

Taking responsibility toward the public:

University academics' imaginaries and experiences

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Chapter 1: Introduction

1.1 Background

Within current discourses on the university, the relation between science¹ and society is a central issue. A change in the social contract of the university is described, where it is no longer possible to justify research merely within the science system (e.g. Nowotny, Scott et al. 2001, Henkel 2007, Maassen 2014). The literature emphasizes the two spheres as increasingly interrelated and interacting; and boundaries between the two spheres as shifting and becoming more porous in what is generally labelled the knowledge society. In the knowledge society, scientific knowledge, and also epistemic practices and mentalities spill over from science to society (Knorr Cetina 1999). Knorr Cetina describes this epistemification of society as one of the main characteristics of the knowledge society. With the shifting and dissolving of epistemological boundaries, models with a linear connection between science and technology and a clear division of labor are being replaced by more complex and interactive roles and relationships with many connections and feedback loops (Henkel 2007), as science and society are seen as linked by a complex web of interactions taking place in a manifold public space (Nowotny 1993: 308). Further, Nowotny points out, the public² has been extended as well as differentiated as knowledge is distributed to ever-wider segments of society, as science is now “everywhere”.

The increased intertwinement of science and society in the knowledge society is taken as a fundamental premise of much of the current research on higher education institutions, as well as discourses on European and national level of policy making within the field of higher education and academic research (e.g. Kogan and Teichler 2007). Both social studies of science and empirical and theoretical studies of higher education and academic work address and illuminate the issue. While studies have traced the effects of these claimed changes in the relation between science and society on academics’ ways of knowing (e.g. Felt 2009a), as well as offered normative perspectives and reformulations of the role and responsibility of the academy and its staff (e.g. Delanty 2001, Calhoun 2009, Barnett 2011), little empirical knowledge exists about

¹ In this study I use the term *science* in the way that it is used within the social studies of science literature, where the term generally refers not only to natural sciences, but also to social sciences and the humanities.

² In this study I use ‘*the public*’ to refer to those members of society that are not members of the specific expert community in question.

how university academics understand, approach, and experience taking responsibility toward the public in this context. The aim of the present study is to provide such empirical knowledge by exploring how university academics themselves experience and imagine taking responsibility toward the public in their everyday work. In order to pursue this question, I have asked academics from different disciplines how they understand and approach responsibility toward the public in their everyday academic work, and how they experience taking the responsibility that they envision.

Current literature indicates that how the scientific life within the university ties to the public life is not obvious. The boundaries between the academy and society are approached and perceived in different ways, and negotiations take place with regard to the relation between the two spheres as well as the drawing of boundaries between them. Furthermore, empirical studies indicate that this relation and its blurriness significantly impact academic work and identities (see Chapter 2). As such, exploring further how academics experience and imagine their responsibility toward the public is an important step both toward gaining empirical knowledge about how the relation between science and society is lived and approached, and toward theorizing the issue of academics' responsibility toward the public. Additionally, by discussing the experiences and imaginaries of the participants in this study in light of the conditions of academic work portrayed in the literature (Chapter 2), the present study draws attention to challenges and opportunities academics may face with regard to taking the responsibility they understand as theirs. Thus the present study illuminates the current conditions of academic work as 'responsibility conditions' (Felt 2015), i.e. conditions for envisioning and taking responsibility.

While both professional- and academic responsibility has been explored and conceptualized in generic and theoretical-normative terms (e.g. Delanty 2001, Barnett 2011, Solbrekke and Englund 2011) (see Chapter 2), cultural studies of disciplinary communities suggest that more specific rationales for and conceptions of responsibility exist within the different expert cultures; and that these rationales and conceptions are closely linked to the different logics of knowledge production (Knorr Cetina 1999, Ylijoki 2000, Becher and Trowler 2001). As argued by Nerland (2008: 124-125), this means that discipline-specific analysis is needed in order to bring to the fore the "what"-dimension of responsibility. By talking to academics from four different disciplines, and by placing their experiences and imaginaries within the socio-historical and

institutional context of their disciplines, the present study provides empirical knowledge about *what* the academics within these disciplines take responsibility for. The aims and approach of the study is further described in the following.

1.2 Aims and approach

The present study explores empirically how academics themselves understand and approach responsibility toward the public as part of their everyday academic undertakings. The overarching research question that I set out to illuminate is:

How do university academics imagine and experience taking responsibility toward the public?

To address this question, I investigate the following sub-question:

- 1. What responsibility do the participants see themselves as having toward the public?*
- 2. How do they understand and experience taking this responsibility?*
- 3. What do these understandings and experiences of taking responsibility toward the public mean and imply a) across disciplines and b) in light of the current context of academic work?*

I explore these questions based on qualitative, in-depth interviews with academic staff from the disciplines of sociology, history, psychology, and biology at the University of Oslo. This explorative study aims to interpret, understand, and discuss imaginaries and experiences of taking responsibility in light of the current context of academic work, as well as to identify and open up important questions for further discussion and exploration.

I approach the analysis of the interviews in two distinct but iterative steps. The first step of analysis is data-driven, performed within a phenomenographic framework and approach to analyzing interview data (e.g. Marton and Booth 1997). I conduct the first step of analysis within each of the four disciplines in order to investigate research questions 1 and 2. To address the first research question, I discern and describe the range of responsibilities that the participants see themselves as having. Regarding the second research question, I discern and describe the variety

of ways in which the participants understand themselves to be taking the envisioned responsibilities. In the second step of analysis, I further interpret the findings from the first step of analysis by using the framework of ‘epistemic living spaces’ (Felt 2009). The aims of this step of analysis are to interpret the understandings and experiences that are discerned through the first (and discipline-specific) step of analysis a) across disciplines and b) in light of the current context of academic work (research question 3).

The framework of epistemic living spaces provides a set of dimensions through which to interpret the understandings and experiences of taking responsibility uncovered in the first step of analysis across disciplines. Further, the dimensions are suitable for capturing central features of the current context of academic work (Felt 2009a), thereby providing a framework for interpreting and understanding imaginaries and experiences of taking responsibility toward the public in light of this context. The dimensions of epistemic living spaces are thereby used to relate the individual stories of the participants in the present study to the above-mentioned macro stories about emerging trends and new conditions. Furthermore, the micro and macro levels illuminate each other; and as a result, the analysis provides insight into possibilities and challenges of taking responsibility within current ‘responsibility conditions’ (Felt 2015).

The overarching research question expresses an interest in the participants’ imaginaries and experiences of taking responsibility toward the public. Both imaginaries and experiences of academic work are part of the notion of epistemic living spaces (Felt 2009b). In the present study, the term *imaginaries* refers to how the participants understand and envision responsibility toward the public to ideally be handled, and includes the arguments for these images of responsibility toward the public. In turn, the term *experiences* captures both how participants perceive that they are taking responsibility toward the public, and to how experiences may contrast imaginaries. For elaboration on the use of and relation between imaginaries and experiences, see Chapters 3 and 4.

1.3 Outline of the thesis

The following chapter elaborates the current discourse on the relation between the academy and society, and the current context of academic work introduced above. Thus, Chapter 2 provides both a research context for the present study, and a description of the current context of academic work. Chapter 3 presents a description of the analytical frameworks of *phenomenography* and *epistemic living spaces*, as well as how I use them in the present study. In Chapter 4, I describe the research design and present the methodological choices and reflections undertaken during the course of the study. In Chapter 5, I provide a brief historical and institutional contextualization of the specific setting of the present study, by describing the Norwegian context of higher education, the University of Oslo, and the disciplines taking part in the present study. These descriptions provide insight into features of the context that are relevant to (understand) the participants' epistemic living spaces. Further, the contextual description is helpful to readers who wish to decide whether the findings of the present study can be of value in other national, institutional, and disciplinary contexts, as it provides a basis for comparing other contexts to the context of the present study.

Chapters 6 and 7 present the analyses. In Chapter 6, I present the findings from the first (and discipline specific) step of analysis. Research questions 1 and 2 guide this analysis, and the aim is to discern and describe what the participants see themselves as having responsibility for, as well as how they understand and experience taking this responsibility. Chapter 7 presents the findings from the second step of analysis. This analysis is guided by research question 3, and the aims are to interpret and understand the imaginaries and experiences that come to the fore in the first step of analysis further a) across disciplines and b) in light of the current context of academic work. Chapter 8 offers a summary of the major findings, a discussion of the contribution and implications of the study, and suggestions for further research.

Chapter 2: The current context of academic work:

Perspectives and findings from previous research

Literature on academic work from the last decades has to a large degree focused on what are observed to be fundamental shifts and changes in the institutional and epistemic context of academic work. The literature further suggests that these developments challenge traditional academic values and responsibilities. This has triggered normative (re-)conceptualizations of academics' responsibility and empirical studies of how university academics experience the current context. At the core of recent inquiries into academic work within the current context is the notion of 'the knowledge society', encompassing a change in the relation between the university and society. Studies emphasize the two spheres as increasingly interrelated and interacting; and that the boundaries between the two spheres are shifting and becoming more porous (e.g. Nowotny 1993, Henkel 2007, Kogan and Teichler 2007). These studies illuminate the effects of the institutional and epistemic changes implied in the knowledge society on academics' work and their understanding and experience thereof. Previous research into experiences of academic work within the current context (as well as normative conceptualizations) provides valuable perspectives and insights for understanding the participants' experiences and imaginaries of taking responsibility toward the public. On the other hand, as introduced in the first chapter, insight into the experiences of taking responsibility developed through the present study sheds light on the current conditions as responsibility conditions.

In the following, I look into descriptions of the current context, focusing on the described changes regarding the relation between the academy and society, as well as what this means for the institution of the university and for academic work. Thereafter, I look into descriptions of what these changes mean for the experience of performing one's work as a university academic.

2.1 Changing relation between the university and its surroundings

Central to descriptions of current conditions of academic work is a focus on processes of change on the societal level with regard to the role of the university and the relation between the university and its surroundings. Such epistemic changes on the macro level are central in

literature looking at the role of the institution and proposing theoretical and normative (re)conceptualizations of the role of the university (e.g. Delanty 2001, Calhoun 2009, Strain, Barnett et al. 2009, Barnett 2011). Further, they are essential in the below elaborated literature looking at the academic profession and empirically exploring experiences of academic work.

At the core of the discussions about the emerging role of the university and the described changes are an increased intertwinement and a blurring of boundaries between the academy and the surrounding society in the knowledge society. In discussions and descriptions of the current context, emerging institutional and epistemic conditions are contrasted with and proposed to be threatening to the traditional notion of

members of the academic profession (...) belonging to a largely independent and guild-like community, invoking powerful doctrines such as academic freedom and autonomy, community of scholars, collegial authority and a strong emphasis on the determination of goals, and on the management and administration of their institution (Enders and de Weert 2009: 2).

In discourses on the university, these changes are on the one hand understood to undermine the core purpose of the university to freely pursue knowledge (e.g. Calhoun 2009, Barnett 2011) and on the other hand to pose opportunities for the university to play an important role in and for the public (e.g. Delanty 2001, Kogan and Teichler 2007).

From the literature, two distinct though related forms of changes to the epistemic condition come to the fore. It seems important both to hold them apart, and to understand how they are related. First, there are the epistemic conditions (and transformations) described as increased intertwinement of the university and its surrounding society, and social contextualization of knowledge. In the knowledge society, knowledge spills over and is distributed into the public, and the public talk back, and expects the university to be relevant and useful (Nowotny, Scott et al. 2001). Second, epistemic conditions are described related to changes in the institutional conditions, structures, and governance, such as funding, auditing, competition, and employment practices (Calhoun 2009, Maassen 2014). This distinction is crucial to recognize why, for example Martin (2003) questions whether the current epistemic context poses a radically new condition. This questioning refers to the first form of change, the epistemic condition related to the increased intertwinement of university and society. Martin (2003) suggests that, if adopting a more long-term historical perspective,

then what we are witnessing appears to be not so much the appearance of a new (and potentially worrying) phenomenon, but more a shift back towards a social contract closer to the one in effect for much of the period before the second half of the twentieth century (Martin 2003: 7-8).

During this period, universities were funded "...with a clear expectation that the work [would] result in specific benefits" (Martin 2003: 7-8); and university academics understood their work as such. This distinction and nuancing of the changes in the macro epistemic context opens up for discussing the images and experiences of taking responsibility that are discerned in the present study in light of the different forms of, and perspectives on, changing conditions of academic work.

Still, concern that current conditions threaten established models of higher education institutions come to the fore in literature addressing the role and responsibility of the university (e.g. Barnett 1990, Readings 1996, Barnett 2011, Halvorsen and Nyhagen 2011, Macfarlane 2011). Within different national contexts, the arrangements and conditions of the university differ. Literature claims, however, some common realities that influence higher education to various degrees: massification of higher education, increased specialization and differentiation, increased financial constraints and demands for accountability and responsiveness to societal needs, market-like approaches to higher education, and increased international cooperation and competition (Enders and Musselin 2008: 145). While tendencies concerning competition, market-like approaches, and demands for accountability are more pressing in other countries than in Norway (Vabø 2011), these tendencies are also central to descriptions of the Norwegian context (Bleiklie, Ringkjøb et al. 2006, Enders and Musselin 2008, Kjeldstadli 2010, Vabø 2011, Kalleberg 2011a).

One may ask, like for example Shinn (2002), whether the above described features account for real changes, or if the discussion is more or less rhetorical (and political). However, the images of the relation between the academy and society provide powerful narratives and imaginaries which expectedly influence not only supranational and national policy levels, but also management at the institutional level, and the everyday life and work of the individual academics (Strassnig 2008). Some features of this context seem to be of particular relevance to the present study, and are therefore further described in the following. First, I describe the notion of the *social contextualization of research*, which is may alter both the epistemic and the societal conditions of knowledge production (e.g. Barnett 1990, Delanty 2001, Bechmann, Gorokhov et

al. 2009), as the university is conceived as an enterprise which has to align its activities with societal demands and interests (Strassnig 2008: 31). Second, I describe how the *expansion and massification* of higher education may lead to new demands and expectations as well as a new and less clear contract between the university and society (Helsvig 2011, Teichler and Höhle 2013). Third, I describe perspectives on the emergence of new structural and institutional conditions, following from what is often labelled *New Public Management* (e.g. Henkel 2009, Vabø 2011) and a new social contract following from this transformation (Maassen 2014).

2.1.1 The knowledge society and “responsibilization” of the university

As introduced above, the current context is often labelled ‘the knowledge society’. The term refers to a situation where scientific and technological knowledge penetrates all spheres in society (e.g. Bechmann, Gorokhov et al. 2009), and where society depends more and more on knowledge, in economic production, political regulation, and everyday life (e.g. Knorr Cetina 1999, Delanty 2001). Further, the term captures a situation where knowledge, and also epistemic practices and mentalities (Knorr Cetina 1999) are increasingly part of society. This means that knowledge developed in academic institutions is no longer confined to elites. It is publicly available, through for example mass education and information technology (e.g. Delanty 2001: 4-5). Arguably, this does not necessarily mean that all members of society know how to attain, or how to make and make use of knowledge, nor that it makes a valuable contribution to the public.

Several analyses from the last few decades argue that science is increasingly intertwined with other societal actors and their rationales. For example, Gibbons and colleagues (1994) find a ‘mode 2 knowledge production’, contrasting ‘mode 1’. They describe mode 1 as concerned only with developing knowledge for its own sake, not with application; as committed to internal rules and norms; and as taking place within academic contexts. Mode 2 on the other hand, they describe as concerned with solving practical problems; as more inclusive with regard to values and wishes coming from society; and as potentially taking place virtually everywhere (Gibbons, Limoges et al. 1994). Etzkowitz and Leydesdorff (1995) find that a shift is taking place from an industry–government dyad in the industrial society to a growing triadic university–industry–government relationship, which they label the ‘triple helix’. Jasanoff (2004) proposes the phrase

‘co-production of science and society’ to capture “...that the ways in which we know and represent the world (both nature and society) are inseparable from the ways in which we choose to live in it” (Jasanoff 2004: 2). In this situation, neither science nor society can be understood without the light from the other.

Further, the social contextualization of academic research is described to imply that a democratization of knowledge takes place within ‘knowledge societies’, in the sense that the government and the public no longer assign the same authority and autonomy to academics (Henkel 2007). Further, Henkel argues that the mode of knowledge production is changing, in the sense that models of a linear connection between science and application/technology and a clear division of labor are being replaced by more complex and interactive roles and relationships with many connections and feedback loops (Henkel 2007: 192-193). Also, the literature highlights that, within the knowledge society, knowledge and knowledge production are no longer controlled solely by “the mode of knowledge itself” (Delanty 2001: 152), as it is both used and produced in social and cultural contexts. This implies that university academics and the knowledge they produce are influenced by various forms of knowledge and cultural representations available in society, as well as the voices of the members of society “speaking back” to science (Nowotny, Scott et al. 2001). Henke further emphasizes that the boundaries between science and society are renegotiated and becoming more porous (Henkel 2007). In contrast to assumptions that academics pursue truth and extend knowledge for its own sake and that they do this autonomously and under collective self-regulation in a bounded world, academe is increasingly seen, both by academics themselves and by external stakeholders, as embedded in the larger social and economic system. In turn, knowledge is evaluated in terms of public utility, wealth creation, and market competitiveness (Henkel 2007: 191), and academe understood as an enterprise which has to align its activities with societal demands and interests (Strassnig 2008: 31).

In this context, the public is no longer seen as a passive recipient of scientific knowledge, and academic inquiry is no longer seen as a bounded world directed and propelled (only) by its internal norms and values, but as contextualized (Nowotny, Scott et al. 2001). “Whereas science traditionally has been regarded as an inner directed, intellectual self-propelled enterprise that has

‘spoken’ to society, it now increasingly finds itself integrated in society, embedded in a context that increasingly ‘speaks back’ to science” (Bleiklie and Byrkjeflot 2002: 523).

It is contested, however, whether such a radical epistemic shift has taken place within the university (Becher and Trowler 2001, Martin 2003, Felt and Stöckelová 2009). Martin suggests that, rather than being a transition from one mode of knowledge to the other, it is a question of “a shift in the balance between the already existing forms” and that this shift is “merely a returning to a balance between the two modes exhibited in earlier eras” (Martin 2003: 13). In 2003, Nowotny and colleagues re-conceptualized the concept of mode 2 knowledge, describing it as an agora, i.e. “the problem-generating and problem-solving environment in which the contextualization of knowledge production takes place” that is “embodied in people and projects” (Nowotny, Scott et al. 2003: 192). The discussion on emerging forms of knowing and scholarship is still central to the literature on academic institutions. The continuous discourse suggests that the boundaries between science and society are seen to be undergoing negotiations and (re-)interpretations. This situation is argued to challenge traditional and valued responsibilities; specifically, the focus on instrumental purposes and contributions to the knowledge economy, in the form of research-based applications or technically skilled professionals, is feared to suppress other expectations and purposes, like the liberal ideal (e.g. Barnett 1990, Kalleberg 2011a), academic autonomy (e.g. Ylijoki 2003, Calhoun 2009, Rinne, Jauhiainen et al. 2013), ethical responsibility (e.g. Strain, Barnett et al. 2009), public engagement (e.g. Fryer 2005, Zelizer 2011, Kalleberg 2011a), professional responsibility (e.g. Solbrekke and Englund 2011), and the cultural role of the university (e.g. Readings 1996, Delanty 2001, Barnett 2011, Kalleberg 2011a).

Within this context, *responsibility* has become an important buzzword, and a shift can, according to Strassnig (2008: 28ff), be observed from top-down regulation and juridical accountability, toward ‘responsibilization’, as moral governance of research. A simple orientation along a true/false dimension is replaced, he argues, by a concept of science as a citizen in civil society, and ‘responsibility’ is used as a concept that seeks to align the interest of science with societal values (Strassnig 2008: 29). Academic researchers are within this frame seen as social actors expected to assume a reflexive moral capacity beyond mere compliance with legal rules, and to establish “a ‘community’ with ‘responsibilities’ toward an imagined collective (society) that

shares the same values” (Strassnig 2008: 29). To illustrate this situation, Strassnig contrasts an example of how the European Commission addresses responsibility to traditional academic norms: While within academia the scientific norms has been expressed, e.g. in the seminal work of Merton ([1942] 1973), as in itself ensuring responsible research, in contrast the *European Charter for Researchers* issued by the European Commission in 2005³ and signed by several of the Norwegian universities (including the University of Oslo where the present study takes place), requires more direct feedback to society. The charter states, under the heading ‘Professional responsibility’, that “Researchers should make every effort to ensure that their research is *relevant to society*” (EuropeanCommision 2005: 11-12). According to the charter, research is no longer regarded as a self-legitimizing activity of basic knowledge production, “but rather as an enterprise which has to align its activities with societal demands and interests” (Strassnig 2008: 31).

While a knowledge society where the university no longer has the status as sole controller of knowledge production may be interpreted as a condition that undermines the role of the university (e.g. Barnett 1990), the societal role of the university is also described as potentially strengthened within such context. For example, Delanty argues that the university “becomes more and more drawn into the communicative structure of society” (Delanty 2001: 152). Universities can therefore play an important role in the knowledge society, not as the exclusive site of expertise, but as a site of public discourse and a site for educating future professionals and citizens. This implies that the university not only responds to social change, but proactively initiates social change (Delanty 2003: 81). Within such a perspective, the societal role of the university shifts from being understood as a one-way enlightener of the public sphere, to being understood as a dialogical, two-way communication taking place in the public.

2.1.2 Expansion and massification of higher education

The expansion and massification of higher education is central in the knowledge society. The term *massification of higher education* refers to the transition from small elite institutions for the few and privileged, educating the future societal elite for important societal functions, to large

³ <http://ec.europa.eu/euraxess/index.cfm/rights/europeanCharter>

mass-institutions educating large shares of the population (e.g. Becher and Trowler 2001, Helsvig 2011, Teichler and Höhle 2013). This meant that higher education institutions grew in both size and number. Further, it meant that the societal role and the identity of the institution needed to be redefined. Legitimacy and trust had to be gained in new ways, in response to external demands that the university adapt to societal needs, that it makes priorities to this effect, and that it implement new forms of management (e.g. Helsvig 2011: 9-11). Furthermore, mass-higher education means that a large share of the public is, has been, or will be members of the institution, in the role as students. It also means that a large share of the public have a higher education degree within a specialized field of knowledge.

In addition, the general growth in the higher education sector has “fueled the massification of academic research” in terms of a considerable growth in numbers of faculty (Enders and Musselin 2008: 128). According to Teichler and Höhle (2013) and Helsvig (2011: 9), this development has led to a new and less clear social contract for academic institutions (see also Chapter 5). Seemingly, the massification of higher education has had a paradoxical influence on the academic profession in Europe: While its importance has grown as the creator and disseminator of scientific knowledge, and as the shaper of knowledge within all other professional areas, the academic profession has experienced a loss of status, increased workload, and reduced professional self-regulation (Teichler and Höhle 2013: 2). While higher education has been for the masses for nearly half a century, it remains a topic in the literature on higher education, suggesting that the institution is still in the process of defining its role in the knowledge society.

As universities grew, so did their budgets, and new governance systems were developed to ensure that (often public) resources were well spent. Universities has become increasingly questioned, both from external actors and from actors within the university, in terms of organization, function, and contributions (Teichler and Höhle 2013, and see following section) New Public Management and new social contract following from new models of governance in the higher education sector is described in the following section.

2.1.3 New Public Management and a new social contract

New public management, with its new systems of governance and its managerial logic, is highlighted in much literature as a major new condition of academic work (Ylijoki 2003, Musselin 2007, Enders and de Weert 2009, Halvorsen and Nyhagen 2011, Helsvig 2011, Hyde, Clarke et al. 2013, Rinne, Jauhiainen et al. 2013, Maassen 2014). Further, it is argued that the recent governmental university reforms can be understood as part of a search for a new social contract between the university, political authorities, and society at large (Gornitzka, Maassen et al. 2007, Maassen 2014). Maassen defines a social contract as

a fairly long-term cultural commitment to and from higher education, as an institution with its own foundational rules of appropriate practices, causal and normative beliefs, and resources, yet validated by the political and socio-economic system in which science is embedded (Maassen 2014: 33).

While previously the social contract was understood as a broader “gentlemen’s agreement” on roles and responsibilities, Gornitzka and colleagues (2007) find it to be increasingly seen as a formal, and primarily economic agreement. The official arguments behind the reforms in the governance of national universities are that the university, while recognized as a core institution in society, is not performing optimally (Maassen 2014). For example, the European Commission accuses universities of isolating themselves from society, and not addressing the role and nature of what they should contribute to society (European Commission 2003: 22).

The expectations facing the university in terms of responding to- and engaging actively in societal needs through educational- and research activities, refer in particular to the universities’ contribution to the national economy (Stensaker and Harvey 2011). For example, Stensaker and Harvey describe a global trend of increased pressure on universities to meet the demands of governments and other stakeholders to stimulate economic growth. Empirical studies (further elaborated in the following section) in the European context (e.g. Brennan 2007, Henkel 2009, Macfarlane 2011, Teichler and Höhle 2013), and more specifically the Norwegian context (e.g. Michelsen and Aamodt 2007, Solbrekke 2008, Vabø 2011) suggest that, in recent years, politicians and other actors external to the academic institution have become increasingly involved with the purpose and function of higher education institutions. In particular, these studies find a rhetoric of global competition, of efficiency and profitability, and of the “the entrepreneurial university” (see e.g. Clark 1998, Barnett 2011) as an “instrument for national

political agendas” (e.g. Maassen and Olsen 2007) aiming toward internationally competitive knowledge economies (see e.g. Halvorsen and Nyhagen 2011). Performance indicators and quality reviews are implemented to assure such contributions, and universities must compete in international markets for students, funding, and academic staff. Further, the trend includes urging universities to become more business-like, introducing new regulations between the state and the university, with increased use of contracts which may be defined as a new ‘contractualism’ (Rawolle, Rowlands et al. 2015).

The way this looks within the current context may seem paradoxical. On the one hand, as described above, a responsabilization takes place in the sense that universities are faced with a form of moral governance where they are expected to align their interests with those of the broader society. On the other hand, universities face top-down accountability demands (elaborated below). Both sides to the development come through as related to the increasing globalization and rising international cooperation and competition (Enders and Musselin 2008: 145). Both institutions and nations (are perceived to) compete on the international market of the knowledge economy, and both research and education are seen as central in this competition. In this context, a discussion is taking place about the redefinition of the university’s identity as the central knowledge institution in the knowledge society, where academic self-governance has been replaced by more top-down management practices in many higher education systems (Enders and Musselin 2008: 126). This new arrangement contrasts the previous one, characterized by a relatively open set of multiple goals and the strong influence of academics on the determination of goals. While institutional autonomy has been enhanced, it is pointed out (e.g. by Maassen 2014) that, as a consequence of the accountability demands that have accompanied the enhanced institutional autonomy, a new structure of leadership, management, and administrative functions have developed at the university. Further, Maassen finds that these functions to a large degree are oriented outwards, toward political actors and bureaucratic agencies rather than toward the academic domain within the university. The actions taken by actors in these positions influence on the experience of academic work, as described in Section 2.2 below.

In the literature, managerial accountability comes through as a central aspect of the new system of governance (e.g. Green 2011, Maassen 2014, Solbrekke and Sugrue 2014). When used related

to institutions of power and governance, the term *accountability* often has positive connotations in terms of holding strong promises of fair and equitable governance (Bovens 2007: 449), and of efficiency, monitoring, and transparency (Evans 1999). However, a specific ‘logic of accountability’ (Solbrekke and Englund 2011) has developed within the framework of new liberalism and new public management (Power 1997, Green 2011, Solbrekke and Sugrue 2014). Green (2011) defines this ‘managerial accountability’ as a logic that assumes that results will improve if controlled against politically predefined and universally applicable standards (Green 2011: 54). In the following, the term *accountability* refers to this managerial logic (see also Section 2.2.2 below, where the term is further elaborated with regard to academics’ experiences of being held accountable).

This managerial form of accountability has come to be associated with mechanisms of control (Enders and Musselin 2008). Literature portraying current conditions of academic work as influenced by this accountability logic stresses that the last decades have witnessed a general expansion of both the forms and sources of control within the university sector, such as various types of external reviews, institutional assessment devices, national evaluation procedures, and competitive international ratings (e.g. Solbrekke and Sugrue 2014). Within this environment, academics are not only expected to contribute to science and the development of their discipline, but they are also expected to contribute to the overall performance of their university (Enders and Musselin 2008).

While the most visible and far-reaching changes in the university are perhaps not in the nature and organization of academic activities, but in the development of an executive structure which in many respects is more connected to external socio-economic and political actors than to the academic domain (Maassen 2014), the research literature suggests that these changes also influence academic work and how it is experienced. Thus, it serves as a relevant backdrop for understanding the participants’ experiences and imaginaries of taking responsibility toward the public that come to the fore in the present study.

The above perspectives all underline the increasing societal contextualization of research and its outcomes. Perspectives from this literature have come to play an important role in current discourses on academic institutions. However, as mentioned above, critics (e.g. Becher and Trowler 2001, Shinn 2002, Felt 2009a) argue that the empirical grounding for diagnoses that

propose such radical discontinuity in terms of how knowledge is produced within academic research is not that strong. Thus, while this wide and multilayered debate focuses on the interrelatedness and on the “new” confronting the “traditional” visions of the university, questions remain regarding whether this accounts for real changes, or if it is more or less rhetorical. Still, the new images of what the university is in relation to society, and of what society is in relation to academic work within the university, provide powerful narratives and imaginaries which expectedly influence academic work and how it is experienced. The following section reviews empirical studies of how the current conditions of academic work are experienced by academics themselves. These studies touch upon issues relevant and related to the question of how responsibility toward the public is experienced and imagined. While academic work and how it is conceived by academics themselves has, until recent years, been rather underexplored, a growing body of research explores academic work from the viewpoint of academics themselves. The present study contributes to this emerging literature.

2.2 Experiences of academic work within the current context

How the above described tendencies influence the ways academics within the university experience their work are relevant to the question of how they experience and imagine taking responsibility toward the public. A growing body of literature explores how the macro epistemic changes are experienced, lived, translated, and performed by academics. This literature provides crucial insight into how the current context of academic work is experienced by university academics. In particular, two large international and comparative studies have approached the question of academic work within the current conditions from the viewpoint of academics. The first study is entitled *Knowing and Living in Academic Research. Convergence and heterogeneity in research cultures in the European context* (abbreviated the (KNOWING project) (see Felt 2009a). Based on qualitative interviews, this study investigated “...the complex and multilayered relationships between researchers, knowledge production and institutional contexts under changing research conditions” (Molyneux-Hodgson 2009). The second study is entitled *The Changing Academy and the Changing Academic Profession* (abbreviated CAP) (see Kehm and Teichler 2013, Teichler, Arimoto et al. 2013). The CAP study focused on the new and rising trends and challenges facing the academic profession in the 21st century. Drawing on survey

data from 19 countries worldwide, CAP explored how the changes in the higher education context are experienced by academics. Publications leading up to the study (Kogan and Teichler 2007, Enders and Musselin 2008, Enders and de Weert 2009) are also included in the review. The following review includes other relevant studies as well.

In this literature, three areas have come through as particularly relevant to the question of how academics experience and imagine their responsibility toward the public: 1) the experiences of increased expectations with regard to being relevant and useful, 2) the experiences of being held accountable, and 3) new forms of social agency seem to be emerging. The following sub-sections elaborate experiences related to these areas.

2.2.1 Tensions between external expectations of relevance and usefulness and academic autonomy

Within the knowledge society, academic work is to an increasing extent expected to be relevant and useful (Kehm and Teichler 2013). Literature showing new kinds of expectations with regard to the usefulness of academic work point to experiences of utilitarian and instrumental purposes gaining strength (Brennan 2007, Kogan and Teichler 2007, Barnett and DiNapoli 2008). Brennan (2007) conceptualizes this as a shift within the university from ‘scholarship of discovery’ to ‘scholarship of application’. In the “traditional role,” the highest goal within the academy “was to create fundamental knowledge” (Kogan and Teichler 2007: 10). Now academics find that “increased expectations from society and notably the perception of knowledge as the most vital resource of contemporary societies have both expanded the role of the academy and challenged the coherence and viability of the traditional academic role” (Kogan and Teichler 2007: 10). However, academics are also found to (partly) resist such expectations, based on the more traditional understanding of the intrinsic value of developing new knowledge, and its enlightening and liberating purposes (Brennan 2007, Kogan and Teichler 2007).

Related to the expectation to be useful, academics experience that they are expected to produce knowledge that is relevant for outside actors, or the larger society (e.g. Brennan 2007, Griebling and Shaw 2011). Still, experiences of pressure for greater relevance are not all that new; moreover, such expectations are not necessarily experienced as malignant (Brennan 2007). The

experience of expectations of relevance is not new; rather, the new aspect concerns experiences of who is able to define relevance, “relevance for whom,” and the “mechanisms through which the pressures for relevance come to impact upon individual academics” (Brennan 2007: 21). For example it is being argued that “the market” has taken over as the important stakeholder, as the state has surrendered its ownership, leaving the university with the forces of the market (e.g. Strain, Barnett et al. 2009, Barnett 2011). Furthermore, distinctions between the state and the market are experienced as becoming blurred, as market mechanisms and principles are incorporated into public bodies and management (Henkel 2007). Thus, the actions required of the individual academic in order to fulfill the expectation to be relevant are experienced as far from clear (Brennan 2007: 22). Academics respond to the requirements in a variety of ways ranging from resistance, to subversion and compliance, to enthusiastic embrace:

For those who would stress the autonomy of universities and academics and their “apartness” from the problems of the day, the various pressures to become more relevant to society may indeed be worrying. However, for those who would stress the important contribution that universities can make to the “public good” these pressures – reflecting growing political and public awareness of the “uses” of universities – may actually be welcomed by many academics (Brennan 2007: 27).

While much literature focuses on how the current conditions challenge the academic profession and its traditional role, the new conditions may also be experienced to represent possibilities in terms of having an influence on society. As argued above, with reference to Kogan and Teichler (2007) and Delanty (2001), the role of the university is (potentially) expanded under the current conditions of the knowledge society. However, there is an important distinction to be made, and a possible tension to be handled, between *responsiveness* to expectations on the one hand, and *proactive engagement* and contributions to setting the agenda on the other (Brennan 2007). Meanwhile, empirical studies of the academic profession indicate that pressure on higher education for greater responsiveness is experienced as a restraint on the possibilities for proactive engagement (e.g. Brennan 2007).

