entities and general portions of the modalities and groups of entities. The first analytical part commences a deeper exploration of the central entities, giving focus to the interaction of the modalities/predicates of each entity, with special regard to the modality of affect in the informal narratives and the modalities of belief and function in the formal narratives since themodality of affect appeared to be too homogeneously neutral in the latter to give interesting distinctions. The second analytical part takes a broader view of the narrative context, of the different groups of entities, and both the part on the central entities and on the narrative context are introduced with a table with the entities that occur most. The presentations are concluded with a final summary that identifies the main horizons and makes explicit the main concerns and structures of meaning.

There are apparent pedagogical reasons to distinguish entities, themes, and horizons as one concept can appear as each of these. Therefore, 'entities' are marked with quotation marks, *themes* or suggestions for titles on emerging categories in italics, and **horizons** in bold font. It should also be noted that 'a narrative' generally refers to one of the eight categories of the analysed texts (e.g., CPe, SPe, CSt, etc.), and each informal narrative is constituted by several reports written by individual respondents.

The Chinese personnel (CPe)

The analysis of the of CPe narratives gathers a study of 370 different entities with a total of 1,537 occurrences each with a predicate. The entities were categorized in seven groups according to their intentions, revealing an explicit emphasis on the phenomena central to this study as shown in Table 04:

Table 04, on the most common entities and modalities in CPe

Most common entities (total: 1,537)		Groups of entities (%)	Affect (%)
University (occ.132)	Freedom (occ.16)	Central entities (22.06%)	Neutral (61.61%)
Should (occ.118)	To Work (occ.16)	Reality & Affect (20.94%)	Positive-Prospective (20.23%)
Good (occ.67)	Money (occ.15)	Time & Tech. (16.59%)	Positive-Retrospective (1.04%)
Teacher (occ.55)	Spirit (occ.15)	Subjects & Contact (14.05%)	Negative-Retrospective (7.48%)
Student (occ.45)	I (occ.14)	Mind/practice (13.53%)	Negative-Prospective (5.66%)
Research (occ.28)	Important (occ.14)	Action (12.81%)	Ambiguous (3.99%)
To Teach (occ.20)	You (occ.14)		
Development (occ.19)	First (occ.12)	**Belief (%)**	**Function (%)**
Thinking (occ.19)	Idea (occ.12)	Doxa-Affirmation (91.54%)	Signitive (51.79%)
Administration (occ.17)	Leader (occ.12)	Doxa-Negation (6.50%)	Perceptive (48.21%)
Management (occ.17)	Own (occ.12)	Possibility (1.95%)	

The overview in Table 04 indicates a dominance of an affirmative tone with a mostly neutral affect and equally perceptive and signitive function. The figures indicate expressions of straight forward descriptions and explanations of situations that are rather clear and unambiguous to the narrators. The distribution of entities reveals a focus concentrated on the 'university', and a normative discourse that establishes values with the entities 'should' and 'good'. A closer look at the general appearance of the groups of entities reveals that the central concerns in this initiative, such as 'education' and 'research', are important in CPe, but they are expressed in relatively few different entities which are often repeated (47 different entities in 339 occurrences). This indicates a homogeneous spread of concerns and a uniform language in the discourse. More than a third of the occurrences in the group belong to the entity 'university', which, using a statistical metaphor, can be said to reveal a low standard deviation with a concentration on a few entities; this appears to be valid both to the narrative as a whole, which is centred on the central entities, and to the group of entities which is focused on the 'university'.

Regarding the other groups of entities, it appears that the gathering of the concern for *affect and quality* (322 occurrences spread over 99 different entities) is centred on the appearance of 'should' and 'good'. These expressions indicate a concern for values, primarily in an ideal prospect, and a broad evaluating approach that establishes a confident tone in the doxa-affirmative modality, but it also is the group in which the affective dimensions are the most diverse. The further occurrence of entities indicates an importance of certain subjects and their relations (with 30 different entities in 216 occurrences). This group of entities gives further emphasis to a tension between

‘teachers’ and ‘administration’ as well as a concern for ‘students’, implicitly mirroring the self-representation of the narrators. The references to ‘teachers’ and ‘students’ indicate a concern for actors, while the appearance of entities such as ‘to teach’ and ‘to manage’ indicate a concern for action related to a wider number of different entities appearing in lesser amounts (73 different entities with together 194 occurrences). Entities describing a mind and a practice (68 different entities with a total of 208 occurrences) refer to priorities and an expected development as well as the need for ‘freedom’, a concern appearing in relation to the more concrete dimensions of the ideal of the scholar. A concept of a positive prospect appears as central to the group of technical entities, mainly gathering references to time and location in the smallest group of entities (37 different entities in 99 occurrences all together), but it carries some importance to the narrative context, not least in the explicit discourse on ‘development’. In sum, it appears that the categorization of the entities into groups according to their similarities reveals the following concern in order of levels of occurrence, affect and quality, subject and contact, action, mind and practice, and technical entities.

A general perspective on the predicates also gives indications of the general narrative context in CPe through two categorizations relating to their form and concerns as they situate the entities in the narrative. An *imperative* form dominated (55% of all predicates) relating to the appearance of the entity ‘should’. *Recommendations* were also common (16%), as well as *descriptions* (12%) and *logics of argumentation* (7%), while *emotional arguments* (4%), *moral reasoning* (1.5%), and *general reflections* (1.5%) appeared to lesser degrees (3% of the predicates were uncategorizable in these terms). Regarding the main concerns revealed in the predicates, it appears that most of them primarily relate to *academia* (26.89% of the predicates), to *recommendations for governance* (23.48%), to *student goals* (13.26%), to *freedom*, (9.85%), to *economy* (8.71%), to *variation* (7.58%), to *administration* (5.68%), and, finally to *buildings*, (3.41%, other topics 1.14%). These broad statistics strengthen the impression that the narrative is gathered on the concern for imperatives related to the ‘university’, which we will now analyse closer.

Central phenomena revealing a logic of development towards an ideal

The entities ‘university’, ‘research’, ‘teacher’, ‘student’, and ‘to teach’ were chosen as the expressions closest to the central concern in our study and will be given special attention in this initial phase. In Table 05, they are illustrated with regard to the distribution of affect and with some examples of predicates. A first observation is the

mere occurrence of some of them as they were not planted in the questionnaire but appear on the initiative of the narrators.

Table 05, on affects and predicates to the central entities in CPe

Entity	Affect (%)	Example of a predicate
University (occ.132)	Pos.Prosp. (20.45%)	that can be good and should have respect for the academicians
	Pos.Retrosp. (0.76%)	that is a place where a person gets rebuilt in his soul
	Neutral (64.39%)	that a leader should know that it is not a production-line to produce students but a place to cultivate the spirit of independence and freedom of thinking
	Ambiguous (7.58%)	that should pay attention to academic research, learning, and pursuit of truth
	Neg.Prosp. (2.27%)	that has a leader that should be better and more far-sighted
	Neg.Retrosp. (4.55%)	that should not have a huge and simple mixture of disciplines
Research (occ.28)	Neg.Prosp. (10.71%)	that can have scientific projects that are considered as a tool for economic interest - then it has lost its value
	Neg.Retrosp. (3.57%)	that has applications in questions for study/discussion which is not always good because some teachers just take this opportunity to get money and not do research
	Neutral (64.28%)	that a good university should give attention to together with the teaching
	Pos.Prosp. (21.42%)	that scholars engage in and they should be provided with a relaxed and good atmosphere by the university
Teacher (occ.55)	Pos.Prosp. (30.91%)	that will be happy when they work in the university if the administration is minimized and opportunities for career are given
	Neutral (50.91%)	that should do some research and their work according to their interest and liking
	Ambiguous (3.64%)	that is the most important factor together with administration
	Neg.Prosp. (3.64%)	that should be paid so they don't have to run around after a house
	Neg.Retrosp. (10.91%)	that should not search for material gain, fame, or money
Student (occ.45)	Pos.Prosp. (22.22%)	that the university chooses which should be good
	Neutral (60.00%)	that the university should give morals
	Ambiguous (8.89%)	that it is very important for to be able to really learn something in the university
	Neg.Prosp. (4.44%)	that you should not drive to face the troubles they should meet a year later
	Neg.Retrosp. (4.44%)	that it is wrong of the department to control
To Teach (occ.20)	Pos.-Prosp. (30.00%)	that can be of good quality and can help a university to form a better research quality
	Neutral (65.00%)	that we are doing to students not producing goods in a factory
	Neg.Prosp. (5.00%)	that is an activity that we can put after administration together with research and treat them in different criteria of salary then research will not grow

The 'university' as a desired ideal and 'research' as its essence

'University' is the most frequent entity, and most of its predicates are formed as descriptive ambition to give account for how something is (100 predicates), and it is mainly concerned with its actors, such as its *students*, *teachers* or *leaders*. A second category of predicates, which at times intersects, attributes properties that the 'university' has or should have (52 predicates) and is mainly concerned with its *leadership*, its *organization*, and its *atmosphere*. The predicates for 'university' mostly concerned prerequisites or conditions in a logic or described attitudes and actions with their respective causes and effects mainly through expressions of how it 'should' be (60 predicates contained a 'should'). Among the predicates for 'university' with a 'should', a majority concerned what it should 'offer' (30 predicates), what it should 'pay attention to' (18 predicates), and what it should 'have' (10 predicates). The main picture that appears is thus not understood as something directly experienced but rather as an ideal. This ideal is given as the end of a potential development and is thus mainly directed towards a desired general positive quality, something 'good' (35 predicates contained 'good' explicitly). Thus, the main concern appears in the

attempts to identify how the 'university' should be, what it should have, and what it should do, directed towards an ideal of the 'good university'. The reference to the 'good university' was planted in the questionnaire, but the approach of a 'should' was not, and it appears to establish the formulations in the experienced reality of the Chinese context as experienced by the participants.

A complexity appears in the categorization of the affects in the narrative as exemplified in Table 05, and it mainly depends on the relation between positive prospect and a related negative shadow in their obstruction. Both the positive prospect and its negative obstruction are, however, described as a matter of fact and with an impression of affective neutrality in the sense that both possibilities are described as a given logic or mechanic deriving of different priorities. The predicates for 'university' with positive affect are clearly prospective, concerning a development towards what ought to be, forming an ideal. The attributed qualities are explicitly directed towards the situation of the 'teachers' (15 predicates) and an 'atmosphere' (9 predicates), two concerns that are closely related in a care for the context of 'proper learning', primarily identified through ideas such as 'belonging', 'freedom', and 'respect', as well as in relation to economic priorities. A further important concern in the positive affects relates to the prospective of a positive development of the 'personality of the university' (13 predicates) describing the 'university' with an explicit metaphor of the personality of a human being, and mostly in a parallel reference to a scholar. This meaning is also repeatedly implied in a relation to the ways of life realized in a larger collective of 'universities', breaking or completing a description of a mass, identified by a state of the arts with which the ideal was contrasted. In this sense, the concept of a 'personality/character' of the 'university' forms a sort of meta-subject as a central metaphor of the desired quality essential to the ideal, a personification of the 'atmosphere' or the 'organization'.

The recommendations are given with a 'should' or proposed as prerequisites for the achievement of the desired potential in the development of the 'university' according to 'its nature'. This achievement is also described as the formation of a positive 'atmosphere', mainly through 'proper distribution' of 'attention', 'salary', and 'fame'. The negative affects appear to contain concerns close to the positive affects, but with a pessimistic perspective. Moreover, they describe a similar logic of development but focus on its lowly origins, the threatening impediments, or what needs to be developed, especially as regards experience of negative forms of management identified as business- or industry-like. They are also imbued with the threat of disappearing in a competing mass through the loss of individual character. The ambiguous affects are mostly obvious statements of a positive prospect that is founded in a seemingly negative experience, giving rise to descriptions of how it 'should' be

and implying a critical approach to the system. The neutral predicates present statements and descriptions that mainly concerned management and governance, which are either followed by a perceived imperative or encouragement often concerning a demand for acceptance of variation.

The meaning of 'research' is mainly constituted through recommendations of a logic or principles according to which its management is meant to be performed in order to realize the desired prospect and to avoid its negative obstructions. The negative affects (as exemplified in table 05) offer pessimistic perspectives and describe threatening priorities or stumbling-blocks that might impede the realization of the potential described mainly in 'wrong motivation', such as centred on 'economic benefits' and to value or focus too much on 'administration'. The predicates in a neutral affect contain similar references to 'research' in a desired prospect with the consequent positive and negative affects but with the emphasis on the implied established logic of development. The meaning of research appears in a setting marked by the belief in a given development primarily appearing in structures of meaning centred on causes and effects, which are expressed with certainty. In other words, it appears that the affective categorization of the predicates of 'research' reveal a statement-like tone, expressed in imperatives or encouragements, and centred on the idea of development of the 'university'.

The common patterns in the predicates for 'research' reveal three repeated references: to *priorities*, to an *essence* of the 'university', and to management in a discourse on *means and ends.* The first concern for *priorities* appears in about two thirds of the predicates that directly cite principles, consequences, or reasons for various priorities. The approach may be the most obvious in the repeated polarization between attribution of the qualities 'scientific' or 'academic' and those generally described as economic or industry-like, which are given as representative for the 'administration'. Eleven predicates attribute the qualities of 'scientific' and 'academic' to 'research', but the words appear primarily as set phrases, as there does not seem to be any reason to qualify different types of 'research', such as a non-scientific 'research'. In other words, it appears as a tautology or a set phrase primarily emphasizing the contrast between the perceived spheres. These descriptions appear in repeated association with ideas of specific ways to organize, manage, or finance 'research', mainly referring to an ideal. However, on a few occasions, the demands are concrete, such as imperatives to comply with 'scientific' principles respective 'statistical' or 'quantitative' principles, for example in the realization of priorities of salary. 'Science' thus primarily appears in this context with the meaning of an attribute to 'research' and polarized to 'administration', but it is not explicitly identified in relation to this context.

The second reference to 'research' can almost be seen as implied in all predicates in a main concern for the realization of the 'university' in which 'research' is referred to as a marker of its essence. The concrete demands mostly revolve around better or unrestricted 'research', occasionally giving more concrete demands for more time, money, and a better 'atmosphere' in which to perform it. The demands mainly constitute the meaning of 'research' as an activity that relates to the realization of an ideal prospect, to form a 'real university', in which its essence appears as related to the motives of the actions. The representation of the actors appear to be central to this realization and are primarily named 'teachers', and, on a few occasions, 'research' is paired with 'teaching' as a further repeated sentence, which is in contrast to 'administration' and the motives of 'economic gain'. This identification of the actors appears to be especially concerned with motives, and this is repeatedly cited as the main problem with 'administration' and economical gain, in opposition to motives aspiring to 'value', 'development', or 'fame'.

The third reference in which the meaning of 'research' is constituted relates to the discourse on means and ends. The approach appears to spring from a debate in which it is repeatedly cited as a means of realization of the ideal of the 'university', with emphasis on the warning of a loss of the ideal as it becomes a means of other purposes, such as earning money. The negative terms are centred on the point that 'research' is not a means for economic growth, but it is a means to reach 'quality' in the activities and 'essence' of the 'university'. The statements indicate an ongoing debate about the forms of organization and rewards, in which both sides of the argument are represented, centred on the role of 'research' as a means or an end. The imperative approach, revealed in the repeated 'should' accentuates a tone of demand, and conveys an idealism, but the predicates do not reveal any perceived need to identify or describe 'research' beyond the ways in which it is 'managed' or in relation to the duality of its function as means or end.

In sum, it appears that the meaning of 'university' appears as a desired ideal and 'research' is appointed as its essence. The descriptions intend towards a logic of development in which different priorities or ideals either enable or threaten a desired potential. The 'university' as an ideal appears in the shape of a meta-character, defined by an atmosphere in which motives are evaluated, while 'research' is described no further than its role as an activity that carries the potential of the ideal prospect in relation to a logic that identifies means and ends. The primary means for the proceeding development are identified in ways or ideas marked by 'freedom' and 'independence' and differentiated from the involvement of government as well as

economic motives. The expression generally focuses on the establishment of a 'should' which appears to concentrate a critique of an experienced system as it also establishes values in a polarization between 'academia' and 'administration' with concerns for economic gain. There appears to be a tension between 'teachers' and 'administration' in an experienced threat to the realization of the desired potential.

'Teacher' and 'student' as developing ideal characters

The desired prospect appears to be the most acutely expressed in concerns for 'academic ideals' that are embodied in a personality or a character of the 'teacher', something that appears to be directly and metaphorically paralleled in the representation of a 'university'. The personality of 'teacher', also called 'professor' (occ.6), 'scholar' (occ.4), 'academician' (occ.3), and 'researcher' (occ.2), appear in a total of 64 occurrences. The predicates to these entities appear with similar traits, such as in references to 'moral character' (14 predicates), which primarily indicate general properties and abilities of a person that are evaluated. 'Character' was also described in direct tension with perceptions of a group responsible for 'administration' (4 predicates). There was a general demand for a higher 'salary' (11 predicates) something that appeared in relation to an expected 'respect' (4 predicates) and 'resources' (3 predicates) perceived to be appropriate for the work. A desire for 'freedom' (8 predicates) of the 'teacher' appears mainly in references to ways of management of the 'university', and finally recommendations of the importance of the feeling of 'belonging' (2 predicates) to an institution. In other words, it appears that the character of the 'teacher' is central to the ideal of the 'university'; it appears in a representation that implies a criticism of experiences of control, lack of freedom, and lack of resources.

The descriptions of a personality or character of the 'teacher' are repeatedly related, word for word, to a description of the 'atmosphere' or 'spirit' of the 'university', 'institution', or 'campus', which appeared mainly to refer to a specific way of being and doing in a collective. This collective, at times formulated as 'we' (occ.11), was often described through the concrete geography in a campus at the 'university', but the concern was generally directed towards the interaction/feeling given as an 'atmosphere' or 'spirit' in the collective. The 'personality' or 'character' is also defined in contrast to a mass, as it should have its 'own' qualities in the sense that it should be specific, contrasted to other collectives that are not differentiated in amass, which makes them invisible. It seems that the representations of the character of the 'teacher' and of the 'university' are intertwined and related to the goal, or aspiration, as a sum of intentions directed towards a positive prospect. One observation in this concern relates to an apparent difference between genders as the male respondents refer primarily to an ideal character in general, such as ways of 'management' (occ.6) and

abstract structures or characteristics. On the other hand, the female respondents referred to expectations about persons, such as a 'leader' (occ.12) or a 'principle' (occ.4). This could imply an experience of a distance from power or a further subject-centred approach by the female respondents.

The 'teachers'' relation to the 'students' (5 predicates) are mainly identified through a perception of goals and related to acts such as 'research' described as a performance of knowledge and a 'forwarding' of something that the students are supposed to receive. This 'something' is not described or questioned in more detail than mention of a certain 'knowledge' (3 predicates). The concern for 'student goals' appears in the narrative as a primary way to constitute the meaning of 'students' and to be an essential marker both for the meaning of the 'teacher' and 'university'. The prospective tone in the entity resembles the ways that the ideal representation of the 'university' appears, both as it conceptualizes the goal of a desired development,and as it attributes an identity that primarily relates to an expectancy of change. A number of statements present the argument that 'students' should be the primary concern of the 'university', but the 'students' are also repeatedly described as recipients of an outcome, often passive before the formative role of the 'teacher'. An a number of occasions, the dualism between material and idealistic forms appears, giving different focus to education, as either a 'professional' or a 'moral' formation, but there are also intentions to unite both ways of education.

The activity 'to teach' appeared mainly in a general sense as it is not referred to in specific occurrences or situations, and it is attributed to 'teachers', implied and not mentioned. 'To work' (Occ.16) is, on the other hand, both attributed specifically to persons and to the 'university' primarily with regard to the specific academic field of a 'teacher' or speciality of the institution. The actions are given in the discourse on the 'good university' and are mainly based on what seems to be an evaluating judgement with regard for the mass of institutions or persons. The main perspective in these appearances is directed towards the relations among activities and their forms, as markers or paths towards the ideal of a good 'university'. A debate appears to be concealed among the predicates to 'to teach' as the argument that its primary goal is to develop students in various ways is a recurring one, and in this relation there appears to be a discussion on the value of practical adaptations in relation to aspirations of quality. The polarization between theory and practice thus appears to be related to the uses of the different words. 'To work' is constituted mainly in relation to the management of resources and priorities of time and money in order to reach quality and the ideal of the university, in requests to the leadership of a university as well as to the conscience of 'teachers' to devote themselves to the 'work'.

On the other hand, ‘to teach’ appears to reach for the ideal of the university mainly through references to ‘moral’ spheres, referring to the development of students.

In sum, there is a representation of the subjects ‘student’ and ‘teacher’ that appear with regard to an expected development of ideal characters. These structures of meaning are expressed in ways similar to the idea of ‘university’ as it is characterized by an ‘atmosphere of freedom’ and a ‘spirit of independence’. The approach is explicitly given as a moral aspect on the roles of a ‘student’ or ‘teacher’, reflecting on the function of education in relation to a tension between material or practical versus moral or humanistic ends. A common trait in the established ideal is, however, a kind of separation from an experienced collective, a desire for personal characteristics which differs from the masses and tend towards an ideal that is envisaged an the other side of a desired development.

A narrative context of values and character of subjects

Table 06, on affects and predicates to entities in the narrative context of CPe

Entity	Affect (%)	Example of a predicate
Should (occ.118)	Neutral (66.95%)	that a university should have a spirit of independence
	Neg.-Prosp.(4.24%)	that you should not abuse power as a leader
	Neg.-Retro.(2.54%)	that teachers should not search for material gain, fame, or money
	Pos.-Prosp. (22.88%)	that teachers should work hard for a common goal
	Ambiguous (3.39%)	that a university should be really humane
Good (occ.67)	Pos.-Prosp. (44.78%)	that a university can be, then it needs that scholars and students can freely and openly express their academic perspectives and idea.
	Neutral (44.78%)	that a university can be if it makes full use of intelligent people in other disciplines
	Ambiguous (2.99%)	that a university can be the most important factors are the administrators and teachers
	Neg.-Prosp. (4.48%)	that a university can be but it needs freedom of thinking
	Neg.Retrosp. (2.99%)	that it is not always that there are applications of research because some teachers just take this opportunity to get money and not do research
Develop ment (occ.19)	Pos.-Prosp. (26.32%)	that is of students that the university should give more attention to and to teaching
	Neutral (57.89%)	that the university should do with the teaching-quality
	Neg.-Retrosp. (15.79%)	that the university has that can not be according to it's spirit because of the ministry of education that uses power
Thinking (occ.19)	Pos.-Prosp. (15.79%)	that I do about building a good university as a teacher when I work hard
	Neutral (63.16%)	that should be human-centred
	Neg.-Prospect (10.53%)	that can be in freedom which a system has to reflect to create a good university
	Neg.-Retro. (10.53%)	that can be free and very hard to implement
Spirit (occ.15)	Pos.-Prosp. (20.00%)	that a school can have and that can be good
	Neutral (53.33%)	that is about independence and is the most important a university should have
	Ambiguous (6.67%)	that a university has that which is essential for the construction of a university
	Neg.-Prosp. (6.67%)	that can be of freedom which a system has to reflect to create a good university
	Neg.-Retrospect (13.33%)	that the university has but can not comply with because the ministry of education is always using the power to control it
Admini-stration	Pos.-Prosp. (11.76%)	that you can be in and then you should release power
	Neutral (52.94%)	that the university has now in many departments

(occ.17)	Ambiguous (11.76%)	that is of the government and that has a way that the university should not use with the school and the teachers
	Neg.-Prosp. (11.76%)	that we can put before teaching and research and treat them in different criteria of salary, then research will not develop
	Neg.-Retrosp. (11.76%)	that the different salaries for research and teaching give an oversupply of personnel in
Mana-gement (occ.17)	Pos.-Prosp. (5.88%)	that can be done better with careers of scholars
	Neutral (82.35%)	that should make sure that professors have real power to do and not only be for decoration
	Ambiguous (5.88%)	that the university should not do with the school and teachers in the way of the government administration
	Neg.-Retrosp. (5.88%)	that it is wrong that the business/political people do with the university

The entities represented in Table 06 indicate some further nodes of meaning which can be grouped in four emerging concerns, according to which the analysis is segmented. The appearance of 'should' and 'good' both relate to the already revealed dimensions of an ideal prospect expressed in an imperative and evaluating tone. The entities 'development', 'thinking', and 'spirit' reveal a concern for the characteristics of a desired atmosphere, and, finally, the appearance of the entities 'administration' and 'management' enable a closer study of the tensions between different groups and actors. The other frequently occurring entities forming the narrative context are related to these segments, but not all of them can be presented within the frames of this text.

'Should' and 'good' forming an imperative and evaluating tone

The entity 'should' often occurred in the narrative and has already been addressed in the study of the meaning of 'university', in which it indicated an imperative and evaluating tone. This repeated expression contains a perspective based in the desire for an ideal, which is contrasted to a present situation and indicates a logic that enables the intended development. The occurrences of the entity 'should' appeared mainly in general references to academia (36 predicates), but more specifically to its governance (26 predicates) as well as in relation to student goals (23 predicates). Some more specific values considered a need for freedom (10 predicates) and variation (9 predicates), while others concerned the tensions regarding economy (8 predicates) and administration (6 predicates). In other words, it appears that the expressions of the imperatives are founded in a general concern for an academic ideal, focused on its governance, with a desire for freedom and variation, and contrasted to economic and administrative restraints. The affirmative demands revealed in the expression 'should' are, in this perspective, founded in the perception of a logic of 'natural development', through which the potential of the 'university' is realized with a priority on increasing the amount and quality of 'research'.

The imperative 'should' is closely related to the appearance of the entity 'good' as an attribute directed towards a number of objects in similar ways: mostly in a concern

for the ‘university’ or academia in general (19 predicates). It also appeared more specifically in references to attributes identifying it, such as its ‘management’ (18 predicates) to realize the ideal, its ‘teachers’ (17 predicates), its ‘economy’ (10 predicates), its ‘atmosphere’ (9 predicates), the ‘knowledge’ it is supposed to impart (6 predicates), and its ‘buildings’ (5 predicates), or fore specific concerns such as ‘freedom’ (5 predicates), student goals (5 predicates), or a need for ‘variation’ (5 predicates).;(The concerns overlap at times, so the sum is more than the number of entities). These different objects for the evaluating approach reflects a constitution of meaning centred on a broad ideal and indicates further the establishment of a logic that is intended to realize the desired positive prospects of an ideal ‘university’. In other words, it appears that meaning given through the entity ‘good’ primarily establishes values that together form an image of the general ideal of a desired university, which is similar to the dimensions of the demands appearing in in the predicates to the entity ‘should’.

The entity ‘good’ was planted in the questionnaire, and it has also already appeared in the investigation of the previous entities, not least in the meaning of the ideal of the ‘university’ and ‘research’. Its predicates reveal a meaning as a general adjective that is seldom specified; rather, it embodies a positive affect and indicates a focus on the positive side of the ideal. However, it also appears in a majority of predicates that are not in a positive affect, which gives further emphasis to the mentioned complexity in the prospective tone with an implied critique through the formulation ‘should’ which was not planted in the questionnaire. The generality and, in some terms, simple expressions appear to paint a dichotomy or duality between something ‘good’ and something bad, which is based on references to a logic or ‘natural development’ seen as inherent to ‘academia’ or the realization of ‘science’. Both values appear primarily as the ends of a development, taking the form of a prospective and ideal value which depends on choices and priorities involved in the management of the ‘university’. The meaning of ‘should’ and ‘good’ in this context also appear to be close to a number of other entities such as ‘importance’ and ‘quality’, which contain general expressions of an evaluating tone, something that can be seen as a consequence of the formulation of the question, but which also appear in such general terms in the narratives that they seem to be a comfortable and potentially habitual way of expression in the context that the CPe narrative is formed.

The entity ‘freedom’ (Occ.16) appeared as an important aspect related to the emerging meaning of the general ‘good’, as well as the imperative ‘should’ forming the academic ideals of the ‘university’ and ‘management’. ‘freedom’ was closely related to the concept of ‘independence’ (occ.6), and they both were described mainly from two different spheres, regarding the ‘government’ and the ‘market-economy’. The

propositions also implicitly draw boundaries, forming a separate sphere in which the 'university' is distinct from something that is outside and into which an invasion is experienced by the motives of the two sectors from which 'freedom' is desired. The spheres are primarily defined by their ways and motives, concerning both internal and external structures of life, such as 'thinking' and 'management'. The ways and motives from the spheres 'outside' are described through the experience of their negative effects, threatening the academic ideals which 'should govern the university'. The tension between the spheres seems to be founded in a negative affect; such as a negative experience or a fear. The entity 'freedom' is also repeatedly attributed in claims of a specific way that is 'natural' or 'inherent' in the 'sciences', and it is opposed to the way of the other sectors, but if applied 'freedom' is expected to give the desired 'development'. It appears that the conceptualization of 'freedom' is informative on the meaning attributed to 'science' in the narrative, as a desired principle useful to an academic community differentiated from the government and the market but,related to a perception of a natural development of the 'sciences'.

The entity 'important' (Occ.14) can be seen as an indicator of the explicit attribution of weight to a certain structure of meaning, which gives further emphasis primarily to the tension between 'teachers' and 'administration' (7 predicates). This explicit reference further emphasizes the conflict as a central part of the understanding of the 'university'. The concern for the development of students (2 predicates) as well as for the general organization (2 predicates), freedom of thinking (1 predicate), and 'Human' sciences (1 predicate) are, in these terms, given as polarities from the intentions of the 'administration' as interference from the government. Accordingly, it appears that what is 'important' mainly gives emphasis to a general perception of the goal of the 'university' in its formation of scholars and the development of students, formulated in the demands to give priority to the 'teachers' in their available time, their salary, and the management of their activities.

In sum, it appears that the narrative context is characterized by an imperative and evaluating tone as values and a consequent development of the 'good university' are indicated through proposed priorities. The qualities that appear primarily reveal a desire for development, something that gives further shape to structures of meaning that already have appeared and establishes the perception of the 'university' as a separate sphere, distinct from the government, market, and society. The markers for the sphere identified as academic appear in a perception of a logic founded in the concept of the desired 'development', forming references to ideas such as 'freedom' and 'independence' as essential means, in which rewards appear in recognition and fame. The academic freedom and the natural logic of development is still threatened by 'administration', but its tension with 'teachers' is framed here with positive

prospects. In other words, it appears that the entities in this group form a structure of meaning in which the essence or purpose of the 'university' is found in the formation of an ideal centred on a separate sphere of scholars concerned with the development of the 'university' and the students.

Representations of time and space identified in an idea of development

The entities 'thinking', 'spirit', and 'idea' all appeared with high amounts of positive affect, and they also all appear in conflict with something described as 'material', with higher amounts of negative affects. The issue appears to contain contradicting views, referring to arguments as if containing an ongoing debate in relation to the academic ideals. The main goal appears in a number of explicitly non-material and altruistic interests, where the motive to make money represents something uncharacteristic for the 'scholar', and a few opposing predicates, mainly in relation to explicit demands for higher salary for 'teachers'. These perspectives unveil a concern mainly for the personal economy as well as the economy of the 'university', but the concern for economy deviates from the rest of the themes by being stated in a more belief of doxa-negation (=20.69%, average=6.51%), a meaning more directed towards an explanation of how it should not be in the concern for economy. The three entities reveal a distinct concern for 'freedom' (16 predicates total) in which the ideals 'thinking', 'spirit', and 'idea' all were characterized by the freedom from the government and the market, or 'independence' (6 occ.). This perspective was also enforced by the second most common concern in the three entities for management (11 predicates total), which also referred mainly to the freedom from administrative interference, representing the governments or the markets interests, with the academic activities. The phrase 'spirit of independence' (repeated five times) which also appeared in the formulation of the 'spirit of the university' describes a character that ought to identify the 'university', and is at times referred to as a necessary prerequisite for its quality. In this sense, there is a constitution of meaning that refers to mind and practice which mainly establishes the ideal approach to the matter, and the three most common entities of this group are closely related to the intended ideal.

The affects in CPe appeared to be repeatedly related to both time and place, especially to the meaning of 'development' as something central to the affective constitution both of negative and positive prospects as well as the evaluation of a present state. A pessimism appears (3 predicates) concerning the ministry of education, and administrative procedures impeding development, while the personal development of teachers and students embodies the positive affects (5 predicates). The neutral predicates mainly contained a 'should' directed to a recommendation to the

management of the university in ways that minimizes administration and, encourages freedom, personal development, and rewards. The entity 'place' (occ.10) is primarily technical in the sense that its narrative appearance may be more conceptual, not actually mentioning the word 'place' but still making a clear reference to it as a meaning-bearing entity in the discourse. The location appear to have a similar connection to the material world which is mentioned earlier, especially as it relates to 'university' buildings ' often with a similar tension to the dimensions of *economy.* A double concern is revealed in this regard, for the value of the buildings appeared to both be able to represent values of a positive culture, and also threaten to overshadow these same values. The references to a concrete place also related the desired ideals to a material realization in the way that 'university' appeared as a location characterized by an atmosphere. The concept of time, or of 'now' (Occ.6) as well as the entity 'time' (occ.5) were mainly categorized in neutral affect, but there is a negative undertone in the predicates containing a critique of the experienced state. These precise indications of time refer to a present epoch related to a description of 'China' and that is characterized with the negative sentiment related to the origin of a development. It appears that the negative affect in the representation of the present state relates to the control of administrative departments and the government in a competition with the 'teachers'.

In sum, it appears that the narrative context is established through references to a time and space taking shape in an idea of a development, mainly of the 'university' with personal characteristics and with an explicit polarization between 'spiritual' and 'material' values. The conceptualization of a 'spiritual' sphere gave further substance to the image of the ideal, in the reference to 'development' of a unique and individual character and a desire for 'freedom' from 'administration'. The technical and temporal references mainly contribute to the understanding of the constitution of meaning through a fuller description of what is meant with 'development' underlining the negative perception of the 'now' from which the development extends. These dimensions also aid the understanding of the tension between the two collectives of 'teachers' and 'administration', through revealing positive affects towards 'scholars' imbued with ideals of an academic character, negative affects towards 'administration', and neutral affects towards 'management' as the field for the tension.

'Administration' and 'management' in tension between state and scholar

The meaning of the entity 'administration' has already appeared as something important both to the constitution of the meaning of 'research' and 'university', mainly with in an apparent tension to the desired prospect. The predicates for

‘administration’ primarily designate a marker for activities and people related to government functions, forming a contrast to other activities and people such as ‘teaching’ and ‘research’. In this light, the categorization of activities and people, and the markers of ‘administration’ reveal a tension between the ‘university’ and the government and a conflict or competition for resources in the daily organization among the representatives of two polarized sides. The tension among collectives and the consequent competition appear in concerns for attention and time as well as status and influence. In this sense, ‘administration’ not only appears to represent an activity and a collective to contrast the ideals of ‘research’ but also an experienced threat to ‘academic freedom’ or ‘independence from the government’. The concern for ‘freedom’ and ‘independence’ is mainly explained with a utilitarian motivation, regarding the desire for ‘development’. ‘Freedom’ and ‘independence’ thus appear as a tool or a process that is described as better or more effective than ‘administration’ to reach the desired goals.

In this sense, the majority of the negative predicates concern the consequences of giving priority to ‘administration’ which are described mainly as a lack of development and a loss of values related to ‘science’ and ‘research’. The repeated demands for less ‘administration’ appear in the sense of less control and less interference of the government for the sake of the development. However, the structures of meaning did not appear from a complete segregation among the scholar and administrative collectives but rather from a threat in the progress of their integration and an experience of a competition between the groups, in which government interference competes with the academic work. The role of a supposed administrator appears to compete and is compared with the role of the scholar, to which the participants mainly expressed a wish for the primacy of the academicians.

‘Management’ mainly appeared in a neutral affect as an object or a ground for the competition among the collectives of ‘university’ and ‘administration’. The predicates of the entity – what it is that is managed – are directed primarily towards the ‘university’ (15 predicates). The ways of management that are described are often reduced to simple principles, such as demands for higher rewards for teachers in terms of salary or promotion according to given rules or priorities. The meaning of ‘management’ also appears at times to be interchangeable with influence and tangent to a perception of power, status, and priorities in the organization. As the object of competition and a potential means for the realization of desired ideals, it appears that the meaning of ‘management’ is constituted as something distinctly different from ‘administration’.

The ‘I’ in the narratives represents an entry of the subject/author of the narrative, with a representation of personal statements or beliefs. The reference to the ‘I’ of the narrator appears mainly in expressions of convictions and clearly evaluating establishments of positions. The other entities in the group reveal further representations of the character ‘you’ (occ.14), in which the recommendations take a more personal tone, or in the two entities ‘human’ (occ.5) and ‘person’ (occ.4), in which the recommendations are directed towards a general subject and also in relation to an attribute to a set of values. The two entities ‘belong’ (occ.5) and ‘together’ (occ.4) established collective approaches to subjects, making reference mainly to a desired atmosphere in the ‘university’. The concern for practice in the group of entities further establishes the revealed tension, as ‘salary’ (occ.7), ‘material’ (occ.6), and ‘pay’ (occ.5) all focus on the objects for the experienced competition among ‘teachers’ and the ‘administration’, mainly meaning something that the teachers should not desire and as something they should have more of.

In sum, it appears that the narrative context that appears is characterized by representations of a neutral management that is a point of tension between an administrative government and an academic scholar. The representations contain values and imperatives and a prospective in moral terms establishing the character of the ‘scholar’ and the meta-character as central in the idea of the ‘university’. The visualization of an expected and positive development is centred on ‘student goals’ and the personality of the scholar, and it appears dichotomous to ‘administration’.

Summary: Ideal, development and character in CPe

The main concern apparent in the narrative is a description of a desired prospect in which the ‘university’ is portrayed as a vision towards which priorities decide the development. In this frame, the narrative is concentrated on the expression of ‘should’, which is founded in the positive desire to realize the prospect, but it appears to also contain a negative experience, mainly of a threat from an impeding administration representing an interfering government. These concerns portray an affective loaded tension between two groups, or collectives, which compete mainly through priorities and a ‘management’ which is guided either by ‘ideals’ described in moral or spiritual terms or by ‘material’ and ‘economic’ motives. The actors represented in the narrative, people as well as institutions, are mainly identified by the acts they are expected to perform according to the role they are attributed. The concern for ‘management’ and ‘organization’ are also represented in an active tone, something that gives further emphasis to the perception of an ongoing aspiration towards a desired state. Thus, the propositions all appear to be centred on a horizon

of an **ideal**, as the complex affective values are gathered around the ways that the 'teachers' might develop to realize an 'essence' of the 'university'.

Taking the analysis a step further, we can see that the horizon of an **ideal** is proposed mainly from a desire to realize a change that is portrayed as distant and contrasted to a present state. The ways that the acts, priorities, and visions pertain to this ideal are based in an apparent belief in a 'nature of science', which is presented as a logic inherent in the ideal of the 'university', in which a desired development depends on a priority given to the 'teachers' and their act of 'research'. The priorities are, in this light, founded in accordance to a belief in a logic of development, in which 'freedom' is a means for the desired changes. The prospective aspiration towards an ideal is a fundamental marker for the attribution of affects in the narrative: it shapes the positive vision or dream, and indicates the negative affects in the obstruction of the prospects, in a deviant motivation or 'wrong priorities'. This attribution of affects appears in the constitution of meaning of several entities, but its context, its prerequisites, and goal appears to found the narrative in a concern taking shape in the ongoing procedures of life. In other words, there appears to be a general constitution of meaning embedded in a horizon of a **development** founded in a fundamental perception of something yet to come, a desired change indicated by actions and priorities.

The horizons of an **ideal** and of a **development** both reveal aspects of the positive prospect, but they do not directly relate to the contents of the desire. The foundation of the ideal and the development is a perception of an 'essence' of certain activities or actors, such as of a 'teacher' as a scholar and academician and of the 'university' as an institution, as well as the potential for the formation of 'students'. The threat to the desired potential as the primary argument for a need for 'freedom' appeared to be from a moral perspective that relates to the presented motives and drivers in life. These propositions reveal underlying positions which not only affect the way the meaning of the desired prospect is constituted but also the perception of the established 'logic of development' and the consequent moral code, with an apparently underlying debate on what knowledge and recognition means, as well as making claims on their relation to money and to their temptations concerning corruption. The 'students' appeared mainly in a conception of 'student goals' in moral or even spiritual terms. These dimensions give an image of the 'university' which is involved in the formation of the 'teacher' and the 'student' in many ways, relating to a form of the 'politics of science' which is inseparable from the system of values and morals forming the persons and organization. What thus appears as a main concern in the narrative is established in a horizon of a **character**.

In other words, it appears that the constitution of meaning revealed in the narrative of CPe mainly concerns an **ideal** of the 'university' that tends towards a desired **development**, mainly relating to a **character** of persons and institutions.

The Swedish personnel (SPe)

The analysis of the SPe narrative will proceed in four steps similar to the previous chapter: through an initial introduction; a subsequent analysis of the central phenomena, such as 'university' and 'research'; followed by a study of the general narrative context; and a concluding summary. Table 07 introduces the occurrence of entities and modalities as it gives an initial indication of the general concerns and the tone in the expressions.

Table 07, on the most common entities and modalities in SPe

Most common entities (tot.1'524)		**Group of entities (%)**	**Affect (%)**
Good (occ.40)	Staff (occ.20)	Central entities (12.37%)	Negative-Prospective (4.00%)
I (occ.38)	To Have (occ.20)	Affect&Quality (22.02%)	Negative-Retrospective (2.45%)
Research (occ.38)	Diversity (occ.19)	Action (18.17%)	Neutral (48.74%)
Student (occ.37)	Place (occ.18)	Subject&Contact (15.44%)	Ambiguous (26.53%)
University (occ.37)	To Teach (occ.18)	Mind/practice (13.94%)	Positive-Prospective (17.75%)
Time (occ.34)	Development (occ.17)	Time&Technical (18.03%)	Positive-Retrospective (0.52%)
Important (occ.30)	Need (occ.17)		
Something (occ.27)	You (occ.17)	**Belief (%)**	**Function (%)**
Should (occ.26)	Thinking (occ.15)	Doxa-affirmation (92.25%)	Sig/Per (45.51%)
Education (occ.24)	Way (occ.15)	Doxa-negation (4.39%)	Signitive (47.58%)
Possibility (occ.24)	Create (occ.14)	Probability (1.16%)	Sig/Imag (6.33%)
To Work (occ.22)	To Know (occ.14)	Possibility (2.19%)	Perceptive (0.58%)

The figures in Table 07 indicate that the narrative is centred on an evaluating tone relating to something 'good', in a potentially personal perspective through the entity 'I', on the objects of concern. The tone is mostly affirmative and signitive, indicating a series of convinced descriptions of connections of meaning. The affect is mostly neutral or ambiguous, indicating that the narrative is directed towards potentially uninvolved descriptive recommendations but that it contains certain points of interest and some tensions. The central phenomena appeared in the quantitatively third most important group of entities (205 occurrences) with rather little variation (48 different entities), and it is centred on 'research', 'student', and 'university'.

A general approach to the analysis based on the occurrence of entities reveals a central theme in the expressions of affect and quality, which also gather entities with the highest portions of non-neutral predicates. The theme is centred on descriptions of something 'good' and 'important' as well as on references to a 'possibility', with a rather wide spread (126 different entities in a total of 365 occurrences) in which

values appear in the descriptive ambitions. A second important group of entities appeared in references to actions (107 different entities in 305 occurrences), centred on a description of 'to work', revealing a concern for a segmentation of the experienced world based on the constitution of meaning of actions. The entities related to subjects and their contacts also appeared with some quantitative importance (45 different entities in 256 occurrences),and independent on the entities describing action, while the entities describing mind and practice (231 occurrences in 86 different entities) mainly concern ways of thinking and doing that both unite a collective and describe a diversity within it. The entities that appeared in the technical dimensions of the analysis (296 occurrences in 79 different entities), such as references to 'time' or to 'something' gave central details to some of the most important concerns in a general approach that exceeds the analysis of the other entities and enable a closer study of the implied dimensions. The general picture of the narrative that emerges from these observations indicates a descriptive evaluation of a situation in which activities are central both in the identification of subjects and in the mind and practice that characterizes the situation.

Two further general categorizations of the predicates also give indications of the general narrative context in SPe, building on a general impression of the form and the concerns of the predicates that situate the entities in the narrative. The forms in which the meaning was expressed are mainly a series of fact-like *statements* (81% of the predicates) describing 'how it is', revealing a descriptive tone with a rather firm belief. There is also a number of *recommendations* (12%) on what is needed in the procedures to reach a good 'university', as well as *affective arguments* (3.5%), and of *logical arguments* (3.5%). In another categorization, eight main groups of predicates emerged according to their explicit concerns, in which the concern for *management* (34.5% of the predicates) was the most common, describing ways of governance and priorities among activities. The second most occurring concern was of a *tension between research and education* (18%), mainly describing activities with regard for a competition between activities for resources. The concern for *student goals* (15%) revealed a prospective tone forming the relation to the students. The fourth main explicit concern for *diversity* (10.5%) directed the attention towards differences, mainly between people and groups. In the explicit concern for an *environment* (9%), the mental or social atmosphere is described, while *thinking* (5.5%) describes general ways in which different 'knowledge' is presented or desired. The concern for *development* (4.5%) describes a general situation marked by a change over time. Finally, the concern for *profession* (3%) describes professional roles and obligations. These two categorizations indicate a confident tone, in the form of statements, and concerns for a management of activities forming an environment and tensions centred on the allocation of resources. These general observations are valuable mainly as

external indications on the narrative context, as a lens through which the reading of the deeper analysis can proceed.

Central phenomena formed in an environment for activities

The entities that primarily gather the central concerns in this study are represented in Table 08, in which the modality of affect is used to choose a few predicates to exemplify the expressions. Emphasis is given to the representation of the 'university' and to the activities 'research and 'education', which establish a number of perspectives what are broadened through the analysis of some subjects and some further activities.

Table 08, on affects and predicates for the central entities in SPe

Entity	Affect	Predicate
University (occ.37)	Neutral (54.05%)	that has a solution that is the best in a combination of research, teaching skills, and experience
	Neg.Prosp. (2.70%)	that I am afraid you will see a link between good research and good essays
	Neg.Retrosp. (2.70%)	that is a place where there should not be bullying and injustice
	Pos.Prosp. (24.32%)	that can be new which could be interesting and inspiring
	Ambiguous (16.22%)	that has a quality that we in Sweden consider mainly by how many articles that are written
Research (occ.38)	Ambiguous (18.43%)	that all researchers and teachers should be let to do
	Neg.Prosp. (13.16%)	that is very difficult to build after having developed the teaching
	Neutral (52.63%)	that I would emphasize the importance of and a good academic environment
	Pos.Prosp. (15.79%)	that teachers can have time for together with teaching
Student (occ.37)	Pos.-Prosp. (18.92%)	that can be happy and feel welcome.
	Neutral (32.43%)	that the university can be friendly too, which is the most important to me
	Ambiguous (40.54%)	that you can have contact with, which is important.
	Neg.-Prosp. (5.41%)	that there are admissions standards for, which should not be subject to compromise
	Neg.-Retrospect. (2.70%)	that we must unfortunately start with, so they seek you in a global world, where markets dictate
Education (occ.24)	Pos.Prosp. (8.33%)	that should be broad, modern, full-hearted education and that a good university should combine with excellent research
	Neutral (58.33%)	that there should be a common thread in with management
	Ambiguous (29.17%)	that all (education) must not lead to a specific target
	Neg.Retrosp. (4.17%)	that I do not suggest that one should be engaged in at low or populist level

University as an environment evaluated according to its acceptance of diversity

'University' is one of the most frequently occurring entities, and the content of its predicates relate mainly to a description of a *logic of development* (19 predicates) in which mechanisms are described in an identification of values. The logic is mainly concentrated on the perception of an opportunity in which the productive encounter among different perspectives happens. The central example for such an opportunity is the establishment of a place in which 'teaching' and 'research' compete for time, but they also are identified through their mutually enhancing effect. The further predicates for 'university' are focused on the description of *needs* (5 predicates) as prerequisites to reach desired *prospectives* (4 predicates), the kind of *place* (4

predicates) it is, the way that the values are *relative* (3 predicates), and its *tasks* (2 predicates) in general. The sum of these five smaller concerns appears in this way to be rather homogeneous and centred on the demands that are consequent to the aspirations to establish productivity in the activities. The concern is expressed in further concrete references to a logic of development that is a product of a unification of differences in a common producing 'quality'. The main example relates 'teaching' and 'research' as a diversity of activities which takes place with different identified variations, or other kinds of variation such as of personalities, or concerns. The entity 'university' appears with slightly more positive-prospective affects that are centred on a desire for the development of 'quality', mainly in the descriptions or prescriptions for the good 'university'. The main descriptive intentions in the narratives are directed towards an enumeration of qualities needed in a 'good university' and the relativity or complexities of such qualities.

The logic of development that appears in the predicates for 'university' is intending towards a 'quality' and is mainly described as dependent on the space in which encounters between different perspectives happen. In this context, there are references to a perception of a 'leader' and the general activity of 'management', which are ascribed the function to enable or threaten the coexistence of diverging ways of thinking. The desired development of 'quality' is thus related to 'management' as it appears as an act that can allow diversity, but it also appears to open a field that is directed towards the evaluation of acts, and it is centred on motivation. Both the 'leader' and 'management' appear in relation to the acts that establish an environment,and are given in parallel references to other acts such as 'teaching' and 'research'. The establishment of an environment appears as acts directed towards the externalization of the ways of thinking into structures and systems that shapes the internal processes of the actors. The recommendations which are intended to enable 'quality' circle mostly around four points of reference, the competence of the personnel, the tension between 'research' and 'education', the relations to a field defined by being outside of the 'university', and, finally, 'inspiration from other universities'. These four points of reference are repeated measures for the evaluation of the environment, and they also imply an understanding of actions as a central marker that categorizes people in an attribution of roles. This approach also implies an establishment of different 'knowledges' through which the narrators navigate in a social environment through expectations, demands, and management of limited resources.

The predicates for 'university' in a neutral and ambiguous affect appear to be statements of fact-like descriptions of a reality, with little explicit emotional involvement, despite the main concern still appearing to compel needs and a desired

idea of 'quality'. These descriptions of a reality are also implied as relative, mainly in reference to characteristics that vary according to location, establishing different environments. The ambiguous statements mainly appear to imply an affect, such as in an evaluating tone towards the repeated focus on the relation between inner abilities and external structures regarding student goals or the way that a leader forms an atmosphere through the attitude towards diversity. The two negative predicates describe the 'university' in the light of the concerns for 'quality' and a 'work-environment', in which 'bullying and injustice' restrain the potential diversity. In other words, it appears that the 'university' primarily is given meaning in relation to an idea of a mechanism of development which tends towards 'quality' and depends on a number of attributes or prerequisites that are different in different locations. Examples of such differences relate to the abilities of the 'leader' or of the 'personnel' and appear in the encounters of different 'ways' of thinking or doing. The approach mainly is evaluating different types of 'knowledge' and refers to kinds of 'management' that establish an environment which either enables or discourages the quest for 'quality' as a consequence of the ways of relating to differences in attitudes and motivations.

In sum, it appears that the meaning attributed to the 'university' is given mainly as an environment in which activities take place and which can be managed differently, primarily through enabling or restricting a diversity of expressions. The activities appear as central to the constitution of meaning as a concrete realization of inner aspects, such as motivation or 'ways of thinking', and together these structures form an environment. This constitution of meaning also establishes an approach to 'management' mainly in the ways that it enables the mechanism of development through an embrace or restriction of a diversity. The consequent differentiation among types of 'knowledges' appears in this sense in an evaluation of attitudes, as a representation of a social environment, which is measured according to its encouragement of the encounter of diverging perspectives as an externalized structure, which the observation with affective values and motivation, regulate behaviour.

'Research' and 'education' as activities in a productive tension

The modalities of 'research' have a similar distribution as the means of the whole narrative as shown in Table 08, with high portions of doxa-affirmation and about equal portions of signitive and perceptive function. The affects are dominated by a neutral tone, mainly in a discourse on the balance, purpose, and demands of activities as well as in the establishment of an environment for this balance. The first impression is that there are few negative affects and almost no retrospective tone, but, rather, a focus on a potentiality both with positive expectations and neutral statements. The affective categorization is, however, complex and can be observed in

the ambiguous predicates as they appear in statements or fact-like recommendations even as they pertain to descriptions of a reality directed towards affectively loaded concerns. The negative predicates mainly describe 'research' relating to the two concerns of 'quality' in a consideration of a potential unfavourable development as well as of 'management' of an institution with regard for a negative environment for the activities. The positive predicates contained concerns mainly regarding the improvement of the 'quality' of 'research' and the ways to achieve this. It appears that the identification of concerns according to affective load primarily reveal a concentration on demands or prerequisites in a prospective reference to a chain of events or a 'development'. This development is presented as potentially either positive or negative depending on its environment, which it is represented in the light of an availability of resources, especially 'time'. The forms mainly appear as statement-like propositions (28 of the predicates to 'research') as well as some recommendations (8 predicates) and imperatives (2 predicates). In other words, it appears that the the meaning of 'research' mainly appears in forms of expressions that pertain towards development in a dominant desire for a positive 'quality' of 'research' and with an implied threat depending on the outcomes of investments of 'time'.

The meaning of 'research' that appears in a study of the predicates reveals that it is intertwined with the meaning of *teaching* (explicit in 26 of the predicates to research) and in a concern for the mutual effects they have on their respective quality. They both appear as activities which are defined primarily in the light of external properties or forms, such as through the resources they need or as they are evaluated with respect for a change over time. The positive effects that the activities of 'research' and 'teaching' have on each other are centred mainly on an expected 'cross-fertilization' or an 'inspiration', expressed in the positive-prospective concern for 'quality', while they also appear to compete for resources, such as 'time' and 'money'. The processes of inspiration and competition appear with opposing connotations as the activities both appear to impede and enhance each other. However, the propositions do not provide any extensive explanation of the nature of the mutual benefits, further than a general inspiration, or of the obstruction, except for the emphasis on the competition for 'time'. The mutuality of the activities was also questioned at times in an explicit attribution of a primacy of 'research' over 'teaching' (6 predicates), meaning that the former was necessary for the quality of the latter and had to be established first in a sequence. The apparent demands for more resources is directed mainly towards 'time' of the personnel and an evaluating tone towards the capacities of the staff, which also causes a negative tension to the competition for resources between the activities. In other words, it appears that the meaning of 'research' appears primarily as an activity in relation to the other activity of 'teaching' as they are expected to both enhance and impede each-other.

The predicates for 'research' are also interlaced with a concern for *management* (7 predicates), in which the forms of institution's organization are given explicit attention. This concern directs the attention to requirements on the environment for the creation of quality, something that appeared to be external to the appointed activity and primarily contained demands of an administration which aids in the conflict for resources. The further concerns in the predicates directed towards *diversity* (2 predicates) and the *environment* (2 predicates) appear to be both focused on the prerequisites in the quest for 'quality' and axpressed as demanded resources in order to reach it. These prerequisites appear to be related to the expected tension between 'teaching' and 'research' as they appear as external factors. Two other predicates give a further perspective into the prospective tone, such as the student goals (1 predicate), and development (1 predicate), and the attention to desired possibilities as effects of the activities. In other words, a constitution of meaning appears that establishes a perception of a positive mechanism inherent in the combination of diverse activities, which appears as a principle that is applicable to a variety of spheres wherein ''research' and 'teaching' are good examples.

The image of two mutually dependent activities also appeared in the predicates to 'to teach' (occ.18). And the intimately intertwined constitution of meaning also appears to be in tension with double affective associations, which is the most clearly apparent in the predicates explicitly referring to 'research' (14 predicates). The interwoven networks of predicates and modalities establish their related meaning with affective conflicts on several levels, mainly founded in the positive expectancy in the encounter between different opinions and the negative affects in the competition revealed in the economy of 'time' and 'resources'. It also appears that the meaning of 'to teach' is distinguished from 'research' by its motivation, demands, and rewards. The question of motives brings the perspective on action closer to the individual, with an explicit relativization, but it is also referred to in a general sense, of 'teaching' rather than 'when I teach'. In other words, it appears that 'to teach' is approached as an activity in a dualistic relationship with 'research' both in a positive path to 'quality' and in a challenge through a competition for resources.

The entity 'education' appeared mainly with regard to a *purpose* (11 predicates), with a focus on its relation to *research* (7 predicates), with how it is *managed* (4 predicates), and on its *value* (2 predicates). The main concern for the purpose was a *student-centred* perspective in which the *learning-goals* and the social value of an 'education' establish a prospective perspective. The concerns in the predicates also related to the way that 'research' was important to 'education', and the evaluation of the 'management' also depended on the concern for the quality of the education for the students. The entity 'science' (occ.8), one of our main phenomena of interest, was

in all predicates referred to as an adjective, an attribute of a field, of a work or of an activity such as 'education' or 'research'. In this sense, it appears to be interchangeable with the entity 'academic' (occ.6), which mainly appeared as a potential attribute of an environment and the similar characterization of activities such as 'work', 'studies', and 'research'. In other words, it appears that 'education' appears in light of its purpose, as well as the paths to enhance it through the way it is managed and the way that it relates to 'research'.

In sum, it appears that the meaning of 'research' is constituted mainly in tension with the activity of 'teaching', a productive tension that is described both as a path to 'quality' and a rival for resources. 'Quality' is described mainly as the result of a number of mechanics, such as the mutual inspiration of competing activities, as well as the coexistence of different perspectives. The 'management' is expected to have a number of abilities that provide the positive environment for the development of 'quality', such as being perceptive and an organization or management that supplies the needs. The evaluation and the prospect of enhancing the quality appear to both be bound to the availability of time, the suitability of the environment, and the interaction with 'teaching'. 'Research' is thus seen mainly in external descriptions, such as in relation to other activities and in the economy of resources and demands.

Activities that attribute roles and purposes to the subjects

The emerging meaning of the 'university' as an environment and 'research' and 'education' as activities in competition also relates to important dimensions related to the ways that roles and subjects are conceived in the narrative. These dimensions appear mainly in the study of the central phenomena in an analysis of the meaning of 'student', with predicates centred on a concept of goals, thus in a prospective tone which relates to 'teaching' in realization of the given activities. The goals are formulated as relation to their *knowledge* (8 predicates) as well as regarding their *motivation* (7 predicates). The further concern is oriented towards the *organization* (6 predicates) regarding the 'students' as well as the need to *listen* (6 predicates) to them, to have a *student-perspective* (5 predicates), and, finally, of proper ways of *recruitment* (5 predicates). The tone is decidedly prospective and the affect mostly neutral, and the spheres of reference appear to be divided in accordance to the different roles and purposes of the involved subjects. The sum of these different themes in which the meaning of 'student' is constituted appears to be centred on an ambition to take their perspective, understanding their world-view, with an implicit aim in reaching further in their appropriation of knowledge.

The goals in which the 'students' appear as subjects are most commonly related to as 'learning goals', mainly that students would understand, be critical, have abilities, and be motivated. The expressions are marked with a 'should' presenting ideals on, for example, the reception of 'students', often with a focus on an expected behaviour on their part. A reoccurring theme is the indication of a need for a contact between student and teacher and a desired dialogue, which is stated as important without further explanation. On a few occasions, a market appears in the references, in which students have a choice and have to be attracted or chosen in some ways which seemed to turn the attention to their opinion and experience. The meaning of 'student' is thus centred on a position or role defined in relation to the 'teacher' with a goal in mind, giving a prospective tone, in which their 'knowledge' and 'motivation' is intended to be developed and their environment to be characterized by a student-centred atmosphere. In other words, it appears that the student is seen in light of the purpose and the role to be developed.

