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THE ROAD FROM SALZBURG

Translating European principles of Doctoral Education to local contexts

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Abstract

The aim of this study has been to investigate in what ways directors of doctoral education navigate and translate doctoral education norms from the European level to local contexts. In focus are the two norms of original research and wider labour market needs, enshrined in the Salzburg principles, adopted by the European University Association. These norms are argued to underpin a central notion of the European knowledge economy.

The CUDOS mores (Merton) as well as post-academic science (Ziman) and the mode 1/mode 2 production of knowledge (Gibbons et al.) constitute a conceptual framework as a backdrop to the two overarching norms and their relevance today. The theory of translation assists in understanding the ways in which the directors reflect on and navigate among these norms.

Interviews have been done with directors for five social sciences subjects. The two norms are found not necessarily in dichotomy or contradiction with each other when operating doctoral education, but are rather seen as contrapuntal. From the overall observation that fewer paradoxes and conflicts than anticipated were found between different goals and norms in the local contexts, follows that strategies for handling such tensions were less articulated than expected. A final main finding was that the Salzburg principles were not at all recognised locally, which calls for more active engagement from European stakeholders if they wish to create a stronger link between the European and the local level in the making of knowledge policy in Europe.

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Content

Introduction: A Europe of Learning, as a way to learn Europe

In Europe, the knowledge domain has always been present at the surface and at the core of argumentation among formative actors, however, as a policy area it has traditionally been kept at the political margins (Chou & Gornitzka 2014:1). This has change at the wake of the 21st century, with the Lisbon Agenda[1] and the Bologna Process[2], during which higher education typically has been linked to and defined by the EU as a key to an expanding knowledge economy and society in Europe (Corbett 2005:5-6). The Lisbon Agenda symbolised the first time the European leaders recognised the status of knowledge and education as decisive for the future economic and social development in Europe (Pépin 2007:128).

Doctoral education was similarly turned into a more central object of policy interest during the early 2000s. Earlier, doctoral education had attracted little policy attention, but after being connected to the knowledge economy, it became a tool for producing growth in Europe (Pedersen 2014:634). European universities are argued to add to the Lisbon Agenda and its successors through the production of doctoral graduates (Bogle et al. 2010). In a textual analysis of the European Commission's usage of the concepts of lifelong learning and knowledge economy, Brine identifies two distinct categories: the high knowledge-skilled learner (belonging to the knowledge economy) and the low knowledge-skilled learner (belonging to the knowledge society), where the first category reinforced the Bologna process and laid the foundation for changes within higher education (Brine 2006:655-56). This study finds its entry point in this linkage, between the knowledge economy[3], higher education and the post-graduate learner.

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[1] The Lisbon Agenda, also known as the Lisbon Process or the Lisbon Strategy, was a broad initiative launched by the Lisbon European Council 23-24 March 2000, adopted for a ten-year period, accompanied with the oft-cited statement: "The Union has today set itself a new strategic goal for the next decade: to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater **social** cohesion." (European Council 2000).

[2] The Bologna Process is an intergovernmental cooperation, comprising 48 signatory states, in the field of higher education. An overall aim is to improve internationalisation of higher education. Components are: the three-cycle system of higher education (bachelor/master/doctorate); strengthened quality assurance; and easier recognition of qualifications and periods of study. See: https://ec.europa.eu/education/policies/higher-education/bologna-process-and-european-higher-education-area_en. In Sweden, the system came in force in 2007. Sweden did not fully implement the system as regards doctoral education, as foreseen in the Bologna Process to cover three years of study, whereas in Sweden the four-year model was kept.

[3] The term "knowledge economy" is in this study neither used as an analytical concept, nor a study object. It is rather the context in which this study operates and finds its scientific and societal relevance. Most striking when

Doctoral education and training[4] "is no longer exclusively regarded as the disinterested pursuit of knowledge, […] the generation of new knowledge has become both an important strategic resource and a factor in a country's economy", as Kehm puts it, thus doctoral education has been an object of political scrutiny and consequently, universities have been forced to adopt institutional strategies to develop it (Kehm 2006:67). The doctorate is crucial in the production of graduates who are able to contribute original research on the one hand, and on the other hand, to develop non-academic careers in sectors important for the knowledge economy (Neumann & Tan 2011:610-11). Following this vein, the European University Association's (EUA)[5] Antwerp declaration (EUA 2015), argue that academic freedom and autonomy are to be safeguarded, but mainly through the added value of doctoral education to European competitiveness.[6] In the renewed EU agenda for higher education, the doctoral training is similarly made important in relation to its contribution to society and economy.[7]

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considering knowledge economy as a term, it has been marked by conceptual laxity (Brine 2006:662); however, addressing a definitional request, this study aligns with the following definition (European Commission 2008): "'[K]nowledge economy' is commonly used to describe economic activity that relies not on 'natural' resources (like land or minerals) but on intellectual resources such as know-how and expertise. A key concept of the knowledge economy is that knowledge and education (also referred to as 'human capital') can be treated as a commercial asset or as educational and intellectual products and services that can be exported for a high value return."

[4] For the sake of consistency, I choose to employ the term "doctoral education" throughout the thesis. This refers more closely to the Swedish word "forskarutbildning". In an international context, a variety of terms is used, e.g. research education, PhD education, third-cycle education. The most distinct feature is the difference between doctoral education and doctoral training, in which the former relates to the educational bit, whereas the latter refers to the part wherein training for a future research career or for developing an early career researcher, is concerned. "Doctoral education" is in the study meant to include both elements of a doctorate.

[5] EUA encompasses more than 800 European universities and national rectors' conferences across 48 countries. It acts as a stakeholder organisation on behalf of universities and influences EU higher education and research policy as well as the Bologna process. EUA assembles universities for sharing experience and best practice. See: https://eua.eu/

[6] "Beyond the specific education and training related to research foci, scientific rigour and methodologies, the challenge is to embed other values in the doctoral process that can enhance doctorate career options, be they in or outside academia. These include, for example, the ability to move between disciplines, entrepreneurship, and the ability to grasp the 'breadth and depth' of a problem." (EUA 2015)

[7] "All forms of higher learning should aim to equip students with the ability to understand new concepts, think critically and creatively and act entrepreneurially to develop and apply new ideas. High quality post-graduate studies and doctoral training are critical. It produces researchers, developers and 'innovation managers' who drive scientific discovery and the promotion and adoption of new ideas. In comparison to the US and Japan, too few PhD holders in the EU go on to work outside academia. HEIs need to promote this through greater focus in doctoral programmes on the application of knowledge and interaction with future employers." (European Commission 2017)

Aim of the study: From Salzburg and beyond

Considering the landscape painted above, this study takes as its starting point the centrality of doctoral education in (and for) the European knowledge economy. Doctoral education has been seen as a link between European Higher Education area (EHEA) and the European Research Area (ERA). In February 2005, EUA agreed the so-called Salzburg declaration, constituting a definitional guideline for doctoral education in Europe, aimed at defining the core challenges in meeting the then new action line of the Bologna process, i.e. the merging of EHEA and ERA, which initially was foreseen in the Berlin Communiqué 2003. These recommendations have been followed up in the Salzburg II process ("enriching the Salzburg Principles", EUA 2010), which made more concrete the initial principles. As was seen from the Antwerp declaration and the Renewed Modernization Agenda (footnote 6 and 7) the norms of autonomy and labour market needs are prescribed in the very first of the ten Salzburg principles:

> The core component of doctoral training is the advancement of knowledge through original research. At the same time it is recognised that doctoral training must increasingly meet the needs of an employment market that is wider than academia. *(EUA 2005:2)*

According to this admittance, the contemporary PhD is no longer to be defined as merely training for an academic career but must include experiences relevant for a wider market (Buckley et al. 2009:5). Signifying this evolution, an observable theme in the doctoral education discourse is the shift from PhD as product to that of process, from content to competencies; that is the shift from a mere focus on contributing to knowledge through original research, to an emphasis of providing the competencies necessary for meeting the needs of the knowledge economy (Park 2005:191, 199).

This tension was already codified at the wake of the modern discussion of the European knowledge economy, in the Magna Charta of the European universities, undersigned by rectors of European universities in Bologna 1988. The signatories presented the role of universities "in a changing and increasingly international society", where recognition was paid to that universities, in addition and integral to its autonomous production of research and teaching, "must also serve society as a whole", and:

> To meet the needs of the world around it, its research and teaching must be morally and intellectually independent of all political authority and economic power. (Magna Charta Observatory 1988)

This view has been contemporarily reconstructed in the explicit argument that a new contract must be launched between universities and society, with the advent of the knowledge society. The argument comes from the Parliamentary Assembly of the Council of Europe, in its recommendation on academic freedom and university autonomy (2006). The tension becomes most emblematically elucidated in:

> 4.4. […] [U]niversities need to be close enough to society to be able to contribute to solving fundamental problems, yet sufficiently detached to maintain a critical distance and to take a longer-term view. (Council of Europe 2006)

It is not a small task the universities are mandated, at the same time independent and adaptable, reinforced by paragraph 10 of the same recommendation:

> 10. To grant universities academic freedom and autonomy is a matter of trust in the specificity and uniqueness of the institution, which has been reconfirmed throughout history. These principles, however, should remain a subject of a continued and open dialogue between the academic world and society at large in the spirit of partnership. Universities should be expected to live up to certain societal and political objectives, even to comply with certain demands of the market and the business world, but they should also be entitled to decide on which means to choose in the pursuit and fulfilment of their short-term and long-term missions in society.