Tensions between external expectations and academic autonomy come through as central to how the current conditions are experienced. Autonomy has traditionally been upheld as a central value and condition in academia, and the university understood as an institution that hosted and protected autonomous scholarship (e.g. Brennan 2007, Musselin 2007). Today, tensions between external expectations and the university as an autonomous institution protecting autonomous

scholarship and academics comes through as central to experiences of academic work. On the one hand, academics are increasingly expected to produce knowledge that is relevant and useful for the knowledge society while, on the other hand, they are viewed to realize this expectation best if they do not strive to fulfil it, but rather exert their freedom (Teichler and Höhle 2013). Related to this, a need to draw boundaries anew is described as part of the experience. The present study shed light on how boundaries and balance between being socially relevant and useful, and pursuing academic work autonomously are experienced and imagined.

Increased focus on efficiency in the new social contract is experienced by academics to introduce new ‘technologies of control’ (Rinne, Jauhiainen et al. 2013). Several recent studies draw attention to changing identities of academics, and in particular to challenges to an identity as autonomous actors within an autonomous institution, due to emerging tensions between external expectations and autonomy (Ylijoki 2003, Barnett and DiNapoli 2008, Clegg 2008, Henkel 2009, Halvorsen and Nyhagen 2011, Clarke, Hyde et al. 2013, Teichler and Höhle 2013, Solbrekke and Sugrue 2014). According to Taylor, identity is the horizon, the commitments and the identification from which we decide what we value and what we wish to pursue (1989: 27). In line with this perspective, I find that identity and its conditions are central to the question of experiences and imaginaries of responsibility, since responsibility arguably concerns what we value and what we commit to.

Identities are grounded in defining communities (see e.g. Henkel 2009, 2011). As the source of key values and a sense of worth, as well as the provider of the language and concepts with which the members communicate (and thereby develop and transmit their understanding of the world, individually and collectively), the epistemic communities to which academics belong are central to identity (Henkel 2011: 65). Henkel explores, from the viewpoint of academics, the context in which academics’ professional and institutional identities are constructed, and finds that it has changed fundamentally in the last thirty years (Henkel 2009, 2011). The experiences of academics suggest that “the conditions which have long enabled the formation and maintenance of stable and legitimizing academic identities have been transformed” (Henkel 2007: 191). Henkel’s analysis shows that, as conditions for the construction of identity, the current tendencies leave academic identity constructions with the challenge of dealing with tensions and ambiguities (Henkel 2011). Also, external claims on the functioning of the university mean that

developing a professional academic and institutional identity “...is no longer a largely internalist process, shaped within a protected and bounded nexus of communities of loosely coupled institutions” (Henkel 2011: 81). The above described logic of managerial accountability is experienced as central in this regard. While ostensibly given extensive institutional autonomy, universities are to an increasing degree held accountable through quality and performativity systems defined by politicians and administered by bureaucrats (Solbrekke and Englund 2011, Vabø 2011, Maassen 2014).

Part of the academic experience is the increasing demands for external financing, which means that external stakeholders take part in defining which research questions are worth pursuing (e.g. Enders and Musselin 2008, Henkel 2009, Vabø 2011). This is further experienced by academics to weaken autonomy, as the sources of funding have a stake in the expected outcomes of research. In addition, it is pointed out that increased external funding of research may weaken the nexus between research and teaching (Enders and Musselin 2008: 130). There is probably also the risk that research may be disconnected from other tasks emanating from the bundle of roles that the university academic traditionally holds, as researcher, teacher, expert, disseminator, debater, and member of the community (e.g. Kalleberg 2000).

The above described studies suggest that the academic identity is changing, as they in particular note changes to the identity as an autonomous actor within an autonomous institution. Another aspect of academic identity pointed out in the literature, is changes in the identity as societal actor. In the wake of the shift from elite to mass institutions, increased differentiation, specialization, and diversification, and a development from the academic expert authority to a member of the knowledge society academics seem to take on a new form of societal agency (e.g. Jensen and Nygård 2000, Jensen 2003, Karseth and Solbrekke 2006). The following sections explore both these aspects of the academic role and identity, first by looking into experiences of being held accountable and then by looking into new forms of social agency.

2.2.2 Being held accountable

The distinction made by Solbrekke and colleagues between accountability and responsibility is useful in illuminating why accountability is experienced as in tension with the traditional academic role (Solbrekke and Heggen 2009, Solbrekke and Englund 2011, Solbrekke and Sugrue 2014). As indicated above, the term *accountability* has, during the last decades, been strongly linked to audit systems and the dominance of a managerial logic within New Public Management and the dominance of neo-liberal discourse (Solbrekke and Englund 2011). With reference to Green (2011), I described this concept above as “managerial accountability”. Accountability in this sense entails answering *reactively* to predefined (by politicians and bureaucrats) standards and criteria. Responsibility, in contrast, is *proactive*, in the sense that it is taken on academics’ own initiative; furthermore, the academics themselves develop the standards and criteria, relying on their abilities of critical deliberation and professional, specialized judgment (Solbrekke and Englund 2011: 855). Distinguishing between accountability and responsibility enables recognizing and articulating the difference, and tension, between *being professionally responsible* and *being held accountable*. This echoes the distinction proposed by Brennan above with regard to academic work being relevant for society, between *responsiveness* to expectations, on the one hand, and *proactive* engagement and contributions, on the other. Within the logic of accountability, ‘good services’ are guaranteed by means of measuring and ‘accounting’ instruments controlling predefined outcomes, rather than by relying on professional discretion and proactive initiative to fulfil responsibilities (Solbrekke and Englund 2011: 855). The line of action, as well as the outcomes of responsible action cannot always be predicted or predefined, and are not always measurable in terms of clear and predefined descriptors or indicators. However, the logic of accountability and the way this logic serves as a structuring feature within academic institutions emphasize practices and steer work toward aims that “...ignore the complexity of professional responsibility” (Solbrekke and Englund 2011: 853).

Further, while accountability implies a managerial logic where actors other than the academic community (e.g. funding agencies⁴/authorities) make decisions about what is important, the taking of responsibility depends on a “contract” between the academic profession and its surrounding society where “a certain autonomy is assigned by society to professions” (Solbrekke and Sugrue 2014: 3). However, as noted above, academics experience their autonomy as being undermined in a situation where the logic of managerial accountability and its emphasis on certain types of performance are gaining strength. In turn, this will expectedly influence experiences of being allowed the space for professional discretion/judgment needed to be able to take responsibility.

2.2.3 New forms of societal agency

Some studies indicate that the identity as an academic in society takes on new forms within the new conditions (Jensen and Nygård 2000, Jensen 2003, Karseth and Solbrekke 2006). The participants in these studies are students within higher education, but I find the studies nevertheless contribute an important perspective on the relation between changing conditions and changing “modes of responsibility”. This perspective illuminates the importance of seeing the experiences and imaginaries of responsibility toward the public in light of the current context.

In addition to experiences of tension between external (accountability) demands and autonomy described above, three experiences stand out as central illustrations of the relation between changing conditions and identity as an academic in society. First, within the knowledge society where higher education is commonplace and knowledge in principle is accessible to all, an

⁴ A current example from Norwegian public discourse illustrates the experience: In December 2014, a debate took place about the role of the National Research Council and the institutional autonomy of the university (Morgenbladet [a weekly Norwegian newspaper], week 49, 2014). Norwegian university academics expressed their concerns about the National Research Council acting as the long arm of the government in steering (through funding decisions) research towards aims of solving relatively short-term societal challenges at the cost of free basic research with its long-term benefits both in terms of excellence in research and unexpected beneficial outcomes. Above, Brennan points out that it is not a question of whether or not relevance is an adequate measure, but a question of “who defines relevance” and of “relevance for whom?” This debate critiqued the situation in which the National Research Council rather than academics themselves defined relevance. Specifically, critics argued that this situation imposed on academic autonomy and could result in poorer research as well as lack of research in important areas.

identity as a member of a paternalist elite is no longer understood to be appropriate; thus, it is no longer experienced as the role of the academic to provide authoritative answers to societal questions (Jensen 2003). According to the findings from the studies of Jensen and Nygård (2000), Jensen (2003), and Karseth and Solbrekke (2006), this does not mean, however, that members of the academic community are not concerned with responsibility toward the public. These studies point out that what may at first glance appear to be a lack of a sense of responsibility is rather a changed notion of responsibility, due to changed conditions. Instead of seeing themselves as being responsible as an elite authority, academics take responsibility in the form of engagement and dialogue in a knowledge society where scientific knowledge is distributed through massified higher education and generally available in society (e.g. Jensen and Nygård 2000, Jensen 2003, Solbrekke 2007).

The second experience of societal agency is related to experiences of communities. As noted above, communities are essential for the construction of identities (Henkel 2007). Increased differentiation and specialization within the university contribute to the development of autonomous subcultures that live side by side (e.g. Jensen and Nygård 2000). What is particularly noteworthy in terms of the question of responsibility toward the public, is that responsibility requires agency, which requires an identity as someone whose actions, knowledge, and judgments matters. Differentiation and specialization, however, make it more difficult to find a common ground in which to place an identity as someone whose actions matter because it may be difficult to see how the very specialized work one is performing within the university may have societal impact (Jensen and Nygård 2000). Jensen and Nygård call for further research into this issue. They point out that, while a vocabulary that is nuanced enough to capture and deal with challenges within the disciplines and the specialized areas of knowledge needs to be located within the practical context of the various fields, a more common vocabulary for dealing with responsibility within the community is also needed (Jensen and Nygård 2000). The present study contributes by shedding light both on discipline-specific vocabularies and a vocabulary of responsibility toward the public common across disciplines.

The third experience regarding societal agency concerns a process of diversification with regard to forms of academic employment taking place within the university (Enders and Musselin 2008). The bundle of roles that the university academic traditionally holds as researcher, teacher, expert,

disseminator, debater, and member of the community (e.g. Kalleberg 2000) is undergoing greater division and specialization; for example, some hold research positions, while others hold teaching positions. Even specialization within these roles is emerging, as some academics are employed to teach only lower grades, or to develop courses but not teach them (e.g. Enders and Musselin 2008). Although less present in Norway than in other countries in Europe and the US, this development is emerging in the Norwegian context (Vabø 2011, Kalleberg 2011a) (see also Chapter 5). Within academic institutions, both in Norway and in other countries, especially those within the Humboldtian tradition, the nexus between research and teaching has traditionally been central (Michelsen 2010, Vabø 2011). Further, this nexus has also been understood as part of a larger bundle of roles that includes the roles of disseminator and debater in the public dialogue and of being a member of one's academic community (Kalleberg 2000). In terms of responsibility, this would expectedly imply that taking responsibility is part of all the roles in the bundle. The present study illuminates this point.

In summary, literature describing the current context of academic work suggests a situation where the role of the university is undergoing a process of re-interpretation with regard to its relation to the public. In the literature, shifts and changes are described that are relevant for capturing and interpreting the experiences and imaginaries of taking responsibility that come to the fore in the present study. In particular, the literature illuminates the relation between the university and its surrounding society as a macro epistemic condition; and how this relation influences how this work is understood and experienced. This is helpful for interpreting the experiences and imaginaries of taking responsibility toward the public that emerge in the present study. Additionally, the present study sheds light on the described context and thus provides insights about the current conditions as 'responsibility conditions'. The analytical frameworks that I rely in in this study are central to attain this contribution. These frameworks are elaborated in the following chapter.

Chapter 3: Analytical frameworks

To explore how academics themselves understand and experience taking responsibility toward the public, I have chosen a data-driven, bottom-up approach that focuses on understandings and experiences. In the previous chapter, I drew attention to a range of aspects that previous research find to influence academics' understanding and experience of their work within the current context. In order to interpret and understand the participants' understandings and experiences, the framework of analysis must incorporate these aspects.

To meet this need, I combine two approaches to the analysis. In the first approach I use the analytical framework of *phenomenography*, which is a methodological approach aimed at capturing a phenomenon from the viewpoint of the experiencer. In the second approach I use the framework of *epistemic living spaces*, which is a conceptual framework from social studies of science, developed to capture academic researchers'

individual or collective perceptions and narrative re-constructions of the structures, contexts, rationales, actors and values which mould, guide and delimit their potential actions, both in what they aim to know as well as in how they act in social contexts in science and beyond (Felt and Fochler 2010: 4-5).

In the following, I describe the two frameworks and how I use them in the analysis.

3.1 Phenomenography: capturing the range of responsibilities and ways of taking responsibility

The fundamental idea of phenomenography⁵ is that, in order to make sense of how people handle situations, we need to understand how they experience the situation (Marton and Booth 1997: 111). The approach is developed to capture the various ways in which actors experience a problem, task, or situation (Marton 1981, Svensson 1997). In the present study, I use phenomenography as the analytical approach in the first step of analysis. The aim of this analysis

⁵ Phenomenography was developed as a methodological approach by Ference Marton and colleagues at the University of Gothenburg from the 1970s. Ference Marton first used the term *phenomenography* in 1981 to refer to research already carried out as well as a suggested research program, with the aim to study people's conceptions (Marton 1981, Svensson 1997).

is to discern the variety of responsibilities toward the public and the range of ways of taking these responsibilities.

The object of study in phenomenographic research has traditionally been described as ‘variation in human meaning, understanding, and conceptions’ (Marton 1981) and more recently as ‘awareness or ways of experiencing’ (Marton and Booth 1997, Åkerlind 2005a). I find it important to emphasize that ‘understanding’ is always used in the experiential sense. Thus, experiences and understandings are inextricably intertwined. As such, the term *understanding*, which I frequently use in the present study, refers to *the way in which* responsibility toward the public is understood, rather than whether or not, or to which degree, it is understood.

A basic assumption within phenomenography is that various aspects are part of the way people experience (and understand) something. By discerning the various responsibilities and how these responsibilities are understood and approached, a detailed image emerges of how responsibility toward the public is understood and experienced to be taken. Further, a fundamental idea of the framework is that the aim of the analysis is not to discern the individual experience of each participant, but to capture the *collective experience*, by approaching the interviews as one pool of meaning (Åkerlind, Bowden et al. 2005, Åkerlind 2005a). Approaching understanding and experience as collective, I can capture the range of responsibilities and ways of taking responsibility that the participants understand and experience to be part of taking responsibility toward the public. Thus, I discern a wide range of details and nuances. This range of responsibilities and ways of taking responsibility combined are, within the framework of phenomenography, understood to provide a comprehensive picture of how the phenomenon is conceived by the participants in the study (Åkerlind 2005a).

While the unit of phenomenographic research is *ways of experiencing* something, the object of the research is the *variation in ways* of experiencing that something (Marton and Booth 1997: 111). In the present study, I take a distinct approach to the aim of variation; rather than aiming at discerning the range of conceptions, which is often an aim in phenomenographic studies, I aim at discerning the range of responsibilities toward the public, and the range of ways of taking these responsibilities (see Chapter 4 for further elaboration of this topic).

3.1.1 A second-order perspective on ‘ways of experiencing’

The distinction between the first-order perspective and the second-order perspective is crucial for understanding what phenomenography tries to do. Research from the first-order perspective aims to describe various aspects of how the world *is*, while the second-order perspective (which phenomenography takes) aims to describe people’s *experiences* of various aspects of the world. Marton (1981: 178) explains that “we orient ourselves towards people’s ideas about the world (or their experience of it) and we make statements about people’s ideas about the world (or their experiences of it)”. This explanation leads to another central assumption within phenomenography, namely the non-dualist ontology of conceptions, meaning that no distinction is made between the phenomenon as such and how it is experienced “because the experiential ontology of conceptions means that there is no other world to us than the experienced one” (Solbrekke 2007: 69). Building on constructivist approaches, ‘ways of experiencing’ a phenomenon are seen as relational, in the sense that they are constituted in the person–world relation (Marton and Booth 1997: 108). This perspective on ways of experiencing is coherent with the notion of epistemic living spaces (Section 3.2. below) as constituted in perception, as a blend of physical features, cultural arrangement, and personal perception.

3.1.2 The experiencer as actor

Further, within the framework of phenomenography, the experiencers are not seen as passive observers of the world, but as actors approaching the tasks before them based on how they understand the situation. A central contribution of the present study lies in the approaching of academics as agents, the ones living and acting responsibility, within the current conditions. This contrasts many previous studies where academics are approached as subjected to, and translators and performers of, the current conditions. This notion of ‘experience’ means that it includes both the everyday notion of previous experiences, but also how responsibility something is *understood and approached* (Marton and Booth 1997). This coincides with the framework of epistemic living spaces, approaching academics not (only) as subject to the space they inhabit, but (also) as spatial agents who themselves demarcate and enact their epistemic living space. I further explain and elaborate this idea below (Section 3.2), in particular in the description of the spatial dimension of epistemic living spaces (Section 3.2.3).

3.1.3 A data-driven approach to explore how taking responsibility toward the public is experienced and understood

Emphasis on letting the data drive the analysis to allow variation to emerge from the interview material is central to the phenomenographic approach (Marton and Booth 1997, Åkerlind 2005a). In the phenomenographic step of analysis, data drives the analysis, and I discern the experiences and understandings of responsibilities and ways of taking responsibility without predefined categories. (However, the relation between data and theory is nuanced in Chapter 4). This approach supports the aim of the study to capture the way responsibility is understood and taken by academics in their everyday work. The process of analysis is further elaborated in Chapter 4.

The outcome of this analysis is a range of various ways of taking responsibility. Together, these ways of taking responsibility constitute how, on a collective level (i.e. within the group as a whole), taking responsibility toward the public is understood and experienced (Marton and Booth 1997: 117). The question arises: How can we understand where these images and experiences of taking responsibility come from and what they mean in light of the current context of academic work? Where the phenomenographic analysis stops, the analysis along the dimensions of epistemic living spaces allows me to further explore, interpret, and understand the experiences of taking responsibility toward the public.

3.2 Epistemic living spaces: understanding experiences and imaginaries of taking responsibility toward the public

The framework of epistemic living spaces is a theoretical and conceptual framework, used in the second step of analysis. The notion of ‘epistemic living spaces’ was coined by Ulrike Felt (Felt 2007). Thereafter the concept has been further developed by Felt and colleagues (see e.g. Felt (ed) 2009, Felt and Fochler 2010). See also Chapter 2.

The literature reviewed in Chapter 2 draws attention to a range of features related to academic work: expectations from society; structural, institutional, and epistemic conditions; issues related to time; and issues regarding identity and community. The further interpretation and

understanding of conceptions of taking responsibility toward the public discerned through the phenomenographic approach requires a perspective that encompasses and integrates the variety of themes characterizing current conditions of academic work. The concept of epistemic living spaces (e.g. Felt et al. 2009) provides such a comprehensive framework. Because the concept is developed to capture a complex phenomenon, and thus is inclusive to a range of themes on different levels, its definition is extensive and complex:

By epistemic living space, we mean researchers' individual or collective perceptions and narrative re-constructions of the structures, contexts, rationales, actors and values which mould, guide and delimit their potential actions, both in what they aim to know as well as in how they act in social contexts in science and beyond. This concept directs our attention to the efforts of researchers to stabilise, extend or protect the space they occupy socially and epistemologically, as well as institutionally (Felt and Fochler 2010: 4-5).

Within this framework, the five dimensions of epistemic living spaces capture the features of academic work that previous literature draws attention to. The dimensions are woven together in an inclusive and comprehensive framework, and thus support an interpretation and understanding of experiences and imaginaries within this complex and changing habitat. Also, the framework facilitates an analysis that illuminates the dynamic relations between the various aspects of taking responsibility, as well as the challenges and possibilities with regard to the taking of responsibility within the current conditions. By looking at the current conditions in light of experiences and imaginaries of taking responsibility that emerge in the present study, the analysis also illuminates the current conditions as 'responsibility conditions' (Felt 2015).

Stressing the aspect of *living* in academic spaces, the framework captures not only the formal rules and norms, or institutional structures and their change, but also the non-codified values and repertoires of practices (Felt 2009: 19). Further, the epistemic living space is not mainly about physical space, but refers rather to a symbolic geography in which academics experience and imagine themselves placed in, part of, and enacting. Epistemic living space is about what the work is about; what and who the work is for; and how the work is performed. But, it is also about the conditions they experience in terms of expectations from colleagues and from the institution, as well as from external actors; it is about forms of togetherness, and coherence and discrepancy between their imaginaries and experiences; and it is about where they do their work and about the temporal aspects of this work. These aspects of epistemic living spaces are captured in the five dimensions: epistemic, spatial, temporal, symbolic, and social. Further, the drawing of

boundaries is central to the notion of epistemic living spaces. In the following, I elaborate the reason for choosing this framework of analysis, before moving on to a more detailed description of the framework and how I use it in my study.

3.2.1 Understanding experiences and imaginaries in light of the current context

The changing conditions of the academic profession are central in research on higher education during the last decades (Chapter 2). I chose to use epistemic living spaces as an analytical framework for the present study based on the research interest of understanding experiences and imaginaries of taking responsibility toward the public in light of the current times of change and to illuminate the current conditions as responsibility conditions (Felt 2015). The concept of *epistemic living spaces* was developed as a conceptual framework for understanding academic work in the current times of change (Felt 2009a: 25). The concept offers the differentiated frame needed to trace the meaning of the macro trends for the individual academic in diverse and complex contexts (Felt, Fochler et al. 2012: 4). Furthermore, while concerned with change, one of the aims of epistemic living space is “moving away from a homogenised and homogenising vision of change (...) to a more subtle reflection on the variations in and multiplicity of research environments” (Felt 2009: 25).

In the context of the transition to the knowledge society, studies of knowledge cultures came to prominence in the 1970s within the new sociology of science (Knorr Cetina 2007: 361). The notion of culture is within this tradition used to capture a shared way of thinking and behaving, as well as sets of values, beliefs, and symbols that govern behavior. This cultural perspective on university life has revealed that “the university does not form a one-voiced homogeneous whole but a heterogeneous entity with many different ‘small worlds’” (Ylijoki 2000: 339, with reference to Clark 1987), constituting different ‘epistemic cultures’ (Knorr Cetina 1999). Building on the cultural perspective, but taking it one step further, Felt and colleagues explore epistemic living spaces. The concept resonates with Knorr Cetina’s concept of epistemic cultures (Knorr Cetina 1999), but is meant to capture the living spaces more fluid than the more or less tightly bound epistemic cultures (Felt, Igelsböck et al. 2012), and to include “beyond the epistemic, also the social, political, structural, temporal and institutional machineries” (Felt 2009a: 20).

The framework provides a more individual perspective than epistemic cultures, while also capturing the collectivized imaginaries of academic work. While focused on individual perceptions and collective experiences, Felt links these to global systemic changes and major structural developments that change the conditions of the academic profession (e.g. Felt 2009a: 20); as a result, the framework relates the individual experiences to the stories on the macro level. This contributes to the aim of the present study to understand the participants' experiences and imaginaries of taking responsibility toward the public in light of the current conditions, thereby illuminating possibilities and challenges to the taking of responsibility within these conditions.

Felt developed the analytical framework of epistemic living spaces within a social-constructivist tradition within the social studies of science. The social constructivist ontology of epistemic living spaces is adequate in the present study due to the aim of capturing how the actors themselves experience and imagine taking responsibility within their disciplinary context as well as within the more general context academic work (Chapter 2). In the way that a landscape is a combination of features in nature, cultural arrangements, and personal perception, so is epistemic living space a combination of actual features of the specific academic site, its cultural arrangements, and individual academics' understanding and experience of life in this place. However, while epistemic living spaces are individual in that sense, "...place is also closely linked to constructing and continuously reworking identity, performing memory and creating commonly shared values" (Felt 2009a: 27). Space takes form through a continuous negotiation between "material forms and interpretive understandings or experiences" (Gieryn 2000: 471, as cited in Felt 2009a: 27). This means that the same spatial and cultural location offers different living spaces—because space, in this sense, is constituted in perception. For the purpose of the present study, this framework offers a way of understanding the participants' experiences and imaginaries as both individual and collective. As such, the framework supports exploring imaginaries and experiences of taking responsibility within the different disciplines in the sample, but also across and beyond disciplines, because epistemic living spaces are not equivalent to discipline.

Further, within the framework of epistemic living spaces, academics are not only subject to conditions of their living space. They are also spatial agents, enacting and (re)defining this living space, and negotiating its boundaries. This view opens up for illuminating how participants in the

present study are agents who conceptualize, enact, and demarcate responsibility. This makes boundary drawing, elaborated in the following, an essential concept.

3.2.2 Boundary drawing

The drawing of boundaries is a central aspect of the notion of epistemic living spaces (Felt 2009a: 19). Boundary drawing refers to “...instances in which boundaries, demarcations or other divisions within and around fields of research and knowing are created, dissolved, advocated, attacked or reinforced” (Felt 2009b: 19). In the case of the present study, boundary drawing is central to exploring both the handling of boundaries between the epistemic and the public space and the drawing of boundaries of responsibility. It is important to note that the way demarcation of responsibility is explored is not by focusing solely on what is *excluded* from responsibility. Equal emphasis is put on what is *included* within the boundaries of responsibility.

Felt (2009b) extracts the notion of boundary drawing from Gieryn, who focuses on demarcation as a practice, as opposed to an analytical question as pursued by philosophers of science (Gieryn 1983). This notion of boundary drawing is essential to understanding the inhabitants of epistemic living spaces as actors who themselves take part in enacting and demarcating their epistemic living space through the choices they make and the activities they engage in (as further elaborated in the presentation of the spatial dimension of epistemic living spaces below).

In the previous chapter, I described the changing relations between science and society as posing challenges for academics in terms of their once bounded world of science now being seen as intertwined with society, and boundaries becoming increasingly challenged and porous. In order to understand academic work in this context, the (re)constructing, negotiating, challenging, upholding, and defending of boundaries is central within the concept of epistemic living spaces. Similarly, tracing the way the participants discuss and draw boundaries of their responsibility toward the public contributes to interpreting and understanding imaginaries and experiences of taking this responsibility. Furthermore, the way boundaries are experienced and drawn as well as the rationales behind the various demarcations are central to the attempt in the present study to understand experiences and imaginaries of taking responsibility toward the public.

3.2.3 Dimensions of epistemic living spaces as analytical categories

As mentioned above, Felt and colleagues propose five dimensions of epistemic living spaces: epistemic, spatial, temporal, symbolic, and social (see e.g. Felt and Fochler 2010: 5-6). I use these five dimensions of epistemic living spaces as focal tools for further interpreting and understanding the responsibilities and ways of taking responsibility toward the public revealed in the first step of analysis. In Chapter 4, I further elaborate and contrast this way of using the dimensions as generic categories in the analysis, to the use of strict and predefined analytical categories. In the following, I describe the dimensions and relate them to the issue of responsibility toward the public, in order to describe the ways in which the dimensions contribute to the present study. It is important to bear in mind that the dimensions are inextricably intertwined and distinguished for analytical purposes only.

The epistemic dimension

The epistemic dimension of epistemic living spaces is about what and how academics aim to know (Felt and Fochler 2010: 5). Meanwhile, to capture the range of knowledge work that the participants in the present study engage in (see Chapter 5), I approach the epistemic dimension as broader, and use it to capture not only that the participants perform research, but also that they are knowledgeable and that they teach within their particular domains of knowledge. This means that the analysis of *the epistemic dimension of taking responsibility* is about how responsibility is envisioned, approached, and experienced with regard to being able to produce knowledge, being knowledgeable, and being a teacher within a specific domain of knowledge. Central to the analysis of the epistemic dimension of taking responsibility is the exploring of the ways in which conception of taking responsibility toward the public and conceptions of knowledge work impinge on each other.

As described in Chapter 2, macro epistemic changing in terms of increased intertwinement and eroding and blurring of boundaries between the university and society are highlighted in recent studies describing the current context of academic work. Studying the epistemic dimension from below (i.e. from the perspective of the actors), the imaginaries and experiences of taking

responsibility toward the public that come through in the analysis of the epistemic dimension of taking responsibility are illuminated by these descriptions. On the other hand, the current epistemic conditions are highlighted as epistemic responsibility conditions.

The spatial dimension

The spatial dimension is about the ‘landscape of taking responsibility’ and about orienting in this landscape. ‘Landscape’ refers to a blend of physical features, cultural arrangements, and personal perceptions (Felt 2009a). As such, the spatial dimension is not primarily about tangible spatial features, but how the participants understand and approach their geography of responsibility. Further, the spatial dimension is about how space is (experienced and imagined to be) enacted, including how boundaries are drawn and negotiated by the academics themselves. Within the framework of epistemic living spaces, academics are seen as spatial agents, i.e. as actors who enact space and draw up the spatial boundaries of their responsibility arenas (Felt 2009a). Thus, the analysis along the spatial dimension is also about how the participants experience and imagine enacting and demarcating their spaces of responsibility. Thus, the analysis along the spatial dimension is about both where and how responsibility is understood by the participants to be enacted; about how features of these spaces are experienced to constitute enabling and restraining features with regard to the taking of responsibility; and about how the participants imagine and experience drawing and/or tearing down boundaries within this geography of taking responsibility.

As described in Chapter 2, the public has been extended and differentiated, and academic work is not confined to the academy but spills over and is distributed to the public, who also “talk back” (Nowotny, Scott et al. 2001). Thus, a situation of a complex web of manifold interactions taking place in manifold public spaces (Nowotny 1993: 308) is described, and the boundaries between different spheres are described as increasingly blurry (Henkel 2007). This context is central to understand the landscape of responsibility as experienced, enacted and demarcated by the participants in the present study. At the same time the analysis of the spatial dimension adds further insight to how the relation between the university and the public is understood within the current context.

The temporal dimension

The temporal dimension addresses the different forms of time which play out in academic work (Garforth and Cervinková 2009, Felt and Fochler 2010: 6). Time is part of what enables us to structure and order our worlds; as such, time is an essential feature of epistemic living spaces (Felt 2015). Along the temporal dimension, I explore the ‘timescape’ of taking responsibility and how it impinges on experiences and imaginaries of responsibility toward the public. *Timescape* is a term that Felt draws from Adam (1998) as an analogy to the notion of landscape, referring to the blend of physical elements, cultural arrangements, and personal perceptions (Garforth and Cervinková 2009). By using this concept of temporality, time is explored not only in the sense of physical time, but also time-related practices and experiences. Further, it addresses how temporal logics and conditions pose opportunities and restraints for how taking responsibility is experienced and imagined.

Much of the current research on academic work addresses time (see Chapter 2). In this research time and tempo is found to constitute important conditions for academic work, and changes in current conditions are found to introduce both a temporal squeeze and conflicting time perspectives (Ylijoki and Mäntylä 2003). Descriptions of the temporal conditions of academic work are helpful to interpret and understand the experiences of taking responsibility expressed by participants in the present study. Further, current temporal conditions are illuminated as responsibility conditions (Felt 2015) by analyzing the temporal dimension of taking responsibility.

The symbolic dimension

The symbolic dimension of epistemic living spaces captures values and practices of valuing, experienced and imagined by academics as structuring their work. Values and practices of valuing structure the ways in which academics observe, evaluate, and orient themselves, and how they conduct their work (e.g. Felt and Fochler 2010: 6), and thereby constitute ‘modes of ordering’ (e.g. Felt and Fochler 2010: 6). On the one hand, a mode of ordering constitutes a normative power, an external control of the individual academic and the community as it

represents values and norms that the members of the community in various forms and degrees experience that they need to adhere to. On the other hand, it provides something to steer by, which can help the individual or the community to orient. In this way, the symbolic dimension captures central ways in which epistemic living spaces are both restraining and enabling academics in their strive to both envision and take responsibility.

The description in Chapter 2 of the current context of academic work emphasized that academics are increasingly faced with expectations of relevance and usefulness from external stakeholders, and that that academic institutions are faced with managerial accountability demands that are experienced to influence their daily academic work. Further, current literature brings attention to academics taking on new forms of societal agency. These tendencies can both illuminate and be illuminated by the analysis of the symbolic dimension of taking responsibility.

The social dimension

Experiences and imaginaries of being part of a community, and of forms and degrees of ‘togetherness’, are captured in the social dimension of epistemic living spaces (Kerr and Lorenz-Meyer 2009, Felt and Fochler 2010: 6). In the present study, I use the social dimension to explore whether and how the taking of responsibility toward the public is experienced and imagined as an individual or a shared endeavor, and how togetherness is imagined and experienced to be part of taking responsibility within the community/institution.

While academic work tends to be described as individualized (e.g. Kerr and Lorenz-Meyer 2009, Macfarlane 2011), literature also points out the importance of the disciplinary community for academics (Jensen and Nygård 2000, Jensen 2003, Henkel 2011) with regard to developing a shared language and a shared understanding of what their epistemic living space is about and what it is for. This tension is central to understand participants’ experiences and imaginaries of the social dimension of taking responsibility toward the public. Also, the analysis of the social dimension of taking responsibility sheds light on an important condition for taking responsibility.

3.3 Summarizing the contribution of the analytical frameworks to the present study

Both the methodological-analytical framework of phenomenography and the theoretical-analytical framework of epistemic living spaces support the aim of the study to capture the ways responsibility is understood and approached by academics themselves in their everyday work. The phenomenographic approach facilitates a data-driven analysis to capture the variety of responsibilities toward the public, and the variety of ways of taking this responsibility. The framework of epistemic living spaces facilitates an analysis that contributes to further understanding and interpreting the experiences and imaginaries that come to the fore, as well as to understanding them in relation to the current context of academic work, as described in previous literature (Chapters 2 and 5). The five dimensions of epistemic living spaces contribute different focal tools for zooming in (Nicolini 2009b) on specific features of experiences and imaginaries of taking responsibility.

The combination of the two frameworks facilitates discerning how taking responsibility is experienced and imagined on the micro level of academics as actors within the university, and an analysis that relates these micro stories to the macro stories about emerging trends and current responsibility conditions in and for higher education. Thus, in addition to providing further insight into the experiences and imaginaries of taking responsibility, the experiences shed light on the current context as a context for taking the imagined responsibility. Thereby, the analysis provides insight into the current conditions as responsibility conditions (Felt 2015), in the sense that experiences of taking responsibility within the current conditions say something about whether and how these conditions support or hinder academics in their efforts to take the specific aspects of responsibility that come to the fore in the present study.

I apply the two frameworks in distinct ways, as described and discussed in the following chapter.

Chapter 4: Research design and method

In this chapter, I describe the research design and method, and elaborate the methodological choices and considerations made during the process of research. This chapter is divided into four sections: 1) research design, 2) method of analysis, 3) ethical considerations, and 4) the trustworthiness of the study.