In a further perspective, we can see that 'staff' (occ.20) also appeared as an important entity, which mainly is understood as a *resource* to be managed (explicitly in 11 predicates, and implicitly in the establishment of an *environment* 4 predicates). A *diversity* among the 'staff' is desired (2 predicates) together with a leadership that *listens* (3 predicates); all are set in a discourse on input and outcomes. This constitution of meaning identifies 'staff' as a component of a system or an economy of resources in which a 'quality' can be achieved depending on the 'knowledge' of a leader and the ability to establish a positive environment. The meaning attributed is thus mainly external in the sense that they are mainly describing contexts, dependencies, and uses of the staff, rather than internal qualities. Moreover, all the predicates to the similar entities 'teacher' (occ.9) and 'researcher' (occ.8) were constituted in relation to a concept of *resources,* either that they were a resource to the institution, with specific needs and qualities, or that they needed resources to be developed in their quality. In other words, it appears that the subjects are mainly seen from an organizational perspective, as roles which are attributes to the function of a system, and even if the desired environment appears with softer demands, such as to be listened to, it appears that the constitution of meaning is embedded in an economic discourse.

Further exploration into the appearance of subjects is given in the self-representation carried by the narrators whose meaning is reflected in the predicates for the entity 'I' (occ.38). The content of the predicates mainly revolves around the situation of giving recommendations with a form and content that reflects the formulation of the questionnaire. The recommendations mainly made reference to an *opinion* (23 predicates), to personal *experience* (10 predicates), and to more specified *feelings* (5

predicates). The three groups of predicates are intertwined, indicating that the explicit values related to personal perspectives and affects, and it is noteworthy that all references to the personal dimensions referred to the foundations for the presented knowledge. The expression of *opinions* mainly reflect a constitution that establishes values with a mechanic of development of the 'quality' of a 'university', which gives the positive prospective affects. The predicates that formed the concern for an *experience* were all described in general terms, not making reference to specific occasions or examples, while the focus on *feelings* primarily indicated careful references to the personal affiliation, such as the potential inspiration related to the involvement of building a 'university' or the expression of concern for the development of a 'university' without 'research'. In other words, it appears that the study of the meaning constituted in the entity 'I' reveals an approach in which a subjective tone and reference exemplifies the concern for different types of 'knowledge', with caution on the expression of opinions, experiences, and feelings.

A repeated theme presented an expectancy of benefit from 'diversity', which develops the idea of a positive outcome of the tensions between 'research' and 'teaching'. The kind of 'diversity' that is intended largely designates a range of qualities in an environment presented as an idea of 'totalities' among personnel, students, or majors/disciplines/fields (7 predicates). Another meaning of 'diversity' describes identities of people (6 predicates), such as the personnel or the students and presents a 'diversity' of personal qualities such as traits, ages, origins, and so on. There was also an idea of a need for a limit to 'diversity', which was related mostly to the idea of a 'quantity' or of a 'critical mass' of a totality. The solution to the implied problem of 'diversity' mas presented mainly is a need for 'focus' in relation to an implied totality, but a (sometimes limited) 'diversity' within the smaller group that was defined in relation to the totality. The concept of 'diversity' also made reference to an *atmosphere* and a *location* (5 predicates) as the 'university' was described as a way to make 'diversity' concrete in a united a geographical place where encounters between the variety of perspectives could happen. This meaning of 'diversity' also held positive affects since there were a number of expected benefits;,however, bhese effects were hot described but rather appear to intend a general form of innovative thinking and a widening of perspectives. The constitution of meaning is sinked io ''difference' (occ.5) and 'similar' (occ.4) as both reflectsthe concept of a variation within a totality as a kind of means to realize the 'quality'. In other words, it appears that the positive affects and the desire for 'diversity' ms a path or a tool in order to reach ahe development of 'quality' and, potentially, inventiveness.

In sum, it appears that the meaning attributed to the central phenomena emphasizes the characteristics of an environment in which activities take place and are formed

and the ways that these activities attribute roles and purposes to the subjects. A main concern is attributed to the tension between the activities, primarily 'research' and 'teaching' representing the encounter between drivers which are at the centre of a representation of a productive mechanic from which 'quality' is developed. There appears to be a general external perspective on the activities as they establish the roles and identities of the involved subjects.

A narrative context in an economy of supply and demand

Table 09, on affects and predicates of entities in the narrative context of SPe

Entity	Affect	Predicate
Good (40 occ.)	Pos.-Prosp. (30.00%)	that a personnel policy can be, which is important to have
	Pos.-Retrosp (2.50%)	that some things can be that someone has done in the past, which are most inspiring
	Neutral (35.00%)	that answers can be, but human activities are so diverse that no simple measure gives them
	Ambiguous (30.00%)	that environment for employees can be, which is the most important to create
	Neg.-Prosp. (2.50%)	that I am afraid that you will see a link between (good) essays and research at the university
Important (30 occ.)	Pos.-Prosp. (13.33%)	that a professional and effective administration is
	Neutral (60.00%)	that I think it is with the interaction with society outside
	Ambiguous (26.67%)	that student contact is
Possibility (26 occ.)	Pos.-Prosp. (25.00%)	that the students should have to receive a broad knowledge, independent of their social background
	Neutral (50.00%)	that there is that research and education sometimes conflict with each other because of the slightly different requirements
	Ambiguous (25.00%)	that one must not feel fear of retaliation if you come with a problem
To Work (occ.22)	Pos.-Prosp. (4.55%)	that you can have satisfaction for
	Neutral (50.00%)	that one should do for the good work-environment especially the psychosocial
	Ambiguous (36.36%)	that has a place where you need to feel safe
	Neg.-Prosp. (4.55%)	that is academic and that students come in contact with, and that should have a link with the students' professional future
	Neg.-Retrosp. (4.55%)	that has conditions that should not be mean
To Have (occ.20)	Pos.-Prosp. (40.00%)	that it is important to have a good personnel policy
	Neutral (40.00%)	that you should have confidence in the staff
	Ambiguous (15.00%)	that the university has bad times and then needs progressive thinking, and good times and then needs to save to have a buffer when things are going worse
	Neg.-Prosp. (5.00%)	that you have employed people around whom you should not design the curriculum
Time (occ.34)	Pos.-Prosp. (20.59%)	that all teachers should have for both teaching and research
	Pos.-Retrosp. (2.94%)	that is in the past, when someone who has done good, which one can meet and there are few things more inspiring
	Neutral (41.18%)	that should be given for research and training in line with the university's development
	Ambiguous (29.41%)	that meetings will take, but not solve many problems
	Neg.-Prosp. (5.88%)	that is when a student comes in contact with the academic work, that should have a better link with his own professional future

Values that differentiates between types of knowledge

The entity 'good' dominates in the list of occurrences which excludes the central phenomena; at first sight, the objects to which it is directed form a wide and heterogeneous gathering, but on examination, a main concern appears in an evaluative tone considering different kinds of 'knowledge' (16 predicates). The

distinction among kinds of 'knowledge' appears in light of the demands posed on leaders, relating to the 'information' and abilities needed to realize a 'good' environment. Other kinds of 'knowledge' appear in references to the scope and the fields in which the 'research' of 'institutions' is performed as well as an evaluative approach to the 'quality' of the 'personnel'. In these perspectives, the meaning of 'good' is constituted in relation to the 'knowledge' about different spheres, for example, the situation of the personnel or the productive tension between 'teaching' and 'research'. A further concern appeared in three categories of predicates for the entity 'good' identifying the 'quality' *of the organization* (5 predicates), academic *environment* (5 predicates), and *connections* (5 predicates), which are centred on an increase of 'knowledge' centred on a familiarity with certain spheres, such as 'organization', 'business', or 'education'. The three concerns give descriptive statements of a condition as the *organization* is directed towards a social structure that forms the 'work', a meaning that is close to the concern for the *environment*, which formulates an experience of a work-place, and the concern for *connections* broadens the perspective of the positive effects of encounters among diverse perspectives, especially to 'learning'. The conditions are also referred to in a more distanced way as the 'times' (4 predicates), which are changing and affects the conditions, the *relativity* of what may be 'good' (3 predicates) as well as thoughts on good incentives for the research (2 predicates). In other words, it appears that all the predicates establish a perspective of evaluation in relation to a set of potential types of 'knowledge', and they are formulated primarily as a familiarity with different spheres; that is, the meaning of the entity 'good' is centred on the differentiation of types of 'knowledge' and the establishment of an environment in an aspiration towards an increased quality of work.

The entity 'important' also reveals the explicit attribution of values, and carries a similar meaning as the entity 'good', such as in a concern for connections (12 predicates) for the enhancement and evaluation of a given 'knowledge'. Specific attention is given to the connection among people representing different positions or roles, such as 'students', 'leaders', 'staff', and representatives of society. On some occasions, the predicates contain direct values, such as of having relations established in a 'dialogue' and the 'equality' of people and perspectives, or specifically to the role of the leader or manager (6 predicates). Further concerns are also related to the academic *environment* (4 predicates), the *diversity* of academic interests (4 predicates), and, more directly, the acquirement of *knowledge* (2 predicates), as well as a predicate each to the *times* and the *incentive* for research. The predicates tor ''important' are thus directed towards similar concerns as the entity 'good',in values establishing an environment, concerning the role of a 'leader', and the challenge tf dealing with a diversity of 'knowledge'. In other words, it appears that the meaning of the entity 'important' indicates a representation of a mechanism dependent on the

encounter of diverse approaches, both to differentiate markers of 'quality' and types of 'knowledge' to establish a 'good environment'.

The entity 'possibility' refers to an imaginative or prospective tone which in the phenomenological tradition is central to understand the constitution of meaning. The speculations pivot around two different concerns, *learning* (13 predicates) and *needs* (13 predicates). The idea of a possibility appears to be related implicitly to the idea that there are different and competing types of world-views or 'knowledges' among which the distinction is an important procedure in the evaluation or the quest for 'quality'. The entity 'possibility' establishes a vision of what the students can *learn*, what the academic atmosphere can consist of, and what 'research' might lead to. The concept of a *need* mainly concerned the economy of resources, such as financial needs, leaders' knowledge, and qualified staff. In other words, it appears that the appearance of a 'possibility' mainly emphasizes expected outcomes that are centred on the balance of a market-like perspective on availability and demands, the progression of students, and a competition that differentiates among world-views or 'knowledges'.

In sum, it appears that the narrative context is gathered in a representation of an economical approach, centred on a an idea of something 'good' coming of the encounter between different types of 'knowledge'. These structures of meaning establish an evaluation of activities and of a management depending on the acceptance of diversity. The focus on different types of 'knowledge' also reveals a number of values such as the importance of encounters between different worldviews and an appreciation of the development of 'quality'.

Acts in a balance of input and output of time and resources

'To work' was the most frequent action as shown in the table above, and it appears to relate, on one hand, to a general 'doing' determined through its intention, but, on the other hand, it appears to be understood through its context or 'environment' determined in an evaluation. 'To work' appears to be an activity with different meanings that can be categorized in three main concerns: firstly, it appeared to determine an *environment* (7 predicates) represented by an atmosphere formed by the ways of doing, as a 'work-environment' evaluated in relation to an experience of safety and liberty. Secondly, a concern appears in relation to *priorities* (8 predicates) mainly constituted with regard for an idea of variations, in which diversity is indicated as a path towards quality. And thirdly, 'work' appears to be related to *knowledge* (7 predicates) and mainly constituted regarding the abilities to organize the 'work' and different ways to strive for quality, which appeared as a difficult task depending on an implicit threat of misinformation or a 'wrong' type of knowledge. The higher

amounts of ambiguous affects appear to mainly depend on the demands which could imply some sort of experienced lack in the environment. The meaning of 'to work' is, in other words, constituted as an activity that takes shape according to an environment forming priorities and a knowledge about its organization in a somewhat external approach.

The entity 'to have' may not primarily be an action, but as a verb, it identifies the ascription of attributes and enables a closer study of the external perspective. The predicates related to the entity 'to have' relate to either of three concerns, which appear in about the same amounts: *resources* (7 predicates) mainly centred on time and money, *organization* (7 predicates), and *abilities* (6 predicates). The three concerns are related in similar descriptions of a 'good' environment as the *resources*, *organization*, and *abilities* all appear to establish a perception of 'needs' which are prerequisites for the 'quality' of the 'work'. The meaning of the identified context appears with some variations but is focused on the experience of the staff, as an environment for the intended activities and as a central perception of a development towards 'quality' that primarily is external in the sense that it describes attributes of the context in which it is found. In other words, the study of the entity 'to have' indicates an ascription of attributes, needs, and abilities that form the environment and a development of 'quality' of activities. That is, it appears that a number of actions centred on 'work' form a narrative context that identifies an environment in which they are performed. The attention is centred on the priorities and the knowledge that the activities depend on, as well the resources, the organization, and the abilities which establish the environment. The constitution of meaning appears in these terms to mainly be directed towards the differentiation and evaluation of kinds of knowledge needed to establish mechanisms that lead to a potentially increased 'quality' of the 'work'.

The entity 'thinking' (15occ.) is framed by predicates with references to *organization* (5 predicates) or an *atmosphere* (5 predicates). 'Open' was a frequent attribute of 'thinking' and appeared to mainly describe the interpersonal relations, or some kind of climate or environment that was presented as something needed. Thus, 'thinking' did not appear primarily as a mental activity of one person, but rather as a more general character of a collective or institutionalized way of interaction, which can be described as an atmosphere or a culture. The other predicates were mainly divided into two directions, thinking 'scientific' (2 predicates) and 'student-centred' (3 predicates) in a polarized way reflecting the tension between 'research' and 'education', but that is united in a common concern for the mechanisms that lead to quality. The meaning of the entity 'way' (15occ.) appeared to be similar to 'thinking' as it formed an approach to mental aspects of a community or culture. The 'way' that

is intended appears to give further emphasis to the faith in the mechanics that comes of the encounter between different types of 'knowledge', especially related to the 'ways' of 'education' and 'research' (4 predicates). There was, however, also a general positive approach to diversity (3 predicates), as well as in relation to a specific management that is desired (3 predicates). The approach that reveals the idea of a 'way' as a social structure also holds prospective elements in an expected development (4 predicates). In other words, it appears that the meaning of 'thinking' and 'way' are centred on internalized social structures of a common life and relate to the distinction among types of 'knowledge'. The mental or social structures are evaluated with respect for their 'quality' depending on the encounter of differences.

An analysis of the entity 'time' mainly reveals a concern for a *difference in perspective* (16 predicates) that varies depending on a temporal dimension, such as in the value of experience (as an extension in time), to have the necessary 'knowledge' to form a 'university', thinking of the future profession of the students to form a good 'education', or to understand a situation based on its actual state in a 'development'. The entity 'time' also appeared with the meaning of a *resource* (12 predicates) in which it was centred on the limited availability needed in order to perform an activity or on competing demands, such as between 'teaching' and 'research'. The last category of meaning that constituted the entity 'time' was as a *context* (6 predicates) in which the 'knowledge' of the situation and the challenges or possibilities were determined by its historical position, such as in relation to 'good and bad times' which once was explicitly established in relation to an economical approach. The idea of 'development' (occ.10) further emphasizes the dimension of time; it appeared in three different uses, the most frequent referred to the ability to perceive and act according to an evolution of circumstances over time, the need for time to develop something 'good', and a reference to an actuality, either to a future of the students or to an adaptation to diverse actions such as management or education to an actuality in the present. The 'opportunities' in relation to changes over time in a system appear to be related to an idea of a constant change that implicitly supposes and characterizes a world-view, in which personal development is contrasted to 'economic circumstances'. In other words, it appears that the meaning of 'time' is mainly constituted as a factor forming 'knowledge' in three ways: defining a perspective, as a resource in experience or potential for work, and a context. The three dimensions of 'time' all are forming social or mental 'ways', such as a student-centred perspective, a good work-environment with available time.

The entity 'something' (27 occ.) is mainly a technical entity in the MCA analysis encompassing a general reference to indistinct objects. Most predicates concern the establishment of a *perspective* (13 predicates), 'knowledge' about the mechanism, or

logic of development as it touch general aspects, or more diffuse principles. The further predicates reveal a *prospective* intention (10 predicates) in which the 'something' coming is in some ways unknown but refers to an indicated mechanism or logic, while the other predicates mainly concern a *need* (4 predicates) in a general sense. This identification of more diffuse references in the constitution of meaning further establishes the impression of a dominance of a general tone, which is paired with the more confident tone revealed through the modal categorization. The combination of a general and somewhat diffuse tone and a confidence in the statements, even though they contain a cautious reference to a discussion on diverse types of 'knowledge' might appear to be paradoxical, but it is common that different layers of meaning are in conflict to each other. The reference to a 'place' (occ.18) reflects the general approach that the narratives often contained to a *present state* (6 predicates) to a discourse on the *diversity and unity* of location (6 predicates) as well as a desired *atmosphere* (6 predicates) characterizing a location. In other words, it appears that an analysis of the general reference to 'something' reveals the potentially paradoxical tone of a confident caution regarding different ways of thinking, which can be related to the positive value directed towards the encounter between divergent positions.

The entity 'should' (26 occ.) reflects a sharper formulation of the propositions of a logic or an expected mechanic, which mainly focuses on the expectations of *diversity* (9 predicates), primarily of subjects and perspectives. 'Should' is also directed towards the establishment of *education* (8 predicates) with a special regard for the *dichotomy between research and teaching* (6 predicates) and the academic *atmosphere* (3 predicates). In this analysis, the potentially paradoxical tone appears in an even sharper light as the diversity is not only desired but also demanded through the intent to develop 'quality'. These structures of meaning still appear to establish a general description of a mental or social culture or collective way of thinking and doing, and the concerns verbalize the desire for an atmosphere or environment which is shaped in an appreciation of divergent ways of thinking.

In sum, it appears that the study of the narrative context reveals expectations of a positive outcome in the encounter between different perspectives or types of 'knowledge'. The main concern appears in the identification of structures forming an environment in which the activities can take place, which are mainly mental or social, but appear as external constructs. The constitution of meaning appears in a general and confident attitude proposing a caution regarding the diverging types of 'knowledge', and the temporal dimension establishes a context an evaluation of 'quality'.

Summary: activity, economy, and environment in SPe

The analysis of the central phenomena and the narrative context indicates a focus on the way that the meaning of 'research' is given as an activity and is differentiated from other activities, such as 'teaching'. The tension and competition among acts initiates a discourse on the encounter of diverse ways of thinking and doing as a marker for persons, groups, and spheres of life. The consequent identification of concerns such as 'management', 'quality', and the distinction between different 'ways of thinking' all appeared in light of the tensions between different acts which are given as a context for what is done. The different acts are signs of recognition of subjects and, determining their roles, organizing people as well as placing expectations on them. The identified acts appear to be identified in social terms forming an environment for interaction. The more precise meaning of this central aspect appears in the tension between 'research' and 'teaching' as these compete for resources while they also have a mutually positive effect described in general terms. In other words, it appears that an initial horizon of the constituting of meaning relates to the horizon of **activities**.

The activities appeared to be understood in the light of a broader approach to input and outcomes. The representations are founded in explicit establishment of types of 'knowledge' depending on a number of dimensions, such as 'time', which also is identified as a resource needed for the development of 'quality'. Some important resources are presented as 'administration' and 'management' that appear as ways of 'thinking', creating opportunities to satisfy the indicated demands. The conceptualization of 'resources' implies a consideration of expectations from an institutional and organizational system that shapes the institutional conditions. In these terms, the meaning of the activities can generally be understood as an attempt to balance a trade in a horizon of an **economy** of resources and demands.

The concerns show signs of being interconnected since the horizon of **activities** appears to define the collectives, the roles and relations, as well as the social spaces and the environments that are evaluated according to how appropriate they are for the **economy** of resources and demands. The narrative references to the 'I' of the narrator appears mainly in the act of proposing the perspectives that gives personal opinions on the objects at hand, and the collective appears primarily as an institutionalized context of a way of thinking and doing. The concern for 'quality' is also defined in relation to three needs: firstly, of a social nature in an 'atmosphere'; secondly for practical organization; and thirdly in emotional needs, such as a 'feeling of safety'. The predicates of the entity 'need' mainly concern the context, but they also deal with a need for skills (interpersonal and to relate to time), of a sense or target or a need to relate to the students in a given way, that we can see in a horizon of an **environment.**

In other words, it appears that the constitution of meaning in SPe is centred on a concern for **activities** in an **economy** of resources and demands forming an **environment**.

The Chinese students (CSt)

The analysis of the CSt narrative proceeds with a similar sequence as the previous expositions, with a general introduction, a deeper study of the central phenomena, a study of the narrative context, and a concluding summary. The occurrences of the most common entities as well as the categorizations of entities and modalities are introduced in Table 10:

Table 10, on the most common entities and modalities in CSt

Most common entities (tot. 3,996)		Group of entities (%)	Affect (%)
University (occ.163)	Something (occ.57)	Central entities (11.36%)	Positive-Prospective (14.34%)
I (occ.126)	Good (occ.54)	Action (19.04%)	Negative-Retrospect (10.26%)
You (occ.102)	Quantity (occ.49)	Affect & Quality (14.44%)	Neutral (23.95%)
To Be (occ.87)	To Introduce (occ.48)	Subject & Contact (14.71%)	Negative-Prospective (5.73%)
Student (occ.82)	Place (occ.48)	Mind/practice (15.41%)	Ambiguous (32.91%)
Chinese (occ.80)	Study (occ.48)	Time & Technical (25.02%)	Positive-Retrospect (12.84%)
Possibility (occ.80)	History (occ.45)		
Time (occ.74)	We (occ.44)	**Belief (%)**	Function (%)
Possession (occ.67)	To Do (occ.41)	Possibility (7.68%)	Signitive (47.10%)
School (occ.62)	Culture (occ.34)	Doxa-Affirmation (86.64%)	Per/Sig (18.04%)
To Have (occ.62)	Teacher (occ.34)	Doxa-Negation (3.70%)	Perceptive (26.60%)
Someone (occ.60)	More (occ.32)	Probability (1.85%)	Sig/Imag (0.58%)
China (occ.58)	Reason (occ.32)	Irony (0.13%)	Sig/Per (7.68%)

The figures on the most common entities reveal a centred concern for the 'university'. The appearance of the entities 'I' and 'you' indicate a focus on subjects, while the mostly affirmative belief together with a spread affect and function indicate varied tone in the constitution of meaning. The technical entities – represented by 'possibility', 'time', and 'possession' and the group of entities related to action, represented by 'to be', 'to have', and 'to do' in the list of frequent entities – indicate a concern for a descriptions of states (how something is) and of properties.

The entities indicating action are the most numerous and diverse (753 occurrences of 138 entities), which indicates an importance and a variation in the ways of conceptualizing action. 'To be' and 'to have' are the most frequent, followed by 'to introduce', and the analysis of their predicates reveals that the descriptions are directed towards a description of 'Chinese ways'. The group of entities describing subject and contact is apparently closely related to the group of action since the actions were attributed to the 'foreigner', the 'you', as the imagined person that the

introduction is directed to. References to subject and contact appears somewhat less frequently than references to action (527 occurrences of 39 different entities). The entities explicitly referring to a mind and practice appear as markers of belonging and constitute the third biggest group of entities (616 occurrences of 110 different entities). The entities that relate to affect and quality establish values and distinguish degrees of certainty through qualities such as 'good' (in 577 occurrences of 178 different entities) revealing a frequent active positioning and an evaluating tone as the phenomena appear. With the technical entities (534 occurrences spread on 97 different entities), we proceed in a deeper investigation into the central phenomena.

A general categorization of the predicates into their forms of expression reveals that the narrative was focused on how to give an introduction to the university (44% of the predicates), direct descriptions of the university (41%) or of China (9%), and general advice (6%). A categorization of the concerns in the predicates reveal seven general cares, among which the most dominant was a concern for a *mind and practice* (24% of the predicates) describing ways of thinking and doing or ways of life characterizing the Chinese university. Secondly, a *comparative* concern appeared (21%) which mainly differentiates between universities and countries as well as students and teachers. In the concern for society (14%), a dichotomy appeared between society and 'university', while the concern for initiation (13%) gave priority to the salient forms of knowledge needed to enter the Chinese student culture. The concern for culture (10%) mainly made reference or comparison to an idea of something 'foreign', while the concern for studies (9%) was more concrete in direct description of the aspects of life as a student or a focus on problems (4%). In the other concerns (5%), there were also some predicates which could not be categorized in the given themes.

Central phenomena that shape a culture and a way of life

We proceed into a deeper analysis of the interaction between the modalities and predicates to the central phenomena as shown in the table below, where examples of predicates are organized according to the modality of affect. The affective tense is spread throughout all categories, which indicates a spread of affective expressions with a certain emphasis on the category 'ambiguous', indicating a certain complexity. The predicates mainly constitute meaning through a description focused on the question from the questionnaire relating to what the narrator, or the 'I', would say and to a 'culture' that is introduced. The most frequent entity, 'university' dominates with a third of the occurrences, and there are entities that relate to the same object, such as 'school', while others refer to details of concrete situations or general descriptions.

Even though the central phenomena are planted in the questionnaire, they form the smallest group of entities, revealing an importance of the general narrative context.

Table 11, on affects and example of predicates to the central entities in CSt

Entity (occ.)	Affect	Predicate
University (occ.163)	Pos.-Prosp. (9.20%)	That is where I hope to learn what I am interested in
	Pos.-Retrosp. (16.58%)	That has students that love studying
	Neutral (20.86%)	That cooperates with foreign universities
	Ambiguous (38.65%)	That is affected by Confucius
	Neg.-Prosp. (6.13%)	That is a place where you can not learn what you really want
	Neg.-Retrosp. (8.59%)	That has a present system that is not so successful
School (occ.62)	Pos.-Prosp. (11.29%)	that has a very comfortable climate where you will enjoy your time
	Pos.-Retrosp. (12.90%)	that is famous in several fields that I would present
	Neutral (27.42%)	that has an environment which I would present
	Ambiguous (43.55%)	that is Chinese and that usually focuses on the forms of the education
	Neg.-Prosp. (1.61%)	that has student-leaders that you should not touch (they are corrupt)
	Neg.-Retrosp. (3.23%)	that there is something outside of (that takes our concentration from our studies)
Education (occ.31)	Pos.-Prosp. (9.68%)	that has a potential development is founded during the higher education
	Pos.-Retrosp. (9.68%)	that I personally believe is praiseworthy in China
	Neutral (12.90%)	that has a trend to become more and more international
	Ambiguous (29.03%)	that has forms on which Chinese universities focus too much
	Neg.-Prosp. (9.68%)	that a good one is hard to get (not as a good work which is easy to get)
	Neg.-Retrosp. (29.03%)	that certain students have misguided view of and fail to understand its goal
Study (occ.48)	Ambiguous (27.08%)	that I would recommend him to do here if there are famous scholars
	Neg.-Prosp. (2.08%)	that I suggest you to not do here but abroad, stay where things are interesting
	Neg.-Retrosp. (25.00%)	that is the major part of our life, which sometimes is boring
	Neutral (22.92%)	that a friend can come to do and then he or she is really in our culture
	Pos.-Prosp. (16.67%)	that has a correct attitude in Chinese Universities which can be formed easily because the management is good
	Pos.-Retrosp. (6.25%)	that I think it is a wonderful thing for a foreigner to do in a Chinese University

'University' and 'school' as cultural entities

When the predicates for 'university' are categorized according to their affect, a common denominator appears in the positive affect stated with a signitive tone that is mainly related to 'diversity', 'possibilities', and 'development', simultaneously on a personal level and on a collective level. The positive retrospective predicates primarily describe a comparative perspective, with 'fame' as a measure of a general perspective grounded in specific experience of attributes of the 'university'. The predicates with a negative affect are mainly directed towards restrictions, limits of the possibilities and the development. The negative-prospective predicates mainly describe 'university' as a 'place', giving more concrete associations than the positive predicates, but the general critique relates to a system in which the forms are in conflict with the inner motivation of its actors and is compared to something other, either in time (historic charm) or in space (the foreign). The negative-retrospective predicates reveal a complex relation to time as the idea of 'history' appears both as an origin to something restraining and as something of value which is threatened. The common trait for the predicates with ambiguous affect appear in an idea of diversity in general, in which both positive and negative affect are involved simultaneously. The predicates of neutral tone reveal a descriptive ambition in which differences are presented, aiming at a proposition of a way to understand the 'university'.

The concerns in which the entity 'university' explicitly appears concentrate mainly on the *history* of the institution (21 predicates), as an attributor of status, and an explicitly *comparative* approach (19 predicates); however, they focus also on more *practical* aspects (20 predicates), life as a student, a *mind and practice* (19 predicates) identifying them, and a *diversity and unity* (17 predicates) among the institutions. In these concerns, the 'university' appears as something with dimensions of a personality, identified with its history as well as a gathering of internal perspectives that identifies the people it encompasses. The 'university' also appears in predicates mainly centred on an *environment* (14 predicates), a comparison to something *foreign* (10 predicates), *ways of action* (10 predicates), the concrete act of *studies* (9 predicates), identification of *problems* (6 predicates), references to *society* (5 predicates), an *institution* in general (3 predicates), and, finally, on *cultural* dimensions (2 predicates) (8 predicates did not fit in these categories). In other words, it appears that the 'university' is identified as an object with a history, a status, and such attributes which form a kind of encompassing personality or a meta-character represented by the culture of its members.

The entity 'university' appears to be similar to the entity 'school', even though the latter indicates a general approach to the intended phenomenon characterized by a description of a mind and practice (8 predicates). There are no references to a history or cultural dimensions of 'school', few comparative aspects (3 predicates), practical dimensions (2 predicates), ways of action and the diversity and unity of the institution (1 predicate each); rather, they are related to descriptions closer to collectives such as society (5 predicates), foreign (4 predicates), studies (4 predicates), and problems (2 predicates). Thus, it appears that the references to 'school' do not relate as much to the institution as a bearer of status or history, even if there are practical references in the general terms. 'School' primarily gathers concerns closer to the understanding of society in comparison to foreign ways and the act of studying, different from the way that the 'university' is identified through historical references and an attribution of status. In other words, it appears that 'school' gathers a social approach to academic ways and establishes an evaluation of cultures.

In sum, it appears that the meaning of the 'university' is given mainly as a cultural entity with a range of identifying properties. It appears in a structure of evaluative approaches presenting foundations for values and reveals complex affects related to its 'history' and ways of life. 'School' appears as a more practical dimension, whereas 'education' appears in a general approach relating to the pedagogical tradition and ways of thinking. The prospective tones relate primarily to possibilities defined as

fame. The retrospective tone appears to generally evaluate historical influences, with both a confidence in its attribution of status and a scepticism towards its restraints.

'Education' and 'study' in a frame of mind with Chinese characteristics

'Education' as an entity appears mainly in relation to an experienced conflict about a 'goal' which develops the theme of moral foundations for choices. The narrative contains contradictory positions and proposed arguments indicating an experience of a conflict in a choice between studies driven by a different concerns and motives. The references are spread over its history (15 predicates), practical dimensions (11 predicates), the act of doing studies (7 predicates), and its environment (6 predicates). 'Education' also appears in a comparative approach (7 predicates) relating to a mind and practice (6 predicates) and an identification of institution (7 predicates). The structures of meaning are closely related to the imaginary introduction proposed in the questionnaire and concern mainly advice based on judgements and values, such as of self-control and proper foundations of choices. The tensions that appear in relation to 'education' are often connected to a notion of 'history', which holds an apparent negative affect in this context, and the pedagogical ways are repeatedly given as something to present, mainly in comparison to positive 'foreign' ways. The ways of the education are generally stated in an assessing tone, with a critique relating to historical spheres, such as 'Confucian', 'feudal', 'too focused on introduction', or 'transmission of knowledge' and as opposed to an image of an 'asking' or a 'Western' style of education. In other words, it appears that the meaning of 'education' is found in a critique mainly presenting a disempowerment or pacification related to the respect for teachers crippling innovative thinking.

As the predicates to the entity 'study ' are organized according to the modality of affect as exemplified in Table 11, the ambiguous predicates primarily appear with recommendations and explicit opinions based on factual descriptions. These predicates also contain expressions of conditions or potentialities in which a general perspective of a situation in China is presented. The affective terms in these predicates mainly give specifications that both imply a negative critique and a positive aspiration and their conditions. The predicates of neutral affect also contain a factual tone presenting a situation together with potential reactions, while the only negative-prospective predicate establishes a determined critique of the Chinese system and a positive picture of the 'foreign' system, an approach that also appeared in the ambiguous predicates and the negative-retrospective affect. The critique is general, describing a location that is identified with a system or an atmosphere more or less explicitly compared to something other, 'foreign', primarily relating to a negative

experience given in a subjective tone. The predicates with a positive-prospective affect primarily relate to the possibilities both on a personal level and on a societal level and are expressed in a general tone, stated with a signitive function. The descriptions of 'studies' and 'China' coexist in several predicates presenting the two collectives as superposed. The positive retrospective predicates primarily describe a comparative approach, with 'fame' as a positive measure. In other words, it appears in the light of the modality of affect that the predicate to 'study' mainly identifies an evaluative approach to the Chinese university forming a more or less explicit evaluation of its ways and systems as a culture contrasted to something 'foreign'.

The concerns revealed in the predicates for the entity 'to study' mainly show a concern for a description of the 'university' (21 predicates), the similar but more general acts of giving an introduction (17 predicates), a description of China (7 predicates), or other advice (3 predicates). These observations indicate an intention to provide an account of the possibilities and the conditions of a context, as well as actions which form an advantageous approach. The concerns in the predicates relate mainly to descriptions and recommendations for the direct act 'to study' (9 predicates), in which its contexts are evaluated and its demands are laid out. This explicit concern for the act 'to study' also appears in predicates directed towards a description of an experience (8 predicates). The concern can be seen as sumerized as a situation that has to be lived, as a culture or a way of life. Other predicates describe an atmosphere (8 predicates) concerned with the context of the act 'to study', with an evaluating tone measuring the suitability of a location for the act. In other words, it appears that the concrete act 'to study' is given in an emphasis on experience and atmosphere in general terms, which reveals a reference to memories forming the image of an atmosphere. These aspects indicate a narrative context given in an evaluation of the suitability of an environment to the act 'to study', implying a description of a culture at the university.

The constitution of meaning in which the entity 'to study' appears is contrasted in an emphasis on a comparative perspective as a number of predicates are concerned mainly with something *foreign* (7 predicates) that is given a high status. For example, this appears in the information that there are 'foreign students' coming, giving the narrator an opportunity to learn from them. The three concerns for a *mind and practice* (7 predicates), of *ways of action* (5 predicates), and *cultural dimensions* (4 predicates) all confirm a broad approach to the meaning of 'studies' and a constitution of a phenomenon that in its variation is identified as a description of a cultural context. The predicates categorized in the three concerns are similar in their focus on general descriptions of collective behaviours in identified communities, both marked by their national belonging to 'China' and to a 'student' collective. In other

words, it appears that the personal experience of an atmosphere in which the meaning of 'study' is constituted refers to cultural dimensions, both identifying and evaluating a 'Chinese' collective and a 'student' collective.

In sum, it seems that the meaning of the central phenomena appear in a general evaluation of a context given in the ways of life, or the mind and practice of a general culture in which concrete acts are performed and experienced. There is an ambivalent, or a both positive and negative, evaluation of the actual Chinese context contrasted with a 'foreign' way. The context appears to be identified as a location but also as an atmosphere or a condition of an environment that is the origin for the affects related to an evaluative approach. The main concern for recommendations as well as the points of reference are given with an intent to compare with something 'foreign' and describe a 'Chinese' context with both general dimensions and specific attributes as a culture or a way of life.

A narrative context centred on the status of environments and figures

The exemplified entities in the Table 12 show the most frequent entities and some predicates divided according to affect. The entities with the highest occurrences refer to subjects, but the largest part of the entities concern actions, as indicated earlier.

Table 12, on affects and predicates to entities in the narrative context of CSt

Entity	Affect	Predicate
I (occ.126)	Pos.-Prosp. (9.52%)	that hope can do what I want and learn what I am interested in at the university
	Pos.-Retrosp. (7.94%)	that think it is a wonderful thing for a foreigner to study in Chinese university
	Neutral (28.57%)	that will introduce the year and month in which the school was built
	Ambiguous (45.24%)	that have a feeling that universities in China are different from yours
	Neg.-Prosp. (2.38%)	that think it is unavoidable that a foreigner will have a culture shock
	Neg.-Retrosp. (6.35%)	that think that we are not first class
You (occ.102)	Pos.-Prosp. (18.63%)	that can choose courses freely by yourself. That's all.
	Pos.-Retrosp. (3.92%)	that need good students to be your company
	Neutral (31.37%)	that better choose a speciality with strong practicality
	Ambiguous (34.31%)	that must value/treasure the school life
	Neg.-Prosp. (6.86%)	that can not learn what you really want to learn in Chinese university
	Neg.-Retrosp. (4.90%)	that have to separate between teachers who teach real knowledge from those who teaches just from the situation
To Be (83Occ.)	Pos.-Prosp. (9%)	that Chinese people are shy and maybe afraid because of their bad English
	Pos.-Retrosp. (17%)	that the university has good students to be in your company
	Neutral (11%)	that there are many kinds of Chinese students
	Ambiguous (38%)	that you should try to be humble
	Neg.-Prosp. (7%)	that the university is not good for the improvement of the students
	Neg.-Retrosp. (17%)	that the speciality can be not good and then I would not recommend it
Student (occ.82)	Pos.-Prosp. (12.20%)	that have very big freedom for self-developing
	Pos.-Retrosp. (19.51%)	that can be foreign with whom many Chinese students want to be friends with
	Ambiguous (24.39%)	that can communicate with Chinese students more
	Neutral (17.07%)	that there are many kinds of
	Neg.-Prosp. (6.10%)	that are leaders in organizations which you should not touch, they are corrupt
	Neg.-Retrosp.	that conventionally are quite unsatisfied with having to serve the country

	(20.73%)	
Chinese (occ.80)	Ambiguous (37.50%)	that people can be and then they are more complicated than people from other countries
	Neg.-Prosp. (7.50%)	that the culture is, and is not best represented by the corrupt student leaders
	Neg.-Retrosp. (7.50%)	that a university can be and that just like many years ago we can not deny the difference to the foreign
	Neutral (23.75%)	that the university can be that you should feel about
	Pos.-Prosp. (12.50%)	that a university can be that has many good things
	Pos.-Retrosp. (11.25%)	that an old culture can be that is brilliant
	Ambiguous (20.59%)	that you could want to understand and then you have to master Chinese language

Acts presenting a 'Chinese way' to be a student

The entity 'to be' is the most commonly referred to among the actions, which is apparent in the descriptive ambitions of the narrative, something that also is expressed in the attribution of properties to the 'university' through the to the entity 'to have' (occ.62). The acts that appear in the entities 'to be' and 'to have' may not be active as such, but as verbs they are categorized in relation to their general descriptive intentions. The predicates for the two entities are mostly attributed to the 'university' and 'China' as generally described objects, except the dominant category of predicates with ambiguous affects which primarily relate to mixed feelings on the demands placed on the person. The entity 'to introduce' (occ.48), on the other hand. mainly attributes acts to the narrator indicated in the entity 'I', while its ambiguous affects are centred on references to the 'history' of the 'university'. The acts are repeatedly given an explicit reason or goal, such as 'to understand' the Chinese culture or the way of life at the 'university'. The acts also appear in an argumentative approach for a transmission of salient and overt knowledge and are described as difficult to reach, with an intent to realize a proper initiation. In other words, it appears that the modality of affect is distributed differently in the three main entities revealing concerns for demands on the person, on properties of the university, and on values of the introduction. In this light, the narrator appears as an actor with the intent to perform an initiation to the Chinese university with references to a national culture and an academic culture.

The predicates for the entity 'to be' mainly gather a description of a condition that both reflects a general situation and the expectations on a person living in this situation. The concerns that appear in the predicates relate mainly to the description of a *mind and a practice* (20 predicates), including a perception of a way of action and thinking. The account focuses on markers that characterize the Chinese 'university', both describing how the 'students' and 'teachers' think and act there as well as the consequent demands placed on a person coming there. A further repeated concern appeared in descriptions of *comparison or competition* (17 predicates) in which diversity and unity in a collective is established in relation to a general body of

universities in china. It appears as a point of reference guiding the evaluation and the attribution of value to specific universities in a stratified collective of universities. The main object that is described as the university is a way of thinking and acting that characterizes the location. These aspects are often related to a concept of ranking or to the grading of universities according to their importance. The predicates of the entity 'to be' also relate to *problems* (9 predicates) experienced in the way of thinking and acting that dominate the Chinese 'university' as well as *cultural* (5 predicates) differences and comparisons with a reference to something *foreign* (6 predicates). The concern for an introduction to the ways of thinking and acting also includes a general approach to *society* (5 predicates) and the *history* (2 predicates) of the university and of China and their respective *environment* (3 predicates). The more concrete appearances of this concern appear in the references to the *institution* (2 predicates), an indication of the importance of *contact* (4 predicates) to be introduced, and of choosing a topic or direction of the *studies* (6 predicates). In other words, it appears that the meaning of the entity 'to be' mainly establishes a descriptive intention directed towards a general situation of life as a student in china, identified by ways of thinking and doing and other internal traits of a culture with consequent demands or expectations on the person coming there.

The entity 'to have' conceptualizes an attribution of properties directed mainly towards the 'university', 'China', or identified aspects of personal experiences. The description through an attribution of properties also forms a meaning of a mind and practice (14 predicates) and ways of action (5 predicates), but the object of concern appeared, rather, as a 'tradition' in a general sense. The attributes appear in evaluations of an environment and recommendations that are contrasted to other perspectives in references to comparisons and competitions (7 predicates) or perceptions of a diversity and unity (5 predicates), and are mainly related to the fame of universities and their experts, with a reference to an implicit general body of universities. The c*o*mparative a*p*proach also relates to something fo*reign (*3 predicates) and cu*ltural a*spects (5 predicates) in which the body of universities primarily is identified as Chinese. The perspective of a university characterized by its Chinese quality also appeared in the references to a hi*story (*7 predicates) as well as to so*ciety (*3 predicates) and the en*vironment (*4 predicates). A number of other entities appeared to contain references to a similar meaning such as 'to get' (occ.14), 'to use' (occ.12), 'to give' (occ.10), and 'to take' (occ.7). The predicates for these other entities gather attributes with a a temporal placement in which the attributes are expected or defined in relation to a beginning or an end. This wider perspective on the allocation of attributes emphasizes the general and descriptive tone of the narrative, which relates to the difficulties of identifying a culture. The general tone also explicitly relates to the practical embodiment of the arguments in recommendations rooted in an everyday-life perspective on choices and decisions

formative for the 'students'. In other words, it appears that the meaning of 'to have' and the similar entities mainly indicate an attribution of properties describing a mind and practice of a specific and evaluated institution in relation to a general collective.

The entity 'to introduce' is stated with 100 per cent doxa-affirmation which reveals a certainty in the ways imagined in the introduction and mostly relates to a concept of 'history' as 20 predicates explicitly affirmed it as an important part of the imagined introduction. The difficulty in identifying the affect related to 'history' indicates references to different layers of meaning as it is stated in a straight-forward tone as an objective distributor of status, and it is presented without any reference to different perspectives or complexities. It is the most occurring explicit dimension that guides the introduction and appears to be similar to a reference to a 'list' or 'ranking' which differentiates the status among 'universities'. In other words, the act 'to introduce' is close to the identification of a value which appears to aspire to an objectified procedure of categorizing universities in levels, related to the dimension of *comparison/competition* (6 predicates) or *diversity/unity* (2 predicates). The introduction also referred to a *mind/practice* (9 predicates) and way of action (1 predicate) related to the perception of a context regarding the studies (3 predicates) or a general reference to the *environment* (4 predicates) with a regard for the *institution* (2 predicates). In other words, it appears that the meaning of 'to introduce' refers mainly to a presentation of claimed objective attributes, such as a history, with a comparative evaluation of the status as a primer marker for the meaning of 'university'.

In sum, it appears that the narrative context is dominated by a description of a Chinese way of being a student through acts which guide the attention towards a way of thinking and doing – or a way of life. The 'way of life' was understood as a practice determining thinking, being, and doing, identified with – identifying an intended collective of Chinese students. This constitution of meaning reveals the studies as a life primarily approached as belonging to two collectives, to the idea of being 'Chinese' and of being a 'student', reflecting a historical reference as well as an evaluative and comparative reference.

Subjects related in an establishment of markers and the status of collectives

The narrator that appears in the occurrence of the entity 'I' generally is mentioned in the initiation of a description of the situation of introduction with a subjective tone as an empowered evaluation or description of the system. It appears in a higher portion

of ambiguous affect that reflects complex affects involved in the encounter between something 'Chinese' and something 'foreign', which is placed in the questionnaire. The positive-prospective affect relates to a more general description of a collective in contrast to other subjects, while the mostly neutral affects of the entity 'student' establish an approach to a way of thinking and acting identified as 'Chinese'. The predicates reveal a schematic differentiation of subjects into collectives according to representations of ways of thinking and acting in comparison to other perceived groups. There is a high amount of doxa-affirmation (86%) and signitive tone (57%), indicating a firm belief in one's own advice together with explanations regarding the good ends of the recommendations. The main concerns in the introduction relates to an ambition to describe a *history* (24 predicates) generally of the university but also of China, *practical matters* (22 predicates), issues directly connected to the *studies* (12 predicates), the *environment* (4 predicates), or the *institution* (2 predicates). These objects are mentioned in a way that identifies them as markers to the meaning of the 'university' or, on occasion, more specifically the 'Chinese university'. The concerns for a *comparison and competition* (12 predicates), a *diversity and unity* (3 predicates), ways of *action* (10 predicates), and a *mind and practice* (5 predicates) establish markers of the collectives, but also showed references to a description of variation. The variation was explained as dependent on *cultural dimensions* (5 predicates), in relation to *foreign ways* (6 predicates), as dependent on *social contact* (4 predicates), and to an understanding of *society* (2 predicates) in general. The negative affects refer mainly to the concern for *problems* (6 predicates) that indicated a negative status or comparative state with reference to 'foreign' or other 'Chinese universities'. In other words, it appears that the narrator appears primarily in the establishment of an evaluation of an environment or a 'university' based on national belonging and largely uses expressions of a firm belief and varied affects to attributes such as the history, practical matters, or the suitability of the environment for the act of studying.

The imaginary person to which the student was asked to introduce the university appeared as 'you' and a representative of a collective of the other which the narrative addressed. A main concern appeared as a perceived willingness from the Chinese institutions to seek contact with the 'foreign' as a marker for status of a university. The subject is mainly identified by a capacity to take the situation into one's own hands and was encouraged to assimilate into the Chinese ways and culture, which seems to mean to understand/know the culture and act in the same way. The Chinese system was described in contrast to the 'foreign', and the relations were described mainly through an indication that the Chinese should learn. There were also a number of ways that the 'foreigner' was encouraged based on the moral judgements, saying either that it was 'good' to come to china for 'more reasons' than studies or that it was not good, a 'waste', or 'meaningless'. The entity appeared to refer to the

imagined student or a subject in general as an intended listener which also appeared through other entities such as 'foreigner' (occ.31), 'people' (occ.19), 'friend' (occ.18), and 'other' (occ.8). The entity 'student' referred both to the 'you' of a 'foreigner', mainly through concrete recommendations or warnings, while the 'you' of a general condition or role of being a 'student' appeared mainly in general descriptions of an implicitly claimed homogenous group. The main concerns that arise are centred on a *ways of action* (20 predicates) and a *mind and practice* (11 predicates) as the group of 'Chinese students' is described in general terms. The concerns also relates to the concrete description of *studies* (19 predicates) and of social contact (10 predicates) as they are described in relation to how 'serious' they take the studies or how difficult it is to 'get to know' them. The evaluations are either positive or negative, but always decisive and general. In this sense, the 'Chinese students' are evaluated according to values which do not seem to be questioned. A few other entities are directed towards roles at the 'university', such as 'teacher' (occ.34), 'graduate' (occ.6), 'professor' (occ.5), and 'expert' (occ.4), which are evaluated according to similar values even if the main concern appears in the status or fame of the persons. Other entities referred to general groups such as: 'minority' (occ.8), 'human' (occ.4), and 'youth' (occ.4) mainly through evaluations of their encounter. In other words, it appears that the subjects and roles appear in an evaluation,or an attribution of status, in which something 'foreign' is presented in quite simple and positive terms, while it works as a contrasting background for the understanding of life as a chinese student.

The entities 'we' (occ.44), 'they' (occ.7), and 'others' (occ.4) have a special value to the phenomenological analysis as they point at perceptions important to the constitution of meaning. The occurrences show that the entity 'we' is more important in quantitative terms and mainly appears with regard to a *mind and practice* (7 predicates) and *cultural dimensions* (7 predicates), something that further emphasizes the concern for the phenomena as cultures, and the 'we' is given as a community defined by its ways of life. A secondary concern related to negative affects as *problems* (5 predicates) also is related to the appearance of the 'we', something that emphasizes a critique of the Chinese system, a critique that does not appear to threaten the identification with it. The wider reference to a perception of 'they' and 'others' mainly is expressed as the 'foreigner' referring to the appearance of 'you'. The further entities establish something described as 'communication' (occ.14) and 'relation' (occ.6) as needed in order to be initiated into the 'university', emphasizing the tacit dimensions of knowledge. There are also a number of threats in the meaning of the entity 'contact', that is to say that the narrative contained encouragement to persevere and devote energy to making contact, even when the 'Chinese students appear shy'. There are recommendations or directives for ways of communication: 'with modesty' or 'with patience' and something that 'enforced communication between people' was described as positive. In contrast to these perspectives, 'contact' was also repeatedly

described as a threat, which seems to be the foundation for choices in life with moral foundation. Friendship/love is recommended to be limited, with regard for the 'studies', and revealing a moral ground for priorities. In other words, it appears that the encounter between people is seen both as something desired and as something threatening, as well as an area of difficulty for the collective of Chinese students, revealing a further represented separation from the 'foreign' collective.

The entity 'Chinese' is ambiguous as it refers both to the language and the adjective, and it mostly appears in comparison or competition, often related to 'history', and it is repeatedly stated as something attributing status. The implicit logic of a correlation between status and history appeared as concrete given 'lists' or 'rankings' differentiating the universities in competition. The identification of a Chinese collective related mainly to a *mind and practice* (15 predicates), as a way to think and *ways of action* (11 predicates), an approach giving emphasis to the everyday life at the Chinese university. For example, the idea that learning the 'language' (occ.9) was given as necessary in these cases to understand the 'university' indicates further the interdependency on national *culture* (10 predicates). The concerns for *contact* (9 predicates) and references to something *foreign* (8 predicates) also reveal proposed procedures of introduction that is comparative (4 predicates). The comparison and competition seemed especially dominant in the reports collected in Beijing. In other words, it appears that these concerns identify an approach to a description, something which also relates to the given category of 'Chinese'. The main factor of comparison/competition was in how 'famous' a university was and the idea of a development of universities, connected mainly to an idea of having a number of 'famous scholars'.

The entities 'thinking' (occ.28), 'life' (occ.25), and 'way' (occ.22) all relate to the 'way of thinking and acting' or 'way of life' that has appeared as essential in CSt. The main concern in their predicates are given in a description of everyday-life, often through the attribution of evaluated qualities in the function of defining the 'student' collective and a Chinese collective. The evaluations indicate a personal involvement in the act of giving an introduction and an active approach giving straight opinions on what a 'good university' is, as well as to the consequent aspects. The entity of a 'way' gathers the explicit descriptions of collectives which already have appeared in the analysis, with a focus on practice. The explicit descriptions of 'culture' are, however, rare; it only appeared in 9 predicates for the 'way' and in these cases are represented as something distant, either in a *historical* dimension (5 predicates), such as 'old traditions', or in a geographical dimension, such as 'local/rural customs'. The narrative also seemed to hold an approach to one's own culture as something distant, an internalized otherness in comparison to Western culture. The ways of thinking

and doing were identified as belonging to a culture of a 'developing country' or that it is a place where 'students' have to 'serve the country' in contrast to implicit alternative 'foreign' ways. In other words, it appears that the narrative context is characterized by a comparison of 'cultures' marked by ways of thinking and acting that were formulated in an implied a comparison to an otherness. These dimensions have to be considered with regard for the situation of the questionnaire and in relation to the description of a foreign researcher interested in the Chinese university, something that will be dealt with in the later chapters.

The entity 'difference' appeared in the narrative with an idea of a perceived totality of 'students' or 'universities', among whom there were similarities and a variation. The ideas of totalities appeared to give norms for comparison and to determine a set of variations proposing positions, and thus a stratification. The consequent evaluating tone gave emphasis to the differentiation among 'universities' and 'students'. The propositions appeared mainly in an ambiguous affect as the predicates point mainly at negative or positive aspects, describing in a seemingly neutral tone the variation among 'students' and 'universities'. There are also some differences that are clearly stated with a negative affect indicating serious challenges for the Chinese system of education and a critique mainly centred on a lack of freedom and the sedimented roles of personnel and students.

In sum, it appears that the references to subjects establish a narrative context centred on their contact and indicate a representation of collectives based on their ways of thinking and acting, as well as their status. The 'I' of a narrator is identified by the act of introduction, and the imagined 'friend' or the 'you' is identified by a recommended way of action and is marked by the transmission of salient knowledge. The comparative approach is centred mainly on a status attributed through history and connections to 'foreign' actors. The references to subjects establish a representation of a stratified collective, both of individuals and universities, which is centred on the exposition of a culture identified by the ways of life and thought. The described markers for collectives in the mind and practice is implied in the discourse on status and appears explicitly in the comparison of universities and reveals a personal approach that articulates one's own opinions.

Expression of affect and quality that establish a system of values

The predicates for the entities 'possibility' (occ.80) and 'necessity'(occ.21) reveal a wider perspective of the values and degrees of certainty in statements as well as an importance of the evaluation. A logic appeared portraying presumed causes and effects or conditions for development in which different actions and qualities are

expected. The 'necessities' appear in a considerably more negative affect, especially when they are in retrospect, while both 'necessities' and 'possibilities' are positive as they appear in prospect, something that indicates a belief in a positive development. The 'possibilities' are central to the attitude in which an active evaluation is given in the narrative, something that was expressed with a firm belief. These firm beliefs in a possible positive prospect took a number of different expressions, such as explicit directives to search for tacit knowledge and identification of perceived threats in certain procedures, primarily in relation to the situation of a lack of knowledge. The entities of 'possibility' and 'necessity' both related to concerns for a *mind and practice* (9 respective 5 predicates), with references to *cultural* dimensions and *differences* (11 respective 2 predicates). Descriptions of *ways of action* (11 and 1 predicates respectively) and *practical* dimensions (8 respective 1 predicates) indicate that the expression 'possibilities' is related to the general descriptions of the cultures, while the 'necessities' held more negative affects, mainly in relation to *problems* (2 predicates and 1 predicate for 'possibility') and comparisons to something *foreign* (2 predicates and 1 predicate for 'possibility'). The distinction between the attitudes shaped by an expected 'possibility' or 'necessity' and the consequent degrees of certainty also appeared in relation to more specific concerns, such as *studies* (7 respective 3 predicates), *history* (6 respective 1 predicates), *society* (5 respective 1 predicates), *institution* (4 respective 1 predicates), *contact* (4 respective 1 predicates), the *environment* (4 respective 0 predicates), and a *comparative* approach (3 respective 1 predicates). In other words, it appears that the concerns of both entities relate to an internal way of thinking as the cultural dimensions dominated the possibilities, as well as the practical and active realizations, and the necessities were more often related to a negative retrospect.

The concept of 'good' (occ.54) appeared as a centre for the expressions of values in the CSt narrative and mostly concerned *comparison* (9 predicates), a description of a *mind and practice* (8 predicates), ways of action (7 predicates), and *diversity and unity* (6 predicates). The values that appear are primarily emphasize an evaluative approach to cultures, finding markers for the status and affects that represent the collectives. Some less frequently occurring concerns also establish the evaluative approach to more practical references to the *environment* (8 predicates), *studies* (3 predicates), *problems* (3 predicates), *contact* (3 predicates), and *practical* dimensions (3 predicates). These concerns reveal an attitude in which the given evaluations relate to a range of concretizations, for example, with regard for location or a general organization seen in light of a set of values. The values that appear in relation to the attribution of status also make reference to ideals such as 'creativity' and 'flexibility', mainly in comparison to the imagined foreign context. The appearance of negative entities in this context primarily further emphasize a comparative approach, something that is expressed mostly in concrete terms, such as evaluations of

universities and their 'lack of freedom'. There is also a reflection on the reasons for the experienced problems, primarily expressed as a general critique of lacking quality in the education, which seemed to be a critique founded in reactions of disappointment and the failure to live up to the ideals. In other words, it appears the entity 'good' mainly relates to an evaluative tone directed towards ways of life and the disappointment regarding certain ideals.

Other entities such as 'important' (occ.17) and 'famous' (occ.16) also reflect the attribution of values through a perception of a recognition of a general collective. The mentioned correlation between 'history' and 'status' appears again, which, in this case, is not explained or developed, and it identifies the foundations of the evaluative attitude in a recognition of a wider collective. These entities gather a set of attitudes that form the general approach which draws lines between particular experiences and general evaluations. The explicit description of the Chinese 'university' in this sense relates to the lack of 'creativity' and the difficulties related to 'own thinking' with regard to an authoritative or 'Confucian' tradition of education; however, the implicit partial intentions clearly indicate a value-oriented emphasis on the creative and critical ways that appear to contradict the explicit statements. The differentiation among the degrees of certainty and among types or sources for knowledge that appeared in the approaches given in 'possibilities' and 'necessities' can also be studied in some other entities such as 'opinion' (occ.6), 'real' (occ.6), and 'attention' (occ.5). In other words, a tension appears between the particular experience and the general evaluative attitude, further establishing a subjective approach but striving for objectivity.

The reference to 'time' (occ.74) was generally made in reference to *practical* issues (12 predicates), identification of a *mind and practice* (11 predicates), and *cultural* aspects (11 predicates). These three concerns reveal a reference to 'time' as a marking context for a certain way of acting and thinking. The further concerns for a *history* (9 predicates), *ways of action* (8 predicates), and an *environment* (5 predicates) reveal an implicit repeated reference to development of the culture and the ways of the double collective of the 'Chinese students'. The entity 'time' also is related to a general approach to *society* (3 predicates) and a *problem* (3 predicates) mainly regarding the lowly origins of the development and a *comparative* approach (2 predicates) which also gave references to ideas of *foreign* ways (3 predicates). The entity 'time' also appeared in the concrete descriptions of *studies* (3 predicates), the need for *contact* (2 predicates) to reach tacit knowledge, and an introduction to the *institution* (2 predicate). In other words, it appears that the reference to 'time' indicates an implied perception of a development to the way that the culture appears in CSt, which emphasizes both the implicit attribution of affect and the explicit attribution of status.