Research questions

This study considers the two central pillars of the Salzburg principles – as above shown, repeatedly reconfirmed and reformulated – as two norms in the formation of doctoral education; the aspiration for original research and the needs of the wider labour market.[8] These two norms are CenterStage in the Salzburg agenda, and can reasonably be seen as part and parcel in the

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[8] Discussing norms, I do not reduce the investigation to isolated or single standards or occurrences, but refer rather to institutions in a sociological sense, emphasising situations in which "behavioural rules are structured together and interrelate (a 'collection of practices and rules')" (Finnemore & Sikkink 1998:891). The two overarching norms are the one of original research and the one of employment market needs. Each of these provide cohesion to local doctoral education activities and practises at the same time as statements and knowledge production contribute to the constant reformulation of norm configurations.

understanding of the European knowledge economy. Suggesting that increased emphasis on productivity and an ever-increasing widening of the outlet for doctoral graduates, is difficult to combine with original and creative research, the agenda would express an in-built tension. Should these norms be seen as mutually conflicting or contrapuntal in the construction of a holistic academic enterprise, in which the doctorate bridges education and research and constitutes the "solar plexus of academia" (Elmgren et al. 2016:87)? The study strives to pare and unlock these imaginaries of the European knowledge economy. To this end, it employs a theoretical framework based on organizational translation, in researching in what ways such various imaginaries are dealt with locally by doctoral education directors in Swedish social sciences contexts.

The research questions are:

- Which strategies are used by doctoral education leadership locally in navigating the norms built into the European knowledge economy of original research versus the preparation for the needs of a wider employment market?
- Are the norms of original research and preparation for a wider employment market to be regarded as mutually conflicting or contrapuntal in the design and operation of doctoral education locally?

Organisation

The organisation of the study is as follows. First, the previous research section will situate doctoral education research in a European context and will additionally argue for the link between a European discursive level and a local operational level, which is a link that will be designed for the analysis. After this, roots to the concepts derived from the two norms, i.e. between original research and employment market needs, will be tracked for the conceptual framework designed. Next, the theoretical frame of organisational translation follows, after which methodological and epistemological concerns are discussed. The results will be presented in an analysis chapter and the study will close with concluding thoughts.

Previous research: Researching Education and Educating to Research in Europe

The research literature on doctoral education has risen over recent decades. In a literary review, Elmgren et al. (2016:79-86) conclude that most of the contributions focus on either experiences by doctoral students or supervisors' perspectives. Jones demonstrates in a long-term theme analysis, that the research field can be categorised in six themes: teaching, doctoral program design, writing and research, employment and career, student-supervisor relationships and doctoral student experiences (Jones 2013:86pp). A special genre is devoted to institutional, national or regional comparisons, either of systems, disciplines or best practices. For comparisons between doctoral education in Europe and North America, see e.g. Sadlak et al. (2004); Kehm (2006); Barnett et al. (2017).

An adjacent grouping is the literature on professional competencies and skills which doctoral graduates acquire. It is not within the scope of this study to attend to the different proficiencies and skills which are transferable or translational in nature, applicable on a wider labour market outside academia, however, for a focus on professional development between the US, Australia and Europe, treating skills needed for social sciences doctoral students, see Nerad (2015). In a survey covering six doctoral education subjects in the US, Rudd et al. conclude that four skills develop naturally in completing a social sciences PhD: critical thinking, data analysis and synthesis, writing and publishing reports/articles, and research design; of which data analysis and synthesis are the most transferable PhD skills (Rudd et al. 2008). For a critical discussion on the definitions of generic skills and the tensions between such and the quest for mastering disciplinary knowledge and producing original research, with a particular focus on Australia, see Gilbert et al. (2004).

Recent Swedish contributions have focused on the local context and in what way political reforms have been implemented (Haraldsson 2010) or in what way doctoral students are habituated onto the scientific field (Peixoto 2014), alternatively which persona/s or portraits of the doctoral students have been projected in legislative bills (Joelsson 2017). These studies have kept its empirical lens at the national or local levels. I find scientific interest from these studies, but I choose to interlink the European with the local, in order to demask through which norms doctoral education are governed and how managers/directors are navigating these norms.

Haraldsson's governmentality approach and interviews of management representatives, has its merits, however, academia is particular to its nature, demonstrated in a study of the 1969 doctoral education reform (Bennich-Björkman 1993), which displays the difficulty of implementing political decisions in a norm-based order such as academia. From this follows that regardless the political steering, there are ideals and norms that supposedly are guarded by the "academic gatekeepers", which can both enable and disable political implementation. This is why studying doctoral education directors and their interpretation of and navigation among the norms is crucial.

In contrast to Haraldsson, this study does not focus on implementation of political reform, in contrast to Peixoto the study objects are not doctoral students; and in contrast to Joelsson, the focus is not political bills. Rather, it aims to foster an understanding in line with Bergviken Rensfeldt to see in what way European imaginaries of doctoral education is to be discerned in the form of self-governing capabilities where specific outcomes and performances of doctoral programs are differentiated by the categorization used (Bergviken Rensfeldt 2013:55), but it takes one step further by focusing on actual doctoral programmes (Bergviken Rensfeldt investigates only documents part of a European discursive frame).

Linking Europe and the local contexts

This study aligns with the call for more research into what Crossouard et al. call the "global-local nexus" of doctoral education, where global drivers saturate local doctoral practices, reinforcing the link between the local and the global. More research into how this is played out in local contexts is requested (Crossouard et al. 2015:15).

Prima facie, this directs the investigative lens to the actual regulatory framework. However, even if national policies define the goals for doctoral education, it is still part of an academic world as a boundary object, inhabiting more than one community of practice/social world able to travel across borders and still maintain a certain identity[9] (c.f. Bowker & Star 1999:16). As

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[9] In this sense, doctoral education entails both education and training; and within the same site, ideas for both original research and labour market needs, must be considered. Doctoral education is a boundary object precisely because it embodies the traditional understandings of education and research, but at the same time transcends them. As a boundary object, doctoral education becomes strongly structured in individual-site use, and weakly structured in common use (Bowker & Star 1999:293-98). It is the translation of ideas from the general level with a common rhetoric, to the strong structuring of the same ideas in local sites, imposing on both directors and doctoral students, that this study explores.

a boundary object, doctoral education must embrace its own norm-bases, beyond the political steering; a lesson we learnt from Bennich-Björkman, that political reform aspirations not easily translate into the mindset beset academia. Consequently, what was easily agreed in the Salzburg principles was that the crucial component of doctoral education is original research, all other principles provoked animated debate. As a result, the Salzburg II principles were formulated in a way not to be interpreted as a tool for standardisation across Europe but rather as guidelines possible to follow in diverse domestic environments. Since education is an EU member-state competence, universities need to design their operations within national frameworks, at the same time as adopting Bologna recommendations and European policy, which not always necessarily are compatible with each other (Bitusiková 2011). The European Commission, can, particularly in periods of shrinking national education budgets, act as a lever for such a development (enshrined in the EU treaties[10]), through its policy and financial instruments, by working directly with subnational institutions in order to establish a Europe-wide evolution and implementation, in line with the EHEA and ERA (Repečkaitė 2016:256). This development allows for university institutions to re-defined themselves positively as the powerhouses of the new Europe (Keeling 2006:214), i.e. actively contributing to the European integration. Universities are "complicit" in this development, since they too are academic actors acting independent of their national system (Repečkaitė 2016:267) and are endowed a dual status, both as actors and as sites for European higher education policy (Keeling 2006:213). In contrast, Batory & Lindström accept that university institutions have been endowed with such an agency, however, they argue that this rather signifies the power of the Commission which has successfully created provisions for EU funding in the educational field that require the grantees' fulfilment of certain strategic conditions, pre-defined by the Commission. Besides being agents for the Commission's policy, they suggest that university institutions in addition comply with EU requirements irrespective of national legislation, leapfrogging a national policy debate. In the end, this bestows the Commission with more powers than enshrined in the treaties (Batory & Lindstrom 2011:312-16).

Repečkaitė argues that the shift in policy instruments from 2014 onwards, through the separation of the policy instruments for collaborative European networks in doctoral education,

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[10] "Resolved to continue the process of creating an ever closer union among the peoples of Europe, in which decisions are taken as closely as possible to the citizen in accordance with the principle of subsidiarity." (Treaty of Lisbon 2009, the preamble to the Treaty on European Union)

by transferring doctoral education components (Joint doctorates) within the Erasmus Mundus framework to the Marie Curie Actions, established a conceptual shift in the European approach to doctoral education: doctoral education is EU-funded through instruments belonging to research and no longer education (Repečkaitė 2016:257).[11] At the same time as being research, doctoral education is still considered as education, not the least since the introduction of the Bologna process. Still, many of the policy objectives defined at European level to this end, for broad and complex competences, have not been translated into the Swedish learning outcomes for doctoral education (Elmgren et al. 2016:16-17, 25-26). Research and education are here linked as a signifier for the knowledge economy and European competitiveness, when treating doctoral education.