4.1 Research design

The present study is qualitative and explorative, and designed as an interview study. The data consists of qualitative, in-depth interviews capturing how taking responsibility toward the public is understood, approached, and experienced by the participants. I perform the analysis in two steps and, as described in the previous chapter, combine two different frameworks of analysis. Both the methodological approach of phenomenography and the analytical framework of epistemic living space are developed to capture phenomenon from the perspective of the experiencer, and interviews are considered a good source of data toward this aim, as they allow for elaborate articulations on behalf of the participant, as well as for probing into examples, explanations, and reasons on behalf of the interviewer (Åkerlind 2005a, Ulrike 2009a). In the following, I first elaborate how I approach experiences and imaginaries, and how these can be explored through interviews. Second, I outline the two-step approach of the analysis.

4.1.1 Exploring experiences and imaginaries through interviews

The terms *experiences* and *imaginaries* are inspired by Felt's concept of epistemic living spaces; additionally, this notion of *experience* resonates with how the term is used within phenomenography (see Section 3.1.2). By exploring how responsibility toward the public is experienced and imagined, I aim to capture how this responsibility is understood in terms of both how the participants *understand and approach* it in their work, and also how they *imagine* that this responsibility should be handled, even if it in their *experience* it is not perceived and approached as such within their epistemic living space. Capturing and distinguishing imaginaries

and experiences allow me also to capture any potential discrepancy between experiences and imaginaries of taking responsibility toward the public.

As pointed out above, inspired by phenomenography, I use the term *experience* in a sense that captures also how responsibility is approached (see Chapter 3). This notion of experience supports the aim of the present study to capture how responsibility is *taken*. While approaches are not observed in this study, they are articulated in the interviews in terms of how the participants talk about how they handle and demarcate the responsibility they perceive themselves to have. In the interviews, the participants are asked to talk about examples of how they approach the taking of responsibility and concretely handle responsibility toward the public in their work. This means that the interviewees' experiences are seen as something they themselves are (in part) an active part in making, as opposed to something that merely happens to them. This also implies a potential overlap/gradual crossing from experience to imaginary, as academics in their concrete work strive to fulfill the responsibility they imagine.

4.1.2 Two steps of analysis

As previously introduced, I perform the analysis of the interview data in two steps. The first step is data-driven, performed using a phenomenographic approach to analyzing interview data. I undertake this analysis within each of the four disciplines. Research questions 1 and 2 guide this analysis, and my aim is to discern and describe the different responsibilities that the participants see themselves to have toward the public, and the variety of ways that they understand and experience taking these responsibilities

While the first step of analysis is discipline-specific, the second step of analysis is performed across disciplines. In this analysis, the various ways of understanding and experiencing taking responsibility discerned and described through the first step of analysis are further interpreted by analyzing them along the five dimensions of epistemic living spaces. This analysis is guided by research question 3, and the aim is to further understand experiences of taking responsibility a) across disciplines and b) in light of the current context of academic work.

The framework of epistemic living spaces facilitates looking at the findings from the first step of analysis across and beyond disciplines. It also allows me to relate the micro stories of individual experiences and imaginaries of taking responsibility discerned through the first step of analysis to the macro stories about new conditions and emerging trends of academic work, while holding on to the perspective of the experiencer. Through this approach, more insight is gained into what the experiences and imaginaries mean and imply, why they have emerged, and the challenges and possibilities that lie within institutional and contextual features with regard to taking the responsibility imagined as theirs to take.

I describe the process of performing the two steps of analysis, as well as the data production, more thoroughly in the following sections.

4.2 The data

4.2.1 The sample

The participants interviewed in this study are academic staff from four different disciplines at the University of Oslo, Norway. The University of Oslo is the oldest, and was until the merger of institutions in Norwegian higher education in 2014, the largest institutions of higher education in Norway, established in 1811 and presently hosting approximately 27,000 students and 3,400 staff in academic positions⁶. It is broad in disciplinary scope, and it is research-intensive while also offering educational programs at bachelor, master, and PhD levels within most fields. The common academic position at the University of Oslo, as within most Norwegian universities, is a combination of teaching and research (Vabø 2011).

In order to be able to relate the interviews to the disciplinary context in the analysis, I chose to sample from four selected disciplines. With the aim of capturing some of the diversity within the university and developing insights that may be of value beyond the disciplines partaking in the present study, I interviewed academic staff from different disciplinary traditions, and I elected to include one discipline that is also a profession and which provides a professional degree. The chosen disciplines are well-established and associated with their respective faculty: biology from

⁶ <http://www.uio.no/om/tall-og-fakta/uio-i-tall/>

natural science, sociology from social science, history from the humanities, and psychology as a professional discipline. In the next chapter, I portray both the University of Oslo and the four disciplines in more detail.

The selection of participants within the disciplines was developed using a snowball strategy (Atkinson and Flint 2001). The snowball strategy means that I asked the first interviewees from each discipline to refer me to other potential participants, who in turn suggested other participants. This way of sampling gave me the opportunity to develop a purposeful sample (Miles and Huberman 1994: 27). Due to the study's aim to explore the range of responsibilities toward the public and the various ways that these responsibilities are taken, as opposed to establishing "a representative conception," it was important in the sampling to include both different perspectives and members of the staff that were particularly concerned about the issue.

The process of gradually developing the sample based on participants' advice may lead toward a biased sample, in particular if participants refer only to colleagues sharing the same perspectives. This would exclude contrasting experiences and imaginaries, as well as "isolates" or "deviates" who are not connected to the network that I have tapped into (Atkinson and Flint 2001: 4). I have attempted to avoid this by not selecting a "single chain sample" (Atkinson and Flint 2001: 4-5). While starting out with one interviewee from each discipline and following their references, I also searched through the list of staff (on the websites) and contacted staff from other research areas. In addition, I sought to balance the sample in terms of gender. Further, it is my experience that respondents have made an explicit point of referring me to colleagues with not only shared but also differing experiences and imaginaries. Also, they usually provided me with several names, and I chose who to contact based on assumptions about variation in experiences (research interests, career stage, and gender).

The participants were mostly associate professors and professors, and all had a doctoral degree. Altogether, I interviewed 19 academics: 4 from sociology and 5 each from biology, history, and psychology. While the size of the sample may be considered relatively small, at least with regard to the analysis within each discipline, I experienced a sense of saturation in that, during the last interviews, I recognized experiences and imaginaries from previous interviews.

I contacted the participants by phone, and interviewed those who answered the call and accepted the invitation to an interview. Due to time constraints, several declined my invitation.

4.2.2 The interviews (and the process of developing the research question)

Having made the appointment for the interviews by phone, the interviewees received an information letter by email prior to the interviews, both to ensure informed consent (NESH 2009) and to prepare them for the conversation. I chose to perform the interviews in the participants' offices, unless they suggested otherwise (which no one did), both for their convenience and so that they could feel safe on home ground. Additionally, the visits to the departments gave me a sense of the environments that the participants inhabited.

Prior to conducting the interviews, I developed a semi-structured interview guide (appendix 2). I performed one pilot interview to test and adjust the interview guide. The interviews lasted from 30–90 minutes, most of them approximately 60 minutes.

The initial problem formulation of this study was narrower than the research question that I finally explored in this thesis. Initially, I set out to explore how academics relate ethical issues to their field of knowledge. The starting point of this question was curiosity about the relation between the university and discourses in society, and an observation that often societal questions that one would expect academics within relevant fields to engage in, involve questions of values and forms of ethical/moral reflection and judgment. Thus, I was curious as to how academics conceived the relation between such ethical reflection and the disciplinary knowledge of their fields. During the initial phase of analysis, however, I decided to change and broaden the research question in order to encompass the range of reflections regarding academics' experiences and imaginaries of taking responsibility toward the public that were present in the interviews. In doing so, I was able to make use of more of the interviewees' experiences and imaginaries and also to illuminate a more comprehensive research question. In Section 4.5.1, I further discuss the issue of adjusting the research question after having performed the interviews with regard to the trustworthiness of the study.

The interviews can be seen as a collaborative dialogue between me as a researcher and the interviewee (Marton and Booth 1997: 130). In this dialogue, I aimed to gather articulations of the

interviewees' experiences and imaginaries that were as complete as possible (Marton and Booth 1997, Åkerlind 2005b). Different measures were taken toward this aim. First, I developed the interview guide with the intention of keeping the questions and the structure open in order to prevent a foreclosing of the interviews. Second, I tailored the interview conversation to the concrete work of each participant. Third, I aimed at letting the interviewees speak uninterrupted so that they could follow their line of thought and augment, provide examples, and associate rather freely. Fourth, I asked probing questions (Åkerlind 2005b), i.e. asked for elaborations, reasons, and examples, in order to access the interviewees' underlying assumptions and reasons. Additionally, the probing questions ensured I did not take meaning for granted, and instead obtained the explicit arguments of the interviewees. Further, I aimed at creating an easy atmosphere, both as I entered the offices to begin the interviews and during the interviews. This is important for the interviewees to be comfortable to talk about their experiences, as well as enabling them to articulate and reflect on the issues raised in the interviews (Åkerlind 2005b, Kvale and Brinkmann 2009). To create a relaxed atmosphere, I engaged in small talk before the interview started and made general efforts not to be too formal. During the interviews, I expressed interest, shared humor by smiling and laughing with the interviewees, and expressed other kinds of responsiveness to experiences and emotions, like frustration or discouragement, either with words, body language, or facial expressions. I did this in an effort to make the interviews conversation-like as opposed to interrogation-like. However, I did not enter into an exchange of experiences, as this would potentially impose my experiences onto theirs.

I understand the quality of the dialogue in the interviews to be essential to get articulations of experiences and imaginaries that are as complete and elaborate as possible. Therefore, I found it more important to follow up on what the interviewees talked about than to follow a predetermined structure or predetermined formulation of the interview questions. Rather, I strived to make the questions fall as naturally as possible into a meaningful conversation, and thus formulated the questions specifically in relation to what the informants talked about (Nicolini 2009a). This approach allowed the conversation to be about concrete experiences and imaginaries of taking responsibility, and to be about what concerned the participants, and not (only) what concerned me.

4.2.3 The context

To provide a contextual backdrop for the analysis of the interviews, I also explored the contexts the participants inhabited. Meaning and conceptions are constructed in and through social practices, and situated in cultural, historical, and institutional settings (e.g. Giddens 1991, Wenger 1998, Wertsch 2010). Therefore, in Chapter 5, I provide a contextual description of the Norwegian context of higher education, the University of Oslo, and the four disciplines taking part in the study. Within the scope of this study, this description had to be brief and rather on the surface, yet provide an image of the habitat of the participants in the study, allowing the possibility to contextualize the interview data and the analyses. This contextualization may, in addition to being helpful in terms of performing the analysis, assist the reader by providing a context for the analysis and for determining the potential value of this study for other contexts.

The sources that I have used to illuminate the various sites within the University of Oslo are mainly texts, in the form of selected works from a book series with elaborate analysis of the history of the University of Oslo and the disciplinary communities (Helsvig 2011, Myhre 2011, Thue and Helsvig 2011), and the official websites with information about the faculties and departments. In addition, my visits to the locations to perform the interviews paved the way for observations of spatial and symbolic features of the locations that contribute to the presentation of the four different sites given in Chapter 5.

4.3 Method of analysis

In the following, I first describe how I performed the steps of analysis. Second, I discuss the relation between theory and data in these analytical steps, and describe the overall approach to analysis as *reflexive interpretation*, relying on Alvesson and Sköldberg (2009). Third, I comment briefly on the writing of the thesis as part of the process of research.

4.3.1 Step 1: discerning and describing discipline-specific ways of taking responsibility toward the public

As described, the first step of analysis was a data-driven analysis performed within the framework of phenomenography. The aim of this step of analysis was twofold; first, to discern the different responsibilities that the participants see themselves as having toward the public, and second, to discern and describe the range of ways in which the participants understand and experience taking responsibility toward the public, and the various ways they understand these aspects. I performed the analysis within each of the four disciplines in the sample. Meanwhile, as described below, using a comparative optic (Knorr Cetina 1999) to look across disciplines was central in discerning the various responsibilities and how they are understood and experienced to be taken.

Before describing in more detail how I performed this analysis, an important reminder is that, in the pursuit of the responsibilities toward the public and ways of taking this responsibility, the transcripts are approached not individually, but as a pool of meaning (e.g. Åkerlind 2005a), or more precisely as pools of meaning, since I explore the variation within the disciplines. This means that the entity of analysis is not the individual transcripts, but the various articulations of aspects of taking responsibility. However, as the presentation of the findings provides elaborate examples of experiences and imaginaries of taking responsibility, individual voices are present in this study. Meanwhile, coherent with the aim of phenomenographic studies (e.g. Åkerlind 2005a), the individual voices are not studied to capture individual qualities or conceptions, or to categorize individuals, but to capture the collective experience, in the sense of the range of ways of understanding and experiencing taking responsibility toward the public. I wish to point out also that the aim is not to discern contrasting positions/ways of taking responsibility toward the public, but to capture the broad range of features of taking this responsibility. The idea in phenomenography is that, by putting together the experiences of a group of people, a more comprehensive image of the phenomenon can be depicted, than the image that is experienced by individuals.

To prepare the analysis, the interviews were audio-taped and thereafter transcribed verbatim by a professional transcriber. I used the transcripts as data for analysis. To ensure the quality of the

transcripts, I listened through the interviews, correcting errors in the transcripts that had impact on the meaning content of the interviews.

In the process of analysis, I followed the common phenomenographic stages proposed by Dahlgren and Fallsberg (1991):

1. **Familiarization.** Both the process of listening through the interviews to control the transcripts and the first reading through of the transcripts served as a familiarization with the data. At this stage, my focus was on letting the data speak rather than interpreting.
2. **Condensation.** In order to reduce the amount of data to make it more manageable, I made summaries of the transcripts. This stage of analysis is a kind of selection procedure, where the relevant passages of the interview transcripts are selected (Åkerlind 2005: 325). I performed this reduction of the data by going through each interview and copying the passages I found relevant for the following analysis into a new document. This process bears a resemblance to coding, but I did not at this point label or categorize the excerpts. Still, this step needs to be acknowledged as a first step in the analytical work, as the decisions about what to include in the reduced dataset were based on analytical judgment of relevance to the research question. To make sure important content was not left out, I found it important to keep the passages for the reduced dataset quite long, keeping whole lines of argument and examples. After adjusting the research question, I reread the transcripts to include all passages relevant to the new research question. Toward the “settling” of the analysis, I again read the full interview transcripts to make sure I had not omitted important parts in the process of reducing the data, or misunderstood sections due to their being cut out of their context. The selection of quotes makes up the data pool that forms the basis for the next step in the analysis.
3. **Comparison.** At this stage, the interviews were not approached individually but as one ‘pool of meaning’, i.e. the boundaries separating individuals are abandoned and the focus of interest is variation in experiences within the pool as a whole (Åkerlind 2005: 325).

I treated data from each of the four disciplines as a distinct pool of meaning⁷. I used comparison both within and between the different pools of meaning to discern the various ways in which responsibility toward the public was understood and experienced to be taken (coherent with Åkerlind 2005a). At this stage, the comparing and contrasting between different ways of experiencing and imagining drove the analysis forward. I used this comparative optic on two levels: between different experiences/understandings and between disciplines. This comparative approach helped me grasp different understandings and experiences of taking responsibility toward the public that may otherwise have gone unnoticed. While the comparative way of looking at the data was central at this stage, it could not be the only way of looking at the data, as that would have narrowed the gaze to the extent that only what was comparable would be noticeable, and thus may have excluded other important findings.

4. **Grouping.** By noting themes and looking to see how the data clustered, different articulations were grouped into responsibilities toward the public and ways of taking this responsibility. I did this by asking, “What is this specific example, argument, or story in the data an instance of?” In other words, I explored under what general theme it could be subsumed. This provided a way of structuring the various understandings and experiences that came to the fore.
5. **Articulating.** In an effort to explore and make sense of the material, I have been constantly writing and rewriting. Throughout this process of writing, I have articulated and re-articulated my interpretations. This has been an essential way to make sense of the material, and to construct meaning as well as meaningful relations and structures (see also Section 4.3.4).
6. **Labelling.** The process of developing labels to the various aspects overlaps with the above stage of articulating, and rearticulating, as well as grouping. The use of concepts

⁷ When approaching interviews as pool(s) of meaning, the responsibilities that come to the fore are the sum of responsibilities from all participants from each discipline. This implies that the individual biologist, for example, will not necessarily recognize him- or herself in all the findings within biology, as these are drawn from the whole set of transcripts from biology. Individual participants may even disagree with some of the understandings that I have discerned, as they would demarcate them as outside the boundaries of their responsibility. As a result, when I write “biologists experience,” I am not implying that all the interviewees have experienced this, but that it is present in the pool of meaning.

and headings, and the subsuming of content under these concepts and headings, was a central part of the process of analysis.

7. ***Contrasting.*** The contrasting of various articulations overlaps with the above described process of comparing articulations. Contrasting takes the form of a specific kind of comparison, where the identification of differences between articulated ways of taking responsibility allows me to discern one way of taking responsibility from the other, and thus provides more nuances and details to the findings.

While I have presented this process in distinct stages, the analysis is iterative. I underwent several rounds of interpretation, labelling, comparing and contrasting, and suggestive and preliminary outcomes in terms of describing and structuring the various responsibilities and ways of taking responsibility before the analysis stabilized. Such an iterative process is common in phenomenographic analysis and performed until the analysis settles (Marton 1981, Åkerlind 2005b) .

In phenomenographic studies, it is common to aim to discern a limited number of (analytically constructed) ‘conceptions‘(as thin descriptions) based on a discerned range of aspects and variation in understanding these aspects (Åkerlind 2005a). At this point, however, I departed from the common phenomenographic route. As the research questions posed above indicate, I am more interested in interpreting the various understandings and experiences further, in order to understand what these experiences mean, how they have come into being, and what challenges and possibilities lie ahead for taking the imagined responsibility toward the public. Therefore, after having discerned the range of responsibilities toward the public, and the variety of ways these responsibilities are understood and experienced to be taken, I performed a second step of analysis where I analyzed the findings further, by using the framework of epistemic living spaces. I describe this step of analysis in the following.

4.3.2 Step 2: analyzing imaginaries and experiences of taking responsibility toward the public along the dimensions of epistemic living spaces

In order to further understand the findings from the first step of analysis, I explored the responsibilities and ways that responsibilities are understood and experienced to be taken using the analytical framework of epistemic living spaces. As described, the aim of this analysis was to understand what the imaginaries and experiences mean and imply across disciplines, how they have come into being, and what challenges and possibilities lie ahead for taking the imagined responsibility toward the public. Introducing the conceptual pair of ‘imaginaries and experiences’ drawn from the framework of epistemic living spaces, this analysis explored further the findings from the first step of analysis that suggested that the participants experience challenges with regard to taking the responsibility that they envision.

The process of analysis involved reading through the findings from the first step of analysis along each of the five dimensions of epistemic living spaces (see also Chapter 3 for elaboration on how the different dimensions were used in the analysis.) The different dimensions offer different points from which to look, and facilitate zooming in (Nicolini 2009b) on different dimension of taking responsibility toward the public. First, I discerned which findings from the first step could be interpreted in light of the respective dimension. Thereafter, by looking at what the dimensions tell about the findings, as well as what the findings tell about the dimensions, I gained further insight into what the experiences and imaginaries mean, and how they have come into being in light of the current context of academic work. The latter is possible because the framework encompasses and integrates the variety of themes that current research directs our attention toward and thus facilitates an exploration of academics’ experiences and imaginaries of responsibility toward the public that includes these features of academic work. I performed this process along all the dimensions, finding also relations between the findings within the different dimensions. This provided insight into how experiences and imaginaries of taking responsibility along the different dimensions are related in complex ways. I performed an iterative process of analysis along the different dimensions, as analysis along one dimension tended to give insights relevant to the analysis along other dimensions. I engaged in this iterative process until the analysis settled, in the sense that going through each dimension did not trigger changes in the analysis along the other dimensions.

4.3.3 Reflections on the relation between theory and data in the analysis: reflexive interpretation

Above, I described two analytical steps, one data-driven and one theoretical reading (Kvale and Brinkmann 2009). The following discussion modifies this clear distinction between data and theory, and indicates that the process of analysis was less linear than the above reconstruction suggests.

The choice of method of analysis is often presented as the choice between induction and deduction, and between first- and second-order analysis, wherein first-order analysis focuses on what the data talks about and second-order analysis arranges data into predefined (theoretical) categories (Alvesson and Sköldbberg 2009). However, I rely on the kind of reasoning proposed by Alvesson and Sköldbberg as *abduction*⁸, which is a kind of reasoning that differs from inductive and deductive inference. The aim is neither to test a hypothesis in a deductive fashion, nor to generalize from cases to a wider population via inductive inference. The aim is rather to explore meaning, reach understanding, and open up for new questions. While induction has its point of departure in empirical data and deduction starts from theory, the abductive research process alternates between theory and data, whereby both are successively reinterpreted in the light of each other (Alvesson and Sköldbberg 2009: 4). The two-step approach taken in the present study makes the interpretive process even more complex.

One potential value of theoretical reading of the data is that it can introduce new contexts and illuminate new dimensions of phenomena. However, a theoretical reading can also result in a one-sided and biased interpretation, where the only aspects visible to the reader are those visible through the lenses of the theory (Kvale and Brinkmann 2009: 244). There is a danger present that data is simply used to re-describe the theory (Kvale and Brinkmann 2009). Also, focusing too much on the theoretical framework can result in the theory becoming more of a straitjacket than wings to help the analysis unfold. In an effort to prevent this, I have approached the data with an attitude of openness and listening without drawing premature conclusions, a dialogical staging of

⁸ Hanson (1958) labels this “retroduction.”

data and theory (Kvale and Brinkmann 2009: 243-244), and a reflexive interpretation between the two levels of analysis in the present study (Alvesson and Sköldberg 2009).

In order to capture complexities, nuances, tendencies, and tensions in the experiences and imaginaries of responsibility, I used the theoretical framework as *heuristics* (Kvale and Brinkman 2009, Felt 2009). By this, I mean that I used the dimensions as focal tools for looking and asking rather than as strict and final guidelines and categories, which could easily become reductionist in the sense that it would reduce my vision of complexities, nuances, ambiguities, tensions, and tendencies, all of which are the important analytical aims and outcomes of this study. Furthermore, the dimensions of epistemic living spaces are generic categories in that their content is not predefined, but rather they are filled with content through the analysis.

An iterative process between the two steps of analysis was an important part of the analytical process. After having drafted the first step of analysis, I pursued the second step of analysis. Then, after having drafted the second step, I went back to the first step to explore further. However, I did not then systematically apply the theoretical framework on the first step of analysis, but working on the second step made me pose new questions to the first step of analysis. When I returned to the second step, I posed new questions to this analysis. This iterative process of moving back and forth continued for as long as I experienced that new details, meaning, and elaborations emerged.

While above I described the first step of analysis as data-driven and the second as a theoretical reading, the iterative process of analysis (shifting between the two steps of analysis) can be described as reflexive interpretation (Alvesson and Sköldberg 2009) i.e. the open play of reflection across various levels of interpretation. In the case of the present study, this meant moving back and forth between the data-driven first step of analysis and the theoretically informed second step of analysis, where they both lent meaning to each other. Within this approach, theory and data are not seen as totally separable entities. Within a social-constructivist perspective on research, the idea that one can get rid of, by self-examination or other means,

...theoretical or other ballasts, so that the empirical material receives maximum justice, is untenable. Without linguistic, cultural and theoretical ballast it is not possible for researchers to get their bearings, to make interpretations or to write anything that makes sense (Alvesson and Sköldberg 2009: 266).

Theory and other pre-understandings on behalf of me as researcher are part of the research process, from the first posing of research question, through the process of producing data, to the analysis and presenting of the findings (e.g. Alvesson and Sköldbberg 2009).

The abductive process means that, on the one hand, the researcher uses theory to ask questions to the data, and then “listens” to the answers. On the other hand, it means posing questions based on the data to the theory. In this interpretive dialogue, data and theory both lend meaning to each other. Putting the two in productive tension provides the opportunity for creative interpretation, acknowledging the perspectival and provisional status of knowledge (Alvesson and Sköldbberg 2009), while maintaining an ethos of doing the data justice. This dialogical development of understanding presupposes a humble yet active attitude on behalf of the researcher. The autonomy of the subject matter under interpretation must be respected, at the same time as the researcher “enters” it. A dialectic between distance and familiarity provides the best attitude when the aim is to balance entering the subject matter and respecting its autonomy (Alvesson and Sköldbberg 2009: 100-101). This implies openness to multiple interpretations, where the researcher does not assume ultimate authority over possible interpretations. I have sought such a dialectic between distance and familiarity by shifting between close-up focus on particular examples and stories, working closely and intensively with specific findings, and zooming out, to the overall structure of the findings (Nicolini 2009b). Further, the reflexive relation between the first and second steps of analysis has provided a reflexive interaction between the close-up analysis of concrete experiences and understandings in the first step and the more abstract and generic experiences and imaginaries provided through the second step of analysis.

4.3.4 Presenting the analysis and writing the thesis: writing as inquiry

A crucial part of the analytical process has been *writing as method of inquiry* (Richardson and St. Pierre 2008). Rather than working with the data until I came to a final interpretation and then writing it up, I have been constantly writing and rewriting in an effort to make sense of the material, to construct meaning, and to reveal meaningful relations and structures. Such writing and rewriting is a never-ending thinking-process, but at one point the decision to stop has to be

made and the thinking presented at the current stage, with its gaps and insecurities. I discuss these below, in the section on the trustworthiness of the study.

Writing in a second language poses challenges to writing as a method of inquiry. I do not possess the same nuances in my English vocabulary as I do in my first language, Norwegian. This may have influenced the nuances available to me through the analytical inquiry. Still, there might be the advantage of working and thinking in two different languages, that it commences reflections about meaning that would otherwise be taken for granted.

Becker (2007) argues the value of writing in a clear, simple, and active language. He also advises treating the interviewees as agents, and writing oneself as researcher into the text as an active part. I have found that my (more and less successful) attempts to follow this advice have contributed to clarifying the presentation, and moreover, to clarifying my interpretations during the process of inquiry. Further, the way I write is closely related to my perception of research as an activity that cannot be performed independently of the researcher. Therefore, I have chosen to position myself as “I” in the text. The visibility of the writing “I” makes it clearer to both reader and writer what in the presentation are my interpretations, what I have drawn from existing literature, and what are references to data. In the process of writing, this practice has helped me to consciously reflect on my role as a researcher in relation to both literature and data.

4.4 Ethical considerations

Ethical considerations are part of an interview study from the stage of planning to the stage of reporting the results (Kvale and Brinkmann 2009). Two major issues are central in the present study. The first is the concern for the individual participants, their communities and institutions, and their right to be protected. I have strived to protect participant anonymity. However, members of the communities may recognize colleagues behind the experiences and imaginaries that I describe. I informed participants of this risk. I chose to be open about the institution and the disciplines, since I find the context relevant to the analysis. The protection of these therefore lies in the trustworthiness of the study and in my presentation of the findings. Thus, central ethical issues in this study are interrelated with methodological issues, as a question of whether the analysis can be trusted and also whether it is useful (NESH 2009). This ethical concern

relates also to the individual participants: When faced with presentations of my analysis, they should feel that their experiences and reflections have been handled with care and are presented in a recognizable, truthful, and agreeable way. There is, however, a balance to be sought here, between presenting the perspective of the participant in a way that they would find agreeable, and making the data subject to analysis. I have sought such balance through the process of reflexive interpretation described above.

With regard to the protection of the individual participants, I contacted the Norwegian Social Science Data Service (NSD⁹) during the stage of planning the study. I reported the study to NSD, who granted approval. Informed consent is a criterion within the guidelines (NESH, NSD). Following NSD's advice, I did not collect written consent, but each participant received a letter of information (appendix 1), and their agreeing to and partaking in the interview was taken as evidence of consent.

With regard to both the individual participants and their communities and institution, I undertook reflections concerning categorization and what Ian Hacking calls *Making Up People* (2006) during the course of analysis. Hacking's concern is that categorization influences those categorized. While I have not put informants into specific categories, I have taken excerpts of what they told me in interviews, sorted it by my interpretive headings, placed it within the categories of epistemic living spaces and in a structure that I have developed, and assigned meaning and implication to their articulations. These interpretations (headings, structures, categories, meaning, and implication) are not obvious nor the only truth. Rather, they are constructed by me as researcher, and subject to my theoretical pre-understandings, values, use of analytical concepts, and the language and form in which I present the analyses, as discussed below. This presentation has the potential to influence not only the individual participants, but also disciplinary communities and even the institution (Kvale and Brinkmann 2009: 81, NESH 2009). While being realistically modest with regard to the potential influence of the present study, such potential influence is surely my responsibility.

⁹ <http://www.nsd.uib.no/personvern/>

4.5 The trustworthiness of the study

In the following, I discuss the trustworthiness of the study in terms of 1) the sample and the interviews and 2) the analytical findings. I take the trustworthiness criteria for qualitative research suggested by Lincoln and Guba (1985) as a starting point for discussing the trustworthiness of the present study.

- **Credibility** addresses the issue of whether the researcher provides assurance of the fit between respondents' view of their lives and the researcher's construction and representation of these. I discuss issues of credibility both in the elaboration of the data and the analytical process above (Section 4.2), and below in the discussions of the trustworthiness of the analysis, as well as in the discussion of the interviews (Sections 4.5.1 and 4.5.2).
- **Transferability** is about generalizations, and concerns how the researcher provides the reader with sufficient information of the case studied for the reader to appraise the degree of similarity between the case(s) in the study and case(s) to which the findings may be transferred. I discuss the issue of transferability as a question of the value of the study beyond the empirical context in Section 4.6 below.
- **Dependability** refers to the assurance that the research process is logical, traceable, and documented. I address this issue with regard to the sample and the interviews (Section 4.5.1), and with regard to the analysis (Section 4.5.2). Also, I have aimed at describing the choices made and the rationales behind them throughout the thesis, in order to make the process documented and traceable for the reader.
- **Confirmability** raises the issue of the interpretations being confirmed by the data. I discuss this concern in the section below on the quality of the analysis (Section 4.5.2), and in the above reflections on the relation between theory and data in the process of analysis (Section 4.3.4).

4.5.1 The sample and the interviews

This study is based on a relatively small sample of informants. Thus, it may be questioned whether I have tapped into the range of experiences and imaginaries of responsibility toward the public among university academics. Inevitably, many stories of academic life and work are untold. Also, the ways the participants were sampled, selecting participants on the “recommendation” of other informants, may have caused lopsidedness toward one way of imagining responsibility toward the public, at the expense of other imaginaries. However, as described above (Section 4.2.1), several of the references to other participants pointed explicitly to colleagues known to see the issue differently. Also, I aimed at variation in the sample by not following a single track of respondents. Moreover, it is important to note that the aim of this study is not to provide a representative image or to attain a finite conception of responsibility toward the public, but to open up the question in search of a variety of understandings and experiences of taking responsibility toward the public, and perhaps generate new relationships and new questions. Thus, while this study provides insight into various experiences and imaginaries, I do not claim to have identified an exhaustive list of all possible variations in experiences and imaginaries of taking responsibility toward the public. However, while I am sure there are still experiences, relationships, and questions to be found, I hope to have shed light on some of the core features of taking responsibility toward the public.

In terms of the question of what interviews can tell us, and thereby the question of the interviews being a *credible* source of experiences and imaginaries, literature notes (e.g. Giddens 1991, Säljö 1997, Kvale and Brinkmann 2009) that this is restricted to what interviewees are willing and able to formulate within the specific interview context. Thus, the information gained from interviews is limited to what Giddens (1991) labels discursive consciousness, while information about their practical consciousness remains limited. On the other hand, it is possible to argue that, in the case of the present study, the participants are generally known as quite articulate; as such, the discrepancy between their experiences and what they are able to articulate may be less wide than in some cases. Still, participants may have reasons to refrain from articulating certain experiences and understandings. However, such critique may be more relevant in studies of other groups than academics, as articulating understandings and experiences of one’s work and being part of discursive practice in relation to this work is common.

The way I understand interviews is that they are co-constructed by researcher and interviewee dialogically (Kvale and Brinkman 2009). The *credibility* (Guba and Lincoln 1985) of the interviews in terms of to what extent they actually capture the interviewees' experiences and imaginaries of taking responsibility toward the public needs to be understood in light of the social-constructive stance that knowledge is constructed in the conversational relation between me as interviewer and the interviewee in the concrete situation of the interview. In other words, I do not see myself as picking knowledge off the interviewees like apples off a tree, or what Kvale and Brinkman call being a "mine worker" who uncovers valuable materials unaffected by the miner's work. Following the metaphor, I rather see myself as a traveler in a more or less unknown landscape, constructing knowledge about this landscape through conversations with its inhabitants. Also, the context of the interview may pose an arena for self-reflection that produces or makes explicit valuable insights on behalf of the interviewee which are otherwise restrained under the pressures of everyday work (Ylijoki 2005: 562). This implies also that the experiences and imaginaries articulated in the interviews are context-sensitive, as opposed to stable constructs. They are affected by the interview situation, as well as the general context (Åkerlind 2005a). As a result, they should not be regarded as exhaustive accounts of the interviewees' experiences.

The relationship between interviewer and interviewee is of a particular kind in the present study, as I as researcher interviewed other researchers. Gunasekara (2007) points out the need to pay attention to the social construction of interview data, related to researcher interviewing researcher. Even though I was a novice PhD student interviewing experienced academic staff, mostly associate professors and professors, thus arguably not really a peer-to-peer interview, some of the features of such interviewees were present to various degrees. Both interviewer and interviewee were academic staff, and as such colleagues, living and working under some of the same conditions. This allowed for building of trust and for exploring and discussing issues in depth (Felt, Fochler et al. 2012), as we "speak the same language" and can achieve a common understanding (Ylijoki 2005: 562). But there is also a risk present, that meaning is taken for granted (Felt, Fochler et al. 2012). However, I come from another knowledge field than the interviewees; as such, I was an "outsider" visiting the interviewee's home fields. Also, I was conscious not to enter into a reciprocal sharing of experiences (Section 4.2.2), but rather took on a role of empathic listener (Ylijoki 2005: 562). Moreover, I tried to diminish this risk of taking

meaning for granted, by asking interviewees for examples and for their reasons and underlying arguments, even when I was pretty certain I understood their arguments. This kind of probing is an important feature of the phenomenographic interview (Åkerlind 2005b). Also, during the process of analysis, I have emphasized not taking meaning for granted. More than being a hindrance in my research, I find that my background from the university, both as a novice researcher and from previous administrative positions, was beneficial in both producing the data (as it helped me engage in meaningful conversation with the interviewees) and in the analytical, interpretive process of creating meaning.