The indicated implicit affect in the reference to a temporal dimension is complex, but the perceptions appear to be centred on the concept of 'development' (occ.24). In this reference, there is a combined retrospective and prospective approach in which a number of entities are directed forward, such as 'hope' (occ.10), 'direction' (occ.4), 'new' (occ.8), and 'future' (occ.5). The prospective aspects were dominated by a positive undertone, while the retrospective dimensions came with both a negative and a positive expression, relating to entities such as 'tradition' (occ.11), 'background' (occ.7), 'present' (occ.7), 'past' (occ.5), and 'day' (occ.4). The double affects related mainly to an attribution of status that depended on a perception of a 'history' which also contained threats, something that appeared the most clearly in the explicit appearances of the entity 'history'. As an entity, 'history' appeared as an explicitly dominant marker for the status of a university, and when it was mentioned, it appeared as the central concern in the proposition (34 predicates). It also appeared in some cases to be an attribute of a cultural aspect (7 predicates) and on singular occasions to be of *practical* importance.

The 'history' (occ.45) of the institution was the single most important factor in an introduction of the 'university', but it was rarely problematized; it had homogeneous and simple predicates, and there were few reasons given of why it was important. However, 'history' was often defined through predicates such as 'cultural history', 'human history', or 'history of the university', but it was rarely described what this history actually consisted of, and it was naturalized as an evident fact that did not need an explanation. The 'history' that appeared seemed to confuse the shorter history of the modern organization of the 'university' and the longer history of the traditional system of education. The explicit references indicated that a long history of 20 years granted a status to some universities, while descriptions also seemed to point back to the longer Chinese history, such as the 'Chinese-style buildings with long history' or the claim that 'the university has a long history and a brilliant culture'. The twofold affects were not clearly separated and revealed an ambiguity which is marked for the narrative as a whole, in one sense appraising 'historical brilliance', while despiszing 'historical backwardness'. The positive predicates appear to be of a more external structure, such as 'fame', 'brilliance', and 'attractiveness', while the negative affects appears to be of an internal structure, such as 'lack of creativity',or 'limited free thinking'. As it earlier appeared to be the most important explicit factor of an imagined introduction, it appears that reference to 'history' dominates the discourse on what seems to be an official level that could be superficial. In other words, it appears that 'history' is an explicitly important dimension of the 'university' which attributes status but that also is connected to a negative image of a lowly origin of a development, and a potential threat to a positive prospect.

The explicit appearance of the entity 'place' contained predicates mainly focused on a concern with *mind and practice* (8 predicates), *practical* dimensions (7 predicates), *ways of action* (6 predicates), and a *comparative* aspect (6 predicates). The description of 'place' also related to *cultural* dimensions (5 predicates) and *problems* specific to the Chinese context (4 predicates). The location also appeared in concrete directions, such as a place to *study* (2 predicates), the *history* of a place (2 predicates), and the general attributes of suitability for an *environment* (2 predicates). In other words, it appears that the 'place' is identified with the ways of thinking and acting that represents the culture of the Chinese student collective. This constitution of meaning relates the abstract descriptions of cultural characterizations to the concrete geography in which the 'university' campus s formative for the way of life. The concern for the place also took a broader expression, s references to specified 'location' (occ.25) appear with different intentions, such as general reference to a material 'campus' (occ.23), building'. In other words it appears that the reference to a 'place' or 'location' is important to the understanding of 'culture' as it appears to be a marker for the geography in which it takes place.

In sum, it appears that the narrative context in CSt is shaped by references to an evaluating approach in which a subjective attitude is founded in the expression of various degrees of certainty. Possibilities appeared in reference to the general description of a culture and a more positive and prospective tone, while the expression of necessities appeared in relation to a negative and retrospective tone. The explicit identification of something good revealed a concern for the general aspects of culturally identified ways of thought and life, while the expressions also relate to concrete expressions of the culture and its attributes. The implicit values in these expressions related to a comparative approach to a development from something negative towards a positive resemblance to foreign ways. The entities that refer to time and location develop our understanding of the way that the references to time and place illustrate a tension between the concrete exemplifications in the narrative and the general aspirations and evaluations. The approach is revealed in the way that the time and place appear to identify different general aspects of the affects, both regarding an expected positive prospect and regarding the concretion of the markers for the concern for culture in the ways of thinking and acting. The double appearance of the phenomena is also related to the way that 'history' is revealed as an attribute deciding the status and posing a potential threat to the desired development.

Summary: culture, values, and aspiration in CSt

The analysis revealed that the narrative of CSt primarily is concerned with a description of the Chinese university through a 'way' of thinking and doing marking a national and a student collective. The collectives are related and differentiated in an attribution of status and affect in which the act of initiation indicates an emphasis on the implied nature of the knowledge about the 'university'. The descriptions appear as both overt and salient, and indicating that the kowledge about the 'university' is something to to learn to know through a life and through an initiation to for example a history. The main object of concern in the CSt narrative primarily revealed a horizon of a **culture**, which encompass the belonging both to a student and a Chinese collective.

The way that *action* emerged as a decisive dimension of the narrative context further establishes the importance of salient knowledge, while the attribution of affect in the relation to the 'university' implies polarized positions in debates on status. The indicated need to make choices in the Chinese student life appears as an encouragement to search for a good foundation for choices. The indicated choices relate mainly to an attribution of status, but they also relate to descriptions of the culture and pedagogy and the students mentality, evaluating their care and commitment in the studies, self-control, and discipline and criticizing forms of education for lacking certain qualities. These evaluations also appear in comparisons between competing institutions among which the students are to choose based on their desired goals, and they are expressed in relation to status. The attribution of status is described with conflicting arguments which contain some similarities to the paradoxical representation of history, as both a marker for status and a threat to the desired development. The perception in the horizon of a culture thus appears as dependent on a deeper horizon of **values**.

The temporal dimension first appeared as central to the affects related to the entity 'university', and it continued to show importance as the attribution of status and the qualities of the pedagogy appeared to relate to 'history'. The description of the culture also indicated a negative back-side of the values or critique mainly towards 'old' or even 'feudal' ways; however, the values were not simple as the same dimensions also held positive aspects of 'understanding rich art', and 'history' appears as possibly the most important marker of status that stratifies collectives into hierarchies, which indicates that it is not a simple perception of development. Furthermore, the general attitude towards comparison and competition seems to circle around the idea of status forming an experienced hierarchy in the implied meta-community, such as collectives of universities or collectives within a university, into different departments as fame is

something that is attributed mostly to a person or a specific department. The implied value in the proposed culture is, however, the desire to proceed higher up in this hierarchy, something which gives the horizon of an **aspiration**.

In other words, we can see that the constitution of meaning in the narrative of CSt is centred on the perception of a **culture** related to the way of being 'Chinese' and 'student', which is founded on **values** establishing status and a consequent hierarchy given in the context of an **aspiration**.

The Swedish students (SSt)

The analysis of SSt will proceed with steps similar to the previous narratives, through an initial presentation, followed by an examination into the central entities and into the narrative context, and a concluding summary. In Table 13, an account is given on the most common entities, their groups, as well as the categorization in modalities:

Table 13, on the most common entities and modalities in SSt

Most common entities (tot.3'686)		**Belief (%)**	**Function (%)**
I (occ.244)	Good (occ.42)	Possibility (4.61%)	Signitive (11.83%)
Something (occ.125)	To Get (occ.41)	Doxa-Affirmation (85.92%)	Per/Sig (83.48%)
Possibility (occ.119)	University (occ.40)	Doxa-Negation (2.88%)	Perceptive (2.55%)
Someone (occ.83)	Help (occ.40)	Probability (5.37%)	Sig/Per (2.14%)
Person (occ.80)	Nation (occ.37)	Question (1.22%)	
To Be (occ.79)	Negation (occ.36)		**Group of entities (%)**
Student (occ.70)	Studies (occ.35)	**Affect (%)**	Central entities (7.14%)
Location (occ.64)	To Know (occ.35)	Positive-Prospective (4.80%)	Action (26.04%)
To Say (occ.62)	To Show (occ.33)	Negative-Retrospective (1.36%)	Subject&Contact (16.77%)
Time (occ.58)	Life (occ.32)	Neutral (79.79%)	Affect&Quality (13.35%)
Way (occ.54)	To Do (occ.30)	Negative-Prospective (8.25%)	Technical&Quantity (13.19%)
You (occ.46)	Possession (occ.30)	Ambiguous (3.96%)	Mind/Practice (12.51%)
Advice (occ.42)	Sweden (occ.29)	Positive-Retrospective (1.84%)	Time&Location (11.01%)

Table 18 reveals that SSt is dominated by the tone of a belief in doxa-affirmation, a function in per/sig and a neutral affect and that the three modalities coincide in 64 per cent of the meaning-units. This dominance opens for a more detailed study of when the pattern is broken and the potential deviations or emphasis in the narrative. The entities referring to the central concepts of this analysis are quantitatively the smallest (263 occurrences) and with a rather minor variation (47 different entities) and mostly relate to 'student', something that indicates an importance of the wider narrative context. The dominant group of entities relates to action, represented in 'to be' and 'to say' in the list of most common entities while the top ten in the list is dominated by entities categorized as subject and contact, such as 'I', 'person', and 'student' as well as technical entities, such as 'something', 'possibility', and 'someone'. The actions in the narratives of SSt were many and varied (152 different entities in 960 occurrences) forming the most frequent group of entities and primarily

represented acts of initiation. The entities categorized as action appear with a distribution of modalities similar to the means of the whole narrative, but they contain a broader variation of affects. The analysis of the modalities reveals a low affective involvement, but entities with direct relation to affect and quality is one of the more important groups, with a variety of different entities (492 occurrences of 118 different entities), mainly implying a concern for relativity and an explicit statement of needs. The entity that is the most frequently used, 'I', is categorized as a subject in a theme with a quantitative important repetition and lesser spread (618 occurrences of 43 different entities). The focus on 'I' mainly reveals a focus on the narrators imagined act of introduction, but it also indicates an image of an expected listener a 'you', as well as providing indications on the way in which the 'university' appear through the relation between an individual and an institution. The entities that are categorized in their concern for a mind and practice (461 occurrences of 86 different entities) reveal the meaning of a number of central ideas such as 'Swedishness' and 'studies'.

The categorization of predicates according to their form reveals a dominance directly of introductory statements (68% of the predicates), describing the intended objects as a direct response to the questionnaire. The following forms are focused on giving general advice (11%), descriptions of the 'university' (10%), descriptions of Sweden (7%), and divers reactions to the question (4%). As the predicates were grouped according to their content, eight main concerns emerged with a dominance of descriptions of the institution (24.58% of the predicates) describing the different organizational entities of the 'university' or of society. A second group reveals a concern for practical issues (17.58%) describing concrete circumstances of the introduction to the 'university'. Thirdly, a concern for the relativity of the answer (16.30%) on how the experience and the description of the 'university' is relative to the person and to the situation. The concern for an initiation (15.00%) gathers a group of predicates describing imagined situation that presents the 'university', which also appeared in references to personal contact (5.94%). A concern for cultural dimensions (13.51%) describes countries and cultural distinctions, and the concern for studies (5.10%) describes the act 'to study' or the part of life concerned with studies. The concern for a mind and practice (4.07%) describes a set of mind and a practice of a person or a group (3.85% did not match in any of the given categories). In other words, it appears that the narrative is centred on the conceptualization of an introduction which refers mainly to institutions and practical matters.

Central phenomena framed by needs of social contact and information

The study of the five entities presented in Table 14 indicates the structures of meaning in which the central phenomena to this initiative appear.

Table 14, on affects and predicates to the central entities SSt

Entity	Affect	Predicate
University (occ.40)	Negative-Prosp. (2.5%)	that are not so student-friendly
	Neutral (90%)	that I would describe what I can and then pass on to someone responsible
	Ambiguous (2.5%)	that has many courses that require a relatively large individual responsibility
	Positive-Retrosp. (2.5%)	that I would describe as open and good, with many different cultures mixed in the courses
	Positive-Prosp. (2.5%)	that is more student-friendly than abroad
Student (occ.70)	Positive-Prosp. (10.00%)	that can be in a dialogue with teachers, which is appreciated.
	Positive-Retrosp (1.43%)	that can be in exchange and is usually well-informed and prepared on how things work in Sweden
	Neutral (72.86%)	that is a kind of life (outside of the studies) that I would also talk about
	Ambiguous (1.43%)	that can be demanded to have a much own responsibility for some courses
	Negative-Prosp. (8.57%)	that can be in exchange and don't plan before arrival so they will live in geographically disadvantageous locations where it does not happen very much
	Negative-Retrosp. (5.71%)	that can choose not to engage in the nation-life, despite that the students there think it is fun to meet students from other countries
Nation (occ.37)	Neutral (97.30%)	that you should join
	Negative-Retrosp. (2.70%)	that has a life that few students choose to engage in (despite that most of the students there think it is fun to meet students from other countries)
Institution (occ.25)	Positive-Prosp. (8.00%)	that is for foreign students that I don't know if they have
	Neutral (88.00%)	that I would pass the person on to after I explained what I know
	Ambiguous (4.00%)	that I would advise to turn to, perhaps, mostly because Swedes are not directly known to be impulsive and voluntarily meet 'foreigners' easily
Studies (occ.35)	Negative-Prosp. (14.29%)	that are hard to catch up if you get behind
	Neutral (80.00%)	that you can do in Lund and then the advice has to be adapted to that situation
	Positive-Prosp. (5.71%)	that I would recommend doing here especially if you do not speak Swedish

A 'university' appearing in a life with practical and social needs

The entity 'university' appears in an even more dominant neutral tone than the means of the narrative, as Table 14 shows, and the dominance was even more significant in the modality of belief (95% in doxa-affirmation). When an affective tone appears, it mainly evaluates the 'student-friendliness' of the environment or describes general qualities even though the discourse is founded explicitly in personal experience. This attitude is also echoed in the two predicates that are not in doxa-affirmation as they develop the concern for the general or specific applicability of the advice. The general concerns that appear in the predicates for 'university' are centred in two roles it is expected to take: with a social function in which the 'nation' is central (Note: a nation is a social institution at the old Swedish universitys) and an informative function in which the 'institution' is central. In this light it appears that the meaning of 'university' appears in an attribution of qualities intending to describe how to get by in the system in everyday life, something that is dominated by descriptions of institutions as locations to turn to. The representation of a location also appeared to be central with regard for a relativity as a provision for the given

advice depends on the context as a variable or denominator that identifies the intended 'way of life' and the consequent measures needed to get by. The intentions in the emphasis on relativity appear to be to limit the responsibility for the statements, indicating a careful approach to the knowledge about a system and the ways to get by in everyday life that takes place there.

The 'university' appears in representations of a number of institutions with a social function which are approached as locations where contact with other people can be found. The approach establishes the life of studies as a context in which it can be difficult to get in touch with others, thus containing a risk of loneliness. The references appear with a differentiation among the respondents according to the university; in the universities of Lund and Uppsala the 'nations' are the main social institution and the location where a social network can be found, which is much repeated in these reports, while the respondents from the other universities cite a number of different institutions. There are also apparent gender and age perspectives as the narratives describing the 'nations' are most dominant in reports given by younger men. The other groups express similar but less dominant concerns in relation to other entities such as the 'union' (occ.9) (Note: a student union is an organisation to support students and represent them in the organization of the university) with qualification of the 'institution'. The concern will be further explored in the study of the narrative context, observing at this point that an emphasis is given to 'social' functions in the meaning of the 'university', pointing at needs or threats created by this environment. In other words, it appears that the meaning of the 'university' appears in light of social needs of the students, in which social institutions (such as the 'nations' in Lund and Uppsala) play a central role.

References to an 'institution' that has a function of providing information appear both explicitly and implicitly in rather homogeneous references to locations that through their institutional functions represent the 'university'. The broader concerns expressed in the predicates also appear in entities such as 'system' (occ.8), 'organization' (occ.4), and 'administration' (occ.2) as well as more general references to the specific institutions or a 'responsible' person, such as 'the program director', who could answer potential questions the introduced person may have, such as a reference to an 'international office', or instances which were referred to were internet or ways to search for email addresses, student-advisor (syo), governmental fund for students (csn), local housing authority, institutions for student health, or other 'good things' in connection to the 'university' - – as places for training, eating, or shopping. There were also some concern with where to get help with the studies, and legal protection, or help with 'money' (occ.6). This spread of references are united in attempts to paint an image of an institutional landscape in which life takes place, and

in which help and directives can be accessed. Something that is called information, or at times knowledge, is indicated as a central concern in this need, and the 'institution', as a representative part of the 'university', also represents governmental functions to which the students relate to with a sense of unity. The 'institution' is, in this sense, established as places to turn to for help that is expected to be filled by an agency of the state, and it is accessed based on a knowledge about where to turn in this landscape, as it shapes the every day-life with a spread of demands. In other words, it appears that the meaning of the university appears in the light of a need for knowledge and information about the institutional landscape in which the life with the studies takes place, both to access help and to get by in day- to- day affairs.

In sum, it appears that the meaning of 'university' is constituted in a way that mainly shapes the understanding of an environment identified by its functions to satisfy needs of social contact and information. The main points of reference are given in relation to institutional and geographic terms, and they are established with reference to locations to turn to for help with contact and information. In these terms, the social and informative 'institutions' represent functions of the 'university' as it is expected to aid students by meeting needs in their every-day-life, and there is a sense of a governmental agency which has a responsibility to provide for the students.

'Studies' as an act with advantages and disadvantages defined by its environment

In Table 14, the entity 'studies' is shown with a similar distribution of modalities as the means of the narrative, except for some more occurrence of doxa-negation (11.42%) and no probability or possibility. The pattern of mostly neutral affect is broken mainly in the concerns for the context of the studies with negative prospective expressions of threats to the ways of living and studying and positive prospective descriptions of a context that is good for studies, and an international perspective on the available institutional help. Half of the four predicates in doxa-negation and the four in a signitive function related to the 'institution', and all were directed towards giving an introduction. These observation imply that the concern for an 'institution' has aspects that are more personal, depending on intimate needs, and appear to deviate from the general tone in the narrative. The neutral predicates attribute properties to the institutions with a concern for getting by in an everyday life, stating possibilities or describing states that identify needs and opportunities. In other words, the context for studies is the main concern of the affectively loaded predicates, with a concern for the evaluation of the conditions in which it is performed.

The concerns contained in the predicates for 'studies' are directed towards concrete and practical dimensions of the act of studying (14 predicates) and contain indications on the role of the institution (6 predicates). These main concerns circle around a description of life as a student, mainly on the introductory procedures and needs for the establishment of an everyday life in a given context or condition identified by the advantages and disadvantages it provides. Life as a student was also characterized by the need for social contact (4 predicates), which is met through the encounter with people. A common denominator in the expressions appears in the identifications of needs around which life circles but to which there was a carefulness expressed in the form of respect for relativity (6 predicates). The general intention with these descriptions is towards a general mind and practice, of ways of action depending on the culture, which also took expression in concerns for language (2 predicates).

The main form of the expressions appears through acts of *introduction* (23 predicates) as a general presentation of life as a student or to give *general advice* (6 predicates), and on some occasions the predicates reveal plain *descriptions of the 'university'* (6 predicates). The combination of the concern for the institution and an ambition to give an introduction appears in a tone that deviates from the rest of the narrative, mainly with a lack of certainty in the recommendations and a personal tone. The concerns appearing in this field relate mostly to potential places where help is available. The discourse establishes a general approach to a system that takes concrete geographical appearance, and the meaning of 'studies' appeared as a life in the educational system. When the introduction relates to the institution, it takes on a more personal expression and an emphasis on the relativity of the claims, primarily intended to limit the responsibility for the statements and advice. The geographical dimensions appear to mainly concern a wider perspective of a life which includes, or gives priority to, something that is described as 'outside' of the 'studies'.

'Study' as an entity is at times difficult to categorize in the narratives as it appears as an action in both a general and a specific sense, with some distinct similarities and differences. In the general sense, it relates mainly to an activity that defines 'a life', such as a profession, a period in life, or a categorized social group in the implicitly greater collective of a society. In the specific sense, it relates to an action that identifies the general 'life' as an action that can be done in different ways mainly identified by its context, situation, or conditions, such as different locations, times, or traditions. Both the specific and the general approaches are, however, described mainly through contextual attributes as significant markers of meaning. It some sense, it appears as a poor entity in that the variation of the predicates is poor, and those that appear relate to a vaguely identified sphere of life or an activity. In sum, it appears that the

meaning of 'study' appears mainly through the identification of its context; it is affectively loaded when the context is evaluated, and it is introduced and described through an identification of locations, institutional help, and 'practical matters'. The context is described as a shaping factor, and it is evaluated according to the advantages and disadvantages it presents for the qualities of a student life. The concern for how to get by in a system both practically and socially is central on both a general period or sphere of life and a concrete activity in time and space, and when the qualities of the context were described (what it is), the primary character appeared as a relativity and descriptions of geographical location which indicates that it primarily is a main attributor of meaning.

In sum, it appears that the central phenomena are framed by the needs that emerge in life as a student, primarily characterized by social and informative dimensions. The needs are related to two categories of institutions which are expected to meet these needs, and they are the primary markers of the context which is evaluated according to its advantages and disadvantages. The 'university' thus appears in the broader light of its function in life with 'studies'.

A narrative context dominated by action and practical matters

The narrative context is dominated by a number of actions, but they are diverse, and the most frequently occurring entities refer to subjects or technical entities, as indicated in Table 15:

Table 15, on affects and predicates to entities in the narrative context of SSt

Entity	Affect	Predicate
I (occ. 244)	Pos-Prosp. (2.87%)	that think it is good for the person to know some more foreign students because you need the fellowship
	Pos-Retrospect. (1.23%)	that would describe it as an open and good universities, with many different cultures mixed in the courses
	Neutral (90.57%)	that would give advice which would probably be like 'come in time for exams'
	Ambiguous (2.87%)	that would probably also tell the person about our beloved alcohol habits here in Sweden
	Neg-Prosp. (1.64%)	first and foremost, I would say that if something goes wrong he can call, and I'll try and help
	Neg-Retrosp. (0.82%)	that would first and foremost warn for all the problems with CSN
Possi-bility (occ119)	Pos-Prosp. (3.36%)	that you have to feel safe with all systems that are available here and work almost always excellent. here I mean the social system, and some others.
	Neutral (83.19%)	that there is for you that it is good to know the code of conduct in Sweden
	Ambiguous (4.20%)	that I would tell that person about our beloved alcohol habits here in Sweden
	Neg-Prosp. (8.40%)	that it is hard to catch up with the studies if you get behind
	Neg-Retrosp. (0.84%)	that there is that information on web pages can be changed at the last minute
To Be (occ.79)	Pos-Prosp. (5.06%)	that I think that this person would be well received
	Pos-Retrosp. (5.06%)	that multiculturacity is what makes Sweden so nice
	Neutral (60.76%)	that I would show where the expensive and the cheap coffee is
	Ambiguous (5.06%)	that the 'foreign' person should not be afraid. there are actually people in this country, but they only go up when the sun is shining
	Neg-Prosp. (21.52%)	that one has to be prepared for that it is not easy to get new friends
	Neg-Retrosp. (2.53%)	that I would say that routines of registration can be a little bit awkward

To Say (occ.62)	Pos-Prosp. (1.61%)	that I would do with other things which may be good to know
	Pos-Retrosp. (1.61%)	that I would do that Sweden is a free and great country
	Neutral (83.87%)	that I would do: test nation life
	Ambiguous (4.84%)	that I would do that Swedes always want a reason to talk to people
	Neg-Prosp. (6.45%)	that I would that there can problems with mandatory elements that they should not miss
	Neg-Retrosp. (1.61%)	that I would do that routines of registration can be a little bit awkward
Person (occ.80)	Pos-Prosp. (3.75%)	that the students are mostly accepted as, with privacy and their own life
	Neutral (88.75%)	that I would show around the city and the university
	Ambiguous (6.25%)	that can be classmate with me which is the condition that I give all the advice
	Neg-Prospect. (1.25%)	that I would say tell to do all it can to not get behind
Location (occ.64)	Pos-Prosp. (6.25%)	that is here that I would advise you to study especially if you don't speak Swedish
	Pos-Retrosp. (1.56%)	that is new that one can come to and that it is always nice to be able to turn to someone
	Neutral (87.50%)	that is where everything is that I would begin by showing
	Ambiguous (3.13%)	that is here where everything is regulated
	Neg-Prosp. (1.56%)	that can be geographically disadvantageous where it does not happen very much (were exchange-students that don't plan before arrival will live in)

An introduction to acts and subjects that indicate the qualities of an environment

The entities that indicate actions are centred on the initiation of the imagined person to the 'university' as induced by the questionnaire. The verbs are expressed both in passive form, such as 'to be', describing a state; in attribution of properties, such as 'to have'; and in active forms, such as 'to say'. There is a common emphasis on the importance of experience to the introduction, indicating an approach to the intended information or knowledge as the product of lived perception, as well as the outcome of a verbal description. The entity 'to be' reflects a spread structure of meaning in descriptions of 'how something is', together with a repeated explicit affirmation of the relativity of the claims. The relativity is also indicated through a specification of contexts in which the propositions are valid, such as depending on cultural dimensions (18 predicates). This concern is closely related to more direct expressions on the relativity of being (10 predicates) and to the description of specific way of thinking and doing (10 predicates) that characterizes a context. These three neighbouring groups of predicates reflect a seemingly paradoxical intention to both determine how something is and to relativize it. The main intention is to give emphasis to the narrative importance of the context as it is identified as a main cause for the variance of the meaning. What is described is mainly the Swedish 'university' as a context, with a concern for cultural dimensions (22.78% of the predicates for 'to be' compared to the mean of 7.89% in all entities), that relates to the description of Sweden. Sweden is described through the attribution of qualities forming a specific context, such as social norms as well as practical advantages and disadvantages. In other words, it appears that the descriptions gathered in the predicates for the entity 'to be' form a narrative context centred on the environment or the location as a factor of relativity, indicating practical and psychosocial dimensions of the 'university'.

The further concerns revealed in the predicates for 'to be' indicate further aspects of the intended social sphere as the predicates are directed to contact among people (10 predicates), social institutions (5 predicates), the 'university nation' (5 predicates), and institutions in general (3 predicates). These concerns all reflect an encouragement to seek contact in an underlying intent to avoid loneliness. The further concerns relate to practical dimensions of life as a student (10 predicates) which also dominate the act of introducing a person to Swedish student life and were exemplified in recommendations concerning the language (4 predicates) or concrete advice (4 predicates). In this sense, the constitution of meaning is mainly centred on social and practical dimensions of a context that form the student life. This also appears in other entities with an emphasis on the subjective perspective and narrative approach, such as 'to feel' (occ.9), 'to see' (occ.7), and 'to understand' (occ.6). The entities tie a subjective tone to personal involvement, with special regard for the social sphere, and reveal an approach to knowledge about the system building on a tacit experience. The entity 'to get' (occ.41) is in many ways similar to the entity 'to be', but it carries a prospective tone suggesting the acquisition of a state in a tone similar to other entities such as 'to begin' (occ.19), 'to find' (occ.17), 'to come' (occ.17), and 'to arrive' (occ.9). These entities widen the approach with a perception of a progression and thus establish a time-dimension in relation to the representation of the context, indicating a further aspect of the subjective approach to the knowledge about the system or the possession of information. The dimension of time is explained by shifting needs depending on development as well as of context, and it is something we will come back to shortly. The entity 'to have' (occ.27) places the context or a subject in a constitution of meaning through giving attributes and an implied ownership, something that also appears in entities referring to properties such as 'to use' (occ.9), 'to buy' (occ.8)', to request' (occ.4), and 'to acquire' (occ.4). In this sense, it appears that a network of entities gathered as passive actions are used in a description of an environment and an ongoing development with a prospective of an appropriation.

The entity 'to say' mainly reflects the direct situation of introduction proposed in the questionnaire attributing words in the suggested dialogue. The main concern was directed towards the enumeration of suggested points of the imaginary description, similar to those that appeared in relation to 'to be', such as practical issues (17 predicates), the importance of the social institutions (17 predicates), and the relativity (14 predicates), such as depending on cultural dimensions, different ways of action (7 predicates), or the study (6 predicates) of, for example, language. A number of other entities that also appeared in significant numbers emphasize this intention as 'to advise' (occ.42), 'to show' (occ.33), 'to ask' (occ.20), 'to question' (occ.21), 'to introduce' (occ.16), 'to answer' (occ.15), 'to recommend' (occ.10), 'to explain' (occ.13), 'to talk' (occ.6), 'to refer' (occ.5), 'to look' (occ.5), and 'to suggest' (occ.4). These identified acts that picture an active subject correlating with the narrator or the

‘I’ of the texts, while the passive verbs such as ‘to get’ are attributed mainly to the ‘you’ or ‘person’. The further entities portray the action of introducing homogeneously, even though the wording differs. The reference to active verbs such as ‘to do’ (occ.30) and ‘to work’ (occ.23) are attributed mostly to the self, while the foreign person is related to the passive verbs, revealing a representation of the subjects involved in the imagined situation. The attribution of active and passive roles appears more clearly in relation to entities with a stronger connotation regarding a potentially unbalanced relation such as ‘to help’ (occ.40) and ‘to give’ (occ.24), something that will be addressed in the analysis chapter.

The imagined introduction gives clear pictures of the way that knowledge is represented, implicitly in the way that the contents are expected to be presented and in relation to the entities ‘to know’ (occ.35) and ‘to learn’ (occ.11). The emphasis on the need for ‘information’ has already figured in the analysis, but it is given more emphasis as the indication of what it is that is going to be told is gathered in a list of predicates. Social aspects of the introduction are also intertwined with the representation of knowledge, such as in reference to a ‘need’ (occ.18), especially created by the threats of loneliness and lack of information. The networks of meaning appear in an intention to point to a number of organizations representing the university or ‘society’, in general, as a way of initiation and introduction: ‘to involve’ (occ.12), ‘to go’ (occ.12), ‘to meet’ (occ.11), ‘to invite’ (occ.7), and ‘to engage’ (occ.6). There are, in other words, a number of entities that indicate a representation of knowledge taking form in the light of the act of introduction and initiation and relating to the needs created by the threat of loneliness and lack of information.

The representation of two main subjects appears as especially formative to the narrative context, exemplified in the table above in the entities ‘I’ and ‘person’, which is also named ‘you’ (occ.46) and ‘friend’ (occ.20) and, on occasion, in the entity ‘student’. The entity ‘I’ is the most common in the narrative and gives a detailed picture of the self-representation of the narrators, mainly through the form of the imagined introduction (83% of the predicates), while the ‘you’ appearing in the four mentioned entities with a total of 234 occurrences refers mainly to the person appearing in structures of meaning somewhat less focused on the would be introduction (64% of the predicates). The concerns in the predicates for the ‘I’ and the ‘you’ relate to similar spheres at a first glance, but there are distinct differences in the noted attribution of an active initiative to the ‘I’ and passive forms of the ‘you’. The quantitatively most reoccurring concern relates to the social institution (49 predicates to each entity) in which the ‘I’ is identified mainly through the imagined act of recommending locations to turn to, while the ‘you’ is the object for recommendations, needing to or missing opportunities when not turning to the

indicated location. A number of different institutions are appointed, mainly representing 'society' and the 'university', such as the 'nation'. In these propositions, the narrative context is directed mainly towards the description of an environment in which the subject finds itself, reacting and preferably adapting to the offered conditions. Institutions form an environment that shape a way of action, a situation, or a sphere/world in which the subjects make a place with an intent to get by. In this context, the recommended institutions also appear with the double function of providing information and points of contact to address the needs of the students.

The revealed variation between the social and the informative institutions appear in relation to the ways that the subjects are represented, attributing different roles. The institutions with a 'social' character are presented mainly as places or contexts in which a needed meeting with other people could be offered, with a homogeneous positive expectancy. Both types of institutions seemed to be of special importance in a phase of introduction, and their importance seemed to be motivated by negative and internal factors: fear of loneliness or fear of being lost without 'information'. The negative motivators are even portrayed as worse than the cohesive characterized as places where 'one would be forced to be social' which was stated with a positive affect, something that appears to imply a desire for a positive reward based on the confrontation of asocial tendencies both attributed to the 'I' and the 'you'.

The entity 'I' is somewhat more involved with *practical issues* (43 predicates compared to 29 predicates for 'you') as well as in the description of *ways of action* (39 predicates compared to 17 predicates for 'you'), while the description of a *mind and a practice* dominates in the meaning of the 'you' (12 predicates compared to 3 predicates for 'I'). These three concerns mainly reflect an importance of the external structures, such as the time and location in the everyday life as a student and establish an importance of the tacit aspects of the knowledge about the 'university. The subject 'you' in its different entities appeared with somewhat more focus on the *relativity* of situations and answers (49 predicates compared to 41 predicates for 'I') which contain an intention on the part of the narrator to avoid a responsibility for the 'you'. This appears to be done through the creation of a distance and by emphasizing the way that the introduction and the recommendations were specific to a context and situation and could not be generalized. The further concern for *culture* (22 predicates for 'you' and 13 for 'I') refer mainly to a description of Sweden centred on the social difficulties encountered by an introverted personality as well as the student life of parties. These two aspects appear to indicate a certain inability attributed to the 'you' such as in reference to the *language* (7 predicates compared to 4 predicates for 'I'). In other words, there is a meaning of 'I' and 'you' that appear in the imagined act of introduction that are focused on recommendations to turn to institutions for help

with social contact and information, reflecting an emphasis on tacit knowledge and the relativity to avoid responsibility. The consequent allocation of initiative for the 'I' and of dependency on the 'you' appears to display implicit images of nationhood and complex affects.

Other subjects also appeared, mainly in the embodiment of the institution, such as 'counsellor' (occ.10) or a 'mentor' (occ.5) to which the 'I' recommended the 'you' to turn to for help to meet needs of information and social contact. These persons represent the institution as experts which could complete the introduction and with a greater certainty, filling a need for information. A similar reference was given to a different source as the 'Internet' (occ.10) also appeared with a similar informative and social function. The 'teacher' (occ.8), on the other hand, primarily represented a relation and is described as 'more personal than usual' (5 predicates) or as with whom meetings are rare (2 predicates), primarily appearing through a schematic code of conduct, which is identified in their position. The concrete subjects can be polarized to a more general approach as the concern for 'people' (occ.7) and 'group' (occ.5), which gathers a description of the social disposition of the Swedes.

Some entities carry a specific interest in the phenomenological analysis as they represent basic categories such as 'they' (occ.18) and 'we' (occ.9). It appears that the two entities, though generally of a different reference, form similar categories of people, marked in national or cultural terms as Swedes and foreigners were described in general. The entity 'they' mainly refers to imagined foreign students, to which the main concern is *practical* (5 predicates), such as according to representations of a lack of planning facing a need to do so and with a reference to 'Swedes' with cultural attributes, such as with social difficulties. The 'we' mainly arises in contrast to the imagined foreigner and in an identification with the person. Interaction of subjects, or 'contact' (occ.15), is explicitly stated both as a way of being initiated into the university and crucial in life as a student; it is something the Swedish students encouraged mainly in the social institutions, simultaneously as a means and an end. There is a tendency to institutionalize personal contact, such as in ideas of 'mentors' or in the different proposed institutions. These dimensions maieared mainly in encouragements whit affectively loaded qualities, such as to 'be open' or 'spontaneous', or pointed out needs for specific qualities.

In sum, it appears that the representation of acts and subjects indicates a narrative context centred on the description of an environment with certain advantages and disadvantages. The active and passive verbs indicate an emphasis on the imagined initiation through giving tacit knowledge and reveals broader approaches to a life in

contexts with advantages and disadvantages. The narrative context is also characterized by a careful emphasis on the relativity of the claims, both regarding the described environments and the perspectives from which they are issued. The representations of subjects and the ways that their contact is expected to take form is centred on the imaginary meeting between an 'I' and a 'you' and constitute their meaning with emphasis on the projection of the need for social contact. There appears to be an uneven attribution of action, but the landscape appears mainly in relation to the 'institutions' as resources for help.

Relative advice forming an environment of a mind and practice and needs

The entity 'possibility' as shown in Table 15 mainly reflects a reference to the concern for relativity that already has appeared a number of times in this exposition. This concern is reflected in a number of other entities as well, such as 'to depend' (occ.18) and 'probable' (occ.16) but mostly was expressed implicitly as the entity 'relative' (occ.14) and was comparatively rare. The analysis of the predicates reveal four dimensions of relativity to which the narrative makes reference: firstly, depending on the 'you' as the introduction is described as dependent on the questions of the introduced person, on his/her needs, origin, knowledge, or goal; secondly, depending on the narrator, the 'I', introducing in relation to the capacity to answer, to availability, or to the understanding of the context and the introduced person; thirdly, depending on the context, as the introduction would be dependent on the university the person would be introduced to; and fourthly, as a reaction to the questionnaire, that it is difficult to give an 'exact answer' or that it is not possible to generalize. These dimensions of relativity point at an area that appears to be especially sensitive in the narratives as it appears to relieve the narrators of responsibility. This approach touches on the perceived relation between a general way of doing and the specific realization indicated as bound to a location or context. The most explicit occurrences of this aspect appear as the entities 'general' (occ.8) and 'part' (occ.4) and reveal a concern for the phrasing of the advice, while the entities 'practice' (occ.8), 'example' (occ.4), and 'issue' (occ.14) relate to explicit cases to which the advice may be related. This way of constituting meaning gives emphasis to the attributed importance of practical matters as they are described as far from trivial but rather with a seriousness that indicate that there is something at stake which is valuable and potentially involves a threat of loss. In this regard, there is a further concern for quality and understanding of the structures of the system, something that appears explicitly with the entities 'real' (occ.10), 'type' (occ.8), and 'point' (occ.4).

The meaning that is revealed in the use of the entity 'good' (occ.41) contains mainly evaluating advice on different attributes forming life as a student, such as good locations for studying, eating, buying things, or getting the needed help. This evaluative tone also appears in the entities 'important' (occ.15), 'best' (occ.8), 'right' (occ.5), and 'great' (occ.4), giving a total of 74 occurrences which mainly reflect priorities among the practical everyday life concerns. The predicates for these entities gather the more concrete and opinionated recommendations in which the narrator takes a position of evaluation, indicating a personal involvement in contrast to the occasions of avoidance of responsibility. These positions are directly concerned with the concrete life as a foreign student. The concept of a 'way' (occ.54) of doing something reveals a concern for a logic of a system and for the ways to get by, as laws and regulations appear as important markers for behaviour which gives further detail to the representation of the institutions. In this context, both civil laws and university authorities appeared as directing actors, directed to the rights and protection that the law offers. The university authorities primarily appear to regulate behaviour as the students repeatedly pointed at the importance of understanding the 'mandatory parts of education', to conform to a specific regulation of 'time' (occ.58), and also how one could take advantage of aspects such as the possibility of re-exams. This is also accentuated when the individual relation to regulated schedules is highlighted, such as the importance to plan and to be punctual or directives on where one can find information. Descriptions of practical dimensions are appointed as a part of the introduction with indications such as 'where to find an apartment', considerations on the 'ages of students', or where to 'get involved', but the main tone describes the need for introduction in general terms.

An explicit appointment of 'culture' as a matter of an introduction to the university generally held positive affect, mainly referring to 'student traditions', with qualities such as 'fun' and 'free' and were directed towards an introduction to the habits of 'party'. There is a double attitude to regulations as 'everything is regulated' is contrasted to a feeling of safety with the social systems or a concern for the environment described as positive, mainly implying the social context of interaction with the 'teachers'. There are also indications of a social problem in relation to the entity of 'culture' depending on Swedish 'reservation', which is believed to be understood as 'offensive'. This was also related to a description of an expected code of conduct describing 'Swedes' and a number of negative emotional reactions to different modes of conduct as well as positive affects related to definitions of something 'Swedish' derived of a perception of a 'mix of cultures' or 'multiculturalism' as 'what makes Sweden so nice'. The explicit entity of a 'culture' (occ.6) relates primarily to a categorization of people into groups, such as the group of 'international' students (occ.4), a separated fellowship, differentiated from being a 'Swede' (occ.13) or something 'Swedish' (occ.20). The seclusion of the international

fellowship is presented as a threat to 'integration', even though it is also said to be good as it offers fellowship. The description of the Swedish culture or Sweden as a 'country' (occ.15) relates to mandatory parts of education, the need for institutions to make social contact, and the importance of punctuality. Language (occ.12) appeared as a continuation of the idea of a culture, with a utilitarian perspective pointing to how information and life gets easier.

The concern for an institution appears mainly in a social dimension through geographic locations where to 'get involved' or to 'make friends', which also is referred to a space where 'life' happens, often described with an attribute, such as 'student life' a 'nation life'. There are repeated indications of a gap between the 'university' and the 'rest of the life' and general expressions of the already established outcome that location is a factor of relativity that determines the ways of life. Some direct references to specific places appeared as indicating a representation of variations between places, both between cities and between social institutions within the same city. Geographical orientation and appointment of location is also a wider issue as a part of the desired information – where things are and how to get there, such as the whereabouts of the library or an introduction to the numbering of classrooms; in many ways, it appears as a wider continuation of the dependency on an institution to get information about a system. An emphasis is placed on formal requirements to adapt to specific times, which seemed to be related to a pedagogical evaluation based on the amount of time with teaching. All these dimensions coincide in a responsibility of the student to adapt and behave in a given way in to cope with the landscape established by the institutions. In other words, a further dimension of the representation of life as a student appears with regard to the distribution of responsibility, as the expected satisfaction of the needs by the institution also dictate the establishment of an environment to which the students are complying.

The presentation of the imagined introduction also revealed a general picture of a foreigner and as such mirrored the individual national identity. The affects appear complex, with an impression of defensive attitudes, for example, in a repeated expression of treating a foreigner in the same way as 'usual in Sweden'. There appeared to be a rather clear and predefined identifying idea of a foreigner, with established concepts of belonging to groups describing the 'foreigner' as an out-group. There are also perceived internal fears as the person is encouraged to dare to ask Swedish students for advice. A central issue was to the way that the students attributed the action to themselves, rendering the 'foreigner' passive by their advice. They mostly invited the 'foreigner' to an assimilating process of adaptation, meaning that it is the 'foreign' ways that yields in the meeting between the two cultures.

In sum, the analysis of the narrative context extends the understanding of the expression of relativity and the importance of the needs as they shape the representation of the environment. The central act of giving advice reveals a respect for the knowledge about the system and for the responsibility for the expected claims describing the situation. The culture, the locations, and the needs indicate ways of life that separate groups and extend practices in which the ongoing life is organized according to the functions of the institutions.

Summary: institution, relativity, and needs in SSt

The entities centred on a concern for action indicate a representation of an environment that takes place in the interaction between individuals and institutions. The appointed act of introduction gives an emphasis to the recommendation to satisfy important needs through the provided services of social and informative institutions. In this light, there is an intention to provide a description of the advantages and disadvantages of environments, with careful provisions for the relativity of the advice depending on the persons and situations in which they appear. The indicated need for information and social contact, the dimension of the relativity of advice, and the actor that establishes the landscape for the life of the students are all related in a horizon of an **institution.**

The abundant occurrences of the entity 'I' reflect the form and the narrative and intertwine with the four dimensions of relativity indicating a horizon which is related to the representation of the knowledge and information provided by the institutions. This appearing horizon reflects an experienced individuality, for example, expressed in the careful references to descriptions of the institutional landscape, together with indication on the seriousness of the involved questions and the consequent responsibilities involved with giving advice. The different ways to introduce the environment repeatedly came back to reflections on needs, combined with a sense of fragmentation, as the reality of the students appears to be perceived to contain threatening elements and to be variable. The structures of meaning that appear are thus centred on an experience best explained as a horizon of **relativity**.

A fundamental concern appears to be centred on motivations such as the need for 'social' contact and 'information', where the subjects are described in relation to a dominating mind and practice, determined, for example, by regulations on time, location, and actions. The perceived 'needs' are established as central to motivation

and directed to concrete and practical dimensions of everyday life. The relation between the individual and the institution also appeared to receive a dimension of necessity or even 'compulsion', which appears to impose itself on the students. All these dimensions appear to present the central structures of meaning in light of a **horizon of needs**.

In other words, it appears that the constitution of meaning in SSt is centred mainly on life in relation to an **institution**, to which there is a **relativity** depending on a context forming certain **needs**.

The Chinese Law on Science and Technology (CS&T)

The analytical procedure for the formal narratives is similar to procedures for the informal narratives, but the focus in the analysis is more narrow on the central phenomena, with less details on the narrative contexts, as explained in the chapter on method. The central phenomena that emerge in CS&T extends to the concepts of 'science' and 'technology', as well as 'research' and 'education'. The section follows the established steps of a short general introduction, a deeper investigation into the central entities, followed by an exposition of the narrative context, and a concluding summary.

Table 16, on the most common entities and modalities in CS&T

Most common entities (tot.1904)		**Belief (%)**	**Affect (%)**
Technology (92 occ.)	Organization (20 occ.)	Imperative (58.42%)	Neutral (98.21%)
Scientific (82 occ.)	Social (20 occ.)	Doxa-affirmation (36.92%)	Positive-Prospective (1.79%)
Shall (81 occ.)	Progress (20 occ.)	Possibility (4.66%)	
Research (77 occ.)	Their (19 occ.)		**Groups of entities (%)**
Science (74 occ.)	Establishment (18 occ.)	**Function (%)**	Action (23.64%)
Develop (66 occ.)	Economic (18 Occ.)	Perceptive (41.94%)	Central entities (22.59%)
Technological (59 occ.)	Applied (17 Occ.)	Signitive (2.50%)	Quality (16.14%)
State (43 occ.)	Achievement (17 Occ.)	Per/Sig (55.56%)	Institution (12.16%)
Technical (28 occ.)	Worker (15 Occ.)		Technical (9.8%)
Institution (26 occ.)	Level (14 Occ.)		Subject (5.77%)
Basic (22 occ.)	State Council (14 Occ.)		Economy (4.3%)

The figures in Table 16 indicate an emphasis on the paired phenomena of 'science and technology' in the general discourse and reveal a neutral affect, a dominance of the imperative tone, and a combined perceptive and signitive function. These general statistics indicate that the narrative is centred on the establishment of an approach, more than a description of how it is, with formal language that appears to be free from evaluation, but still to have an argumentative or an explanatory tone. The imperative tone is also given emphasis in the appearance of the entity 'shall'. The central phenomena dominate the appearing structures of meaning, and they are closely intertwined. Among the 110 predicates on 'science', 78 contain a reference to

‘technology’, and of the 120 predicates on ‘technology’, 100 contain a reference to ‘science’, and the directly combined sentence ‘science and technology’ appeared in 55 occurrences.

A categorization of the forms of expression in the predicates indicate a tone centred on an attribution of properties (56.63%), but forms of expression also appear which are centred on possibilities (25.81%), imperatives (11.83% of the predicates), and descriptions (5.73%). The contents of the predicates reveal a primary concern for development (28.67% of all the predicates). The second most common concern in the predicates relates to the government (17.93%) and economical aspects (17.82%). The rest of the predicates are categorized in seven minor concerns: values (7.89%), law and policies (6.81%), workers (6.09%), basic or applied research (4.66%), achievement (3.94%), cooperation or foreign (3.94%), and information (2.15%). In sum, the analysis is introduced by figures that suggest a concentration on the attribution of properties related to ‘science and technology’ and indicate a concern for development as well as acts of government.

Central phenomena that take place in a desire for development

Table 17, on modalities and predicates to the central entities in CS&T

Entity	Belief	Function	Example predicate
techno-logy (occ.120)	Imperative (55%)	Per. (18.33%)	that can be advanced which the state shall encourage the application of to develop the education
		Per/Sig (36.67%)	that gives a profit of which a certain percentage shall be taken to reward individuals who have accomplished its achievements
	Doxa-affirmation (38,33%)	Per. (20.83%)	that is managed in a way that can be improved
		Signitive (1.67%)	that has a law which brings the role as a primary productive force into full play in the socialist modernization drive
		Per/Sig (15.83%)	that has achievements that people shall do and then receive a reward in a certain percentage of the newly added profit
	Possibility (6.67%)	Per. (2.5%)	that institutions can be engaged in and then they may raise funds for research and development from society
		Per/Sig (4.17%)	that can be renewed through fraud which anyone who reaches it that way shall be deprived of the preferential treatment or awards and be given sanctions or penalties
science (occ.70)	Imperative (57,28%)	Per. (17.48%)	that has workers with outstanding contributions whom special and preferential treatment shall be given
		Per/Sig (39.81%)	that has a development which projects can have significance for that the state shall select and sponsor
	Doxa-affirmation (42,72%)	Per. (20.39%)	that can have a cooperation and exchange with foreign governments and international organizations which the government shall actively promote
		Signitive (2.91%)	that has a law which brings the role as a primary productive force into full play in the socialist modernization drive
		Per/Sig (19.42%)	that has a development that citizens can make outstanding contributions to according to which they shall receive honorary titles
research (occ.77)	Imperative (68,83%)	Per. (33.93%)	that marks institutions to which policies stipulated by the state shall be applied as they engage in the development and production of high-tech products
		Per/Sig (33.93%)	that can be scientific and of technological development of which the state shall select projects of vital significance to economic construction and sponsor
	Doxa-affirmation (20,78%)	Per. (14.28%)	that is contractual or equity which marks the foreign institutions that may be established together with Chinese institutions
		Signitive (3.57%)	that has a capacity that should be increased

		Per/Sig (5.36%)	that has funds which should be portioned appropriately to basic and applied research
	Possibility (10,39%)	Per. (1.79%)	that marks institutions that may invest and establish branches abroad, as well as development
		Per/Sig (7.14%)	that can be basic or applied and has topics that may be chosen by institutions on their own

'Technology' as a property of development and a field of interest to the government

The entity 'technology' appears primarily with a neutral affect, but the five predicates with a positive tone relate to an expectancy bound to 'development'. The prospective in which a desire to reach a given goal is expressed generally comes with regard for values such as 'popularization', 'creativity', 'commercialization', and 'government support'. The meaning of 'technology' in general terms appears mainly in predicates centred on a concern for *development* (36 predicates), which indicates attributes to 'technology' reflected in the high occurrence of the expression of *properties* (29 of these predicates in the concern). The properties were attributed in repeated phrases specifying the concept of 'technology', intending to distinguish it, indicating that it is an attribute to something else, such as 'technological development'. In these predicates, 'technology' was defined through categorization such as 'high-tech', 'leading role of technology', or 'technological transformation' which mostly appear as further developments with a similar focus on the potential of 'development'. This concern and the expression of properties were often combined with other distinct intentions, such as an imperative tone, with a focus on 'state' regulation, and a tone of possibility, with a focus on the potential contained in the concept of 'development'.

Consequently, the meaning of 'technology' appears as a category or a general sphere which involves phenomena such as a 'process', 'development', or 'state action'. At times, the attributes appear to be piled onto 'technology' as an attempt to specify and distinguish a concept, such as in a description of 'high and new technology industrial development zones'. In this quote, 'technology' and 'development' can be seen as two adjectives among five that elaborate a precision of the nature of intended 'zones', while the content of the meaning actually remains vague due to its intent to regulate something called 'appropriate conditions'. The meaning of 'progress' and 'development' in the context of CS&T are not explicitly defined but are interchangeable and have other concepts they could be changed to as well, in what often appears as ready-made phrases. Therefore, the meaning appears as a movement towards something diffusely positive that often appears to be viewed as natural, unquestioned, and without need for explanation. In other words, it appears that the meaning of 'technology' is given primarily in a general sphere of properties with a common concern for the driver of development.

The second biggest group of predicates for 'technology' reveals a concern for the *government* (28 predicates), which is given in a focus on the regulation of its roles and acts. The concern for acts required from the 'government' (or its subordinated authorities) are formulated in an array of verbs which appear in a positive-prospective tone, such as 'encourage', 'enhance', 'select and sponsor', or 'guide'. The meaning is centred on the ways that the government is directed to encourage certain attributes of 'technology' such as its 'development'. The acts of the state often appear general in their positive aspirations but are in several predicates also more specific such as when the state is directed to establish 'rewards', which are proposed to be attributed to persons and institutions based on recognition and achievement or good causes, such as work in dangerous conditions or in 'remote and poor areas'. The predicates relating to the concern for the government has the highest portion of predicates expressing an *imperative* (64% of the predicates relating to governmen*t*), and they are primarily directed towards a regulation of the government itself. The main interest in the imperative tone is the focus on actions that the government shall execute, mainly to 'rely' on 'technology', 'advance the economic construction', 'develop the national defence', and 'to vitalize the rural economy'. The other imperatives are focused on the directives 'set up prizes' and 'promote commercialization of the achievements'. These acts presuppose some kind of movement as the 'development' or 'progress' of 'technology', and the imperatives appear to demand action from the state to strengthen this already existing movement and to be in pace with or at least to 'follow' it. The meaning of the 'government' is, in this light, primarily given as an actor that regulates the sphere of 'technology', but the positive and diffuse nature of the regulation appears to reflect a lack of meaning. These dimensions indicate a constitution of meaning in which the state appears as an actor but its responsibility is mainly in reaction to the initiatives of the institutions and an ongoing development of 'science and technology'.

The predicates for 'technology' with a common concern for economy or rewards (27 predicates) has three major lines. The first concern dictates the establishment of prizes to reward people and institutions for notable achievements; the second dictates the establishment of the 'appropriate financial input', such as for the sake of expected outcomes; and the third is directed to the authorization to raise funds. All three lines appear to attribute action to the state but actually presupposes the action of other parties, whether it is 'excellent' contributions worthy of rewards, ongoing activities to which the funding is to be balanced, or institutions raising funds. The establishment of prizes is explicitly given as a major state action and a way to 'encourage the development', both to persons and institutions, something that appears to imply a propagation of a set of values, but the values also appear to be already dominant. The

imperative builds on the perception that there are already initiatives which can be given attention and rewards and that there is some form of consensus on the meaning of excellence. This excellence is given in a double approach either of a social nature or of a technical nature, which coexist at times, but also picture initiatives directed towards unfortunate contexts. The concern for the establishment of funding appears in vague tones, which is described mainly in relative words such as 'appropriate', but there is seldom description of what these dimensions should be relative to. The description of prizes has a similar vagueness concerning their practice, as the main concern is the establishment of the prizes rather than their content. The authorization to raise funds appears in its positive formulation to be directed towards a limitation of institutions and to build on the perception of an existing activity to raise funds with potential fraud.

The three concerns for *values* (12 predicates), *achievement* (11 predicates), and *foreign cooperation* (6 predicates) are implicit in the presentation of the previous concerns; when they are explicitly approached they reveal some central nodes of meaning. The concern for *values* primarily contains predicates with moral guides of freedom, participation, and honesty. The concern for *achievement* appears to be mainly an attribute of 'technology' with a meaning close to 'development'; further, there are some warnings for fraud and a further call for the establishment of prizes. The *foreign cooperation* is described mainly as a reason to receive prizes and can be a source or means for 'advancement' in the technological development. These three minor concerns reinforce the vague references with positive values, such as in references to 'principles of free will' or that generally negative activities such as fraud and abuse should be prohibited. The concern for *values* appears as central in the light of the intent to establish a positive position to 'development', 'excellence', 'international exchange', and 'achievement' and a negative position to 'fraud' and 'abuse'. The meaning of 'technology' is thus constituted through the proposition of a moral landscape, which does not appear to have the ambition to be concrete but rather points in the direction of what is believed to be a positive influence on an already existing evolution.

In sum, it appears that the meaning of 'technology' is constituted mainly as a sphere related to a concept of development and takes place as an area of concern for the government. It is constituted through the attribution of properties and in the concept of a prospect with dimensions of a moral language in which governmental acts are proposed. These acts consist of the 'encouragement' of already ongoing activities and the further establishment of already dominant values and is given with a number of repeated set phrases. These set phrases and the ways that 'technology' appears in the

mist of interchangeable attributes occasionally give an impression of a lack of meaning.

'Science' as a quality and a driver of development

The 70 occurrences of 'science' appear in concerns which echo the formation of the meaning of 'technology', but with some differences. The main concern is centred on an idea of development, in which progress or growth is pictured, as well as a concern in which state laws and policies are presented. The main form of expression appeared in a tone of attributing properties (69%) as well as possibilities (20%), together with some minor occurrences of imperatives (6%) and descriptions (5%). In their similarities, these numbers further illustrate how close the meaning of the two entities 'science' and 'technology' are to each other in CS&T.

The concern for a development is the most common to the constitution of a meaning of 'science' (appearing as the principle explicit concern in 39 of the 70 predicates), mainly in an attribution of properties (in 30 of these 39 predicates). The references to science thus appear mainly as adjectives that determine the nature of other phenomena such as a 'scientific', 'progress', 'development', 'achievement', and 'system'. These attributes establish the meaning of 'science' in a field centred on an idea of a desired development, which is given as a motivation to regulate the actions of the state. The regulating acts are expressed in a demand to adapt to a nature of this development and to a representation of 'science'. The concerns for 'systems' and 'laws' are, in a similar tone, proposed in relation to imperatives consequent to the 'foundation' or 'basis' of the development. 'Progress' as a property of 'science' appears to be a point of reference in the motivation for a number of vague values. The expression of a positive *possibility* (in the 9 other predicates) shapes an optimistic approach, which is encouraged to be assimilated in general terms. The development appears as a property of 'science' together with other attributes that generally are inclined towards material associations described in terms of means of production. In other words, 'science' appears to be given primarily as a quality of a sphere that represents a driver of development to which a necessity is expressed and to which the government should comply in its acts.

The second group of predicates raises a concern for law and policy (dominant in 19 of the predicates for 'science'), with a discourse in which the text establishes itself as a law with a validity, as well as the responsibility and authority of the state and its administrative departments. The establishment of its own authority appears as a part of the establishment of a chain of authority that is not directly described in this text but in reference to the general political organization in the country. This general

organization relates to the state, the state council, and its administrative departments as well as local governments and the 'whole nation' that is dictated to take part in the 'encouragement' of 'science' and 'research'. The primary concern here is expressed as an 'interest of the nation' which the state proposes, a general way of proceeding in positive acts to help general development, and it appears to involve its own authority with the authority of 'science'. In this way, the constitution of the meaning of 'science' appears primarily as a tool or a means for a desired development in the first place, and the state takes on the task of implementing it in the general population involving its own representation with the 'scientific' authority.

The concern for 'science' appears in light of its *workers* (in 17 predicates) and relates mainly to the regulation of the institutional treatment of involved personnel. These concerns appear, for example, in relation to 'professional ethics' that are regulated and mandated to be followed or the 'workers' having 'appropriate conditions' and 'titles' as well as 'rights and interests'. The imperatives that are implied in the attribution of such properties to 'science' and its 'workers' primarily establish general intentions since the actual regulations lack concrete content in this context. The meaning of the 'conditions', 'titles', 'rights', and 'interests' are not precise, something which enhances the impression of a general approach rather than specific directives. The general approach appears to have concrete associations in the use of the concept of 'workers' as it relates to 'science' as an aspect of the general means of production. The affects are both positive, regarding rights and rewards, and negative, regarding threats and punishments, for example, in the case of 'fraud'. In this sense, it appears that the meaning of 'science' is given a further moral value in the establishment of good and bad behaviours of workers and the consequent governmental reactions.