As the above shows, the linkage between the European level and the subnational, university level, has been reinforced over the last years, partly from the merging between the EHEA and the ERA and its connection to the European knowledge economy, through the Lisbon Agenda and ensuing Europe 2020 Strategy[12], and partly through a policy connection linking European actors and university institutions. The latter is seen both via the more loose cooperation within the EUA and the established Salzburg principles, but also through a more strategic steering and funding through EU-policy instruments. The European discourse on higher education propagated by the Commission is according to Keeling a hybrid between research and Bologna elements, and even if these originate from varying policy sources (EHEA and ERA), these agendas are reciprocally reinforcing each other discursively and politically (Keeling 2006: 211-12). Universities in general and doctoral education in particular become agents for the development of a Europe of knowledge, encompassing both EHEA and ERA. This study looks into in what way these norms are situated in local doctoral education contexts and in what ways directors for such are reflecting on and operating in relation to these. The next section will present some of the concepts and tools employed for the analysis.

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[11] Marie Curie, later Marie Skłodowska-Curie, is a subprogramme within the EU's framework programme for research, Horizon 2020. It is divided into a number of actions, so-called MSCA:s, for research funding. Special sub-actions are directed specifically towards joint doctorates of different kind. See: https://ec.europa.eu/programmes/horizon2020/en/h2020-section/marie-sklodowska-curie-actions

[12] The Europe 2020 Strategy was the immediate successor to the Lisbon Agenda. Adopted by the European Council in June 2010, it set out a strategy for jobs and smart, sustainable and inclusive growth, through five headline targets (European Council 2010).

Introducing the conceptual framework

The apparent tension between original research and the push for common skills, applicable on a wider labour market, has not prevented a major focus on generic skills in doctoral education (Gilbert et al. 2004:378). Gilbert et al. limit their conclusion to the English-speaking world, but generalising this to Europe does not seem farfetched. Already in 1988, Liedman argued that external necessities regulate university education. The most important of these external necessities is the labour market. The problem, Liedman argues, is that commissions often overlook this in-built norm tension (Liedman 1988:175-82). This suggested tension was discerned in the Salzburg principles with the concepts of original research and the needs of an employment market. The range of skills needed for doctoral students to function effectively has simultaneously grown enormously (Nyquist 2002:14). Career planning can thus be seen as both training the students as well as increasing the pressure on them to fulfil an ever-increasing number of skills articulated by management and policy-makers, reinforcing the tension.

Strannegård suggests that this is a false dichotomy. He regards employability not as contradicting bildung, but rather as a means for the emancipation and self-fulfilment of the individual. Graduating students who think freely and critically at the same time as being relevant for the labour market, is not a contradiction in terms Strannegård (2019).

This study investigates in what ways these two norms are translated and handled locally in the operation of doctoral education at a faculty of social sciences. In order to track the roots to the first of this pair, Merton's CUDOS-mores and Humboldt's view of originality, will be borrowed. For the wider labour market norm, Gibbons et al. and Ziman's definitions of mode 2 knowledge production and post-academic science are respectively referred to.

Scientific and academic norms

A typified scientific imaginary has been the scientific ethos constituted by Merton's so-called CUDOS-mores, consisting of the four institutional imperatives (mores); universalism, communism, disinterest and organised scepticism. Merton suggests that the institutional goal of science is the extension of certified knowledge, defined as empirically confirmed and logically consistent statements of regularities, serving as being predictions (Merton 1973:270). Without going into a discussion on different conceptualisations of knowledge, one has to be aware that Merton's views were ones derived from the idea that sociology should mimic natural

sciences in its aspiration towards objectivity, impersonality and using "hard" data (Layder 1998:16-17), however, these norms have still had a wide-reaching impact for reference.

Universalism finds its legitimation in that truth-claims, regardless their origin, are subjected to preestablished impersonal criteria. Personal or social attributes of the scientist ought not to be relevant for truth-claims made. Universalism is additionally expressed in that careers be open for talents; thus only competence is to guide academic recruitment. Communism is derived from the notion that substantive scientific findings are the product of collaboration and assigned to the scientific community, based on a scientific heritage. The status of scientific knowledge is common property. Disinterest relates to a pattern of institutional control framing the motives of the scientist. In an institution characterised by disinterested activity, "it is to the interest of scientists to conform on pain of sanctions and, insofar as the norm has been internalised, on pain of psychological conflict" (Merton 1973:276). This entails impartiality in the scientist's integrity. Typified by a process of verifiability, science entails a peer review process of results and methods, and scientists are in this process ultimately accountable to their compeers, where the motive is ultimately to contribute new knowledge. The last element, organised scepticism, is transversely interrelated with the other imperatives, and has both an institutional and a methodological mandate, based in the notion that the scientist must uphold a critical and scrutinising eye on all her activities and at the world at large (Merton 1973:270-78).

The emphasis of originality

Merton does not explicate on originality in relation to his CUDOS mores, except for the example of controversies of scientific priority as a factor of institutional accents of originality (Merton 1973:273). Instead, the concept of originality emanates from the Humboldtian ideal.

A precondition for this notion of the university to be developed in the early 1800s was the transformation of originality that took place during this time. Earlier, originality had been considered a capacity assigned to the genius, but successively was the creative subject turned into a universalist clothing, which everyone potentially possessed. For Humboldt, this potential could be utilised as the Lonestar for the entire institution. This was why in Humboldt's view not only research but also education was to be characterised by active interaction between the master and the apprentice, and education should not be directed towards any future career (Östling 2016:45-46). To this end, academic freedom, lehr- unt lernfreiheit were signifiers of

the new university, with bildung as the ultimate goal (ibid:21) and emphasis lied with original and creative research (Goodchild & Miller 1997).

Still today, the emphasis of originality is key in defining the doctorate, not the least in the master/apprentice model of doctoral education[13], however, Yazdani & Shokooh put originality into a wider formation process, defined as: "A personal quality, that following a developmental and transformative apprenticeship process, results in the formation of an independent scholar with a certain identity and level of competence and creation of an original contribution, which extend knowledge through scholarship and receipt of the highest academic degree and culminates stewardship of the discipline." (Yazdani & Shokooh 2018:42)

An ideal disclaimer

It is important to stress that norms such as these, do affirm ideals and do not necessarily describe reality. Their function is to resist contrary impulses (Ziman 2000:31). In this sense, the norms equip institutions with stability and individuals with a map for legitimacy to personal and communal activities. Any academic career aspiration leads to an oscillation between adapting to and resisting external demands. Defining one ideal-type among German academic careerists, namely the self-assertive type, Matthies and Torka find that the behaviour among younger generations displays a paradox: these academics interpret the symbolic recognition of having fulfilled the new kinds of institutional pressure for competitiveness and time-limited performance as personal success; while at the same time they oppose these criteria and external demands at a discursive level, as they are seen to run counter to their normative idea of true science (Matthies & Torka 2019). In line with this, the CUDOS mores are not expected to be fully represented in practice, but are ideals that still guide ambitions, and can act as a norm at a discursive level, whereas action takes place at an every-day level where strains and regularities might condition the ability to act according to the norm.

The post-academic modes of knowledge production

According to Ziman, one must in contrast to Merton, consider the society and temporal realities surrounding academic activities. For instance, funding often originates from a political sphere that wishes to have a certain say over the usage of the funding disbursed. Science is signified but not only driven by these norms, and exhibits features also from other principles. Ziman

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[13] For a discussion on this model and the peer learning model, as an alternative, see Flores-Scott & Nerad (2012).

argues that the disinterested and universalist ideals are active on the façade, in the way articles are written or how scientific results are presented, but the personal aspirations or vested interests that may lie behind are rarely articulated. One cannot neglect the differing extent to which personal anxiety, for funding or for future career, might impinge on the neutrality through which research ideas are formulated (Ziman 2000:33-41). The CUDOS mores still constitute an institutional toolkit, where rewards are graded to match the quality of the work recognised (Ziman 2000:45).

Over the recent decades, a transformation of the conduct of science has occurred, where the evolution of post-academic science performs a new social role and is guided by a new ethos (Ziman 2000:60). The structural conditions for academic science have changed. This new post-academic science is characterised by both continuity and rupture, and caused by a mix of external (political, economic, industrial) and internal (social adaptation) forces. Academic science has partly been penetrated by and forced to adapt to industrialisation, transdisciplinary formations, economic, political and societal demands for utility and involvement (Ziman 2000:67pp). Although Ziman does not suggest that post-academic science equals industrial science – represented as Proprietary, Local, Authoritarian, Commissioned, and Expert (ibid:78) – he does not neglect the impacts of these on the formation of post-academic science.