Qualitative interviews are sometimes critiqued because, as Nicolini points out, the nature of the interview is such that the "...encounter produces narratives that are often morally connoted and idealized in character" (Nicolini 2009a: 195). Thus, some may question whether interviews provide a picture of actual approaches and understandings. However, I do not explore practices, but experiences and imaginaries. While in the analysis there is an emphasis on 'approaches to', 'taking of', and 'demarcation of' responsibility in the verb-sense, it is not practices but experiences and imaginaries that are the aim of the analysis. Therefore, moral connotation and idealized images are expected, valid, and interesting in the case of the present study.

The quality and *credibility* of the interviews with regard to the research question may have been affected by the adjustment of the research question (Section 4.2.2), and the interviews could potentially have been more to the point and more elaborate if the initial research question had been closer to the one posed in this thesis. However, I did approach the interviews with open questions and let the interviewees talk about what concerned them. In addition, responsibility toward the public was the interest that framed the research project in the first place and was explicitly addressed in the interviews. This interview approach arguably minimizes the risk of relevant data having escaped the interviews.

A particular challenge in a study in which the interview data is in Norwegian and the presentation is in English is the translation of interview quotes from one language to the other. Obviously, it is essential that meaning is not lost in this translation. Therefore, it was central in the process of translation to make the quotes read well in English, rather than to translate word by word. To assure the quality of the translations, they were made in cooperation with a native English speaker conversant in Norwegian.

4.5.2 The analysis

A series of choices in terms of analytical approach and framework have influenced the analysis. Other choices would have resulted in other stories to tell, as it is unlikely that this study captures the full breadth of experiences and imaginaries of responsibility toward the public (Marton 1981: 190). Thus, alternative analyses of academics' responsibility toward the public deserve attention in future research. However, efforts are made throughout to ensure that the analysis is credible, dependable, and confirmable.

An interpretive process can never be objective. The results of the analysis represent the data the way I as researcher interpret them. As described also by Felt (2009), the study can be seen as a gathering and re-telling of stories, and ultimately I have seen and heard some stories louder and more clearly than others. Therefore, the question of the validity of the analysis is not a question of whether I have “found” the right interpretations, but if the interpretations made are dependable, credible, confirmable (e.g. Lincoln and Guba 1985) and defensible (e.g. Marton and Booth 1997, Åkerlind 2005, Kvale and Brinkman 2009). While there is not, in the kind of explorative and interpretive research conducted in the present study, one single reality to “find” or “get right”, presenting an analysis as I have done means putting forth a claim of proposing *reasonable* interpretations and conclusions (e.g. Alvesson and Sköldberg 2009). Rather than looking at validation as regarding the product of research, I find validation to be something to be kept in mind throughout the research process (Kvale and Brinkmann 2009). Thus, I have continuously questioned my choices, interpretations, and categorizations. As noted in the above section on ethical considerations, I have experienced that the epistemic obligations of validity are very much related to ethical obligations toward those participating in the study and their institution, as well as the reader. I applied two main strategies in order to seek valid interpretations. The first strategy was to move back and forth between transcripts and preliminary interpretations. Doing so entailed looking closely again and again at the data selected—in the reduced set of data, in the full transcripts, and in the text where I inquired through writing—to make sure meaning was not lost or twisted in the process of interpretation. The second measure was to ensure an audit trail, i.e. to seek input, comments, and advice from others (elaborated below). While participant-validation is a common strategy for validating analysis of interview data (Miles and Huberman

1994, Kvale and Brinkmann 2009) it was not an adequate approach to ensure validity of interpretations in this study since I viewed the data as pools of meaning (Åkerlind 2005).

Throughout the analysis, I have taken measures to ensure that dependability and defensibility of my interpretations. One such measure was to keep a *critical distance* from my own interpretation (Alvesson and Sköldberg 2009). I have done so by taking breaks from the analysis, by re-reading the full transcripts in several rounds, and by way of zooming in and out throughout the analysis. Moreover, the reflexive interpretation between the two stages of analysis contributes to this critical distance because the different steps of analysis are seen in light of each other, and have a corrective function in addition to lending each other meaning (Alvesson and Sköldberg 2009).

One of the ways I have aimed to justify my interpretations and ensure some level of confirmability is by presenting low-inference data (i.e. quotes from the transcripts). Chapter 6 is therefore rich in data in the form of extensive quotes from the interviews. This gives the reader the opportunity to consider my interpretations. However, there is still the danger of what Flick (2009: 384) calls ‘selective plausibilisation’, i.e. that the data quotes are selected to support something that would look different if one read the whole set of data. In an effort to ensure that I had not performed this kind of selective plausibilisation, I re-read the full transcripts toward the settling of the analysis. Also, to ensure dependability, I aimed at describing the study in detail in order to present the logic/rationales for the choices made and to make the process documented and traceable.

To strengthen the trustworthiness of the analysis, I also continuously sought feedback on my analysis. These rounds of feedback constitute an audit trail (Solbrekke 2007). At an early stage of the analysis, I discussed the first step of analysis with several researchers experienced within phenomenography at the Institute of Teaching and Learning (ITL) at the University of Sydney, and at the Teaching and Learning Centre at the University of Canberra. By working on the analysis with one of these researchers over a period of one week, I learned about the phenomenographic approach to analyzing interviews through cooperation and observation. Further, I have presented preliminary work at seminars at ITL and the Department of Education at the University of Oslo, getting valuable feedback from colleagues. Most importantly, supervisors have engaged actively and critically throughout this research process. This has been crucial for the whole process of developing the study, establishing the approach and the

analytical framework, and for the process of analysis. Any and all shortcomings are, of course, still on my behalf.

4.6 The value of the study beyond the empirical context

Transferability (Lincoln and Guba 1985) or analytical generalizability (Kvale and Brinkmann 2009), i.e. a reasoned judgment about to what extent the findings can tell us something about another context (e.g., another university, perhaps in another country), depends on similarities and differences in context. Literature elaborated in Chapter 2 on the current context of academic work and the questions that arise from the reviewed studies confirm the general relevance of the research questions as well as the findings and discussions I have discerned. At the same time, these discussions show that conditions look different in different national, political-economic, and institutional contexts.

The transferability of the findings to other contexts depends on rich contextual descriptions, on the researcher's argumentation for the transferability of the results to other situations and contexts, and on the reader's own generalizations (Kvale and Brinkmann 2009: 269). Chapter 5 describes the national, institutional, and disciplinary contexts, allowing the reader to compare with other contexts to judge the value of the present study in the contexts in question. Based on the combination of the contextual descriptions and the literature reviewed in Chapter 2, I find it reasonable to suggest that the findings from the present study are to a large degree of general relevance in the sense that the issues that arise in the analysis would to various degrees resonate with academics in general in Western liberal democracies. While national, institutional, and disciplinary contexts differ, and thus the issues of responsibility will be lived, experienced, and imagined differently, the central findings relate to issues of taking responsibility toward the public that seem relevant beyond the local context of the present study. The discussions of the findings from the present study in relation to perspectives and findings from international studies in each of the chapters where the analysis is presented support this claim.

Chapter 5: The context of the study

In this chapter, I present the context of the present study to provide insight into relevant features of the epistemic living spaces of the participants. Within the notion of epistemic living spaces, the individual academics' own experiences and imaginaries are crucial; in addition, the national, institutional, and disciplinary contexts are also relevant, as they indicate features of the collective experience as well as the concrete context of the individual participants' experiences and imaginaries. Thus, these descriptions constitute the contextual frame for studying experiences and imaginaries of taking responsibility from below.

The global (discourses on) epistemic changes in the macro level presented in Chapter 2, play out locally and necessarily take on specific forms in the local historical context. Therefore, I provide contextual descriptions of the Norwegian context of higher education, the University of Oslo, and the disciplines of psychology, history, biology, and sociology at the University of Oslo. The descriptions rely on previous studies and the disciplines' online self-representations. The descriptions provide relevant nuances to the descriptions of the current context of academic work presented in Chapter 2, and contextualize the epistemic living spaces of the participants in the present study.

5.1 The Norwegian context

Higher education institutions in the Norwegian context are considered to be important institutions in society (Vabø 2011). Within a knowledge society and a modern liberal democracy, academic institutions are seen as contributing both to the economy and to social and cultural development. The democratic and cultural role of higher education is pronounced in the Norwegian context (e.g. NOU 2008: 3, Kalleberg 2010, Vabø 2011), and the “universities have generally had a key role in fulfilling the central democratic goals of the welfare state” (Vabø 2011: 263). In addition to this democratic and cultural role being an educational task, it is a research task and a communication task. This comes to the fore in the general guidelines issued by the Norwegian National Research Ethics Committees (NENT)¹⁰, as well as in *the guidelines*

¹⁰ <https://www.etikkom.no/en/ethical-guidelines-for-research/general-guidelines-for-research-ethics/>

for research ethics in science and technology¹¹ and the guidelines for research ethics in the social sciences, law, and humanities¹². The guidelines point out a responsibility related to both what researchers choose to pursue knowledge about and to communicating their specialized knowledge to the public and contributing to the public conversation. Jacobsen (2014: 25) points out that this entails a responsibility to contribute to quality assurance of the knowledge claims forwarded in public debate, and that taking this responsibility is expected to take place during office hours.

While in Anglo-Saxon literature on higher education (Calhoun 2009, Henkel 2009, Strain, Barnett et al. 2009, Barnett 2011) the retreat of the state as funder of higher education is a central issue, in the Norwegian context the state is still a strong actor. Not only does the state provide nearly all the resources, it also regulates and steers the system (Vabø 2011: 263). Vabø describes the Norwegian higher education system as positioned *between humboldtian values and strategic management* (Vabø 2011). In Norwegian universities, the tradition of Humboldtian values and ideals¹³ has been important for the development of academic work (Vabø 2011: 263). During the last decade however,

academic staff at Norwegian universities have had to adapt to a range of initiatives introduced as part of the so-called Quality Reform, launched in autumn, 2003. This was first and foremost a response to the goals of the Bologna Declaration of 1999. In Norway this meant a new study structure, the bachelor-masters study structure (3+2 years) was to be implemented. Furthermore, the reform represented an attempt to achieve: (1) a higher degree of efficiency through devolution of authority to higher education institutions, (2) the provision of stronger leadership, (3) increased emphasis on internationalisation, (4) the formation of an autonomous central institution for quality assurance and accreditation (NOKUT) and the development of criteria for institutional audit, (5) new forms of pedagogy, as well as (6) a new funding model that is supposed to provide stronger incentives for improvement (Vabø 1989). This followed a range of reforms inspired by New Public Management (NPM) that had gradually been implemented throughout the public sector in the 1990s (Vabø 2011: 263-264).

¹¹ <https://www.etikkom.no/globalassets/documents/english-publications/1/guidelines-for-research-ethics-in-science-and-technology-2008.pdf>

¹² <https://www.etikkom.no/globalassets/documents/english-publications/guidelines-for-research-ethics-in-the-social-sciences-law-and-the-humanities-2006.pdf>

¹³ In the Humboldtian notion of the university, the central elements are: the unity of teaching and research, academic freedom, the university as a research institution, and the primacy of *Bildung durch wissenschaft* (Michelsen 2010: 151).

In particular, the increased public expenditure following from the massification of higher education and a growing concern about global competitiveness have been used to justify more market-oriented modes of governance and management in higher education (Vabø 2011: 264).

Other central features of the Norwegian academic profession are that almost all academic staff have both research and teaching duties, and there are only a small number of grades and minor differences in professional duties and salaries compared to most European countries (Vabø 2011: 265). A central experience reported by Norwegian university academics is that, in the wake of the Quality Reform and the implementation of new pedagogies requiring closer monitoring of students, they now have less continuous time for research (Michelsen and Aamodt 2007).

Meanwhile, to develop a career in academia, it has become necessary to participate in international (research) networks and to publish frequently (Vabø 2011: 266). Vabø (2011: 267) notes that repeated calls for continuous time for research may indicate a one-sided identity for academics as researchers. However, she suggests that these calls may also be due to the incentives in the system being related to research rather than to teaching. Further, external financing of research has become increasingly important; consequently, more time is spent on writing research applications and related activities (Vabø 2011: 268).

In Chapter 2, the increased influence of external stakeholders (including government) on academic work came through as central in the descriptions and experiences of the current context of academic work. According to the CAP¹⁴ survey data, Vabø argues, this influence is in the Norwegian context “...relatively weak on decisions about: the selection of new faculty, determining budget priorities, setting research priorities, determining the teaching load of faculty, and setting admission standards for undergraduate students” (Vabø 2011: 268). A particular nuance to the descriptions in Chapter 2 is that “university faculty in Norway are not expected to operate as entrepreneurs and raise external funds to the same extent as in other national systems, such as Australia, the UK and the USA” (Vabø 2011: 268). However, Norwegian academics report a growing demand to raise external funding and also an increasing extent of influence from the government and other external stakeholders on the evaluation of research (Vabø 2011: 269). This may indicate an increase of stakeholder influence also within the Norwegian university context. From observing the discourse and debate about academic work, it seems that

¹⁴ See Chapter 2 for a description of this research project on the Changing Academic Profession.

since Vabø's report in 2011, the focus on external funding of research within Norwegian higher education institutions has only increased. Furthermore, due to the combination of a

...powerful National Research Council allocating research resources through programs directed at targeted areas and governed mainly by stakeholders,... [and] actors at the supranational level, such as the European Commission and the Nordic Council of Ministers,... [becoming] more influential in the allocation of research resources, individual academics are increasingly reduced to the role of an agent in a principal-agent relationship (Vabø 2011: 269).

Vabø finds that this situation is experienced to diminish the opportunities for individuals, both in terms of autonomy and resources, to initiate and perform scholarly investigation in areas they find important (Vabø 2011: 269). As noted in chapter 2, university academics raised a similar critique in the weekly newspaper *Morgenbladet* in December 2014, suggesting that Norwegian university academics experience increased stakeholder influence as a challenge in the Norwegian context today.

The degree to which institutional management influences the life and work of individual academics varies, and is complex. Many research environments within the universities are still relatively autonomous professional communities governed by their own standards of academic quality and modes of organizing academic work (Vabø 2011: 270-271). However, Vabø finds indications of changes in management, both in terms of increased power of management and in terms of a form of management that implies that academic organizations and academic activities can be run in the same way as other companies in the service sector. While the conditions described in the European context are not all equally present in the Norwegian context, it seems that the governance models for the academic profession in Norway "have changed in favour of strategic management" (Bleiklie et al. 2006, as cited in Vabø 2011: 278). This development has been, and still is, subject to critique. Some argue that the new regime developing do not serve the Humboldtian ideal of scholarship of discovery, nor the democratic and cultural obligation of the university, but economic and political-managerial interests alone (e.g. Vabø 2011, Kalleberg 2010, Kjeldstadlie 2010). According to Vabø, little empirical research has provided evidence for these claims; still, she argues that "we can expect great changes in the nature of academic work as well as in what it means to be an academic in the years to come" (Vabø 2011: 279). This role and power of administrators and management following from the introduction of new public management has been and remains subject to public debate and empirical research. By

contributing empirical knowledge on experiences and imaginaries of taking responsibility toward the public, the present study adds new knowledge on how Norwegian academics experience this environment.

5.2 The University of Oslo

Established in 1811, the University of Oslo is, as noted in Chapter 4, the oldest and, until the merger of several higher education institutions in 2014, the largest higher education institution in Norway. In 2015, the University of Oslo was hosting over 27,000 students and over 3,400 academic staff¹⁵.

The strategic plan of the University of Oslo states that the “academic culture is characterized by critical reflection and debate, a critical attitude toward established norms, and a place where objectivity and freedom from prejudice flourish” (UiO 2010: 4). Further, “social responsibility, solidarity and the environment” are expressed as core values of the university, and the plan states that “the University of Oslo is ready to take responsibility for helping to resolve global challenges, particularly those related to climate and the environment (...) both through research and education related to the environment and through operations at the university” (UiO 2010: 5). In the review of literature on the current context of academic work (Chapter 2), the relation between the university and society was found to be among the central topics addressed in this literature. Historical presentations of the University of Oslo provide concrete examples of there being strong ties between the university and society from the establishment of the university. Established in 1811—three years prior to the first Norwegian constitution—Det Kongelige Fredriks universitet [the Royal Fredriks University], renamed the University of Oslo in 1939, was crucial to the building of the nation, in the sense that the forming of the Norwegian state was to a large degree performed by communities related to the university (Thue and Helsvig 2011). In the 19th century, university staff was leading departments of government, and developing the school system and the infrastructure around the state. There was thus an extensive mixing of roles and strong relations between the university and the political elite and the bureaucracy¹⁶. In addition, the different faculties each had clearly defined educational missions, which meant that

¹⁵ <http://www.uio.no/om/tall-og-fakta/uio-i-tall/>

¹⁶ <http://www.uio.no/om/tall-og-fakta/slik-forandret-uio-norge/forendeskikkelser.html>

they were integrated in distinct circuits in the Norwegian society (Helsvig 2011: 31-32, Thue and Helsvig 2011). Also, the various institutions in society often asked for the professional service of professors¹⁷. However, as the following descriptions reveal, the relation between the university and the surrounding society has gone through changes.

The literature also points out the massification of higher education and the expansion of the university as central features of the historical development of the university. Until the 1960s, the universities were small and few, educating a small elite; however, from the 1960s, student numbers grew to include large shares of the population, and the number of universities as well as the size of each institutions grew. The University of Oslo was no exception.



The university buildings from 1851. Welcome ceremony for students to the University of Oslo
Photo: Francesco Saggio, UiO

In the beginning of the 20th century, the university outgrew its locations at the city center, and Blindern campus at the outskirts of the city center was developed from the 1930s. The buildings from 1851 in the city center now house the Faculty of Law, but are still an important symbol of the University of Oslo. Symbolic events take place there, for example the yearly welcome ceremony for new students.

The picture below shows an expanded university, the large brick buildings in the picture constituting an extensive campus, like a “university village” on the outskirts of the city center.

¹⁷ <http://www.uio.no/om/tall-og-fakta/slik-forandret-uio-norge/forendeskikkelser.html>



Blindern Campus
Photographer unknown (Source: tu.no)

Thue and Helsvig (2011) describe an ambiguous development following from the expansion of the university and the massification of higher education: Parallel to the radical growth of student numbers, the university and the disciplinary communities were in the process of consolidating as a research university and as research communities. According to their analysis, from the 1960s, the disciplinary communities within the University of Oslo developed from a bundle of collegial communities anchored in concrete societal missions, to more loosely coupled self-governing disciplines focusing on their own international research community. This, they claim, weakened the above described relationship between the inner life of the university and the surrounding society. They describe a development where negotiations with society were left to an increasingly active administration (echoing Maasen's analysis presented in Section 2.1.1). Contradictory to images of the increased importance of the university in the knowledge society, a paradox is developing in the sense that, at the same time as the university was met by increasing expectations and demands from funding authorities to increase productivity, relevance, and societal usefulness of both education and research, academic communities were seemingly "for the first time in the history of the university (...) drifting towards the exclusive "ivory tower" of international science" (Thue and Helsvig 2011: 391). This historical analysis echoes Martin's claim (see Chapter 2) that the intertwinedness of the academy and society is not a radically new phenomenon, but rather constitutes a turning back to a social contract common before the second

half of the 20th century, where universities were funded based on the expectation that academic work would contribute to society in specific ways (Martin 2003: 7-8).

Still, Thue and Helsvig describe a development where the disciplinary communities focused more on the international research community than on their specific societal missions. Current claims of relevance, usefulness, and accountability are probably best understood in light of this context. However, while in this historical analysis, the tension between orienting toward the research community and orienting toward societal contribution is conveyed as central, it seems crucial to ask whether there necessarily is a contradiction between the two. By exploring how university academics take responsibility toward the public, the present study illuminates this question.

Strategy 2020 states that the University of Oslo (UiO) wants to be “a university in society”, and has as a core objective that, “through active dialogue and cooperation, the University of Oslo will help to ensure that research-based knowledge is employed to solve the major challenges facing society in the 21st century” (UiO 2010: 10). One of the strategies to accomplish such a contribution is to “...share knowledge and improve its dialogue with the society-at-large. Research-based knowledge will be applied to challenges found in the public domain through a closer collaboration with institutes and public and private enterprises” (UiO 2010: 10). With regard to this, it is further stated that

...active communication and sharing of knowledge represent sound approaches to the development of knowledge and are in accordance with the spirit of academia. University leadership at all levels has the responsibility of placing greater emphasis on dialogue with society. (...) The university will adopt a more comprehensive approach to the dissemination and communication of research. Priority will be given to the efforts to preserve and publicize scientific publications in open, institutional archives and to Open Access publishing. (...) The university community will take an active role in the dissemination of research to the general public through the use of interactive arenas for dialogue, through the use of the Internet and through key events that aim to both inform the public and recruit new students. Dissemination activities will help ensure that research, education programmes and the university’s relevance in society are better publicised¹⁸ than they are at present (UiO 2010: 10).

¹⁸ It is interesting to observe how strategies to contribute to societal purposes are in the strategic plan mixed with branding strategies and strategies to recruit students. This is a topic worthy of critical discussion, but will not be further explored here.

The plan also states that

...the University of Oslo is expected to do more in the face of global and national challenges. At the same time, UiO is asked to be more accountable for the use of its own resources in a situation where financial constraints are becoming tighter (UiO 2010: 5).

More examples of the strategic plan's focus on the orientations toward society could be reported. The point, however, is merely to suggest that, while this is taken from the strategic plan of one particular university, formulated at one particular point in time, it resonates with the discussions found in the literature on the university, and the expectation from both inside and outside the university to be an (increasingly) important contributor to societal development. Also, the experiences of accountability demands reported in the strategic plan echo an important point made in the literature on the current context of higher education institutions and indicate that, despite the relatively autonomous position of the University of Oslo, academics are exposed to demands from external actors, as described as an emerging feature of higher education in Chapter 2.

In addition to the general features of the historical context of the University of Oslo, distinct features of the historical context of each of the disciplines are relevant to the present study. The contextualization of the disciplines provides even more concrete information about the context in which the participants live and work, and thus provides insight into features of their epistemic living spaces. The following sub-sections describe the disciplines.

Psychology at the University of Oslo

The knowledge domain of psychology is human experience and behavior, including how cognitive, emotional, and social processes and skills develop, function, and are affected by factors surrounding the individual¹⁹. This knowledge domain is explored in a variety of ways. Academic staff at the Department of Psychology pursue research within work and organizational psychology; clinical psychology and personality psychology; cognitive neuropsychology; social psychology; developmental psychology; and cultural and community psychology.²⁰The

¹⁹ <http://www.sv.uio.no/psi/om/beskrivelse/>

²⁰ <http://www.sv.uio.no/psi/english/research/>

department offers bachelor and master programs, and a one-year unit in psychology, in addition to the six-year professional degree, educating clinical psychologists.

Until the beginning of the 20th century, the human mind was explored philosophically. At the turn of the century however, psychology as an empirical and experimental science emerged, by model of the laboratory of chemistry and biology. At the University of Oslo, the Department of Psychology was established in 1909 (Gullestad 2009). Echoing the above, Gullestad further notes that the establishing of the department took place at a time when universities in Norway and in most Western countries went through a transformation from being focused on education to becoming focused on research. Moving away from the education of priests, doctors, lawyers, and philologists as the major task, the production of new knowledge became the focus of attention (Gullestad 2009). In this process, the scientific breakthrough of the natural sciences became influential on the rest of the university.

After World War II, psychology was established as a profession. However, both academic and political resistance toward establishing a profession upon a young and immature science (Gullestad 2009, Thue and Helsvig 2011: 175-176) prolonged this process over a decade. Even though a professional program was offered in 1948 (Østerud 2013), a fully developed professional program was not established until 1959. In the following years, psychology became one of the social sciences with a clear mission to develop understanding about society and the development of personality, and to educate professional psychologists to treat mental illness (Gullestad 2009). Psychology was expected to contribute both to efficient management of societies' resources and to individual welfare and self-fulfillment (Thue and Helsvig 2011: 174-175).

At the University of Oslo, the Department of Psychology is organizationally located within the Faculty of Social Sciences. In 2002, the department outgrew its facilities within the faculty buildings, and moved into their own building (picture below) physically located between the university campus, the university hospital, and Oslo Science Park (Østerud 2013). In a presentation at the 50-year jubilee of the Faculty of Social Sciences in 2013 psychology

professor Gullestad pointed out that psychology is a discipline in the area between social science, medicine, and the humanities²¹.



Harald Scheldrup's house, Forskningsveien (Research street] 3
Photographer: Unknown (Source: www.admin.uio.no/)

This historical contextualization of psychology places its development in the general development of the University of Oslo toward a large research university, but provides also the distinct contextual framing of a discipline developing from the humanities to an experimental science, and further on to a profession with central and distinct societal tasks. This serves as an important backdrop for understanding psychologists' articulations of taking responsibility toward the public.

History at the University of Oslo

At the University of Oslo, history is placed at the Faculty of Humanities, within the Department of Archaeology, Conservation and History. In the present study, history is taken as a discipline from the humanities; however, history is a discipline at the intersection between the interpretive humanities and the systematic social sciences (Kjeldstadli 1999-32). At the time of establishing

²¹ <http://www.sv.uio.no/om/aktuelt/arrangementer/sv-50/program/fagkritisk-debatt.html>

the department at the University of Oslo in 1953, it was suggested to locate history as a section within the department for social sciences (Kjelstadli 1999: 32) and within some universities history is placed among the social sciences. However, while exploring societal events and phenomena, historians tend to approach this in a more individualizing manner than the social sciences, and with a more interpretive and hermeneutical approach than social sciences.

While not established as a department until 1953, the discipline as a research discipline in the modern sense can be traced back to the Norwegian Historical Association in 1869 (Thue and Helsvig 2011: 138). History professor at the University of Oslo, Erling Sandmo (2015), points out that the purpose of history as well as the question of how history should be written needs to be understood historically. Both the purpose and the process of developing knowledge and presentations of the past have changed, due to both epistemological and social developments. According to Thue and Helsvig's historical analysis, the scientific culture of the humanities within the university was during the 19th century reproduced in close interaction with the important outbound task of educating teachers for the high school/gymnasium. University and high school formed a kind of closed cycle, where high school prepared students for academic studies, and the humanistic university disciplines educated teachers for high school. The content included in the graduate degree at the university was defined by the curriculum in high school (Thue and Helsvig 2011: 117). Possessing a key position in the nation-building of the 19th century, history was, alongside philology, kind of a "mother science" of the Norwegian humanities. After World War I however, the discipline became more integrated in a European research community, as Norwegian historians strived to be part of an international community and to surpass the nationalistic heritage through new and comparative approaches (Thue and Helsvig 2011: 138). Also, a shift occurred from history as "serving national identity building" to history as more critical participant in public discourse, challenging established narratives and identities, and disclosing myths.

The development of a research community of historians was followed by a partly new understanding of what constituted the core of scientific practice for historians, and what ensured the objectivity of historical knowledge. Within both the focus on the nation's development in the 19th century and the historical materialism of the interwar period, the interpretation of historical sources and formation of historical "facts" were places in a continuous interaction with

overarching theories about the direction of the development of society. After World War II, such comprehensive and “teleological” theories were discredited as “ideologies” that threatened the objectivity of research (Thue and Helsvig 2011: 139 and 142). Thereby, the dominant epistemology within history came to be critical empiricism. Thue and Helsvig note:

By making source criticism the central method of historical science, historians established themselves as a sort of “investigating committee” facing the past, with high standards of documentation, just judgment of evidence and fine-tuned judgment in the weighing of different facts and arguments (Thue and Helsvig 2011: 141).

Critical empiricism has in posterity been criticized for having weakened the holistic perspective and the societal relevance of the discipline, qualities that were linked to the field of history’s place in the larger cycle of the Norwegian society (Thus and Helsvig 2011).



The books in the photo all have titles that reflect that how to perform and how to use history is a topic of continuous concern. Translated titles: Top left: The Past is Not What it Used to Be]; Bottom left: History in Use; Right: Time for History. A book on Historical Questions. Photographer: Ester Fremstad

This historical contextualization serves as a backdrop for understanding the analysis of historians’ experiences and imaginaries of taking responsibility, as it provides insight into central features of the historians’ epistemic living spaces.

Biology at the University of Oslo

At the University of Oslo, the Department of Biosciences was established in 2013, following the merging of the Departments of Molecular Biosciences and Biology. The department is located within the Faculty of Mathematics and Natural Sciences. It has one Centre of Excellence (Centre for Ecological and Evolutionary Synthesis) and four research sections: Aquatic Biology and Toxicology, Biochemistry and Molecular Biology, Physiology and Cell Biology, and Genetics and Evolutionary Biology. Within these areas, biologists focus on understanding the fundamental biological processes from the molecular and cellular levels to the population and ecosystem levels. The department is large, with approximately 130 employees, 175 PhD students and postdocs/researchers, and 650 students²². The department provides education at the bachelor and master levels within a broad spectrum, for example biochemistry, microbiology, physiology, genetics, ecology, bioinformatics, and biotechnology²³.

The natural sciences had a central position within the University of Oslo beginning with its establishment in 1811. A separate faculty for the natural sciences was established in 1861, and its societal importance continued to grow, in particular after World War II (Thue and Helsvig 2011). While in the first decade after World War II physics and chemistry were the most prominent natural sciences, biology developed as a field that became an increasingly important border area between the research of natural science and medical research, resulting in the establishment of the Department of Biochemistry in 1956(Thue and Helsvig 2011: 99-100). From the 1960s and 1970s field biology, experimental biology, and ecology gained considerable attention inside the university, and also came to play an important role in environmental debate and policy.

In 1971, a new, spacious, and modern biology building, named after the first Norwegian female professor, Kristine Bonnevie (1872-1948), stood ready on campus (Thue and Helsvig 2011: 112). This building has some interesting symbolic features, ranging from the museum-like displays of birds and animals on the ground floor, to the very modern labs and posters featuring advanced molecular research on the higher floors. Also, old labs are being renovated and modernized, as the once-modern building needs to keep up with new times. On the walls are framed and unframed photographs, posters, and drawings of natural objects that are more artistic

²² <http://www.mn.uio.no/ibv/english/about/>

²³ <http://www.mn.uio.no/ibv/om/>

in their expression, giving associations to art exhibitions and evoking admiration for the wonders of nature.

While the growth in student numbers within the Faculty of Mathematics and Natural Sciences deflated in the mid-1960s (while still increasing within social sciences and humanities), economic and staff resources continued to grow, and new buildings were raised. According to Thue and Helsvig's analysis, this allowed the faculty to pursue an ambition to develop into an internationally oriented research community. They assert that research considerations were also the basic consideration when developing curriculum, forming a radical break with a curriculum oriented toward educating teachers (Thue and Helsvig 2011: 113). Still, the above mentioned showcases on the ground floor, most of which contain environmental messages, continue to bear hints of the department's educational, societal, and environmental missions. Outside the major auditorium "*Our Nature - Our Responsibility*" is written in capital letters, heading a large showcase featuring scenes from nature.



Photography of the large showcase outside the auditoriums in the biology building (Krsitine Bonnevis hus).
Photographer: Ester Fremstad

The display case in the picture is in honor of Professor Kristine Bonnevie. In his commentary on the display, the artist (Øystein Bernhard Mobråten) points out that the range of colors in the

showcase is meant to symbolize the ideal combination she represented of intellect and sober analysis with fantasy, warmth, and passions; further, the artist expresses that this balance will inevitably lead to lasting responsibility and engagement. This display case illustrates an interesting feature of the epistemic living space of biologists.

Sociology at the University of Oslo

At the University of Oslo, sociology is located within the Department of Sociology and Human Geography at the Faculty of Social Sciences. Sociologists study social life, and seek to interpret and explain how people are being shaped by societal features, as well as how society is changed by human interaction. The relation between the individual, group, and structure, as well as societal change and development, are central in sociology²⁴. Compared to the individual focus within psychology, sociologists are concerned about groups and institutions, and their circumstances and organization. Topics that occupy sociologists at the University of Oslo range from global challenges to cultural and political participation, the welfare state, work life, social inequalities, marginalized groups, and family and life cycle²⁵. The department offers a one-year course in sociology, in addition to a bachelor degree and a master degree.

The Faculty of Social Sciences is quite young, established in 1963 (Østerud 2013). However, the Department of Sociology was established in 1950, and the department was located within the Faculty of Humanities until the establishment of the Faculty of Social Sciences (Thue 2013). Studies of political and social life at the University of Oslo began, however, in the 19th century, within disciplines such as law, history, philology, and theology (Østerud 2013).

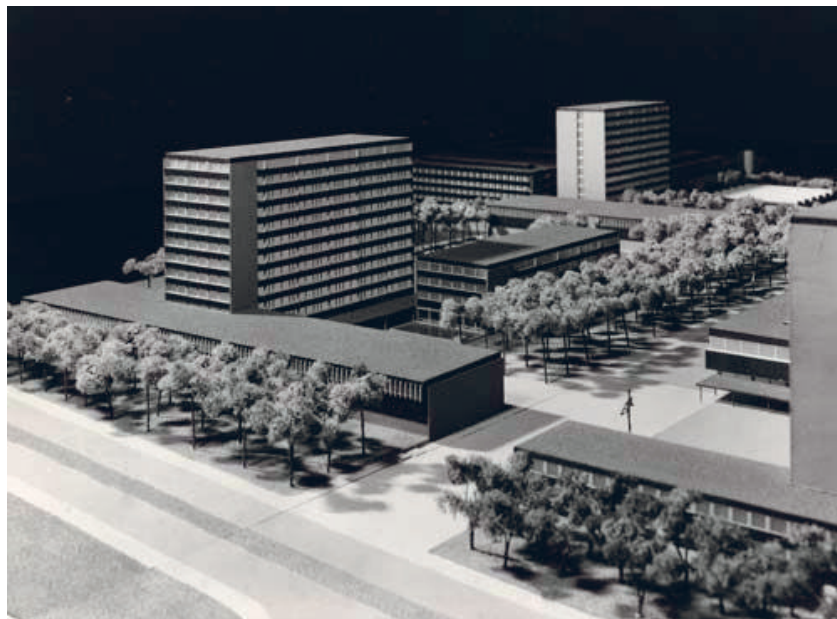
When the Faculty of Social Sciences was established, “social science were to provide the Norwegian society with new knowledge, new ways of understanding and new tools to solve the challenges of moderns society” (Thue and Helsvig 2011: 155). The fight against totalitarian ideologies, in particular fascism, is an important backdrop for the development of social science in the early postwar years. Developing the modern welfare society, ensuring democracy, and securing peace were central issues in society, and the social sciences were understood to be

²⁴ <http://www.sv.uio.no/iss/forskning/vi-forsker-pa/sosiologi/>

²⁵ <http://www.sv.uio.no/iss/forskning/vi-forsker-pa/sosiologi/>

important contributors. Educating students for democratic social responsibility and teaching them to unite political engagement with scientific rationality were central educational aims (Thue and Helsvig 2011: 156).