The predicates gathered for their concern for *awards* (12 predicates), *values* (10 predicates), and *information* (6 predicates) are similar to the predicates for 'technology', and they reflect the major concerns with a more explicit focus. The establishment of *awards* appears to be a specific way of forming a policy to govern the evolution of activities through a symbolic indication of desired values through rewarding appreciated persons and organizations. The appointed act of the government is still in reaction to individuals and institutions, formulating an imperative to react through an explicit involvement in an attribution of status. The predicates with a concern for *values* portray the 'sciences' mainly as something that the state can 'rely' on to tackle 'key problems' with solutions to a number of 'social problems'. The predicates also indicate a faith in 'principles of decision-making' which are recommended in an imperative, giving a specific rationale in which the 'sciences' offer ways to serve the state and a given moral distinction. The predicates with a concern for information are directed mainly to the manners in which

exchanges with foreign institutions are realized, in a continued general approach with diffuse practical meaning. The three groups of predicates further establish the meaning of 'science' as a distinct phenomenon in which 'values' can be of use to modernization and that the government is prescribed to aid such a development, mainly though awards and regulation.

In sum it appears that the meaning of 'science' is given primarily as a quality and a driver of development. As a property, it appears in the dimensions or dynamics which are viewed as inherent in a 'scientific' logic or system of values, and these dimensions are indicated to entail certain laws and policies. The logic or system of values is mainly given in broad and general terms but appears to be made the most concrete in the establishment of an approach to the 'workers of science' in which rewards and punishments are detailed. The consequent moral code appears to confuse the role and status of 'science' and the government, and the implied concerns are established with apparently explicit blanks.

'Research' as something that the government should encourage

The 77 predicates for 'research' are expressed primarily as an imperative belief, as exemplified in table 17, with a dominance of perceptive function and some themes in signitive function. The three main themes in which the predicates for 'research' can be categorized concerns the authority and the state, the distinction between basic and applied 'research' and the economy. The most dominant theme of concerns in the predicates relates to the state and the distribution of authority (24 predicates), which is connected to the representation of the roles that 'research' is expected to play, and, the acts that the state is expected to do as a consequence of these roles. The most mentioned of the expected acts of the state is to 'encourage', and the imperative tone establish 'research', mainly as an object for the acts of the state, implying a contest for its ownership. The act is mostly directed towards the concepts of 'development' and 'technology' but also towards companies to invest or new institutions of 'research' to be established. There are some further acts of the state that are closely related formulated as to 'guide' and 'support' which form a positive approach to something already existing. The narrative also shows a concern to regulate different rights and duties of the state as well as institutions and agencies that relate to it, forming a meaning of authority that refers to a chain of mandates originating in the state. Thus, it appears that the regulation primarily addresses the hierarchy and relations among institutions with a concern for the promotion of 'research', which is implied as a reaction to already existing actions.

The imperative tone dominates the predicates for 'science' with a concern for state and authority (16 of the 24 predicates), and in the broader appearance of imperatives have similar intentions which are directed towards the state. The repeated imperative is, in other words, directed towards what the 'state shall do' and indicates a complicated regulative ambition in the law, in which the regulation of the chain of authority is not obvious. The contents of the regulation are also diffuse in their general focus on positive 'encouraging' and 'supporting' activities. However, the reasons for these regulations are not specified, and the acts are described with a certain lack of concrete terms as the further meaning is not addressed. The consequent constitution of meaning of 'research' is thus given as an object which the state is regulated into aiding in general formulation.

The concern for *economy* (16 predicates) mainly carries three different threads that sometimes converge, in a concern for *rewarding contributions*, for *ratios of expenditures*, and for the *authorization to raise funds*. The first thread for rewards dictates that the state is supposed to reward people and institutions for contributions, both as regards situations concerning need, such as 'poverty-stricken rural areas' and of excellence if they 'have expounded certain phenomena'. The second thread of concern addresses ratios of expenditure which are directed towards the state both in their totality of the national budget and in dictates that the state should 'account for the appropriate portions' and to the priorities between the already mentioned variations within the 'research'. The third thread of concern relates to an authorization to raise funds as the state issue decrees to encourage institutions to gather funds which comes from sources other than the government. The modality of possibility dominates the concern for rewards, indicating possible characteristics or acts to be rewarded, while the modality of properties dominates the concerns for expenditures and the authorization to raise funds, indicating a descriptive tone ascribing a number of properties to the 'research' that is intended.

The third group of predicates for 'research' reveals a discourse with a distinction between *basic and applied* 'research' (14 predicates) that differentiates between different fields. 'Research' is in this theme connected to the stately acts of encouragement to 'research' with a focus on the equality of the acts for 'basic' and 'applied' research. The theme is mainly developed in the modality of possibility as it often poses potential attributes of the 'research' since it can be 'applied', 'basic', or 'high-tech'. In this theme, the nature of the support is developed into a economical concerns, describing the state acts rewarding exemplary persons and projects involving research. The meaning of 'research' is thus developed into fields of basic and applied 'research', but the focus still stays on the acts of promotion that the state is regulated to give in this variation. The frames presented in a distinction between 'basic' (22

occ.) and 'applied' (17 occ.) forms in the explicit entities appear to relate primarily to an aspiration to make the general approach more precise. The intention appears as somewhat paradoxical, but it is centred on the repetition of the phrase 'basic and applied research' in a manner that is given without any other specification or help for interpretation or understanding of the intended meaning. Further on it appears that the entities 'production' (6 occ.), 'application' (5 occ.), 'invention' (5 occ.), and 'innovation' (4 occ.) all develop these aspects through references to the application of the 'research' on appointed issues, but they still make reference to general terms, giving emphasis to the same tension between a determined concrete tone that still is expressed in general. This tension between concrete and abstract is related in a further sense to the ways that outcomes appear in further entities, such as 'social' (20 occ.), 'economic' (18 occ.), and 'welfare' (6 occ.). The outcomes in an economic aspect are given further attention in a number of entities, such as 'prize' (9 occ.), 'funds' (8 occ.), 'award' (7 occ.), 'grant' (5 occ.), 'means' (5 occ.), 'expenditure' (4 occ.), and 'reward' (4 occ.). In these terms, the economic concerns are given several expressions and a variety of points of contact with the central concerns.

Predicates for 'research' also relate to *development* (12 predicates) as the two concepts appear to be interchangeable at times. On these occasions, the meaning of 'research' is established not as an action but as an object, or a kind of dynamic, a something that shapes an evolution of the states of things. Further light is shed on the meaning of 'research' in a concern for *cooperation* (5 predicates), primarily with foreign partners, broadening the meaning of the concept mainly with an establishment of a new institution for research, which is both allowed and encouraged to do in cooperation with foreign institutions. The closest to a mention of 'education' (1 occ.) appears in the entity 'higher learning' (4 occ.), which primarily addresses concrete institutions and does not indicate any actual meaning of the phenomena. The lack of an explicit appearance of 'education' poses questions of a different character addressed in the later analysis.

In sum, it appears that the meaning of 'research' primarily address an imperative directed towards the government in which an encouragement is demanded. Moreover, it appears that this encouragement intends to allocate the action of the state to the sphere in which it is performed. The demand is shaped with references to authority as well as to economic aspects and an understanding of a difference between basic and applied 'research', which establish an intricate understanding of the role of the state in the function of 'research'.

A narrative context where the government is regulated to encourage development

The exploration of the narrative context is directed primarily towards the imperative tone given in the entity 'shall' as well as the actor of the 'state' and the act 'to develop', as Table 18 shows:

Table 18, on modalities and predicates to entities in CS&T

Entity	Belief	Example predicate
Shall (81 occ.)	Imperative (95.06%)	that the state shall select projects of vital significance to economic construction and sponsor related scientific research and technological development so as to accelerate the popularization and application of scientific and technological achievements
	Doxa-affirmation (3.70%)	that the local people's governments at various levels shall encourage and support the development of mass science and technology organizations in rural areas
	Possibility (1.23%)	that anyone who obtains preferential treatment or awards by resorting to fraud (...) shall be deprived of the preferential treatment or awards
To Develop (66 occ.)	Imperative (63.64%)	that the State shall do with technology market to promote the commercialization of scientific and technological achievements
	Doxa-affirmation (24.24%)	that has a system that the state shall establish that is modernized for scientific and technological research
	Possibility (12.12%)	that is technological and that if institutions are engaged in it they may raise funds for research and development from society by various ways
State (43 occ.)	Imperative (90.70%)	that shall establish and develop technology market to promote the commercialization of scientific and technological achievements
	Doxa-affirmation (6.98%)	that has a level of key laboratories that are open to both domestic and foreign researchers
	Possibility (2.32%)	that has relevant regulations regarding institutions engaged in technological development and that may raise funds for research and development from society in various ways

Legal imperatives directed to the government and with a concern for development

The most common entity in the narrative context is the entity 'shall', which primarily embodies the imperative tone, as exemplified in Table 18, emphasizing the directives of the law. The main concern in these imperatives indicates a desired development (22 predicates) in which the governmental activities are presented through different formulations of the act of encouragement. A further concern for economic aspects (16 predicates) reveals imperatives directed towards the establishment of awards and 'appropriate' funding. There was also a concern explicitly directed to the government and the distribution of authority (18 predicates) revealing a formal tone of legislation of the mandates of different agencies and institutions. The already mentioned concerns for workers (7 predicates) and values (5 predicates) also appears in this context in a way that mainly indicate an approach to the proceeding stately governance. The remaining 13 predicates mainly establish the interest in achievements, basic and applied research, information as well as law and policy with a concern for the procedures and the outcomes of the activities. The dominance of the imperative tone can also be seen in the less frequently occurring entity 'may' (7 occ.), which embodies a permission and reveals a similar tone but with a permissive

possibility concerning economical mandates. In other words, it appears that the imperative tone suggests an intention to regulate the governmental activities regarding a development in economic and hierarchical dimensions.

The entity 'to develop' appears primarily in the general imperative, revealed to be directed towards the government, and it mainly indicates a general desire for a positive change. The constitution of meaning in this aspect mainly forms a representation of positive action which is also reflected in the use of a number of other entities, for example, 'progress' (20 occ.), 'encourage' (14 occ.), 'promote' (11 occ.), and 'popularize' (10 occ.). The broader approach and properties appears to form a rather homogenous picture of an attitude in which the emphasis is placed on the establishment of a general positive disposition rather than a legal governance of details. However, the different acts also appear to signal a demand for a prerequisite, or something to be done for the general 'development' to continue, which is variously expressed, but appears with a single intention in the governmental act. The positive act is also reflected in number of entities that raise the concern for an initiative as an act of founding or accomplishment, such as 'establishment' (18 occ.), 'achievement' (17 occ.), and 'construction' (13 occ.). The mandate for the acts are generally expected to come from the state or its subordinate authorities, and it appears to demand the involvement of the government even though it also implicitly appears to be redundant – establishing something that is already there.

The proposition of acts is related in a general approach towards something that is identified as positive, in a development that echoes values or an attribution of qualities, often in a comparative aspect. Examples of such entities are 'major' (14 occ.), 'high' (10 occ.), 'important' (8 occ.), 'relevant' (7 occ.), 'modern' (7 occ.), 'right' (7 occ.), 'key' (6 occ.), 'high-tech' (6 occ.), 'advanced' (5 occ.), and 'outstanding' (4 occ.). These entities contain an evaluation of initiatives and form a broad view of the desired outcomes that embody an image of the intended development – in its generality. The meaning of the act of 'to develop' and the consequent active approach can also be studied in the occurrence of a number of verbs in the entities: 'to be' (12 occ.), 'to have' (12 occ.), 'to administer' (12 occ.), 'to make' (8 occ.), 'to relate' (7 occ.), 'to take' (6 occ.), 'to carry out' (6 occ.), and 'to work' (5 occ.). The range of occurrences suggests that the intended acts are not the main concern of the narrative, but rather appear as different markers for actors and objects, established in a broad inclusion of references and adjectives.

In sum, it appears that the narrative context is characterized by a general expression of imperatives founded in a desire for development, which are directed mostly towards

the government. It appears that the law is characterized by its placement in a chain of distribution of authority, which contains some vague references, and a generality that indicates a broad representation of development.

A government that gets involved in the acts of the institutions for a development

As shown in Table 18, the third most occurring entity of the 'state' appears with a similar meaning as the entity of the 'government' (10 occ.), which reveals the concern for a specific actor in relation to other actors (in 14 predicates). These other actors are identified mainly as the 'institution' (26 occ.) when specified, but they are often implicit, a general sphere towards which the acts of the state are directed. The identification of the 'state' and of other actors appears mainly as a by product of imperatives to perform the positive acts (in 11 predicates) with regard for the enhancement of 'technology', 'science', 'development', and 'research' in general, or 'institutions' in more specified terms. Thus, the meaning of the 'state' appears primarily in light of its role as a recipient of the imperatives to proceed in encouraging acts and implies a predated and ongoing development which is allocated to the institutions. The imperatives to 'encourage' this desired development thus appear as general suggestions of an array of rather complex relations, which mainly implies the involvement of the state in the ongoing activities of the institutions. There are some blanks, or areas which are not described in these emerging implied complex relations, but an aspect that identifies a central concern appears in the intentions to award and punish different individuals and institutions as a procedure of distribution of recognition and status. The 'state' is, in other words, identified as an actor, an image that appears in imperatives in which it is prescribed to get involved in activities initiated by other actors represented by the 'institution'.

As the 'state' appears as the object of the imperatives, prescribed to encourage the positive attributes, there is also a set of other entities which makes the picture of the institution more detailed. The entities of 'organization' (20 occ.), 'state council' (14 occ.), 'department' (11 occ.), 'system' (7 occ.), 'law' (7 occ.), and 'management' (7 occ.), among others, indicate a web of relations between agencies that are regulated in a chain of authority. There are also indications of a potential competition for status which is in parallel to the general aims to cooperate in the governance. The differentiation of the agencies within the general sphere of the state indicate internal procedures which are not described in this context, but the propositions and the blanks between them indicate procedures which could be complex. The entities of 'enterprises' (10 occ.), and 'industry' (7 occ.) also reflects actors in the private sector, which are approached as similar to the 'institutions' and represent an origin of

initiatives, as well as funding. At times, these external actors are also subject to governmental encouragement and thus, to some extent, encompassed within its sphere of responsibilities. The further perception of actors also related to involved people, such as in the entities 'worker' (15 occ.) and 'citizen' (12 occ.) as well as the more general terms in 'forces' (6 occ.) and 'base' (4 occ.) that makes reference to the masses of people. In other words, it appears that the representation of the actors is made complex by references to a variety of governmental agencies and to a variety of organizations that play the roles of 'institutions'.

A number of entities appear give concrete expressions of aspects of the act of governing, such as 'project' (13 occ.), 'information' (10 occ.), 'measure' (9 occ.), 'level' (14 occ.), 'in charge' (6 occ.), 'public' (6 occ.), 'policy' (4 occ.), and 'socialist' (4 occ.). These entities relate mainly to an identifications of actors or acts, in which the main concern appears in the light of organizational epithets. General and concrete references converge in expressions of detailed descriptions that indicate vague properties. The identification of concrete acts with general expressions also appeared in procedures that are given a political dimension, such as 'activity' (8 occ.), 'programme' (5 occ.), 'contribution' (7 occ.), 'service' (6 occ.), and 'responsibility' (4 occ.). Actors and groups of actors are also identified in relation to the general tone, such as in the entities 'their' (19 occ.), 'various' (11 occ.), 'other' (10 occ.), and 'role' (4 occ.). While the acts entities of 'full' (4 occ.) all relate to different dimensions of evaluation or measures in which intended general values are expressed and established. There are other references which appear with similar constitutions of meaning, such as the reference national and international perspectives, which appears in entities such as 'foreign' (9 occ.), 'exchange' (8 occ.), 'national' (8 occ.), 'Peoples Republic of China' (5 occ.), and 'local' (6 occ.). These references indicate an aspect of the a general concern for an involvement of the state in ongoing activities. In other words, it appears that the act of encouragement of the 'state' has both a concrete and a general appearance, with references to both general political expressions and to detailed and concrete descriptions.

In sum, the analysis of the narrative context reveals a picture of the state through imperatives prescribing it to encourage a development bound to acts initiated by the institution. The actors, such as the government and the institution, and the acts, such as encouragement, appear in expressions that contain both a detailed practical descriptions as well as general and vague references.

Summary: development, state encouragement, and encompassing status in CS&T

The constitution of meaning in CS&T is centred mainly on the attribution of properties in which 'technology', 'science', and 'research' appear as part of, or attributes to, progress. The extensive use of accumulated properties to specify details in combination with broad and vague expressions indicate a distance between the regulation and the concrete issues that indicate intentions to develop general attitudes rather than specific procedures. The general concern behind these expressions repeatedly relates to formulations of a general desire for a positive prospect, a change that appears to already be ongoing. It is expressed as a general growth in which 'science' and 'technology' play an essential role, and at times they appear to be identified with it. In these terms, it appears that the most explicit central aspect of the narrative is given in a horizon of a **development.**

The narrative context is dominated by the formation of the positive prospect of development which appears mainly in expressions of imperatives directed towards the government, in which it is intended to stimulate an existing movement. The way that the actions are presented also implies an understanding that the movements are already happening, and the central tone of an imperative is directed towards these state actions of 'encouragement'. The primary concern is repeatedly allocated to the acts of the state, but other actors are also repeatedly included, whose initiatives predates the acts of the government and constitute the actual action. In this sense, it appears that the understanding of the meaning of development is based on a horizon of **encouragement of the state.**

The imperative modality forming the regulative tone of the law is centred in positive decrees directed towards the government, demanding an action that is implied to continue or encourage an already existing movement or development. Further, there appears to be a number of repeated phrases, such as 'technological development' and 'science and technology', apparently specifying concepts but also appearing in a tension between general and vague references. In these terms, the desired effect of the narrative does not appear to provide a significant change of direction or the establishment of certain goals; rather, it appears to be directed towards the perceptions of the government's place in relation to the current movement. A main act of the state is the establishment of rewards for excellence and social contributions, directed towards the two other horizons in the encouragement of development, forming a horizon of **encompassing status**.

In other words, it appears that the constitution of meaning in the narrative of CS&T is centred mainly on the description of **development** as an attribute to 'technology' and 'science' that the state shall **encourage** as a desire to **encompass status**.

The Swedish Government Bill on Research (SS&T)

'Research' is the most common entity in SS&T, as can be read in Table 19, and is, together with 'education', one of the central entities that are studied closer. The few references to 'science' (3 occ.) and 'technology' (5 occ.) do not invite a study of their explicit meaning at this stage, but the implied dimensions are explored in the later analytical chapters. The investigation follows the steps of a short introduction, an investigation into the central entities and the narrative context, and a concluding summary.

Table 19, on the most common entities and modalities in SS&T

Most common entities (tot.1088)		**Belief (%)**	**Function (%)**
Research (100 occ.)	Higher education (11 occ.)	Doxa-affirmation (85.14%)	Per/Sig (56.08%)
To Be (33 occ.)	Important (11 occ.)	Imperative (12.16%)	Perceptive (43.24%)
Education (25 occ.)	To Base (10 occ.)	Possibility (2.7%)	Signitive (0.68%)
To Have (20 occ.)	Also (10 occ.)		
To Increase (19 occ.)	Quality (9 occ.)	**Affect (%)**	**Groups of entities (%)**
Area (16 occ.)	Strength (9 Occ.)	Neutral (92,57%)	Qualities (19.21%)
Swedish (16 occ.)	Government (8 Occ.)	Positive-Prospective (3.378%)	Action (18.38%)
Investment (15 occ.)	International (8 Occ.)	Positive-Retrospective (3.38%)	Technical (12.87%)
Funding (14 occ.)	Country (8 Occ.)	Negative-Retrospective (0.68%)	Central entities (12.5%)
Sweden (14 occ.)	Number (8 Occ.)		Institution (10.66%)
Institution (13 occ.)	Researcher (8 Occ.)		Subject (5.33%)
To Develop (13 occ.)	University (7 Occ.)		Economy (5.24%)

The figures in Table 19 indicate that the narrative is expressed with an affirmative and neutral tone, with a mostly perceptive function and with occasional traits of signitive form. The central entities are few in comparison to the total numbers, and they are highly centred on the appearance of 'research', as references to 'education', 'higher education', and 'university' are comparatively rare. The entities relating to qualities, such as 'Swedish', 'Sweden', and 'important', as well as relating to actions, such as 'to be', 'to have', and 'to increase', are the most common, and together the groups represent 39% of the occurrences. The technical entities such as 'area' and 'also' and the references to institutions, such as 'institution' and 'government' form a second level of entities related to the the formal expressions of the narrative. The two smallest groups of entities in Table 19 concern economy, represented by 'investment' and 'funding' in the list of entities, and subjects, represented by 'researcher' and 'country', and they indicate some more specific concerns.

As the predicates are categorized according to form, a majority appear as descriptions (42% of the predicates), followed by attribution of properties (25%), proposition of possibilities (25%), and, finally, some imperatives (8%). When the predicates are categorized according to content, the groups with the most occurrences relate to economy (30% of the predicates) and to the differentiation between basic and applied 'research' (21%). An international perspective appears in dimensions of competition, cooperation, and comparison (22%), while a related category of predicates are directed towards a concern for quality and quantities (13%). The acts of government appear in dimensions of organization and management (11.5%), and there is also a discourse on history (2.5%). These general categorizations indicate that the narrative is mainly descriptive with a discourse that establishes an approach to a certain condition, proposing attributes and possibilities which are directed towards economical dimensions and a distinction between basic and applied research.

Central phenomena that appear in the light of their funding

Table 20, on modalities and predicates to the central entities in SS&T

Entity	Belief	Function	Example predicate
research (occ. 100)	Imperative (10%)	Perceptive (2%)	that will receive a boost both in Sweden as well as Europe through ESS
		Per/Sig (8%)	that has a system for funding that must be changed in order to give more explicit priority to quality
	Doxa-aff. (87%)	Perceptive (43%)	that has funding agents that have drawn up the areas on the basis of strategies
		Signitive (1%)	that is in certain areas to which substantial resources are allocated after a rigorous evaluation process
		Per/Sig (43%)	that has a landscape with its high levels of competence in information and communications technologies
	Possibility (3%)	Perceptive (1%)	that are in areas in which Swedish industry is investing in
		Per/Sig (2%)	that can receive gifts from private persons and companies
education (occ. 25)	Imperative (28%)	Perceptive (16%)	that marks institutions that should increase student and teacher exchange
		Per/Sig (12%)	that marks institutions that should actively cooperate with researchers from other countries
	Doxa-aff. (68%)	Perceptive (12%)	that is a sector which can be investigated about its future organization
		Per/Sig (56%)	that marks institutions that can be signalled to increase research quality
	Possibility (4%)	Per/Sig (4%)	that marks institutions that can be facilitated to play a leading role in EU initiatives through Sweden's strategic investments

Funding *'research' for its applicability to reach international recognition*

The initial exploration into the meaning of 'research' is centred on its 100 explicit appearances. The scarce non-neutral statements are directed towards an international comparison, as the three positive-prospective predicates approach 'research' as a marker for the status of the Swedish nation and the role of government in the preparation of an environment that enables an increased status. The single negative-retrospective predicate addresses a national development of decline in the quality of research. Table 20 identifies two dominant fields in the combination of modalities of belief and function – where the modality of function divides the narrative in roughly

equal shares categorized in perceptive and per/sig. The first share relates mainly to the concern for *funding* of 'research', expressed with a descriptive tone directed to facts, while the second share relates to the concern for *basic and applied* 'research', which is given in a further argumentative or explanatory tone. The further presentation of the analysis of the meaning of 'research' is divided according to five general concerns or themes emerging in the predicates.

Funding is the most common concern in the predicates for 'research' (33% of the predicates), and it can be divided into three equal portions, the *origins, strategies*, and *quantities* of the funding. The first concern for the *origins of funding* emphasizes a dichotomy between basic and applied 'research', with an explicit ideal directed to the ways and procedures of the applied forms, driven by private means. This preference for a private origin of funds appears simultaneously with a repeated emphasis on a presentation of government in light of its active position to increase its spending on 'research'. The tension between ideal and practice is addressed with an emphasis on the intentions to give signals and distribute funds in a way that resembles the funding from 'the private sector' or 'the industry'. The references to the origins of funding imply a broader concern for the quality of 'research', which is expected to be based on a relation to its applicability. The concern for *strategies of funding* mainly differentiates fields or areas of 'research' and argues for a selectivity based on the ambitions in an international competition. These references to strategies thus indicate a desire of the government to increase an internal competition within and among academic fields, the intention of which is to improve 'quality' through a narrower focus. The two themes of origins and strategies of funding are related in the concern for a governmental involvement directed by values of applicability and specialization, with the aim to perform better in an international competition and governance through external forms, such as allocation of funds. The third concern for *quantities of funding* primarily contains a description of the Swedish position, both in international comparisons and in light of an increased governmental involvement with a manner of funding that simulates the private ways. In other words, it appears that the meaning of 'research' is constituted primarily in light of its funding, in which an increased amount of governmental means are based in an intention to mimic the private sphere.

The meaning of 'research' that appears in the predicates centred on its funding were previously identified by a perceptive or descriptive tone; moreover, the theme mainly attributes *properties* (44% of the predicates concerned with funding), containing descriptions of what something 'has'. It is an approach that gives indications to the suggested external approach, and it can be related to the dominance of neutral affect and the majority of doxa-affirmative belief, which indicates a detached narration wherein the object at hand appears primarily with external properties and lacks

internal distinctions. In this light, 'research' appears with properties that depend on organs external to it, such as the origin, strategies, and quantities of its funding, or with regard to an expected outcome differentiated from its contents, such as economic growth or international recognition. In other words, it appears that the meaning of 'research' is given quantitatively with the most dominant concern for the mechanics involved in different types of funding, such as an external context in which it takes place.

A second group of predicates is centred on the distinction between *applied and basic* 'research' (27% of the predicates). This topic already appeared in the predicates centred on funding and in aspects of the modality of function due to the somewhat more signitive tone in which it is expressed. The group of predicates contains most of the occurrences of an exposition of a logic or arguments in reference to a chain of events in represented causalities. The group of predicates can be divided into three concerns: the *differentiation* between research areas, the *context* of the research that decides potential outcomes, and the *initiatives* of the government. The predicates in the first concern are centred on a call for a strategic *differentiation* between academic fields that is explained mainly in reference to desired possibilities or potentials that derive from the rewards of applicability and depend on the focus of the government in areas of strength in 'Swedish research'. The differentiation into fields combines ideas of needs and prerequisites, for example, in the implied references to different kinds of motivation related to the ways of financing, but it is generally centred on an idea of selectivity in favour of areas of strength. The second concern in the predicates centred on *contexts* refers mainly to the potential outcomes of the different procedures of financing. The predicates are vague as regards the properties of the intended contexts and mainly indicate a need to mimic and cooperate with the private sector, especially regarding patents, exchanges with industry, and expertise. 'Basic research' is mainly reflected in this discourse and appears as a context or prerequisite for the 'applied research', an approach to attributes of an institutional environment that are similarly formulated, for example, 'independence' and 'strategic investments'. The third concern revealed in the predicates centred on *initiatives* relates primarily to an intention to present a picture of the government in the light of the act to increase investments in chosen areas as well as a strategy reminiscent of the private sector. These predicates aim primarily towards a description of government as an actor, emphasizing the initiative to increase the amounts of financial output directed towards 'research'.

The concern for *applied and basic* 'research' appears mainly in expressions of *possibilities* (59% of the predicates). The attitude is formed in the focus on the potentials of the applications, on the eventual achievements to meet needs and in

relation to the potential attributes of applied 'research'. The expressions indicate a prospective focus in the ideal of applicability, centred on the expectation of achievements. A reluctant affirmation of the importance of basic 'research' appears in a more retrospective tone and in the context of the environment to enhance applications. The other predicates relating to basic and applied 'research' are mostly *descriptions* (38%) and some *imperatives* (3%). These figures indicate that the meaning attributed to 'research' is centred on arguments for certain mechanics leading to a desired development, and that both its basic and applied forms tend towards an idea of growth through applicability. In other words, it appears that 'research' is represented as a twofold phenomenon: with an applied form that is most desired and viewed in contrast to a basic form.

A third group of predicates for 'research' is gathered in the concerns for *competition* (12% of predicates) and *cooperation* (5% of the predicates). Together, the two categories of predicates form a general concern which is centred on the relations among institutions and among national contexts. This representation of relations implies an approach to isolated institutions, viewed in an external perspective, which, for example, appears in the comparative standards. The perspective is external in the sense that it approaches quality based on the position in a ranking as the central marker for quality, in which the relation between the isolated institutions define their properties, not a description of their contents. The approach explicitly refers to competition and cooperation as mechanics that are supposed to enhance the quality and applicability of the 'research'. The mechanics are expressed, at times, in an economic logic, in relation to ideas of markets for opportunities, status, and ranking, which are related to concepts such as 'globalization'. Both competition and cooperation are presented as tools or methods to increase the quality of 'research', but there is a level of complication as the main measure for this quality and achievement appears in references to the same principles of competition. In other words, it appears that the meaning of 'research' in the predicates centred on cooperation and competition indicate an approach to the mechanics expected to produce the desired quality, in an external approach to relations among institutions and countries.

The fourth group of predicates for 'research' gathered in the concerns for *quality* (9% of the predicates) and *quantities* (5% of the predicates) relates mainly to an ambition attributed to the government to break a negative trend through better incentives or 'to signal' to the 'institutions' that quality should be increased. The intended meaning of quality has already been mentioned in this analysis, as related to an external approach and in the contexts of the mechanics of funding and relations among institutions. A main concern in this perspective appears in the proposition to asses the areas of strength, to increase the investment, and to encourage more international

cooperation in these areas. The presentation of *quantities* appears with a concern for an establishment of a perspective of the governmental initiative of strategic funding that explains both the propositions and the approaches. The strategy appears in relation to concerns centred on a focus of funding to the areas of strength, fostering a competition among academic fields. In other words, it appears that the meaning of 'research' is further established in light of the relations among differentiated institutions, such as in the competition among academic fields, as part of the idea of quality reached through mechanics such as strategic funding and international cooperation.

The fifth and final group of predicates is gathered around descriptions of *management and history* (together 9% of the predicates) with an approach to 'research' based in external perspectives. The concern for *management* gathers a few predicates arguing for measures to maintain the confidence of the public, addressing issues of fraud and dishonesty. The narrative is introduced with a historical description in which the Swedish history of 'science' is described through the perspective of competition among countries. The historical aspect emphasizes the perception of a negative trend where the fame and quality of Swedish inventions comes of a era of achievements and glory, but is fading, which leads to the strategic approach in a conflicting view of disciplines. There are also a few mentions of 'basic research' in which 'historical researchers' are reminiscent of a 'time dimension' of 'research'. These concerns indicate a meaning of 'research' centred on references to a context based on a negative perception of threats to the confidence of the public in a negative historical development and the threats of strategies that do not lead to applications and the desired outcomes.

Most of the predicates for 'research' contain a description (37% of the predicates) primarily addressing what 'research' is in relation to external aspects such as competition, management, and history. Other entities identified properties (26% of the predicates) or what 'research' has, primarily in relation to the concerns of cooperation and funding, appearing to give a more external perspective. These two modes of expression are centred mainly on the intention to establish a discourse and an approach to the involved phenomena. A third group of entities expresses possibilities (31% of the predicates), mainly in relation to basic and applied 'research', proposing what it can be, can have, or can do, and finally some predicates are direct imperatives (6% of the predicates), what shall or should happen in relation to 'research', related primarily to its funding. A few appearances also reveal an interest for the person marked by the activity, such as the 'researcher' (8 occ.), but it is a broader theme that will be addressed in the exploration of the narrative context.

In sum, it appears that the representation of 'research' is centred on modes of funding that appear in light of a concern for applicability together with a desire for international recognition. The general expressions involve mainly external qualities, such as comparisons and competition between isolated institutions or academic fields, and they identify implied references to mechanics of development, strategies of the government, and the expected quality of 'research'. These structures of meaning are emphasized in a tension regarding applicability, which appears in a proposed dichotomy between basic and applied 'research', with an idealization of the procedures of 'the private sector' and 'the industry'. Applied 'research' is, however, potentially dependent on basic 'research' to reach its potentials, and the strategy resides mainly in a differentiation among disciplines and types of funding. The external approach with an ideal of the private sector with its mechanics and motives is contrasted with an image of the government as involved and which increases research funding.

'Education' between autonomy and regulation of institutions

The 25 predicates for 'education' appear mainly with a neutral affect and a somewhat lesser dominance of the doxa-affirmation than the predicates for 'research', as shown in Table 20. The entity 'education' occurs mainly as a part of the phrase 'institutions for higher education', something that indicates that it is not a direct constitution of meaning of 'education' as such, but rather of an institutional organization. These general observations can be read in light of the external approach revealed in the study of the meaning of 'research', in which the forms of the institutions are the main concern, such as, ideas of autonomy and the regulation of activities. The categorization of the predicates according to their explicit contents reveals three main concerns: in the organization, cooperation, and quality, themes which are each developed in turn.

The predicates for 'education' with a concern for *organization* (36% of the predicates) reveal an approach to 'institutions' for higher education embedded in two movements: on the one hand, concerning 'increased influence' over the organization, also called 'freedom', and, on the other hand, further acts of investigation and measures of control. A third of these predicates refer to *organization* through *descriptions* and a third through attribution of *properties* connected to the expression of a trend described as positive, in a discourse in which the government gives further space in concepts of 'autonomy' and 'freedom'. The last third of the predicates gather *possibilities* which declare a need for control of institutions based on a desire for quality, mainly in international acclamation. There are also a number of implied

assumptions in these predicates, such as the indications of further control of institutions explained by the threats of 'fraud', desires for quality and recognition, and the need to maintain the confidence of the public. These implied dimensions explain the need for external investigations and 'signal' to the institutions that 'quality' is desired. In other words, it appears that the predicates for 'education' concerned with the organization indicate simultaneous intentions to increase both the autonomy and the governance of institutions.

A second category of predicates establishes a concern for *cooperation* (36% of the predicates to 'education') with a higher amount of the combination of imperative and perceptive modalities. These predicates mainly constitute a description of the institutions in which 'education' takes place with an imperative tone (67% of the predicates directed to cooperation), describing institutions that 'should do' a number of things, such as 'playing a leading role in international exchanges' or 'working with an ongoing dialogue with other actors'. This modal categorization indicates a tone in which an approach is given emphasis in prescriptive terms, as a development of quality through increased cooperation. The concern for cooperation also appears in a demand for 'experts from outside', which are directed to be a part of investigations into eventual fraud or lack of quality. These perspectives implicitly establish distinct boundaries between inside and outside, differentiating the intended institutions and forming a sphere which is intended to be governed through stimulus, direction of funding, and imperative directives. The expression of *possibilities* appears in relation to the idea of cooperation, in which the Swedish role in the EU is described as leading. In other words, it appears that the concerns related to the imperatives and implied possibilities indicate a desire to govern institutions of higher education through an identification of a discourse, mainly, a meaning of 'quality' as a product of international cooperation and competition.

A third concern relates to a concept of *quality* (28% of the predicates to 'education'), which is constituted with a majority of per/sig function and doxa-affirmation. The modal categorization indicates a factual tone which is directed primarily towards an attribution of meaning that is similar to the aforementioned concerns for control of fraud and the recognition in an international competition. The central act in the context is described as an intention to signal certain values and approaches with a factual tone that does not invite discussion but which propagates an approach. The act of giving signals is related primarily to the procedures of financing, which appear as attempts by the government to communicate something through the establishment of the institutional landscape. These intentions of communication relate mainly to the act of directing the institutions to the representation of quality in relation to an

ideal of application and to establish the perspective through economic incentives. This approach to quality is expressed with an explicit expectation of measures that stimulate and regulate economic growth. These possibilities are presented in light of an argumentation for strategic focus on profiles and strong fields and were mainly described as *possibilities* (72% of the predicates contain 'quality) as well as *description* (14%) and *imperatives* (14%). In other words, it appears that the concern for the quality of 'education' is directed mainly to the structures through which it is expected to appear, in expression of possibilities relating to different kinds of motivation and organization.

There is a further dimension in which the predicates for 'education' appear, as they relate differently to action when the different actors appear as subjects or objects for the acts. Five general categories emerge as the action is presented with regard for different intentional directions, such as that institutions for higher education are given as an *object for action* (32% of the predicates), that they can *be made to do something* (24% of the predicates), that action is given on the *government's initiative* (16% of the predicates), that the institutions *should do something* (24% of the predicates), or that the they *may do something* (4% of the predicates). The first three groups of predicates form an approach to the institutions as objects for the governments acts, and the two latter as subjects of indicated acts. As the institutions for higher education are identified as actors, they are either ordered, encouraged, or allowed by the government. The acts that are intended are described in the revealed external approach, mainly through a focus on the institutional environment, such as acts of stimulation. In other words, it appears that the approach to action in the predicates for 'education' indicates an emphasis on the acts of the government visualizing institutions as the object for the acts.

In sum, it appears that the meaning of 'education' emerges primarily from a concern for two apparently contradicting organizational movements: one towards autonomy and the other towards regulation. The concern for organization, cooperation, and quality of institutions reveal contradictive intentions to increase autonomy and governance. The action is attributed to the government, and the institutions appear as the objects for the acts. The constitution of meaning reflected in the occurrences of the entities 'research' and 'education' mainly reflect a position towards an institutional organization and a national structure with values related to a belief in the augmented rewards coming of the private ways of funding 'research' as it is directed to an applicability and competitiveness among academic fields, institutions, and nations.

A narrative context of a discourse with arguments for strategic differentiations

The study of the meaning of 'research' and 'education' already provides some aspects of the narrative context, and the proceeding investigation into its structures builds on these indications complemented with the figures of general occurrences of the groups of entities, which can be seen in Table 19. These latter figures indicate an emphasis on action and quality related to the description of an ongoing state as well as national comparisons. The continued investigation takes a point of departure in the most frequently occurring entities, illustrated in Table 21, and proceeds with references to entities that occur less frequently.

Table 21, on modalities and predicates to entities in SS&T

Entity	Belief	Function	Example predicate
To Be (33 occ.)	Imperative (12.12%)	Per/Sig (12.12%)	that research should be ensured that it is increasingly levered to work in dialogue with other actors to formulate new knowledge needs
	Doxa-affirmation (81.82%)	Per. (39.39%)	that Sweden is now improving its research-based innovation system
		Per/Sig (39.39%)	that a requirement is being introduced whereby researchers will be obliged to notify patentable research findings to their institutions
		Sig. (3.03%)	that substantial resources are allocated to research in certain areas after a rigorous evaluation process
	Possibility (6.06%)	Per/Sig (6.06%)	that can be achieved through gifts to research
To Have (20 occ.)	Imperative (5%)	Per/Sig (5%)	that institutions of higher education can have a relative competitive advantage in a research profile that they can be stimulated to identify with a quality based criteria for allocating funding
	Doxa-affirmation (95%)	Per. (55%)	that Sweden has a proud history in the scientific area
		Per/Sig (40%)	that certain areas have been identified as particularly important
To Increase (19 occ.)	Imperative (15.79%)	Per/Sig (15.79%)	that student and teacher exchange should be done as the means for Swedish institutions of higher education to play a leading role in international cooperation
	Doxa-affirmation (84.21%)	Per/Sig (42.11%)	that it is important that the contribution of research does to economic growth and competitiveness
		Per. (42.11%)	that the research has done in its volume
Swedish (16 occ.)	Doxa-affirmation (68.75%)	Per. (25%)	that has research with areas of strength which the Swedish research council has carried out an assessment of
		Per/Sig (43.75%)	that research is which has a number of world class 'peaks'
	Imperative (18.75%)	Per/Sig (12.5%)	that has a research of which the quality must be strengthened
		Per. (6.25%)	that leading-edge research is, as well as European which will be provided a boost
	Possibility (12.5%)	Per. (6.25%)	that an industry is which is investing heavily in certain areas
		Per/Sig (6.25%)	that research is which has a quality that may have declined in relation to that of other countries
Sweden (14 occ.)	Doxa-affirmation (92.86%)	Per. (71.43%)	where resources for research and innovation are being substantially increased
		Per/Sig (21.43%)	to which the Nobel Prize plays an important role in the international perception of a prominent scientific nation
	Possibility (7.15%)	Per/Sig (7.14%)	that has strategic investments that can facilitate the participation of higher education institutions in playing a leading role in EU initiatives
Impor-tant (11 occ.)	Doxa-affirmation (90.91%)	Per/Sig (72.73%)	that some broad areas of research have been identified as
		Per. (18.18%)	that global problems and issues are which research can contribute to finding solutions to
	Imperative (9.09%)	Per/Sig (9.09%)	that knowledge is increasingly in society, which means that higher education institutions should work in dialogue with other actors

Establishment of a discourse on the financial acts of the government

The three most common entities 'to be', 'to have', and 'to increase' illustrated in Table 21 reveal a descriptive tone that appears mainly as arguments for a specified attitude or position. The first two indicate an approach based on the representation of an ongoing condition with a temporal extension or an achieved tense. The entity 'to increase' indicates a similar representation but with an emphasis on the augmentation of certain traits of this ongoing state, related mainly to the financial acts of the government. The predicates for these three entities refer mainly to economy (37.01% of the predicates), basic and applied 'research' (19.35%), comparison and competition (19.35%), and quantities and qualities (16.12%). In other words, it appears that the initial figures indicate a descriptive ambition to establish an approach to a current state which intends to explain the proposition of economic incentives for increased focus on applied dimensions of 'research'. There are a number of other entities that give further emphasis to this approach, representing a governmental discourse that explains its actions, such as 'to develop' (13 occ.), 'to work' (4 occ.), 'to make' (4 occ.), 'to lead' (5 occ.), and 'to allocate' (4 occ.). The entities illustrate the act of the government contained in the intended augmentation, developing a discourse centred on the establishment of an active image of the government. The appearing discourse is based on a description of a mechanic of development in general terms and primarily concern the formation of an institutional system for the realization of 'research' through the allocation of funding. The act of establishing a world view or a discourse appears as a means and an argument for the measures that are taken by the government, of increasing the funding and distributing it based on a logic inspired from the private sector. In other words, it appears that the narrative context is centred on an implied attempt to establish a discourse with a description of the condition that explains governmental acts and values of applicability and ideals of the private sector.

The acts repeatedly imply financial aspects, which a few entities explicitly address, such as 'investment' (15 occ.), 'funding' (14 occ.), and 'financing' (4 occ.). These entities gather predicates in which the financial aspect is presented with regard for its 'strategic' (10 occ.) value in the sense of its origin and intention. The financial approach is, in these entities, given in an active tense, as something that is done, and it is formed with regard to a goal as well as an origin. In this sense, the economical perspective is constituted as an active process implicitly embedded in a temporal aspect, a development in which the government gets involved with a specific approach to 'research'. The strategic aspect appears to relate primarily to the governance of the initial and potentially decisive step of the process, such as a differentiation among

academic fields and economic motives, deciding the consequent outcomes. The strategic aspirations relate to the choice of fields with regard to potential applications and rewards in international comparison, as well as an evaluation of their potential rewards. The formulation of such rewards appears most clearly in a number of entities which are explicitly described as desired (or have desired) ways of action, such as the entities 'innovation' (7 occ.), 'industry' (6 occ.), 'companies' (4 occ.), and 'independent' (4 occ.). These entities form a sphere which gives indications about the intended meaning of the desired applicability of 'research'.

The discourse also implicitly identifies a number of actors, a topic which has appeared in the analysis but was saved to this moment. The reference to subjects of action, or the identification of 'researcher' implicitly establishes a field in which relations and power are identified. The central relation between the government and the 'institution' (13 occ.) is often identical with 'university' (7 occ.) and occasionally the 'university-colleges' (4 occ.), as well as the 'institute' (3 occ.), and has already been explored to some extent. These actors are primarily identified through a discussion of financing, status, and as recipient of 'signals' from the government, an apparently one-way communication. The government as the author of financial acts is also attributed a power as it gives liberties and autonomy to the 'institutions' and indicates a number of values and directions. There is also an implied polemic as the established discourse is argumentative, possibly expecting a resistance in the push for the values of applicability. These aspects also appear in references to wider perspectives and an emerging 'system' (5 occ.) with regard for innovations or applications, as well as 'policy' (5 occ.), 'public' (4 occ.), and 'society' (4 occ.). The discourse on the strategic differentiations implies an explanation for a set of choices that are to be made as the entities 'specialized' (4 occ.) and 'profile' (4 occ.) reveal a positive presentation of the intended act of reducing a propagation of interest explained as a reason for the lack of the desired achievements.

In other words, it appears that the narrative context identifies a discourse which primarily explains the financial acts of the government as it establishes economic motives for increased applicability of the 'research'. The economic incentives for the institutions are explained in the discourse by a desire to increase outcomes and enhance quality through increased emphasis on modes of action from the private sphere, innovativeness, and a combination of increased freedom and governance.

A national context and aspirations for a development

The initial study of the modality of affect in the predicates for 'research' revealed that the few expressions of affect relate to a presentation of the state in which the Swedish

environment and development is perceived to be. These expressions of affect indicate that the values that appear are related to a concept of a Swedish context. There are a number of entities that are related to this field of concern, with references to qualities, mainly with regard for a national context, for example, the entities 'Swedish' and 'Sweden' as indicated in Table 21. The 30 predicates for the two entities mainly contain qualifications used to described the intended system, primarily through comparison and competition with other countries (33.33% of the predicates), economic aspects (30%), in relation to basic and applied 'research' (13.33%), management and quality (13.33), and history (3%). These figures reveal an approach to an institutional field which is formed and characterized by national boundaries and the consequent financial context for the realization of 'research' and the dependent distribution of status.

Similar concerns appear in the expressions related to several other entities, such as 'base' (10 occ.), 'international' (8 occ.), 'country' (8 occ.), 'world' (7 occ.), 'nation' (4 occ.), and 'European' (4 occ.). The entities mainly develop the references into an image of a landscape shaped by national systems and values which gives different conditions for the 'research'. This is perhaps the most acutely appearing in the predicates for the entity 'areas' (16 occ.), which both relates to academic disciplines and to geographic boundaries in similar terms. 'Swedish research' is intended to be enhanced in relation to the perception of a wider 'world' or an 'international competition' that sets a scale of success and markers for the evaluation of quality. These entities appear to largely embody a representation of a 'state' which is identified with a country and a system in which 'research' is to be potentially 'enhanced'. The concern that appears in the entity 'international' also relates to the perspective of a positive augmentation of an existing state as 'cooperation' (7 occ.) is given as a path to the development of quality. The parallel references to competition and cooperation offer a somewhat ambiguous meaning as 'country' and 'nation' both are comparative references indicating success and partners with whom mutual development is attractive.

The entity 'important' signals explicit expression of values and appears to give a further involved dimension of the narrative, but the predicates are general in their expression. They are related mainly to the descriptive tendencies of an establishment of a world-view. The most important aspect relates to the establishment of an approach to basic and applied research (45% of the predicates). Some other entities give further attention to the values that underpin the approaches and more or less implicitly reveal the causes or explanations for the propositions such as 'quality' (9 occ.), 'strength' (9 occ.), 'number' (8 occ.), 'substantial' (4 occ.), and 'great' (4 occ.). Some entities reveal a concern to give arguments for the approach with regard to the

origin of the development that is intended to be encouraged, such as 'history' (5 occ.), 'from' (5 occ.), and 'level' (4 occ.); all more or less implicitly establish a retrospective approach that is intended to explain the proposed attitudes. Two entities indicate the imperative tone of the document, revealing the more governing intentions in the entities: 'should' (6 occ.) and 'will' (6 occ.), which are focused on the intended development.

In sum, the narrative context is given with an emphasis on a differentiation among systems according to national boundaries as they shape modes of financing. The establishment of a discourse is centred on a differentiation among concern for the continued augmentation of an already existing state, something that establishes an approach to a development that is intended to be enhanced by the proposed acts of financing. The approach is constituted in a representation of a process beginning in the act of financing, which directs and signals values to the institutions that perform the 'research' with an applicability in mind and thus reach an international recognition.

Summary: Funding, strategy and differentiation in SS&T

The analysis reveals representations of 'research' and 'education' that are centred in the institutional environments in which they take place, such as the origins, strategies, and quantities of the funding. The approach is centred on the acts of the government, even though the explicit ideals relate to the forms of the private sphere, with intentions to both present the government as active and to establish a belief in the dynamics of a free market to regulate and enhance the academic achievement and innovations. The meaning of 'research' and 'education' thus appears in a narrative context shaped by governmental acts such as funding or as giving freedom, stimulation, or directives. The most dominant concern relates to the establishment of economic incentives for the institutions, with respect for expected outcomes. A main horizon emerges, in other words, in relation to a concern for **funding** as an act of the government for the initiation and governance of 'research' and 'education'.

In the horizon of funding, there is an implied allocation of the initiative to the government as it indicates an act that is intended to initiate and direct a motion towards desired outcomes. The concerns of the governmental acts are centred on an intention to appoint appropriate economic incentives to increase the outcomes, which are expressed both as material growth and international recognition. The act of funding indicates a concern for an enhancement, or stimulation of a quality, which is understood mainly as applicability and specialization and which appears in light of a

comparative and competitive approach. The government and the institutions are thus presented in the description of the acts of strengthening and the stated intention to increase the position and the competitiveness of the nation. The establishment of the image of the government is, in other words, based on the approach it takes to produce the desired outcomes. It is thus a **horizon of strategy** that appears in which the acts of the government are given in a comparative evaluation in relation to other nations.

The narrative appears to be intent on the establishment of a discourse, in which approaches to quality, and to the evaluation of the acts of the government are implied. The image of a process appears with a concern for the direction in expressions of possibilities, which in the imperative tone are based on the descriptions and properties. The idea of quality that appears in light of a competition, is a comparative concept, and that intends towards a desired applicability primarily signifies a contribution of an outcome external to itself. The resulting strategic action is, in this perspective, the identification of 'areas' in which the development happens in consequence of their cooperation and competition. Academic fields, institutions, and nations are thus represented in the light of distinct boundaries and as separated entities that both cooperate and compete. In other words, the act behind the horizon of funding and strategy is established in a discourse centred on a horizon of a **differentiation** among academic fields, institutions, and nations.

Therefore, it appears that the general constitution of meaning in SS&T is centred on the concern for the **funding** of 'research' in a **strategy** centred on the **differentiation** among fields and nations.

The Chinese Law on Higher Education (CHE)

The initial analysis of the central phenomena in CHE mainly explores the meaning of 'education' and 'research' as well as the marginal references to 'science' and 'technology'. The following exploration into the narrative context is focused on the appearance of the 'institution', a 'shall', and the 'state', followed by concluding summary. A first impression is given in Table 22.

Table 22, on the most common entities and modalities in CHE

Most common entities (tot.1797)		**Belief (%)**	**Function (%)**
Higher education (158 occ.)	Qualification (20 occ.)	Imperative (70.95%)	Perceptive (89.21%)
Institution (120 occ.)	Academic (18 occ.)	Doxa-affirmation (28.26%)	Signitive (2.49%)
Shall (85 occ.)	State Council (17 occ.)	Doxa-negation (0.83%)	Per/Sig (8.30%)
education (60 occ.)	Law (16 occ.)		
research (32 occ.)	Level (15 Occ.)	**Affect (%)**	**Groups of entities (%)**
State (30 occ.)	Department (15 Occ.)	Neutral (95.85%)	Action (21.18%)

To Administer (25 occ.)	Teacher (15 Occ.)	Positive-Prospective (3.73%)	Institution (17.35%)
Student (24 occ.)	To Be (14 Occ.)	Negative-Prospective (0.41%)	Central entities (16.02%)
Teaching (24 occ.)	People (14 Occ.)		Quality (15.74%)
Other (23 occ.)	Work (13 Occ.)		Technical (12.31%)
They (23 occ.)	Accordance (13 Occ.)		Subjects (9.59%)
Specialized (20 occ.)	Organization (12 Occ.)		Economy (1.39%)

The figures presented in Table 22 reveal the dominance of an imperative belief, a perceptive function, and a neutral affect which indicates a tone that is authoritative and factual. The narrative appears to intend to regulate the relations between organizational entities such as the 'institution' and the 'state', and it is directed towards actions, as indicated in the occurrences of the groups of entities in which acts such as 'to administer' and 'teaching' are dominant. The narrative is concentrated on a few central entities, mainly related to the concept of 'education', which is also explained by the procedure of sorting the MU's, as indicated in the chapter of method.

The categorization of the predicates according to concern reveals the central attention given to the *organization* (32.37% of the predicates) and the similar concern for the relation between *the institution and the government* (30.32%). There is also some concern for the 'teacher' and 'student' (18.51%), *needs and prerequisites* (8.66%), the *economy* (5.10%), and *titles and levels* (5.04%). The forms in which the predicates were expressed were concentrated on imperatives (48.28% of the predicates), descriptive tendencies (29.60%), the allocation of properties (12.69%), and propositions of possibilities (9.42%). In other words, it appears that the narrative relates mainly to an organization involving the relation between institutions and the government in expressions of imperatives.

Central phenomena that appear in a regulation of academic life-spans

Table 23, on modalities and predicates to the central entities in CHE

Entity	Belief	Function	Example predicate
education (Occ.201)	Imperative (71.14%)	Perceptive (62.69%)	that shall be conducted by higher education institutions and other higher education organizations
		Signitive (0.50%)	That students does, and that shall become builders and successors for the socialist cause
		Per/Sig (7.96%)	that marks institutions in which teachers should have the necessary competence
	Doxa-affirmation (28.36%)	Perceptive (24.87%)	that has a structure that can be optimized as well as the distribution of resources
		Signitive (1.49%)	that students are receiving for non-academic qualifications by respective institutions or other organizations
		Per/Sig (1.99%)	that students are receiving for non-academic qualifications and shall be granted appropriate diplomas
	Doxa-neg. (0.50%)	Perceptive (0.50%)	that marks institutions that may not misappropriate the funds earmarked for teaching and research
research (occ.32)	Imperative (72.41%)	Perceptive (72.41%)	that the higher education institutions shall act on their own to manage

	Doxa-aff. (24.14%)	Perceptive (24.14%)	that has material and equipment that the state adopts preferential policies with regard to
	Doxa-neg. (3.45%)	Perceptive (3.45%)	that funds can be earmarked for as well as teaching which no higher education institution may misappropriate

'Education' as organized academic lifespans encouraged by the government

Among the predicates for the entities 'education' and 'higher education', three main concerns emerge as they are categorized according to their similar content: first, the *state*, with a formal description of the roles and prescriptions of a law; secondly, the *organization*, describing the institutional structures and functions; and thirdly, the *teacher/student,* describing the roles and qualifications of these main characters. Two quantitatively less represented concerns also appear, in which *need* and *economy* indicate interesting similarities and differences between the concerns. The two smaller themes are specially interesting as they contain the only five predicates that appeared with an affective load, all of which were positive-prospective. Four of these five predicates were in imperative belief and perceptive function and were related to an expected or encouraged development in light of acts of the government to guarantee or encourage investments and funding. The fifth predicate was related to the sacrifice of a person going to the poorer regions of the country. The five topics are explored each in turn in the following analysis.

The first and most dominant concern relates to the *state* (31% of the predicates for 'education'), and it can be divided in three major intentions: *state prescriptions*, the *role of institutions,* and the *hierarchy of departments*. There were also three minor groups of intentions which are explored thereafter. The references to *state prescriptions* are concentrated on a formal establishment of the general validity of the law, to the 'planning' and the 'principles' of 'education' as well as to various groups of actors, such as the students, or to people within the 'territory of the PRC'. The formal emphasis on the establishment of the validity of the law and its prescriptions appears mainly to be a way to establish and regulate the authority of the state as regards the institutions of 'higher education' and 'research'. The regulation of the *role of the institutions* primarily reflected concerns for status, duties, and expectations on the institutions as well as their answerability to the state and some consecutive concerns of internal organization, such as the accountability of their presidents. The differentiation and regulation of the administrative *hierarchy of departments* focuses on the State Council and the administration of institutions throughout the country with a further concern for the establishment of the authority of the state. In other words, there appears to be a main concern for the regulative state that establishes order and a role for the institution through a hierarchy of departments.

The three minor intentions in the predicates relating to the state direct attention to *encouragements,* descriptions of the *economy*, and the *establishment of new institutions*. The first of these minor intentions mainly establishes the positive approach of the government to institutions, scholarships, collaboration, and investments by various actors. The prescription to encourage 'education' presupposes that it is an ongoing phenomenon, and it holds an implicit expectation of an initiation from the institutions, which appears to indicate an inclusion of these initiatives within the formal frameworks of the governments activities. This implicit expectation of initiatives of the institutions sheds further light on the previous main concerns, in which the relationship between the state and the institutions is regulated. The validity of the law established in the prescriptions appears primarily to have the ambition to regulate the initiatives and the action taken by the institutions and the departments. The concern for the economy is centred on 'norms of expenditures' as well as the state economy with the concern for student, such as in tuition fees, loans, and grants, in which general indications are given. Finally, there are some details on the establishment of a new institution, which can be done by various actors but is indicated to be in accordance with the state intentions.

The main form of expression in the predicates with a concern for the state is in *descriptions* (56% of the predicates). This indicates that the constitution of meaning of the *state* reveals a tone directed towards the establishment of 'how it is', which in the situation of the legal document actually implies an imperative, a 'should', but with a presumption that the imperative is already followed and can in some ways be taken a priori, such as 'the state runs and supports higher education in various ways'. The implied imperatives in the descriptive tone were both directed towards the institutions, which were indicated to be subordinated to the state and its agencies with descriptive dictates. The second most dominant form of expression is the imperative tone (36% of the predicates with a concern for the state), which did not appear to relate to any visibly different concern than the implicit imperatives, but is concerned with the institutions, the state, and their mutual relations. The meaning of 'education' is thus constituted with an emphasis on formal aspects of regulation, where the state is described as an actor in reaction to the initiatives of the institutions that establish its authority and a hierarchy through the law, and which appears to want to amplify the initiatives of the institutions. The concern for the state also contains some expressions of intents to attribute properties (6%) or to indicate possibilities (2%).

The second biggest concern related to *organization* (30% of the predicates for 'education'), and it appeared in a number of predicates with a variety of subordinate concerns, which can be classified in four general categories: the *educational life-span*, the *legal person* of the institution, *functions*, and *development*. The concept of an *educational life-span* does not appear explicitly in the narrative itself, but it gathers the major concerns appearing in the discourse on an organization as it stretches through a procedure that is extended over time and through appointed phases. This life-span is initiated in the application and goes through an admission through entrance exams, and it continues through qualifications for certificates, approval of examination, regulations of the length of the courses, emphasis placed on a differentiation between full-time and part-time classes, and special and regular courses. This formulation establishes an approach to 'higher education', as 'conducted on the bases of completion of earlier education', which constitutes its meaning as a process built in a succession of elements. The further predicates in the concern for *organization* gather a formal description of the institution as a *legal person* in which it is subject to the organization of departments, their supervision, funding, and regulations. This develops the meaning of 'education' presented in the concern for the *state* in the sense that it identifies the institution to which the state relates. The focus on functions of the organization and the institution for higher education and research appears primarily in the modality of properties, attributing different roles, statuses, and responsibilities to the internal organization of the institution. The concern for development takes mainly a political perspective on the effects of education on the society and the 'socialist market economy' which is expected to develop and is referred to as a contribution by the involved people to a greater collective. The concern for the organization appeared mainly in statements of imperatives (40%), attributions of properties (31%), descriptions (27%), and the mentioning of possibilities (2%).