A norm clash has occurred, and this clash is the essential current of and manifests itself most emblematically in the post-academic scientific practise and temporality of today. This can be compared with a shift in mode of production of knowledge from mode 1 to mode 2, as Gibbons et al. define it. Mode 2 is organised in a context of application (whereas in mode 1 problems are define within a disciplinary domain) and is thus social, economic rather than mono- or interdisciplinary, and conducted in heterogenous forms including many actors. Mode 2 is not primarily institutionalised through university structures, and importantly, mode 2 production is more socially accountable and uses a broader range of criteria for assessing quality. Mode 2 knowledge production is generated through interests or usefulness on part of actors in a broader societal context, and knowledge production becomes more widely diffused in society. Under mode 2, the final outcome is normally a product of a discovery and process beyond a single disciplinary domain, and practitioners need not return to it for validation of quality. In mode 2, flexibility and response time define the formation of organisation, which consequently is less institutionalised but created around the problem in question and dissolved when the task is

accomplished. Sensitivity to the impact of the research is in-built in mode 2 from the initiation of a problem, and social accountability involves a broader interest party in the problem definition and the setting of research priorities. Mode 2 has not replaced mode 1 production of knowledge; however, its features are distinctly different, which additionally makes more difficult to define what good science entails (Gibbons et al. 1994:3-11).

Mode 2 bears resemblances with the emergence of post-academic science. This evolution has gone hand in hand with a stronger demand for utility and diffusion of the scientific production (Ziman 2000:70-73). The norm of utility makes academic institutions answerable to people outside the scientific community. This is seen through the formation of skills or competencies, transferable[14] in their applicability across a wide range of sectors, in contrast to scientific originality typified as subject-oriented knowledge.

This suggests that academic institutions through the organisation of doctoral education, besides securing original research, are increasingly answerable to a wider audience, manifested in the needs of a wider labour market, which is one of the cornerstones of the European knowledge economy, as expressed in the Salzburg principles. How doctoral education directors handle these presumably conflicting norms, in relation to structuring the programmes, is the focus of the empirical part. Next section presents the translation theory before turning to the methods and material discussion.

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[14] The term "transferable skills" refers to generic professional competencies. Transferable skills generated in the academic sector can be transferred and used in other sectors. The more recent term "translational skills", derived from the medical sector, refers to a set of skills needed to translate academic research into societal applications, on the notion that research and knowledge must be more socially relevant (Feldman 2008; Nerad 2015:287).

Translating ideas into practice

While primarily focusing on organisational change, Czarniawska's discussions on travels of ideas and translation, will assist in understanding the ways directors of studies relate to the ideas of original research and the wider labour market needs. At a general level, ideas which travel and are translated across time/space, acquire objective features and become quasi-objects, are disembedded from their original "receptacle", entering different localities, being re-embedded and institutionalised in actions and objects (Czarniawska & Joerges 1996:22-23). In order to travel, an idea must be materialised. The driving force can be the interests involved, energised by the people involved in the translation. Materialised ideas might wither if translation is not repeated, enabling disembedding an re-embedding. The result of a local translation is never identical to the original, and therefore the plurality grows with each translation (Czarniawska 2015:123-26).

Translation does not amount to accurate representation of an idea or an ideal (suggesting that actions or events represented in a symbolic language can be identically "translated back"). The fact that an idea is not identically symbolised or translated does not mean the idea is meaningless, but rather that the object of study is the representational efforts on part of actors involved (Czarniawska 2000:121). This instructs us to dislocate the focus from the inherent properties of the ideas to the success of their presentation (Czarniawska & Joerges 1996:25). Any relationship between the fictitious and the factual is never stable, i.e. Fictitious events can have real consequences, and actual events are often fictionalised to make them comprehensible (Czarniawska 2000:129). Original research and labour market needs are both social constructs, which have travelled far, been translated and debated and re-formulated across time and space, practiced at a range of levels and institutionalised in myriads of ways.

This means that the necessary fit with the in-built definition of the CUDOS mores or post-academic science, is not the primary object of interest, but rather the way they are instilled in practices and actions. This can be exemplified by Olds, who has investigated the translation of the idea of academic freedom in Singaporean universities. Olds sets the scene where the state and universities adjust to emerging fashions in higher education and to structural economic changes (Olds 2005). Olds as well as Haraldsson (2010:42-44) demonstrate that there is a need to relate to the norm or the idea, but that the local implementation can acquire a certain twist and translation, depending on local and/or structural conditions. At a general level, we have

seen that the norms in focus have been materialised in central guidelines for doctoral education in Europe. These are then sent to other places, e.g. universities, repeatedly translated into institutionalised objects and actions, which in turn can be described and summarised through abstract ideas. The local translation is embodied both in material forms, e.g. policy statements, guidelines, strategies, but also in non-material ones, such as the discourses on part of responsible persons, which are the main object of study here. Thus, the micro events constitute the macro world. This entails transformation and transference, since the travelling means that the ideas and objects cannot emerge unchanged, to set something in a new place is to construct it anew (Czarniawska & Sevon 2005:8).

In translation models, the local and the global is not dichotomous but form a continuum, interconnecting time/spaces. Idea spreading in this sense is not reducible to mechanical diffusion, but is a translation process at the hands of people, collectively engaged in a creative process which impact the way ideas are embodied locally. Learning from Latour, translation implies a modification of the two agents, those who translate and what is translated (Czarniawska 2015:118; Czarniawska & Joerges 1996:24). Translators become both users and creators. According to Latour, the translation model is defined by three characteristics: the spread of anything is at the hands of people, each of whom can act in many different ways; displacement is not caused by the initial impetus but is rather the consequence of the "energy" from the actors in the chain of translation, which provides that the force of the first in the chain is no more important than the later ones. Thirdly, all involved actors are doing something essential for the existence and maintenance of the object of translation, which means everyone is shaping it for their own project. This leads to the continuous transformation of the token by participatory actors. As a precondition, the nature of society in this model is seen as negotiable, as performative, and not something that can be defined once and for all (Latour 1986:264-68).[15]

Translation ties different actions to each other and to actions that occur across time and space. Macro structures are constructed through a myriad of micro translations of this kind. Action nets produce conversations, translocal in that they occur in parallel at many spaces, which additionally bind the local to a regional and global on-going discourse (Czarniawska 2015:40-

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[15] For a slightly contrasting view of translation, Callon argues that a basis for translation is a single field of significations; a shared desire to arrive at the same results, which affirms the underlying unity of elements and tokens distinct from each other. Translation entails the construction of convergences and homologies by relating aspects which earlier were different (Callon 1980:211). In this study, Latour's view is rather the one adopted.

41). Therefore, we need to link the local with the European, the institutional with the normative and discursive.

Material and methods

This section begins with some epistemological and methodological reflections, followed by a presentation of the material and interviewing as a method.

Epistemological and sociological comments to the choice of methodology

Sociological research regards human action as element of wider figurations, i.e. a non-random assembly of actors locked together in a web of mutual dependence. Sociology is an extended commentary on the experiences that arise from social relations and the interpretation of these experiences in relation to others and the social conditions in which people find themselves (Bauman & May 2001:5, 180). The main actors involved in the play to be unfolded in this study are directors of study responsible for doctoral education. Whilst one cannot neglect the web of interdependence including other actors in the academic game, this study takes the angle of interlinking doctoral education directors with the European community of doctoral education norms.

My approach to the material is abductive, bridging both context of discovery and context of justification. The former deserves to be upgraded, in line with a stronger emphasis on theorising. Context of discovery is reasonably characterised by inspiration, intuition, abduction and creativity. Theorising should guide the entire study and bridge these contexts and not merely being dominated by methodology. Data enter the research process at two stages, data are explored as a first step, and secondly, data are confronted with hypotheses or similarities (Swedberg 2012:7-8). In this process, the researcher conducts a circular movement, where the agentic responses are interrelated with and understood in relation to the whole, and possibly re-formulated in the meeting with the whole, whereas the whole has to perform a similar openness for understanding and re-formulation in its meeting with the agents (Bourdieu, Chamboredon & Passeron (1991:64-5). Such an adaptive process suggests that the notion of theorising means that theory adapts to and is shaped by incoming evidence, while the data in parallel are filtered through and also adapted by prior theoretical material. This creates a process beyond mere deduction or induction, (Layder 1998:5, 135-36).

Theorising becomes a holistic guide, in a constant adaptive circularity between theory and empirical data, throughout the study. Such an adaptive approach enables, moreover, for the way theory and empirics interrelate with each other insofar the norms defined by me in advanced,

are suggested to impact on the actors navigating them, but at the same time, the actors have been part of forming these norms on beforehand and are constantly involved in a "game" in which the norms are interpreted, integrated and developed further. This is how I reason in relation to the difficulty in the adaptive approach, as Layder terms it, to apprehend both the immanent order of social reality and to impose order on this reality at different stages in the research process (Layder 1998:152). The adaptive approach, furthermore, allows for a design which considers the interweaving and interrelation between what Layder calls the social setting and the situated activities that take place within them (ibid:156-57).

Theory would be more robust and its explanatory force strengthened if its assumptions and presuppositions were more closely measured against empirical evidence; and empirical research would gain from more sophisticated forms of analysis and enhanced generalisability and applicability (Layder 1998:7). With this said, this is why general theories with the claim to explain all and everything, are not adopted in this study. Rather, the norms which form the basis for the analytical framework are generated from the context of discovery, and the theoretical framework employed, that of organisational translation, is not used for theory-testing but for enhancing the explanatory power and enabling understanding of the empirical evidence generated.