The societal tasks of social science were clearly voiced. While the social science disciplines as we know them today are quite different from the small entities fighting to establish an identity in the first years after the war, the field of social sciences grew fast, not least due to massive student interest (Østerud 2013). The photo below depicts a model of the new faculty of social sciences, built in the late 1960s. This planning of a large complex to house staff and students of the social sciences may be taken to symbolize both the expansion of the field and a growing belief (by public and government as well as the university and social scientists) that social science would contribute valuable knowledge in the form of research and education, for solving societal challenges in the future.



Model of the new faculty of social sciences, built in the late 1960s
Photographer unknown.

Source: <http://www.muv.uio.no/uio-historie/fag/samfunnsvitenskap/sv50.html>

That the expansion and massification of the university that began in the 1960s comprised the social sciences and not only technical and natural sciences was specific to Norway (Thue 2013). However, according to Thue's analysis, a shift in focus took place within the social sciences from the late 1960s, from focusing on educating for important tasks in society, toward focusing on research and the international research community. However, as pointed out above, it seems crucial to ask if there necessarily is a contradiction between the two, where one excludes the other. By exploring how sociologists see themselves as taking responsibility toward the public, the present study offers some insight into this issue. Also, Østerud (2013) points out that social sciences play an important role in both the private and the public sectors in Norway. For example, the extensive official analytical reports of societal challenges (NOU²⁶) have, according to Østerud, been a Scandinavian specialty after the war, and the social sciences have been instrumental in developing such reports on issues like welfare, poverty, distribution of resources, labor market, power, and immigration (Østerud 2013).

While contributing to social development is central within sociology²⁷, a distinction and a theoretical and practical tension have also gradually emerged between a social "management science" and a more "critical-reflexive" social science concerned with how it influences people's understanding of their social circumstances (Thue and Helsvig 2011: 175). When the Faculty of Social Sciences celebrated their 50-year jubilee in September 2013, key topics were the critical and the constructive roles of social sciences²⁸. Critique of how society functions has been central within sociology. However, sociologists at the Department of Sociology argue that part of the critical task of sociologists is to identify what works and to make constrictive propositions regarding societal arrangements and how they may be improved²⁹. This description of the historical context of sociology provides an image of a discipline that is seen (by government, by itself, and perhaps by the public) as important for society, but in different, perhaps conflicting

²⁶ Official Norwegian Reports. The Government or a ministry may constitute a committee and working groups who report on different aspects of society. These reports are commonly used as the foundation of suggestions made by the Government to the Parliament, and are often referred to in white papers (<https://www.regjeringen.no/en/find-document/norwegian-official-reports/id1767/>)

²⁷ <http://www.sv.uio.no/iss/forskning/vi-forsker-pa/sosiologi/>

²⁸ <http://www.sv.uio.no/om/aktuelt/arrangementer/sv-50/program/>

²⁹ <http://www.sv.uio.no/om/aktuelt/arrangementer/sv-50/program/fagkritisk-debatt.html>

ways. By exploring how sociologists experience and imagine taking responsibility toward the public, this is further illuminated in the present study.

Chapter 6: Ways of taking responsibility toward the public

This chapter presents the findings from the first step of analysis. This step of analysis is a data-driven, phenomenographic analysis, performed within each discipline. The chapter serves two main purposes: First, to map out and describe the various responsibilities toward the public that the participants see themselves as having, and the range of ways that they understand and experience taking these responsibilities. Second, the aim is to unfold the participants' own expressions of how they understand and experience taking responsibility toward the public. Therefore, I provide elaborate examples from the data.

The way I have mapped out the various responsibilities toward the publics and the range of ways of taking these responsibilities is (as more thoroughly described in Chapter 4), first, by approaching the interview transcripts as pools of meaning. Specifically, all the interviews from each discipline are treated as one pool of understanding and experiencing taking responsibility toward the public³⁰. I chose this approach to the data because the aim is to capture not each individual participant's way of understanding and experiencing taking responsibility toward the public, but all the different responsibilities toward the public and all the different ways that these responsibilities are understood and experienced to be taken, by the participants as a group. Further, it is worth noting that the aim is to unfold the variety of different ways in which the participants understand and experience taking responsibility, and not to identify contrasting understandings. Second, in order to structure and make sense of the manifold articulations of taking responsibility toward the public, it was essential to group the findings (described in Chapter 4). Within each discipline, responsibilities and ways of taking responsibility seemed to fall into three broad categories. Across disciplines, I identified both similarities and differences in the categories. In the following, I present the findings from each of the four disciplines, structured according to the responsibilities that the participants describe themselves to have toward the public. For each of the responsibilities, a number of ways of taking these responsibilities emerged. Further, challenges with regard to taking the envisioned responsibilities, as well as experiences of needing to draw the boundaries of responsibility while struggling to do

³⁰ This means, as noted in Chapter 4, that not all participants will recognize every responsibility and way of taking responsibility presented as the outcome of this analysis.

so came through as central in this analysis Thus, I include these findings in the following presentation.

The psychologists

The psychologists describe themselves as having responsibility for 1) contributing to clinical practice, 2) providing psychological knowledge to other professions, and 3) contributing to improving the everyday life of the general public. These responsibilities toward the public are understood to be taken in a variety of ways, as described in the following.

Taking responsibility for contributing to clinical practice

For the discipline of psychology, the clinical profession is central. Psychologists partaking in the present study, even if not teaching in the clinic or performing clinical work, seem to associate strongly with the psychological profession, and describe taking responsibility for contributing to clinical practice. In particular, they understand this contribution to be about including new knowledge in psychological practice. The “we” and “our” in the following quote, expressed by a psychologist not involved in clinical work, illustrates how psychologists not involved in clinical practice/teaching see themselves as actors in including new knowledge in clinical practice:

How do we accept and include new knowledge, and what consequences does this have for how we are to conduct our practice? (P1)

Being researchers specialized within specific fields of research, psychologists understand their contribution to clinical practice being about ensuring that knowledge from their field that is relevant for clinical psychology gains influence on this practice. This responsibility comes through as being twofold. They describe a responsibility, first, to contribute to developing the profession, and, second, to contribute to making the education of new professionals as good as possible. Taking these responsibilities is described by participants as two sides to the same coin, and at the core of taking this responsibility is helping make the educational program as good as possible. Taking the responsibility to contribute to the clinical profession being based on updated scientific knowledge is described by participants to include a variety of actions. These are described in the following.

By continuously developing new knowledge, psychologists gain more insight into how and what kind of therapy works; thus, the psychologists partaking in the present study express as one way of taking the responsibility to develop the profession, images of taking responsibility to contribute to the clinical profession through their research. In order to develop knowledge that is relevant for the clinical profession:

...it becomes important to do research that can help decide what may do good, what may make no difference, and what may do harm when we conduct our treatment. (P1)

The quote suggests an orientation toward the clinical profession, with a particular focus on developing knowledge that sheds light on clinical practice when choosing what to explore in one's research. Similarly, another participant refer to "*my research, which is mostly directed toward the profession*" (P2), suggesting that psychological practice is pivotal to psychological researchers.

Another way of taking responsibility for contributing to clinical practice is by interpreting what knowledge from the international community of psychological research may mean for psychological practice. In addition to the specific research one does, being a researcher within a specialized field of knowledge offers insight into new research performed by the international community of psychological researchers. Participants describe contributing to communicating this knowledge and insight to the field of clinical practice as an important way of contributing to this field.

The participants primarily express that they approach the act of contributing both specialized knowledge from their own research and from the international community of which they are part to the field of clinical practice through communicating this knowledge to colleagues in the clinical section of the department so it could influence the education of new clinical professionals. Furthermore, they emphasize efforts to make the educational program as good as possible as being the responsibility of the collegial community of psychologists, including both clinical academic staff and academic staff performing basic research. It is understood to require "*dialogue [between basic and clinical researchers] ... as a discipline that talks about these things*" (P1). Critical reflections on the "*different schools*" (P1) within psychology, how they understand the human mind, and thus how therapy is approached is envisioned as a central topic for these conversations, and a topic to be illuminated by new empirical knowledge. They describe the aim

of this dialogue to be the reaching of “*new ways of talking and doing things*” (P1), which in turn they see as “*crucial to move forward*” (P1).

While the means of taking the responsibility to develop/improve clinical practice seem to be relatively clearly envisioned, experiences of challenges with regard to fulfilling the responsibility come to the fore. The following quotes illustrate the experience that the community of psychologists at the department is not properly engaged in the dialogue needed in order to include new knowledge in clinical practice:

...we have come, as I consider this institution, pretty short in this dialogue. It does not take place as institutionalized or as any ordinary daily dynamic. It takes place within the clinical communities and outside the clinical communities in other research communities separately. It becomes very little together, very little like one discipline discussing these issues together. (...) We [researchers and practitioners] do not talk much.... And that is a shame, because the consequence is that the development of the discipline takes very long. (P1)

The quote stresses the need for a dialogue between the clinical staff and the basic research staff that is experienced to be more or less absent. Also, debate is experienced as not always productive:

I miss that debate as something we can lead without it being polarized, aggressive sides, as easily happens in academia. (P1)

Participants describe experiencing these challenges to the dialogue to pose serious difficulties in the fulfilling of the responsibility to inform the profession about new knowledge and insights in order to make sure it influences professional practice.

Meanwhile, approaches to ensure that clinical practice is research-based is experienced as sometimes counterproductive. The following quote illustrates how participants experience the focus on a scientific basis for clinical practice as needing to be modified:

...it has been a rather tough pressure on clinical psychology from science, and in part quite unfair, because one demand, it is something about it being very soft phenomenon what we are dealing with...and what is change...? And when science has not come further in measuring than we have, then it is too much to demand that one submit to those measurements and say that this is where it stops.... But it can be infinite possibilities that we do not have a clear research approach to. And then it's wrong to say to a clinical psychologist, who has a gut feeling about what is good for his clients, that “there are no studies that can show this”. Maybe it hasn't been explored. So even if many studies are negative, there may be other ways...So...we may become a little vulgar....and demand a form of scientific basis that is impossible really. It is something about being open that I think is a little difficult for both sides. (P1)

In summary, the participants experience taking responsibility for contributing to clinical practice being based on updated scientific knowledge by developing knowledge relevant for professional practice, by interpreting the implications of new research for professional practice, and by taking part in forming the way that the department educates new clinical professionals. This responsibility is described as taken toward the general public, and toward (potential) clients, in order to contribute to “...forming, creating good clinical professionals out there” (P3/4³¹).

Taking responsibility for providing psychological knowledge to other professions

Psychologists partaking in the present study point out that psychological knowledge can be important and useful also for other professions than clinical psychologists. Thereby, they understand themselves as having a responsibility to pass their knowledge on to other professions:

If you possess a knowledge that can be useful...you are obliged to try to pass it on to those who can put it into use. (P3/4)

One way that this responsibility is described as taken, is by educating psychologists for other positions in society than clinical psychologists, as there are “...many arenas in society where psychological knowledge can be useful, without having the responsibility to perform therapy on individuals, and be educated for that” (P1). In this regard, participants point out that the Department of Psychology provides both bachelor and master programs “...for all those who wish to learn psychology, but who do not want to become therapists” (P1). These psychologists can “help organizations, or advice people in many situations, or help politicians and society in general with how to arrange society in ways that are good for people psychologically speaking” (P1).

Another way of taking responsibility to provide psychological knowledge to other professions is described as offering further education and courses for other professions:

...I have been engaged in training of medical doctors as part of systems of further education...I have performed coursing of staff in public sector ... about psychological phenomena because I believe that they have such a huge range of impact on the public. (P1)

The quote illustrates that participants see providing staff in the public sector with psychological knowledge as a way of taking responsibility toward the general public, as people in these

³¹ P3 and P4 chose to perform the interview together, and are referred to in this presentation as P3/4.

positions are understood to have extensive impact on the public. For example, bureaucrats influence societal arrangements, which in turn impact people's lives, people who work in public offices meet and help people in their work, and medical doctors have extensive impact on individual lives through how they communicate with and decide treatment and advice for patients.

Participants describe yet another way of taking the responsibility to provide psychological knowledge to other professions as giving expert advice to other professional groups in order to “*contribute knowledge to key persons*” (P3/4). This is performed, for example, by taking part in specific societal programs like “*a program that is about convicted youth*” (P3/4).

Altogether, participants describe the responsibility for contributing psychological knowledge to other professions as a responsibility taken toward the general public, toward specific groups that professions work with, and toward the professions with which psychologists communicate. They experience taking this responsibility by educating psychologists for positions other than clinical therapists, by providing further education and courses, and by engaging as experts for example in societal programs. The taking of this responsibility is related to taking responsibility to improve the everyday life of the general public. This is described in the following.

Taking responsibility for contributing to improving the everyday life of the general public

The psychologists describe psychological knowledge as potentially beneficial for the general public's lives and living conditions on the level of the individual human being (through therapy and knowledge about oneself), on the level of how we interact, and on the level of societal arrangements. Thus, contributing to psychological knowledge fulfilling the potential to make a positive contribution to the life of the general public is described as a responsibility. In the following, a range of different ways of taking this responsibility is described.

One way of taking this responsibility is by illuminating questions in one's research:

...I think that we have a major responsibility to contribute to enlightening and to illuminate issues, not necessarily showing that things are true or false. (...) not because we, in a way, shall get people to behave in specific psychologically good ways, but because I believe that society can be improved by incorporating a little bit of this type of knowledge to the ways in which we interact.
(P1)

The above quote illustrates illuminating psychological questions on the level of human interaction. Further, participants see psychological knowledge to be potentially beneficial on the societal level, and thus psychologists experience taking responsibility for contributing to people's living conditions when they "*...make visible...what takes place in society from a psychological perspective*" (P1), and thereby illuminate how societal structures and arrangements contribute or hinder psychologically good living conditions for people. This understanding of taking responsibility toward the public induces reflection on what questions one chooses to pursue in research, as illustrated:

...questions like why do we do research on this...among the myriad topics I might be interested in [exploring], what types of ...implications it has that I choose this topic, and not something else, and choose not to go into something. (P1)

An additional way of taking responsibility for contributing to the everyday life of the general public is by communicating psychological knowledge to the public. Psychologists note that it is "*important to be disseminators (...) not just for colleagues and the academy, but for...influencing on the surrounding society*" (P3/4). Furthermore, participants acknowledge taking responsibility not simply by disseminating, but also by engaging in debate, as the following quote exemplifies:

What I would like to do more of is to participate a little more in contexts of (...) public debate. (...) so that one isn't just doing pure dissemination of knowledge, but more, that one also took responsibility for some of that knowledge and debated it in concrete situations. (P1)

It is worth noticing the distinction made in the quote between "*pure dissemination*" as "letting the public know what you know," and engaging in public debate on specific issues. In the quote, the articulated as a taking of responsibility for the knowledge in the public, and in concrete settings. Additionally, engaging in public debate is described as a way of influencing not only the public's basis for how to act, but also to influence political decision-making, in order to "*...help politicians and society with how to arrange society in a way that is good for people, psychologically speaking*" (P1). Thus, while treatment of mental illness is central to the clinical profession, psychological knowledge is also seen as potentially contributing to preventing society from causing harm to people's mental health, as discussed further below.

Meanwhile, participants express that taking responsibility by communicating knowledge to the public is experienced as difficult to prioritize. This is first and foremost articulated to be “*a question of time*” (P3/4) and how to prioritize spending it:

I don't feel very good at this [disseminating knowledge to the public and partaking in debate] because, like other researchers in the middle of their career, I would rather close the door and undisturbed write my articles to qualify myself and so forth. (P1)

The quote may be taken to suggest that, while understanding himself to have a responsibility to disseminate knowledge to wider audiences and to engage in public debate, the incentives the participant experience in the form of what serves as qualification in the career path drives him back into his office.

Yet another way of taking responsibility to contribute to the life of the general public is described as critically taking into consideration how psychology as a discipline “*influences our understanding of ourselves and society*” (P3/4). Within psychology, there are “*different traditions*” (P1), approaching the human mind from different perspectives. Psychologists partaking in the present study point out that different sides of the human being are illuminated within the different perspectives, and thus the different traditions provide different images of human nature:

... psychology is a discipline that is used to understand oneself and understand others and understand social reality. And when some research traditions become very strong, it is this knowledge that is brought out and people think they are only like that. And we can actually take part in steering, as a discipline, in specific directions—“the human being is like this and not like that”—and in that way we can have as consequence that our discipline does not attend to the whole breadth of human nature. (P3/4)

Psychologists explain that the discipline must explore the human mind from a variety of perspectives, and “*...not leave any perspective at the doorstep for too long...[but] make sure to include it from time to time, in order to adjust your discipline*” (P3/4) in order to provide the public with knowledge about human being that attends “*to the whole breadth of human nature*” (P3/4). Also, this critical perspective on one's discipline is described to include “*...consider[ing] the broader disciplinary tradition with regard to the understanding of the human being that they are based on*” (P3/4). From these quotes, it becomes evident that participants understand this critical perspective as having to be performed on the level of one's own research, but also on a

more collective level, as a discipline. Further it is described as a responsibility *for* the discipline; as a “*responsibility to develop the discipline to be as good as possible*” (P3/4).

Meanwhile, this way of taking responsibility is described as challenging within a context where expectations of productivity and competitiveness are increasing:

And especially in today’s situation where “publish or perish” is harder than ever, then many will say that you cannot think about these things because it gets to complicated. You just have to get into a tradition and produce. And not least for you in recruitment positions, that you must clear away all challenges, get into a tradition, stand on the shoulders of those within the tradition and then move forward. (P3/4)

The quotes suggest experiences of there being too little time, and few incentives within the institution to take the responsibility to critically reflect on one’s discipline and how it contributes to the public. In their experience, in the world or research today “*traditions become very strong*” (P3/4), and one is not expected to question it, but to simply “*enter and produce*” (P3/4).

Taking responsibility by critically considering the influence of one’s discipline on humans’ self-understanding is described to be passed on to students, as future clinical psychologists, and/or researchers, as well as psychologists in other positions. The following quote illustrates how participants approach this responsibility in their teaching:

Take a step back and ask: Yes, how far is this tradition going? What is it building on as its horizon of understanding human beings? And helping students to answer this type of question is our goal (...) ...that students should constantly reflect over what they, when they enter a research tradition, what it is that they attend to and what it is that is omitted. (...) and which theories follow from the different horizons, each with their own limits for how the human being is understood and approached. (P3/4)

By taking this approach, they aim to help the students “*putting all the premises on the table and considering the implications of various perspectives*” (P3/4).

Sociology, anthropology and such disciplines...they approach human being from other viewpoints. ...we attend to how these disciplines have different points of departure, and make visible the cultural and historical development of the discipline of psychology (...) to take a sort of outsider perspective on the discipline and reflect.... (P3/4)

These examples illustrate how a critical approach to one’s own discipline is described as a central way of taking responsibility, and how this way of taking responsibility is passed on to the students, as the next generation psychologists. Helping student engage in critical reflection about

their discipline was further meant to “...challenge their [the students’] identity, that they are challenged with regard to what it means to perform psychology, what it means to create knowledge about human being” (P3/4).

Even though the students are experienced as “very receptive and eager to engage in this,” (P3/4) participants find that “the critical potential...is not sufficiently attended to [in the rest of the program] due to there being a large amount of curriculum in the other courses” (P3/4).

An additional way that psychologists describe taking the responsibility to contribute to improving the lives of the general public, is by using psychological knowledge to protect the mental health and integrity of vulnerable groups and individuals. In the capacity of having knowledge about what strengthens and what threatens mental health and integrity, psychologists point out that they have a responsibility not only to not cause harm themselves, but to watch out for and protest against misuse of psychological knowledge as well as other practices that may cause harm to the mental health of either vulnerable groups or individuals, or the public in general. Participants describe psychological knowledge as particularly vulnerable in terms of the possibility of it being misused:

...the knowledge we work with is about the relation between people, what affects people positively and negatively, all these things that may very easily be misused, even more than in other disciplines....so our knowledge is potentially pretty vulnerable (...). It is a major responsibility for psychologists...to contribute so that the knowledge is not misused, and actively protest when it happens.... (P5)

Further, she described acting as watchdog and whistleblower in order “...to prevent, and see to it that things [violations] are disclosed, explored, investigated, and sanctioned” (P5) as a central way for psychologists to take this responsibility. The following example, in which an ongoing discussion on the public mandate and responsibility of psychologists is elaborated, illustrates how this way of taking responsibility is understood and experienced. She describes a situation where “...we in the Norwegian Psychological Association were accused of becoming political activists because of taking part in the protest ‘No people are illegal in Norway’” (P5). The following quote describing her reply to the critique illustrates her arguments for why she sees taking part in this protest as within psychologists’ mandate and responsibility:

...to go out and say something about vulnerable and exposed groups must be understood as something different than political activism. I believe that it is a part of the social responsibility

that psychologists have. When you see that people that are hurt or vulnerable to begin with, are exposed to systematic violation by the Norwegian state, that seems unreasonable and impossible to defend against, then I believe we have a responsibility to say something about it. (P5)

In the quote this psychologist makes a distinction between an engagement that is politically motivated, and an engagement that is motivated out of the purpose of the discipline. She explicitly articulates her engagement as not political, but as part and parcel of the role and responsibility of the academic community of psychologists (“*the social responsibility that psychologists have*”), because it flows from the purpose of psychology to contribute to mental health.

While clearly expressing this responsibility, she articulates also the experience that “*for many this would be to overstep the role*” (P4). Also, as the quote above shows, she has experienced being critiqued and accused of “being political.”

Additionally, responsibility is taken by passing the capacity for this way of taking responsibility on to students through teaching:

...I teach human rights...And then I tell them a little about the whole system, but try also to concretize what human rights and violations of human rights mean in peoples’ regular lives, and in which ways we as psychologist may come in contact with this. (...) ...it is important that psychologists understand that human rights is about peoples’ right not to be violated by the system, and by people working in the system, that is also...health workers, and that we can be held responsible for such violations. So that it not the idea that this happens out there, and is very relevant for Uganda, but not for anyone else.... (P5)

In summary, participants describe the responsibility to contribute to improving the everyday life of the general public as a responsibility taken toward the general public; vulnerable groups, and political actors. Psychologists describe taking this responsibility by illuminating important societal questions, by disseminating and engaging in debate with one’s knowledge and thereby influencing political decision-making, by critically considering how the discipline influences people’s understanding of themselves and society, and by preventing misuse of knowledge and acting as watchdog and whistleblower. However, psychologists describe challenges to the taking of these responsibilities, related to lack of time, strong career- and production pressures, and critique of overstepping the role as psychologists.

Briefly, the range of responsibilities that psychologists see themselves as having includes:

- *Contributing to clinical practice*
- *Providing psychological knowledge to other professions*
- *Contributing to improving the everyday life of the general public*

The participants describe a variety of ways of taking these responsibilities, through research, teaching, and communications to and with the public. Meanwhile, they also describe challenges with regard to taking the responsibilities they envision. These challenges are related to time, career incentives, pressure to produce research publications, the situation in which some traditions become strong (at the cost of others), the lack of institutionalized dialogue within the department between the clinical sections and the research section, and the question of taking responsibility by acting as watchdog and whistleblower.

The historians

The historians describe themselves as having responsibility for 1) correcting wrongful or incomplete descriptions of the past, 2) contributing to public understanding and discourse, and 3) contributing to and for challenging identities. The following sections describe the range of ways in which the participants understand these responsibilities to be taken.

Taking responsibility for correcting wrongful or incomplete descriptions of the past

Historians continuously re-examine the past. By doing this, the participants see themselves as taking responsibility to provide descriptions of the past that may be more truthful and complete than previous descriptions. Previous historical presentations/writings are caricatured as:

It is in a way the grandchildren of the establishment of the 1800s that have written history, a little exaggerated, about the doings of their grandparents. And all that have been omitted,—it can be groups or initiatives from other parts of the population. (H4)

The quote illustrates how questioning established texts and including new sources is understood to be one way of taking responsibility for correcting wrongful or incomplete descriptions of the past. Historians point out a development within the discipline where first there was a sociohistorical reaction to the way history had been presented, emphasizing “*that everyone is*

entitled to a past” (H2), and thereby included ordinary people in historical writing (such as farmers, workers, women and children). Thereafter, historians introduced a cultural reaction where including everyone in history was understood to be about “*not only [writing] about people’s everyday life and struggles from birth to death*” (H4), but “[*letting*] *those speak who spoke then, but were not allowed into the history*” (H4) and including them as “*actors in history*” (H4). The responsibility to include those who have been excluded from history is described as a way of taking responsibility to describe reality more rightfully and to provide the public with a more nuanced picture of the past:

It is about getting these things more balanced—as one experiences it oneself when one looks at the sources. (H4)

Participants describe taking this responsibility to include being “*aware of the power structures in knowledge production in a way, so that one can actually examine it, and not just follow blindly in others’ paths*” (H4), but be critical of, for example, who is included, and to include new sources, new actors, and new perspectives. By doing this, historians may tell a different or more multi-voiced story than the ones told by previous historians. This kind of new knowledge is understood to potentially correct or adjust our collective memory, and to contribute not only to our view of the past, but also to our current discussions. This way of taking responsibility emerge as closely related to responsibilities to contribute to public discourse and self-understanding, as elaborated below.

Further, the responsibility to correct wrongful images is explicitly linked to the experience that history “*is being used politically*” (H1). Responsibility is taken with regard to “*which images of the past are being used politically*” (H1) and to “*contribute to uncovering...directly incorrect, depictions of the past...*” (H1). Taking this responsibility entails developing new knowledge through historical research, but also communicating knowledge to the public and to the political field upon becoming aware of incorrect depictions of the past being used as arguments for political decisions. Also, this way of taking responsibility emerge as closely intertwined with the responsibility to contribute to public discourse elaborated in the following.

In summary, historians describe the responsibility to correct wrongful or incomplete descriptions of the past as a responsibility taken toward the general public, political actors, and also in a sense toward past publics. They describe the taking of this responsibility through research that includes

new sources and new perspectives, and uncovers and makes the public aware of false descriptions of the past. Further, historians understand historical knowledge as a potential contribution to political debate and decisions both directly through correcting falsehoods used in political discussions as described above, and indirectly, through influencing public debate and the public's understanding of present situations, as described in the following.

Taking responsibility for contributing to public understanding and discourse

The present purposes of historical knowledge, and the understanding that history is “...*continuously rewritten for present purposes*” (H4) came through as central in the interviews with historians. In particular, they expressed an understanding of history as potentially a central contributor to public understanding and discourse, and describe themselves to have a responsibility for contributing to public understanding and discourse of past and present society. The pursuit of historical knowledge emerges as the central way of taking this responsibility. Producing knowledge is described as a way of taking part in a public conversation, and as a way of “*contributing to making public discourse more rational*” (H3), and in turn influencing political decision-makers. Specifically, illuminating important societal questions through research is experienced to be a way of taking this responsibility:

I think that all of the larger works that I've completed, that I've had a wish to participate in finding answer to questions that I have considered to be important. (...) I wanted to tell people that story, because there was something that I considered to be at stake. (H3)

The quote illustrates how images of responsibility toward the public influence research pursuits, comparable to how this was described by psychologists. The following quote even more specifically illustrates that exploring pressing societal issues through research is a way of taking responsibility:

...one area that that we have failed ... is for example environmental history, climate history, - where I believe that historical methods ...could actually contribute to that debate.... (H3)

The quote suggests an understanding of historical research potentially playing a part in public debate about current issues. It is further interesting to note that, in the quote, the participant articulate the responsibility to illuminate social issues as shared, using the pronoun “we,” which indicates that the historian view this responsibility as being shared by the community, rather than

falling to an individual. Also, the quote expresses an experience of the community having failed to take on this responsibility in the specific instance of climate.

Further, historians describe the responsibility to contribute to public debate as taken by exploring and making visible nuances and dilemmas. The pursuit of these aims in historical research is contrasted to “...*historical research [that] reinforces existing stereotypes and black and white thinking...*” (H5), and is described to potentially contribute to “*more nuanced conceptions*” (H5) of past events, and as “*strengthening society’s ethical self-reflection*” (H2).

These ways of taking responsibility toward the public through research suggest that the understanding of taking responsibility toward the public is decisive for historians’ focus when performing research. For example, historians describe including the aim of developing more nuanced beliefs among the public in the process of research in the sense that it becomes a focus and an aim in the research to explore and describe dilemmas and nuances. In the below quote, an example of such an approach and how taking this approach is experienced is elaborated in more detail:

To try to kind of understand the basis for action rather than just demonizing the action...That one is deconstructing in a way—or the motives that one is deconstructing. I’ve tried to do that. ...And, well I don’t believe that demonizing Nazism is the best way to fight it. I don’t believe in that, because it’s an oversimplification. So in a way, there is something about these dilemmas. (...) Some of the nuances seem to kind of disappear. ... in a way, things become kind of distal from the everyday, trivial reality and kind of defined away and categorized once and for all. It becomes a kind of hardened evil. And one doesn’t learn anything from that. And that simplifies what it meant to be human at that time. And what kind of, what does it cost to show courage? To what degree are we able to identify it as, you know, things that might look like similar phenomena, in our own time, you know. What do we do? (H5)

The above quote explicitly links historical exploration to the present purpose of contributing to a nuanced understanding of phenomena taking place in the present. Nuancing dilemmas is described as essential if history is to teach us (the public) something; thus, exploring these becomes central in historical research.

Further, to “*acknowledge that you actually perform a kind of influence*” (H4) is described as one way of taking responsibility related to the contribution of historical research to public understanding and discourse. The following quote elaborates:

It has societal impact. All knowledge production does, it describes reality for us (...) history books are actually something that sells quite a lot, so people are interested in history. So we are, in a way, continuously producing descriptions of reality for people. (...) we become very influenced by that which is described.... (H4)

This understanding of a responsibility to consider that historical knowledge influences the public's view of the world emerge as interlinked with the understanding that historians influence the stories they tell, and thereby influence the public's understanding of the world. Comparable to psychology, being critical toward one's discipline (in the case of history, in terms of matters such as including new sources, new actors, and new perspectives in order to tell a different or more multi-voiced story than previous history, as presented above) emerge as a central part of taking this responsibility. The following quote illustrate how historians see this responsibility as having to be shared:

...a community...say a department, or a university have a responsibility to ensure that knowledge is produced that in a way, since the discipline is huge and each of us is studying only tiny bits, it is the joint production where it is important that colleagues together make sure that some topics are important to illuminate. (H4)

The responsibility to make sure that important questions are illuminated is describes as a responsibility that the individual alone cannot take on; rather, it must be about the community's joint production of knowledge. Further, the historians describe the understanding that a shared discussion is necessary for the community to take such responsibility. The following quotes describe the historians' experiences of a lack of such discussion, as well as a particular nature of this kind of discussion:

...it is a structural weakness in the university, that they have not really made a structure to properly handle the social responsibility (...) one should have discussions where one acted more as citizens than as protectors of one's own position or (...) create forums that is not about conflict of interests between staff but that is about the shared social responsibility that one has. (H4)

I think we need an ongoing discussion about what it is worth to know something about. (...) perhaps have historians not lived up to the societal need....do we explore the important questions? (...) Do we use the space of action that we have in spite of everything? Even if a lot has happened with the universities, we are still left with a certain freedomto choose topics and perspectives. And do we live up to those commitments? (...) I feel the need for, perhaps, more discussion about prioritizations, choice of topics, the meaning of what we do. (...) not a decision by leadership/management, or a research council decision, or a governmental decision, but, perhaps a stronger will to discuss, in a way, to justify why what we are doing is important. This is what I think is lacking to a certain degree. (H3)

In the quote above, the participant highlights a distinction between a management/executive decision and a dialogue within the community of historians. Further, the experience of a lack of shared dialogue is described as posing a serious challenge with regard to taking the responsibility that he understands historians to have.

Further, part of critically considering the influence history and historians have on the public's understanding is bearing in mind that historians "*assign meaning to the sources*" (H3), and by that take part in forming the story.

And, in a way, that's a type of unending conflict within the discipline of history. On the one hand, a view of this as a type of empirical science, where in a way the sources and the materials set the limits. On the other hand, the recognition that we are rather free to make quite substantial choices when we are writing. (...) ...in the texts we write, and also in the lectures that we give, and so on, we have an extensive freedom to form the overall picture of the past, based on the perspectives we choose. (H2)

In this regard, participants also point out that "*...the search for meaning can lead us in the direction of fabricating a past*" (H3). Thus they describe a responsibility to not let the pursuit of meaning, or "*polemic points*" (H3), foreshadow what actually took place and thus provide the public with "*false maps*" (H3) for orienting on the world. Further, participants also note that it is important to "*continuously remind the reader or receiver that history is a continuous investigation of reality, which will never be completed*" (H4).

Yet another specific feature of taking responsibility by considering how historical writing influences the public was highlighted by the participants addressing that historians "*try to reconstruct and explain processes in the past (...) often in a more individualizing manner than social science*" (H2). The implication is that in historical writings individual people are often recognizable. As a result, the historians expressed an understanding of themselves as having specific responsibilities toward "*those written about and also their families and their heirs*" (H3). This is described to entail a "*...responsibility that one doesn't write about people in a way that can be... damaging for people*" (H3). In this regard, participants experience a dilemma between the responsibility to inform the general public of past events and the responsibility to protect those written about as well as their family and heirs. One participant gave a current example of this conflicting understanding of responsibility toward those written about and their heirs:

The Norwegian Encyclopedia of War [Norsk krigsleksikon] was released a few years ago, and in my opinion several names were “outed” in the sense that people with distinctive surnames, where their relatives are alive today, and they, in a way, wrote short biographies about their forefathers who’d been active in NS. And I am unable to see how this contributed to building an understanding of the nature of Nazism, or any other type of general insight, but rather this just created discomposure for the families. Well, that’s how I experienced the situation anyway. As I said, I know that some people clearly disagree with me on this point. But it’s a type of example where I believe that one should consider—is there really a need for this? (H3)

Further, while historians tend to write for colleagues and the public in the same texts, specific actions were described, aiming at conveying knowledge from research to the public to ensure that “...it is being used at all, that something valuable gets out to the public and that we are not just writing for each other” (H2). Meanwhile, participants experience a growing tendency among historians to orient more toward the research community, and less toward the public. One stated:

...that’s something that I think is a big problem today, that we are internally oriented and writing for experts within our own field. (H2)

The quote indicates that the increasing orientation toward the research community at the cost of the public is experienced to pose a challenge to the taking of responsibility toward the public. Still, participants describe taking responsibility to communicate knowledge to the public. The responsibility “to be a disseminator...” (H3) is articulated as being taken in different arenas, such as giving “quite a few talks in different places, about historical topics and societal topics (...) [and writing] a column in a newspaper” (H3), being “...available for media” (H5), and “partaking in a commission appointed by the government” (H3).