The concern for the *teachers and students* (26% of the predicates for 'education') is given mainly in descriptions of expected qualifications regarding employment/admission and promotions /graduation. The focus is quantitatively more dominant in concerns for 'teachers' than 'students' (62% respective 38% of the predicates); it is focused on the institutions, regulating their behaviour towards 'the people', mainly concerning the establishment of criteria in which the knowledge and abilities of the person is determined, which is primarily formal, but given in recommendations for disciplinary committees. The concern for the 'teacher's' qualifications held a few different directions, but it was mainly focused on the demands in relation to the appointment, status, and promotion of staff, while the 'students' qualifications held concerns of a wider nature, such as the concern for their competence and aspects of development of the country in a politically loaded discourse on the 'socialist modernization'. The imperative tone (51% of the predicates

concerned with teachers and students) is directed mainly to the institutions and turns the students into the objects of the law, those to whom education and qualifications shall be given, that they 'shall enrol students offering the necessary education'. The institutions are, in other words, instructed to let the students proceed in an educational lifespan. The concern for teachers and students also appeared as descriptions (23%), attribution of properties (17%), and statement of possibilities (9%). In sum, it appears that the concern for teachers and students mainly appears as imperatives in which the government gets involved in the appointment of qualifications along the educational lifespan.

The concerns for *need* (7% of the predicates for 'education') and *economy* (6%) broadens the perspective with a focus on the lives of students and the economy of the state. As indicated initially, the theme contains the only categorized expressions of affect, indicating a specific importance, which is related to the investments in different approaches. The two concerns are common in their general formulations, such as of 'norms of expenditures', which are dominant, implying the need for a general 'norm' without further indications on what this could mean. When the references to need are given in an imperative tone, they relate primarily to 'society' and 'development' in politically loaded terms, and in the tone of possibilities, they mainly concern qualifications and groups of people in special need. The concern for economy relates mainly to portions and 'norms' of expenditures in which 'sponsors' are regulated according to what appears to be concerned mainly with principles of stability, preventing withdrawal of funds and prescribing assurances for stability. The concerns for needs are, however, much more prone to be mentioned as possibilities (53% of the predicates for need) and imperatives (47% of predicates for need). The expressions of economy mentioned as imperatives (55% of the predicates for economy) and expressions of properties (36% of the predicates for economy) is roughly equal to the percentage of needs expressed as possibilities and imperatives; However, the concern for economy comes in fewer expressions of possibilities (9% of the predicates for economy). In other words, it appears that there are dimensions of need and economy that appear in the meaning of 'education' in a general sense with a reference to norms and their consequent demands.

A general observation of the occurrence of predicates for 'education' reveals that they appear mainly in direct imperatives (43% of all the predicates for 'education') and that it is an involvement of the government that is dominating most of the concerns. There are also aspects of descriptions (31% of the predicates) that often contain an implied imperative, in an indication of how something is, with a measure of authority, in relation to the realization of the academic concerns. The attribution of properties (18%) stating what something has, appear mainly in a concern for

organization and the few occurrences of possibilities (8%) in a concern for *need*. In other words, it appears that the narrative is shaped mainly with an imperative regarding the involvement of the state.

In sum, it appears that the meaning of 'education' in CHE mainly indicates an involvement of the government in the ways that the institutions organize the academic lifespan of their students and personnel. The initiative is attributed mainly to the institutions, even though the reacting position of the government is ascribed a formalizing importance through prescriptions in which the state is supposed to encourage the initiatives. The prescriptions also relate to the way involved persons should be met, with a special regard for a formal approach to the qualifications and the succession of elements that reveal a concern for an 'academic lifespan'. The approach to the academic lifespan appears essential to the meaning of 'education' as a regulation of the path of a student from enrolment to examination and of the staff from employment to promotion. The organizational development and the personal competences relate to a concept of development formulated by a state which aspires to encourage the initiatives of the institutions.

'Research' in a regulated freedom of a juridical person

The meaning of 'research' is studied in 32 predicates with a main concern for the *organization*, *titles and levels*, and *prerequisites.* The predicates in which 'research' appears continues to reveal a formal approach to the relational structures between the institutions and the state. The predicates gathered in the first emerging concern, for the *organization* (59% of the predicates for 'research') are directed primarily towards the approval given by the state to the institutions, asserting their freedom as well as giving them provisions to abide by certain indicated laws. These prescriptions are expressed as imperatives that concerned, for example, the evaluation of institutions by committees, a demand for 'higher quality', or a need for cooperation with other actors, possibly from other countries. These predicates for 'research' reveal an approach based in the regulation of the relation between the state and 'institutions' that takes place in a tension between a freedom and decrees intruding on this same prescribed freedom.

The dominance of the *imperative* tone (47% of the predicates for 'research' concerned with organization) with a concern for what the state shall do indicates the regulatory ambition of the law to control, an ambition that appears with an apparent concern for quality, such as when committees are demanded within disciplines, but it also involves economy and 'funds'. The descriptive (29%) tone concerns the independence or 'freedom' of the institutions regarding the state as well as the state's

encouragement to collaborate with other actors. The predicates are directed towards the description of a possibility (24%) and mainly emphasize a potential approval of the institutions from the state, a perspective in which they are put in dependency in order to be able to realize the 'education' and 'research'. Thus, the relation between the institutions and the state appears to be regulated in an imperative tone, to have a freedom established in a descriptive tone, and to have a dependency on the state described in a tone of possibility.

The predicates gathered in a concern for *titles and levels* (24% of the predicates for 'research') primarily concern the regulation of use of titles in relation to 'competence' and 'experience', but they are also related to issues of 'need'. Most of the predicates contained an imperative (71% of the predicates concerned with titles/levels) developing prescriptions from the state to institutions concerning an appropriate balance between titles and competence and experience. A similar attitude is related to the name of the institution, which demands to be matched to the level of research, teaching, body of students, and administrative level of the institution. The rest of the predicates contain a description (29%) concerning the responsibilities, of various nature, of the president – among others the 'ideological and moral education'. The concern reveals an approach to education that is centred on a tension over how the formal status and the informal competence, such as the titles, are regulated, as well as the moral responsibility of the formal position of the president of an institution for higher education.

Some predicates also contain a concern for *prerequisites* (17% of the predicates for 'research'), which primarily concerned 'conditions' for the teachers to be able to perform research and the 'abilities' of the students. The conditions are referred to mainly in a general sense, only mentioning 'equipment' and 'material' once, to which 'preferential policies' are commended. There are also predicates which indicate that the skill of conducting 'research' is a prerequisite that is demanded of the students, which is repeatedly asked for with the complementary skill of doing 'practical work'. This duality between research and practical skills gives an indication that the research is thought of as theoretical, and not seen primarily as innovative techniques or the development of something 'practical'. The modality of possibility concerned 'research' as creative, which thus appears as a potential quality, while the focus on a descriptive tone concerned the freedom of the institutions, describing it in a way that presupposes the realization of the ideals of freedom from the state. The predicates appear mainly with an imperative (60% of the predicates concerned with prerequisites), but occurrences also appear with a more descriptive tone (20%) and the expression of a possibility (20%).

In sum, the meaning of 'research' appears in CHE through descriptions of the organizational relation between the state and institutions and the tension between regulated freedom and governmental directives. The expression of directives is vague at times due to the descriptive formulations that appear to imply imperatives, in which duties and expectations of the actors are appointed. Contact with the persons involved mainly concerned prerequisites and the titles and levels that could be expected.

A narrative context with a government encouraging initiatives from institutions

The analysis of the narrative context of CHE reflects on 411 entities in a total of 1,554 occurrences, which mainly reveal addressed aspects beyond the phenomena of interest. The introduction to the narrative indicated a dominance of entities that refer to action and different institutions that form both the governmental and academic organization. The analysis is, therefore, focused on the relation between the institution and the state as it is expressed in imperatives, as seen in Table 24:

Table 24, on modalities and predicates to entities in CHE

Entity	Belief	Example predicate
Institution (120 occ.)	Imperative (81.67%)	in which the appointment of teachers of higher education shall be based on the principle of equality and voluntariness on both sides
	Doxa-affirmation (16.67%)	that are of higher education and that the state encourages collaboration with each other and with research institutes
	Doxa-negation (1.67%)	that is of higher education and that none may misappropriate the funds earmarked for teaching and research
Shall (85 occ.)	Imperative (92.94%)	that higher-education institutions shall be oriented to the needs of society and shall run the schools on their own in accordance with law and administer democratic management
	Doxa-affirmation (7,06%)	that literary and artistic creation and other cultural activities in higher-education institutions shall be conducted in compliance with the law
State (30 occ.)	Imperative (63.33%)	that protects the lawful rights and interests of teachers and other educational workers of higher-education institutions and takes measures to improve their working and living conditions
	Doxa-affirmation (36.67%)	that applies a system of higher education examinations for self-taught people

A government that reacts to institutional initiatives

The meaning intended with the entity 'institution' already appeared in both the analysis of the meaning of 'education' and 'research', but here it appears in its own regard in a group of entities such as the 'university' or similar 'institute' (6 occ.). The categorization of the predicates for 'institution' mainly reveals a concern for its *organization*, its relation to the *government,* and to the *teachers and students*. These three themes have already been explored to some extent, but as the meaning of the 'institution' is specifically analysed, further light is shed on the representation of the

government which is given an explicitly active role; however, the expressions appear with an implied contrast as the acts are formed as an involvement in the proceeding academic life driven on the initiative of the 'institution'. The three categories of predicates are each explored and related to further entities.

The explicit references to an 'organization' (12 occ.) are relatively rare in relation to how important the theme is in the discourse, both in general in the narrative and to the meaning of 'institution' (29.17% of the predicates relating to 'institution', or 35 unique entries). The meaning of 'institution' in relation to the concern for *organization* mainly appears in practical prescriptions, such as in directives on the succession of elements of 'education'. The main concern in these predicates is the establishment and regulation of the relation between the government and the institution as it takes shape in practical and ongoing academic life. The concrete prescriptions that relate to the structures of academic life can be seen further in some entities, such as 'specialized' (20 occ.), 'qualification' (20 occ.), 'accordance' (13 occ.), 'requirement' (9 occ.), 'condition' (8 occ.), 'regulation' (7 occ.), 'relevant' (6 occ.), 'professional' (5 occ.), 'appropriate' (4 occ.), and 'respective' (4 occ.). These entities shed light on the discourse concerning ways of organizing and emerge with a focus on relative and relational norms, both between objects and subjects, and the attribution of evaluative epithets. In this light, the evaluative tone has to be seen in the way that, for example, 'teachers' or certain attributes of institutional and academic life relate to a sphere of norms described in vague references to general norms. The meaning of 'institution' can, in other words, be said to relate primarily to a number of prescriptions to its organization with regard for and involvement of the government.

The meaning of 'institution' in the predicates that relate to *government* (28.33% of the predicates for 'institution') appear in explicit references to the concrete task of encouraging (20.59% of the predicates relating to the government) and to the general relation between the two actors (another 32.35% of the predicates). In these two categories of predicates, the main picture of the interaction appears in the act of the government encouraging the activities of the institutions, which is implied in many of the themes. The act of encouragement indicates the involvement of the government already in proceeding acts and implies that the institutions are expected to take the first step, with an ownership of the initiative. The references to the government in the predicates for 'institution' also appear in acts of prescribing (17.65% of the predicates), for the regulation of departments (14.71% of the predicates), and as financial perspectives (14.71% of the predicates), which emphasizes the representations of a government that gets involved in the proceedings of the institutions through positively expressed acts. In other words, it appears that the representation of the 'institution' is rather homogeneous since it is given in relation to

a government that is regulated to encourage it, as it is implicitly attributed in the initiative.

The predicates for 'institution' that relate mainly to the concern for teachers and students (24.17% of the predicates for 'institution') indicate imperative prescriptions regarding their proceeding in the educational lifespan. This constitution of meaning can also be studied in a number of other entities, such as 'student' (24 occ.) and 'teacher' (15 occ.), which identify the actors through a localization in the different phases of the academic life-span. The ways that the organization of the institution is addressed mainly frame regulations, expressed as imperatives directed towards the establishment of vaguely formulated norms regarding the involved 'students' and 'teachers'. In 10 of the 29 predicates for the 'institution' relating to these two actors, the main theme concerns the regulation of the appointment of staff and students, and 19 of the predicates relate to the requirements on the institutions established by the government, which imposes provisions and demands that the institutions are meant to relay to the staff and students. In other words, it appears that the meaning of 'institution' that appears in relation to the actors 'students' and 'teachers' mainly concerns the directions for the requirements and appointments through which the academic life proceeds.

In sum, it appears that the narrative context in CHE is centred mainly on the 'institution' as an organization that takes initiatives which the government regulates and encourages, thus getting involved with the institution. The directives to institutions consist mainly of relational norms that intend to regulate the academic lifespan in a succession of elements of the teachers and students. There also appears to be a tension between the implicit dimensions and the concrete directives regulated in the acts of the government.

Imperatives forming a governmental involvement in academic life

The expressions related to the entity 'state' and the 'government' (8 occ.), illustrated in Table 24, gather predicates which establish a perspective that mainly concerns the governmental structure and its acts (63.33% of the predicates concerned with the 'state'), but, to some extent, they are also concern with *organization* (16.67%). The assembled picture of the 'government' in the predicates for these entities appears as an actor that issues regulations and decrees directed towards the 'institution' but also presupposes acts and procedures initiated by the institution. Some further entities with a similar concern expand the field, for example, 'state council' (17 occ.), 'system'

(11 occ.), 'law' (16 occ.), and 'management' (3 occ.), in which the picture of the government appears as a stratified whole. The concern is often also addressed as fragments of the whole, such as in the entities 'department' (15 occ.) and 'level' (15 occ.). In these structures of meaning, the 'government' appears as a regulator concerned with the establishment of authority and the positions of different departments and institutions. The contents of the regulations are, however, directed towards ways of relating to the initiatives of the institutions. In other words, it appears that the meaning of 'government' appears mainly in an imperative tone directed towards the regulation of institutional initiatives and to the structure of the departments.

Beside the appearance of the imperative tone as a form in which the predicates are categorized, it also appears explicitly in the occurrences of the entity 'shall', as represented in Table 24. It gathers a number of imperatives directed towards the concern for the *organization* (31.76%), *teacher and student* (28.24%), and *government* (23.53%), in which aspects of the three spheres of concerns are governed. The imperative intention is directed mainly towards the hierarchy of actors in the departments, institutions, and people involved. The establishment of the institutionalized relations between departments and individuals indicates a concern for the official affirmation of a stratified community in which the status and the hierarchies are related to governmental actions. The imperative implied in the entity 'shall' can also be perceived in the entity 'may' (10 occ.), although with a less commanding tone, but which also allocates the act to the government.

The entities referring to acts form the largest group considering occurrences, as can be seen in Table 22, mainly represented by 'to administer' (25 occ.) and 'teaching'. This group appears in a special light after the revealed central role of the acts of the government, which are explicitly targeted, for example, in the entities 'to encourage' (7 occ.) and 'to ensure' (7 occ.). In more general terms, it can be related to a number of other acts, such as 'establishment' (16 occ.), 'conduct' (17 occ.), and 'approval' (12 occ.). There is an implied prospective tone in most of the predicates and entities that carry the imperative intention, and it is explicitly stated in the entities 'to develop' (11 occ.) and 'to undertake' (11 occ.). The acts all appear in the tension between an initiative that predates governmental involvement and the establishment of its proactive status. A number of entities gather a further general approach to actions, such as 'to be' (14 occ.), 'to work' (13 occ.), 'to have' (11 occ.), 'to run' (10 occ.), 'to train' (9 occ.), 'to provide' (8 occ.), 'to offer' (8 occ.), 'to take' (7 occ.), and 'to support' (6 occ.). Most of the occurrences are concerned with the establishment of the regulative acts of government but are directed towards the realized acts of institutions and their personnel. The regulative acts refer to spectra of values based on

a variations in the theme 'encouragement', as well as distinctions between awards and punishments. This general tone also can be seen in the different ways to relate to people or groups, such as in the entities 'other' (23 occ.), 'they' (23 occ.), 'people' (14 occ.), 'society' (6 occ.), and 'public' (3 occ.). The general approach mainly constitutes members of the Chinese nation, institutions, or appointed groups as objects for the acts of government. The general approach is related to the formulation of a law and leaves a rather broad field open for different interpretations, especially regarding the vague references to norms.

The specifically academic qualities of the initiatives in which the government is involved appear in a number of entities that establish a sphere of reference that characterizes the life that proceeds through the academic lifespan. The approach identifies the institutions and the academic life through expressions of acts and qualities, such as 'teaching' (24 occ.), 'academic' (18 occ.), 'course' (12 occ.), 'graduate' (10 occ.), 'subject' (9 occ.), and 'president' (8 occ.). The qualities and acts that are intended appear as a continuous procedure in which the act of involvement is not presented as interference but as measures to guarantee quality and prevent fraud. The specifically academic nature of the intended sphere indicates, however, an involvement with an entity with certain traits of individuality, mainly shaped by the educational life span with expressions related to an everyday academic life. The discourse on these characteristics implicitly establishes an acknowledgement of the interference in the process that they constitute. In a final note, it appears that the competing concerns in the analysis of the meaning of 'education' pointed at a special role of the references to needs and economy, and these concerns also appear in the occurrences of entities such as 'funds' (10 occ.), 'service' (8 occ.), 'need' (7 occ.), 'purpose' (7 occ.), and 'activity' (7 occ.). In these entities, it appears that a general reference to the material or practical dimensions of the academic life take a marginal role in a number of occurrences but are essential to the representation of the involved governance of the state. It appears that the academic qualities in which the acts intend to get involved with still are established in a structure of the organization that is emphasized as material and practical.

In sum, it appears that the narrative context in CHE mainly appears in the emphasis on an imperative expression directed towards the manner of government's involvement in the academic processes and the educational lifespan. The acts of regulation that are intended frame the institutional initiatives as ongoing processes in which government gets involved through acts described in a discourse on the attribution of initiative, a concern for quality, and the punishment of fraud.

Summary: Initiatives, juridical persons, and academic lifespan in CHE

The primary concern in CHE appears in the ambition to regulate the relation between the state and institutions, and this implies a tension with a government that gets involved in an ongoing process of academic life. The explicit discourse is directed towards the ways that government is intended to synchronise, guide, or govern processes that are established implicitly as originating in the initiatives of the institutions. The relation between the institutions and the state is regulated in an imperative tone, has a freedom established in a descriptive tone, and a dependency on the state described in a tone of possibility. The discourse is focused on governmental regulation, which is presented on initiatives ascribed to the institution as either encouragement or stimulation. This approach attributes the power for action to institutions and establishes them as juridical persons with the initiative. The narrative aims at regulating of the state's reaction to the initiatives in an encouragement that relates to an implied actor that realizes a context in which the main concern appears. It is, in other words, a relational and regulative discourse that mainly takes shape around a discussion centred on a horizon of **initiatives**.

The horizon of initiatives reveals an approach to institutions through the presentation of governmental regulative acts, indicated primarily as encouragement or otherwise positive expressions of positive acts in different ways. There is a tension that arises in the seemingly reactionary nature of government, in which government is presented as active, but the actual initiative is allocated to the institution, leaving certain blanks indicating a certain amount of individuality as well as power to act. There are propositions which explicitly relate to freedom, as well as evaluation and control of fraud, but they appear to indicate a meaning in the proposed encouragement which is vague and open for interpretation. The proposed responsibility and the measures of control implied appear to be something that makes the institution understandable in a horizon of a **juridical person.**

The two revealed horizons mainly portray the interaction between institutions and the state. The nature of the initiatives and the function of the juridical person are mainly directed to the organization of an ongoing process, related primarily to the involved persons. The objects of the law, mainly teachers and students, are addressed regarding their position in a proceeding set of elements, which also forms a setting for education and research. There are also wider political formulations that address a general public with regard to, for example, a socialist development of society, but the central object of the law appears in the involvement with academic procedures. The ambition to regulate institutions involve discourses on quality and potential fraud.

The description of the people involved is mainly concerned with the promotion and titles for the staff and prerequisites for and examination of the students. These dimensions indicate a general concern for the involvement of the government in the institutional organization, which mainly takes shape in a horizon of an **academic lifespan.**

In other words, it appears that the narrative of CHE reveals a constitution of meaning that is centred on the governmental regulation of the **initiative** of the institution as a **juridical person** which organizes an **academic lifespan** for teachers and students.

The Swedish Law on Higher Education (SHE)

The analysis of the narrative of SHE proceeds according to the established form, with an initial introduction and an analysis of the main phenomena of interest, which in this case only extends to 'education' and 'research' as there are hardly any references to 'science' or 'technology'. The following exploration investigates the narrative context, and the analysis is concluded with a summary. A first impression is given in Table 25:

Table 25, on the most common entities and modalities in SHE

Most common entities (tot.898)		**Belief (%)**	**Affect (%)**
Higher education (65 occ.)	Their (12 occ.)	Imperative (52.17%)	Neutral (100%)
Institution (57 occ.)	Government (11 occ.)	Doxa-affirmation (34.78%)	
Shall (35 occ.)	Decide (10 occ.)	Doxa-negation (1.74%)	**Groups of entities**
Research (24 occ.)	Requirement (9 occ.)	Possibility (11.30%)	Institution (25.84%)
May (19 occ.)	Organization (8 Occ.)		Action (18.6%)
Programme (18 occ.)	Award (8 Occ.)	**Function (%)**	Technical (14.7%)
Develop (16 occ.)	Board (8 Occ.)	Perceptive (60.87%)	Central entities (13.25%)
Student (14 occ.)	Education (7 Occ.)	Per/Sig (39.13%)	Quality (9.69%)
Study (13 occ.)	Be (7 Occ.)		Subject (5.9%)
Courses (13 occ.)	Specialized (7 Occ.)		Economy (1.56%)

Table 25 reveals a main concern for the 'institutions' of 'higher education' with a dominance of an imperative belief and a perceptive function, as well as a completely neutral affect. These statistics appear to emphasize a regulative function of the narrative and the concern for the institutional organization of 'education' and 'research'. A focus on 'education' rather than 'research', 'science', or 'technology' is clearly established and indicates a focused concern that seldom deviates into neighbouring matters.

The general figures on the narrative reveal a concern for the 'institution' of higher education, which besides gathering the most frequently occurring group of entities is

also a theme that is involved in 81% of the various categorizations of predicates. It appears as a broad theme directed towards the institutional establishment of the relations between actors, such as government, students, and teachers. The general categorization of the predicates according to their major concern also reveals a focus on the roles of the participants: students (20.94% of all the predicates), teachers (11.02%), and government (15.36%). The concern for their relationships are indicated in references to mandate or authority (20.82%), a more general organization (16.59%), a focus on equality (6.01%), services and duties (6.35%), and prerequisites (2.90%), for example, of 'education'. These concerns reveal a triad of actors, among whom the relations are regulated in formal aspects and involve an institutional structure. The dominant forms of expression are mainly descriptive (42% of all the predicates) or express a possibility (30%) or an imperative (28%). However, these forms of expression all imply an imperative, as even the descriptive expressions and the possibilities establish a regulating frame. In other words, it appears that the narrative is centred on a description of the institutional structures and the organization of the relations between the actors representing government, students, and teachers.

Central phenomena appearing in an attribution of a mandate and task to institutions

Of the 86 times 'education' was mentioned in SHE, 78 predicates with meaning were retrieved, as a number of occasions mainly concerned the name of the law or the names of institutions. The SHE narrative is completely categorized in neutral affects, as a law stating or suggesting propositions, apparently without evaluations. This indicates a detached tone, which is centred on the concerns for formal regulations of the relations among a number of identified actors: students, teachers, government, and the institutions for higher education. Table 26 shows some examples of predicates for 'education' in each category of modalities:

Table 26, on modalities and predicates to the central entities in SHE

Entity	Belief	Function	Example predicate
Education (occ.86)	Imperative (48.72%)	Per. (25.64%)	that may be given in cooperation among institutions
		Per/Sig (23.08%)	that marks institutions that shall decide which categories of teachers to employ
	Doxa-affirmation (32,05%)	Per. (26.92%)	that is the object for the ministry for education and research
		Per/Sig (5.13%)	that institutions perform which shall employ professors and senior lecturers to undertake teaching and research
	Doxa-negation (2.56%)	Per/Sig (2.56%)	that institutions perform from which a council or a municipality can commission a course or study programme and to which remuneration should not be paid
	Possibility (16,67%)	Per.(6.4%)	that marks institutions that may within the framework of educational cooperation decide to delegate administrative tasks relating to admission
		Per/Sig (10.26%)	that marks institutions where teachers may take posts as long as the confidence of the general public is not threatened
Research (occ.)	Imperative (59.46%)	Per. (27.03%)	that has practises that higher-education institutions shall uphold
		Per/Sig	that the government shall establish higher-education institutions to provide

		(32.43%)	
	Doxa-affirmation (40.54%)	Per. (37.84%)	that can have benefits deriving from its findings
		Per/Sig (2.70%)	that has regulations supplemented in the higher-education ordinance

'Education' as a service regulated by the government and realized by institutions

The entity 'education' appears mainly in a general context of a regulation of relations among actors, with an emphasis on the institutional contexts in which they appear. Seven themes emerge as the predicates to 'education' are categorized with regard for their main concerns: in students, authority, government, organization, teachers, equality, and quality. The themes are each explored in turn, with consideration for the emerging concerns, such as the relations among the actors, the attribution of authority, precedence regarding the initiatives, and the regulation of the formal authorizations in organizational perspectives.

The concern for *students* (25% of the predicates for 'education') is expressed in imperatives (47% of the predicates with a concern for students), possibilities (42%), and a few descriptions (11%). The imperatives are directed mainly towards the 'institutions' in a concern for the rights of *students* as they are admitted, while the possibilities and descriptions are directed towards the potential accomplishment of courses and the protection of rights in different situations. The regulation of the interactions also addressed the specific occasion of a violation of the rights of students, involving conflicts with the institution of higher education and at times referred to student unions. The primary concern for the 'admittance' of students and what they are to be 'awarded' appears to be regulated in a number of situations, such as in the case of international exchanges, as well as relating to the authorization from the National Agency for Higher education to give courses and the procedures when the mandate of an institution to give a course is lost. The rights of the students are centred mainly on the initiation and the completion of a course or programme, and the student-centred approach is repeatedly given to have an implied tension with the institution. The meaning of 'education' is, in this light, primarily a general service provided to the students, giving the appropriate 'qualification' and 'credits' in consequence to an admittance. The use of the word 'education' appeared primarily as a marker of an institution described in an external approach, as an intermediary between the government appointing a mission and the students receiving the earned qualification. In other words, it appears that the main category of predicates for 'education' establishes a governmental initiative to protect the rights of students in relation to institutions.

The three concerns for *authority* (19% of the predicates for 'education'), *government* (19%), and *organization* (19%) appear in equal amounts and are similar in their emphasis on the regulation of formal relations. The concern for *authority* is described mainly in formulations of possibilities (60% while the other 40% are descriptions); the concerns for *government* and *organization* are mainly descriptions (60% of the predicates concerned with the government respective 80% of the predicates concerned with the organization). These figures indicate that the approach to the government and the organization is expressed with a more factual tone than the further tentative topic of authority. The three concerns gather predicates that mainly give a picture of a formal landscape in which the government shapes an organization through a potential delegation of a mandate and an authority to the institutions for 'education' and 'research', with regard for a more definite picture of the rights of the students. The concern for *authority* is focused on the mandate that the government gives to institutions to award degrees to students, with an emphasis on potential problematic issues, for example, in the case of cooperation among institutions.

The references shape a juridical approach focused on admittance and the consequent differentiations of rights, as well as of mandates which are settled in the context of the organization of governmental agencies. The concern for the *government* appears in predicates centred on the role of the NnationalAagency forHhigherEeducation in the delegation of authority and in the roles of the actors in conflicts over student rights, such as regarding issues over admittance. The concern for the government thus mainly establishes a chain of authority that originates in its initiative and tends towards protection of student rights. The concern for *organization* is centred mainly on external perspectives of institutional forms, but there are also two remarks on the internal organization of 'education' and its outcomes, framing otherwise missing indications on the intended spheres of knowledge, with references to international cooperation and 'research'. In other words, a concern appears for the identification of the *government* in the origin of a chain that potentially attributes *authority* in a formal *organization* of structures, considering its involvement on behalf of students and institutions.

The concern for *teachers* (10% of the predicates for 'education') does not gather as many predicates as the concern for students, but it contains references that appear to be important to the representation of the institutions and the allocation of activities. The concern for teachers is expressed mainly as descriptions (50% of the predicates concerned with teachers), imperative (37.5%), and possibilities (12.5%). The concern for the institutional relations is centred mainly on 'employment', regulating a formal aspect of the relation to the institution for higher education, in which institutions are entitled to employ the different categories of personnel depending on their needs,

while the employees are entitled representation on the board of governors. The employment is repeatedly described as having the 'activities' as a purpose and that are differentiated. The forms of employment are appointed considering 'activities relating to research and development work within the subject area of their posts', and teachers are responsible for 'keeping abreast of developments within their own subjects'. These descriptions indicate a way to constitute the meaning of 'education' and 'research' as activities that are mainly contractual, bound to the employment of an institution. There is also a note on the limits of activities due to the threat of a loss of confidence by the general public, and it develops this meaning both in an apparent separation of 'employees' from the public and in indications of a value or a need for the trust of this public.

The concerns for *quality and equality* (8% of the predicates for 'education') appear in expressions of imperatives, describing what the institutions shall do. Examples of such demanded actions stretch from an active promotion of a wider recruitment of students to the imperatives to always take into account and promote the equality between women and men, to ensure high standards, sustainable development, to remedy shortcomings pointed out by the Swedish National Agency for HE, and to 'uphold credibility and research practise'. Even though quality and equality might appear as different concerns, they are expressed similarly: as perspectives the institutions are obligated to consider.

In sum, there is a constitution of the meaning of 'education' which is centred on a concern for the regulation of institutions where student rights are established. The focus is oriented mainly towards admittance, awards for completion, and the relation to the teachers, who are institutionalized through regulated employment. The concept of the general public also appears as important in a reference to the need for 'teachers' to restrain their activity with regard for the preservation of 'trust'.

'Research' as a task on the governments initiative

The 37 predicates on 'research' are formulated primarily in a tone of possibility (40% of the predicates), and the rest of the predicates are divided in about equal thirds in imperatives, descriptions, and attributions of properties. The dominance of the expression of possibilities indicates a prospective tone, which, for example, appears in the reference to the goals of the given propositions and imperatives. The predicates for 'research' are also given in a modality of belief with imperative or doxa-affirmation as illustrated in Table 26, which indicates that the statements relate both to a would-be state and a factual state. As the predicates are categorized according to their main concern, three groups emerge that are directed towards *service and duty*, *organization*

and evaluation, and *authority.* These three concerns are similar in their approach to the forms of 'research' without direct indications on its content, thus presenting it mainly as an object for the state directives to institutions regarding structure and organization. Each concern is analysed in their own regard in the proceeding exploration.

The predicates with a main concern for *service and duty* (35% of the predicates for 'research') mainly reflect an approach to the ways that 'research' is a task that the state appoints to the institutions or the employees, which are expected to realize the implied service to the students. It appears as a task that depends on various forms of employment and is thus structured as dependent on established labour policies, with reference to the work environment. In these predicates, the meaning of 'research' is intertwined with the holding of one of the differentiated posts, such as 'professor', 'lector', and 'teacher', which could imply a stratification of the personnel, but it is not explicit. This concern showed a somewhat higher expression of possibilities (46% of the predicates in the concern), which emphasizes a prospective tone in the way that a task is presented and relates to the expected outcomes of the realized acts and the benefit that can come of 'research' in general. The predicates in which the main concern relates to *service and duty* address the 'institution' and the range of posts in similar expressions and appear to not differentiate between the organization and the posts that people fill, indicating an identification between the organization and its representatives. The tasks appear to be directed primarily towards 'institutions', but the realization is allocated to a concrete level of interaction between employees and students. In other words, it appears that the meaning of 'research' relates to a representation of a service and a duty which is founded in relation to a prospect of a meeting of a task, involving the 'institution' and a range of different posts that persons representing the organization can take.

The predicates that gather a concern for *organization and evaluation* (32% of the predicates for 'research') reveal an explicit emphasis on standards, good practices, and competence. The dominant expression of *possibility* (49% of the predicates in the concern) emphasizes the potentiality of qualities, constituting their meaning as something desired. The possibility is also directed towards the concept of 'evaluation', which is directed mainly to 'research', the 'organization', and 'competence'. These three points of reference develop the concern for quality from a level of prospective desire to an expected ground for investigation. It is an evaluating concern in the sense that it makes reference to values, but the values are not precise;, raher, they are approached in an external way — drected to the environment in which the 'research' is performed. The values are expressed in general terms, establishing their presence as a marker that is expected to indicate their contents, such as in dnds for standards,

practices, and competence in general. In other words, it appears that the organization is approached in an evaluating tone, implying a meaning of 'research' that relates to general values that form the institutional structure in which it is performed.

The predicates with a concern for *authority* (22% of the predicates for 'research') and *prerequisites* (11% of the predicates for 'research') reflect the formal procedures in which 'institutions' are regulated and establish a context which is described as necessary for 'research'. The concern is given through the attribution of properties (37.5% of the predicates for 'research' with a concern for authority), through direct description (25%), the suggestion of a possibility (25%), and through imperatives (12.5%). The establishment of the relations of *authority* designates the government as the accountable authority, as the actor establishing the institutions for research and 'other development activities'. These dimensions are complemented with 'principles of freedom' which are described as applied to 'select, develop methods, and publish results'. The emphasis on freedom and governance are divided by their tone, as 'freedom' is mentioned in the attribution of properties of 'research', while 'government' initiative and responsibility is given in a descriptive tone. The concern for prerequisites is focused mostly on the skills that students are to develop and on the competence that employees can or cannot have, and the dominance of the imperative tone is focused mainly on the defence of student rights. The concern for prerequisites is expressed mainly in imperatives (50% of the predicates in the concern). In other words, it appears that the predicates for 'research' are centred on the authority and prerequisites established in formal relations between the institutions that realize service and duty and a responsible and initiating state.

In sum, it appears that the constitution of the meaning of 'research' is centred on the task given by the government and that the institutions are asked to realize. The meaning is formed in expressions of possibilities and is directed towards a segmented group of staff, which are approached through a formal reference to employment. The staff are given the responsibility to realize something that takes the shape of service and duty that is approached through its organizational forms and is evaluated according to ideals of quality mainly related to the environment in which it is performed.

Narrative context of governmental initiatives

The 298 different entities that appeared beside the main phenomena in 898 occurrences are explored to reveal the broader patterns of the narrative context, beginning with Table 27, on the most common entities:

Table 27, on modalities and predicates to entities in SHE

Entity	Belief	Example predicate
Institution (57 occ.)	Imperative (61.40%)	that is of higher education and shall admit students who fulfil the entry requirements for their studies
	Doxa-affirmation (24.56%)	that is of higher education and decides on its own internal organization, along with the board and vice-chancellor
	Possibility (12.28%)	that is of higher education and has teachers that can have activities if in doing so they do not undermine the confidence of the general public
	Doxa-negation (1.75%)	that is of higher education and to which remuneration pursuant shall not be paid in respect of a course or study programme commissioned by a county council or a municipality
Shall (35 occ.)	Imperative (80%)	that a student union shall submit an annual report on its activities to the higher-education institution and an account of how many students are members
	Doxa-affirmation (8.57%)	that a board for the higher education sector shall hear issues relating to expulsion
	Possibility (8.57%)	that a teaching post at a higher-education institution shall be combined with employment as a physician or dentist with specialist training
	Doxa-negation (2.86%)	that remuneration pursuant to this section shall not be paid in respect of a course or study programme commissioned by a county council or a municipality from a higher-education institution
May (19 occ.)	Doxa-affirmation (52.63%)	That research methodologies may be freely developed
	Possibility (36.84%)	that the government or the agency nominated by the government may stipulate that a teaching post at a higher-education institution shall be combined with employment as a physician or dentist with specialist training
	Imperative (10.52%)	that association of students at the institution may be granted the status of a student union for a specified period if the association fulfils the requirements laid down

Regulating the institutions in a governmental initiative to protect student rights

The most common entity beside the phenomena of interest refers to the 'institution' as a way of naming the 'university' and the 'university-college', which is identified through the imperatives of the government. The main concern that appears in the predicates to the entity is the regulation of the relation to *students* (17 predicates), mainly in the need of the institution to comply to student rights (10 of those that related to students), such as consequences of admission, the right to influence the contents of the education, and the right to a degree upon completion of a course or programme. The concern for students also relates to the rights and duties of a 'student union' (the other 7 predicates) in relation to the institutional organization of the university. The predicates for the 'institution' also reveal concerns for the *organization* (10 predicates) which involve the allocation of power, such as representation in boards, vice-chancellors, and the government. The concern for *authority* (9 predicates) regards the performing statement of giving the institutions a mandate to attribute degrees, credits, and diplomas. The further predicates to the 'institutions' regulate its relation to the *government* (6 predicates), which establishes both the latter's utter responsibility for the institutions and its right to regulate their initiatives and to initiate new ones. In other words, it appears that the groups of predicates in the concern for students, organization, authority, and the government are rather homogeneously centred on the governmental act of establishing and protecting the rights of the students, with imperatives directed to the 'institutions'.

There are also four minor concerns in the predicates for the 'institution' which at first glance are marginal to the narrative context, but as they are studied closer, it appears that they give clearer indications on the values that are identified as the base for the approach. For example, the concern for *teachers* (5 predicates) is centred on an act that guarantees the representation of the different groups in governing boards and regulates the rights of the institution to choose the 'categories' of teachers. The rights of the institutions to differentiate between employees is given further emphasis in the concern for *service and duty* (3 predicates) as it mainly concerns the institutional regulations in the employment of teachers. The concerns for *quality* (3 predicates), *equality* (2 predicates), and *evaluation* (2 predicates) generally establish a prospective approach regarding values in which the recruitment is targeted with respect both to gender and to cultural aspects, to be 'widened', implying a desire for variation among the personnel; however, the concern also targets the 'sustainability' of development as well as the 'standards' of education. In other words, it appears that the 'institution' is given meaning mainly through a frame of regulations, rights, and mandates given by the government, with regard for student rights, teachers, and an evaluative approach to the prospect of accomplishing the given tasks.

The entities 'shall' and 'may' shown in Table 27 contain an embodiment of the imperative tone, taking a directly prescriptive tone as well as giving permission which potentially is equally imperative. The predicates for the entity 'shall' primarily relate to a concern for the regulation of the 'institution' regarding rights of *students* (8 predicates, and 5 for 'may') and in a concern for *organization* (7 predicates, and no predicates for 'may'). The predicates for the entity 'may' mainly concern a delegation of *authority* (8 predicates, and 3 predicates for 'shall'). These differences indicate that the concerns for organization and student rights are expressed with further imperative tones, while the concern for authority is more speculative. Both the entities relate to the concern for *government* (5 predicates for 'shall', and 4 predicates for 'may') and teachers (3 predicates for 'shall', and 1 predicate for 'may'), while each predicate relating to the concern *service/duty,* and the concern for evaluation appeared only in the entity 'shall' (2 predicates). In other words, it appears that the entity 'shall' mainly reveals intentions to regulate the institutions with regard to the student rights, while the entity 'may' is a way for the government to give allowances with regard to an attribution of authority.

In sum, it appears that the narrative context is centred on the intention of the government to protect the rights of students with imperatives directed towards the institutions. The regulation of organization and authority appears as a formation of

an environment centred on the relations between actors that represent different positions or posts.

Forming an institutional environment for action

A number of entities identify desired actions and qualities, such as 'to decide' (17 occ.), 'to develop' (16 occ.), 'requirement' (9 occ.), 'specialized' (7 occ.), 'qualification' (7 occ.), 'provision' (6 occ.), 'to offer' (5 occ.), 'to admit' (5 occ.), 'to promote' (4 occ.), 'to relate' (4 occ.), 'regulation' (4 occ.), 'responsibility' (4 occ.), 'account' (4 occ.), 'pursuant' (4 occ.), 'to refer' (4 occ.), and 'ensuring' (4 occ.). All these entities, with a total of 91 occurrences, reveal approaches and implied values attributed to the government, both in its delegation of mandate and in its attribution of tasks to the institutions. 'To decide' appears as the most proactive entity which mainly appoints the location for decisions relating to the establishment of authority, such as the 'institutions' themselves deciding on their own internal organization. 'To develop' is the most obviously prospective as it relates mainly to the procedure of acquisition of knowledge and of the improvement of organizational aspects, such as courses and programmes. The prospective tone also is imbued in the concern for the establishment of some aspects of the way in which the given tasks are to be met, which reveal the formation of approaches and values. This concern is centred on the delegation of a mandate to the institution, which in these entities is limited by a regulative frame, such as in the proposed ways to have regard for student rights and the demands on teachers in exchange for their employment. The attribution of a mandate is, in this sense, closely related to the prospective of an expectation of a growth and implied in the government assigned task. The expression of qualities in the mentioned entities indicates the values behind the tasks, which centres the authority on the government even though the mandate is delegated to the institutions. In other words, a concern is revealed in the entities for the delegation of a mandate that is tied to values given in the expectations on the institutions to meet the tasks.

A number of entities are related mainly to the actual organization of 'education', such as 'programme' (18 occ.) and 'courses' (13 occ.) which mainly gather specifications of the regulation of the 'institution' with regard to the forms of realization of the tasks. The interest in the actors and their activities is also revealed in the entities 'student' (14 occ.), 'study' (13 occ.), 'teaching' (6 occ.), 'teacher' (4 occ.), 'staff' (4 occ.), and 'employed' (4 occ.). The frequency of these occurrences further emphasizes the previously established student-centred perspective, already initiated in this analysis of 'education' and 'research'. Both the organization of 'education' and its actors are, in these terms, approached mainly through the external mandates to perform the 'education', and the entitlements it attributes. Some other entities diversify the

representation of the actors, and relate to the institution and students, such as 'government' (11 occ.), 'board' (8 occ.), 'organization' (8 occ.), 'county' (7 occ.), 'council' (7 occ.), 'Swedish National Agency for Higher education' (6 occ.), 'municipality' (5 occ.), 'governors' (4 occ.), and 'student union' (4 occ.). The designation of agencies reveals a hierarchization related to the delegation of a mandate and task, indicating a verification or evaluation of its accomplishment.

Further, some entities are interesting in the phenomenological tradition, such as 'their' (12 occ.) and 'other' (6 occ.). The former mainly designates positions of teachers (7 predicates), in their qualifications or potentialities, but also the rights or positions of students (5 predicates). The latter mainly expands the validity of a regulation to a generality. The reference to the more general acts contained in the entities 'to be' (7 occ.) and 'to have' (4 occ.) appear mainly in the expression of precise formulations, for example, expressions of passivity in the former as it relates to objects of concern that 'shall be' or 'have been'. The entities 'award' (8 occ.) and 'pay' (4 occ.) both relate to a perspective of outcomes, mainly regarding the students' entitlement to a diploma and the teachers and other personnel's right to a salary. The technical entities of 'as well' (7 occ.), 'also' (5 occ.), and 'within' (4 occ.) illustrate the enumeration of regulations among relations, while more specified references appear in entities such as 'artistic' (7 occ.), 'activity' (7 occ.), 'operation' (7 occ.), 'issue' (5 occ.), 'sector' (7 occ.), and 'section' (4 occ.). The concrete references are general in the sense of designating other locations in the law, spheres of activity, or challenges. In other words, there are a number of formulations in the narrative which trace the lines between practical and general approaches.

In sum, there is a concern for activities and their environment that is revealed in the analysis of the narrative context, which primarily establishes the three main actors as the 'institution', the 'student', and the 'government' and whose relations are regulated mainly through the establishment of mandates, as well as a frame of restrictions and propositions that convey some general values. The actors are also differentiated according to different missions and permissions, something that accentuates the governmental ownership of the initiative.

Summary: Institutions, mandate and task, and governmental initiatives in SHE

The constitution of meaning in SHE is centred on the forms and relations that shape service and duty, appearing in tasks that are given by the government and that give rights to students. The task of the government appears in light of organizational

perspectives together with an attribution of a mandate and are directed to meet the rights of students that come with their enrolment. The main concern thus appears in the space between the government that gives a task and the students that are entitled the accomplishment of these tasks, and it takes the shape of a regulation of an institutional structure in which service and duty is realized. In this aspect, the acts of the government appear in a frame that primarily establishes the role of the institutions regarding the formal relations among the actors, such as the enrolment of students and the employment of personnel. The different acts of regulation, giving mandate, and appointment of tasks therefore appear in an approach in which the government forms an actor that represents it and realizes its prescriptions, represented in a horizon of an **institution**.

The narrative thus approaches the institution as an actor identified by the mandate and task issued by the government in a formalized institutional landscape of rights and duties. The regulations that shape 'education' and 'research' are framed primarily in an external approach to acts that are expected of the personnel and the institutions, with regard for 'students' and some general reflections on the broader society. The evaluative attitude is directed to the environment that the institutions constitute and that establish the relations and roles of the 'government' and the 'students'. The resulting regulative frame forms an institutional landscape centred on a horizon of a **mandate and task**.

The narrative context is centred on an institutional structure for action, in which the mandate and the task guide a regulation of the rights for services and duties. The regulations are centred on an organizational approach in which the people and institutions are attributed roles. The act of delegation is centred on the rights and services the 'students' are entitled in response to the government's initiative to give missions. The narrative is thus apparently centred on an approach to a government that acts through an organization that shapes an institutional environment for the acts of 'education' and 'research'. In other words, these concerns appear in a horizon of a **governmental initiative.**

The constitution of meaning in SHE is, consequently, centred on the **institution** and how it is given a **mandate and task** in a **governmental initiative**.

Chapter four: Analysis

The eight narratives have this far been explored individually, and the constitution of meaning has only been explored in the isolated discourses. The analysis is initiated with a study of the emerging representations of the central phenomena across the narratives and is continued with observations of similarities and differences between the narrative contexts. The eight narratives are thus juxtaposed in an analytical process that continues the movement from specific appearances to general approaches. The meaning of the central phenomena, in the 'university', 'research', and 'education' appear quite explicitly, while the two more abstract and general structures of meaning forming representations of 'science' and 'politics' demand an analysis of general structures. These concerns also address potentially tangent issues, such as the implicit dimensions in the meaning of knowledge and representations of public spheres. The second part of the analysis brings the narratives together, revealing common patterns in the expressions and possibly describing world views implied in the narrative context, as they are categorized according to national origin (Swedish and Chinese narratives) and formality (formal and informal narratives).

The emerging meaning of the central phenomena

The phenomena identified as central in this study appeared in different ways in the chapter on outcomes, both regarding the frequency of occurrences and regarding the frames of reference forming their narrative contexts. The coming analysis is an attempt to describe the emerging meaning of the 'university', 'education', 'research', 'science', and 'politics' in light of the empirical outcomes. The similar and different appearances of the phenomena in this phase form the frames of reference for the analysis. Indications are, in other words, gathered through parallel studies of the phenomena referring to the previous chapter and searching for ways to interpret and understand how they are meaningful in the discourse through similarities and differences between the eight narratives. The meaning of the 'university' is explicit and central to the informal narratives, and is implied mainly in the meaning of 'institution' in the formal narratives, and therefore introduces the analysis. The second part of the analysis investigates the meaning of 'education' and 'research' that appear in explicit dimensions, but that are less detailed. The analysis of the meaning

of ‘science’ takes a step from the analysis of explicit concerns towards the increasingly implied and general dimensions, a movement that proceeds further in the analysis of ‘politics’.

The emerging meaning of ‘university’, ‘education’, and ‘research’

The three phenomena ‘university’, ‘education’, and ‘research’ are often defined in theoretical approaches, with reference to abstract considerations of a general nature, but this exploration into their narrative appearance aspires to identify them maintaining a close link to their narrative appearance. The structures of meaning revealed in the previous chapter are the analysis base for an attempt to gather a coherent image of the references in which the phenomena appear.

The meaning of ‘university’ defined by its relation to the government

The ‘university’ appears in different ways in the analysis of the eight narratives, which is first shortly recapitulated. The SPe understand the ‘university’ as a work environment (p.71) characterised by the diversity of activities taking place there: it depends on the tasks of the government, it is concentrated on an economy for resources and demands, and it forms an evaluated context. In the SSt, it appears as a location to turn to (p.107), in an institution filling a practical function as the students ask for help to meet social and informative needs, and it represents the government satisfying the everyday life demands of the students. In SS&T, the ‘university’ appears mainly as an institution that is an object to be funded by the government (p.142), with historical achievements that is threatened by a system of financing that is not signalling enough that quality is desired, and that is revealed in the applicability of the ‘research’. In SHE, it appears as an institution that receives missions from the government (p.171), performing its service and keeping its promises to students. In other words, it appears that the Swedish narratives approach the ‘university’ with a focus on the expected roles and functions of the government, mainly in relation to a horizon of an institution as an actor that realizes responsibilities of the government on the behalf of students.

The informal Swedish narratives are similar in their approach to the ‘university’ as a location gathering a number of activities: SSt turns to it for the provision of expected services from the government, and SPe approaches it as an environment to activities, shaped by a management of the balance of resources and tasks provided by the government. Both narratives approach it as an authority representing a ‘system’, or

the 'state', realized in a location as an external structure that shapes the everyday life of the narrators. The formal Swedish narratives are similar in the establishment of a concern for the outcomes of the 'university' through the ways that the government attributes tasks with regard for the student in SHE. The SS&T is mainly directed towards a polarization between public and private origins of its funding, giving different outcomes in quality and kinds of research. The formal narratives are thus centred on the institution as something that the government directs through external structures such as missions or allocation of funding. The four Swedish narratives thus form a meaning of the 'university' which is dependent on the initiative and acts of the government, in a general economic perspective in SS&T and on the behalf of student in the three other narratives. The acts of the government appear mainly as the establishment of an institutional context with a primary concern for the life of the population, and it appears to primarily be evaluated in a general balance between a given input and the amounts of a desired outcome, in measures that appears to be defined by the state. In other words, it appears that the Swedish narratives mainly approach the 'university' in light of its role as an intermediary between the government and the student.

As we turn to the Chinese narratives, the 'university' is approached in CPe through the representation of an academic ideal that challenges the moral character of the teachers to live altruistically (p.54), and the narrative is centred on a desired principle of development threatened by economic motives and governmental interference. In CSt, it is identified as a culture (p.88), understood as a way of life in the double belonging to both Chinese and student collectives, and it is evaluated in a competition for status that takes both national and international expressions. In CS&T, the 'university' appears in the initiative of the institutions that is to be encouraged by the government (p.128) in the development towards material wealth and to contribute with a means of production to a general established good. In CHE, the 'university' appears primarily as a juridical person (p.156) that takes initiatives and that is regulated with regard to the academic lifespan of students and teachers. The Chinese narratives thus constitute a meaning of the 'university' mainly in implied forms as an institution in the formal narratives and explicitly described in the informal narratives.

The formal Chinese narratives are focused on the management of the initiatives of the institutions, with a concern for the control of potential deviations from the given intentions, meanwhile awaiting the initiatives of the institutions and their representatives to achieve a desired development. The CHE appears mainly to establish an approach centred on the institutions as juridical persons, dependent on the academic careers of the teachers in the first place, but also with a nondescript

relation to students, mainly through imperatives regarding their qualifications. The institution is expected to have its own voice and to take action, something that appears to both trigger governmental reactions for the control of their activities and to attract a desire to engulf the initiatives to attain their awarded status. The CS&T also appears to have the ambition to encompass the initiatives under its jurisdiction, seemingly with an intent to appear as the originator of the development presented in the discourse on the 'encouragement' as an imperative directed to the state. In other words, it appears that the formal Chinese narratives approach the institution as an actor separated from the government, as a kind of meta-character. It appears as a desire for control and which is expressed as an act of encouragement, with the intent to encompass a status rewarded by their initiative.

This ambition in the formal Chinese narratives to govern as well as making use of the initiatives can be related to the ambivalent approach in the informal narratives on the 'government' and 'administration'. The informal narratives are similar in their representations of the 'university' with an individual character or spirit described with terms similar to a person. Essentially, the CPe narrative reveals a reaction towards attempts of governance with suspicion in the experienced threat of a corroboration of their academic integrity, and they rather demand 'their own' procedures to shape the management of the 'university'. On the other hand, the CPe also shows a concern for the material needs in which they are dependent on the government, both in personal terms with regard for the salary that they consistently describe as too low and for the institutions and the structures of the 'university'. The ambivalence of the CPe also appears to be reflected in the representation of the 'university' as a culture in CSt, to which the procedures of initiation appear in an evaluative discourse regarding the ambience or spirit, with both criticism and appraisal depending on the character. The affects are related to a dichotomy between material desires for future wealth and an idealism with cultural aspirations to the role of an intellectual. In other words, it appears that the 'university' is, to some extent, given in an attribution of a number of characteristics that echo personal traits, which explicitly are related to the moral character desired in CPe and the status-bearing persona in CSt. In other words, there appears to be an attribution of a role reminiscent of a meta-character in the way that the Chinese narratives relate to the 'university'.

In sum, it appears that the 'university' appears mainly through its relation to the government, as an intermediary between the student and the government in the Swedish narratives, and as a meta-character that takes a more autonomous position in the Chinese narratives. This distinction raises interesting questions, such as on the nature and expression of academic freedom, as well as the different representations of the government, something that will be addressed in the chapter on contextualization.

A meaning of 'education' that is open for dispute

'Education' is one of the concerns that appeared explicitly in all eight narratives – even though it is marginal in CS&T. The Swedish narratives gave comparatively much attention to 'education', but they did not give many indications on its actual meaning. The descriptions of its structure and organization were numerous, but reflections on its realization or dimensions of its quality, purpose, or nature were rare. The appearances of 'education' are primarily related to a concept of 'teaching' in the SPe narrative (p.109), in which it appears as an activity in tension with other activities, such as 'research'. As such, it mainly appears as a task competing for the resources of time and money, putting the structures of the work environment of the personnel into focus, and a discourse on its purposes as well as the effects of its organization and its simultaneously impeding and inspiring relation to 'research'. In SSt, it appears with a focus on its context and on practical and personal tones (p.109) such as with regard to locations and times in which it happens, both as a marker for student life and as a concrete act. These aspects have some similarities with SHE which mainly approach it through the regulation of the institutions responsible for its execution (p.166), as it presents a concern for the rights of students, regarding the authority, organization, and structures in which it takes place. Both approaches identify organizational perspectives, directed towards how it is performed and the context in which it is realized. 'Education' appears manly in SS&T in light of the autonomy and regulation of the institutions for higher education, with a quality that depends on the funding and signals of the government and on international cooperation (p.142).

The focus on the rights and services of the students in SHE and SSt, and the focus on organization, incentives, and competing activities in SPe and SS&T establish an approach to 'education' through external descriptions. It appears as a perspective considering the organization and how 'education' takes place in a structure, but without any explanation or meaningful description of its contents, such as how its quality would be shaped by economic motives as is common in the Chinese narratives. The external approach can also be seen in light of the relativistic approach explicit in the informal Swedish narratives and possibly implied by the lack of description of contents or substance in the formal narratives. The expressions of relativity mainly imply a doubt in the relation between a specific realization and a general perspective. The approach also implies a centralized system in which the action is attributed primarily to the government but that is shaped with the service of the students in mind, especially as referred to in SHE and in SSt. The formal organization in SSt and SPe appears in confusingly similar descriptions of authority and administration, and it is much clearer than the references to the contents of 'education'. In other words, it appears that the meaning of 'education' appears in light

of its practical realization, as a structure, and the Swedish narratives contain little reflections on its meaning or content.

In the Chinese narratives 'education' appears in a common reference to spheres of values or ideals which are described with reference to the end result of development. The concerns are allocated to a prospective sphere, explicitly in CPe (p.58) and CSt (p.90), while CHE implies development in the approach to the succession of elements that forms an academic lifespan (p.152). CS&T did not give any extensive consideration for 'education' other than as something demanded for the development of 'research' and 'technology' (p.121), which, in a way, also indicates a prospective concern for means of production that aspire for a construction beyond the present. In the three other Chinese narratives, there is a similar time-dimension, as 'education' appears as a continuous and ongoing activity performed by a scholar at the 'university', with reference to the morality and fame both of the scholar and the meta-character. As an activity dependent on the attribution of fame, it appears mainly as an object for a number of different and conflicting perspectives on the attribution of status among individuals and institutions. The discussion appears to have a focal point in the perspectives on the origin of development, regarding motivation in the informal narratives and initiative in the formal narratives. Both these perspectives appear to lead to a resulting attribution of status, which also implies different considerations of a nature and a place of knowledge and the consequent role of the 'university' in society. The discussions oppose academic ideals to economic motivation and government interference in both the informal narratives and the formal narratives discuss the attribution of power and status in the tension between the institution, the scholar, and the government.

The representation of a discussion thus appears to be central to the meaning of 'education' centred on the horizon of development in all four Chinese narratives. It appears in a time-dimension founded in a desired prospect pointing at different qualities that are expected to evolve. In this comparative and temporal narrative context, given in an ongoing discussion, it appears that 'education' is understood as something with a number of properties represented by different perspectives and arguments. The debate also has a main theme in the tension between the 'university' and the government, a tension that is given as the central marker for the proposed logic that decides the outcomes of the development, enabling or impeding the desired changes. The question of the place of knowledge and the tension between the institution and the government appear as the key issues in the positions in the given debate, forming a meaning of 'education' as an object that depends on the different positions. The main concern in the informal narratives frames the concept of different forces or logic according to which the development can proceed. In other words, it

appears that the meaning of 'education' in the Chinese narratives is approached mainly as a variable depending on perspectives or values, as an object of discussion.

In sum, it appears that the meaning of 'education' is open for dispute, as a structure in the Swedish narratives and an object for discussion in the Chinese narratives. It is given with an aspect of openness in both contexts as it is open for dispute, with a focus on a structure whose content awaits to be filled in the Swedish narratives and depending on perspectives in the Chinese narratives. Both approaches are general, but in different ways, with reference to the generality of experience in the Swedish narratives,and to the adaptations of different approaches in the Chinese narratives.

'Research' as a means to different desired ends

'Research' is both an explicit concern and a common entity in all the narratives except the two coming from the students. In the two formal Swedish narratives, 'research' appears in similar ways, mainly as an expected response to governmental initiatives centred on the communication of the institutions, the giving a task in SHE (p.168), and the allocation of funding as a signal in SS&T (p.137). This communication in which the government recruits the institutions to do 'research' appears to be unilateral, as a simple and external way to direct its realization, and it implies the establishment of concepts such as 'quality'. In SPe, a meaning of 'research' appears in a horizon of activities (p.73), mainly in the context of the competition among tasks for the resources of time and money. In this context, 'research' appears in the light of the environment in which it is performed, which is defined by the management as an expected service to the personnel and not primarily through references to its purpose or function. In this sense, it appears that there are similar dimensions with the meaning of 'education', with a primarily external approach to the structures of the organization, but it appears that the function and goal of the activity is somewhat more clear. The reference to communication from the government in the formal narratives and to an environment in SPe all establish a meaning of 'research' that relates to the central horizons and frames an evaluating approach to the realization of an activity, with common references to a concept of 'quality'.