I follow Östling's epistemological observation that, even if knowledge always is situated in rooms and practices, the university system does not evolve as a result of merely endogenous processes, but is an alloy of national traditions, conditions and international influences (Östling 2016:30). The EU strives normatively to impact on doctoral education, insofar it can be used as a lever for boosting European competitiveness and economic growth, but their message would be of low value if these ideas remained merely as rhetorical tropes. Education is a member-state competence, but national steering and decisions risk clashing with the norms on part of university representatives. Such norms are suggested to swirl around regardless the legislation in place. A governmentality perspective informs that power and ideas are beyond political government, and suggested to be strengthened when they are upheld by directors for doctoral educations, who have the two-way power of influencing the daily life of the doctoral students both via the formulation of study syllabi and guidance, and secondly through the institutional culture of the specific environment which hosts the doctoral education. The discourses on governing and government are integral to the operation of government, rather

than a means to its legitimation, it is consequently therefore we need to study, in what Dean calls analytics of government, how activities of government are operated locally, rather than in what way power is distributed. Rather than merely describing how authority is operated in a specific situation, we must direct focus to the practices of government that form the bases on which problematisations are made, and what occurs when governing and when being governed (Dean 2010:37-40). However, learning from Layder's adaptive theory, a research aim must be to disentangle the power or impact coming from the social setting and the actors and activities operating in these, respectively. In contrast to a classical discourse analysis, we must move beyond the sole focus on intertextuality and also extend beyond the discourse.

The process of interviewing

The material consists of semi-structured interviews with directors for five different doctoral programmes, belonging to a faculty of social sciences at a large Swedish university. Four interviews were conducted in person at the interviewee's office, and one via Skype. The interviews took between 50 and 60 minutes, except for one that was shorter (35 minutes). A sixth interview was scheduled, but was not completed due to circumstances beyond the control of the author.

The site was chosen in order to provide a width of subjects. The programmes vary in size: three of them have roughly ten active doctoral students; one approximately 25 and the fifth one has up to 50 active doctoral students. The programmes were chosen as to provide a variety within social sciences. This said, no claims are made for a wide generalisation (higher education institutions organise social sciences majors very differently).

An alternative approach would have been to include more subjects and institutions, allowing wider comparisons, alternatively to focus on one single subject across a variety of institutions. However, that had been on the expense of depth in the analysis, provided the limited scope of the study. The choice of interviewees follows Haraldsson (2010); directors of studies are expected to have wide and thick knowledge on the practical organisation of doctoral education. Through their positions, they can define what doctoral education is and should be, and also communicate the discursive translation of norms underpinning the environment, as well as define the knowledge transferred to the doctoral students. Important to say is that I am not primarily interested in which persons say what, rather in what ways the overarching norms of

the study are translated. This means that the lens of attention is not on the actor or subject but on the positioning, where primarily the discursive statements are in focus (Haraldsson 2010:96).

Such a self-selected sample cannot be statistically generalised to the population at large. What, however, is possible is an analytic generalisation, including a reasoned judgement over the extent to which the findings in a certain context can guide what could occur in a different situation, based on theory and thick description (Brinkmann & Kvale 2015:297-300). This enables comparing and contrasting the results from the case with an accepted set of principles or theory (Gray 2014:279). Yin makes an important distinction between generalising from cases and from case studies. Crucial is that generalisation occurs at a conceptual level, above the specific case(s). Yin argues that case study researchers should not view their cases as samples, rather one should view the case study as an opportunity to shed empirical light on some theoretical concepts, necessitating supportive arguments. Ideally, this provides greater insights to any "how" or "why" questions formulated (Yin 2018:38).

The design of post-academic science and the mode 2 production, are typically attributed natural, technical or medical sciences, where humanities are regarded as the other end of the spectrum. Often in such dichotomies, social sciences are not dealt with specifically, but rather transversely. Therefore, I find it particularly relevant to elucidate social sciences, which cross over a range of subjects from those closer to natural sciences' methodologies and those closer to the humanities. Moreover, social sciences have been under-investigated in studies and dissertations of doctoral education in Sweden. Other disciplines have rather been attended to; e.g. humanities and natural sciences (Haraldsson 2010; Myrdal 2010); humanities, natural sciences and educational science (Peixoto 2014), humanities and social sciences (Gerholm & Gerholm 1992). The latter is, even with its focus on a few social sciences subjects, quite dated, given the major doctoral education reforms effectuated since the early 1990s.

Ethical considerations

I have followed the research ethics recommendations by the Swedish Research Council. Some general criteria relate to: information (the researcher shall consciously review and report the basic premises of the study); informed consent (the participants must actively consent to and freely decide on their own participation), anonymity (anonymising or de-identifying involves eliminating connections between samples or answers and a certain individual); confidentiality (not communicating information given in confidence, which entails also protection against

unauthorised persons partaking of the information), and safe storage of the data (Vetenskapsrådet 2017:10, 40pp).

Prior to the interview, I contacted all directors by email and presented the background and aim of the study and I also clarified the circumstances of participation in a letter closer to the interview date. All participants had to decide on their participation. This led to one of the interviews were not recorded electronically, on the explicit demand of one of the interviewees. The directors are interviewed in their professional capacity as leaders, and not as private persons or academics, which minimises the sensitivity of the data. All interviewees have been offered confidentiality and been anonymised in the transcription. The choice of anonymising is made in order not to allow for any identification. All names are consequently fictionalised: Kerstin, Margreth and Sofia represent the smaller environments (approximately 10 doctoral students), Judith represents a mid-size environment (approximately 25 students) and Paul represents the largest environment (up to 50 students). Data and transcriptions have been stored solely at my computer, have not been disseminated and will only be used for the purpose of this thesis and any article that possibly can come out of it.

I am working as a research education officer at the Faculty of Social Sciences, University of Gothenburg, and the study has in part been conducted within working hours. Consequently, this faculty and university has not been the site of study, in order to guarantee a reasonable distance towards the organisation and interviewees.

The act of analysis

Since one of the research questions is to investigate how doctoral education directors navigate the overarching norms, it is not clear on beforehand how they define these norms or the thematic relation of concepts underpinning them, in focus is rather their translation of these. The coding is enabled through the thematic organisation of the interview guide, which follows the design of the study and the research questions, derived from the analytical concepts.

The norms in focus are generally abstract, and the interviewees do not necessarily name these concepts but only describe their characteristics. Therefore, the researcher must assign labels to them. Themes bind concepts together as summary statements or conclusions, which signify what the concepts mean, why they occur or how the interviewees relate to them (Rubin & Rubin 2011:194). Therefore, I will allow an openness for the interviewees' reflections on the norms

and how they relate to and interrelate them. The only pre-assumed content in the framework, is a suggested tension, regardless how strong or weak it might be, between the norms of original research and needs from a wider labour market. The interview guide will therefore lead the interviewees through an open conversation around these norms and end with their views on any possible conflicts or contradictions between them. In the coding, I have organised the answers from the interviewees jointly related to the different concepts discussed. After this, I have concentrated on what are their definitions of the concepts, what are their reflections on the concepts and in what context do they speak about them, i.e. to which other concepts or themes can they be linked. The analysis has then been organised through the main themes on which the interviews were conducted. Throughout this process, I have interrelated the statements and reflections to the conceptual framework used and the theory of translation.

It is here the adaptive approach of Layder comes into play, where an iterative movement between unknown data and a defined, general theoretical framework is imperative. This will be done by marking the themes and concepts which explicitly were part of the interview guide, after which are looked for those concepts that the interviewees emphasise. A constant inter-relational movement is then conducted, between the empirical material and the conceptual and the theoretical underpinnings of the study, a movement during which the analysis evolves. This is also a way of avoiding being too dependent on pre-defined concepts in the literature, bearing the risk of missing insights in the data that are not in the literature. In coding, one must stay close to the meaning attributed by the interviewees. A tentative explanation can be developed, but openness must be there to refine it if other interviewees use the concept differently, allowing for possible re-labelling (Rubin & Rubin 2011:195-97, 202). This is suggested as a more advantageous approach than mere deduction, which risks loosing sight of the insights in the data, or a mere grounded theory approach, which would adhere to the data, however, which does not distinguish between central and peripheral terms and themes, and thus not suitable for this study which is based on a limited number of research questions. The role of the theory is not to provide a theory-testing, but assist in understanding how overarching principles are anchored locally; and the role of the conceptual framework is to view how the ideals and norms can be interrelated.

Analysis: The Road from Salzburg, but where to go?

This section will firstly present the results in relation to the Salzburg principles and the linkage between research and education. Subsequently, the themes of the design will be dealt with respectively: original research, labour market needs, conflicting goals and critical thinking/independence.

The location of Salzburg

None of the directors is aware of the Salzburg principles and the goals and guidelines developed Europe-wide for doctoral education. However, several of them refer to the faculty and university-wide level where they think this awareness is located. These higher levels can be understood as organisational gatekeepers in the translation from the European to the local, in the way Bennich-Björkman reasoned in relation to a previous doctoral education reform (Bennich-Björkman 1993), even if that does not hinder lower level actors from gaining knowledge or exerting leadership out of that knowledge.