A possible need to follow up the knowledge communicated to the public is also articulated as part of taking the responsibility to contribute to public understanding and discourse. Historians experienced the taking of this responsibility as challenging because, as soon as the knowledge is “let loose”:

...you lose control in a way, over what you have written. Media takes over...and then this lived on. So ideally one should have control with how the research results are used, but it is not like that. (...) But I believe that if interpretations are forwarded that one perceives as illegitimate or directly false, then one has an obligation to try to correct it. One cannot just let the research result out into the world...and think that it will manage on its own.... (H3)

Further, uncertainty with regard to the question of what the authority as a researcher can be used for in the public is described by historians as part of the experience of taking responsibility to contribute to public understanding and discourse. The following quote illustrates this point:

...done something a little bit different for the past six months, which in a way, also raises some interesting questions ... I've written some more free commentaries that are not necessarily research-based. And that's yet another dilemma that arises in a subject like history. How can we use our researcher-authority? And is it legitimate for us to comment on things that we don't conduct research on? In that case, how should we make it clear that this is something that we believe as, or is there as strict divide between what we believe as professionals and what we believe as ordinary citizens? How fluid are the boundaries, and what can we do? And my current experience is that I think I've done quite a lot that is relevant and interesting, exactly by allowing myself to, break free a little from only the things that I am an expert on. But clearly, if people ask whether this is scientific knowledge, then I have to say no, it's not. (H2)

In summary, the responsibility to contribute to public understanding and discourse is described by the historians as a responsibility taken toward the public in general, but also more specifically toward political actors, toward those subject to research, and toward their family and heirs. It is interesting to note that, while historians emphasize specifically communicating knowledge to the public as one way of taking the responsibility to contribute to public understanding and discourse, to a large extent taking part in public discourse and debate come to the fore as understood to be taken through research. Developing knowledge in specific areas is described as contributions in public debate, and particular approaches are taken in the development of knowledge in order to pursue specific aims regarding this contribution. It seems reasonable to interpret this finding as arising from historians' practice of writing for colleagues and the public in the same texts.

Taking responsibility for contributing to, and for challenging identity

The historians describe knowledge about the past as central to how we understand ourselves and to our identity. While contributing to one shared national identity may be abandoned as the central purpose of the discipline of history (see Chapter 5), the contributing to, but also the challenging of, identity emerges as a central responsibility for historians. Historical knowledge is described as potentially contributing to building and challenging identities.

This responsibility is primarily described as taken through research. Participants question the image of history as an "identity project," as the builder of "*a community (...) identity, a shared frame of reference*" (H4). They articulate a responsibility to critically explore the traditional political-ideological aim of historical texts to build a "we"—a shared national identity. This is

further described to include critically examining historical writing and the identities that this historical writing has contributed to. The taking of this responsibility emerge as closely related to the above described responsibilities to contribute to correcting and completing descriptions of the past, to contributing to public understanding and discourse, as well to the ways of taking these responsibilities. The following quote illustrates the image of historical research as a continuous re-examination of the past with regard to the contribution of history for identity:

...when one created the Norwegian history, during the 19th century, one created a national history despite there being no national history before 1814 (the year when Norway developed its constitution, authors note), because one wanted to build this community. So history has very much to do with identity—that one builds an identity, a shared frame of reference. And then there is the choices one makes in terms of which topics are important, which people are included...have made it look like Norway is a very egalitarian nation...both socially and in terms of ethnic groups - which is a social construction. (...) all the differences...in particular in older historical writing is completely missing. And it will take time to include it again. (H4)

The quote illustrates that the contributing to identity is seen as intertwined with the responsibility to correct wrongful or incomplete images of the past. The following quote explicitly links the re-examining of the past to taking responsibility for providing everyone with a past and making everyone visible in the stories that historians tell:

Another thing that there has been a long discussion about in this discipline, both nationally and internationally, is who it is that we make visible and who it is that we make invisible when we are writing. And that was an important starting point for social history, for example—that all groups should be made visible, that they have the right to a past.... (H2)

The critical examination of previous historical writing addressing “*whose voices are heard and whose stories are told*” (H4) is described as central in order to challenge identities, provide everyone with a past, and disclose myths. These aims and responsibilities come through as interrelated, and as taken by related and overlapping measures. The taking of the responsibility to provide everyone with a past is described to include them as sources in historical writing. Also, including those who have been excluded from history in descriptions of the past, is described as a way of taking responsibility to describe reality more rightfully, and to provide the public with a more nuanced picture of the past. One noted, “*It is about getting these things more balanced, as one experiences it oneself when one looks at the sources*” (H4). Further, when including new sources, both myths about the past and identities may be challenged. The following quote illustrates how whose voices are allowed to take part in the story influence the story told:

...when someone who was four years old when the war started, and the child of an NS³²-family, tells stories about their growing up and schooling and such, then this is a different place from which to view the Norwegian history [than the way that history is normally told]. (H5)

The quote articulates a critical perspective on the narrative provided in traditional history books about what Norway was like during the World War II and in the postwar period. The quote implies that the “we” in historical works about the war and the postwar era does not include the four-year-old in the example. To further elaborate this point, participants describes a PhD thesis (Corell 2010) as an example of historical research that critically explores the roles given to different people in history telling. The thesis explores critically how the years of the German occupation during the Second World War has been described in history books, looking at who become the heroes and who the villains, who are included in the (national) we, who are excluded from this community, and who are excluded from the history altogether. These examples illustrate an understanding that critically exploring which sources are included, and including new sources are seen as measures taken to pursue the responsibility to disclose myths and to provide more nuances to the description of the past. In doing so, historians understand themselves to challenge the collective memory and national identity, and perhaps contribute to new identities.

Further, history is a school subject. While historians do not provide a professional degree like psychologists, many history students enter the teaching profession, and history is also part of the teacher education at the University of Oslo³³. Historians in the present study depict history as a school subject that can potentially “*contribute to a sense of belonging in this society*” (H3). Both the pursuit of research and the teaching of students who will become teachers is described as ways in which the responsibly to contribute to identity and belonging is taken. This example provides a concrete illustration:

...how can one present Norwegian history in such a way that it is experienced as relevant for the 40% of children in Oslo’s schools with minority background? It has to happen by telling about what is “majority-norwegian”. I do not mean that we shouldn’t do that, but in part it will be to think about how do we do it, what do we emphasize? Is it the Norwegian spirit which has always been there, Vikings and that, or does one wish to emphasize that Norway has been an egalitarian society and in a way the fight for democracy, or should one in addition tell the story about the

³² This quote refers to the World War II, and NS refers to the Nationalistic Socialist party which acknowledged Germany’s occupation of Norway.

³³ A five year Master programme: <http://www.uio.no/studier/program/lektorprogrammet/index.html>

immigrants? Not because one finds one's grandfather there...but perhaps people with some similar experiences of what it means to move between countries. And that this maybe, this is sort of a humble hope—that this can contribute to a sense of belonging to this society. (H3)

The example reveal how an understanding of responsibility toward the public and the possible contribution of the discipline for specific publics and specific purposes is experienced to influence “back on” approaches to research: If history as a school subject is to contribute to the young generation's sense of identity and belonging, historians must pursue research questions and apply perspectives in their research that can potentially develop knowledge about Norwegian history that can contribute toward this aim. Providing such knowledge through historical research is described as necessary for providing history students potentially becoming teachers with knowledge and insights that can support their future teaching of history in a way that makes the school subject of history relevant for all children in primary and secondary school, and that contributes to their understanding of, and identity as members of, this society.

Overall, historians describe the responsibility to contribute to and to challenge identities as being taken toward the general public, students in primary/secondary education, teachers in primary/secondary education, and students becoming teachers in primary/secondary education. This responsibility comes to the fore as being taken in multifaceted ways by pursuing research that discloses myths, performing research in such a way that it provides everyone with a past, pursuing research using perspectives that contribute to specific groups and their sense of belonging, and educating future teachers.

To summarize, the range of responsibilities that historians see themselves as having are:

- *Correcting wrongful or incomplete descriptions of the past*
- *Contributing to public understanding and discourse*
- *Contributing to and challenging identities*

These responsibilities come through as even more closely related within history than within the other disciplines. This may be due to the understanding of performing historical research as taking part in a public conversation, and the related image of history as central to how we understand our self and our society. Meanwhile, historians experience that some responsibilities

remain unfulfilled; in particular, they experience a lack of institutional dialogue to hinder the community in performing the envisioned responsibilities.

The biologists

The biologists describe themselves as having responsibility for contributing to 1) society's ability to protect nature, 2) public discourse and debate, and 3) general education, professional education, and medical research. The following sections elaborate these responsibilities toward the public, and the variety of ways in which they are understood to be taken.

Taking responsibility for contributing to society's ability to protect nature

Knowledge about how nature works and what influences processes in nature is central within biology. Through their research, biologists develop knowledge about, for example, the conditions needed to sustain species of plants and animals, how species are affected by human intervention in nature, and other actions that influence ecosystems. Biologists taking part in the present study express an understanding of this knowledge as crucial for those making decisions concerning or affecting the environment. In particular, they view politicians as being in need of such knowledge in their decision-making because:

biological knowledge is used in management of natural resources (...) [and] forms the basis for a lot of the nature management policies. (B1)

The responsibility for contributing to society's ability (and motivation) to protect and preserve species, their habitats, and ecosystems is described as a responsibility toward "*future generations*" (B4), as well as for the present. The variety of ways in which this responsibility is understood to be taken is elaborated in the following.

One way of taking this responsibility is by developing new knowledge. However, while focusing one's research on the possible environmental contribution of biology is described as important in order to take this responsibility, biologists experience a competing pressure to publish in scientific journals in order to develop an academic career. The following quote illustrates how the situation is experienced:

I think that it is very easy when one enters a research situation as a young person, that one becomes so keen to get out articles, at nearly any cost, that one forgets that what one is doing should ideally be for the greater good.... Of course not all research problems can necessarily solve world problems. That is not what I mean, but that one manages to have in the back of one's mind that it's not just about focusing on one's career I think this is a feature that has developed, that people get very focused on getting out articles—and then the big picture and the whole meaning of doing research and the contributions to societal good is lost. (B5)

Communicating knowledge to the public and contributing to public debate is described as another way of taking the responsibility to contribute to society's ability to protect nature. This way of contributing to the public is further elaborated as a distinct responsibility below.

Furthermore, biologists describe taking responsibility to contribute to society's taking care of nature through teaching. By "*educating a new generation of biologists*" (B1), the biologists taking part in the present study see themselves as contributing to providing society with an expertise that in various positions can contribute to society's ability to protect and preserve species and their environment, as well as providing knowledgeable members of the public and thereby also contributing toward this aim. The following quote illustrates the weight given to the taking of this responsibility through teaching:

... that I am educating a new generation of biologists. That might be where my societal responsibility weighs heaviest. (B1)

Further, biologists link their educational responsibility to the national and regulatory level:

... The Law on biological diversity [Biomangfoldloven] that came a few years back, and our responsibility to care for the values we have out there (...) underscores Norway's responsibility to take care of biological diversity.... But if we are to take that law seriously, it means we have to educate more biologists that have this competency. (B4)

The quote illustrates how biologists see their responsibility as bound to a broader national context in which political actors have stated the obligation of Norway to protect biological diversity. Participants suggest that this obligation implies a need for more educated biologists. Seemingly, they understand this law to potentially support biologists' taking of this responsibility through teaching, as something they can refer to in their efforts to ensure the resources necessary to take this educational responsibility.

Further, it is worth noticing that descriptions of taking this responsibility through teaching emphasize educating not only knowledgeable, but also engaged biologists, who understand

themselves as agents whose actions matter, both for the environment and for the discipline of biology:

...that it gives the students the sense that it makes a difference what they mean, and that they can contribute something...as individuals that can actually participate in influencing the development in a certain direction. (B5)

According to the experience of biologists, such environmental engagement is a central motivation for many biology students entering the study program, and they describe nurturing this engagement in their teaching to be one of the ways in which they take responsibility for contributing to society's ability to take care of nature.

...I feel that many biology students are engaged (...)I try when I teach and supervise, and in my experience so do many of my colleagues, to convey engagement and interest ... that it is important that we take care of nature, and to do that we need knowledge. (B3)

These two examples illustrate how biologists understand themselves to take responsibility for contributing to society's ability to protect and preserve nature by supporting students in their development, by helping them see the importance of their future roles as biologists and to understand that how they perform their work can make a difference both for the discipline of biology and for the environment. Participants express concern, however, due to the experience "*that it is often difficult because there is a lot of curriculum content to cover in limited time*" (B5). Additionally, they experience the educational context characterized by time limitations and exams to be a challenge to the realization of this way of taking responsibility, as expressed in the following quote:

I am afraid that sometimes the engagement [to the students] ... can become a little amputated throughout their education because...there is something about being in the whole situation, with exams and performance ... one can easily become focused on oneself and one's performance (...) I have to say that the way that the new educational program has been arranged, after the introduction of master, bachelors, and away from the old system we had where there was more flexibility, including how much time one could use and so on, then of course there are a lot more limitations (...) we really notice that, and that there is not much time now to use on other things when one has to complete a master, compared to how it was before, when I was a student, when submission wasn't that important. So we have a very strict two-year deadline on taking a master here. (...) And we notice that there isn't the same degree of flexibility with regard to which courses they can include in their degrees or what they actually have time to do alongside studying. (B4)

Meanwhile, biologists also expressed an understanding of knowledge and engagement as being two sides to the same coin in that biological knowledge is understood to potentially promote respect for nature and for life. The following quote illustrates this view:

Respect for, respect for life ... that is something that I think we promote in basic research, because the more, the more insight you get into how fantastic these systems that you have living in cells and such actually are, the more humble you become and the more respect ... I think you get...because it is all part of nature and nature is so beautiful and so functional and it is...like a great work of art that we understand more and more of. (B2)

The quote addresses an emotional component related to the knowledge component of contributing to society's ability to care for nature. In this regard, biologists point out that, while fields of basic research may not have direct application value, knowledge and insights from basic research potentially contribute to society's taking care of nature as a consequence of the respect, humbleness, and admiration that such research contributes.

Biologists describe preventing harmful use of biological knowledge as a way of taking responsibility to contribute to society's taking care of nature. This way of taking responsibility is comparable to psychologists' descriptions of preventing harmful use of psychological knowledge. While biologists develop knowledge that has the potential to contribute to society's taking care of the environment (and to contribute to medical advances, elaborated below), biological research also brings forth knowledge and in turn technologies that potentially entail environmental or other ethical challenges. As expressed, "*you sort of cannot attain one, without having the opportunity for the other*" (B2). Forwarded as "*the very obvious [example] is biotechnology with all its facets*" (B5). Biologists express an understanding that they need to be involved in considering what may be harmful use, because they possess the "*necessary biological knowledge and insights*" (B5) to make such evaluations. Meanwhile biologists also note that "*politicians*" (B2) are central actors in this. Furthermore, providing students with knowledge is understood to make them capable of making such considerations, and is as such teaching is described as a way of taking this responsibility:

...I believe that the knowledge they [students] get about these things, we talked about genetically manipulating.... When you have insight into what is happening and the possibilities one has, then one will be able to see more clearly what it may be used for in the negative sense, and make you more capable of judging.... (B2)

To summarize, the responsibility to contribute to society's ability (and motivation) to protect and preserve nature is taken toward the general public, political actors, and future generations.

Biologists describe taking this responsibility through research and teaching, as well as through contributing to public discourse and debate, which is described as a distinct responsibility in the following. However, part of the experience of taking this responsibility is that it competes with a focus on producing articles and the tight time schedule in education, which arises from both the extensive curriculum and the students' time limits for finishing their degree.

Taking responsibility for contributing to public discourse and debate

The responsibility for contributing to public discourse and debate emerge as a distinct responsibility, even though it is also a central part of taking the responsibility to contribute to society's ability to take care of nature elaborated above. Contributing to public discourse and debate is described to involve disseminating knowledge to the public (*communicate the knowledge outwards* (B3) and engaging in public debate. For example, engaging in the "*the debate on climate*" (B5) is described as one of the ways in which to take responsibility to contribute to society's taking care of nature.

Communicating knowledge to the public is, as with psychologists, described as distinct from communicating with fellow researchers:

...a type of engagement that is not about writing articles, but to use the knowledge of the discipline outwards, where I believe that there is exactly this reflection behind it that if what you work with shall have any impact in the larger picture, it has to be communicated outwards. (B3)

...not work with blinders on, with mind for only producing publications, but see one's field in a larger context, that it shall be to the best for society in one way or the other. (B5)

Biologists describe taking part in debate to serve purposes comparable to what may be labeled a cultural contribution (i.e. contributing to our understanding of ourselves and of society, and to society's ethical self-reflection) which also came to the fore among historians and psychologists. For example, biologists point out that engaging in debate may contribute to how the public looks at gender and gender differences, or how the public conceives the question of race. The following quote illustrates the understanding that being knowledgeable in specific areas implies a responsibility to engage in debate:

I am especially interested in some debates ... about biology and gender. (...) And then every now and again there is something about race, a debate about race, which, in my professional opinion, does not exist. ...grounding a racist attitude on, or convincing oneself that one can build them on biology, in my opinion that is an error. (B3)

The quote illustrates how biological knowledge is understood to potentially contribute to illuminating and correcting misconceptions that arise in public debate, in turn helping to make public debate more informed, knowledge-based, and rational. This contribution to public debate is comparable to the contribution to public debate depicted by historians.

Further, biologists describe taking a critical perspective on one's own discipline, and the knowledge claims that members of the discipline present to the public as a way of taking responsibility to contribute to public debate. This way of taking responsibility goes beyond one's specific domain of knowledge, and is taken not only by engaging in public debate, but also by engaging critically in disciplinary discussions. The following quote exemplifies this idea with regard to claims made by behavioral biologists/evolutionary psychologists concerning genetic gender differences as a result of evolution:

The genes are physical, so that evolution has influenced the DNA ... So if you are to claim that something is brought about by evolution, you should have something tangible to refer to. But I believe that the way it is argued, which is on a very theoretical level, so that it has no relation to the physical DNA at all. It is a huge divergence between molecular geneticists and that direction – behavioral [biology]- or evolutionary psychology. ...that one has these kinds of disciplinary discussions, or challenge in a way disciplinary thinking, or enter into disciplinary debate. One has a kind of obligation to do that I think. (B3)

The quote describes taking responsibility for the (global) discipline and the knowledge claims made by the discipline, and further suggests taking responsibility for illuminating for the public the different approaches to biological research. This way of taking responsibility bears resemblance to historians' way of critically examining historical writings.

Yet another way of taking responsibility to contribute to public discourse and debate is described as engaging in dialogue with other actors, and doing so with openness to other arguments than the ones based on research from one's own discipline. The following example on debate about genetically modified organisms illustrates:

...I have been concerned that there should be a dialogue (...) established between activists and scientists (...) so what I have been trying to say is that, "yes, you know, there are other considerations than the purely disciplinary", and that we have to see that people assess this also

with other criteria (...) than simply logical conclusions about what is safe scientifically (...). It is also about power. Do farmers benefit? Do consumers benefit? Is it the large firms that benefit? (...) what other possibilities are present to ensure sufficient food supplies? (B3)

The questions posed in the quote are questions to which biological knowledge does not provide answers, but which are argued in the example to be valid and relevant in the discussion about genetically modified organisms. Thus, she argues, biologists need to be open to these issues, in addition to the biological issues of what is biologically safe, when they take part in public debate.

While taking part in public discourse and debate emerge as an important responsibility, biologists describe struggling to allocate the time to contribute to public discourse and debate. Thus, “*newspaper chronicles have been written on Saturday mornings, at the kitchen table, accompanied by the sound of children’s television*” (B5). The quote illustrates the experience that it is difficult to find time to engage in public debate during working hours. Further, the responsibility to contribute to public discourse and debate is described as challenging to handle. In particular, challenges are described with regard to the distinction between “the academic” and “the political”:

I actually think that I should have been more active in a few debates than I have been, within areas where I believe I have knowledge. But... it is something about the gradual crossing between being an expert and to take political stance that I find awkward. (B3)

In the quote, the participant articulates a responsibility as a “knowledgeable” individual to contribute this knowledge to the debate. Defining the line between what one knows and what one believes based on (also) other kinds of arguments is, however, experienced as “*awkward*.” Furthermore, it is experienced as unclear whether or not engaging politically is part of the academic role:

Where then does the boundary go for when one becomes political? And is being political part of the role as an academic, or is that overstepping a boundary? (...) As a private person I can have my opinions, but as a professor, then (...) I am outside my field of competence so to speak. On the other hand, one should be (...) engaged in society beyond the purely disciplinary. (B3)

The above quote illustrates the biologist’s dilemma when engaging in public debate. The following quote offers a concrete example of such an experience:

[Some of the questions regarding genetically modifies plants are] rather outside the disciplinary considerations. And then it sometimes becomes a dilemma for academics because you try to be

neutral and academic you know. And then when you see that there are nevertheless other dimensions that enter into it, then it becomes a dilemma for you as an expert whether or not to make judgments with regard to non-disciplinary aspect, because then you in a way become political. (...) And as an expert you may not want to appear as political in one or the other direction, because it really is a political battlefield. I mean, it is not a purely disciplinary question. (...) as a private person I am happy to have an opinion, but as a professor I am outside my field of competence (...) I am not professor in international economy or questions concerning developing countries, so if I mean anything about that side to the question.... (B3)

The quote illustrates how the biologist experience a central distinction between what she knows from biological research, and other kinds of arguments. Further, she experience uncertainty as to what extent these other kinds of arguments should be part of her engagement in public debate. She articulates a division between the scientific and the political, and depicts keeping “on the scientific side” to be an aim. However, she expresses uncertainty with regard to the aim of remaining scientific both due to experiences of a blurry line between the scientific and the political, and due to a sense of responsibility to engage. Still, she expresses reluctance with regard to making judgments related to non-disciplinary questions because doing so involves arguments other than the purely scientific, and she does not wish to appear as political when taking part in debate, but rather as scientific/professional.

Awareness of the limits of one’s own competencies is described as part of taking the responsibility to contribute to public debate. In this regard, a distinction is pointed out between what one knows as a professional, and what is merely one’s opinion:

... can have a lot of opinions and write in newspapers in various debated, signed professor this or that... And then one takes one’s title and uses it in a way for what it’s worth. (...) [but], I just think that one should also be aware how far one’s professional competence stretches in relation to having an opinion about absolutely everything, then ... or—one should have an opinion about absolutely everything, but one should also be honest about what is an opinion and what is, in a way, a well thought out and professionally justified statement about different matters. (B3)

The above quote describes paying attention to the distinction between professionally justified statements and personal opinion, and being explicit about it when taking part in public debate, as a central, but challenging part of taking the responsibility to contribute to public debate.

Yet another way of taking responsibility to contribute to public discourse and debate is by making sure that specific topics are addressed in teaching. Educating biology students is

described as a central way of channeling biological knowledge into public discourse and debate.

The following quote illustrates this point:

...I always make them [the students] aware of this discussion, so that the students think about it. I think it is important that they think through the questions of GMO [genetically modified organisms]. And I believe it is important to provide them with sufficient knowledge about genetically modified plants so that they when they go out in the world, or just out to meet their friends...that they have a reasonably good basis of knowledge to talk about what a genetically modified plant is. (B3)

The quote provides a concrete image of biologists taking responsibility for channeling knowledge into the general public's conversations by way of teaching. Students as members of the public are, through their education, provided with specific knowledge in order to be able to have knowledge-based conversations about current controversial topics, such as genetically modified organisms.

In brief, the responsibility to contribute to the public discourse and debate is taken toward the general public, but also toward political actors. Biologists describe taking this responsibility through disseminating knowledge to the public, taking part in public debate, engaging in dialogue with other actors, engaging in (critical) disciplinary debate, and teaching. Meanwhile, they experience challenges to taking this responsibility, both with regard to finding/prioritizing time, and with regard to handling the distinction between the disciplinary/scientific and the political.

Taking responsibility for contributing to general education, professional education, and medical research

The biologists emphasize that biology is a school subject in primary and secondary education. Further, they point out that biology is important for medical professionals, and that it is important for medical research. In various ways, they described biology as a support discipline in these areas. The various ways that biologists describe contributing to these fields are described in the following.

The knowledge domain of biology includes knowledge about how the human body works, including for example processes within the cells, the functioning of organs, the anatomy and physiology of animals, and the anatomy and physiology of the human body. Thereby, biology borders the field of medicine, offering knowledge that is important for medical professions and

veterinarians respectively; as such, participants noted that it is part of the educational programs for these professions.

Biologists expressed that the understanding of biology that students within these educational programs develop is important for their performance as future professionals. One way of taking responsibility to provide the medical professions with biological knowledge is by authoring textbooks:

For example, I write textbooks (...) because as a biologist, I think it's important that we do not just leave to the presentation of our subject to chance.... (...) as a professional I think that there are certain areas in physiology that are more important than others and there is maybe a specific approach within the subject that I think is important to gain in-depth understanding of physiology, so I feel I have a responsibility there, and that is why I do that type of thing.... (B2)

By carefully handling the knowledge to make sure that it is presented in adequate ways for the students, biologists see themselves as taking responsibility for future professionals' understanding of how the human body works. Providing professions with knowledge can be seen as a way of taking responsibility toward these professions, as specific publics, and moreover as a way of taking responsibility toward the general public, who may come to rely on these professions.

Another way of taking responsibility to provide knowledge for the medical profession and for medical research (and thus serving also the general public) is by contributing to the preserving of species. While contributing to protecting and preserving species and their habitats and ecosystems, and contributing knowledge to the medical professions and medical research are presented as two distinct responsibilities, they emerge as related. While biologists describe the preservation of species to be due to a species having "... *a value in its own right*" (B4) and because of its importance to ecosystems, the preservation of species is also related to their potential medical purposes. Both known and unknown species may have so far unknown areas of use in for example medicine:

...most biologists see it as a value in its own right to preserve them [the species]. (...) ...But the extinction of species now happen in a tremendous tempo, not least in the rain forest...where the largest biodiversity is, which can have large consequences globally...But at the same time, new discoveries happen all the time...and one finds new species which contain substances that enables us to develop medicines or in other ways...Myrtle is an example of plants that one has extracted substances from which have been crucial for treating children's leukemia. Now one produces it synthetically. (B4)

While participants express this kind of usefulness as central, they also stress that the question of the more or less immediate usefulness of basic research is understood as irrelevant, and basic research described as free from other concerns “*than simply finding out how it works*” (B2). Meanwhile, the same biologist describe basic research as something that is beneficial, both for preservation of nature and/or for medical advances in the long run. Meanwhile, it is noted that “*...it is often different people that do it.... [and] ...often the period of time between the research efforts and the possibility of application of is, so there is sort of a rupture there*” (B2).

With regard to the long-term outcome, biologists describe this as a global contribution:

Often it is not those who invest in basic research that harvest. ... if you publish things and you increase the level of knowledge, then all nations, for example developing countries, in the world can use this knowledge. And this is very advantageous in the long term. (B2)

In the quote, the international community, and in particular developing countries, with far less resources to invest in basic research is understood as a form of public for biologists. A responsibility is understood to be taken by producing new knowledge and making this knowledge available to all nations.

Further, biologists describe how knowledge about the functioning of the human body is important not only for experts within biology, medicine, or medical/health-professions, but also for the general public. Thus, providing the general public with knowledge about how their bodies function is seen as important for their general education. For example, this knowledge is needed if people are to be able to make sense of health promotion and take care of their own health:

Amongst others, we educate teachers...and all sorts of health promotion; in order for it to have an effect on people they need a certain level of knowledge in physiology. Everyone has it in lower secondary school and in secondary school (...) so we perceive it as a very important subject for the general education of the public. (B2)

As illustrated in the quote, educating biologists to become teachers is seen as one way of taking the responsibility to make biological knowledge about the human body part of the general public’s repertoire of knowledge.

To summarize, the biologists describe taking responsibility for providing knowledge to the medical professions, medical research, the general public, students in secondary education, future generations, and the global community. They describe taking this responsibility by

conducting basic research, educating teachers for secondary education, writing textbooks for future professionals, communicating knowledge to the public, and making knowledge globally available.

Overall, biologists take on the responsibilities of:

- *Contributing to society's ability to protect nature*
- *Contributing to public discourse and debate*
- Contributing to general education, professional education, and medical research

These responsibilities are taken in a variety of ways, through choices and actions made in research, teaching, and communicating to and with the public. However, biologists describe challenges with regard to taking these responsibilities, in terms of the focus on producing articles, a large curriculum to be covered in limited time, time pressures on students to complete exams and degrees, and awkwardness regarding the role as participant in public debate.

The sociologists

The sociologists describe themselves as having responsibility for 1) contributing to public understanding, discourse, and debate; 2) illuminating how society can be improved; and 3) providing society with sociologists. In the following, these responsibilities toward the public, and the variety of ways in which they are understood to be taken are elaborated.

Taking responsibility for contributing to public understanding, discourse, and debate

The sociologists describe the knowledge domain of sociology to be important to the public because it is about the society in which they live. As pointed out by one of the participants, it is “*difficult to imagine a topic that is important to the discipline, but societally uninteresting*” (S1). By taking the responsibility for contributing to public understanding and discourse, the sociologists understand themselves to provide the general public with knowledge about society, and to potentially provide people with insight into their own circumstances and understanding of

society, and thus contribute also to how people (are able to) act in it. Further, they understand sociology as being important for political decision-makers because it potentially provides them with knowledge on which to base their decisions. In this regard they describe contributing to public discourse and debate as ways of providing political decision-makers with relevant and useful knowledge. The responsibility to contribute to public discourse and debate is described to be taken in a variety of ways, as elaborated in the following.

Sociologists describe developing knowledge through research as one way of contributing to public understanding and discourse:

...I am paid by the public to do research...so of course I have to present something and come up with some results. That is clearly a responsibility. (S1)

In addition to providing new knowledge through research (“*coming up with some results*”), the quote points out the responsibility to convey this knowledge to the public. As within psychology, history, and biology, the distinction between writing for colleagues and writing for the public is emphasized in this regard. Communicating knowledge to the public by writing specifically for this audience is described as a central way of taking the responsibility to contribute knowledge to the public:

...one writes for colleagues, one might say, in English journals. No one in the general Norwegian public reads or hears about this. So I also try to write a little popular science every now and again too, and I make myself available if anyone wonders about anything.... (S1)

This quote further illustrates that, in addition to writing for the public, she takes responsibility through making oneself available “*if anyone wonders about anything.*” This suggests a way of taking responsibility by responding to the public’s request for knowledge within areas of her expertise as a sociologist.

However, sociologists describe a dilemma as sometimes occurring with regard to communicating research findings to the public. While sociologists are typically aiming at knowledge about groups, and usually protect individual identities, groups are also understood to be entitled to protection, for example from stigma. If the findings from sociological research suggest interpretations to the disadvantage of the reputation of these groups, or interpretations that in any way “*could be perceived in an unfortunate light about a «weak group»*” (S1), sociologists

experience encountering “*a dilemma*” (S1) between protecting those subject to research, and disseminating the results to the general public. In this regard, participants point out that, if communicating research results to society may cause negative stigma to a societal group, then sociologists need to “*consider carefully how the results are presented*” (S1).

A distinct way of taking the responsibility to provide the public with knowledge about society is by relating one’s research to “*processes of decision-making in society*” (S2). This orientation in research is contrasted to research being “*very focused on theoretical questions*” (S2). Thus, political decision-makers emerge as a specific public which sociologists take the responsibility of providing with knowledge. The understanding of political actors as a public for the discipline, due to knowledge from the discipline being relevant and useful for them in making decisions about how society should be arranged, is comparable to the understanding of knowledge from the discipline being important for political decisions in specific areas that come to the fore within the other disciplines. What is specific for the discipline of sociology is that it concerns society and how processes of decision-making in society influence people’s lives.

A direct arena for taking the responsibility to provide both the general public and decision-makers with knowledge is noted in sociologists’ participation in developing Official Norwegian Reports (NOUs). This is a common practice in Norway, where the Government or a ministry establishes a committee as a working group that reports on different aspects of society. These reports are commonly used as the foundation of suggestions made by the Government to the Parliament, and are often referred to in white papers. Legal practitioners assign discussions from NOUs as sources of law, referring to them as preparatory works³⁴.

As suggested above, sociologists highlighted communicating sociological knowledge to the public in dedicated public genres as a way of taking responsibility to contribute to public understanding and discourse/debate. The taking of responsibility by communicating sociological knowledge to the public emerge as mainly understood to be related to the specific expertise of the individual sociologists. The following quote, where “I” is central, illustrates this:

I should have written a newspaper chronicle about a NOU [Official Norwegian Report] (...). I believe that it is clearly I who should write it, because I have worked a lot with this subject and I have relatively clear perceptions. (S2)

³⁴ <https://www.regjeringen.no/en/find-document/norwegian-official-reports/id1767/>

The chronicle is an institution in several of the larger Norwegian daily newspapers. It is an open, public forum where citizens present a quite long, reasoned argument on a specific issue. The above quote indicates an understanding of a responsibility to elaborate on a certain topic for the public, because it is within this particular sociologist's field of expertise (he has "*worked a lot with this subject*"), and also because he, as he puts it, "*has relatively clear perceptions.*" The latter can be interpreted to mean that working extensively with this subject has resulted in his making some judgments about how this specific issue should be understood and/or handled, based on his knowledge about it. As a result, he experience having a responsibility to communicate his reflections on the issue to the public.

The participants emphasize engaging in public discourse and in debate as a central way of providing knowledge and insights to both the general public and political actors. Still, they experience taking responsibility through communicating knowledge to the public and engaging in discourse and debate as difficult to prioritize within a tight schedule, as illustrated in the following quote:

with regard to this social responsibility I am a little less active than I might wish. And that is because I have so ... much to do that it is difficult to find time. (S2)

Finding the time to pursue responsibilities toward the public is described as a concrete challenge, as participants have many tasks to perform in limited time. Furthermore, they describe partaking in public debate to be a challenging task to handle. The challenges that emerge are comparable to the experiences of difficulties regarding the role as a professional academic in the public expressed by biologists as well as historians and psychologists. In particular, sociologists echoed biologists in discussing the challenges related to the division between the professional/academic and the personal/political as well as the uncertainty with how to approach this division. In this regard, sociologists point out that, by virtue of one's position as a professor from a particular university, one may be interpreted as speaking on behalf of the whole university, which may give arguments and judgments of a more personal, moral, or political nature an unjustified scientific and institutional momentum. The quote illustrates this matter:

But it is complicated you know, because you sort of get the entire weight and authority of the university backing you. And sometimes you express yourself as a private person. (S3)

Within the other disciplines, the concerns articulated with regard to the difficulty of defining the role of the academic in public debate were mainly about being academic and scientific and not political and personal. The focus of concern in the above quote is rather the risk of personal and political points of view being (mis)interpreted as scientific, and as the voice of the institution and not the person, thus providing the arguments with unjustified scientific and institutional authority.