The meaning of 'research' in the Swedish narratives is, in other words, connected to the realization of directives from the government and to the environment for activities. The evaluating perspective bound to this concept of realization is constituted with a reference to a desire for or a guaranty of 'quality'. What this means in general terms is addressed as a concern for the result of a process, in SPe through the provision of proper resources of time and money, in SS&T through mechanics following an applied approach, and in SHE as a consequence of the realization of the

appointed tasks. In this perspective, the quality of 'research' appears as an end product resulting from a procedure decided by the properties of either the given tasks or an environment. It thus appears as a kind of object taking shape in a realized service or duty, through the task appointed with regard for the protection of student rights in SHE and through the relation between investments and outcomes in SPe and SS&T. The services and duties are established with institutional references as an objectified realization of 'research', as the end result of investments and activities, in which the structures are evaluated regarding their suitability to establish the desired aspects of this object. In other words, it appears that the meaning of 'research' is formed in a homogeneous reference in three of the Swedish narratives on desired outcomes as an asset shaped by the institutional context in which it is realized. It is evaluated in this approach primarily in relation to the input or an investment, in monetary terms as well as regarding time and effort, and it is realized on the initiative of the government and performed by the intermediary in the 'university'.

In the Chinese narratives 'research' appears in a frequency of reference which is similar to the four Swedish narratives, as something central in three narratives and lacking in the fourth from the students. In CPe, it appears as an activity (p. 88) that carries the potential of the desired prospect, depending on a prioritization that enables the realization of the essence of the 'university'. The way to understand 'research' thus places it in the middle of the path towards the desired recognition which establishes the foundation for the evaluating attitude to institutions and collectives. In CHE, 'research' appears in a central function in the points of tension between the institution and the government (p.156), as the narrative implicitly allocates the initiative to the institution but claims responsibility for its achievement, seemingly to be encompassed in the consequent recognition. In CS&T, 'research' appears in the context of a directive to the state (p.128), to encourage institutions to proceed with their initiatives for the good of a desired development. There is thus a common reference in the Chinese narratives to a role played by 'research' in the prospect of attaining a desired recognition.

The reasons that the state is directed to encourage the institutions to continue with their initiatives in CS&T is a matter that cannot be answered only by the analysis of these narratives; it is a question that reaches into an analytical field that will proceed in the later chapter on contextualization. At this point, however, it is interesting to reflect on the way that the implied description of the government appears to be related to the meaning of 'research'. The government appears to be homogeneously portrayed through the desire to be encompassed in the responsibility for the achievement of a development and the consequent reward of status. In this sense, it appears primarily as a contested means for a desired end in the establishment of

legitimacy. The way that the CPe reflects an ongoing discussion on the government involvement appears to further emphasize this interpretation and indicates resistance from the academic community. In other words, it appears that the meaning of 'research' appears mainly as the means to access a public recognition, predominantly in relation to the status rewarded based on the achievement of a successful development, taking the shape of a source for legitimacy.

In the two narratives of the students which did not explicitly mention 'research', there are, however, interesting implicit dimensions that support the approach established in the analysis of the other narratives and add detail to the narrative context of the phenomenon as well as to the structural landscapes in which it takes place. In CSt, there is an explicit concern for legitimacy (p.86), especially regarding 'famous professors' as an indicator of status for the university, as well as the development of various departments and academic fields. There is also an evaluative attitude towards the contents of teaching with regard to a tension between practice and theory, and it is a discussion which suggests references to 'research' both as a source of legitimacy and as a base for scientific claims. In SSt, there are no explicit references to 'research' or the qualities of 'education', but there is something embedded in the confidence in the expert role (p.105), mainly representing the departments and other institutions with social functions, which also hold the information that the students need. The trust in expertise indicates a presupposition and a confidence in the abilities of the persons holding the function, a trust that appears to predate any encounters or experiences. It is, thus, a general trust in a system which is perceived to shape the necessary knowledge and abilities for the respective position. This information that is one of the two needs that the institutions and experts are expected to satisfy in SSt appears as a desired asset, and it refers to an ability to navigate a complex landscape of institutions and claims of knowledge. In other words, it appears that the concerns for legitimacy and a desired asset revealed in the analysis of the six other narratives can also be recognized in these two narratives which did not mention 'research' explicitly.

In sum, it appears that the meaning of 'research' appears in the frames of means for desired ends. In the Chinese narratives, it appears in the context of aspirations to a status that is attributed through the achievement of a development, in a competition for status between the institutions and the government. In these terms, 'research' appears to be described as a source of legitimacy. In the Swedish narratives, 'research' appears in relation to a balance of investment and expected outcomes and is shaped by the attribution of tasks and the institutional environment in which it takes place. The balance of input in time and money and the desired outcomes of an object of quality establishes an approach to 'research' as an asset.

‘Science’ as a characteristic and a dynamic

The investigation into the meaning of ‘science’ begins with an analysis of its explicit appearances in the eight studied narratives – when it did appear. The scarcity of explicit appearance is in one sense an interesting outcome, indicating that it may not always be a formulated reference in the ways that the ‘university’, ‘education’, and ‘research’ are addressed. There are, however, a number of implicit dimensions, especially as the analysis takes the broad approach established in the chapter on positioning, based in the way that Whitehead (1926) conceptualized ‘science’ as an aspect of mind concerned with the relation of general principles to irreducible and stubborn facts. The analytical summary of the eight narratives is followed by gathering a reflection of the common patterns in the references, and it continues into a study of the differentiation among types of knowledge and of the representation of the veracity of discourses.

The representations of ‘science’ in the eight narratives

The explicit references to ‘science’ in CPe are quite rare, but when they occur, they point at a quality of a sphere identified as ‘academia’ mainly appearing in a differentiation from ‘administration’(p.54). The explicit occurrences appear as adjectives, and thus in the form of secondary concerns, in the way ‘scientific’ is given as an aspect of, for example, ‘research’. The adjective identifies and appears to intend to associate the expression to a sphere of life with certain connotations and thus involve its meaning with the central concerns in the narrative. In other words, it appears that ‘science’ appears mainly as a rather vague sphere of reference that marks the properties of, for example, the ‘university’, and it indicates a quality towards which the aspirations and ideals are pointing. It takes place as an aspect of the development of the moral character of the academician and of the ‘university’ as a meta-character. There are, however, also indications in the way that a number of terms are repeated, such as ‘scientific research’,the references appears to be an established phrase which does not necessarily indicate a specific meaning. These expressions can be interpreted in different ways and appear to have lost some of their actuality, possibly appearing in a dimension of thoughtlessness, which leads the analysis into some open questions as the specifications do not seem to intend a differentiation between ‘scientific research’ and ‘non-scientific research’, but, rather, an unclear sphere of reference. In sum, ‘science’ primarily emerges as an adjective that characterizes the central concerns and is thus related to the main horizons, but there are also questions concerning the ways it appears, depending on repeated phrases with a potential lack of meaning.

In SPe, the references to an idea of 'science' also mainly appeared as an attribute (p.71), in this case referring to a 'scientific', 'research', 'environment', 'work', or specific objects. It appears to be interchangeable with the attribute 'academic' and primarily categorizes a sphere of reference which identifies activities and objects as an adjective. Qualifying something as 'scientific' thus appears to allocate the phenomenon of 'science' to a secondary position, dependent on the understanding of what appears in the conscious spotlight of attention. The explicit references to 'science' primarily appear together with declarations of personal opinions and have to be seen in light of the intention to identify a category of activities, an environment, a work, or specific objects in the context of the economy of means and ends. This economy of tasks and resources primarily shapes the representation of the institutional environment and, as such, does not specify the contents of this characterization. The meaning of 'science' thus appears in a general sense, similar to the established meaning of 'research' as an asset and 'education' as a structure. In other words, it appears that the meaning of 'science' is constituted mainly as a secondary object, given as an adjective to, for example, an environment, a work, or designated objects such as 'research', and it appears as a dimension of the economy of time and resources that is central in the narrative.

The explicit appearances of 'science' are also few in the CSt narrative, but when they appear, they mainly relate to the central aspirations to describe the markers of belonging to the Chinese and student collectives (p.88). The representation of a cultural belonging mainly relates to shared values in a collective and a common attribution of status. The earlier analysis revealed a perception of the scholar as a character and the 'university' as a meta-character with a special concern for the identification, differentiation, and comparison between specific individuals/institutions in relation to the larger collective. The meaning of 'science' is, in this process, given mainly as part of a network of several phenomena, such as 'excellence', 'knowledge', 'ranking', and 'fame', which all appear to form a general image of a desired recognition. These aspects are given in descriptions of conflicting values, with perceptions of polarized positions in a discussion within the collective, as also was revealed in the meanings of 'education'. In other words, it appears that the meaning of 'science' is given as a function of the allocation of status in a stratified collective, and it appears in the sphere of desired attributes of characters and meta-characters.

'Science' does not appear at all explicitly in SSt; however, there are indications, such as in the noted trust in the competence of experts, which point at representations of encounters between facts and general principles. A potential meaning of 'science' may be implied in one of the most central concerns, established in the need to access

certain information, as well as to differentiate between true and false claims. This concern mainly addresses a kind of knowledge that involves the representation of an institutional landscape, and it reveals a respect for narratives issued with the authority of the institutions and the government. In this explicitly expressed respect, there is an acceptance of a discourse and a world-view issued by the institution that implies a distinction between facts and claims of knowledge. There are also explicit references that can imply a meaning of 'science' in the carefulness in the expression of proposition of knowledge in general, mainly relating to aspects of an environment, invoking a relativity and a responsibility implied in the act of asserting a perspective. This relativistic tone combined with the trust in expertise and institutions appear as dimensions of the broader concern for an understanding of the characteristics of an environment. In other words, it appears that even though 'science' did not appear explicitly, there is a concern for the discernment of facts and information about an environment in which it can be represented.

CS&T is the narrative that mentions 'science' explicitly most frequently, making reference mainly to a set phrase of 'science and technology' (p.98). It appears in the presentation of a logic in which 'science' relates to the engine of a desired development which the government is directed to 'encourage'. The concern for an act of 'encouragement' relates primarily to an already ongoing process, and it appears with motives that are mainly implicit. On the one hand, it relates to a desire to include the government's acts with a legitimacy and, on the other hand, to control and enhance chosen aspects of the development. The development as a general desired phenomenon implicitly relates to a driver in change, but the indications are diverse as 'science' is presented as an attribute of a number of phenomena, such as 'progress', 'achievement', and 'system'. The concerns for law and policy as well as for workers and rewards indicate a differentiation in the potential development that 'science' can engender, explaining a governmental distinction among desired and non-desired aspects. In other words, it appears that the central dimensions of the meaning of 'science' is given in the expectation of a dynamic that drives development, which appears not only as a desired force but also holds dimensions that are intended to be contained.

In SS&T, the indications on the meaning of 'science' are mainly implicit and can be seen in the dichotomy between applied and basic 'research', indicating two different ways of understanding its procedures according to different expected outcomes (p.107). The polarization between different forms of 'research' is given in a historical and argumentative narrative describing the mechanics of different types of financing depending on the outcomes. The suggested representation of 'science' thus appear mainly in light of its external organization or the forms in which the related activities

are realized. 'Science' does not directly appear as an activity, and in this sense, it is differentiated from 'education' and 'research'; rather, it is indicated as a dynamic that can be organized differently to give different outcomes. The constitution of meaning is centred on the approach to different kinds of funding, depending on the the origins, strategies, and quantities, with a concern for the outcomes. It also appears that the differentiation among disciplines that explains the funding relates mainly to perceptions of a dynamic that is activated according to the indicated priorities. In sum, it appears that a meaning of 'science' may be implied in the reference to the dynamics that drive the different types of 'research' depending on the desired outcomes.

'Science' is only mentioned six times in CHE (p.118), but there are aspects of its realization that appear in the descriptions of the acts and initiatives of the 'institutions' with a simultaneous intention to regulate and establish 'freedom'. The tension between the intentions to regulate and give freedom are reflected in the appearance of 'education' as an object for discussion, in which the involvement of the government polarizes the sides in the debate and in the tension regarding the reactive position to the 'university'. The reflections in the debate and the separated positions of the meta-character imply a meaning of 'science' as a factor that is differentiated from the involvement of government. There are some parallels to the ways that the promotion of staff and the institutions are approached, with consideration for the passage through a hierarchy in the academic lifespan 'conducted on the basis of the completion of earlier steps'. As the students and staff are portrayed with regard to a succession of elements of an education or work, 'science' appears as a potential and generally relates to the dynamics behind progress. In sum, it appears that the meaning of 'science' in CHE is implied in a reference to a sphere differentiated from the government and a dynamic behind development.

In SHE, the only explicit references to 'science' appeared in the names of institutions (p.164), as the law regulates the relations of the institutions as an intermediary between the students and the state. The concern is directed towards the governmental initiative of giving tasks to the institutions with an expectancy of an outcome that primarily regards the students but also implicates the teachers. In this sense, the blank in which the meaning of 'science' appears is given in the way that the task is met, a left out process in which the students receive their due and the staff realize the task acting according to their appointed positions. The gap in which the accomplishment of the task is realized frames a meaning of 'science' with little indication of its meaning or content, something that follows the external descriptions of 'education' and 'research' as a structure and asset. It appears that the void left in which a meaning of 'science' takes place primarily is implied in the way that quality and equality is

addressed, framed with regard for student rights, some concerns for the teachers, and the representation of the task-assigning government. In sum, it appears that SHE is one of the narratives that holds the least obvious references to 'science' or that it may be implied as a dynamic or a function of the way that the personnel fulfils the tasks.

'Science' as a characteristic and a dynamic

The revealed scarcity of explicit references to the phenomenon of 'science' leads the investigation into somewhat more tentative approaches. In some sense, it appears that the general expressions described in the earlier steps, revealing 'education' as a structure or an object for dispute and 'research' as a general means to different ends, can indicate a further dimension of a void or lack of meaning. There is an implicit space that appears within the explicit frames, a meaning that can be pinpointed as the lines are drawn together when the common patterns in the narratives present a shape or a contour of a reference. The expositions of the meaning of science in the informal narratives reveal a concern expressed as a general characteristic, as an adjective. It is directed to an academic sphere in CPe and SPe, to the trust in expertise and the distinction among claims of knowledge in SSt, and to cultural expressions of status and excellence in CSt. In the formal narratives, there is also a common reference in which 'science' appears in a general sphere of a dynamic. These references appear in the drivers of a development in CS&T, in the differences between basic and applied 'research' in SS&T, in a potential dimension of the drivers behind academic life in CHE, and in the means to perform the tasks of the government in SHE. In other words, it appears that the informal narratives are rather homogeneous in their reference to 'science' as a character of a sphere to which they make reference through adjectives that often identify their central concerns and in the formal narratives to the dynamic of a development.

Identifying 'science' as a general characteristic in the informal narratives allocates it as a secondary phenomenon, depending on other phenomena – as an attribute. This conclusion may not appear to be much of a description, but it is a reference which involves the central concerns and thus places it in the important structures of meaning in the narratives. The main horizons can all be seen to be involved with 'science' as a characteristic, such as a scientific ideal in CPe, a scientific activity in SPe, a scientific culture in CSt, and a scientific institution in SSt. In this sense, it appears that its meaning involves the most central intentions and addresses the most important aspects in the narratives. It also appears that its meaning easily can be related to the other revealed structures of meaning, as an intermediary, a meta-character, a structure, a discussion, a source for legitimacy, and an asset with scientific characteristics. The representation of 'science' as a characteristic also involves an evaluative or introductory attitude directed to its realization at specific institutions

and in relation to ideal expectations in reference to the character central to the development.

As 'science' appears as a dynamic in the formal narratives, it takes shape mainly in an approach that is centred on the identification of a process and an outcome. Attention is given to a distinction among drivers, such as academic values, dynamics of a market, government tasks, or motives for applied and basic 'research', and they are seen primarily in light of their expected outcomes. In this sense, it appears that the meaning of 'science' involves the central concern of development and addresses the most important drivers. The representation of a dynamic is, in some ways, similar to the characteristic in the informal narratives as it is identified by a distinction between categories or spheres of life. These spheres of life are represented primarily in the formal narratives with references to a logic of development according to which the acts of government are explained. The identification of 'science' as a dynamic thus appears as a reference to drivers and implies narrative acts to establish an approach to a desired development.

The explicit references to 'science' are frequently given in the context of set phrases, and at times these appear to be statements without any direct meaning. The phrases occur mainly in the four narratives concerned with 'research' (CS&T, SS&T, SPe and CPe), in the phrase 'science and technology' in CS&T, 'teaching and research' in SPe, and 'basic and applied research' in SS&T. In the repeated phrases, the Swedish narratives refer to 'research', rather, as an activity, and the approach to activities and acts could be an explanation to the few explicit references to 'science'. These references are similar as they do not appear to be intended to differentiate from other attributes (such as scientific technology from non-scientific technology), but rather to established concepts as a reference to a sphere which is perceived to be commonly accepted. The apparent lack of meaning in the reference will be analysed further in the exploration of the meaning of 'politics' in relation to rhetoric, but they are interesting at this point in the way that they identify a number connotations. The set phrases also appear to give a representation of an accepted pairing of concepts, mainly to 'research' in SS&T, SPe, and CPe and to 'technology' in CS&T.

In sum, it appears that the meaning of 'science' in general appears in reference to a characteristic or a sphere of life in the informal narratives and to the dynamics behind development in the formal narratives. It appears thus to be related to the central phenomena in each narrative, but rather as an attribute to the intended spheres to which it belongs. It also appears in the context of some set phrases which can indicate a habitual reference with a dimension that is presupposed or lacking meaning.

'Science' and the distinction among types of knowledge

There are further dimensions in the narratives which can develop the understanding of 'science' and the encounter between specific facts and general principles, for example, how types of knowledge are differentiated. Such aspects are often implied in reflections on the veracity and reliability of discourses, in the approaches to the descriptive tasks, and in the nature of the attempts to establish and communicate propositions. The implied attitudes towards facts and how they form worldviews may mainly give indirect indications on the meaning of 'science', but the increased understanding of the narrative context can be quite informative to the different ways to understand the narrative practice of the 'politics of science'.

The discernment of types of knowledge is an important theme in all informal narratives, with an emphasis on tacit forms of knowledge in an interesting contrast to the scarce explicit references to 'science'. The intents to discern among ways of thinking and acting in the informal narratives is expressed mainly regarding markers for academic characters in CPe, an introduction to the Chinese student culture in CSt, identifying advantageous ways to make contact and get information in SSt, and abilities of a leader in SPe. The four approaches all involve a dimension of distinction among types of knowledge with regard for practical life at the university. The discernment is explicitly the most apparent in SPe in the description of a desired competence of a leader to distinguish among worldviews and claims, mainly in the essential act and the evaluative and suspicious approach to potentially wrong knowledge. In this sense, it appears that the distinction among types of knowledge appears mainly in the frame of an ability carried by a specific person and in relation to a threat implied in the representation of erroneous understanding of the institutional landscape that the system represents. The CPe seemed to approach knowledge primarily in attributes related to the role of teachers in their relation to students, in a movement towards a goal of 'forwarding' something belonging to a sphere separated from actuality in an ideal or a future of the students. There are references to a conflict of ideals, between moral teaching and instrumental approaches to knowledge, aiming for something the students might have a use for in an occupation following student life. In this sense, there appears to be a homogeneity in a main reference to knowledge in the future of the students, but an explicit reference to a heterogeneity of contents.

CSt and SSt refer to perspectives on the personal introduction as a procedure of initiation into life as a student, explicitly giving weight to practical and tacit knowledge of life acquired through personal contact and first-hand experience. There are similar reflections in the two narratives on the markers of their identity and

general approach to an integrated whole of life as a student, in which practical understanding of the procedures of everyday life dominates. Specified actions appear as rituals of initiation, with the major difference that social life in SSt appears as something outside of the university. The tendency to relativize appears as one solution to escape the responsibility for the advice; another appears in the revealed tension between its general and practical application, but the main implied dimension is the seriousness of the practical matters, indicating that there is something important at stake, including a threat of hurt or loss. The motivation in fear mainly appears in relation to the lack of social contact and knowledge on the ways and procedures of the institution.

The different approaches to knowledge imply different allocations of the phenomena in the lives of the involved people, and the meaning of, for example, the 'university' was perceived as something that occupies different measures and spheres of life in the informal narratives. The CSt gives a description of the whole of life as a student, with a holistic approach to life in the university. The narrative relation the CSt shows to the necessary knowledge is contrasted to the utilitarian and material relation to the facts in SSt, which rather evaluate knowledge in relation to its applicability to a specific situation and indicate an approach to the university as something partial relating to a life external to the institutions they presented. The CPe appeared, rather, to approach the ideals of 'university' as something essential in their life, and also to society. This might be an important difference in the cultures of both national settings, and it may be decisive in how the meaning of 'science' is constituted. It appears that the informal Swedish narratives refer primarily to knowledge with references to being right or wrong – as facts – while the informal Chinese narratives refer to knowledge based on values which are either good or bad.

The discernment among types of knowledge is not as important in the formal narratives, even though it appears to be important to establish a specific approach to quality and fairness. The distinctions are expressed in a combination of descriptive and imperative tones, and relate to a juridical establishment of relations and procedures. The concern for a dynamic of development in CS&T appears to relate to knowledge as a general prerequisite for the means of production, with a lack of differentiation among types, or on their constitution and variations. The CHE primarily relate to qualifications as indications of knowledge, mainly identifying promotion and titles for the staff and prerequisites for the students. SS&T discussed the applicability of the knowledge, and SHE mainly approached it in an evaluating concern for its structures, context, and appearances in an external approach that mainly forms knowledge in a similar concern for its applicability and 'quality'. In

other words, it appears that the formal narratives were concerned with markers for quality and levels rather than a distinction among claims.

In sum, it appears that fewer references to 'science' do not indicate a lesser concern in a distinction among claims or for knowledge. The informal narratives relate primarily to tacit forms of knowledge about the 'university', while the formal narratives relate mainly to markers of quality.

'Politics' as the formation of an environment and competition for status

The exploration into the meaning of 'politics' in the narratives reaches further into the implied dimensions of the discourse, searching for indications of different representations of the individuals and how they are gathered into collectives. The approach was established in the chapter of positioning to a public space in an Arendtian meaning, appearing through that which 'gathers us together and yet prevents our falling over each other' (Arendt 1958). The representation of the individual, the collectives, the institutions, and the government as they appear in light of the main concerns gives indications of some dimensions of how the 'politics' are realized. There are aspects which already have appeared in the preceding investigation and the proceeding exploration into how the common or public space is formed, which also takes a special regard for how the space is prepared for the realization of the 'sciences'. The investigation takes a first step into a summary of how the individual is represented, followed by how they are gathered into a collective, or, in other words, how the 'political' body is addressed and given shape. The investigation continues in an exploration into how the collective is related to the institution and the government, and it is concluded by some reflections on the apparent negotiations and the potential tensions regarding a political rhetoric.

Conceptualization of the individual

The point of departure in the study of an appearing public space is taken in a recapitulation and reflection on how the individuals appear in the narratives and will then proceed into a study of how they are gathered. The individual appears in CSt and SSt mainly in reflections on the need of students to make choices dependent on the given institutional context, either in the aspirations towards status in the former (p.95)or regarding the satisfaction of needs for contact and information in the latter (p.107). The individual appears in CPe and SPe as students in relation to setting goals and as teachers, leaders, or administrators appearing in the act of identifying a development of ideal characters in the former (p.58) or in the management of tasks

and resources in the latter (p.76). These approaches to the individual reveal similarities and differences, such as when CSt and SSt identify a similar position in reaction, whereby an actor answers to an institutional landscape through the choice between presented paths. SSt present choices of what institutions turn to depending on an environment of available support, and CSt present choices of what institutions to associate with depending on the consequent status. The individual is similarly presented in CPe and SPe as a scholar seen in light of the general collective with a responsibility to set goals for the student. The narratives are different as SPe approach the task of setting goals for student development with regard for a desired balance in the environment formed between demands and resources, while CPe approach the task with regard for academic ideals and the status related to achieving excellence. In other words, it appears that the informal narratives give a homogeneous picture of the person as an actor, students making choices, and teachers setting goals.

Remembering that the informal narratives were given in response to a questionnaire in which the narrators were asked to give directions, it is possible to argue that the approach to a person as an actor could be induced in the informal narratives. The situation given in the questionnaire did not, however, imply the values that form the recommendations to choices and goals, something that indicates a specific representation of the individual. The representation of actors appears in a unified prospective tone, but it is differentiated by the perceived levels of influence in the institutional context. The presented act of a choice presupposes an existing range of ready-made offers, while the act of setting a goal assumes further degrees of freedom, but in the narratives these acts still relate to institutions and the government. This balance might not be surprising regarding the situations of students and personnel, but that this experience would be that formative to the way that the informal narratives constitute the individual is an interesting outcome. In other words, it appears that there is a similarity in the informal narratives as the individual is constituted mainly as an actor, whose acts are understood in light of the institutional structures in which they takes place, through choices by students and through setting goals by the personnel.

The formal narratives approach the individual in a larger context and as implemented in an institutional structure, mainly as a representative for acts which imply an establishment of values. In CS&T, the individual appears mainly in references to awards and in decrees on fraud (p.131), and in SS&T as heroes of historical achievements (p.147). In SHE and CHE the individual appears primarily as objects for the institutional attribution of roles related to stages in the academic lifespan, such as enrolment of students, employment of personnel, and appointment of positions of leadership (p.171 and p.152). The establishment of values differentiates mainly

among the initiatives explained with a desire for 'excellence' or 'development' as opposed to 'fraud' in CHE and CS&T. The approaches are intended to be exemplified through the attribution of awards for individuals representing desired aspects and punishments for individuals representing non-desired aspects. In SS&T, the individual also appeared as an example, mainly of historical accomplishments representing an 'international status' that is used for the arguments for further 'applicability'. In the SHE narrative, the individual appears mainly as the object for the attribution of a mandate, a task, and a right, either as a leader, a teacher, or a student. The references thus establish and regulate a set of relations by drawing frames in which activities are regulated in an environment of tasks, resources, and financing.

On some occasions, this ambiguous relation to the actors appears as formal narratives, mainly in CHE, and CS&T explicitly defends the independence and freedom of the actors in a proceeding governance of the institutions and individuals while it simultaneously attempts to direct the initiatives through 'encouragement' or 'regulations'. The attribution of awards and the hunt for corruption both appear to intend to an involvement in the attribution of status#, both through rewards and punishment. In other words, it appears that there is a similarity in the formal narratives as the individual appears symbolically, as an exemplification of the desires expressed in the narratives or as an object for the attribution of roles.

In sum, it appears that the individual is an important topic in the informal narratives and that it is constituted mainly as an actor, that in generally proceed in acts defined by an institutional context. The formal narratives identify the individual as a symbol, example, and object for the institutional attribution of positions. The relation between the institutional structures and the individual appears as central in all narratives, with a certain precedence of the structures and the ways they form the acts of the individuals.

Establishment of collectives

The presented conceptualization of the individual already indicates an initial constitution of the collective in the interaction with institutions. As we search the outcomes for the structures of meaning, it appears that the narrative context in the informal Swedish narratives are similar in their concern for the space and the locations in which action happens – an environment. The SPe narrative primarily identifies the central phenomena as actions, and the individuals are identified, related, and united based on their role as actors; however, the acts are also identified by the environment in which they take place. As the actions are differentiated, they also appear to form a professional sphere of life, recognized by the attribution of tasks and

resources. The balance between the tasks and the means to meet them form an environment for work and activities and establishes a common space that repeatedly is evaluated according to how fit it is for the performance of the actions. The SSt narrative establishes a common space marked by an institutional environment that the students turn to with the intention to satisfy basic needs of fellowship and information. The satisfaction of the needs is expected to come from the institutions, identified as locations to turn to or environments for professional expertise that are evaluated based on how the offered help fits the needs. The drivers are of a personal nature and are not marked by competition for limited resources, but, rather, of a mutuality in the needs. In other words, it appears that informal Swedish narratives are similar in their concern for an institutional environment which is evaluated based on its fit to the expected action.

The formal Swedish narratives establish the relation between both the government and the institutions as one of the main areas of concern, an interaction which provides the central appearance of a collective and of the formal public space. The SS&T relates primarily to the act of the government through the direction of financial means and described as to give 'signals'. The addressed common space is thus constituted as a set of institutions which are the objects of a distribution of financial means. The explicit motivation is explained in a desire to enhance the achievement in an 'international competition' in which the institutions are representatives of a nation in a meta-community of nations. The approach to governance that appears in the narratives is presented as an indirect and wordless form of rudimentary 'pointing'; it is directed to the shaping of an economic environment that is supposed to lead institutions towards goals shaped in an implied international consensus of values. The common space that appears in SHE is shaped mainly by the relations between the state, the institution, and individuals based on the attribution and fulfilment of tasks. It is mainly a juridical approach to tasks, responsibilities, rights, and duties and appears to consider one-way communication from the state, and to some extent, it establishes the criteria for the evaluation of the realization of the tasks. The establishment of the relations appears primarily to put pressure on the institution for the benefit of the individual. In other words, it appears that the formal Swedish narratives have a common concern for the initiative of the government and the performance of the institutions, mainly in relation to an evaluative approach to their realization of the attributed tasks.

The informal Chinese narratives identify collectives formed through a common culture, with a perception of shared values in which a public sphere establishes an evaluation and a hierarchy. The CPe is centred on the development of moral character in relation to an academic vocation, something that shapes a collective into

a community of individuals united by an ideological objective set by perceptions of a culture with shared values. The conflict between the academic and administrative collectives as well as the criticism of the governmental involvement in the organization of the 'university' shapes a political space with tensions, primarily regarding the attribution of recognition. The CSt identifies collectives based on a way of being and doing that marks a culture, as well as common values and aspirations. The consequent public space appears in the debates on values and threats bound to the different positions and foundations for choices, as well as in the perception of a common hierarchy of status. The space that appears in the debates in which the meaning of 'education' is negotiated implies a field of given and recognized positions, which establishes the evaluation in a ranking or hierarchy that is comparative and intends towards the attribution of recognition. In other words, it appears that the collective is established in the informal Chinese narratives mainly in light of common values forming an evaluation and a space that gathers a community of actors in a competition for recognition.

The formal Chinese narratives establish a relation between the government and the institution with a primary concern to encompass the initiatives that attribute status. The narrative of CS&T mainly forms a public sphere in an explicit concern to encourage the development of certain means of production, explained through dimensions of social and material development. The governmental approach is given in reaction to pre-existing initiatives, and it is concerned with the outcomes of the development in light of the attribution of a social recognition in an implied public realm. The narrative of CHE aspires mainly towards a juridical approach to the institution, shaping an academic lifespan of its involved persons, in the admission and graduation respective employment and promotion. The consequent common space aspires towards a regulation of rewards given with social appearances.

In sum, it appears that the individual is an actor mainly in the informal narratives, while the formal narratives sees the individual in a more symbolic way, occasionally as an actor, but the main concern appears in a tension between the institution and the government as the initiator of action. Common concerns appear in the presuppositions of the initiative as an identifier of the actor in the informal narratives, exemplifying the institutional approach in the formal narratives. In the informal narratives, The institutional system appears as a landscape that demands abilities to navigate, something that can be related to the ambitions in the formal narratives to establish a context through regulations and encouragement. In other words, it appears that the meaning of 'politics' in the Swedish narratives is based on the representation of an environment for the action, while the Chinese narratives reflect an attribution of status.

'Politics' as the formation of an environment and a competition for status

The meaning of 'politics' as the formation of an institutional environment in the Swedish narratives and an attribution of status in the Chinese narratives uses the flexible approach to public spaces from the Arendtian vocabulary directed towards the phenomena in their realized contexts. The result of this analysis now invites for a further study of the ways that the meaning of the environment and the attribution of status are constituted in the narratives. The acts and interactions which are formative to the environment and to the attribution of status are expressed with some interesting similarities and differences which can be used to describe the phenomena in a more detailed way, such as the allocation of the initiative or the questions on the precedence of the acts of the government. The further study of 'politics' goes back again to the chapter of outcomes to investigate how the phenomena appear and draws the lines together between the narratives.

The concept of an environment occurs frequently in the analysis of the informal Swedish narratives; it is explicitly important in the description of the 'university' and appears to found the evaluating approach (p.71 and p.107). In SPe, the environment appears as a location that embodies a social atmosphere, and that is evaluated in relation to an acceptance of diversity. It is also the field for the competition among activities, as a formalized work-place framed by the attribution of positions and the consequent authority. The power to shape the institutional structures is repeatedly attributed to a 'leader', as an extension of governmental agencies. In SSt, the affect mainly appears in an evaluation of the environment according to its 'student-friendliness', an attribute that relates to the experience of navigating in an institutional landscape searching for needed information and contacts. The analysis of the appearance of individuals and their gathering into collectives emphasizes an environment that is characterized by uncertainty, creating dimensions of anxiety in threats to everyday life. The environment is not an explicit concern to the same extent in SS&T, but, the main concern of the allocation of financial means in order to shape the field of research appears as the formation of the institutional environment (p.146). This can also be seen in relation to the importance of the attribution of resources in SPe, reflecting a homogeneous attribution of importance to the institutional structures from two different perspectives. The formation of an environment is an explicitly important part of SHE, mainly in the understanding of 'research' (p.173) appears as central in the concern to attribute tasks and direct the institutions to realize the intents and duties of the government. In other words, it appears that there is a homogeneous representation in the Swedish narratives in which

the government has the initiative to establish the institutional environment and the individuals react to the resulting landscapes.

The environment thus appears in the Swedish narratives as a formal sphere with institutional frames, as a workplace and a location for studies, with gates of inclusion and exclusion. In this sense, an importance is attributed especially to the symbols or rituals of passage, such as admission or employment and graduation and promotion. The formal structures dominate the representation of the environment as it changes for the person according to the different stages. The formal frames are defined mainly by the balance of resources and demands given by the government in SPe and the landscape of available help which can satisfy needs in student life in SSt. These formal structures are also revealed in the ways that the government allocates tasks and gives directives for the activities. This formal representation of the gathering into a collective appears also to be confirmed in what appears to be a kind of social anxiety, as the informal Swedish narratives give emphasis to social behaviour.

The representation of a competition for status has already appeared in the analysis of the Chinese narratives and is a central concern with several dimensions, for example, in the meaning of 'research' as a quest for legitimacy. In CSt, the competition for status appears mainly in relation to the choices between institutions, deciding the affiliation based on the accompanying status (p.88). In CPe, the representation of a competition for status is given with mixed affects as there is an explicit disdain for its attribution based in compromises with the academic ideals facing economic or governmental temptations; however, there is a homogeneous representation of academic achievements as a respected attribution of status (p.54). In CS&T, there is a less obvious current in the government directives to encourage development, in which it appears as the intention to encompass the status that is attributed based on the achievement of a development (p.123). In CHE, the status is attributed through awards and chasing fraud, as well as in the regulation of promotion and positions of leadership (p.152). In other words, it appears that there is an interaction between the individual and the institution as bearers of status in all narratives, with a potential mutual benefit related to the association. There is also a tension related to the attribution of status based on these associations, in a competition between the academic and administrative communities, as well as in the general stratification of collectives.

The attribution of status thus appears in the Chinese narratives in the stratification of a social sphere in which characters and meta-characters are placed in a relational hierarchy. The relations appear to carry some complicating dimensions, with a

negotiation on the values and ideals according to which the status is attributed. The social sphere and the foundation for political life appear as a consequence of shared values in which the status is represented, and one of the main tools in the attribution is the associations among bearers of status. The desire of the government to encompass the status and of the students to belong to an institution with high status indicates that the interactions among the different parts involve implied dimensions and stakes which might be difficult to perceive for an external observer.

These emerging images of what the realized 'politics' mean in the narratives also frames the conclusions on the meaning of the other phenomena. The representation of 'education' as a structure in the Swedish narratives and an object of discussion in the Chinese narratives are not very descriptive, but as they are placed in a concern to establish an institutional environment or in a competition for status, they appear somewhat more concretely.

'Political' rhetoric and the negotiation and establishment of narratives

This analysis began with an investigation of the meaning of 'university', which was revealed as a meta-character and an intermediary, something that already establishes different representations of 'politics'. The different representations are founded in the different attributions of roles and relations between the public, the institutions, and the government. The differences can be portrayed in relation to the autonomy and the level of initiative coming from the institutions. The following analysis of 'education' and 'research' revealed quite open frames which are based on a discussion and aspirations for legitimacy in the Chinese narratives and on a structure, an asset, or an investment in the Swedish narratives. These perspectives already frame different ways of conceptualizing 'politics', as the common space formed in narrative constitutions and in communicative behaviour which refers to the encounter of different perspectives. Some apparent examples of such expressions are given in the different uses of metaphors, mainly in the Chinese narratives, in which references to industrial or authoritative approaches were repeatedly described in derisive terms. There are also aspects of a constitution of a 'political' space in the different references to uses of verbal communication, such as in the uses of repeated phrases. An example of such a use of 'science' as a quality of, for example, 'research' or 'technology' in the Chinese narratives and the use of groups of concepts such as 'teaching and research' in the Swedish narratives indicate discursive habits which appear to shape the representations. There are also aspects of the political life that appear in the way that there are blanks in the narratives, such as in the lack of explicit descriptions of the contents of 'education'.

The representation of disagreements and tensions can provide interesting dimensions to the study of the appearance of a public space. An example of such a social sphere of interaction with disagreements appears as both SPe and CPe express demands for change, the former requests an environment with acceptance of diversity and the latter freedom of expression. These approaches indicate different representations of the encounters in disagreements and different challenges. The demands for an acceptance of diversity in SPe appears to have some similarities with the legal approach to rights and duties in SHE, especially in light of the concern for the institutional environment. The requests for freedom of expression are also related to the attribution of recognition, as the concept of freedom appears in the frame of a dynamic to enhance development, a concern it has in common with the formal Chinese narratives. In this sense, there is a frame for the encounter of diversity in the Swedish narratives in which there are demands for a legal protection of plurality, while the Chinese narratives rather discuss freedom as the means to achieve greater development. There is a polarized sense of participation in this observation as the informal Swedish narratives do not criticize the institutional structures, but rather establish them in a sense of participation, while the informal Chinese narratives are criticizing without the sense of inclusion.

The analysis of the informal Chinese narratives indicates an ongoing discussion, especially in the revealed meaning of 'education', forming an involvement in encounters of disagreements which are political in the way they intend to shape the common world. The CSt narrative contained discussions on values and the markers for placement in hierarchies, such as in the given differentiation of 'universities' through the extension of their history as well as their contacts with foreign institutions. The CPe narrative also referred to discussions related to different ideals, such as entitlement of a hierarchy. The formal Chinese narratives appear to be focused mainly on the establishment of an organization, the attribution of roles, authority, and a status that is consequent on positive development. As the laws primarily target the inclusion of the state in the proceedings and implicitly establish the primacy of the institutions in the sequence of procedures and the source of initiative, it appears that the space in which politics take place is filled with tension. These representations indicate that the way that the formal narratives indicate the involvement of the government in the activities of the 'universities' can be the source of the narrators' reactions.

There are not many explicit references to conflicting perspectives in the Swedish narratives, but there is implied indication, such as in the demands for an environment

that accepts diversity in SPe, prohibitions of discrimination in SHE, and the polarization between basic and applied 'research' in SS&T, while the SSt is directed towards different solutions in everyday life. The common concern for the establishment of an environment appears, however, to be given in a way which lacks a confrontation. The perspectives are quite homogeneous, and the establishment of an environment also holds discursive aspects, especially visible in the way that the care for a balance of resources and demands is mirrored in the SPe and the formal narratives. The Swedish narratives thus appear to be directed towards a consensus materialized in an environment established and upheld by the legal and governmental structures. The apparent lack of negotiation on the nature and meaning of the central phenomena in the Swedish context can be explained through a proposition that there is a strong and established narrative, or at least the perception of one. The silence on the dimensions of meaning and the lack affective involvement would be explained by little active participation in a negotiation as the settled narrative would be perceived not to be in need of negotiation. This perspective can also be given emphasis in the apparently low personal involvement, and the sense of a division between the personal and the public spheres in the Swedish narratives, even if the personal problems are involved in the reference to institutions. The main concerns turn, rather, to practical issues in the environment, a turn to relativity and the careful expressions of recommendations on how to navigate in this uncertain environment. The meaning of the environment is concentrated mainly on an approach to a professional sphere that shapes actions, which vary in the eight narratives. The meaning of recognition is primarily concentrated on the attribution of authorship of certain proceeding acts, in which an appreciated development engenders a status which the government attempts to encompass.

In sum, it appears that already in the identification of the 'university' as a meta-character and an intermediary, there are indications of different representation of the 'politics' in Sweden and China. There is a further dimension of autonomy in the representation of the 'university' in the Chinese representations, while the Swedish political sphere appears to be more integrated. The 'university' as an intermediary between the government and individuals gathers an environment for the staff to accomplish the tasks of the government on the behalf of the students, and thus forms relations which draws the spheres together. The 'university' as a meta-character, especially in light of a competition for status, forms a sphere in which the relations are marked by tension and competition. These are aspects which we continue to explore in the following part of the analysis, which is focused on the study of the narrative contexts.

Similarities and differences between the narrative contexts

There are many questions that can be raised based on the findings presented in the first part of this analysis, and there are many areas that have been approached in rather vague propositions which would be valuable to investigate further. The affirmation of the complex appearance of the phenomena leads to a point where it is impossible to investigate all the appearing structures of meaning. At this point, the analytical field is, however, broadened to the narrative context, while the guides of the investigation are still focused on the backdrop they form to the appearance of the central phenomena. The following exploration is intended to proceed in the analysis reaching for a further clarity of the emerging picture. The study of similarities and differences have been a central method to analyse the narratives, and in this second part of the chapter, the eight narratives are categorized according to two different divisions (formal/informal and Swedish/Chinese).

Swedish and Chinese narrative contexts with task- or process-driven governance

Both questionnaires initiating the informal narratives gave equal primacy to personal experience and reflections, but there is a considerable difference between the groups regarding both the concerns and the tones, as well as the expected space in which their potentialities may be realized. The formal narratives are equally the result of governmental discourse with regulating or governing intentions but they establish different approaches to the structures as they relate to the perceived motivations of the involved persons, collectives, and institutions. One of the reasons for the choice of two national contexts was explained in the chapter on positioning as an attempt to simulate a distance, or to be aided by the different emerging frames of reference to unveil what is taken for granted in a narrative context. The differences between the narratives are often the most obvious as they are categorized according to their Swedish or Chinese origin, and it is an aspect that is present through most of the analysis. The meaning of 'university', 'education', 'research', and 'politics' appeared in the analysis to be differentiated mainly according to the Swedish or Chinese context. There are further dimensions of the narrative contexts which become visible on closer examination of the main horizons of each narrative as presented in Table 28:

Table 28, on the main horizons in the Chinese and Swedish narratives

Main horizons in the Chinese narratives				Main horizons in the Swedish narratives			
CHE	government regulation	initiating institution	academic life-span	SHE	institution	mandate/task	governmental initiative
CS&T	development	encouragement	encompass status	SS&T	funding	strategy	differentiation
CPe	ideal	development	character	SPe	activities	economy	environment
CSt	culture	status	values	SSt	institution	relativity	context

The main horizons are reminiscent of the central concerns in the eight narratives, and they are intended to enable a visualization of the similarities and differences. In the first row of the Table 28, a similar concern in CHE and SHE appears for the interaction between the government and the institution, but with a different allocation of the initiative. Emphasis is given to the initiating role of the institution in CHE and of the government in SHE, a difference between the two narrative contexts with a potentially considerable importance, which is an excellent point of departure in the further analysis. These representations also resonate in the second row, where CS&T attribute encouragement as a reactive action to the government while the SS&T consider its more active steps of funding, establishing further a concern for the origin of the initiative. In the third row, CPe and SPe are presented with a similar concern for the role of the scholar, but they are differentiated based either on internal aspects, such as ideals and character in the former, or external factors, such as acts and environment in the latter. These aspects can also be related to the perceptions of the allocation of control, which converge with the representations that allocate the initiative to the governmental responsibility in the Swedish context and to the institution as an active character in the Chinese context. There are many similarities between CSt and SSt; however, in the approaches to student life in the institutional landscape, there is a difference similar to the third row, with more frequent references to external dimensions in the latter. A common trait in these most visible similarities and differences relates to the representation of the government and the allocation of initiative, which is a question that guides the continued analysis of the narratives.

Similarities and differences in the representations of the government

Table 28 indicates a constitution of meaning centred on the initiative, in which the government is involved at different stages in the two countries. The representation of the government already appeared as an implied but central marker in the constitution of the meaning of 'university', as both an intermediary and a meta-character. The Chinese government is mainly portrayed through its attempts to get involved and regulate the proceeding acts and initiatives of a separated entity. These dimensions are explicit in the informal narratives in which the interference is a reason for a mistrustful attitude towards the governmental administration, as is most clearly expressed in the ways that the CPe asserts the strength of a character in a resistance to the influence of the state and the CSt reflects the image of the controlling state. The dimensions also appear in the formal narratives, but implicitly as the proposed encouragement and regulations presuppose ongoing initiatives, and the main horizons in CHE and CS&T reveal a central concern in the involvement of the government through an encouragement and regulation of the academic lifespan of its participants. These different representations indicate a coherent image of a government that

attempts to get involved in the academic organization. The Chinese narratives thus attribute the initiative to the institutions and indicate acts of government which are centred on the involvement in the ongoing process of the institutions.

The formal Swedish narratives portray the government mainly as an actor that assigns tasks in the act of attributing funding with attached signals in SS&T and in the act of establishing a mandate and task to the institutions in SHE. These acts implicitly place the government as the central actor at the origin of the initiatives, something that already is implied in the development of the understanding of the 'university' as an intermediary. The government is represented by the institutions in these terms, and it is thus brought a step closer to the public, as seen in SSt, and appears to be safeguarded from the failure to meet expectations, as seen in SPe. The informative institutions in SSt are described as having the authority of a governmental agency and the role of the intermediary that they expect a service from. The weight of the responsibility appears, rather, to be put on the personnel, which is expressed in the tension of maintaining the balance between resources and tasks. In other words, it appears that the government is represented mainly in the Swedish narratives in the act of establishing an institutional environment through assigning tasks to the institutions and as safeguarded from failure due to the attribution of responsibility to the institutions and personnel.

The approaches to the governments appear to be similar in the sense that they both are identified by their actions, but they are differentiated by the moment in the procedure in which the act is allocated, either in the origin in the Swedish narratives or in the involvement in an ongoing process in the Chinese narratives. The moment of engagement also indicates a higher measure of control or authority of the government in the Swedish narratives, as it appears quite unchallenged in the establishment of an environment, but it is seen as one of the parts in the competition for status in the Chinese narratives, and is questioned as such. The different attribution of trust to the government appears the most clearly in the ways that administration is described in the informal narratives. Authority and administration is described in confusingly similar expressions in the Swedish informal narratives, and often in close relation to an aspect of service to the involved people, while administration and management are clearly differentiated in the Chinese narratives, as the former stands for the involvement of the government and the latter for its actual governance. There appears to be a sense of trust which is implicit, indicated by the lack of criticism, but also by the natural reference to the expectation of a government that satisfies needs in SSt and SPe. In CPe, an invasive governmental control is demanded to be reduced as it threatens the ideals at the centre of the meaning of the university and the logic of development founded in freedom. In the formal narratives

a similar tension can be seen as the SS&T is concerned with the financial and comparative perspectives, in which the bureaucratic functions are central – but implied. The administration appears, rather, to be concerned with the relation between the institutions and the state in the other three formal narratives.

Thus, it appears that the government is represented with a natural and unchallenged authority to establish an environment, in a mainly task-oriented approach in the Swedish narratives, while it is represented in a questioned involvement in a process-oriented approach in the Chinese narratives. These narrative contexts are primarily differentiated according to the levels of trust involved in the representation of the government.

'Politics of science' in task- or process-oriented narrative contexts

There are evidently many ways to formulate the similarities and differences between the Chinese and Swedish approaches, and the material in the outcomes is rich enough for many different studies. Some further perspectives appear in the differentiation of task- or process-oriented approaches in relation to how different spheres are identified and related and to how a society appears to have special regard for a concept of 'science'. These aspects appear, for example, in how the 'university', society, and the government are represented in their interactions, relations that are described in all eight narratives, but their meaning and the nature of their relations is indicated explicitly to different degrees. It appears that the narrative context in Sweden gives a dominant role to the government as it is trusted to form an institutional environment for activities with scientific characters that shape its dynamics. On the other hand, the Chinese representations establish a 'politics of science' based on the competition for status with academic characteristics and dynamics in which the government is involved as a questioned actor attempting to form academic life.

In the Swedish narratives, the relation among the actors is described with double appearances. On the one hand, the 'government', 'society', and 'institution' appear with similar expressions as merged entities. The actors are also differentiated, such as in the approach in SSt in which both a social/private and a professional sphere are clearly separated but the service of the institutions are expected to satisfy needs in both spheres. The merged unity of different actors converges on the tasks to provide financial means and tasks in the formal narratives and tasks and support in the informal narratives. The spheres that appear in the Chinese narratives are represented mainly in light of a movement, of a potential merger of spheres, as the informal

narratives express a threat related to the merger in the government's involvement in the 'university', while the formal narratives explicitly present a desire for further such mergers. In this approach, SSt and CPe represent two extremes, as the former identifies the state with the institution, while the latter antagonizes them. The narratives of SPe and CSt appear to have dimensions of both separation and differentiation, as the former identifies a work environment which is formed by governmental directives but which is also evaluated in its own terms, while the latter differentiates between institutional and state influences, which are given as threatening, but also identifies the system with a wider culture that is marked by a way of governing and a formal political structure. A contrast appears among the formal narratives as the concerns with the institutional structures are centred on the protection of the rights of students and personnel in SHE, on the regulation of initiatives through an organization of the academic lifespan in CHE, on the differentiation and competitions among fields for funding with regard for applications in SS&T, and on the ways that the state is expected to encourage the initiatives in CS&T.

There are a number of central differences that appear as the form and content of the expressions interact in different ways, such as in the interaction between the tone in which the descriptions appear in contrast to the central concerns. The informal Swedish narratives are focused on factual structures, such as the environment and institutional aspects in a way that are external to the individual and appear to challenge its control. This can, however, be put in contrast to the more personal ways of expression as the narration is given with an emphasis on the relativity and subjectivity of the propositions. The informal Chinese narratives are focused on the subjects in the way that their main horizons are internal, and held by people, relating to the characters of scholars as well as a way of life in a culture, but the expressions appear to be more firm, more factual, and with little concern for a subjective emphasis. The informal narratives are varied in their descriptions of the relation between institutional structures, especially as they relate to the state, and the formal narratives are more homogeneous in proclamations on governing as well as giving liberties. The formal narratives approach the institutional context with a concern for the motivation as a driver behind the dynamics, primarily through directives that target a development in CHE and CS&T and through the establishment of an environment in SHE and SS&T. These distinctions between formal and informal narratives will be developed in the next part of the chapter.

The competition for status in the Chinese narratives appears as a more dynamic representation of 'politics' than the establishment of an environment in the Swedish narratives. The Swedish system appears with indications of a lack of tension,

combined with a greater trust in the government which gives a further impression of stability. However, the relations appear to be quite unidirectional in the act of assigning tasks, and the institutions are allocated to the receiving end, most acutely expressed in the ways that SS&T indicates signals implied in the acts of funding. The effects of this approach appear, however, to give a sense of control allocated to the participants in external spheres, in the sense that the governance, the initiative, and the management are allocated to the environment. The process that appears in the Chinese narratives is, on the other hand, related to internal procedures, and there are considerable tensions between perspectives and the allocation of power and recognition. The characters of people and institutions are tested in the tensions between actors, and the competition for status challenges the participants to make balanced choices and to hold on to ideals and values.

Consideration of the distribution of the modality of affect can be used to take the analysis a step further. The Chinese narratives use a much more affectively loaded tense, with a more active personal involvement as the narratives states a position or opinion of what is good or bad, right or wrong, and numerous affectively loaded claims, referring to moral dilemmas such as debating whether the knowledge from 'universities' is a means or an end. The informal Chinese narratives are, in this sense, also more critical to their own system, providing an alternative or resistance to the propositions implicit in the formal narratives of a closer governance of the management both approving and disapproving of different qualities and aspects, and the Chinese formal narratives also establish values which were to be encouraged. The Swedish narratives appeared to be more factual, keeping to rather practical points such as giving recommendations, tasks, or advice on the performance of work that is more separated from personal involvement. The Swedish narratives mainly contain descriptions with a neutral affect, primarily referring to everyday life problems without any extensive consideration of concepts of quality or reflection on the deeper reasons for their activities. The negative affect that is presented mainly relates to threats of failure in practical issues, most explicitly expressed in SSt in the fear of lacking contact and information, but also appearing in SPe in relation to the representation of a leader which has to have abilities to understand the institutional landscape and its development.

The informal Chinese narratives indicate a general concern with the balance of power between students and teachers, most acutely criticized in CSt, but with some appearances in CPe as well. The academic ideal in the CPe narrative invites for critique and opposition in relation to power, but it also appears as interested in power and paints a picture of an ideal system, proposing an alternative, and affirming the role of the personnel to decide the goals and contents of the academic activities. The

CPe also explicitly demanded an administration which serves and does not govern and forms of organization that would be fair, often indicated in academic, scientific, or statistical grounds for promotion and attribution of recognition. The formal Chinese narratives appear to indicate measures that allocate power to the government, through the attribution of funds, awards, and regulations as well as punishment in case of fraud. Nevertheless, the general formulations related to such acts leaves broad margins of interpretation, which in the light of the attitudes of the informal narratives, give reasons for suspicion.

Another dimension which illustrates the difference between the narrative contexts is the representation of the foreigner and the ways in which it reflects back on the representation of one's own group and cultural collective. The informal Chinese narratives attribute an active role to the foreign person allocating the difficulties to aspects of the individual culture and practices, while the informal Swedish narratives attribute a passive role and allocate to the foreign person the challenges to the abilities and efforts to adapt to the environment. These expectations are similar to the general attitudes towards the interaction between environment and person in the narratives on the whole, as the Chinese narratives emphasize personal abilities in general, and the Swedish narratives emphasize the primacy of the environment in general, but they specifically create different contexts for a visitor. The attribution of action and abilities indicates representations of the self and the other with different balances of status, but this is a broader theme that will be further discussed in the later chapters.

In other words, it appears that the Swedish narratives emerge as *task-driven* as the government assigns tasks to the institutions, with an apparently further measure of control as well as of trust. The Chinese narratives appear to be *process-driven* as the government gets involved in already proceeding acts, which are initiated by the institutions. These structures of meaning indicate similarities in the concern for interaction and acts of government, but that are differentiated in the ideals of the extent of these acts.

Formal and informal narrative contexts in a driver- or outcome-centred development

The formal and informal narratives are produced in different ways and have different compositions, aims, and functions which explains many variances and modes of expression. There are also themes that have appeared in the analysis this far which have initiated an approach to the similarities and differences in the perspective of a categorization between formal and informal narratives. The similarities and

differences relate, for example, to the representation of 'science' as a characteristic or a dynamic and to the individual as an actor or a symbol. However, the study initially takes a step back to the main horizons of the eight narratives pairing the perspectives, as illustrated in Table 29, to identify a point of entry to the analysis:

Table 29, on the main horizons in the formal and informal narratives

Main horizons in the informal narratives				Main horizons in the formal narratives			
CPe	ideal	development	character	CS&T	development	encouragement	encompassing status
SPe	activity	economy	environment	SS&T	funding	strategy	differentiation
CSt	culture	status	values	CHE	government regulation	initiating institution	academic life-span
SSt	institution	relativity	context	SHE	institution	mandate and task	governmental initiative

In Table 29, the dimension of formality is placed to differentiate between the categories of narratives, positioning the main horizons in the left and right parts of the rows. A horizon of development appears on both sides in the first row, but the two other horizons indicate different connotations to the same concept. The way that the ideal and a character in CPe frames the development primarily indicates references to personal motivations in an academic life and a prospective tone driven by a desire to realize the ideal. The horizons of encouragement and encompassment of status in CS&T frame a concept of development that refers mainly to an institutional system in which the government aspires to get involved. In other words, it appears that the two narratives represented in the first row are similar in their concern for development, but they allocate different expectations and values to the concept. In the second row of Table 29, the SPe and the SS&T have a similar economical perspective, giving emphasis to the act of coping with a reality of available resources with a concern for the expected outcomes depending on their management. In SPe, economy is framed mainly as a balance between resources and activities shaped by an institutional environment, while funding in SS&T appears in the light of the acts of the government to establish the environment through a differentiation of disciplines and through signalling values of applicability. These concerns can be related to a concept of development in the sense that the emphasis is on a progression with a point of departure and an outcome, as both narratives indicate that the government shapes an environment that guides a development.

In the third row of Table 29, CHE and CSt are united by a common concern for life in academia, which also appears in the light of development, in the regulation of the stages of the academic lifespan in the former, and in a distinction among approaches that are expected to give something of value in the latter. The development appears in the frames of a succession of elements or choices, which aim for progression in academic life. The fourth row in Table 29 indicates a common concern in SSt and SHE for the 'institution', which appeared in the earlier analysis as an intermediary between the government and the individual. The other horizons in SSt, of relativity and a context, emphasize the ways that the experience of the environment varies

according to different locations, while the SHE emphasizes the initiative of the government in attributing a mandate and a task to the institutions. The concept of a development may be the furthest from this pair of narratives, but can still be implied in the central concerns for the expected satisfaction of needs in SSt and in consequence of the governmental initiative in SHE.

In other words, it appears that the concept of development is well placed as a point of entry to the study of similarities and differences between the formal and informal narratives, and, in the proceeding analysis, it is used to explore the narrative contexts. There are a number of further extensions of this approach, such as with regard to the representation of a prospect, which, classically, is important to the analysis in the phenomenological tradition.

Development as a concern with a variety of meaning

The concept of development is central in several of the narratives and is also tangent to several of the themes that have been studied. The CPe relates to a logic of development centred on academic freedom, which is threatened by the involvement of the government, while CS&T relates to a desired dynamic of material growth that decides an attribution of status. These two representations of development are different as CPe is concrete and certain in relation to its source or cause, while CS&T is more certain and concrete in relation to its goal or outcomes. This distinction also appears in the Swedish narratives, as SPe is concerned with the positive effects of the tension between different activities, opinions, and worldviews in the work of the personnel, which appear as a positive origin for development, while SS&T focuses on the outcomes of different kinds of funding. SSt and CSt relate to a development of life that is dependent on the drivers behind the choices of students, relating to a pre-existing, but in some dimensions uncertain institutional environments, while CHE and SHE relate to an outcome of the proceeding academic life centred on the accomplishment of a task in SHE and on promotion in CHE. All four informal narratives are thus centred on the acts and approaches of the individual and portray development depending on its drivers. The four formal narratives, on the other hand, are centred on the different kinds of rewards of the systems and portray development depending on its outcomes.

The different representations of the individual here appear as central to the approaches to development, as the individual as an actor in the informal narratives shapes a personal involvement as a driver, while the symbolic persona in the formal narratives cedes space to a focus on the outcomes. The concern for drives and outcomes are also expressed differently depending on the approaches to the

interaction between the individual and the environment, in institutional perspectives in the Swedish narratives and relational terms of recognition in the Chinese narratives. The Swedish narratives are concerned with the ways that the environment shapes the development, such as the way that an environment allowing a diversity of opinions and perspectives is expected to be a driver of quality and growth in SPe. In SSt, the services of the institutional environment are expected to drive progression in life, while the outcomes depend on the acts of the government in the formal narratives, through its tasks in SHE and through its modes of funding in SS&T. The Chinese narratives emphasize relational mechanics that produce or enhance a progression and function of development for international recognition as well as social and economic growth. Examples of such concerns can be seen in the dynamics of liberty and academic freedom as drivers of quality in CPe; in the discussion on proper drivers in the choices and approaches in CSt; and in the awards, punishments, and encouragement in CHE and CS&T.