At an immediate thought, can this endanger the validity of this study? If the interviewees are not aware of the source of the norms, am I really studying what I intend to study, and are the methods adequate in relation to the research questions? I argue that this is not a validity problem, since what is in focus is the discursive translation and not the origin, the context of the norms or the knowledge of these ipso facto. Illustrative of this is what one of the interviewees, Paul, concluded, by saying that he was not aware of the discourse, but: "The discourses are apparently based on something which makes me able to answer your questions", i.e. he is not required to be acquainted with the overall discussion in order to be able to relate to the questions. This is made possible through the aim and design of this study, remindful of the translation theory by Czarniawska, where the focus not lies with the inherent properties of the idea but the representational efforts by the actors involved.

The non-existing awareness among the directors of study for a wide range of social sciences doctoral subjects is, however, a finding per se. The European policy-makers and stakeholder organisations, such as the European Council and the EUA, in their endeavour to chisel out what is central to doctoral education in Europe and why it fits into the wider goals of strengthening the European knowledge economy, must consider such a lack of awareness as a failure in addressing these, according to them, pressing economic and societal concerns. The argument

in favour of universities being the powerhouses of Europe's new knowledge economy (c.f. Keeling 2006) could of course be propped up from effects generated from academic institutions, e.g. highly educated and skilled labour, but in a dearth of attributed appreciation to the European cooperation, the latter would not be able to garner legitimacy from those effects. In order to do so, as a minimum, the pillars of the Salzburg agenda, should be reinforced. We will therefore turn to the discursive parts of this agenda and see what the empirics show, but first; as we have seen, central to this agenda was the merging of ERA and EHEA, i.e. research and education.

Research and education

None of the interviewees sees a contradiction or conflict between the training for research and educational elements of the doctoral programme, but rather that they go hand in hand. Sofia suggests that a tension can occur towards the end of the doctorate, after a completed public defense, if there are residual courses left prior to graduation; Judith suggests a tension if courses are too strictly structured or tilted in any particular way; and Kerstin sees a potential problem if doctoral students get too specialised and thus risk loose sight of the broader aspects that courses provide, but no one sees it as a major problem. Paul does not see a conflict either, but lifts the discussion to a higher level – nationally initiated evaluations of doctoral education can create such an asymmetry; what is in focus for the external evaluation is often what can be penned down on paper, for example courses and examination goals, whereas fulfilled training encompasses something more comprehensive and cannot necessarily be judged based on such criteria.

The fact that none sees educational and research training elements conflict each other, serves to corroborate the linkage which has occurred and being reinforced at European level, with the merging between ERA and EHEA.[16]

Original research

Original research is a cornerstone of what doctoral education is suggested to entail. All interviewees are aware of its centrality, and a shared, down-to-basic understanding is that it is a unique, creative or innovative contribution to the state-of-the-art literature, which expands epistemic boundaries and provides new knowledge in a systematic and substantial manner.

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[16] This can, however, illustrate a wider dilemma for the doctoral student, who constantly is oscillating between viewing the programme as professional work vs. education. Doctoral education can therefore, besides being a boundary object, also be seen as a set of interlinked activities at different abstraction levels with sometimes varied expectations on the results (Peixoto 2014:12-13).

Kerstin: "I view it as the production of unique knowledge." Margreth: "We defend a view where research must produce new knowledge … a substantial contribution to the subject … which pushes the boundaries of knowledge." Sofia connects the definition of originality to her own reactions: "My initial thought is often, that's odd, will s/he write on this topic!? … It takes some time, but is something which I later appreciate … something that can be completely novel."

An interesting observation is that two of the directors for the smaller environments, Kerstin and Margreth, mention that they do not explicitly stress the originality that much in relation to their doctoral students and the education. This said, they agree to the general understanding of it and that the aspects of originality is central to the knowledge production, although the concepts of originality/original research are not explicitly communicated.

In contrast, the directors for the two larger environments argue that originality is absolutely essential and something they discuss in detail. However, both of these directors, Judith and Paul, have disclaimers to the originality. Judith: "Sometimes that can entail a higher risk and that might be difficult for a doctoral student to undertake, if it is completely original and no one has ever talked about the research question and there is not much to build on, that can be difficult. So we don't expect it to be original or innovative to that extreme of the spectrum." Paul, for his part, explains that their programme has added originality/creativity on top of the general selection criteria for admission, in order to make possible a ranking among the lead group of applicants. This demonstrates the essence of originality, however, it has been difficult to apply, since persons belonging to different sub-disciplines define originality differently. In that sense, originality is "in the eye of the beholder", according to Paul, and therefore problematic to use as a selection criteria.

Judith and Paul do here engage in a translation of the concept of original research to their local contexts. They both stress the essentiality of it for doctoral education, but given different restraints (e.g. in Judith's example that not all students have the capacity to undertake it, i.e. individual restraints; or in Paul's example the systemic restraint of the difficulty of comparing originality across different subjects) they display an openness for negotiating the ideal. The concept becomes materialised in the assessment criteria, and commensurate with creativity, providing for a plurality of interpretations in the re-embedding of it. In line with translation theory, they use, recreate and provide a slightly modified view of the original (sic) concept, although they rhetorically maintain the concept of original research. In that vein, the usage of

the concept displays, in line with the translation model, a continuum, and not a breach, from the global to the local.

Sofia argues that originality in research formulation shall be encouraged, at the same time as it can be a risk since lack of supervisory resources can endanger admission for a too original idea, beyond the traditional boundaries. At the same time, a comfortable way is to follow ploughed routes, which the institution can be more condoning toward, as they stay within a known realm and discourse, already established, although it can be pretty boring research out of that, according to Sofia.

All interviewees state, in various ways, that their primary mechanism for ensuring original research is the open positions they offer for new intakes of doctoral students (which is in line with Merton's universalism imperative, where only competency shall guide recruitment), in contrast to project-funded positions. The latter often comes with a pre-defined research framework, restraining the opportunity for the applications to be as original and creative as otherwise. The open positions, however, come with the limitation of shortage of faculty funding, primarily for the smaller environments, however, they are considered as the most effective way of ensuring original research. Sofia, Kerstin, Paul and Margreth all additionally stress that this is a way of opening up for perspectives and ideas not worked with at the department. Margreth and Judith reiterate the courses and seminars as the primary procedures for securing original research, endowing the students with capacities to producing it on their own. Paul refers to this as the "invisible infrastructure … this system allows for originality to the largest possible degree."

All agree that the autonomy is pretty strong, given they are not hired on project grants. Judith: "If they are accepted into the doctoral programme it basically says to them that, we accept your idea of what you want to do, and we believe we have the expertise in the department to help you do it." Margreth summarises succinctly the tension between open and project-funded positions and that there are pros and cons with both models:

> There exists a perverse problem in-built here; there are supervisors who are very effective in getting grants, and others who are less successful, which means there's a great variation; a researcher who has many doctoral students since s/he is successful in getting grants, can never supervise them as deeply as one would wish. … On the one hand, a project-funded doctoral student has limited ability to choose direction and can feel too much dependence in relation to the supervisor, on the other hand, s/he generally finishes faster since the research questions are

> fixed and it doesn't require as much creative thinking, and it is comfortable with a project leader who knows a lot. This creates inequalities among doctoral students. A doctoral student who comes with a completely new topic has not at all the same opportunities. … It is an unfortunate development if we too heavily formulate a norm out of these project-funded doctoral students.

This quote illustrates the ideal of open positions, as the favoured way of recruiting and also as the most efficient way of guaranteeing originality. At the same time it demonstrates the disadvantage of such positions, since it can create structural asymmetries in the conditions provided between doctoral students. As Judith earlier mentioned, originality can entail a higher risk on an individual basis.

It follows from this that original research mostly is discussed at the beginning of the doctoral programme, setting the frame for later development. The mandatory seminars used at the programmes are additionally seen as quality control guarantors, although the scene very often is set with the admissions process and the introduction of the programme. The mandatory courses are in addition seen as instruments for equipping the doctoral students with the resources for undertaking original research, to the extent possible.

On the topic of obstacles to the general conditions for enabling doctoral students being offered and contributing to original research, Margreth argues that there are obstacles at all levels; structurally there is a tendency of instrumentalization of research, for ends other than mere knowledge production; institutionally there is a tendency in the allocation architecture which favours certain prioritised disciplines; and individually there are constraints as to the allocation of supervisory and research resources. Margreth is the only one which explicitly mentions such preconditions which can act as obstacles to the ability to producing original research. All others consider the general conditions are in place enabling this (whether original research actually is produced is a slightly different question); they consider that the programme and environment with courses and seminars and supervisors do cater for this, although, as some explain, not all individual doctoral students have the skills yet to live up to this.

From the above, it is clear that the concept of original research is simultaneously both essential and loose. One cannot overlook it, at the same time as one cannot define it once and for all, in any but abstract terms. This enables the concept to be translated into various contexts across Europe, which also was the purpose of the Salzburg principles; not a tool for standardisation but a guideline for a variety of diverse settings. The concept of original research was, Which

Bitusiková (2001) showed the easy part agreed on as an essential component in doctoral education across Europe. One suggestion why this is the case is that original research as an idea, presumably lies closer to the CUDOS mores of academic and scientific life. These norms in turn lie at the heart of what a university traditionally is about. Even if they interpret it differently, a natural scientist and a representative of the humanities can both agree that original research is at the core of doctoral education. However, all other aspects, which are more of added layers, in this study the example of the needs of a wider labour market, are dimensions more naturally belonging to the "post-academic science" and mode 2 concept of knowledge production, and therefore more prone to conflict and tension as regards the interpretation and acceptance. The easiness of agreeing to original research comes possible at the potential risk of hollowing out the concept. The ideal of original research is there, but competing forces do also call for attention. As Margreth argues, the original research is an ideal, and not anything they necessarily aspire to fulfil in all activities. This is interesting, since it can be related to the CUDOS mores, which act as an ideal, but in the every-day operation of academia can be negotiated and even compromised, in the effectuation of doctoral education. This allows for other ideals entering the field in which this game takes place, if we use Bourdieu's language, and next, we will consider the second major norm.