It seems that sociologists experience ambiguity with regard to taking part in public debate due to a lack of clarity concerning the divide between the professional and academic and the more political and personal, and whether “becoming political” is within the mandate of a university academic. It is interesting to note the experience of this challenge in light of the aim of social science to combine political engagement and scientific rationality (described in Chapter 5). Further, the experience is articulated by participants of the university in general and sociology in particular being decreasingly active in the public outside the university. Experiences of ambiguity with regard to what is the “proper” form of engagement in the public are suggested to be one reason for this. In this regard, participants articulate a concern that, if university academics refrain from taking part in public debate, other actors, like “*think tanks*” (S3), will occupy the arena at the cost of the university.

Pursuing knowledge with the aim of “*developing knowledge that is useful for those subject to research*” (S4) is elaborated as a distinct approach to the responsibility to contribute to public understanding. Those subject to research is seen as the primary public within this approach. In this regard, participants offered a distinction between research aiming at providing management/government with knowledge to help them steer (“*sociology as a management science*” [S4]) and research aiming at providing “*those subject to research with knowledge that they can use*” (S4). The latter way of doing sociology is described to be an “*alternative to the traditional sociology*” (S4). In order to ensure that sociological research “*benefits first and foremost the participants in the particular research project*” (S4), sociologists have developed a specific set of “*alternative methodological approaches*” (S4). Further, this participant emphasizes that the question of “*whom and what the knowledge is for*” (S4) is taken into the whole research process, from the posing of research questions, to the research design and methodological approaches used, and to the conveying of results. This illustrates that the taking of responsibility toward the public can have implications for how the production of sociological

knowledge is approached, comparable to how the taking of responsibility emerged as influencing the whole process of developing knowledge within psychology (e.g. choice of research question and theoretical perspective in order to fulfil responsibilities regarding the influence on self-understanding) as well as within history (e.g. in the example of exploring dilemmas).

In summary, sociologists describe the responsibility to contribute to public discourse and debate to be taken toward the general public, political decision-makers, and those subject to research. They describe the taking of this responsibility as being performed by illuminating important societal questions, developing knowledge relevant for those subject to research, communicating knowledge to the public, partaking in developing NOUs, and taking part in public discourse and debate. Yet, they experience the taking of this responsibility as being challenged by both the lack of time and lack of clarity with regard to the divide between the professional and the political/personal. The responsibility to contribute to public discourse and debate emerge as intertwined with the responsibility to illuminate how society can be improved. This responsibility and how it is taken is elaborated in the following.

Taking responsibility for illuminating how society can be improved

The sociologists express an understanding that their knowledge may illuminate how society can be improved. As such, sociologists seem to understand themselves as taking on a critical, but also constructive voice in and for the public. The responsibility for illuminating how society can be improved is first and foremost described as taken through research.

The following quote illustrates an example of taking the responsibility to illuminate how society can be improved through research. Further, it elaborates what is understood to be demanded of such exploration in order to fulfil the potential of illuminating how society can be improved:

Take a thing like class and social stratification, you know, inequalities between people... Then I can of course, say that, yes, it is terrible that there are such big inequalities between people. Let's make them smaller, or let's reveal how big they are, or whatever. (...) One can do that. But then again, that does not extend the debate as far as it could if one doesn't ask the question: Yes, but what types of differences can we live with and what type of differences are not okay.... Being more precise, in one way or another, in so to speak what it is we are challenging society about.
(S2)

The quote exemplifies exploring a sociological issue in order to illuminate how society can be improved, and thereby challenge societal arrangements. By taking a critical perspective in order

to illuminate, for example, kinds of inequalities between members of society and to determine which inequalities are so consequential that measures should be taken to change societal arrangements, sociologists discover how society can be improved. The following quote offers further details on how illuminating ways in which society may be improved is approached through sociological research:

...seeing the sociological aspects, and to look at it and then think in terms of independence, dependence, resources, some have resources, others don't. To unfold, in one way or another, should we call it the dimension of power in this, look at it properly. And then in the third round, the question arises – when we look at these ... what do you think about this type of situation. (S2)

This approach to research may indicate that the participants understand developing knowledge as an act of participating in public discourse and debate. This is comparable to how historians depict their research as part of the public conversation, and how specific aims are pursued in research in order to make the wanted contribution to this debate. As historians, for example, wanted to illuminate dilemmas and nuances in their research, in order to make public debate more nuanced, sociologists describe wanting to develop knowledge and insight through their research that is specific and concrete enough to contribute to extending the debated as far as possible toward possible concrete measures. Developing such knowledge come to the fore as being directed toward providing political decision-makers and other societal actors that have the power to make changes come about with specific and usable knowledge. Thereby, the responsibility to illuminate how society can be improved is closely intertwined with the responsibility to provide (political) decision-makers with knowledge about different choices of action, elaborated above.

Meanwhile, with regard to taking the responsibility to illuminate how society can be improved, the distinction between the professional/ scientific and the personal/political is pointed out. This distinction is, as noted above, recognizable from biology in particular. While biologists' concern was about how to handle this distinction when engaging in public debate, sociologists express this as a concern and a tension also with regard to knowledge production. From the way the different sociologists talk about this, it seems reasonable to suggest that how and to what degree to include explorations of "*what is right and what is wrong about society*" (S4) and "*how thing should be done*" (S2) is understood in different ways. In the above examples, exploring to find out "*what do you think about this type of situation*" (S2) and to "*find out what types of*

differences can we live with and what type of differences are not okay” (S2) is described as a way of taking responsibility through research; however, participants also point out that “*as a scientist one should stay neutral*” (S1) and adhere to “*describing how society is*” (S1). These different approaches to research indicate, not surprisingly, that there are different understandings of the responsibility of sociologists as researchers. Also the following quote suggests that there is not one shared understanding and approach to this among sociologists:

... an interesting tension in our discipline which is probably more prevalent here than for example in political science and economy actually, where it is more included as a very clear part of the discipline, however in very different ways, that “here we have some normative questions, and these we handle in these ways”. In sociology, we don’t do that to the same degree. (S2)

From these examples, ambiguity arises with regard to how sociologists take the responsibility to illuminate how society may be improved.

To summarize, the responsibility to illuminate how society may be improved is described as taken toward the general public, particular groups, and political actors. The responsibility to illuminate how society can be improved is described as being taken through critically and constructively exploring how society works and how it may be improved, communicating knowledge to the public, and engaging in public debate. Meanwhile, ambiguity also emerges with regard to how sociological research can illuminate how society can be improved.

Taking responsibility for providing society with sociologists

The sociologists describe educating sociologists as a central way of channeling sociological knowledge and insight into society, and thereby (potentially) benefit the public. This argument is comparable to how educating professionals for positions in society were understood within the other three disciplines. In the following quote, taking responsibility for providing society with sociologists is in the following quote expressed as a central responsibility for sociologists toward the public:

... as an employee at the university, I think that the most important role that we have is here at the university. That is my initial thought, because actually, it’s not just research, but we are educating all of these people that will end up in lots of different places and positions. That is an incredibly important disciplinary task. I mean, most important of all, is that we are actually educating ... all these people that will have different functions in society. (S4)

The quote illustrates that sociologists envision themselves as important for society, and that providing society with sociologists potentially benefits the general public. This way of taking responsibility toward the public is emphasized as a responsibility toward the public that is taken “*here at the university.*” Thus, participants point out that educating sociologists is a way of providing the public with sociological knowledge that is distinct from taking part in public discourse and debate, but which in part serves some of the same purposes. The following quote reveals an educational aim of steering students toward a particular way of approaching things for when they enter into positions in society:

It is a special type of teaching task. And it is important ...to get people to wonder about how things are done rather than... to know for sure how things are. To kind of have that attitude toward things when one is out working within a directorate or for the council, or whatever. To question things and to investigate how things are done. (S4)

This quote highlights teaching as a way of passing on to students a responsibility to approach societal questions with an attitude of inquiry and critical curiosity. Related to this, the educational responsibility is described to include being a role model:

...we are in a way role models. Of course we are. And we are up bringers. We have to face that we are. And then there is a question...about how we behave...how we act. (S2)

The inclusion of responsibility as a role model with responsibility as a teacher can be interpreted also as the sociologists taking a responsibility that goes beyond the purely disciplinary.

In brief, the responsibility to provide society with sociologists is described as a responsibility taken toward the general public, and emphasized as a central way of channeling sociological knowledge into society. Sociologists describe this responsibility as being performed through teaching and being a role model.

To summarize, sociologists partaking in this study envision taking responsibility for:

- *Contributing to public understanding, discourse, and debate*
- *Illuminating how society may be improved*
- *Providing society with sociologists*

In a variety of ways—by research, teaching, and communicating to and with the public—sociologists take responsibility for our understanding of society and our ability to improve it.

Meanwhile, like participants from the other disciplines, sociologists experienced challenges with regard to taking the responsibilities envisioned. The challenges are related to time pressures and to defining and handling their role as participant in public debate.

Summarizing comments to the first step of analysis

The above analysis has answered the questions of 1) what responsibility the participants see themselves as having toward the public and 2) how they understand and experience taking these responsibilities. Through this analysis, I have discerned the range of different responsibilities and different ways of taking these responsibilities, and elaborated these findings with close reference to the data. In addition to mapping out the variety of ways of taking responsibility toward the public, the analysis has brought to the fore that there is not one public, but rather multiple publics that the participants take responsibility toward, as the participants describe several relevant audiences outside their specialized fields of knowledge.

The participants describe taking the envisioned responsibilities in multifaceted ways, through research, teaching, and communicating to and with the public. Meanwhile, they also highlighted experiences of facing challenges with regard to taking the envisioned responsibilities. What do these understandings and experiences of taking responsibility mean for how we can understand, discuss, and further explore university academics' responsibility toward the public? In light of the current context, what do the images and experiences tell us about the current conditions of academic work as responsibility conditions? The following chapter investigates these questions by further analyzing the findings from this first step of analysis within the framework of epistemic living spaces.

Chapter 7: Understanding imaginaries and experiences of taking responsibility

Through the first step of analysis, I mapped out the range of ways of understanding and experiencing taking responsibility toward the public within each of the four disciplines, as presented in the previous chapter. Moving now to the second step of analysis, I further analyze these findings in order to explore the understandings and experiences of taking responsibility across disciplines. In this step of analysis, I use the framework of epistemic living spaces (Felt 2007/2009; see Chapter 3). This framework facilitates a zooming out from the discipline-specific analysis to look at imaginaries and experiences of taking responsibility toward the public across and beyond disciplines. As elaborated in Chapters 3 and 4, the framework of epistemic living spaces offers the notion of “imaginaries,” which encompass the understandings discerned in the first step of analysis, and offers a distinction between imaginaries and experiences that is useful in interpreting the findings in light of the current context of academic work.

The framework of epistemic living spaces facilitates relating the micro stories of the first step of analysis to the macro stories about new conditions and emerging trends of academic work described in Chapter 2. In doing so, it supports interpreting what the imaginaries and experiences of taking responsibility mean in light of the current context of academic work. I interpret the findings from the analysis as both expressions of and products of (or responses to) “...the structures, contexts, rationales, actors and values...” that are experienced to “...mould, guide and delimit...” (Felt and Fochler 2010: 4) academic work. This approach, by still holding on to the perspective of the participants, offers more insight into what the imaginaries and experiences mean and imply, why they have emerged, and the challenges and possibilities that lie within (the emerging) institutional and contextual features of the current context of academic work. Thus, in addition to providing further insight into how taking responsibility is imagined and experienced, the analysis also provides insight into the current conditions as ‘responsibility conditions’ (Felt 2015).

As described in Chapter 3, Felt proposes five dimensions of epistemic living spaces. In the following analysis, I use the epistemic, spatial, temporal, symbolic, and social dimensions of epistemic living spaces as focal tools, i.e. different points from which to look at images and

experiences of taking responsibility. The following sections present the findings from the analysis of each of the dimensions. For each dimension, I discuss the findings in light of the current context of academic work, as described in Chapter 2.

7.1 The epistemic dimension of taking responsibility toward the public

As described in Chapter 3, the epistemic dimension of epistemic living spaces is about what and how academics aim to know. More broadly, I use the epistemic dimension to look at the ways in which the participants understand and approach handling/managing their knowledge domain. For the participants in the present study, this includes teaching, as they hold academic positions with both research and teaching responsibilities. Further, academics within this context are expected to communicate knowledge to both colleagues and the broader public, as described in Chapter 5. As a result, the analysis of the epistemic dimension of taking responsibility concerns how the academic participants envision, approach, and experience responsibility with regard to being a researcher, being knowledgeable, and being a teacher within a specific domain of knowledge. Thereby, the analysis of the epistemic dimension of taking responsibility toward the public captures how conceptions of taking responsibility toward the public and conceptions of knowledge work impinge on each other.

The analysis of the epistemic dimension captures the core of how responsibility is understood and approached. Based on the mapping of different ways of taking responsibility in the previous chapter, I note that the public is not conceived as one homogenous group, but rather that the participants understand themselves to have and to take a variety of responsibilities toward multiple publics. Further, the first step of analysis revealed that both the specific knowledge domains and the specific publics envisioned as relevant audiences, recipients, and users of this knowledge imply specific responsibilities that the participants imagine and experience taking through their knowledge work, as knowledgeable, as able to produce knowledge, and as teachers.

Looking at this as the epistemic dimension of taking responsibility, four features become central:

- 1) On the one hand, responsibilities toward the public flow from the knowledge domains, while, on the other hand, the knowledge domains are influenced by these responsibilities, resulting in a circuit that can be traced where the publics and the disciplines are conceived to influence each other reciprocally.
- 2) As the descriptions of taking responsibility indicate not one, but multiple publics impinging on what and how the participants aim to know, teach, and disseminate, academics are engaged in not one but multiple loops of interaction, and take not one but multiple responsibilities toward multiple publics.
- 3) Taking these responsibilities is experienced and imagined as integral to the bundle of research, teaching, and communication to and with the public.
- 4) Meanwhile, participants experience the need to draw and handle boundaries between disciplines and their publics.

In the following, I elaborate these major findings from the analysis of the epistemic dimension of taking responsibility, before discussing them in light of relevant characteristics of the current context of academic work.

7.1.1 Knowing for multiple publics and multiple responsibilities

As suggested in point 1 above, central findings from the epistemic dimension of taking responsibility are that, on the one hand, responsibilities flow from the knowledge domains, as the particular fields of knowledge are understood to potentially make specific contributions to the public. For example, psychologists take responsibility for providing the public with knowledge that can help people and help society because their knowledge domain illuminates how the human mind works, and can thus help us in how we interact. Further, psychology can illuminate what takes place in society from a psychological perspective, and thereby help determine how to arrange society in a way that contributes to rather than endanger the public's mental health. On the other hand, the knowledge domains are influenced by the responsibilities envisioned toward the public. For example, historians take responsibility for both contributing to and challenging the publics' identities, and thereby aim to develop knowledge toward this aim. This orientation

influences not only research questions pursued, but also perspectives and approaches used in the process of knowledge development. These are but a few random examples of traces of a circuit where the publics and the disciplines are conceived to influence each other reciprocally. This is further elaborated below, when looking at responsibility toward the public as integral to the bundle of research, teaching, and communication.

As suggested in point 2 above, there is not one public, but multiple publics impinging on what and how the participants aim to know, teach, and disseminate. As such, the participants take not one, but multiple responsibilities; moreover, they envision and experience being part of not one but multiple loops of interaction between responsibilities to the public and the knowledge domain. For example, the responsibility envisioned by sociologists to provide the public with knowledge about society is taken toward the general public, political decision-makers, and those subject to research. The responsibility envisioned by biologists to provide the public with knowledge about the functioning of the human body is taken toward medical professions, medical research, the general public, students in secondary education, future generations, and the global community.

Further, the various publics imply various responsibilities, which are often related and sometimes conflicting. Thus, they experience and imagine a complex web of responsibilities, which may be understood as a “web of commitments” (May 1996). This is further illuminated in the following elaboration of responsibility toward the public as integral to the bundle of research, teaching, and communication to and with the public.

7.1.2 Responsibility toward the public as integral to the bundle of research, teaching, and communication

A central feature of the experiences and imaginaries of the epistemic dimension of taking responsibility toward the public is that participants understand and take the responsibilities as integral to academic work, and that they form a bundle³⁵ of responsibilities taken through research, teaching, and communication - as a bundle of activities. Taking responsibility toward the public comes through as integral to research in three related but distinct ways:

³⁵ I draw the notion of “bundle” from Kalleberg 2000, whose notion of bundle is inspired by Clark 1995.

- 1) In participants' descriptions of taking responsibility by illuminating questions that they picture as important for different publics to gain knowledge about.
- 2) In participants' descriptions of taking responsibility by considering how the knowledge they produce potentially influences the public is seen as a responsibility.
- 3) In participants' descriptions of responsibility taken as a proactive concern about possible futures, in the sense that knowledge is pursued based on images of possible development or change in/of society.

These ways of taking responsibility emerge as bundled with taking responsibility through teaching and communication to and with the public. In the following, I discuss how these three ways of taking responsibility appear to be seen as integral to research, and how they seem to be bundled with teaching and communication with the public.

In order to take responsibility in the first sense, by illuminating issues that are in different ways important for various publics to gain knowledge about, responsibilities toward the public are included in the production of knowledge in terms of the choice of questions to explore, which approaches and perspectives to apply, and how to write up and present the findings. For example, psychologists aim to develop knowledge that clinical psychologists need, as well as knowledge that they believe may benefit the general public. In biology, one example is pursuing specific questions in research in order to contribute to taking responsibility for the environment; similarly, in sociology, participants aim to illuminate current societal issues in their research, in order to provide political decision-makers with knowledge to base decisions on. Yet another example is the responsibility taken to contribute to making public debate more informed, nuanced, and rational. In response to this perceived responsibility, participants report selecting certain questions and steering their research toward certain aims; for example, historians may aim to illuminate dilemmas in the past or disclose myths. In addition to experiences and imaginaries of making these choices to fulfil a responsibility to the public, experiences also emerge of the knowledge they develop making this kind of contribution without the researcher undertaking such deliberations in advance. Meanwhile, in order for the knowledge to make a contribution to the public, it "*has to be communicated outwards*" (B3, pg. 111³⁶).

³⁶ The page numbers in the citations in this chapter refers to the pages in chapter 6 where the citation is presented as part of the first step of analysis.

Taking responsibility by illuminating specific issues appear as bundled with the responsibility to communicate to and with the public, as this knowledge and these insights are what academics (potentially) communicate to the various publics, engage in public discourse and debate with, and/or use when providing expert advice to specific publics. Also, putting this knowledge “*out into the world*” (H3, pg. 102) is seen to potentially influence the public, whether intentionally or not. The taking of responsibility toward the public by identifying important issues through research emerge also as bundled with teaching, as participants pursue specific knowledge because they consider this knowledge important in order to enable students to fulfil their future responsibilities as professionals in various societal positions, as well as to educate them as citizens. For example, historians in this study describe aiming to develop knowledge that they understand as crucial for students becoming teachers.

The second way of taking responsibility through research, namely by considering how the knowledge produced influences various publics, is closely related to taking responsibility for addressing specific issues in research; in addition, it is worthy of distinguishing as a separate responsibility. Participants report considering the influence on the public with regard to the research questions they choose to pursue, the perspectives and approaches they apply, and the way they choose to present the findings. For example, psychologists and historians express a concern for how the knowledge they produce influences our self-understanding as human beings and as society. Other examples concern the way in which particular groups are described through research, and thereby how their reputation and self-understanding are influenced. This concern was particularly addressed by sociologists, and also historians. This aspect of taking responsibility necessitates adopting a critical perspective on one’s own discipline, and includes making considerations with regard to the influence on the public not only related to one’s own research, but to the discipline as a whole. Further, taking responsibility for preventing the use of knowledge that is harmful to people or to nature can be seen as part of taking responsibility for considering the influence of knowledge on the public. In particular, biologists and psychologists express this responsibility. While biologists develop knowledge that has the potential to contribute to society’s efforts in taking care of the environment, biological research also brings forth knowledge and in turn technologies that potentially entail environmental or other ethical challenges; in fact, one participant note, “*You sort of cannot attain one, without having the opportunity for the other*” (B2, pg. 110). Likewise, knowledge about the human mind can be

used both to help and to harm people, and psychological knowledge is understood to be particularly “*vulnerable*” (P5, pg. 94) in this regard.

Taking responsibility in research to consider the influence of the knowledge one is producing on the public is further bundled with responsibilities taken through partaking in public discourse, as communicating knowledge to the public is understood to influence their self-understanding.

Further, this responsibility is explicitly stressed as bundled with responsibilities taken through teaching. Participants, particularly psychologists and historians, assert that providing students with the capacity for reflexively and critically considering their discipline and how it influences the public is a crucial task in order to influence how they enter society as knowledgeable within their field.

A proactive concern for possible futures, in the sense that knowledge is pursued based on images of possible development or change in/of society, is the third way that responsibility toward the public comes through as integral to the research. Participants report that considerations regarding their contribution to enable society to make good decisions for the future; is part of their motivations, choice of research questions, and methodological and theoretical approaches. For example, biologists articulate such proactive responsibility for possible futures in terms of health and the environment; conversely, sociologists, psychologists, and historians discussed this responsibility in terms of self-understanding as society and human beings, social and mental wellbeing, societal discourse, and the development/improvement of society.

As with taking responsibility through pursuing important questions and through considering the influence of one’s knowledge on the public, the taking of responsibility as a proactive concern for possible futures in one’s research is bundled with responsibilities taken through teaching and communication. Communicating knowledge to the public is understood as a way of contributing to improvement in relevant areas, and the bundle involves exploring questions that can potentially illuminate possible futures, and communicating research findings that might provide insight about possible futures and inform the public’s choices in this regard. Educating professionals who contribute to the public in the future, as well as educating knowledgeable and engaged citizens, is also part of this bundle, and the educational task influences on which areas of research participants find important to explore.

7.1.3 Handling blurry boundaries between the disciplines and their publics

As described in Chapter 3, boundary drawing is central to the framework of epistemic living spaces. Looking at the way boundaries are conceived, approached, and handled with regard to the epistemic dimension of taking responsibility, boundary drawing appear as central both with regard to the way that the participants engage in the public and the way responsibilities toward the public are included in knowledge production. The following sections offer some elaboration.

The way that responsibilities toward the public are described above to impinge on knowledge work and the inherent nature of taking responsibility toward the public that come to the fore, suggest that the boundaries between the public and the academy are porous. This porousness of boundaries means that participants envision themselves as actors in and for the public.

Meanwhile, boundaries are drawn regarding both directions of influence in this reciprocal relation between the epistemic work of the discipline and the public. With regard to the academic as actor in the public, the academic experiences the need to draw boundaries for the claims made in public discourse as knowledgeable. Emphasizing the authority one enjoys as an academic from a university, participants from all four disciplines propose a need to draw boundaries with regard to the knowledge claims they make in the public. However, where to draw this boundary is not experienced as a given. Tensions and quandaries regarding drawing the boundary were, for example, proposed by the historian who had experienced doing “*relevant and interesting*” things by freeing himself from his field of expertise, but raising the questions “*is there as strict divide between what we believe as professionals and what we believe as ordinary citizens? How fluid is the boundaries, and what can we do?*” (H2, pg. 103). Similarly, a biologist reflects on the divide, and the possibility of distinguishing between personal engagement and her engagement as a biologist (B3, pg. 113-114).

A need for boundary drawing is also experienced and envisioned with regard to knowledge development. For example, while biologists emphasize focusing on developing, teaching, and disseminating knowledge that is beneficial to human health or to society’s care of nature, they also acknowledge a need to uphold the importance of academic knowledge pursuits as something that is free from other concerns “*than simply finding out how it works*” (B2, pg. 117). Likewise,

while sociologists express a broad societal engagement and take responsibility for contributing to the improvement of society, they also stress the boundary between the descriptive and the normative. In another example, historians point out the importance of not letting the “*search for meaning*” or “*polemic points*” overshadow what actually took place (H3, pg. 101). Based on such experiences, it seems that, while traditional boundaries are challenged in terms of proposing or claiming a mutual influence and co-production (Jasanoff 2004) of the knowledge of the discipline and society, traditional boundaries like autonomy and neutrality are also upheld and defended, expressing experiences of a need to keep society sufficiently at bay.

When looking at boundary drawing related to the epistemic dimension, autonomy and neutrality seem central to the participants’ demarcation of epistemic work. However, a central finding is that the images of taking responsibility toward the public participants describe suggest that responsibility is taken not primarily as a response to external demands for particular kinds of knowledge, but as a proactive concern for the various publics and the various contributions the participants envision that their discipline can potentially make. Thus, while autonomy is expressed as crucial, the epistemic boundary in the discussions of autonomy is not drawn between a university doing research independent of society—in “splendid isolation” driven by academic curiosity only—and a society to be kept totally at bay, seen only as the recipient of authoritative knowledge from science. Rather, to a significant degree, the discussions revolve around how to manage the autonomy to choose the topic to explore and the perspectives to apply, based on both epistemic considerations, such as what kind of knowledge is acceptable and valuable for the discipline, and considerations of responsibility toward the public, such as which questions need to be investigated to contribute to specific aims. As a result, the issue of autonomy comes through as experienced and imagined to be less about independence from society or freedom from societal concerns and influence, and more about how to conceive and enact autonomy in a context of intertwinement of the epistemic and the societal. For example, images of autonomy depict freedom to choose what they aim to know, and how they approach developing knowledge based on considerations of responsibilities toward the public.

Meanwhile, the form and degree of including responsibilities toward the public in research vary between disciplines and within disciplines. For example, in history and psychology, the development of knowledge is conceived as a way of taking part in the public conversation; in

contrast, biologists seem to depict the development of biological knowledge as more confined to the academy, as they did not, like participants from the other disciplines, identify responsibility toward the public as influencing the process of knowledge production beyond the choice of research questions. Rather, partaking in the public conversation come to the fore as being more about communicating and using the knowledge one already has in the public. However, while the process of producing knowledge may be understood as confined, taking responsibility by participating as a knowledgeable figure in the public seem pivotal to biologists. Likewise, educating biologists, both as knowledgeable and engaged citizens and for positions in society where they can make important contributions in terms of health, or environment, is expressed as a crucial way of taking responsibility toward the public.

7.1.4 Understanding imaginaries and experiences of the epistemic dimension of taking responsibility within the current context

The epistemic dimension allows an interpretation of the experiences of taking responsibility in the current context of macro epistemic changes. In Chapter 2, porous boundaries between the academy and society, and many feedback loops (Henkel 2007) between academics and the expanding and differentiating public as knowledge is distributed to wider segments of society (Nowotny 1993) was discussed as a central feature of current academic work. The above analysis indicates that this is also central to the participants' experiences and imaginaries of taking responsibility. In line with descriptions of the current context, the participants' experiences and imaginaries of taking responsibility as being integral to academic research suggests an understanding of academic enquiry and society as co-produced (Jasanoff 2004). Further, participants in the present study articulate this idea to imply responsibilities concerning the impact of the knowledge of their disciplines, not only in terms of applications, but in terms of social and cultural meaning and transformation (positive or negative), echoing Nowotny et al.'s description of "knowledge-seekers [having] to reach out and anticipate reflexively the implications of research processes" (2003: 192). Conversely, responsibilities emerge with regard to being conscious and consider the influence of the current socio-cultural context (and its *zeitgeist*) on the knowledge they produce (which in turn influences society). Thus, the findings of experiences and imaginaries of taking responsibility along the epistemic dimension echo and

bring content and nuance to the concept of an agora—that is, “the problem-generating and problem-solving environment in which the contextualization of knowledge production takes place...embodied in people and projects” (Nowotny et al. 2003: 192) of proactively (Brennan 2007) and reflexively anticipating the implications of research (Nowotny et al. 2003: 192).

Contrary to statements about “the ivory tower of the academy and its posture of splendid isolation” (Delanty 2001: 2), the above elaborated findings illustrate that academics see themselves as actors in the public. However, as addressed in Chapters 2 and 5, the orientation toward societal relevance and contribution is not radically new, but can also be understood as a shift back to, or a re-interpretation of the traditional academic role. According to this perceptive on the development of the role and self-understanding of the university, the societal orientation traditionally part of the academic role was set aside for a few decades (1950s-1980s). During this period, the isolation of the ivory tower was seen as the ideal, due to a linear model from (sheltered) basic research to application, modelled by natural sciences such as physics and chemistry (Martin 2003). In light of this perspective and the inherent nature of taking responsibility described in the above analysis, the experiences and imaginaries of the close relation between the academic discipline and society can be understood as re-interpretations of the traditional academic role more than as something radically new. Still, the analysis shows that the drawing and enacting of boundaries of responsibility for both including concerns for the public in research and teaching, and for taking part in the public discourse and debate are central to how responsibility is handled. Furthermore, drawing the boundary of responsibility in this context comes through as challenging, not least due to experiences of tension and ambiguity between images of science as intertwined with various publics, and images of a need to keep society sufficiently at bay so it does not threaten the ethos of epistemic neutrality and thus the epistemic/academic status of the knowledge produced. The boundaries between the discipline and society, and thus the boundaries of responsibility, are described as being negotiated and re-drawn, with regard both to how and when concerns about/for the public are drawn into the process of producing knowledge, and to the drawing of boundaries for acting as knowledgeable participants in the public. The participants experience and imagine the drawing of these boundaries in different ways, suggesting that there is not one shared demarcation of responsibility; rather, boundaries are shifted, negotiated, and also defended. In the following

chapter, I further explore experiences and imaginaries of boundary drawing by analyzing the spatial dimension of taking responsibility toward the public.

7.2 The spatial dimension of taking responsibility toward the public

The analysis of the spatial dimension of taking responsibility illuminates the *landscape* of taking responsibility, as a blend of physical features, cultural arrangements, and personal perceptions (Felt 2009a; see also Chapter 3). In the following analysis, I first use the spatial dimension to draw up some spatial features of the university, as the space that the participants inhabit. Second, the spatial dimension captures the landscape of taking responsibility, and the analysis describes how the participants orient in this landscape. Mapping out the landscape of taking responsibility, the analysis of the spatial dimension elucidates how responsibility is taken *inside* and *outside* the university, and how responsibilities toward the public are taken in both direct and indirect ways. Third, within the framework of epistemic living spaces, academics are seen not only as subject to, or dependent on the space that they inhabit, but also as the ones perceiving this space and, not least, as partaking in making the space they inhabit. The analysis of the spatial dimension of taking responsibility brings to the fore features of how the way that the participants take and demarcate responsibility is also a way in which they, as spatial agents (Felt and Fochler 2010), partake in making as well as enacting their epistemic living space. In the following, I elaborate the findings with regard to these three features of the spatial dimension, before discussing the findings in light of descriptions of the current context of academic work.

7.2.1 Where university academics live and work

For university academics, the university and its specific faculties and departments constitute the space in which they live and work. This space has its material features, in terms of buildings, old and new, with material-spatial environments such as offices, laboratories with various equipment, virtual and physical libraries, and meeting rooms for individual and collective work. In addition, these spaces include hallways, cafés, canteens, lounge areas, and kitchen facilities for (social) recreation as well as auditoriums and seminar rooms for teaching and working areas for students. Furthermore, the university is a space that offers financial and collegial resources,

in the sense that academic work is supported with financial means, and that this space is inhabited by a collegium of knowledgeable academics within the particular knowledge domains of the disciplines, and by administrative and technical colleagues to support academic work. In addition to having access to time, space, collegial support (and perhaps competition), and material facilities and resources, academics within this space have the authority to produce knowledge, to teach, and to communicate knowledge to the public. And they are faced with expectations to do so. The university is a rich and multifaceted space in this sense, and it provides facilities and privileges needed for pursuing good work.

In many ways, the university is a space that is “self-sufficient” in the sense that it manages its financial, material, and human resources. In many respects, also, the recipients of the knowledge and insights developed through scholarly work lives within this space, as students and as fellow academics. However, the university is no ivory tower. Echoing the descriptions in Chapter 2, the participants’ accounts of living and working within this space suggest that the boundaries of this space are porous. As the analysis of the epistemic dimension revealed, the public is in multiple ways included in knowledge work. Further, an extensive share of the population is/has at some point been part of this space, as students. Moreover, the participants seem not to picture themselves as the spatial center sending knowledge and qualified students out to the periphery, but rather as interactively communicating with the public; likewise, they view the public sphere and the sphere of the university as influencing each other reciprocally. As knowledgeable agents, the participants take part in many different places also outside the university: they talk and write in media, give talks in meetings in various organizations, are available if anyone has questions, provide courses and further education to various groups, and engage in projects as experts. The spatial dimension is also about these other spaces, and how they are imagined and experienced as related to work inside the university.

7.2.2 The landscape of taking responsibility

The above analysis of the epistemic dimension of taking responsibility toward the public exposed that the participants take multiple responsibilities toward multiple publics. In addition, it showed that participants understood and approached responsibility as integral to research,

teaching, and communication to and with the public. Exploring these findings in spatial terms suggests the following three related features of the landscape of taking responsibility:

- 1) The participants (have to) orient in a multifaceted landscape of responsibilities in the sense that, in their research, teaching, and communication to and with the public, they (have to) orient toward and/or keep multiple publics and multiple responsibilities in mind.
- 2) The boundaries between the epistemic space in which the participants live, and the surroundings are understood to be porous and permeable.
- 3) The interrelatedness between the disciplines and their publics is multifaceted, in that there is no single chain of interaction between the university and society (Nowotny et al. 2001), but multiple feedback loops and interactions (Henkel 2007) in a web of responsibilities (May 1996).