The meaning of development indicates similar approaches to the central concerns through a prospective approach. The informal narratives identify the acts with regard for their purposes, while the formal narratives identify development with regard for expected economic outcomes, attribution of status, or an eventual accomplishment of a task. The task to aid progress also appears to be a central function that the governments take on themselves, but this is explained with regard to the expected outcomes and expressed as an encouragement. These revealed references are also central in SSt and SHE – even though the references to the concept of development are not as explicit, and the distinction between the focus on drivers and outcomes can also be applied to the concerns for economy, academic lifespan, and institutions that appeared in the pairs presented in Table 29. The distinction between an emphasis on the driver or the outcome is not exclusive as the formal narratives also consider the drivers, but generally with regard for the expected outcome, and the informal narratives consider the outcomes, but generally with a regard for the potential drivers.

In sum, it appears that the representations of development in the informal narratives have common traits in a concrete approach to acts and their contexts as they drive development, while the formal narratives relate, rather, to the general mechanics and their outcomes. In other words, it appears that the difference between the formal and informal approaches are conceptualized mainly in relation to a driver-centred or an outcome-centred understanding of development.

'Politics of science' with driver- or outcome-centred perspectives

The narrative contexts thus appear in light of the different approaches to development, which indicates broader frames that are central to the representation of the 'politics of science'. The frames reveal, for example, further detail in the image of the progress that appeared in relation to the meaning of 'science' as a characteristic in the informal narratives and as a dynamic in the formal narratives. The representation of 'science' as a character in the informal narratives allocates it to a secondary place, dependent on the sphere of life that it characterizes, involving the structures of meaning that relate to the appearance of the central horizons. The 'scientific' ideal in CPe, the 'scientific' activity in SPe, the 'scientific' culture in CSt, and the 'scientific' institution in SSt are all presented with regard to an image of an expectancy or potential, and can thus be related to different aspects of development. There is also quite a natural connection to the concept of development in the emerging representation of 'science' as a dynamic in the formal narratives. Focus on the drivers or outcomes of a development also gives different perspectives on 'politics' as an establishment of an environment or a competition for status.

There are different approaches to the drivers of development in the informal narratives, based either on the mechanics of diversity or freedom. These dimensions are the most acutely expressed in SPe and CPe, but appear in SSt and CSt as well. The SPe mainly expects a growth of quality and a development of 'education' and 'research' based on an encounter between different perspectives, and in the interaction of different activities. The driver of development appears thus as dependent on the creation of a positive environment with respect for diversity among people. The CPe mainly expects a growth of quality and a development of recognition in consequence of academic freedom and the integrity of scholars. The SSt refers to a diversity of perspectives in relation to levels of relativity, but it does not appear to reflect on academic freedom in the situation presented in the questionnaire. There are occasions of explicit expressions of appreciation of diversity in SSt, but the main expressions of approaches that relate to a development of life appear, at times, as threatening, depending on the complex and diverse academic landscape. In CSt, there is an aspect of diversity in the reference to different perspectives that are represented in debates, such as on the value of applicability of knowledge; however, they are mostly expressed in the light of an accepted position and a critique of the opposed views. The different positions in the debates in the informal Chinese narratives do not appear as drivers of development, but rather as a threat. There are, on the other hand, references to a tension between the scholar and the government, both with explicit expressions of a

belief in development that comes from academic freedom and a general reference to the impeding involvement of the government.

The main horizons in the informal narratives, as seen in Table 29, are also differentiated as they appear as external to the subjects in the Swedish narratives, such as activities, institutions, and locations, while the Chinese narratives mainly focus on internal aspects such as cultures, ways of thinking, choices, and values. The informal Chinese narratives refer to a driver of development in a desire for status, respect, and influence, and it appears in a perspective of polarized values. There is a repeated approval of an attribution of status that is based on academic ideals, while ways that are related to the administration, the Party, money, and corruption are despised. The academic ideals in CPe relate to the morality of the academician in terms that are similar to the arguments presented in CSt, in the discussion on the foundation for the choices that the students have to make, reflecting a similar approach to personal involvement and the motivation to drive positive progress. The informal Swedish narratives appear, on the other hand, to allocate the drivers to the environment. The way that SPe is centred mainly on resources and demands as they determine the quality of activities appears to give an evaluation of the way that the environment shapes the encounter between people and their perspectives, while SSt refers to an institutional environment as regards help getting information and making contact. There is, in other words, a common concern for the drivers of development in the informal narratives, but they are differentiated as the drivers are related to internal dimensions and expected to be consequent on academic freedom in the Chinese narratives, while they relate to external dimensions and are expected to be consequent on an encounter between diverse perspectives in the Swedish narratives.

The representation of 'science' as a dynamic in the formal narratives appears with further detail in light of a study of the narrative context, which proved to be centred on the outcomes of development. It is interesting in this context that there are few indications on the nature of these dynamics, such as in the representation of mechanics of development in the informal narratives –except in SS&T. In SS&T, considerable attention is given to the expected benefits of applied research, expecting positive dynamics from applicability and what is called private ways, or associations to the industry. The formal narratives can also be differentiated in terms similar to the informal narratives, regarding their consideration for internal or external outcomes and the attribution of recognition in the Chinese narratives and economic rewards and the accomplishment of a task in the formal Swedish narratives.

In other words, it appears that the formal and the informal narratives are similar in their concern for development, but they are different in the sense that they focus on different prospectives: the informal narratives are centred on the drivers of development, and the formal narrative are centred on its outcomes. The drivers appear as external to the person and centred on the encounters between diverse perspectives the informal Swedish narratives and as internal to the person and centred on academic freedom in the informal Chinese narratives.

Chapter five: Contextualization

References to theoretical and historical narratives to aid understanding of the meaning of the phenomena has this far been vacant from the analysis, a choice explained in the first chapters by the desire to give way to the emerging outcomes that now have been presented. As the theoretical and historical narratives are presently involved, there is a considerable amount to choose from. The choice of historical and theoretical narratives to frame these outcomes is done with regard for the emerging questions in the analysis, as the empirical investigation is still guiding the proceeding reflections. The introduction to the historical and theoretical perspectives is very limited in the context of this initiative, possibly tending to distortional simplifications of complex procedures and to raising more questions than they answer. However, the intention is not to do justice to the history behind the system but to broaden and contextualize the perspectives on the structures of meaning revealed in the analysis. Extended historical narratives can, with advantage, be studied further, for example, in the publications of Hayhoe, Liedman, and Benner and the two volumes of the *handbook of science and technology studies* for further theoretical narratives (Jasanoff et al. 2001; Hacket et al. 2008).

In Sweden, there appears to be more or less constant debates on the goals, ways, and performance in higher education and research (Benner 2009) while debates on the historical aspects of the politics of science often take place in internal academic forums. On the other hand, the writing of history in China is a more acute matter of public debate (Kern and Hegel 2004), and it often takes subtle forms of expression (Schwarcz 2008), while the perceptions of development and modernization appear to be more homogeneous, even though there are considerable tensions at different levels, such as regarding the involvement of the government (L. Zhao 2009). Two concepts are used as main tools, or frames, in the continued exploration. In the first part of the chapter, which is centred on historical narratives, the concept of stories is used, as presented in Hayhoe (1996) and indicated in Arendt (1958). In the second part of the chapter, which is devoted to theoretical narratives, the concept of science cultures is used, as presented in Elzinga and Jamison (1995). The concept of stories is used in this approach as extensions of the revealed narrative contexts to give an extended understanding of the meaning of the central phenomena, and the science cultures are approached as fields of concern placing the expressions in the analysis in contact with

theoretical approaches. The concepts are used as frames, which involves further theoretical and historical approaches, providing a space to interpret and contextualize the revealed structures of meaning. This chapter is, in other words, finally extending the analysis into the common realms of the academic traditions in which this initiative is performed, making use of, among others, the theoretical field of science and technology studies.

Framing the central phenomena in historical narratives

The complex dimensions of how the meaning of the phenomena relate to historical narratives can, for example, be illustrated by the recent uses of Confucius as a symbol in the international campaigns of the Chinese government to promote the Chinese culture (Yang 2010), which to some extent are similar to the ways that scientific figures are used as symbols in SS&T. Reflections on the meaning of a figure such a Confucius to modern culture appeared in the informal Chinese narratives, but in contexts of accusation, lack of development, and in acclamation of the riches in a historical heritage, indicating that the effects of a campaign with such references are difficult to foresee (The Economist 10.24 2009; Yang 2010). These apparently paradoxical yet coexisting references are addressed through the uses of the concept of stories to analyse the narratives in attempts to frame ambiguous connotations (Hayhoe 1996; Arendt 1958).

There are also some explicit references to historical narratives in the analysis, for example, as an explicitly important part of the informal Chinese narratives, as a primary source of status. The horizon of history is, however, mentioned with different affects, as a threat to a desired development and as an important indicator of quality and status. The ambiguity indicates that the historical dimension of Chinese politics is not only of an illustrative or anecdotal value but also central to understanding the attribution of meaning, while it is also a symbol that is difficult to use and interpret. The historical perspectives are involved in the attribution of status, which is revealed to be central to the representation of 'politics' in Chinese narratives and an area in which the portrayal of governmental involvement is undesirably present in the informal narratives. In the Swedish narratives, there are only direct references to a historical context in SS&T, in which it takes many similar expressions as in the informal Chinese narratives. The three other Swedish narratives refer, however, to the importance of having knowledge about the system, which at times could imply a historical understanding of its development.

In the first step of this chapter, the main focus is given to reflections on potential segmentations of historical narratives into different eras, with an intention to discern stories. This act is not meant to give a simplified representation of a history, but rather to introduce a reading of the analysis which considers a variety of narratives on its development. The focus in the second part of the chapter relates to reflections on a potential convergence of the stories into a single and common final story of massification which places the revealed meaning of the central phenomena in the 'university', 'research', and 'education' as well as 'science' and 'politics' in broader narrative contexts of similarities and differences and to address some of the questions that emerge.

Tracing phases and stories in the 'politics of science'

The presentation of the different stories are mainly centred on three accounts that frame a general segmentation of the history of the 'politics of science'. After an introduction to the early history of the 'universities' in both contexts, a general frame is used in the segmentation proposed by Elzinga and Jamison (1995), proposing that recommendations issued by the Organization for Economic Cooperation and Development (OECD) have left such imprints on the politics of science that they can guide a periodization of the development of national policies. The proposed periodization integrates perspectives of four 'cultures' with impact on the formation of policies in a bureaucratic focus on organization, an economic focus on expenditures, an academic interest for policy doctrines, and civic focus on relations and social movements. The continued reflection on the stages are guided by the formulation of stories of the Chinese 'university' as presented in Hayhoe (1996) and layers in the history of the Swedish 'university' by Liedman (2009). The stories can be seen as broader narrative contexts that may have left lingering structures of meaning, indicating different associations and meaning of the explored phenomena.

In the approach, the events in China during the past century are interpreted through a nationalist story (dominant in 1911-1949), a socialist story (1949-1978), and a story from the reform decade (1978-1990) (Hayhoe 1996; Yang 2004b; Spence 1999). The phases in this context are completed with two preceding stories in an imperial story which in the context of 'research' and 'education' refers to the extensive traditions of examinations with antique references and a colonial story which is in parallel with the imperial and nationalist stories (West 1976; H. Zhao 2008), as well as a story of orchestration or massification (1990-) (Trow 1972; Yang 2004b). These historical phases are also addressed in Hayhoe, but not established as stories in the same manner. The periods reflect a politically segmented retrospect, in which residues of ideas and values of the stories coexist, giving a context to a number of

simultaneously valid but at times apparently contradicting perspectives on phenomena that can be difficult to place otherwise.

A similar division of history centred on the development of the 'university' in the Swedish context is proposed by Liedman (2009) describing its organization and heritage from internal struggles and processes through seven periods as layers: (1) a medieval layer, (2) a colloquial layer, (3) a Humboldtian layer, (4) a bureaucratic layer, (5) a democratic layer, (6) a leadership-centred layer, and (7) an entrepreneurial layer. The three first layers appear with common concerns and are gathered into an academic story in this account, while the values are challenged in the four later stages in which the concerns are centred on the forms of organization and are at times gathered into a rough categorization of a story of the uses of the 'university'.

The beginning of the 'university': Imperial/colonial and academic stories

The distinction of phases of development and the consequent formulation of stories can be used to frame the social role and position of the 'university'. An example of such a distinction of roles between a Medieval story in Europe and an imperial story in China is the way Guo (2009) attributes the role of 'vehicles of culture and learning' to the religious organizations and clergy in the west, in contrast to the communities of learning gathered around the imperial system of examination, with extensive responsibilities for the administration of the state in China. This aspect allocates the stories of the early institutions for 'education' and 'research' into delicate spheres in China in the sense that they interact with the centres of power, as well as in relation to the understanding of nationhood (Carlson 2009). The meritocratic system of imperial examinations enabled intellectuals to earn influence as social servants and advisers to the emperors (Yang 2004b; Guo 2009), and the idea of a scholar appears to maintain a social status that resonates in the analysis of the Chinese narratives. The extensive cooperation between the academic community and the emperor established an image of the scholar with important and useful roles in the national administration. Instead of a government that gets involved in academic life through the administrative procedures as presented in the analysis, it is, rather, the community of scholars that is in charge of the national administration. However, this relation also implies an intimate control of the scholars as the price for involvement in 'politics' (Guo 2009), which can imply a personal sacrifice on the part of the scholars.

In contrast to the politically involved intellectual class in China, the initial European 'universities' were more isolated and concerned with theology and the rediscovery of antique philosophy (Power 1964; Perkin 2006). The Swedish narratives do not seem

to attribute the same esteem to scholars as the Chinese narratives, even in general terms. The differences in reference are mirrored in the topics in which the knowledge was organized, with the 'five great topics' in China, established in the Sui-dynasty comprising strategy of warfare, law, tax and income, geography, and farming. In contrast, the early European universities taught topics which were more abstract: consisting of a primary trivium of liberal arts including logic, grammar, and rhetoric and a secondary quadrivium including arithmetic, geometry, astronomy, and music. The studies were supposed to prepare students for the higher studies of philosophy and theology, all centred on the Latin language, with a close relation to the church. The early European universities tended towards a totality of scholars and institution, such as *Studium Generale*, indicating a totality of disciplines, while the imperial examination was focused, rather, on picking out gifted scholars. Even if the Chinese system had ambitions to be egalitarian and accessible to all different classes, it was in practice impossible for the poor to afford the books or have the needed time to memorize the texts which were at the heart of the examination. The analysis of the narratives only indicated a tension between uses and higher values of the knowledges in the 'university' in the informal Chinese narratives, while the other six narratives appear to presuppose the useful aspects of learning as an unquestioned dimension. It appears thus that the antique frames show opposed values to the dimensions revealed in the analysis of the narratives, regarding an ideal-practical polarization of the function of knowledge. The level of abstraction of the teaching was, however, an important issue both to the SPe and CPe, in reflections on student goals, and is something that is reflected in the explicit value of applicability in SS&T.

The layers Liedman proposes are specifically directed towards the development of the 'university', in which the first Medieval story is centred on the organization of teachers and students as well as a focus on the teachings in the Latin language. The second layer of a collegial process emerged together with the European nation states concerned with the organization of institutions, while the third level in the Humboldtian layer is concerned with the protection of the 'sciences' from the external pressures of the government and the market. These three stages frame a concern for philosophy and theology, in an academic story, in which an isolated elite builds institutions which in some senses are secluded from broader society (Liedman 2009). The fourth layer is formed in the development of the 'university' with an integration of the natural sciences and the technological development from the industrial revolution in the ambitions of a modern bureaucracy.

In the nineteenth and early twentieth centuries, the Swedish political system was reformed step by step, and democracy was established, concurrent with the organization of the Swedish 'university' being seriously restructured by politicians,

maybe for the first time. A coalition of academicians and politicians transformed the institutions, mainly due to a critique built on the perception that they were too theoretical and ineffective in the formation of civil servants (Liedman 1987). The reforms shortened the extended studies of the Latin language and show early tendencies of complex relations between the state and academia. The institutions of 'education' seem to be prone to helping the government to the extent of sacrificing the academic ideals, while the state shows slight interest, trying to give the institutions their freedom, proposing reforms built on political ideologies directed towards utility (Liedman 1987). There are traces of these attitudes in the ways that the Swedish narratives interact, mainly considering a task-centred approach in which the government attributes tasks on the behalf of the students and experience the responsibility to the personnel in order to meet them.

The modern Chinese university was born both in reaction to and in cooperation with colonial influences (Hayhoe 1996; West 1976) as well as in the light of a simultaneous inspiration and challenge from an antique heritage (Perkin 2006). The encounters between the Chinese cultures and Western actors is a vast and complex topic which often still figures in news reports, and that is a complex issue. Some say that it is impossible to understand modern China without understanding the Opium Wars (1839-1842 and 1856-1860) (Arnason 2006); others say that the emphasis on former Chinese glory, on the suffering of its people, and the salvation of the CCP is a manipulative governmental discourse (Carlson 2009). The focus on an uneven encounter can also resonate of lingering post-colonial approaches (H. Zhao 2008). However, a colonial story suggests some reluctant dimensions, on the Chinese part, in early encounters with foreign traders, adventurers, and missionaries, among whom many had ambitions to found 'universities'. The initiatives were mostly British/American but also French in the south, and even, for a few years, a Swedish 'university' called the University of Lund in China (Österlin 2005). The initiatives to build 'universities' were in many cases supported by Western institutions cradling debates going on about the possibility of uniting the Chinese classical teachings with the modern scientific findings or European theology and philosophy, which appeared in a parallel movement by Chinese authorities and communities to establish 'universities'. Journals were founded in which Western sciences were translated to a Chinese setting and which also aspired to make the Chinese traditions available in the West (West 1976; Yang 2004b; Österlin 2005)..

The emergence of the 'universities' in China was marked by cultural encounters involving both struggles and creative inter-cultural exchanges (Bray and Qin 2001; Yang 2004a). West (1976) describes the process of Sinification of Western knowledge and a widely shared passion to 'reinstall' status to China among nations. The

autonomy of the community of scholars grew, as well as its social importance in the establishment of the Republic and in the national story (Schwarcz 1985), involving 'universities' at several levels as centres for modernization and liberal values. The abolishment of the old system of examination in 1911 and the growth of the new 'universities' of a Western model is a landmark procedure of modernization, or potentially, Westernization (Hayhoe 1996). The creation of a national agency of education in charge of implementations of new directives was the direct consequence of a civil movement in opposition to Westernization (Schwarcz 1985) which intended to balance the influence of Westerners, especially at the 'universities', and, to some extent, recover after the 'unequal deals' that China experienced in the peace-treaty following the First World War. Quotas of foreign and local teachers were imposed, and differences in salaries and standards of life of the teachers were addressed in radical policies (Schwarcz 1985; West 1976). This colonial story can be reflected in the analysis of the narratives primarily in the complex affects, but also in the simplified division between Chinese and foreign ways, and in combination with propositions that a model would better fit the Chinese context if it originated in its own historical milieu. The complex dimensions of the encounters between a Chinese and a foreign context appear to be reflected in a multi-layered attribution of status to something foreign. Both the formal and informal narratives give reference to foreign ways as carriers of status and a source for a speeded rate of the desired development, but also, on occasions, something that forebodes a diffuse threat to the Chinese culture.

In other words, it appears that the imperial and colonial stories in China indicate a beginning of the 'university' in which respect is given to scholars with important social roles, but complex affects are related to the encounter with something foreign. The initial academic story in the European milieu and the qualities of the initial layers (Liedman 2009) do not appear to have any significant resonance in the analysis of the Swedish narratives; rather, they appeared to be dominated by an opposed use-centred story.

Early intentional 'politics of science' in economic and socialist stories

After the Manhattan project and WWII, in the tensions of the cold war, and in the forming of the PRC, 'science' appears as a 'political' means, a tool to achieve a desired development, intertwined with a balance of national and international power. The 'sciences' appear as a source for great optimism as well as pessimism regarding the technological solutions for the organization of societies. In Sweden, and the wider European context, institutional initiatives were brought about, such as the OECD

which was established in 1961 and explains its existence and undertakings in a war-preventing unification of Europe through 'scientific' and intellectual exchange with the intention to prevent further wars, which also had an impact on the 'politics of science'. The first period of the 'politics of science' proposed by Elzinga and Jamison (1995) stretches from Pearl Harbour to the launching of Sputnik, including the 40s and 50s, when alliances among the four science cultures were formed in part through big-scale and multidisciplinary projects. In this context, the academic culture took a more active role propagating an elitism in which 'scientific' knowledge and language alienates it from the other science cultures and the general public, with a state that guarantees its primacy over economic, bureaucratic, and social involvement, bordering on a 'totalitarian scientistic hegemony'.

Sweden was left comparably whole and strong after the Second World War, but the allied victory meant a significant shift of ideals, from a German sphere of reference to one dominated by the USA. The importance of this shift is indicated in the propositions made by V. Bush (1945) to the president of the USA to expand the benefits of the 'sciences' to the nation, which in many accounts is considered as the first explicit statement in the 'politics of science' (Elzinga and Jamison 1995). The post-war stability and prosperity increased the pace of changes in line with the previous development: growth of numbers and reforms intended to increase the utility of the 'sciences' (Liedman 2009). The period is described by Liedman (2009) as a process of bureaucratization in a Weberian sense: the strict way of ordering decisions concerned with efficiency and equality. The two approaches to the meaning of bureaucracy are comparable on several levels, but they are also different as Liedman describes a historical period of the academic organization, while Elzinga and Jamison describe a culture and a group of stakeholders involved with the 'sciences'. The revealed meaning of 'politics' as an establishment of an institutional environment and the university as an intermediary indicate an intimate relation between academia and the government that is reflected both in the propositions of a scientific totalitarian hegemony and a Weberian bureaucratization, as indicated in Liedman (2009).

Chinese international relations were dramatically altered by the end of WWII as it both ended the Japanese occupation that had targeted the 'universities' specifically and was followed by a disruptive civil war between the nationalist party and the CCP (Israel 1998).The Communists won the civil war as the Nationalists fled to Taiwan, and mainland China was subsequently closed to the West, initiating the Socialist era(Spence 1999; Yang 2004b). Many 'universities' had been liberal and close to the Nationalist Party, as well as driven by foreign means and personnel which were expelled, so the great reorganization of 1952 weighed heavily on the academic community (Hayhoe 1996). The 'universities' were important in the efforts for

‘national salvation’, which was a central idea in the reformation of the Chinese society both by the Nationalists in the beginning of the century and by the Communists in the middle of the century (Yang 2004b). The first years of the establishment of the CCP meant considerable changes for the population and the ‘politics of science’ as the party took an explicit control of academic institutions and technological development. In the first five-year-plan in 1953, the concerns were directed mainly towards practical uses in the establishment of a modern industry and communalization of the farming. The political elite monitored procedures, but the chains of authority and feed-back suffered from their political ambitions. The inspiration for the realization was taken mainly from a Soviet model, as Mao expressed it: ‘leaning to one side’, and priority was given to eliminate Western and historical residues (Spence 1999; Yang 2004b). The totalitarian rule of the CCP efficiently removed the potential competition from science cultures, and political ideologies dominated the ‘politics of science’. The suspicion of the involvement of the administrative departments in the academic activities in the informal Chinese narratives can be understood with greater insight in light of these aspects of the Socialist story.

The socialist revolutions can be said to have come in tides, in which case the ‘Great Leap Forward’ was a high tide, beginning in 1958. It was a gathering of efforts to deepen the revolution as the party got involved in further details of governance, envisioning an enhanced productivity through radical reforms. In practice, the policies meant that many of the newly established communes were merged into groups of up to 10,000 households, with a bureaucratic decentralization and mass mobilization of the peasant masses through military forms (Spence 1999). It was a severe calamity for the people. The misguided expectation in rushing technological advancement, corrupt feedback in the political system, as well as the pricey help from the Soviet Union led to famine on a massive scale. It has been difficult to gauge the depth of the suffering and deaths but they are counted in the tens of millions (Spence 1999; Yang 2004b). At he end of the 60s, in the escalation of the cultural revolution in which chairman Mao reclaimed authority and urged large parts of society to turn on itself, the effects were disastrous, and the political dysfunction rose to new proportions i (Hayhoe 1996). The youth and university students were an essential part of Mao’s public methods of re-enacting a revolution , a symbolic initiation, and this is seen in one of his speeches in which he hailed a student for confronting the authority of her teachers. Most education and research was closed down, and people at all levels of society were encouraged to turn on their leaders on the slightest whim of a rightist accusation. Intellectuals, scientists, and teachers were sent to demote locations on the countryside to be re-educated by the farmers in the values of hard work and practical labour (Spence 1999).

However, there are no indications in the analysis of the narratives that faith in technological development has suffered; on the contrary, it appears that the formal and informal narratives are united in unquestioned positive expectancies. It is also possible to see the general competition for recognition in light of the failure of the government to achieve material development, and the story can be a way to frame the suspicion around administration and governmental involvement and an expectation that institutions take the initiative. The complex relation to history revealed in the Chinese narratives can also be understood in light of this trauma (Schwarcz 2008), which the Chinese society only recently has been able to confront. It also indicates that most forms of higher education, as well as its traditions and organization, has been established since the end of the Cultural Revolution in the seventies, even though many of the scholars have returned froe forced exile, forming a surprisingly consistent academic community through the disruptive stories (Hayhoe 1996).

In sum, it appears that the tensions between the academic collectives and the Communist Party is central in several narratives on the history of the academic institutions in China (Yang 2004b), while the historical descriptions of the interaction between the Swedish university and the state is described in more harmonious terms (Liedman 1987; Marton 2000). The emergence of approaches to 'politics' as a competition for status and an environment can be framed in several ways, but the references to the Socialist and use-centred stories are alternatives with some bearing.

Stories of reform and civic involvement

The second period proposed by Elzinga and Jamison (1995) covers the period between the launching of Sputnik and the war of the USA in Vietnam in the 60's , and it identifies an accelerated involvement and investment in the sciences as westerner governments reacted to advances of the Communist world, such as the victory of the CCP and the Soviet space programmes The period entailed an initial increase in the quantities of funding in the divided pattern of applied and basic research, but this period was also associated with a growing critique of values and forms of organisation of the sciences, with a tension between the academic (and civic) culture and the bureaucratic and economic cultures. The tension occurred between the views of the procedures in which innovations actually were encouraged and made to contribute to advancement in society,and ahe demand of a new way to think about applicability and the usefulness of the sciences. This suspicious attitude towards basic research can be seen in the values presented in SS&T, mainly in the idealization of the private and applied modes of financing research, something that also can be read

into the complex relation to types of knowledge in SSt and CSt, in which a 'real life value' and 'use for a future profession' are desired.

The third period proposed by Elzinga and Jamison (1995) took place in the 70s, in a turn towards values of social relevance as a kind of 'repoliticization' of the sciences. The development is dominated by the academic and the civic cultures taking more distance from the economic bureaucratic cultures in increasingly ideological evaluations of the S&T policies, such as democracy, socialism, feminism, and environmentalism (Hedén 2008; Førland 2008; Östberg 2008). The quest for social relevance meant an increased concern for the people touched by the scientific and technological changes and the establishment of boards of representatives as well as information campaigns and involvement of the civic culture. Liedman (2009) describes the development in the period as dominated by democratic ideals especially important towards the tumultuous end of the 60', when the hierarchies in society were targeted as residues of an ancient age (Førland 2008). Liedman calls this a democratic phase, in which the social movement challenges the organization of the university and its involvement in civic issues, and these aspects can be seen in the focus on equality,and diversity as drivers of development in the Swedish narratives. There are also some considerations which can be implied in the complex relations to different types of knowledge, which appear in all Swedish narratives and are, related to issues of equality, inclusiveness, sustainability, and demands imposed on the narratives on science that go beyond a technocratic evaluation of more or less efficient tools.

After Mao's death, Deng Xiaoping initiated a reform of Chinese society with a new priority given to the 'politics of science', which can be followed through the progress of the National Science and Technology Conferences (Liu et al. 2011). In 1978, Deng Xiaoping defined science and technology as productive forces, and this change in tone was especially important to intellectuals as they were finally accepted as a part of the working class and identified as key to the 'four modernizations', in contrast to the suspicious approaches to intellectuals in earlier periods. In 1985, Deng Xiaoping further directed the S&T towards an economic reform with a special regard for economic zones and a liberalization of the research centres and institutes. These changes are regarded as the inauguration of the new politics in China (Spence 1999; Liu et al. 2011). The pragmatism of the new policies and their eventual success can be seen as frames for the extensive faith in the technological development, the competition for recognition that is awarded for achievements, and the mechanics of freedom – especially in academia.

Recent stories of orchestration of mass-systems

The fourth period designated by Elzinga & Jamison (1995) encompasses the 80s, and it is characterized by a policy of orchestration in which the different parts of the S&T chains in Europe and the USA were organized to meet an increasing competition by the growing Asian industries. Efforts were made to stay ahead in technical development, gathering the initiatives and establishing a greater cooperation among industry, 'university', and policy-making bodies. These new collaborations were framed as a new social contract between society and 'science', in which the different actors became more involved in policy making than they had been another, hybrid institutions were created, in which the four cultures could interact (Etzkowitz and Leydesdorff 1997). Liedman identifies this development in Sweden in the 80's was dominated by ideologies of leadership in the 'universities', in which an idealized person would be expected to be ever-present and remain close to the various parts of the organization (Liedman 2009). These dimensions can also be reflected in the representation of a complex institutional landscape formed by different actors and concerns, as well as the expectations on the institutions and their representatives to get a variety of needs in SSt, and to accomplish tasks in SHE.

The concerns for the efficacy of the system and the expectations on outcomes from investments are encompassed a discourse which has grown in impact in the public debates on the 'university' in Sweden (Sörlin and Törnqvist 2000), moreover there is a concern to enhance the political organization to increase the return on the investments in 'education' and 'research' (Öquist and Benner 2012).The central governance of 'education' and 'research' in Sweden during recent decades has been described as a continuous reform (Kim 2004), such as in the recent establishment of the Swedish Higher Education Authority, or UKÄ (Universitetskanslersämbetet), which replaces the National Agency for Higher Education, HSV (Högskoleverket) that had been in place since 1995, representing the fifth major reorganization since its establishment in 1964. Even though the organization has grown considerably in size and diversity, it has a unified legal system that has gone through only minor changes since 1977 (Kim 2004). The reforms of the 'education' at Swedish 'universities' have also recently been undertaken to integrate into the wider European system reorganizing courses, levels, and degrees. Liedman describes this recent development in the 00s as a shift of focus to expectations on the leader to be an entrepreneur, someone focused on the business related to the 'university',and be able to make it profitable (Liedman 2009).

This repeated governmental reorganization of the institutional structures, with a concern for efficacy and utility, and the representation of an involved and entrepreneurial leader poses questions on the levels of autonomy (Marton 2000). Marton identifies a steady movement towards decentralization from 1968 to 1994 in Swedish politics and thereafter a regression back towards a centralized governance between 1994 to 1998, which is based on a study of a number of aspects of the concept of centralization and autonomy, such as internal governance, funds, employees, admissions, curriculum, research, and assessment. The organisation and atmosphere of the Swedish system in the nineties was described as a 'cooperation from above'(samverkan uppifrån) (Sörlin and Törnqvist 2000), a description of a form of governance that,in some ways, might appear as paradoxicalp as a combination of authoritarianism and democracy in Chinese 'education' (Zha 2012). The meaning of cooperation from above can be understood in the light of an involved government with a seemingly paradoxical intent to simultaneously increase freedom and control These propositions can be related to the analysed Swedish narratives and the repeated references to a relativity of a proposition, depending on time and location, and to 'politics' as the formation of an institutional environment. The indicated reforms can frame the revealed dimensions of uncertainty in relation to the institutional environment of the 'education' and 'research' in the informal narratives and to the allocation of an extended expectation and mandate on the roles of leaders, experts, personnel, or representatives of the institutions. The representations of an involved government are well established in the analysis of the narratives as the task-centred approach and the 'university' as an intermediary. There are, however, questions that can be raised concerning a tension between the forms an the content –as it could indicate a sense of autonomy in the lack of governmental involvement in the meaning, or content, of the phenomena, in contrast to the extensive involvement in institutional forms or structures. It is a question that will be addressed further on.

The development of China in the 90s and 00s has been described as the biggest process of decentralization ever undertaken in 'education' (L. Zhao 2009). The Ministry of education (ME) has delegated power and responsibility in 'education' to provincial, county-level, and local governments, in a decentralization that has distributed governing authority and financial means to the administrations of lower levels, even though the central ME still partially has control over all education (Yang 2004a). The rapid growth and changes in the system also illustrates a capacity for initiative in the Chinese context, in which a strong top-down -sructure and an industrious bottom-up section of the society cooperate for comprehensive changes, incorporating paradoxes which often have been seen as impossible to combine (Benner, Liu, and Serger 2012). There has also been an explicit strategy to segment categories of 'universities' into ranks, in parallel with ambitions to broaden the recruitment of students as well as establishing hierarchy of status, through a conscious

accentuation of the stratification of the system (P. Altbach 2007; Mok 2005; Yang 2004a). Through different macro-strategies, the goal has been to increase quantities, quality, and esteem without the ministries loosing control (P. G. Altbach and Knight 2007).

The ME institutionalizes its governance of the universities through evaluations and standardization, and with a growing amount of administrative work devoted to the performance of evaluations and controls. This administration is also related to a governance of the Chinese universities based on a detailed level going as far as a control of the curriculum and text-books. As Yang (2007) puts it: 'Despite the fact that the two models of 'command and control' and 'negotiation and persuasion' re not always in harmony, indeed conflicting under many circumstances, they coexist in today's Chinese university governance' (Yang 2007, pp.260). These paradoxical aspects were also formulated as a combination of authoritarianism and democracy in Chinese 'education' (Zha 2012).

The development of China in the 90s and 00' can also be followed in the national conferences on S&T, which, for example, in the 90s indicate an application the measures of the special economic zones on a more general level in China; moreover, in 1999, an innovation strategy was put in place to encourage the development (Liu et al. 2011). Specific initiatives in projects such as the 985-project and the 211-project are repeatedly cited as examples of the ambitious orchestration of macro-policies in China, and they are said to have established the guidelines and decided an atmosphere (Li, He, and Xu 1996; Bray and Borevskaya 2001; J. Zhao and Guo 2002). The projects were initiated to establish world-class universities through a competition for resources and rewards, while they have also been criticized for and intrusive governmental involvement and compromising the academic freedom (Lai 2010). The 211-project launched the November 1994, and was later incorporated as a part of the ninth instalment of the five- year plan (1996-2000), which consisted in a selection of one hundred institutions for special advantageous circumstances (Li, He, and Xu 1996; Bray and Borevskaya 2001; J. Zhao and Guo 2002). The institutions are set to be elected in the stratified system of 'education' with very different opportunities, both regarding students and economy. The political ambition has also meant a considerable involvement in the academic landscape, such as through mergers of institutions cutting in administration, and to stratify the system forming specialized elite institutions (Mok 2005; Yang 2004b). Procedures of parallel centralization and decentralization form an orchestration of the 'politics of science' in a sector of tertiary 'education' with considerable growth and changes, which has come with important challenges, both regarding the distribution of opportunities, and in relation to the adjustment of wider society (Shi and Englert 2008).

There are several dimension of the analysed Chinese narratives that relate to these propositions, such as the emphasis on status and elitism, competition, a system of common values, and a system with tensions in many layers. However, there is an apparent difference in the level of authority attributed to the government as the historical narratives places it in a central initiating position, while the analysed narratives primarily indicate a position of 'encouragement' attributing the initiative to institutions. Such a dimension could be read in light of the proposed decentralization, but it can also be read in light of the indicated process-oriented approach. Even if it is a broad and diffuse categorization, it appears that most of the words, such as centralization, segmentation, and hierarchization, indicate an involvement in an ongoing process.

In sum, it appears that there are some indications in the analysed narratives and in the proposed historical stories which form interesting frames for the studied phenomena. The initial stories of an imperial system of examination and a Medieval 'university' indicate approaches that are polarized regarding a theoretical-practical dualism, which appears to be opposed in the representations in the respective analysed modern narrative context. The following stories of socialist and economic stories indicate intentions of the governments which influence the present 'politics of science'. The stories of reform respective to civic involvement can indicate a frame of reference to interpret the encounter between different perspectives: between academia and the government in the Chinese narratives and between different perspectives coexisting in a common environment in the Swedish narratives. The final common story of orchestration or massification can indicate a movement towards similar approaches, and even though the analysis is not primarily established to pronounce such a conclusion, it appears that the analysis of constitution of meaning is well situated to indicate a number of similarities and differences.

A common story of a 'mass-university', but with different cultural expressions

On 28 June 2003, the Shanghai Jiao Tong University Institute of higher education issued a 'world-wide ranking of universities' (Marginson 2009). Through a sum of indicators, the 'universities' of the world were ranked in a single list, with a simple and accessible grade, considerably affecting the discourse in the 'politics of science'. The revealed discourse of a unified and single approach to the academic activities in all parts of the world was published on a global scale, and it has reached a considerable impact in Sweden (Bergseth 2015), as in many parts of the world. The

simple grade and ranking can be contrasted both with the complex statistical procedures on which the grades are based and with the complex meanings of concepts such as quality and values of education to which the grades appear to answer (Marginson and van der Wende 2007). Independently of what the ranking and its replicas actually measure, or of their accuracy and reliability, they attribute an air of objectivity to the judgement of the quality of an institution, which implies a unified discourse on their meaning – that it is possible to compare the 'universities' of the world. It is a discourse that might indicate a story that is, to some extent, final, in which a common development of massification indicates a singular approach. It is also a discourse of which we can search for traces in the analysed narratives.

The story of massification has been proposed as the latest story in both contexts, which could indicate that they are growing more similar, something that has been proposed in relation to procedures of globalization or internationalization (Healey 2008). The proposition of a common final story invites for a further study of the similarities and differences between the 'university' as it takes place in different cultures. The choice of narratives in the analysis was not adapted to a longitudinal study following a possible development towards a common point or to the most recent dimensions of this question, such as both formal Chinese narratives being published in the 90s. However, in the present study of the representations of the 'university' and of the broader 'politics of science', there are similarities and differences between the appearances that could indicate valuable perspectives on the proposition.

Massification as a common story

In many ways, massification is a generic term that appears in many contexts, but it seems to primarily imply a quantitative property and has, for example, been proposed in the study of the 'university' through the key element in the ratio of an age-cohort in a nation that is admitted to higher 'education' (Trow 1973). Trow offered a theoretical conceptualization of the observed changes through parallels to the economical and industrial transformations of societies explaining a proposition of historical phases of the 'university'. The theoretical framework proposes phases that indicate a number of changes to the social function of the 'education', as well as different challenges bound to the rates. The first stage describes an 'elite-university' (enrolling less than 15% of an age-cohort), intended to prepare the social elite to exercise 'elite roles'. The second stage forms a 'mass-university' (enrolling between 15% and 30%) and the 'universal university' (enrolling more than 30%) prepares the whole population to social and technological transformation. The three forms would not be seamlessly divided but to some extent coexist simultaneously, and also depend on other dimensions of the societies in which they take place (Trow 1972). The

theory of three different historical stages in the evolution of the 'university' are based mainly on observations of the system in Europe and the USA, and is intended to explain an experienced crisis as a transition between stages, which changes the role of the 'university'. The transformation is described with regard for changes in qualities of the 'university' bound to the development, for example, that a student would be less inclined to study the further process of massification because of a shift in motivation related to broader access and less social expectancy of status.

The theory of massification is established in a historical discourse and has been used in broader ways to conceptualize a modern development of society. An example of such a use appears in a historical analysis in which Arendt (1958) proposes distinctions based on approaches to human activity with reference to representations of a development of Western civilization. Mass-society appeared in this account together with a liberation of labour, that is to say as the majority ceased to labour the land becoming jobholders with a salary. The liberation of labour concurs with an appearance of the state as a greater subject, with a society as the unit of organization, instead of the family, which in this context indicates a massification, as the later systems involve massive amounts of people. The changes thus brought new forms of governance, with bureaucratization and anonymization of ruling, building on assumptions of a generality of interest that guides the major financial decisions on massive scales. Massification and industrialization can be seen as general processes which progressively reach into further regions of society (Arendt 1958), and, even if the liberation of labour can mean that the masses of the population are invited into a life with 'education', culture, and 'politics' through mass democracies, there is often an emphasis on its negative aspects (Arendt 1958). It is also apparent that the evolution of academia is not only a positive development according to Trow (1973), as the main element of analysis is a crisis, but which is also described as a transfer with significant losses.

Although the Arendtian and Trowian narratives use the same concepts, they have quite different approaches. The Arendtian exposition is mainly reflective, using the concepts in attempts to understand historical procedures through the proposition of different approaches. Whereas, Trow proposes an ideological frame based on quantitative properties in an approach defining the development of the involved systems of higher 'education'. The broad and general stories in the Arendtian narrative and the adaptation of theories of massification to the academic system by Trow may in some sense be distant from the concrete structures of meaning revealed in the analysis, even if there are certain explicit references to such prospects. However, it is a story that can indicate broader frames for the representations of similarities and differences in the two cultures and a historical frame to a possible common story. The

quantitative dimension in a story of massification, in which the growth of numbere is used as an indicatrn for the procedures and orgonizations of th "universiy", implisy representations of global similarities. The question is whether the similar development of quantities in the different cultures indicates that the phenomena would have a similar meaning. The story of massification appears to be based on a quantitative approach, which initially gives quite different national frames in China and in Sweden. There is an interesting aspect in this concern that appears both in the studied narratives and in other narratives, such as by Yang (2004b), in which the expectation on countries is identified with their size, as a big or small country, and there appears to be an expectancy to have a correlating impact in the international community (Yang 2004b; Swedish Ministry of education and research 2008).

The underlying assumption of quantity as a defining property for quality gives frames with considerable difference between Sweden and China, especially in absolute numbers. The Chinese system for higher education encompassed about 63 times as many students as the Swedish system in 2014 (25,477,000 compared with 405,994) ('China Data Online' 2015; 'Statistiska Centralbyrån' 2015); however, these figures are not directly comparable further than to give general indications since they build on different principles, for example, on categories of students. Nevertheless, the identification with size in relation to a potential impact in the international scene is mentioned in SS&T, and possibly implied in some other aspects in the wider analysis of the narratives, but it does not appear to be applied to the more general attribution of status. On the contrary, there are indications of opposite attitudes as national comparisons appear in the representations of the foreigner. The foreigner is represented with a status higher than that of the local community in the informal Chinese narratives and with a lower expected capacity for action than the community in the informal Swedish narratives (as indicated on page 209). Thus, it does not appear that the simple story of an impact that correlates with the quantities of a system is a frame of reference that is reflected in the narratives.

Trow proposes that relative figures in the portion of an age-cohort indicate the position of the university-systems, which tells a different story as the Swedish ratio of enrolment of an age-cohort is almost double the Chinese ration of enrolment of an age-cohort (24% compared with 44%) ("China Data Online" 2015; "Statistiska Centralbyrån" 2015). As with the previous figures, these figures are also only indications and are not entirely comparable.' I light of the frames indicated by Trow, the figures in the narrative would imply that the Swedish 'university' would be in the transfer between mass- and universal stages of the 'university', and the Chinese 'university' would recently and rapidly have completed a transfer from elite- to mass university, and showing signs of continued growth towards a universal 'university'. It

is a narrative that could frame the similarities and differences that has emerged in this study, but it appears to completely ignore references to the meaning of the phenomena, in references to external approaches to figures and quantities.

The conceptual framework of massification proposes a way to explain aspects of the involved systems in a unidimensional quantitative and universal perspective. It places these aspects in a historical evolution with a scale in which the Swedish and the Chinese systems fit on different levels. The universal approach puts the two systems in a logical relation that enables comparison and evaluation centred on its forms – that is, the amounts involved – which tends to disregard the contents – that is, the cultural realization of the phenomena. It is, however, important to understand that the implied universalism in the theories of massification also consist in abstractions that alienate the cultural dimensions and differences. The challenges and the threats of universalism lay in its reduction of the systems into abstract qualities, which might have a very different meaning in different cultures. The mass appears to have an essence in a quantitative nature, constituted by a large number, but in the theoretical approaches to massification, there are also qualitative assumptions. The present investigation into the constitution of meaning of the phenomena enables a study of the cultural dimensions and a ground for reflections on whether the common numbers indicate similar ways to constitute meaning.

Representations of massification and cultural differences in the studied narratives

Before an exploration into the meaning of massification and cultural differences in the narratives, we have to take a step back and consider the assumptions thas have guided the investigation ad, maintang the reflexive approach. The broad intentions to analyse the meaning of phenomena in contact with their appearance in narratives indicates an initially suspicious attitude towards stories which attribute meaning in general and universalistic terms. To some extent, it can be said that the whole ambition in the identification of the different meaning of the phenomena is shaped as a critique of the proposition of a common story of massification. There are, however, also some interesting dimensions in the act of taking a step back to an initial and fundamental observation that there are institutions of such similarities as the ‘universities’ in the two cultural contexts of Sweden and China. This basic observation already indicates a relevance of common stories and common values, and it suggests a number of common perspectives. The issues range from similar questions on trust in governments, references to dynamics of markets, potential approaches to students, personnel, and the values involved in propositions of knowledge. However, the main question resides in the ways that the similarities and differences are framed and on the

ways that the meaning of the phenomena is addressed. Reflections on the impact of the assumptions in this analysis are addressed further in the chapter of conclusions, in procedures to reconsider the reflexive position (page 259).

The concept of a mass or of massification did not appear explicitly in the narratives, but it is possible to search for traces of such a story in the revealed structures of meaning, for example, in the representation of bodies of people, society, and dimensions of the 'politics'. The representation of a mass may be the most obvious in the implied frame of reference in the informal Chinese narratives as the attribution of status and the establishment of a hierarchy appears in an identification of excellence in contrast to a general mass of people and institutions. It is a dimension which is less apparent in the formal Chinese narratives, but implied in the emphasis on prizes and punishment and the general appreciation of status and recognition. The representation of a Chinese student culture in which the meaning of the 'university' appeared in CSt indicates a way of action and thought that is held and realized by an experienced general mass of people. There are explicit references to attempts to find an identity that is differentiated from a mass in the Chinese narratives, as a primary marker for quality of the character both of the scholar and the institution. In this sense, it appears that the representation of a mass appears primarily as a threat in the Chinese narratives, which is identified with an invisibility and insignificance. In other words, it appears that the procedure of massification could be considered as a serious threat to the essential academic activities in a Chinese narrative context in the sense that the discourse appears as primarily in contrast to the desired aspects of excellence.

In the Swedish narratives, the approach to 'politics' as a formation of an institutional environment indicates an allocation of the individual to a secondary position, to some extent as a part of an institutional structure, or the scenery in which the phenomena take place. The analysis repeatedly indicates an external approach to the phenomena, in which the main objects of concern are indicated in a factual approach to dimensions that are outside of the involvement of the persons. It appears that the revealed approach to 'politics' as an environment does not indicate a society that primarily is shaped as a group of people, but as a system in general, and its realization in the institutional structure. These approaches can be interpreted as a representation of a massified system in which the individual is attributed a dimension of insignificance or interchangeability, and the forms in which the acts take place take precedence to their meaning or contents. In other words, it appears that the frames of a story of massification may not be reflected as the same threat in the Swedish narrative context as in the Chinese; rather, it may be an approach that can be related to the central frames of reference, in which the meaning of politics and the university are established.

The references to cultural differences, on the other hand, is a broad theme in the analysed narratives, which can be directly related to the formulation of the questionnaire, but which is also reflected in the formal documents. There are ample references to cultural dimensions of the acts and procedures of 'education' and 'research' at the 'universities'. Two of the most obvious examples are the approach in CSt to the 'university' as a culture and the revealed expectation in SPe of a development of the quality of 'education' and 'research' as a consequence of the encounter of diverse activities and opinions (page 211). All of the analysed narratives also indicate an importance of international cooperation for enhanced quality of 'education' and 'research', as well as comparative and competitive standards of evaluation. The references to cultural differences are, however, implied in these dimensions, and what seems primarily to be intended is a general effect in which cooperation and competition inspires and motivates the involved actors. There are also similar issues in the formal and informal narratives that suggest there are challenges bound to cultural diversity. The informal narratives are homogenous in their understanding of demands on the leaders and institutions to be able to navigate among potentially treacherous fields, in realms of knowledge about the institutional environment in Swedish narratives and 'political' or administrative realms in the Chinese narratives. Thus, it appears that the advantages of cultural diversity are related to motivational effects and that its challenges are related to the interaction between claims of knowledge and the acts of government in both narrative contexts.

In other words, it appears that the references to a discourse of massification are different in the two narrative contexts, and they do not appear to directly offer support for the theoretical expressions of a universal story of massification indicated by Trow. The mass appears as a contrasting backdrop for the concept of excellence in the Chinese narratives and may be indicated in the representations of the institutional environment in the Swedish narratives. The advantages of cultural diversity are related to motivational effects and that its challenges are related to the interaction between claims of knowledge and acts of the government.

Massification and failures to address questions of meaning

The reduction of the cultural nuances in the meaning of the phenomena for the sake of comparability in a quantitative approach was in the earlier parts of the chapter criticized. On some occasions during the analysis, there has appeared a number of aspects of the analysed narratives indicating a similar lack of reflection on the meaning or nuances of a certain phenomena. These observations are not intended to initiate a critical approach to the analysed narratives, but rather to point at propositions that have appeared in the analysis in which there are tendencies to fail to

address the meaning of the intended phenomena, in a possible dimension of thoughtlessness (Arendt 1971). Such reflections appeared, for example, in the study of external approaches in the Swedish narratives (page 206) and of repeated phrases, mainly in the Chinese narratives (page 190).

The analysis of the Swedish narratives indicates a combination of a controlling government and a well established autonomous position of academia, a paradoxical situation that may be understood under the provision that the forms and the contents of 'education' and 'research' can be separated (a question posed on page Fel: Det gick inte att hitta referenskällan). This perspective would imply that the government could govern the institutional structures and establish the goals, and that academic freedom would be granted as long as the institutions and scholars are free to shape the contents that fill the forms. The emphasis on external guidance and little involvement of the government in the internal affairs and priorities of the university can give a space for the academic freedom of the actors to form the contents. Marton (2000) proposes a distinction between the substantial and procedural autonomy with reference to Berdhal (1990), in which the former refers to the 'what' of the academic activities and the latter to the 'how'. It is a conceptualization that is reminiscent of the separation between form an content, and in the words of Marton and Berdhal would, in this case, indicate a low procedural autonomy and a high substantial autonomy reflected in the Swedish narratives.

The idea of academic freedom granted through a focus on the institutional forms is, however, not indicated in the informal Swedish narratives; rather, it appears as if the content is not a matter for consideration in an approach that appears to black-box the meaning of the central phenomena. The proposed frame of an external approach in the informal narratives instead indicates a lack of reflection on the indicated questions of meaning. This conclusion has to be seen under the provision that the questionnaire did not actually demand a reflection on the questions of meaning, but it is a suggestion as the reflection did appear in the Chinese context with similar questions. These perspectives can be related to the rough story of a an increasingly involved Swedish government that intends to shape the forms of 'research' and 'education' with a concern for their uses and economic outcomes, which comes at the potential expense of academic concerns and priorities. The perspective is also formulated in the analysis of reformation of the education in the beginning of the twentieth century, as described by Liedman (1987), as an aspiration to guide internal priorities through external structures. The few perspectives on the contents and meaning of the activities can indicate a form of thoughtlessness, in which a number of essential questions on the meaning of the phenomena remain unanswered.

The Chinese narratives address the meaning of the phenomena to a further extent and appear to invite for a more dynamic representation of 'politics' than the Swedish narratives (page 207). There is, however, an aspect of the constitution of meaning that might indicate similar blanks or a lack of reflection in the use of set phrases (page 190). These set phrases appear primarily as intentions to involve references to respected and status-filled spheres, indicating a desire to encompass a respected authority in the propositions. These references combined with a number of further perspectives in which authority is framed as a general confining structure appear to indicate a further blank. Examples of such references appear in the important expectation of a development as a natural consequence of academic freedom (page 211), in which the desired prospect explicitly is expected to appear in the case of a removed confining authority. The reference can also be read in light of the confining aspects of the narratives of a historical heritage and pedagogical traditions. It appears that there is an expectancy that if only certain authorities were removed a quality and development would be guaranteed. The set phrases, the expectancy of a development and the aspects of history and pedagogy indicate that there is an image of authority that explains a broad spectrum of undesired dimensions. These reflections are definitely not intended to question the need for academic freedom in China; rather, they are expected to ask if the representation of authority may overshadow a needed reflection on the involved meaning, of, for example, academic quality and development.

In sum, it appears that in certain regards the Swedish narratives fail to address question on the meaning of the central phenomena, and the Chinese narratives appear to leave similar blanks regarding the function of authority. The analysis now proceeds into a theoretical approach based on general narratives which are proposed to understand the phenomena that are addressed in this initiative, building on a distinction in the expression of science cultures.

The narrative contexts seen through theoretical frames

In this chapter, the questions on the meaning of 'science' and its 'politics' and the approach to the issue in concrete and empirical contexts is put in the theoretical context of the STS tradition. The references to some STS narratives framing the meaning of the central phenomena are primarily intended to make the analysis more explicit and to facilitate the investigation of what the outcomes might mean in a wider reading. The procedure of this schematic theoretical contextualization places the outcomes in reference to four general concerns or cultures: economic, bureaucratic, academic, and civic frameworks as conceptualized in the idea of science

cultures given in Elzinga and Jamison (1995). The four science cultures are used as entry-points to a wider STS theoretical framework through which the established structures of meaning are developed. The more abstract and general levels are intended to broaden the understanding of the concrete expressions on which the analysis is built. The procedure also consists of a further shift from the descriptive attitude of the phenomenological analysis towards firmer connections to theoretical positions. The concept of science cultures presented in Elzinga and Jamison (1995) mainly approach the different functions and social roles of 'science' through references to different groups of actors with different concerns. In this aspect, the 'sciences' mainly appear as a disputed object, simultaneously formed by and forming communities.

Economic metaphors and motives

The economic culture as presented in Elzinga and Jamison (1995) presents an approach to 'science' founded in a discourse inspired by the world of business and management, with concerns oriented mainly towards its uses with a technological and 'entrepreneurial spirit or ethos that seeks to transform scientific results into innovations diffused in the commercial marketplace' (Etzkowitz and Leydesdorff 1997). Economic approaches and metaphors have been important in the STS tradition (Polanyi 1962; Amsterdamska 2008), and the discourse on the uses of the 'sciences' has long been central to the policy motivations intertwined with other concerns such as the international dominance of a nation (Bush 1945; Kerr 1963), and it is an impact that may be growing (Etzkowitz and Webster 1995). The economic discourse can still be seen as a distinct tradition in the STS theoretical project (Slaughter 2005), but the main concern here is how it appears in the analysed narratives and how the perceptions of such a tradition may help us to get further in our attempt to understand the phenomena in their practice. The continued analysis of the narratives through the identification of potential expressions of an economic culture will proceed through a summary quest into the eight narratives, continuing with reflections on the two different national contexts.

Use of economic discourse appears most prominently in SS&T, mainly concerning ways of funding 'research', categorizing and polarizing it according to the sources of its monetary input. The main attitude appears to be concentrated on an idealization of private sources as opposed to governmental sources with regard for expected better applicability of the 'research'. The narrative of SPe also contains an explicit use of economic discourse in which resources are measured against given tasks, and while the resources often are expressed in monetary terms, it appears that the economic approach is broader and essential to the understanding of time and place, as well as of

'research' as an asset. The SSt and SHE narratives have points of contact with economic discourses in references to a market, mainly through concepts of supply and demand driven by the expression of needs in the former and tasks in the latter. The economy appears, however, as a means or a by-product of other concerns, such as the description of the relation between individuals and institutions or the satisfaction of needs. The informal Chinese narratives identify the economic motivations as a dominant discourse that is polarized to desired academic ideals, in a motivation to conduct research in CPe and in the choices of education in CSt. The formal Chinese narratives mention economic perspectives mainly in references to awards and permissions to take fees and support of different natures, but also in warnings concerning fraud. The economic discourse relates to motivation in both informal and formal Chinese narratives, but it is criticized in the former and encouraged in the latter. In other words, it appears that the economic discourse dominates the two Swedish narratives concerned with 'research' while it is implied in different ways in the six others and repeatedly occurs as a part in polarizations, such as in contrast to state political involvement or to academic motivation.

The Chinese context in the informal narratives displays an economic discourse mainly in contrast to cultural values, and the formal narratives seemingly advocate cultural values while simultaneously giving primacy to the economic approaches. The economic discourse in the informal narratives is repeatedly given with a proximity to a governmental function, as the governmental administration and economic motives are perceived to be related, something that can be seen as confirmed by the double approach to economic aspects in the formal Chinese narratives. The main arguments against economic values in both formal and informal narratives are founded in the perceptions that they are a threat to the desired development according to an academic logic demanding 'freedom' from government and market. It is a logic described in the classic STS literature with reference to the liberal theories of the invisible hand, for example, by Polanyi (1962) as a mechanism in which the 'sciences' would be developed if only they would be left to themselves. It is, however, a perspective that has lost most of its supporters in the present STS perspectives (Amsterdamska 2008), as the tensions between economic and cultural values take new shapes. In the Chinese narratives, a criticism of economic discourse is the most acutely formulated in concerns for corruption, a theme that is sensitive and difficult to explore (Anonymous 2002). The references to corruption are reluctant and with negative affect but are repeatedly mentioned in all four Chinese narratives indicating perceptions of a spread problem, something that also is proposed in several studies, especially on the lack of transparency of the system (L. Zhao 2009). In other words, it appears that the Chinese narratives all understand the phenomena in light of a polarization between cultural and economic purposes and present a tension between the government and the academia.

The polarization between the economic and a cultural discourse is not reflected in the analysed Swedish narratives, but the concept that a utilitarian concern for the uses of 'research' is an asset, dominates the four narratives. The dichotomy between a cultural and a useful discourse has, however, been applied in an analysis of the Swedish 'politics of science' as one of two polarizations by Marton (2000) (the other polarization according to the degree of centralization will be explored further with regard to the bureaucratic science culture). Marton presents an analysis of political documents and concludes that the general Swedish discourse has in the latest decades oscillated somewhat between a radical and an extreme focus on the utility (Marton 2000, 77ff). This kind of development is also described by Liedman (2009; 1987) in a prolonged growth of the dominance of an economic discourse that values the uses and applicability of knowledges. The concern for the uses of the 'sciences' has often coincided with the classic differentiation between basic and applied 'research' with a reference to the motives behind the produced knowledge as proposed by Bush (1945). The representation of a linear relation between input in basic 'research' and the later production of applicable outcomes has been criticized, and is in many contexts considered to be obsolete (Godin 2006). The division between basic and applied 'research' is still explicitly important both in SS&T and in SPe, but the two categories are presented with regard to their utility and fitted into an economic discourse which is reminiscent of the theories on academic capitalism (Slaughter and Rhoades 1997). In other words, it appears that the cultural role is not polarized to the economic discourse in the Swedish narratives as it is in the Chinese, but there are tendencies of a polarization with perceptions of linear relations between basic and applied research; however, both extremes are presented in the light of their uses.