The needs of a wider employment market

The most striking finding is that all interviewees admit that the support for a broader career is relatively sparse, and that they can do more. Four of the interviewees deny that there is a clearly identifiable labour market outside of academia for doctoral graduates, Judith is the exception, but the description of it is the public sector and governmental agencies at large, which is a similar picture as the others, i.e. a relatively vague depiction. Paul is the only one that explicitly mentions the private sector as one big outlet for the graduates, which can be an effect of the relatively larger programme he represents (although others also mention individual graduates who have gone private). In terms of where graduates end up, Kerstin and Judith describe that the majority stays within academia. Kerstin explains that they view academic employment as a springboard for other employments, whereas Judith argues that they do not distinguish between inside or outside academia when they do career planning. The others describe a more mixed pattern as to where graduates end up. Sofia argues that academic positions are not unusual but it is difficult to be employed at her own university, and therefore many go to other universities, although a fair number also go outside academia.

Kerstin's and Judith's views above are interesting considering the relation between mode 1 and mode 2 knowledge production. They do not necessarily distinguish between the outlets when doing career planning, which bears resemblances of a post-academic imaginary, stressing mobility, transfer and applicability.

The most recurrent generic and transferable competencies that the interviewees define are generated from their programmes, are: critical thinking, analytical skills, data collection, "project management", reading/writing, presentation techniques and compiling larges information spaces. Three directors explicitly mention that skills in quantitative methods and research are the more desired competencies at the wider labour market, and therefore more transferable in practice. Judith suggests that those who do qualitative research are the once probably more likely to stay within academia. This is an interesting observation, since it individualises the career track planning – if you choose any particular methods trajectory, you are either prone to stay within or go outside academia. The others suggest that the link between career and formulation of research is weak, since doctoral students are not thought to consider career plans when formulating research. This is rather seen as something that is done at a very early stage, or even prior to admission. Sofia and Paul, though, argue that the weakness of this link creates a stress towards the second part of the education, when doctoral students by necessity are forced to consider the future. Sofia: "Not in the beginning at least, when they formulate their questions. I don't think they consider career at that stage, and it is perhaps therefore it turns stressful for them the last year."

A movement is here discerned, from mode 1 to mode 2 considerations during the course of the doctoral education. If a strictly discipline-oriented mindset is more predominant at the early stage of the programme, that signifies a mode 1 feature, whereas career consideration later during the programme are widened in order to encompass more possible routes after graduation, opens up for a mode 2 thinking of transferability. What this, however, boils down to is the need for more career support on the part of the programmes, which all director admit they need to do, but have difficulties in managing. This speaks to a key observation in a recent report Holmquist et al. 2019), an analysis of 95 doctoral education evaluations, which displays that the single most recurring area which the evaluators call for development in, is labour market and preparation for career outside of academia.

Sofia captures this ambiguity succinctly:

> I don't think they are prepared enough for a wider career. In one way or another, one thinks generally that they shall stay within academia, at the same time that is not explicitly communicated, and all know it is difficult to remain in academia.

This example embraces both mode 1 and mode 2 features, and it adds to the difficulty for doctoral education as a boundary object (Bowker & Star 1999), strongly structured in its individual-site use, with its ideal of original research and pursuit of academic paths, and at the same time transcending this community, encompassing also a common use, where it is rather weak in purport.

Conflicting goals?

A notable finding, going against the pre-existing anticipation of this study, is that four of the interviewees clearly think there is not a conflict of interest or contradiction between the goals of original research and the needs of a wider labour market. This tension, argued to be in-built in the European knowledge economy and part and parcel of the university DNA does not seem to find its equivalence at an operational level among the directors of studies. This does not mean they do not admit there can occur tensions in the meeting between these discursive forces. Sofia argues that a tension can occur when a graduate moves to an employer outside of academia which serves under a different logic, whose principals rather than questioning and problematisation, at the end require solutions, measures and answers of a report produced. Sofia suggests that academia trains very well the students in critical thinking, problematisation and questioning, while the act of delivering unambiguous and clear-cut answers and solutions might come as an uncomfortable surprise when moving to employment outside academia. The latter is neither seen as the qualities traditionally and typically representing the one end of the spectrum of the academic enterprise, manifested by Merton and original research whereas the post-academic science spectrum has designed this as a feature necessary to develop and deliver.

Judith reasons in a similar way:

> And I think that is actually one of the things that sets apart those paths, students who really loved the creative aspects of figuring out how to get an answer to an important question out there, they are the ones who are most likely to want to stay within academia, because when you leave academia you often are asked to answer a question in a specific way, and that means you somewhat have to leave your creativity behind.

This quote opens up both for tension and balance. Judith suggests that most of the jobs outside of academia do not necessarily require the kind of creativity that original research requires. However, she does not necessarily view this as a conflict, since that is not the most transferable aspect of the kind of work students do.

Kerstin argues that there is no conflict in the process of methodology and writing, whereas in the analytical and theoretical processes a conflict can occur, as the latter, according to her, are not similarly appreciated at the labour market. Paul means that a doctoral graduate has developed a driving license for research, and once a doctoral student has accomplished what is expected during the education, s/he should demonstrate such an independence as to be as prepared as necessary for the demands set at the labour market.

Margreth is the only one who explicitly argues that both of the goals, that of original research and that of labour market needs, do act restraining on and might compromise the thought and independence. Original research as the individual aspiration for the truth, in a unique and insulated manner, is not what defines academic knowledge production, according to Margreth. She argues that the university must reflect more on the collective and social side of originality and not nurture the pre-Humboldtian perception of originality born with the individual. This is in line with the Mertonian imperative of communism, where the scientific success is the result of collaboration and assigned to a community, and not an individual genius. We can here see a different conflict displayed than the anticipated earlier, not necessarily only between the norms relative the other norm, but also in relation between the norm and the daily activities and the fundamental principles of the scientific enterprise. Margreth argues that labour market prospects too are very much connected to individual expectations, and she thinks we here must separate what is the task of the university. The university has, in her mind, rather a collective responsibility towards the society, and she uses the word societal relevance as a broader term than labour market provisions. The university's priority must lie with that primary mission of producing education and research, not necessarily producing workforce matched with suggested needs of the labour market. In this reasoning, Margreth provides a defence against a development where at the same time as traditionally academic values are defended, universities and doctoral educations do also adopt the habits and practices relevant for the knowledge economy, the embodied self of the doctoral education shifts from that of the "autonomous scholar" to that of the "enterprising self" (Tennant 2004:438).

Here, we see a clear example of translation. Margreth reflects on the term of needs of the labour market, but translates that into a mission which suits better her normative understanding of the university. The ideal of the needs of the wider labour market is materialised in the documents, according to the translation theory, and Margreth makes a local translation, to fit the specific conditions but also in line with her normative stances, which shapes this norm to something partially different. This makes her both a user and a creator, in line with the translation theory and Latour's considerations. Translation does not necessarily suggest an accurate representation of the ideal, and the inherent property of the idea is not the focus of the process, but rather the representational activity, in this case by the directors of study. In line with Haraldsson and Olds, there is a pressure to relate to an overarching norm or idea, but the way this is worked with locally can take different twists or features, depending on the local conditions and ambitions.

Critical thinking and independence

As critical thinking and organised scepticism (c.f. Merton) lie at the heart of the scientific mindset, it is secure to see that the interviewees view the conditions for guaranteeing critical thinking not necessarily being compromised by career planning or labour market needs. A few interviewees reflect in more principle on scenarios which can endanger the critical thinking and independence, with a too heavy-handed supervisor or with doctorates funded from outside of academia, but they do not consider it as a general problem.

Sofia exclaims that she thinks the doctoral students sometimes are left too much on their own, although that is not the same as being independent. But she argues that given the support and programme design they offer, the doctoral students are often half through the programme better equipped and know the matter better than the supervisors, "and what we can contribute is how to structure a text, the methods, what needs to be lifted up, etc … But if we guarantee it in any way, no", she reflects. Paul argues that independence is key in the education, and they view it as a progression toward the driving license, where supervisors engage more actively in the beginning, providing the tools and resources, and at their third article, they are expected to do it on their own or at least be in the driver's seat. Kerstin and Judith admit that independence is not so much discussed, since it has not been a major problem, but they have procedures in place should there occur a problem, for example in the relation between the doctoral student and the supervisor.

Margreth diverges, though, in that she reminds that the university is not only a knowledge producer but also a workplace, with individual wills, power struggles and hierarchies, and all institutions possess a certain logic of reproduction, which can make it difficult to open up for criticism against the basics of its activities. This pattern conditions to a great extent the ability for critical thinking in relation to the doctoral dissertation or research project. However, it is not a dead end; there are examples of institutions that prove there are cracks through which the critical thinking can survive and even thrive, she thinks.