The polarizations in which the economic discourse appears are central in the narratives and are essential parts to the understanding of the central phenomena. The meaning of 'science' as a dynamic driving a general development is given with specified economic aspects, and the meaning of 'science' as a character is given as a field of objects that takes shape in specified economic realities. The economic discourse is also explicit in the meaning of 'research' as an asset in the Swedish narratives and as one of the parts in the discussion on the meaning of 'education', the part that threatens the development in the Chinese narratives while forming the contrasted background shaping an understanding of academic freedom. In this sense, it appears that an economic discourse permeates the constitution of meaning and shapes the understanding of the central phenomena, primarily revealing a utilitarian approach that goes beyond the monetary and the explicit economic discourse (Slaughter 1988).

The economic discourse in the analysed narratives, thus, appears primarily in the polarizations between a cultural and an economic purpose and between basic and applied research, approaches that explicitly appear in older or classic STS theories (Slaughter 2005). The appearing discontinuity between the theoretical narratives and the empirically revealed narratives can be interpreted in different ways, such as that there might be a slower development in a general discourse than in the academic studies or that there is a gap between the theoretical understanding of the field and the lives of the people involved in its realization (Chong and Hamilton-Hart 2008). The understanding of an economic discourse as a threat to the desired development in China, a potential preamble to a corrupt system, while the same discourse establishes the central values in the Swedish system, such as in the evaluation of different types of knowledge that poses some further questions. However, such questions also imply an importance of other aspects and indicate that we have to include the study of further science cultures in order to understand the expression of economic discourse.

In sum, it appears that there are traces of an economic discourse in all eight narratives and that it is dominant in SS&T and SPe. The economic discourse carry perceptions of a basic and applied research, mainly in the four narratives concerned with 'research', as well as a threat to the development expected of the values of freedom in the informal Chinese narratives. It appears that the economic references resonate in classic STS theories, with lingering perspectives that remain important both in the formal and informal narratives in both Sweden and China. The economic culture also appears in a wider utilitarian approach, but it appears to show only a part of the general constitution of meaning, implying an importance of other science cultures.

Bureaucratic frames and concerns

The frame of a bureaucratic culture proposed in Elzinga and Jamison (1995) conceives actors of a state administration that handle its agencies, committees, councils, and advisory bodies, approaching the procedures of knowledge production as a cogwheel in the wider government machinery. In these terms, the bureaucratic discourse is primarily concerned with the realization of an 'effective administration, coordination, planning, and organization' and is often encountered with questions on the academic autonomy (Berdahl 1990). The bureaucratic culture portrays a 'science' that regards its potential efficiency and functions in the concerned procedures: 'to make public policy scientific'. These approaches relate to a number of theoretical frames that can shed further light on the revealed constitution of meaning, primarily concerning perceptions of centralization (Marton 2000), organization, and localization of authority (Yang, Vidovich, and Currie 2007), as well as the

bureaucratic ideas of governance (Elzinga 2010). The theoretical contextualization with regard for a bureaucratic science culture is introduced by a study of the specific references to such discourses in the eight narratives followed by theoretical frames to the meaning appearing from the institutions and the state, especially regarding the meaning of autonomy.

The bureaucratic science culture has a potential of being dominant in the analysis because of the choice of formal narratives issued by governmental bodies, and it primarily appears in the three laws. The concern for bureaucratic organization appears mostly in presentations of the 'institutions', something that already has been investigated. For example, it appears that the main concern in SHE is an attribution of the mandate and task to the institution, which indicates a bureaucratic discourse, and it is directed towards the governmental function of regulation of rights and duties in the acts of institutions with regard for the students. The institutions in the SSt narrative are given as a location to turn to for support and carry the trust of the respondents, and its function is expected to satisfy the needs both of a social and informative nature. These are services of a bureaucratic structure that formulate the ideals of the government's service to the students. The two formal Chinese narratives are concerned with a regulation of initiatives of the institutions through governmental procedures and a desire for effective administration and coordination for 'social uses', mainly described as a material development. In this sense, it appears that the concerns for organizational structures dominate the discourses in these four narratives (SHE, SSt, CHE and CS&T), and the culture is primarily bureaucratic in the sense that it establishes formal structures for interaction with institutions.

These are themes that also appear to some extent in the other four narratives, as SS&T establishes a relation between the government and the institutions based in the governing act of attributing financial means in appointed ways to 'signal' certain values and the SPe relate to the institution mainly as an environment that shapes the acts of 'research' and 'teaching'. The informal Chinese narratives are clearly negative towards the administrative interference of the government and avoid bureaucratic issues that infringe on the desired academic freedom. In other words, it appears that the bureaucratic discourse dominates four narratives (SHE, SSt, CHE and CS&T) and plays an important role in the other four, mainly in the concern for the relations between the institutions, the state, and the people.

The meaning attributed in these terms represents different kinds of bureaucratic discourse, something that can be initially related to an issue formulated by Marton (2000) in a regard for the level of centralization. The organizational aspects can be

framed in an investigation into the government control of the 'politics of science', a question that has been reoccurring in the historical contextualization of the Swedish and Chinese systems, revealing considerable movements towards centralization as well as towards decentralization (as related on page 227), with reference to the distinction between substantial and procedural autonomy that is reminiscent of the separation between form and content that has been discussed regarding the Swedish narratives (such as on page 236). The four Swedish narratives agree in the establishment of the government as the initiating actor financing and task giving roles and thus an origin to the behaviours that establish the organization. However, both formal narratives indicate a movement in which the government encourages autonomy in SHE and management mimicking the private sphere in SS&T.

The meaning of centralization appears to be somewhat different in the Chinese narratives, as all four narratives presume that the academic institution is the initiating actor while the government attempts to engulf the initiatives. The bureaucratic or administrative acts are seen as interference with the academic procedures that the formal narratives address as allowances and directives which encourage activities. The historical movement is, however, described in similar terms as the Swedish development, as Yang, Vidovich, and Currie (2007) describe a considerable decentralization in the 80s followed by a regression in a motion towards centralization. The meaning of centralization in these terms relates primarily to the attribution of ownership of the acts, or expressed differently, the allocation into spheres of responsibility for the acts, tending towards the status bound to their accomplishment, something that the state and academia appear to compete for. This approach appears to establish a tension over the substantive autonomy more than the procedural autonomy in Berdhal's terms, even though the distinction does not appear to contribute much in this context. Yang, Vidovich, and Currie (2007) also propose a development of Berdhal's theory in the differentiation between levels of autonomy in the concept of individual autonomy as distinct from the institutional autonomy. This distinction can shed a further light on the differences revealed between the formal and informal narratives. The distinction appears especially in the informal Chinese narratives as a criticism of the lack of autonomy on both levels. The concept of management is presented in more neutral terms, free from the tension between government involvement and academic autonomy, with an affective load to the concepts that are antonymous to Elzinga's (2010) proposition. In other words, it appears that centralization is given slightly different meaning in Sweden and China, with a surprizing unison among formal and informal narratives, even though the points of view are different.

The simple structures of meaning in the economic discourse, with the threat of corruption in China and a practical academic capitalism in Sweden are made more complicated in the discourse related to concepts of organization and bureaucracy. Both the Chinese and the Swedish systems appear to mix tendencies of centralization and decentralization, but in somewhat different meanings and affects. The tension can be seen in a further light with the help of Jiang's (2010, page 19) emphasis on the informal interpretations of the documents: 'In the sea of 'nonlegal rules' a written and codified constitution is only an isolated island'. Jiang (2010) proposes that a differentiation between a written and an unwritten constitution is indispensable in understanding the Chinese legal and organizational contexts. The proposition mainly considers Western frames of interpretation that may be misguided in the encounter with the Chinese constitutional issues, beginning with a remark on the relationship between the CCP and the NPC. It is a historical perspective that points at the fact that the party was established and took power before a constitution was established, as it appears only after 1952 when the party had already established its control, explaining without excusing the criticized primacy of the rule of the party over the constitution. The proposition also considers the position of the chairman and the trinity system of rule which developed through the internal struggles of power in the CCP, both in the early phases and in the end of Mao's life during the Cultural Revolution. The third issue of the relationship between the centre and localities is important to the politics of science in its central organization and local realization, which also contain diverse and explicitly differentiated models, such as of the solution of 'one country, two systems'. The reflections illustrate the central role of a number of tensions and struggles for power shaping an unwritten constitution, indicating practical procedures beyond what is formulated in the written documents (Jiang 2010).

The tensions in the Chinese system have also been described with emphasis on problems to integrate the 'horizontal relations' among administrative bodies on the same level, while the 'vertical relations' among bodies with different authorities are more limpid (Lieberthal and Oksenberg 1988). The cooperation among the Chinese ministries, such as the ME and a MOST has been criticized for being counteractive and inefficient (Lieberthal and Oksenberg 1988; Liu et al. 2011) as the ministries, in general, appear to have difficulties in their cooperation. The study by Liu et al. (2011) also brings a further dimension of the relation between the written and the unwritten constitution to light through a focus on the ministries and the number of policies they issue regarding the influence they appear to have. Liu et al. (2011) investigated the emergence of a national system of innovation in China through analysing numbers and concerns of policies and laws issued by various levels of ministries. One of the main presented challenges appears to be contained in the lack of coordination among the ministries and the apparent internal struggles for influence, especially

regarding ministries of the same level of influence, while the hierarchical structure appears to be more effective in the top-down processes. The concept of a national innovation system has been the epicentre of an overarching debate on the meaning of such theoretical constructs (Miettinen 2002; Elzinga 2004).

It appears that the bureaucratic discourse is more complex than the economic discourse, and the meaning of centralization and decentralization have more varied appearances in the two contexts than the earlier references to classic STS theory in the economic discourse. In later STS theory, the critique of the linear models has established approaches that involve attempts to develop the dualism of basic and applied forms of research in a proposition of a new paradigm, something that can be informative to the perceptions of the bureaucratic concern for organization. The second 'wave' or 'mode' (Godin 2006; Godin 1998; Slaughter 2001; Gibbons et al. 1994) proposes four marking qualities that are identified with the new approaches replacing the linear models, formulated as principles which can be examined with regard to the meaning of decentralization in the present analysis. The four markers present (1) a context-driven 'research', (2) a transdisciplinary context, (3) a heterogeneity of sites and practitioners, and (4) a motivation in social responsibility from a system of control based on peer review to more complex and varied considerations.

The proposition of a new paradigm in which (1) 'research' is *context-driven* as a marker for decentralization is contrasted in this setting with the revealed task-driven Swedish narratives with a centralization based in the state's initiative acts and the process-driven Chinese narratives with a centralization based in the state's engulfment of responsibility. Neither the meaning of 'research' as an *asset* in the Swedish narratives and a source of legitimacy in the Chinese narratives are explicitly reflecting the context, and SS&T identifies the allocation of investments as signals of expected outcomes, an attitude that in its practise appears to counteract a context-driven 'research', even if the narrative also presents applicability as an evaluative foundation. However, the references to different types of knowledge explicitly expressed in SPe but appearing in all narratives indicate a reference to a context as a ground for the evaluation of knowledge. In this sense, the context is not the driver of 'research' and is thus not the sign of decentralization, but potentially presents a frame for its evaluation.

Positive attitudes towards transdisciplinarity (2) appeared the most clearly in SPe indicating the encounter of different opinions as a source for increased quality, while the variation mentioned in the Chinese narratives relates rather to a differentiation

between the contexts emphasizing their internal homogeneity. Transdisciplinarity is explicitly counteracted in SS&T by the proposed differentiation and competition among disciplines, something that is enhanced by an approach in the Swedish policy to enhance competition among researchers and institutions (Fridholm 2010), together with the inspiration of the New Public Management (Elzinga 2010). The informal Chinese narratives also appear to be disciplinary in their presentations, mainly in the descriptions of rigid fields or collectives in which status and fame is attributed and recognized.

The heterogeneity of practitioners and sites (3) is contrasted to the homogeneous understanding of the 'institution' in both contexts, and the 'university' as a meta-character or an intermediary further emphasizes a uniform discourse on the practitioners. There are, however, indications both in SPe and CPe of a need for specialization of the institutions, and the Chinese narratives explicitly include a variety of forms of practitioners in institutes and other organizations. The appearance of motivation in social responsibility and more complex and varied considerations (4) can be implied in some of the narratives. These dimensions might be seen in the explicit emphasis in the formal Chinese narratives on the social gains of a development driven by a scientific dynamic as well as the appreciation of issues of status based on the attribution of responsibility for such an endeavour. The other narratives reflect similar dimensions in the concerns for a variety and evaluation of different types of knowledges, especially in the perceived demands on a leader to understand the contexts.

Calhoun (2006) challenges the perception of governance of the 'university', claiming that no one is steering, but indicating that this would not make it directionless. This might in many ways correlate both with the formal descriptions of the systems in Sweden and China and with the informal expressions as the direction of the development based on the analysis of the narratives would not explicitly establish a locus of control (Rotter 1966) from which the revealed approaches could be originating.

In sum, it appears that four narratives (SHE, SSt, CHE and CS&T) emphasize a bureaucratic culture in the sense that they are concerned mainly with the interaction between the government, the institution, and the individual, as well as a 'science' that is primarily of interest for its function in a state organization. The more complex expressions in the bureaucratic concerns indicate that the understanding of economical motives are given in simpler terms than the perceptions governing the relations among the state, the institution, and the individual. The empirical analysis

does not give any narrative support for a turn towards the kind of complexity indicated in the Mode 2 theories, or that it has moved on since. The context of 'research' is given not as a driver but a frame of evaluation, and transdisciplinary, heterogeneity of practitioners, and the motivation in social responsibility appear but not as the driving factors the theory assumed. The meaning of centralization based on the state's initiation of acts in Sweden and the state's engulfment of acts in China does not indicate a heterogeneity of practitioners, either.

Academic ideals and the role of the scholar

Elzinga and Jamison (1995) present an academic culture concerned with the preservation of 'traditional academic values' such as autonomy, integrity, objectivity, and economic concern in the control over funding and organization. This approach to the 'scientific' proceedings comes with references to classical 'university' theories such as the Humboldtian ideals of freedom from the market and the state (Humboldt and Burrow 1969) as well as to a formation of a gentleman (Newman and Turner 1996). In the economic concerns as well as explorations into the meaning of autonomy, we have already addressed these questions; however, they appear in a further light as they lead the exploration of the narratives into a study of the academic ideals and the consequent discourse. In these approaches, it is easy to be trapped by the ideological presentations of a 'nature' of 'research' or 'higher education', but the ideologies are, at this point, primarily seen as factors shaping the two contexts that we investigate. The continued analysis brings further understanding through reflections on the constitution of meaning of expertise in an academic discourse (Brubacher 1970; Collins and Evans 2002), a proposition which leads the analysis into a study of the formation of the role of the scholar in the narratives. The image of a meta-character positions it in a tension with the government in the Chinese narratives, while the image of an intermediary positions it as representing the government in the Swedish narratives. These dimensions indicate different approaches to the issues of autonomy, as well as the uses of the 'university', which have been central themes in many studies (Marton 2000; Kerr 1963; Yang, Vidovich, and Currie 2007; Kai-Ming, Xinhuo, and Xiaobo 1999; P. Altbach 2001).

Expressions of an academic science culture as suggested by Elzinga and Jamison (1995) appear the most explicitly in the informal Chinese narratives and in the main horizon in CPe of a character of the academician. The narrative of CSt also expressed the importance of an evaluation of the 'universities' based on academic ideals, both with a criticism and an attribution of status. The formal Chinese narratives also appear to relate to an academic discourse, but on an implied level, suggesting different manners of 'encouraging' certain desired traits, such as through rewarding excellence

or punishing fraud. In the Swedish narratives, it appears that the academic concerns are expressed most clearly in SHE, in the concerns both to establish a protection of academic autonomy and general rights and levels concerning students and personnel, seemingly leaving the substance of the academic activities to the academicians (as reflected on page 236). The possible expression of an academic discourse in SS&T mainly centres on references to academic recognition, as well as mentioning the liberties and duties of academia, but the academic discourse is lacking in any further extent. The informal Swedish narratives also appear to lack such an explicit discourse; however, the wider concerns broach the theme in respect of expertise and in the complex relation to types of knowledge as well as its evaluation and applicability. In other words, it appears that discourse established in an academic science culture is most explicitly formulated in CPe and CSt, while it is implied and tangent to a number of structures in the other six narratives.

Expressions of further values that represent classical Humboldtian (1969) approaches to academia are also expressed in the positive approach to the interaction between 'teaching' and 'research' in SPe and in the idea of student goals, which dominated the CPe. The references relate to the ideal of a personal development and formation of a humanistic role, such as proposed by Newman and Turner (1996). The signs of similarities with the two classic approaches present ideals in which the scholar is attributed important public roles, but there are different ways to understand these roles. It is something that can be aided by the proposition of a differentiation between experts or critiques as proposed by Simons (2007). This dualism portrays the scholars either in the acts of aiding or scrutinizing the authorities, implying that the academic community is either allied or in conflict with the centres of power. The Chinese narratives, identifying the 'university' as a *meta*-character, give different answers to this polarization, as the informal narratives put emphasis on the conflict, while the formal narratives put emphasis on the alliance. The Swedish narratives, on the other hand, agree on the alliance to the point of including the 'university' in the state apparatus as the revealed intermediary with tasks given by the government. In other words, it appears that the informal Chinese narratives emphasize the role of critique while the formal Chinese narratives and the Swedish narratives emphasize the role of the expert as described in Simons (2007).

The informal Chinese narratives refer to idealistic approaches to academia, explicitly given in the informal narratives and implied in the formal narratives, in which autonomy is related to the classical tensions to the state and the market, while it appears to be more complex in the Swedish narratives. The image of the 'university' as an intermediary indicates the appointed institutional environment in which the encounter between the government and the public takes place and the analysis can be related to broader traditions of institutional theories, such as Weber's sociology, or

Merton's (1942) analysis of the norms governing science, two examples among many. The image of a meta-character indicates a formation of a separated actor with its own character that attributes status through relational associations. This approach can also be related to a broad tradition of theories concerning the interaction between actors, which can be related, for example, to Confucius' archetypal relations, Leibnitz' relational worldview, or the more modern adaptations to the STS in the Actor-Network Theory (Latour 2007).

The Chinese debate on the role of the meta-character with reference to the state and the Swedish unity in the representation of an intermediary allied with the state can also be understood in a further sense, in the light of a proposed choice that has to be made by 'universities' between excellence and access (Calhoun 2006). In this perspective, the scholar is either distanced from the public in the aspirations towards recognition in an elite group, or affiliated with the public in a role of service. The informal Swedish narratives were concerned primarily with basic needs, such as the day-to-day economy of resources and tasks in SPe or the personal need for information and social contact in SSt, something that affiliates the scholar to the public needs. In this context, the protection of rights in SHE points at an emphasis on a concern to address the satisfaction of the needs and rights of each individual in a similar discourse that also gives emphasis to accessibility. The position is expressed most explicitly as the SHE indicates a task to make the research and education accessible to the public in a third task (Bragesjö, Elzinga, and Kasperowski 2012). The SS&T as well as the informal Chinese narratives are comparative in their approach to the institutions, emphasizing the attribution of status based on recognition. The focus on the academic lifespan in CHE and the emphasis on the regulation of graduation and promotion and the attribution of recognition for action in SS&T are both given with explicit references to values of excellence. In other words, it appears that the distinction of values of excellence and access identifies a tension among the Swedish narratives that otherwise appear to be quite harmonious, as SS&T is singled out in its focus on excellence and the others are rather strongly established in their concern for access. On the other hand it appears that the Chinese narratives that othe oherwise established in a number of tensions are, in this perspective, united in a concern for excellence.

It appears that a focus on the expert role with a concern for access appears in SPe, SSt, and SHE, while CPe and CSt appear with a focus on excellence and a concern for the role of critique; moreover, SS&T, CHE, and CSS&T appear with a focus on the expert role and a concern for excellence. The focus on excellence can also be illustrated by the discourse on the ranking of universities (Marginson 2009), as the simplified marker organizing the attribution of recognition in such an accessible

way. The reference to ranking was dominant in all the Chinese narratives, but only appeared in SS&T among the Swedish narratives, but there it appeared to play an important part regarding the framing of evaluation and success. It appears, however, that the simple polarizations that appeared in the expressions of economic discourse in relation to a threat of economic motives in China and different strategies to reach applicability in Sweden.

In sum, it appears that an academic discourse dominates the CPe and the CSt narratives and that a closer analysis of the understanding of the role of the scholar splits the Swedish narratives regarding values of access and excellence and the Chinese narratives regarding the expectations of a scholar to be a critic or an expert. The role of the scholar and the difference between the focus on excellence and accessibility has, until now, only been addressed with regard for internal academic ideals, but it also has a decisive impact on ways to relate to the representation of a public, something that will be further investigated with regard to the civic science culture.

Civic involvement and approaches to public participation

The civic science culture as proposed in Elzinga and Jamison (1995) is primarily formed in relation to social movements and ideological organizations with a driving pathos, such as environmentalism and feminism, with concerns relating to 'the social consequences and implications of science'. There are, however, different ways to understand what civil society is, and it has generally been approached in light of an Anglo-American representation of a civic-state binary struggle for power (Trägårdh 2010). This image appears to be dominant in approaches in the studies of the Chinese civil society (Teets 2014). Trägårdh proposes another approach which is adapted to a Swedish scene as follows: 'civil society is first and foremost conceived of as the arena, in which individuals and groups seek to advance particular political and private interests, satisfy needs and desires, and to realize hopes and ambitions. It pictures state-civil society as a dynamic, interactive, and productive process, rather than as a counter-productive zero-sum game' (Trägårdh 2010, pp.12). The distinction between the approaches to civil society resonates with similar distinctions in the conceptualization of 'politics' as revealed in the outcomes of this thesis. The 'arena' that Tragårdh identifies is similar to the approach to an environment, while the representations of a civil society in conflict bound to a counter-productive zero-sum game with the government that Teets presents is more reminiscent of a competition for status. In this approach, civil society also appears as a dynamic, similarly formulated as the representation of 'science' in the formal narratives, which could be an interesting way to approach the civic science culture in this context.

The sampling of the narratives is not primarily intended to investigate these dimensions, and the outcomes do not directly provide much detail on these issues. However, there are a number of questions that relate to a civic science culture which have been raised in the earlier analysis, such example, on an identification of the role of the scholars, the institutions, and the governments as well as the general trust in the government and the representation of 'politics'. The form and ties between the civic science culture and the different organizations that represents civil society depend on the 'political' culture of the different national contexts, but they appears to generally stand for democratic strategies as opposed to a technocrat direction (Elzinga and Jamison 1995). The analysis of the civic science culture are in the first step in this context, related to the appearance of civic concerns in the narratives, and then related to a continued investigation into the social role attributed to the scholar, as well as the understanding of the wider public. The initial distinction between approaches to civil society, in a Swedish model and an Anglo-American model, is mainly established depending on the levels of trust in the government (Trägårdh 2013). The revealed trust in the government in the informal Swedish narratives, and the revealed suspicion of the government in the informal Chinese narratives can frame the differentiated models, but there is also a dimension of ideology which appears in the academic ideals in the informal Chinese narratives but are less marked in the informal Swedish narratives.

The general conceptualization of 'politics' as an environment has structures of meaning which is fit for the general purposes of the proposed civic science culture at several levels, representing the arena Trägårdh (2010) refers to. The emphasis on personal needs and concerns which relate to the potentially exposed role of the student as well as references to organizations in SSt, the concern for a fair and respectful work-environment in SPe, and the protection of student rights in SHE all indicate values which can be expressed in the language of a civic science culture. The expressions appear with a social pathos and an implied ideology which affirms rights and protection for the exposed actors, which at times takes explicit positions for equality, and at times appears at the expense of more technocratic approaches. A civic discourse might also be seen in the regard for social implications of the 'research' in both CS&T and SS&T, but the distinction between utility and social development is not always clear and may tend towards the technocratic approaches which are opposed to the civic pathos. The informal Chinese narratives contain the most explicit expressions of affiliation to ideologies, and they presuppose an ongoing debate which is often reminiscent of civic involvement, as well as a critique of the government which tends towards a civic pathos. The ideologies are, however, mostly established in an academic discourse, which diverges from the civil ideologies as the

values address issues of excellence rather than fairness. These approaches are also reflected in the procedures of regulation of awards and punishments in CHE and CS&T, but the organizational forms are not addressed.

There is an important and growing movement in China, of organizations which are non-governmental and not for profit (NGO), but they are awarded little space in the public debate and are subjected to the confining supervision of the government (Ma 2006). There is, however, a debate on the model of governance and the level of control of the government (Teets 2015) which balances between a Beijing and Guangdong model as the former dictates further supervision of the government regarding registration, funding, and regulation of activities. These intentions, and the governments suspicious initial attitude to movements exterior to its own sphere or to the party, is quite apparent in the analysis, and especially relevant to a study of the meaning of the act of 'encouraging' which is formative to the attitude of both academia and civil movements (Teets 2014). The occasions in which the informal narratives mentioned organizations at the 'universities' tending towards a civil involvement are imbued with a suspicion towards the desire for powerful positions in the CCP. It thus appears that there is an experience in both formal and informal narratives regarding an involvement in the organizations that constitute the civil movement, but that the academic expert has a civic role in the critique of the government.

In Sweden, there is a long tradition of cooperation between governmental agencies, education, and the civil society (Trägårdh 2007), even if the concept as it relates to international and liberal traditions is rather new, bringing new connotations (Trägårdh 2008), in contrast to the earlier associations with labour movements. As an intermediary, the 'university' is closely tied to both the state and the population and appears to be involved in the mutual trust between the two parts, and this does not explain the need for a civil movement as a critic. The historical narratives appear to indicate a governmental involvement in the 'university' with a primary concern for a more utile function, which has proceeded with the trust of the involved actors, even though the classical academic concerns may have been compromised (Liedman 1987). Civil society is, at times, addressed as a part of the broader institutional environment in the Swedish narratives, an is thus implied to be in a similar position of an intermediary, such as the 'university', something that also can be seen in the of the public funding attributes to the civil society.

In other words, it appears that the expressions of civic concerns in the narratives are similar to the general approaches to the 'university' as a meta-character and an

intermediary. The organization appears as part of the institutional environment in the Swedish context, something which appears to be firmly established at the expense of a living debate on the meaning of fairness in the specified context. Debates on ideals appear livelier in the Chinese context; however, they are mainly related to the expression of academic ideals, and not civic concerns.

Chapter six: Conclusions

The chapter of conclusions is intended to summarize and reconsider positions and propositions that appeared in the earlier chapters. An ambition in this initiative presented in the chapter of positioning is the establishment of an approach that accepts and affirms the potentially complex appearance of the phenomena. Thus, the conclusions are not intended to set a final point to all the threads of thought that have emerged, but rather to gather some main perspectives, starting with a short reflective summary. The second part of the chapter on conclusions is intended to reconnect to the established position from the first chapters, through a reconsideration of the reflexive position. Thereafter the conclusions open the gates for thinking in further speculative terms, in attempts to imagine potential effects of the revealed dimensions and how they could be used in a preparation for encounters between Swedish and Chinese actors, as well as to potentially inspire the thinking on the meaning in the 'politics of science'.

The open approach and the exploratory attitude that formed the point of departure and the procedures of research also colours the way in which the conclusions are drawn. The main measure to preserve reflexivity is taken in the preservation of the connections to the context from which the structures of meaning have emerged. The propositions thus relate primarily to the realities in which the narratives were issued, with a probing development of propositions which might very well be relevant to the extended Swedish and Chinese contexts; this can be considered for approaches to reflect on the constitution of other contexts. Thereafter, there are numerous ways to apply the findings and the summarizing epithets, such as a 'university' as a meta-character and an intermediary, but the principle focus here is on the investigation into potential advantages and difficulties in the exchanges between the two systems.

Towards an understanding of the emerging meaning

The phenomenological and explorative approach was intended to give an understanding of the process in which the meaning of the phenomena is constituted in the narratives, as well as providing a broader entry to the narrative contexts. This

understanding can lead to a diversity of reflections, such as the different expectations of various groups, or the meaning given to the concept of quality or motivation. The broader perspective on the narrative dimensions of the 'politics of science' allows approaches to the study of organizational structures and can challenge rigid ideological representations.

Reflecting summary: 'university' and culture

The chapters of positioning and method presented an approach for an open and empirical enquiry in which structures of meaning emerge and are studied, primarily in a consideration of their similarities and differences. The variations depending on cultural contexts and types of narratives were used to formulate approaches to the structures of meaning. The emerging nature of the descriptions and their origins in the empirical material are meant to validate the quality and generate images that might be valuable in the quest to understand the concerned phenomena.

The central phenomena and narrative contexts

The revealed meaning of the 'university' as an intermediary in the Swedish narratives and a meta-character in the Chinese narratives indicates that it is framed primarily by its relation to the government. It is an approach that raizes many questions, and it has been involved at several points and levels in the discussion regarding questions of academic freedom, autonomy, centralization, development, and models of institutional organization. The meaning of 'education' emerges in general ways, as a structure to be filled in the Swedish narratives and as an object for discussion in the Chinese narratives. Both representations indicate rather wide blanks and are similar in their lack of internal descriptions, which in the Swedish narratives, appears to stem from a relativization of the personal and local contexts, as it can be different things in different places to different people. In the Chinese context, the variation appears, rather, to depend on a consideration for potentially different approaches and values, such as cultural or economic values. The references to 'research' as an asset in the Swedish narratives indicate an approach centred on a balance between resources and demands, and that its appearance is a source for legitimacy in the Chinese narratives indicates a desire for status. Both representations of 'research' are related to the conceptualization of means to desired ends, but they appear in quite different realms, regarding a public representation in Chinese narratives and an institutional economy in the Swedish narratives.

The meaning of 'science' emerges primarily as a characteristic of a sphere of life in the informal narratives, as an adjective, and as the dynamic of a development in the

formal narratives. Thus, the intended meaning relates to important dimensions of the central phenomena, even though the references to 'science' are generally scarce and lack extensive clarifications. The approach proposed in the chapter on positioning referred to the propositions of Whitehead (1926) in which 'science' relates to an aspect of mind concerned with the 'passionate interest in the relation of general principles to irreducible and stubborn facts', which appears as something quite different from both the explicit representations and the implicit approaches. The meaning of 'politics' as the formation of an institutional environment for action in the Swedish narratives and as a competition for status in the Chinese narratives is related to an establishment of relations among characters and meta-characters in a hierarchy. The Arendtian narrative on 'politics', as an aspect of human interaction that constitutes a collective of people, gathering them together and yet preventing them from falling over each other (Arendt 1958), can be seen as a general frame for the two emerging representations.

The analysis of the general similarities and differences between the categories of narratives was, in consideration of the emerging questions, centred on representations of the government (to discern between the cultural contexts) and on representations of a development (to discern between the types of narratives). In the Swedish narratives, the government is represented with a natural and unchallenged authority to establish an environment in a task-oriented approach, and in the Chinese narratives, it is represented in a questioned involvement in a process-oriented approach. The representations are primarily differentiated according to the trust in the respective government. The narrative contexts in the formal narratives in general relate to the outcomes of the development, such as recognition or assets. The informal narratives have a common approach to the drivers of development, which in the informal Swedish narratives appear as external to the person and centred on the encounters between a diversity and in the informal Chinese narratives are internal to the person and centred on academic freedom.

Stories and science cultures

Stories as presented in Hayhoe (1996) and indicated in Arendt (1958) are used as tools, or frames, centred on historical narratives to proceed in a study of the revealed structures of meaning. In these terms, the Chinese context is introduced with an imperial story that gives emphasis to a respect for scholars with important social roles, which is reflected in the analysed narratives. A following colonial story indicates complex affects related to the encounter with something foreign that also is reflected in the analysed narratives. The tensions and contrasts between the nationalist story and the socialist story advantageously frames the tensions between the academic collectives and the communist party, which are central in several narratives on the

history of academic institutions. The story of the reform decade advantageously frames the approach to a competition between the government and academia for status and recognition. A similar division of the history centred on the Swedish context is proposed by Liedman (2009), through seven periods seen as layers, which here are gathered into two broad stories. A Medieval layer, a colloquial layer, and a Humboldtian layer are gathered into an academic story, but they do not, however, appear to have any significant resonance in the analysis of the Swedish narratives. The following bureaucratic, democratic, leadership-centred, and entrepreneurial layers are gathered into a story on the uses of the 'university', indicating a complex interaction between the 'university' and the government in Sweden, but that is described in harmonious terms. The stories mainly frame the interaction between the state and the institutions in simultaneous currents of centralization and descentralization.

A story of massification has been proposed as the latest story in both contexts, which could indicate that they are growing more similar, a perspective that can be related to procedures of globalization or internationalization. Theoretical frameworks present massification in a general approach to society (Arendt 1958) and in a quantitative approach applied to the 'university' in Trow (1972). It is a concept that appears to have an essence in a quantitative nature, constituted by a large number, but in the theoretical approaches to massification, there are also assumptions regarding the meaning or qualities of the involved phenomena. The references to a discourse of massification are different in the two narrative contexts, as a contrasting backdrop for excellence in the Chinese narratives, and it may be indicated in the representations of the institutional environment in the Swedish narratives. Thus, the analysis does not appear to directly offer support for the theoretical expressions of a universal story of massification as indicated by Trow. However, the reduction of cultural nuances in the meaning of the phenomena, which enables a comparability in the theory of massification, also appeared in the analysed narratives, on some occasions with similar failures in addressing the questions of meaning. The Swedish narratives are expressed in an external approach, failing to address the meaning of the central phenomena, and the Chinese narratives are expressed with repeated phrases and references to a confinement of authority and, thus, might reflect dimensions of thoughtlessness.

The analysis of the narratives with regard for theoretical frames is inspired by the approach of Elzinga and Jamison (1995) to integrate the perspectives of four science cultures with impact on the formation of policies: a bureaucratic focus on organization, an economic focus on expenditures, an academic interest for policy doctrines, and a civic focus on relations and social movements. The categorization primarily reveals that the discourse of an economic science culture is reflected in all narratives, but is dominant in SPe and SS&T, carrying references to classic S&T

theories that relate to liberal theories of the invisible hand but that are often considered obsolete. The discourse on a bureaucratic science culture is also reflected in all the narratives, but it is dominant in SHE, SSt, CS&T, and CHE and establishes more complex representations of the interaction between the state, the institution, and the individual. The discourse on an academic science culture is dominant in CSt and CPe, mainly with an idealism that is given in a conflict to government administration, and it attributes the role of a critic to the scholar as opposed to the role of an expert in the other narratives. The civic science culture does not dominate any narrative, but it does indicate a number of tensions in the concerns of the academic community with regard for economic and bureaucratic discourses in ways that are similar to the general approaches to the 'university' as a meta-character and an intermediary.

Reconsidering the reflexive and preliminary positions

The chapter on positioning established a reflexive and preliminary point of departure, and it is now time to return to the propositions, evaluate the positions, and consider the conclusions in light of the journey from which they have emerged. The reflexive position was intended to enable a methodical consciousness of the position from which the perspectives are taken and the impact it has on the outcomes, in a cultural, political, and theoretical regard. The considerations are directed to the validity of the claims, as well as to their representativeness in broader fields. Dimensions of generalizability were established through intimate connections to the context from which the claims originate, and not in an attempt to isolate variables (Polkinghorne 2003). It is mainly an attempt to establish an understanding of the phenomenon through unveiling the context in which the meaning is constituted.

The reflexive and preliminary position was adopted with the intention to establish an open and careful approach to the field, both regarding cultural differences and as a tool to come closer to the meaning of the phenomena. The position was established through the approach to meaning as something fluid, something which also shapes the approach to the propositions of short titles or epithets to the revealed structures of meaning. This dimension of the analysis can appear as simplifications if taken in a narrow literal interpretation. It is evident that the 'university' is many things, not only an intermediary in Sweden, and not only a meta-character in China, but the pronounced differences provide a way to emphasize the value of an open approach and to reveal how variable the phenomena are. This open approach is, however, not to be confused with pretences of a neutral approach. The frames and the intentions of the research are founded in the contexts of a Swedish narrative setting, and the generalizing claims implied in the intention to transgress the own positions and

perspectives through a meticulous study of narrative expressions are open for discussion. As the statements are given in relation to the context from which they come, it is apparent that as 'science' appears as a dynamic and a characteristic of a sphere of objects, it reveals two different structures of meaning which also can be investigated in other contexts.

Considerable effort has been spent in the analysis to hold back directly evaluative approaches, even though it is accepted that they have been shining through at times. It is, however, evident that both the writer and the readers of this thesis encounter the proposed formulations, such as of an 'institutional environment' or a 'competition for status' involving different worlds of thoughts, associations, affects, and, values. Providing the extensive exposition of the narrative contexts in which the representations appeared is an attempt to invite to a closer examination of these references, both as they belong to the analysed narratives, as well as to the writer and reader of the text. Hopefully, the broad frame of reference can follow the concepts as far as possible through the procedures of theoretical conceptualization. In the further reconsideration of the reflexive and preliminary positions, attention is given to reflect on the encounter with the Chinese cultural context, and thereafter a broader consideration of the weaknesses and strengths of the approach.

Reflections on the cultural challenges, primarily in the encounter with the Chinese context

The encounter with the Chinese culture has been one of the great adventures of the work with this thesis, both containing a considerable challenge and great joy. As indicated in the chapter on method, there were also a few surprises that had an impact on the procedures of collection of the material, such as considerations for the balance of status between student and personnel. These are dimensions which also are interesting to the outcomes and are reminiscent of the dialogical nature of narratives, and how easy it is to forget underlying differences of status in encounters between representatives from different cultures (H. Zhao 2008). In this regard, there was special attention given to the treatment of the material from the two countries, such as the treatment of languages and attempts to shape similar situations of investigation in the two countries. However, it is apparent that the challenges are considerable, even if the situation of translation, in continuous cooperation with Chinese students, has given a satisfactory contact with the expressions under the circumstances. The difficulties in the distribution of the questionnaire to the personnel, and the need to go through the established hierarchies in the institutions appears to support the general theories of the difficulties present in the horizontal structures, and efficiency

in the vertical hierarchical relations as indicated in the theoretical narratives (Liu et al. 2011; Lieberthal and Oksenberg 1988).

The encounter with Chinese perspectives and the distance created in the steps of translation is a threat to the validity of the descriptions, but the approach to quantitatively and qualitatively analysed expressions by emphasizing repeated segments of semantic material is a procedure which targets such threats. In this sense, the ideal is not to compare Swedish and Chinese data, but rather to regard them with care in the context and circumstances in which they appear. Several measures were taken to establish an open and careful attitude in the production of the chapter on outcomes, as discussed in the chapter on method, but there are certain issues which have been challenging to formulate. For example, it appears that the more pronounced tensions between the academic community and the government in the Chinese narratives point at a different language than in the Swedish narratives. Similar formulations of involvement in the two systems are, in their contexts, given more antagonizing expressions in the analysis of the Chinese narratives, in a discursive balance that has been challenging to establish.

The revealed aspect of an emphasis on the competition, as well as explicit descriptions in CSt, indicates difficulties related to different statuses in the academic community, which is in a considerable contrast to the focus on the rights of students in the Swedish narratives. It should also be considered that the actual freedom experienced in the formation of this initiative is an effect of a less authoritative environment and tradition, as established in the Swedish narrative context, and as such can involve some difficulties to truly fathom the expressions in the Chinese narratives, such as the restraints on authorities. It should also be noted that most of the historical and theoretical narratives are established in a non-Chinese tradition, either by non-Chinese researchers or in journals and frames that are mainly Western. The consequent emphasis on paradoxical traits in the presentation of the recent development in China shall not be seen in, this light, as a critique of a potentially illogical system, but rather as a curious approach to a potentially different logic. The greater question, on the universal respective culturally particular dimensions of the phenomena and of the understanding of for example academic freedom, autonomy, and scholarly integrity are neither meant to be relativized nor strictly compared to a Western standard, but rather explored as narrative structures to develop potential ways of interaction between the different discourses.

Some potential weaknesses and advantages of the study

During the conducting of the research, the principle of emergent design was intended to guide the collection of material to analyse into further steps of research, but the dimensions of the collected material grew beyond what could be managed within the frames of the initiative. A number of studies with focus groups and interviews were done in Sweden and China, intending to continue the investigation into informal narratives and to indicate a further choice of formal narratives to analyse, but they could not be concluded and integrated into this text within the frames of the project. However, the open and written questionnaires and the four formal documents gave material that proved to be quite enough when processed through the MCA. This, however, resulted in material that is somewhat one-sided in relation to the informal narratives and somewhat out of date in relation to the formal narratives, especially with consideration for the formal Chinese narratives that represent narrow extracts of the general orchestration of issues, decrees, and laws (Liu et al. 2011). We can only speculate at how the further studies would have shaped the analysis, perhaps confirming or nuancing the revealed structures of meaning, but they do not lessen the value or the validity of the realized studies.

There has been a number of positive and negative sides of the encounter between the traditions of STS and phenomenology. The challenges involved in the attempt to combine the two academic traditions was underestimated at first, and there has been some compromises with the traditional orthodoxy of both fields. Examples of such compromises can be seen in the scarce references to STS theory in the initial parts, as well as the approach to a phenomenological analysis of general narrative expressions without references to the individual narrators. Both compromises have appeared as necessary for the outcomes to make sense to both contexts, but it may have lost some of its actuality to both perspectives. The text may initially have been less appealing to a reader formed in the STS tradition due to the vague initial questions and less appealing to a person formed in the phenomenological tradition due to the less rigorous emphasis on the steps of abstraction from the life-worlds of the narrators to the general discourse. There have also been a number of challenges related to the interdisciplinary setting, as the addressed reader has appeared in rather vague terms. There are few expected readers that are familiar to all the fields involved in the formation of the research, such as the phenomenological tradition, the STS literature, and the Swedish and Chinese cultures in general and the situation of their 'universities' in particular. This has made the decisions on the level of introductions to the fields challenging, risking to be stereotypical or simplified for some readers and too complex and excluding for others. The combination of fields has, however, hopefully brought some questions to the respective fields which transgress the common frames.

The presentation of the outcomes has, to some extent, also been the product of compromises with the two traditions, as it conforms neither to the more factual tone of the psychological or phenomenological traditions nor to the more descriptive and interpretative tone of the STS tradition. The extensive descriptions of the constitution of meaning in the eight narrative contexts have balanced between the ambitions to provide a base for a reader to form an individual opinion and criticize the conclusions, as well as to sort the extensive data and to provide a readable scope in which the used discourses appear, an act that demands involved judgement that has been very difficult to give a proper account of. However, the resulting procedure landed in an intention to build, so to say, a case to present the different structures of meaning based in chains of arguments that are traceable through the ways that the narratives were processed. The attention has been directed to a number of issues which were more or less explicitly considered to be central to the study, such as the exemplifying study of the meaning of the 'central phenomena'.

There are a number of outcomes and conclusions that have been surprising, such as the more critical attitude in the informal Chinese narratives in comparison to the informal Swedish narratives, and that may sound counter-intuitive. However, this is taken as a marker of quality of the exploration as it can indicate that the outcomes and conclusions have reached beyond the preconceived positions. There are several ways to interpret this outcome, but two lines of thought give different context to the proposition. The first aspect situates the critical attitudes in China and the more complacent Swedish attitudes in light of reactions to the rule, as the Swedish system aspires towards democracy and the participation of citizens in the formation of rule, while the Chinese system is more formative and aspires to shape the citizens to preserve of the power of the party. The expression of criticism is seen, in this sense, as a reaction on ambitions to dominate. The second aspect reminds of the distinction between substantive and procedural approaches, as the formulation of the questionnaire clearly was aimed at the institutions and not the contents of teaching or claims of knowledge. In this sense, it appears that the outcomes do not challenge the stereotype of critical Swedish individuals and non-critical Chinese individuals, and there is a wide sense of confirmation of this attitude in the narratives. Rather, the emerging distinctions reveal a position in which the attitude towards the institution does not imply a corresponding attitude towards the knowledge or narratives it teaches. However, the challenge of stereotypes may be healthy in its extension.

The results of quite distinct representations of the central phenomena and the way they emerge through the method of identifying similarities and differences indicate a

certain achievement of the preliminary and reflexive position. The procedure founded in an analysis of free expression and focus on repeated segments has contributed with structures of meaning that can be traced to a popular use, which might both close gaps between scientific communities and a wider public and engender a reflection on the values and spheres of reference of theoretical concepts. It is a question which involves a reflection that is essential to the academic and scientific activities and contributions – at the least as formulated by Witehead and Husserl.

Ideas on applications of the reflections

The initiative behind this research was not driven by ideas of application and does not have any stakeholder with ready-made questions, but there are a number of dimensions to which the reflections on the constitution of meaning can be applied. The encounters between Chinese and Swedish actors are numerous, and they can be aided to a mutual understanding by a fundamental approach, as presented in this context. The 'universities' in Sweden and China both exchange students and teachers, igniting a need to understand expectations from other traditions of higher learning. There is also an invitation in the analysis to take further steps in the acts of thinking on our common ways of living and doing 'politics', 'science', 'research', 'education', and 'university'.

Preparing for an encounter between Chinese and Swedish contexts

The occasion of an encounter between representatives from the Chinese and Swedish contexts has a potential to challenge the representations of both involved parts, but it might take some serious work with the communication and reflection to achieve a mutual understanding. The narratives that have been investigated at length in this research and the conclusions presented here might indicate a number of points of reference with which such an encounter might begin. These reflections are still not making any claims of having a full picture of the interaction between cultures, in a continued affirmation of a complex world, and the extensive variation between people within the Chinese and Swedish contexts. There are also in the theoretical narratives indications that habitual approaches may cloud other potentialities which are better for the two university systems, such as the image of China as a market and Sweden as an role model (H. Zhao 2008).

Surprises as gateways into reflection

The task-driven approach to a 'university' as an intermediary between the student and the state in Sweden could bring certain surprises to a person used to the process-driven approach to a 'university' as a meta-character in China, and vice versa. The less idealistic expressions of academic ideals and the embrace of government-driven and market-centred narratives in Sweden might be disappointing to a Chinese visitor, which would primarily see a threatened academic freedom and weak mechanics for quality. On the other hand, it might be difficult for a Swedish visitor in China to relate to the ideals of an altruistic scholar, to fathom the sceptical approach to administrative environments, as well as the representation of an economic discourse as a threat to the desired development and a potential preamble to a corrupt system. However, there are indications in the informal narratives that the initial attitudes of the participants may also be different (page 209). The informal Chinese narratives attribute an active role to the foreign person allocating the difficulties to aspects of the individual culture and practices, while the informal Swedish narratives attribute a passive role and allocate the challenges to the abilities and efforts to adapt to the environment to the foreign person. The indication of an attribution of higher status to foreign systems in China can mean an openness and willingness to learn from the Swedish context, while the representation of the foreigner can mean that the Swedish visitor would be less open and willing to learn. There are certain risks of prevailing stereotypes in such a proposition, but it can also be an aid to overcome them.

The different representations of the government and of development, which have been explored at length, have appeared as central in both narrative contexts, but might be of such a fundamental nature that it is difficult to extend beyond the individual spheres of reference into the spheres of the other. The mixed affects towards the administration, the involvement of the government, and certain dimensions of the history in the Chinese narratives can be contrasted to the silence on such issues in the Swedish narratives, and an apparently presupposed trust in the government. These fundamental approaches appear to involve extensions into most of the themes and spheres which have been analysed in the context of this research. Examples of such extensions can be given as the role, respect, trust in the scholar, function and expectations on the academic institutions, rights, status, liberties of the students, and so forth. The encounter with different representations might result, however, in surprises that appear as gateways into further reflection, and possibly indicate paths through challenges that might otherwise appear insurmountable.

Positive and negative examples

The challenges of the Chinese system that are explicit in the informal Chinese narratives refer mostly to dimensions of a confining authority. The central tension relates to the interaction between the academic community and the government, but problem in the pedagogy is formulated in similar terms, of an authoritarian and passivating model of learning, as well as the threats to a desired development. There are also indications in all the Chinese narratives of a problem with corruption and challenges with the distribution of means, such as in the repeated indications of the low salaries of teachers. These aspects together with an apparent mutual lack of trust in the narrative context are dimensions which are challenging to alter and which might need sources of inspiration from other contexts. However, it appears that there is an intense procedure to discern among values and systems that produce a reflective and flexible attitude, an idealism and personal involvement that may not only enable solutions to the present challenges but also prepare the systems for an uncertain future, and it should be inspiring to other contexts.

The challenges of the Swedish system that are explicit in the Swedish narratives relate mainly to dimensions of relativity, with demands on knowledge that are adjusted to the respective situation. However, the analysis of the story of massification presented earlier indicated a threat in the lack of reflection on the meaning of the central phenomena (page 236). There also appears to be an interesting combination of uncertainty and trust in the approaches to the environment and the government in the Swedish narratives. The appearance of relativistic tendencies in SSt and the high demands on a person in charge in SPe both explicitly refer to the difficulties to navigate a changing institutional landscape and extensive pressure on the individuals, especially the personnel, that appear to be responsible for the realization of the goals and intentions of the government in the encounter with the students with rights to an 'education.' The historical references to the development of the Swedish system for higher education also give interesting signals of both high degrees of change in the systems of governance and a remarkable stability, as the ministries have been reformed numerous times, but the laws have been stable. The explicit intentions revealed in the formal Swedish narratives to govern through altering the external dimensions of the institutional landscape can be related to the attitudes and uncertainties in the informal narratives. Thus, it appears that there is a lack of reflection, personal involvement, and an external approach which has traits that could need inspiration from other contexts and simultaneously a trust and stability in the system which appears to foster a positive environment that can be inspiring to other contexts.

In the emerging representations of 'politics', there are also certain traits that need further consideration. The representation of a competition for status appears to shape a system with tensions that, on the condition of preserving the discourse, are impossible to reconcile. For the system to be upheld, it appears that there is a need for a section of students, teachers, and institutions to be at the bottom of the hierarchy. It is a dimension that has to be considered in the Swedish context, especially on the occasion of an import of ideas, such as of university rankings. The desire for the status inherent in the proposition of a ranking does not appear in the informal Swedish narratives, and there is nothing about status or comparison between universities, but it dominates in SS&T. Considering the historical introduction, with an apparent influence of the governmental discourse on the academic community, it is a dimension that has to be examined. The comparative and competitive standards might have advantages, but that there is an alternative and that it is possible to represent a 'university' without an inherent quality of elitism, competition, and status might also be an, odd, but inspiring alternative in the Chinese narrative context.

The future might be as uncertain to both contexts, but there is a further perspective of value. It is common to reflect on the relevance of 'research' in the formation of 'education'; however, the effects that go the other way are unusual, that is, how the 'education' of a country shapes the development and the potential for future 'research' (Chong and Hamilton-Hart 2008). Considering the approaches revealed in the analysis in SSt and CSt, it appears that there are some perspectives that could be used to investigate the future possibilities and challenges of the contexts. The analysis challenges the representation of a critical Swedish student and a compliant Chinese student and can indicate that there are reasons for further consideration of the ways that the higher education and universities realize their intentions in both systems.

Thinking anew in the 'politics of science'

The question on the meaning of the 'university', 'education', 'research', 'politics', and 'science' have now been addressed based on their narrative appearance in different contexts. It is an act that has attempted to exemplify an approach in the STS which is not based in an ideological approach (Latour 2005). The attempts to conceptualize the 'politics of science' through various metaphorical constructs can be more or less descriptive and more or less helpful (Elzinga 2004), and the several formulations of how the phenomena are understood in this thesis are intended to inspire a creativity in the approaches to the phenomena. The analysis exemplifies realized potentialities in two narrative contexts that frame the meaning of the phenomena differently, something that can inspire further questions and thoughts. The different meanings of the phenomena are not exclusive to each other, or in a dichotomy, or opposed; rather,

they reflect the variations of the ways in which they can be realized and thus reveal the meanings they have in their respective contexts. Thus, the revealed epithets would not fit for the creation of a scale in which other countries and systems could be placed; rather, they emphasize qualitative differences in the representation of the phenomena. Evaluative aspects might be applied to these two general approaches with references to other narratives, such as evaluations of different kinds of motivation, governance, or academic achievements. The establishment of 'politics' as the formation of an environment or in competition for recognition also invites further reflection, regarding the values on which we build our common society.

A further outcome that invites for reflection is the occurrence of several approaches which have been deemed obsolete in theoretical presentations. The linear approach to the production of knowledge and research policy (Bush 1945) that is considered obsolete in many STS theories (Gibbons et al. 1994) is a discourse which has influence on the thinking in formal and informal narratives in Sweden and China. Similarly, there are approaches to 'science' as a dynamic that are best left alone (Polanyi 1962), which is also a proposition that is regarded as obsolete (Amsterdamska 2008) but carries influence on the ways of thinking in China. The meaning of these outcomes to the theoretical frames depends on their descriptive or prescriptive ambitions and their function in the service of understanding or shaping our common world. The research that has been presented here is primarily intended to be descriptive, except, perhaps, in a humble prescription inspired by the desire for a continued thoughtful labour to understand ourselves as human beings and the world as our common ground through posing the big and important questions on the meaning of our words.

Appendix

Demographic categorizations proved interesting and at some points well worthy of deeper reflection, but as they were secondary to the categorization into student/teacher and Chinese/Swedish we only provide a shorter introduction here and include the other points in the main presentation. Among the all the respondents 41% of were men, and 58% women (1% did not fill in the information on their gender) and the mean age was 27,66 (SD=9,15). These demographic variables proposes different categorizations and a different inter-subjective structure in which differences and similarities can appear. The presentation of the narratives and the inter-subjective constitution of meaning will primarily be according to the four the primary categorization of the participants:

Table 30, on quantities in the informal narratives

	Ch.St	Sw.St	Sw.Pe	Ch.Pe	Total
Number of Reports	67	83	20	32	202
Number of Meaning-units	599	414	239	264	1516

Table 31, on proportions of gender and age in informal narratives

	Ch.St	Sw.St	Sw.Pe	Ch.Pe		Ch.St	Sw.St	Sw.Pe	Ch.Pe
Men	37%	42%	55%	41%	Mean age	20,76	23,72	44,44	37,44
Women	62%	57%	45%	59%	SD	2,48	4,05	10,6	8,31
Unanswered	1%	1%	0%	0%	Unanswered	5	2	0	0

In Table 31 you can observe that the Swedish participants were both older and that their age was more spread than the Chinese participants, something which fits with more general statistics and the experience in the universities, this means that the dimension of age coincides with the categorisation of nationality, something that might be revealed both has quantitative and qualitative relevance. You can also see that the portion of women is higher among the Chinese participants. The interesting question is however if gender and age are significant markers determining the constitution inter-subjective meaning.

Table 32, on most common entities* by gender and age in informal narratives

Entities Man (N.occ)	Entities Woman (N.occ)	Entities (Mean age /N.occ)	Entities (Mean age /N.occ)
University (156)	I (277)	Both (51,4 /10)	To Listen (21 /6)
I (141)	University (207)	Position (49 /5)	To Like (21,83 /13)
Should (100)	Possibility (143)	Staff (46,37 /19)	Beautiful (21,86 /8)
Student (93)	Student (136)	To Know (45,86 /14)	To Travel (21,89 /9)
Something (92)	Good (115)	Will (45,4 /5)	Speciality (22 /25)
Good (83)	Something (114)	To Use (44,6 /5)	To Choose (22 /6)
Possibility (82)	You (109)	To Find (44,5 /6)	Probability (22 /6)
To Be (71)	Someone (104)	Manage (44,24 /17)	West (22 /6)

You (68)	To Be (103)	Professors (43,5 /6)	To Test (22 /6)
Time (64)	Time (102)	Perspectives (43,17 /6)	Chinese (22,12 /81)
Someone (49)	Should (73)	Courses (43,13 /8)	To Speak (22,17 /6)

*Entities occurring less than 5 times were excluded in the table

In table 32 you can see the occurrence of entities according to gender (which should be red in the light of table 31 and in perspective of the balance in the distribution of gender, which gives a lesser number of entities). The differences at this level appear to be of minor shifts of emphasis, but as the categorisation according to gender and according to age followed all the way down in each entity, there is a wide range of statistical and analytical possibilities which are opened. In China a number of universities participated in the study from three locations (as specified in the following table 33); some universities from the political centre in Beijing; some from the in the south-east region of Ningbo, outside of Shanghai with its highly expansive development; and in the South-west in the region of Kunming distant from the political and economic centres in the northern and western regions. At all three locations we included both some major or more prestigious universities and some less renown universities. The size of the Swedish country does not allow the same division into regions, even though there are political and economical centres too, and the much smaller university-system does not appear to be as differentiated, there is however a legal differentiation between universities and university-colleges, where the former are approved as institutions with further rights in research, and to some extent funding.

Table 33, on participating universities

	Total P	Student	Staff	Chinese	Sweden
Regional/national universities	94	34,72%	50,98%	38,97%	37,96%
Local/College universities	150	65,28%	49,02%	61,03%	62,04%

Chinese universities	*Regional/national universities:* Beijing University, Yunnan University, Ningbo University, *Local universities:* Beijing Youth University, Kunming University, Ningbo Technical University, Yunnan Normal University, Yunnan University For National Minorities, Yunnan Technical University .
Swedish universities	*Universities:* Uppsala University, Lund University, Göteborg University, Royal Technical Institute, Royal Academy Of Fine Arts, Stockholm University, Umeå University, Växjö University, Örebro University. Linköping University *University-Colleges:* Blekinge Institute Of technology, Högskolan i Dalarna, Högskolan i Halmstad, Högskolan i Jönköping, Malmö Högskola,

The participants also represented 57 different disciplines as showed in the table 34 below.

Table 34, on, the academic fields represented in the informal narratives

Field	Total P.	% of Students	% of Personnel	% of Swedish	% of Chinese
Language	37	23,33%	4,00%	3,96%	33,33%
Humanities	31	12,67%	24,00%	10,89%	20,20%
Natural and Technical sciences	24	14,67%	4,00%	21,78%	2,02%
Professional education	30	13,33%	18,00%	18,81%	10,10%
Politics and Economy	31	16,00%	14,00%	24,75%	6,06%
Social sciences	37	12,67%	34,00%	18,81%	17,17%
Unanswered	12	7,33%	2,00%	0,99%	11,11%
Academic field	**Academic disciplines (as stated by the participant) categorised according to field**				
Languages:	English, French, Chinese, Swedish				

Human sciences:	Art, Linguistics, Study of Religion, Morality And Political education, Ethics, History, Philosophy.
Natural and Technical sciences:	Chemistry, Chemistry/Biology, Mathematics, Medicine, Physics, Zoology, Electronic technology, Electronics, Physical Planning, education/Biology, Computer science, technology Of Information, Digital Media Production, Virtual-Art, Design.
Professional education:	Administration Management, Communication, Counsellor, education Management, Sports, Teachers education, Teaching, Translation Studies, Marketing, Nursing, Pharmacy, Police education, Tourism, Logopaedics.
Politics and Economy:	Economics, Economics & Marketing, Economics-Management, Political sciences, Peace And Development, International Relations.
Social sciences:	Law, Anthropology, Developmental Studies, Environmental Studies, Ethnology, Higher education Studies, Psychology, Psychology Of Work And Organisation, Social sciences, Social Work, Sociology.

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