Conclusions: Coming back to Salzburg (and the research questions), at last

Stefan Zweig, in his seminal work *The World of Yesterday*, depicts how his beloved city Salzburg has changed after he has been away travelling and then returned. The first time, in the period which serves as a shard of light during the interwar period, when optimism flourished, after 1924, when Salzburg recovered after the first world war and again became a world metropole for the fine arts. Zweig admits he didn't see all ominous signs but allowed himself to engage in optimism. The second time, in early 1934, after which he returned from a short visit to England, and his house in Salzburg was subject to a police search and confiscation of private property. Within the course of just a few months, events had turned severe and Salzburg had once again changed dramatically. Zweig decided to once and for all leave his home city and country (Zweig 2011).

As the city of Salzburg changes, given different purposes, uses and interpretations, concepts do also change in the process of translation. A concept moves from its moorings, are picked up by interested stakeholders and is re-formulated in the meeting with a different context. When it is left back to the original user, or the traveller who returns, it is partially something else.

Reiterating the call from Crossouard et al. (2015), for more research into the global-local nexus of doctoral education and how macro-level drivers and ideals are played out locally, this study has attempted to bridge these levels of analysis and empirical activity, i.e. the European and the local university setting. To this end, the theory of translation enables such a linkage, as it bridges any space between the macro and the micro, weaving them into a net of interdependence, where the act of translation makes use of, creates and recreates ideas which travel and are subject to translation. The Salzburg principles were not at all recognised locally, which calls for more active engagement from European stakeholders if they wish to create a stronger link between the European and the local level in the making of knowledge policy in Europe, especially given the presupposition that the universities shall act as the powerhouses of Europe.

Which strategies are used by doctoral education leadership locally in navigating the norms?

Notably, the directors do not to a great extent consider the paradoxes to be as decisive as the assumption was formulated at the outset of this study. If no major conflicts or contradictions

are seen, no strategies to navigate them are called. They rely heavily on the open positions as guarantors for original research. Margreth formulates a nascent strategy in that she recognises the need to re-define the concept of originality and make it a factor of a collective effort of the university edifice. A suggested explanation can be that too heavy-handed steering is not warranted in academia, therefore overarching strategies do not necessarily need to be formulated, beyond what one thinks the system in itself guarantees, with seminars, quality controls and the individual pursuit of extended knowledge. Following this organic trait, doctoral education becomes what it becomes, depending on the supervisors and the doctoral students as actors in the creation of it.

We saw also a similar clash between the norm and the every-day operations. Margreth meant that original research is an ideal, and not anything they necessarily aspire to fulfil in all activities. Here comes to mind Matthies & Torka (2019) who observed such a discrepancy at an individual level among younger academics, between how one reasoned around personal academic career and success, which often was the consequence of a mode 2 mindset, whereas one defended the norm of a Mertonian kind, when explaining in overall terms what should drive scientific culture in general.

Are the norms to be regarded as mutually conflicting or contrapuntal?

It is striking that the assumption of this thesis does not fully hold strength, in the meeting with the empirics, when the normative meets the every-day business where people actually live the ideals. There are no problems for the interviewees to formulate scenarios where conflicts can occur, but in all examples (Margreth is the exception) they do not think they represent major problems in practice. If they occur, they consider they have the ability or mechanisms to take care of them. The academic organisation with supervisors, individual study plans and seminars act as quality controls and can thwart such developments from wrecking havoc. Margreth sees such conflicts, though, but the most notable in her representation is that she sees the conflict occurring not necessarily only between the norms themselves, but between the norm and the reality, where both the norm of original research and the post-academic labour market norm, act as constrainers on the actual academic and scientific life.

What follows is thus that original research and wider labour market needs; Mertonian and mode 2 post-academic conceptualisations, need not to be dichotomous but contrapuntal. This makes the articulation of the universities' role for a wider labour market or societal relevance ever

more important. Thus, the observation that whereas no conflict of interest generally is observed between the two norms, the material clearly shows that there is a difficulty for the directors in articulating what and how they shall work with the demands of the needs from a wider labour market.

Norm finders, ideal keepers?

The findings put the norms of original research in a similar position as the CUDOS mores; they are weak in definition and not operationalised in the everyday life of academia, but at the same time they constitute a very strong norm of what research and academic life is about. They can be elastic and strict at one and the same time. The CUDOS mores have been criticised, however, they still constitute an ideal, guiding as a norm. Characterising academia, one can see them as acting in parallel with other norms, also influencing academia. In this vein, original research and originality are not considered as hard, all-embracing norms but rather contrapuntal. This is most emphatically seen from the perspective of conflicts of interests or possible contradictions, where the interviewed directors, with one exception and to a differing degree, did not see any obvious conflicts between the norms of original research and preparation for needs on a wider labour market. Neither any obvious contradictions were displayed in the relation between educational and research training components in doctoral programmes. These findings are in line with the ones that Haraldsson found, that there exists an ambivalence in the steering. This is embodied in not an "either-or" but an "both" perspective, where the dichotomous view between different disciplines not necessarily are reproduced locally, where rather marked differences can be seen within the same discipline or even within the same individual (Haraldsson 2010:226-27), in this case, within social sciences.

The CUDOS mores can act as an ideal, but can in the every-day operation of academia be negotiated and even compromised, in the effectuation of doctoral education. This contrapuntal character of academic norm possession, as I wish to call it, is constituted by continuous ambivalence, but it exhibits additionally a paradoxically absence of conscious strategies. Such a contrapuntal melody rhymes with the Salzburg principles, encompassing various norms in a holistic enterprise, diverse as the European landscape is. The old motto of the European Community comes inevitably to mind, "United in diversity". The transfer of the norms of original research and the needs of a wider labour market has been successful, although the act of translation dilutes the "copyright"; the local level uses and recreates the definitions of the

norms, making them relevant across a diverse range of context. As Paul states, he is not aware of the Salzburg principles, but he is aware of the discursive conversation around original research and the needs of a wider labour market, enabling him to discuss in length what is in the principles, without referencing them. This has been enabled through an act of translation, the objects are up for finding and keeping.

Everyone knows the tunes of Salzburg, let them be the melodies from earlier centuries or from 2005 and 2010, but they have forgotten the name of the composer.

Future research

As this study has been limited to a few directors of studies at a single university, expanding the scope would of course be a task for future research. Do the main findings hold if broadening the sample of social sciences subjects or including other institutions? As it would be of importance to scratch deeper beyond the surface of these findings, one can also see a venue for expanding the sample also to include actors at other levels. Do doctoral students, the main targets of the power of the norms studied, view it similarly? It was suggested that actors at higher levels of the university, the faculty, the university-wide or the national level, probably have a tighter grip on the translation of the norms from the European, and it would therefore be as relevant to look at this process from their perspective. Finally, in order to allow a broader representativeness, other forms of methods would be called for, such as survey studies.

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Appendix

Interview guide

Introductory questions

How many doctoral students do you have, how many doctoral students are admitted and how often?

What is the balance between faculty funded and project funded doctoral students?

Do the doctoral students usually write monographs or compilation dissertations?

Do most doctoral students go on to employment inside or outside academia after graduation?

What role do you have as director of studies and what are you expected to do in that capacity?

How is the doctoral education regarded in the organisation, which is seen as the purpose?

Thematic issues

Original research

Is it important that the doctoral students do original research? Why?

What do you consider as original research?

In what way are the doctoral students offered and can contribute to original research?

Do you consider the general conditions for producing original research in place? If not, what obstacles are there?

Does it relate to individual or structural conditions?

Independence

To what extent do the doctoral students themselves design their research projects and in What degree is admission and choice of course based on ongoing projects at the department?

In what way is the doctoral students' independence ensured in the design of their projects and their research?

Employment market

The European Salzburg principles emphasize, in addition to original research, that the needs of a broader labour market should also be taken into account. In what ways are doctoral students offered support for a broader career?

Is there a clearly identifiable labour market outside academia for graduates from your education? If so, what does it look like?

Which do you consider to be the most important skills / competencies as a graduate doctoral student gets from your education, in relation to how they can use them in a future career?

To what extent are the doctoral students offered generic skills / transferable skills, that can be used in a broader labour market?

Conflicts of interest and possible contradictions

Do you generally consider that there is a contradiction or conflict between the ideas of original research and adaptation to needs in a broader labour market?

There is often a notion that doctoral students are preparing for an academic career but a large proportion goes on to non-academic work. How do you view the choice of career and career support in relation to the freedom to formulate research questions and the way doctoral student are developing?

Is there a contradiction or conflict of interest linked to the degree to which the doctoral students can maintain their critical approach to what they are studying, based on previously explained prerequisites?

Is there a contradiction between education and training for research in how the education is organized?

Because the European knowledge economy and the Salzburg principles are an entry point to this study, where several target documents for doctoral education in Europe exist, at the same time as there are national governing documents and regulations, e.g. The Higher Education Ordinance and The regulations of the Swedish Higher Education Authority, I would finally ask whether these objectives at The European level are alive in your activities? And how do they relate to the more governing regulations at national level?