In this landscape, the participants take responsibility in work that they do both inside and outside of the university. They take responsibility inside the university, through teaching and through research. As elaborated above, they take specific responsibilities toward specific publics, as inclusive to and even at the core of academic activity. For example, the landscape of historians taking responsibility includes developing knowledge that serves specific educational aims in primary education, and teaching this knowledge to history students potentially becoming teachers. At the same time, historians take responsibility toward other publics, as they orient both toward the general public, the political sphere, and those that they write about as well as their family and heirs. Related to specific fields of knowledge within the disciplines, specific responsibilities are pursued with regard to the various publics. In a sense, one can say that participants hold open multiple paths where they channel various publics' "needs" into their work. Further, several pathways are envisioned and enacted for distributing knowledge to the relevant publics. For example, writing in daily papers and writing textbooks are ways that participants take responsibility from inside, to communicate knowledge out to the public. These two-directional pathways of bringing concerns for the public *in* to research and teaching, and channeling knowledge *out* to the public illustrate permeable boundaries between the university and the public.

In addition to taking responsibility through the work that they do at the university, the participants illustrate ways of taking responsibility as actors in spaces outside of the university.

Participants from all four disciplines place themselves in the public, as partakers in public discourse and debate with and based on their knowledge. Moreover, they acknowledge their research as central to their taking part in the public conversation. This was particularly evident among the historians, who explicitly and primarily described research pursuits as a way of taking part in public discourse. Psychologists describe providing courses outside the university, for other professions, as well as serving as experts when taking part in projects within other institutions. Historians and sociologists describe giving talks or other forms of partaking in meetings in organizations. Sociologists address taking part in developing NOUs, which is a way of developing knowledge that takes place partly at the university, partly in other places and in cooperation with people outside the university.

It is interesting to note that, while participants in the disciplines of biology, sociology, and in part psychology, viewed taking part in the public conversation as largely about “taking the knowledge that they have and using it in this conversation” historians discussed it primarily in terms of developing knowledge. Historians articulate an understanding of their production of knowledge as part of the public conversation, and focus more on this aspect of taking responsibility than on the different forms of communication. As noted in chapter 6, it seems reasonable to suggest that this is related to historians’ traditionally writing for colleagues and the public in the same texts; thus seeing their writings as utterances in/to the public.

Yet another feature of the landscape of taking responsibility toward the public is that responsibilities are taken both directly and indirectly through other actors. For example, biologists, psychologists, as well as historians describe taking responsibility toward the general public by providing knowledge to other professions, and thus contributing to their work in ways that are envisioned as contributing to the general public. Responsibilities taken in indirect ways involve other actors, for example other professionals. Thus, these actors are also part of the landscape of taking responsibility.

7.2.3 Taking and demarcating responsibility

As suggested above, the analysis of the spatial dimension of taking responsibility discloses a complex landscape of taking responsibility specific to each discipline. In this landscape,

responsibility is imagined and experienced to be taken in a variety of ways, both inside and outside the university, and both directly and indirectly through other actors. The three major features of taking and demarcating responsibility within this landscape are as follows:

- 1) Taking responsibility is understood to include handling the interrelatedness as well as the boundary between the academic sphere and the public sphere.
- 2) Boundary drawing in this geography is about drawing the boundaries of responsibility, and about drawing as well as crossing the boundary between the discipline and its various publics.
- 3) Uncertainty is experienced with regard to some of the ways in which to take responsibility, due to uncertainty regarding the drawing and handling of boundaries between the academic sphere and the public sphere.

The porosity of the boundaries between the university and society can, as tends to be the case in how the current conditions of academic work is described (see Chapter 2), be seen as something that “happens to” academics, in the sense that it constitutes parts of the conditions of the space they inhabit (due to features of the knowledge society, increased claims of relevance and usefulness etc.). The present study, however, brings attention to how academics themselves perforate boundaries between the two spheres. For example, participants report including concerns for the public in their research; they focus on purposes related to specific publics in their teaching; they engage and take responsibility in places outside the university; and they emphasize reflections on how the social, historical, and cultural contexts in which they are situated influence the knowledge they produce. These can all be understood as ways of perforating boundaries between their disciplines and the different publics. In this sense, the participants emerge as *spatial agents*, meaning actors who themselves draw as well as perforate boundaries, and who express a degree of freedom to draw these boundaries as they find purposeful. Rather than being about loudly advocating the drawing or tearing down of boundaries of responsibility, the most important way that boundaries are challenged, shifted, and upheld is through academics’ choices and actions in their everyday work. For example, participants explain that they take on a particular perspective or set out to illuminate specific questions in order to take responsibilities toward particular publics which they experience as not having been included in the discipline’s previous work. A prime example of this situation is the

historians' inclusion of new sources and new perspectives in order to fulfil specific responsibilities toward students in primary education. In this way, they include particular concerns within the boundary of their responsibility through the work that they do.

While participants offered several examples of confidently drawing and shifting boundaries through enacting specific responsibilities, they also disclosed experiences of uncertainty with how to draw and enact the appropriate boundaries. In the analysis of the epistemic dimension, the drawing of boundaries was illuminated mainly with regard to what and how the participants aim to know. The spatial dimension delves further into the handling of the relation between inside and outside the university, and the following imaginaries and experiences of taking responsibility through communicating to and with the public. Further, this dimension offers additional insight into the challenges of demarcating this way of taking responsibility. This is elaborated in the following.

Communication to and with the public is enacted in different ways, each with its own features of boundary drawing. To share knowledge from one's field to the different publics is explicitly distinguished from communicating to colleagues. Communicating knowledge to the public is enacted in ways different from the responsibility to write and publish scientific articles that communicate to colleagues and enhance the level of knowledge within the discipline.

Dissemination to the public is understood and enacted as a distinct form of communication, requiring a different language and genre (history, to some degree, is an exception). Further, it takes place in other spaces than the discipline-internal communication in scientific journals, books, seminars, and conferences, as for example in mass media such as newspapers, radio, and television, but also in more local or specialized publics, like meetings held by various organizations. Also, academics engage in communication of knowledge to the public through continuing education, providing expert advice, and writing textbooks. These forms of communicating knowledge *to* the public are described as unproblematic with regard to epistemic and spatial boundaries.

In contrast, engaging in public debate based on, and with one's specific research-based knowledge and insight is enacted differently than dissemination of knowledge. Engaging in debate it is not simply about "telling the public what you know," but about influencing how specific issues are understood and approached by other societal and political actors. It may

include other types of arguments than the purely disciplinary because it involves dialogue with people from other areas of knowledge, from other institutions, and from other roles than the academic. Participating in debate is described as more difficult to demarcate than disseminating knowledge. In spatial terms, it seems reasonable to suggest that, with regard to taking responsibility through disseminating knowledge, the academic space and the public space are articulated as quite distinct, and the academic communicates from one space (the university) to the other space (different publics). Engaging in public debate comes through as experienced to be more complicated to enact, and as more difficult to demarcate because the boundary between the two spaces blurs when enacting this responsibility. An elaborate example from biology (pg. 113-114) illustrates the challenge of handling the boundary between being an expert and being politically engaged. She describes engaging in debate to imply considerations/deliberations that “*are rather outside the disciplinary considerations*” (B3). This is perceived as a dilemma because “*one tries to be neutral and academic*” (B3). The biologist elaborates the discussion about genetically modified organisms as an example, and argues that the question address not only what the knowledge tells us; rather, it is also a political question. This poses a boundary, as she, despite considering herself “*politically engaged as a private person,*” is uncomfortable with “*becoming political*” in her role “*as a professor*” (B3). She envisions a boundary between “*academic/knowledgeable*” and “*political,*” but does not experience it as clear where to draw this boundary. Thereby the taking of responsibility to engage in debate as knowledgeable within a specific area is experienced as troublesome. A demarcation is suggested in epistemic terms, between the specialized knowledge claims and political arguments. However, this demarcation is also experienced as posing a dilemma between engaging and staying “*neutral and academic*” (B3). A boundary is proposed between what one may mean as a citizen, and what one may claim authority on as a professional (scientist) within one’s field.

However, the participants articulate uncertainty about where to draw that boundary; thus, handling the role as a participant in public debate is experienced as “*awkward*” (B3, pg. 113). The awkwardness seems to stem from taking part in public debate experienced as ambiguous. As a biologist, the participant takes part in public debate based on scientific knowledge, but at the same time she is a person with values and political opinion. Considerations may be involved in the issue debated that are “*outside the disciplinary considerations*” (B3, pg. 113-114). She express concerns about where to draw the boundary for the claims she can pose in the debate

acting as an academic from the university, and point out a distinction between knowledge from one's field and opinions ("*if I mean anything*") about issues outside this field of specialized knowledge. Participants propose this as the boundary for the claims one can make as an expert taking part in public debate. However, knowledge about the field seems to fuel engagement, while participants place restraints on their engagement to avoid overstepping the boundaries of professional and research-based expertise. Paying attention to the distinction between "*professionally justified statements*" and personal "*opinions*" (B3, pg. 114) is described as central to taking responsibility when engaging in public debate. However, participants did not experience the distinction to clarify the boundary because, as one asked, "*Where then does the boundary go for when one becomes political?*" (B3, pg. 116). Furthermore, participants also acknowledged that, "*on the other hand, one should be (...) engaged in society beyond the purely disciplinary*" (B3, pg. 113).

Descriptions of experiences of taking responsibility highlight two sides to the demarcation between the professional/academic and the personal/political. On one hand, the demarcation is about being (perceived as) academic and scientific rather than (as) political and personal; on the other hand, it is about the risk of personal and political points of view being (mis)interpreted as scientific, and as the voice of the institution and not the person, thus providing the arguments with unjustified (scientific and institutional) authority. The ambiguity/lack of clarity concerning the boundary between the professional/academic and the personal/political is experienced to cause reluctance on behalf of academics to get involved in public debate. Based on this experience, participants articulate concerns that the university loses its voice in public debate.

In the above, the participants are described as actors who themselves enact and demarcate their landscape of responsibility; however, experiences of being influenced by the choices and actions of other actors are also central. (This is further disclosed in the analysis of the temporal, symbolic and social dimensions.) Institutional leadership, colleagues, those who provide funding and decide policies for higher education institutions related to research, education, and governance all influence the space and the boundaries that the participants experience as restraining or supporting their ability to take their perceived responsibilities.

7.2.4 Understanding imaginaries and experiences of the spatial dimension of taking responsibility within the current context

The literature describes the space of the university as one under increasing pressure from external actors. Financial resources are experienced to be diminishing and subject to increasing competition, as well as increased demand for documentation of production as necessary to ensure the allocation of resources to one's unit (see Chapter 2). Universities have increased both in size and in number; in addition to putting a strain on resources, this growth influences the prestige of the institution in paradoxical ways. Universities grow in importance in the knowledge society, both as providers of mass education and knowledge to all areas in society, while they simultaneously experience diminished prestige and autonomy. An ambiguous space comes to the fore in these descriptions. On the one hand, the university emerges as a space experienced to be under pressure with regard to resources, prestige, and societal role. On the other hand, the societal role is described as potentially increasing (Delanty 2001, Nowotny et al. 2003, Brennan 2007).

What the analysis of the spatial dimension of taking responsibility suggests is that, while external demands are part of the experience of the participants, they demand of themselves to take responsibility toward the public. Further, the analysis shows that the academic and the public space are viewed as interrelated and the boundaries as porous; however, the two spheres are seen as different spaces, and participants experience a need to more clearly conceptualize and (re-) draw boundaries of how academics are to take responsibility in and toward the public.

Boundaries drawn in epistemic terms are central also in the analysis of the spatial dimension. The analysis shows that the way that boundaries are drawn in epistemic terms is relevant in the taking of responsibility in outside spaces, as both autonomy and neutrality are upheld as values academics need to live up to, including when they take part in public debate, for example in the media. The literature describes challenges to academic autonomy as a central feature in the current context of academic work. The drawing of boundaries comes through as intertwined with imaginaries and experiences of autonomy. Common across disciplines is the understanding that the university and each discipline is both embedded in society and, to some degree, sheltered from it. This arrangement ideally provides an autonomous space for academics to pursue their work according to their own definitions and values, without having to respond to demands of

external actors. While tensions between the epistemic autonomy (to decide what constitutes good knowledge) and the societal embeddedness of knowledge are experienced, a notion of autonomy that embodies this two-sidedness of academic life and work seems to be prevalent among the participants in the present study. As pointed out above, the analysis of the epistemic dimension shows that responsibility toward the public is not imposed from outside, but *taken* inside the epistemic living spaces, as it is experienced and imagined as integral to academic work. Much of the literature, however, seem to assume a dichotomy between the previous self-legitimizing enterprise of autonomous academic work and expectations from the public to be provided with relevant and useful knowledge. By looking at responsibility through the eyes of such a dichotomy, the inherent responsibility toward the public may be lost from view. The taking of responsibility as integral to academic work means that responsibility and autonomy come through in the present study not as contradictions but as mutually dependent entities. However, descriptions of the current context also indicate that this social contract is changing (see Section 2.1.3), and as will be further discussed in the analysis along the other dimensions, the question of how academic autonomy can be safeguarded within the current context is still an important one.

7.3 The temporal dimension of taking responsibility toward the public

The analysis of the temporal dimension of taking responsibility looks into the ‘timescape’ (Adam 1998) of taking responsibility. As described in Chapter 3, a timescape is analogous to a landscape, which refers to the blend of physical elements, cultural arrangements, and personal perceptions (Garforth and Cervinková 2009). As such, time is explored not only in the sense of actual time, but also in the sense of time-related practices and experiences, including how temporal logics and conditions pose opportunities and constraints for how taking responsibility is imagined and experienced. Time is part of what enables us to structure and order our worlds and to create and sustain a feeling of stability and belonging; in terms of the present study, it is part of what “structures, molds and guides” (Felt 2015: 2) academic work.

In the analysis of the temporal dimension of taking responsibility, time emerges as central in two distinct but related ways:

- 1) Time is understood as a crucial resource for taking responsibility toward the public.
- 2) Different and conflicting temporal logics impinge on taking responsibility toward the public.

7.3.1 Time as a central resource for taking responsibility

In the participants' imaginaries and experiences of taking responsibility, time comes through as an important resource. Participants express the importance of this resource for their ability to take responsibility, but they also note it is limited. Their articulations reveal that whether or not a responsibility is pursued is "*...a question of time*" (P3/4, pg. 92). Experiences of time as a limited resource thus pose temporal constraints on the responsibilities academics are able to pursue. For example, one participant express difficulty finding the time to write a paper chronicle on a specific issue. He sees it as within his responsibility toward the public to write the article because the matter is both a current concern and a topic he knew a lot about through his research. However, he experiences temporal constraints due to the many tasks he has to perform within the time available. Another example illustrates how the temporal squeeze pushes the taking of responsibility out in the margin, and even into the private time: A biologist describe writing paper chronicles on Saturday mornings, accompanied by the sound of children's television (pg. 113). This anecdote reveals how taking the responsibility to engage in public debate is squeezed into, and eats out of, academics' private time.

The above example suggests that, even if partaking in public debate is part of the work that university academics are expected to perform (see Chapter 5) thereby implying that office hours should be used to take this responsibility (Jacobsen 2014), academics partaking in the present study experience this way of taking responsibility to be squeezed into the private domain because of their lack of time. In light of the above described challenges regarding the drawing of boundaries between the professional and the personal, this paradox is interesting. If taking part in public debate can take place only during an academic's private time, and possibly even at one's

own kitchen table, assumedly this will influence how the individual experiences and imagines the boundary between the professional and the personal.

Experiences of the temporal squeeze tightening also emerged. These experiences are closely related to images and experiences of different temporal logics elaborated in the following.

7.3.2 Different trajectory narratives and conflicting temporal logics

Experiences of competing temporal logics materialize as a central feature of the participants' timescapes. The concept of temporality as 'trajectory narratives' (Garforth and Cervinková 2009³⁷ and Felt 2015) is helpful to understand this experience. From the participants' experiences and imaginaries of taking responsibility, three distinct trajectory narratives can be discerned:

- 1) A short-term trajectory from academic activity to countable outputs.
- 2) A relatively short-term trajectory from academic activity to fulfilling predefined promises to, and expectations of, external actors to contribute useful/applicable knowledge.
- 3) A long-term-trajectory where academic activities are seen to pose long-term and not necessarily predefined societal, cultural, environmental, and/or health purposes and goals.

These trajectory narratives constitute different and conflicting temporal logics. Adding this timescape to the landscape of taking responsibility illuminates how temporal features of the environment pose opportunities and restraints on the taking of the responsibilities the participants see themselves as having. The following illustrates and elaborates the way that temporal orders pose a form of constraint that individuals have to submit to (see also Ylijoki and Mäntylä 2003).

The participants experience expectations to produce countable results, in particular in the form of articles published in peer-reviewed (and preferably international) journals. These expectations is experienced as founding a short-term trajectory, with a focus on tempo and productivity. This trajectory is further experienced as leading to a temporal pressure and a temporal restraint, in a "*situation where 'publish or perish' is harder than ever,*" (P3/4, pg. 93) as articulated by one of

³⁷ Garforth and Cervinková 2009 is a chapter in the book presenting the findings from the *Knowing Project*, where the framework of epistemic living spaces were used and further developed (Felt et al. 2009, see also chapter 2).

the psychologists. Participants further experience the pressure to publish as leaving little or no time for taking the envisioned responsibility for one's discipline and how it contributes to and influences the public because "you don't have time for this." The responsibility to critically reflect on the discipline's influence on, for example, the public's self-understanding as emphasized by historians and psychologists in particular, operates within a different temporal logic. Specifically, it operates as a more long-term trajectory where academic activities are seen to pose long-term and not necessarily predefined societal and cultural purposes and goals.

Further, participants' experience a relatively short-term trajectory from academic activity to fulfilling predefined promises to, and expectations of, external actors to contribute useful/applicable knowledge. Felt and Fochler labels this 'promissory discourses' (Felt and Fochler 2013), to capture the expectations facing academics to make promises about and to predefine the usefulness of their work. This form of temporality emerge as a guiding force in academic life, working in subtler ways than time as resource, but not in less important ways. As stories about the anticipated future benefit of knowledge work, the promissory trajectory narratives are experienced as expectations facing academics in terms of *when* they will deliver more or less *predefined* output in terms of societal contribution (Garforth and Cervinková 2009). The temporal logic of the promissory narrative is experienced as counter to how the participants envision their work. For example, biologists point out that they experience expectations to promise future benefits of their research, but that the benefit of research cannot always be predicted, in outcome or in time. Rather, crucial benefits from biological research, such as knowledge of mechanisms in nature used in the development of new medicines, have been discovered "by chance" as biologists explored things in nature simply to learn more about them. This does not mean that future benefits are not a concern for the participants. The above presentations of responsibilities describe multiple forms of future benefits being at the heart of how academic work is understood. Participants experienced the promissory narrative, however, to depict the contribution of the work that academics do in tighter and more predefined temporalities than many of the images of the contribution that participants hold. Participants' images of possible contributions are placed in a more long-term trajectory focusing on the continuous cultural contribution of their work, for example contributing to our self-understanding, as elaborated in particular by historians and psychologists.

This brings the discussion to the third trajectory narrative, which focuses on the long-term cultural contribution toward increased understanding and insight. As noted above, this trajectory is experienced by participants to contrast both the linear short-term trajectory toward countable outputs and the linear (relatively) short-term promissory path. This long-term narrative focuses on the societal benefits of academic pursuits, but in a different form and within a temporal logic that is both more circular and more long-term. Some examples of taking responsibility illustrate the long-term narrative: Images of the contribution to society's self-understanding as humans and as society addressed especially by psychologists and historians is placed within this long-term temporal logic. Taking this long-term cultural responsibility toward the public includes spending time deliberating about how the discipline can contribute, deliberating about responsibility toward the public, and engaging in critical reflection on the traditions, perspectives, and approaches of the discipline. Also, biologists' focus on responsibility toward future generations seems best understood as a long-term trajectory, even if the environmental goals are quite concrete. Also as a long-term trajectory narrative, the story is told about the unexpected outcomes of research, as opposed to predefined goals. This narrative also encompasses the performance of basic research aiming to simply find out something, without paying attention to what it may or may not be used for, but which is seen as beneficial to the public in the long run. Likewise, this trajectory includes taking the time to explore things that unexpectedly turn up. Biologists offered examples of dirt and moss found on excursion being taken home to the lab and studied, simply to find out about them; in some cases, these findings have proven crucial in the development of medicines. Thus, the plot of the long-term narrative is not simply knowledge as self-legitimizing or a general cultural (enlightening) contribution; rather, it comes to serve concrete purposes and provide concrete benefits, but the outcome, in content and in time, cannot be predefined.

The distinction between the temporal logics of the 'promissory narrative' and the 'long-term future benefit narrative' is further illuminated by, and illuminates, the distinction posed by biologists between basic and applied research. While participants describe the two forms of research and thus the two temporal logics as related, a distinct rupture/break between the two is also noted. Basic research is seen as performed within the long-term logic, and applied research as performed within the promissory logic. However, basic research is understood as (often) constituting the basis for applied research, and thus a linear trajectory emerges from a long-term,

basic research logic, to applied research aiming at specific goals, but with a distinct break between the two, as “*it is often different people that do it.... [and] ...often the period of time between the research efforts and the possibility of application of is, so there is sort of a rupture there*” (B2, pg. 117). This clear distinction between basic and applied research is highlighted in biology and is perhaps most relevant for natural sciences. However, in terms of temporal logic, the distinction between the short- and the long-term societal contribution provides insight into the timescapes of all four disciplines in the present study.

Moreover, the temporal logic of production and promissory narratives is experienced to constitute a condition of unfortunate temporal restraints for the taking of the long-term responsibility. For example, biologists point out that they experience that a strong focus on predefined outcomes potentially closes important paths to the unexpected because they have no time to take epistemic risk (exploring something without a predefined outcome). Psychologists asserted that a one-sided focus on production of countable outcomes outweigh the process of taking time to reflect on the long-term contribution of the discipline. As mentioned above, these experiences of the timescape of taking responsibility add to the understanding of experiences of handling the complex landscape of taking responsibility illuminated in the above analysis of the spatial dimension. The experienced prevailing temporal logic favors some of the responsibilities within this landscape at the cost of others, which are then squeezed into the margin, and/or into private time.

From this analysis of different trajectory narratives and conflicting temporal logics, it becomes evident also that, while distinguishing between time as resource and different temporal logics or trajectory narratives is fruitful to capture relevant experiences and imaginaries of time, the two are very much related. The expectations facing academics to produce publishable and/or applicable knowledge within a short-term trajectory narrative is experienced as suppressing time for other activities. Thus, time as resource is affected by the trajectory narrative of the “production logic” and the “fulfilling promises and expectations logic.” However, long-term trajectories, in the form of images of the importance of both reflexive work and the pursuit of research without predefined outcomes, are articulated as important aspects of taking responsibility toward the public. These responsibilities go well beyond the short-term and countable. It seems that the participants in the present study inhabit two different and conflicting

timescapes; in a temporal context experienced to be focused on the short-term, they struggle to find time to pursue more long term responsibilities. The experiences that participants describe, indicate that it is becoming increasingly difficult for academics to find, or make, time for fulfilling responsibilities that do not count in the audit, or in the process of collecting merits to establish an academic career. The importance of time and the experience of a temporal logic of production emerge also with regard to teaching, as participants experienced time limits for fulfilling exams and degrees as undermining their ability to nurture students' engagement. Temporal restraints imposed on students are, as described by biologists, experienced to have made it more difficult for students to take the time to engage, for example in environmental organizations and other types of activity beyond getting a degree to pursue a career. Participants experienced the temporal regime to narrow the students' focus from an engagement in their field of study and what they may contribute to society with the knowledge they develop through their education, to becoming concerned merely with their own studies and achievements related to exams and degrees. While this has been described (Liebau 1984, Astin 1991, Aittola 1995, in Jensen and Nygård 2000) as an emerging tendency among students and explained as due to a combination of mass education and a focus on the individual and on careers in society in general, participants in the present study experience that students enter the program with a societal/environmental engagement; but that temporal pressures of the educational program work against such engagement. This situation may push toward a tendency suggested by Felt et al. (2012) that academic pursuits are shifting from being approached as a biographical trajectory to becoming a career trajectory. However, participants in the present study describe aiming at nurturing student engagement beyond degrees and exams.

While these experiences indicate that the temporal squeeze is tightening, they also suggest that the participants in the present study hang on to a purpose that operates in a broad time-scape that includes the responsibilities of the long-term trajectory narrative. For example, participants engage in critical reflection on the contribution of the discipline to the public, and report including this reflection in their teaching, as described in particular by psychologists. Furthermore, participants take the time to communicate with the public, and to pursue responsibilities toward future generations in their research, communication, and teaching.

Picturing this timescape of the competing temporal logics of the short-term countable, the relatively short-term promissory logic of producing useful knowledge, and the long-term logic of cultural contribution as a layers upon the spatial geography elaborated above, it poses features that structure, mold, and guide academic work within that landscape. In particular, the experienced timescape poses temporal restraints with regard to fulfilling responsibilities within the long-term temporal logic. In the following analysis of the symbolic dimension of taking responsibility, I further illuminate these experiences.

7.3.3 Understanding imaginaries and experiences of the temporal dimensions of taking responsibility toward the public within the current context

As suggested in the above analysis, picturing the timescape described as a layer upon the spatial landscape, it represents on the one hand additional insight into this landscape, as it depicts the temporal logics implied in taking different forms of responsibility. On the other hand, the emerging features of the timescape of taking responsibility show how temporal logics pose restraints to the taking of certain responsibilities, as it steers academic work in specific directions. Ylijoki and Mäntylä note that “...perceptions of time in an organization act not only as a cultural resource but also as an external constraint to which individuals have to submit themselves” (Ylijoki and Mäntylä 2003: 57). In particular, some aspects of the landscape of taking responsibility are experienced to be subjected to the temporal squeeze following from some temporal logics gaining influence at the cost of others. These are the long-term responsibilities such as reflection and deliberation about how the discipline influences the public, pursuing research questions without predefined outcomes, nurturing students’ societal/environmental engagement, and taking part in public discourse and debate.

Current literature supports the participants’ experiences of the centrality of temporal conditions representing challenges to the taking of responsibilities. In particular, literature on academic work within the current context points at the accountability logic posing time pressures on academic work, and also at the expectation to promise specific outputs within specific (and short-term) timeframes (Ylijoki and Mäntylä 2003, Garforth and Cervinková 2009, Felt and Fochler 2013, Steen 2015). On the one hand, the above findings echo these descriptions of increased pressure to produce countable output and to promise useable outputs of their research.

On the other hand, the analysis shows that the participants generally confess to a different temporal logic. The current temporal regimes, introduced by managerial accountability and external demands for usefulness, seem to have the potential to guide academics' priorities in directions they only reluctantly comply with. Ylijoki and Mäntylä argue that "...[t]he temporal structure in organizations repress individuals' experiences and impose discipline and standardized requirements on them" (Ylijoki and Mäntylä 2003: 57). However, it seems that, while the short-term applicable and countable is experienced as the strong currency within the emerging/current temporal regime, the participants of this study did not see it as their major responsibility concern. While observing experiences of the temporal squeeze tightening, I find also, from analyzing along the other dimensions, that the participants in the present study discuss and argue the importance of purposes that operate in a larger timeframe, and thus defend more traditional timescapes. As such, this study nuances previous studies that accentuate the focus on the "production logic". Still, because the experiences of the prevalent temporal logics are counter to the imaginaries of the participants in the present study, it seems important to ask how these logics nevertheless become part of their epistemic living spaces to the extent that the experiences of the participants indicate. I explore this question in the following analysis of the symbolic dimension.

7.4 The symbolic dimension of taking responsibility toward the public

The symbolic dimension is about the values and practice of valuing that are experienced and imagined as structuring academics' work, in the sense that it structures the ways in which academics observe, evaluate themselves and others, determine what they orient toward, and thus how they conduct their work (e.g. Felt and Fochler 2010: 6, Felt et al. 2012: 5-6). The ways in which such values and practices of valuing structure and steer academics' work is captured in the notion of a 'mode of ordering' (e.g. Felt and Fochler 2010: 6), which has two faces. On the one hand, a mode of ordering constitutes a normative power, exerting an external control of the individual academic as well as the community because it represents values and norms that the members of the community in various forms and degrees experience that they need to adhere to. On the other hand, it provides something to steer by, which can help the individual or the community to orient. Thus, the symbolic dimension captures central ways in which epistemic

living spaces are both restraining and enabling academics in their strive to both envision and take responsibility.

The two major findings in the analysis of the symbolic dimension are:

- 1) A new mode of ordering (and mode of responsibility) seems to be emerging, where the participants challenge and re-draw boundaries, and conceptualize and take responsibility in line with societal and epistemic conditions in the knowledge society (see Chapter 2).
- 2) However, this new mode of ordering is experienced as conflicting with an increasing managerial mode of ordering (see Chapter 2 and Section 7.3.2).

While both these modes of ordering seem to have grown out of the current context of the knowledge society, they constitute very different responses. The “new mode of responsibility”, which I explore in the following, seems to be developed by the academics themselves, from within and from below. However, the “managerial mode of ordering” is imposed from above, but from the participants experiences, appear to be institutionalized as a logic that structures academic work to the extent that it works as a mode of ordering. The conflict between temporal logics elaborated in the above analysis of the temporal dimension, and how time structures and steers the participants’ work is a central feature of the conflict between these two modes of ordering. In the following, I further elaborate the different modes of ordering before offering a summary in light of descriptions of the current context of academic work.

7.4.1 The emergence of a new mode of ordering

The university has long traditions for producing and disseminating knowledge and insights to the public. Traditionally, this has been understood as a one-way and top down communication from the knowledgeable to the public as lay people who needed to be educated and informed, and who were seen as recipients of authoritative knowledge. In the present study a different and more complex understanding of responsibility toward the public comes to the fore. The new symbolic mode of ordering revolves around taking responsibilities toward the public that include:

- 1) A dialogical vision of communication.
- 2) An orientation toward the public as integral to research and teaching.
- 3) Complex boundary drawings regarding 1 and 2.

It seems reasonable to interpret the emergence of a new mode of ordering as part of the university re-interpreting its role in the knowledge society (see Chapter 2, in particular the summary). This is further discussed in Section 7.4.3 below.

When it comes to the point of dialogical communication, the participants in the present study articulate a humbler notion of their role in the public than the traditional elitist notion of the academic authority enlightening a scientifically illiterate public. Meanwhile, the participants explain that they envision and take responsibility for their knowledge being disseminated to wider audiences, for making knowledge from their field of expertise publicly known/available, and for engaging in public discourse and debate with their knowledge. Rather than seeing themselves as an authority speaking to the public, however, they describe themselves as participants in the public, and express a *dialogical vision of communication between academics and the public*. For example, a biologist expresses a responsibility to engage with other arguments than the purely biological when engaging in public debate about genetically modified organisms (pg. 113-114). Likewise, psychologists envisioned being able to “...*participate a little more in contexts of (...) public debate. (...) so that one isn't just doing pure dissemination of knowledge, but more, that one also took responsibility for some of that knowledge and debated it in concrete situations*” (P1, pg. 91). The first example draws attention to a vision of taking responsibility as “one among others”, and as doing this through dialogue with people from other fields of knowledge as well as with the general public. The second example explicitly states the distinction between pure dissemination and engaging in debate (see also Section 7.2.3 above on taking and demarcating responsibility). Further, this example expresses a wish to move from performing dissemination to more participation in contexts of debate.

When it comes to the *orientation toward the public as integral to academic work* (point 2), the participants' experiences and imaginaries make it evident that physical partaking in public spheres outside the university is not the only way that they see themselves as participating in and contributing to the public. Rather, they emphasize that the knowledge they produce and teach inside the university is part of the public conversation. Participants describe pursuing specific knowledge in order to take part in the public discourse on particular issues. Thereby, responsibilities toward the public are taken onboard in the process of producing knowledge, and understood as integral to the process of developing knowledge, as described in the analysis of the

epistemic dimension. Central to this understanding of taking responsibility and within the emerging mode of ordering are the reflexive responsibilities that follow from this understanding of academic work, namely reflecting on how the knowledge one produces and the societal context/the public influence each other reciprocally. A particular example come to the fore within sociology, where knowledge is described as pursued in specific ways, as sociologists include those subject to research in the development of knowledge for their benefit (pg. 122-123). Within history and psychology, more general examples materialized of including critical reflections on how one's knowledge is both influenced by, and will come to influence society and our self-understanding. Both historians and psychologists describe how they include such reflections in their teaching, in order to pass this responsibly on to the students.

Previous research suggests (e.g. Martin 2003) that this situation of interrelatedness between the university and the public is not radically new, but rather a reinterpretation of the traditional academic role. The present study supports this interpretation, as the taking of responsibility toward the public emerges as part of the participants' academic identity and as being integral to academic work. Nevertheless, experiences of increasingly blurry boundaries between the university and its surroundings invoke *a need to draw boundaries* of responsibility as well as boundaries between the academy and its surroundings (point 3 above).

The above analysis of the epistemic and spatial dimensions of taking responsibility highlighted challenges with drawing the boundary of including concerns for the public in knowledge production, as well as participating in the public. Insecurities related to how to draw the line of including concerns for the public in research and teaching, as well as how to demarcate between knowledge and "opinions," and how to determine for what and how far one can use one's authority as a university academic came to the fore as central parts of experiences of taking responsibility toward the public. These experiences may suggest that the new mode of ordering is not clearly conceptualized, but rather still in motion. Moreover, within the new mode of ordering, it seems that the appropriate balance between "getting involved in the public and keeping the public at bay" must be found, and the appropriate boundaries drawn, in concrete instances of research, teaching, dissemination, and debate. The balancing and the boundary drawing depend on the concrete purpose of the endeavor, the public and tasks involved, and the

specific responsibility aimed to be taken. This means that the boundaries of taking responsibility cannot be drawn once and for all; instead, boundaries need to be handled continuously.

This new mode of responsibility emerges as one that the participants strive to realize in their everyday work. As suggested above, however, they describe this way of taking responsibility as experienced to conflict with an existing (and expanding) managerial mode of ordering. By elaborating the contrast between these two modes of ordering, the new mode is further elaborated.

7.4.2 The new mode of ordering contrasted to a managerial mode of ordering

As pointed out above, a managerial mode of ordering seems to be emerging as a very different response to the conditions of the knowledge society. In the present study, managerial accountability comes through in the experiences and imaginaries of the participants as a mode of ordering that has not grown out of academic work itself, but rather as a logic that has been introduced by the form of new public management implemented in higher education and other public sectors (see also Chapter 2). Within the present study, this mode of ordering needs to be understood in light of the managerial and financing model introduced in Norwegian higher education in 2003 (Frølich 2007). In this model, a portion of the institutions' funding is based on the number of articles published in scientific journals and the "production" of student credits; furthermore, these metrics are also used within the institutions as indicators of achievement and for distributing funding.

Experiences that come to the fore in the present study indicate that the logic of accountability has to some extent "trickled down" and become institutionalized in the university in the form of institutional structures such as report structures, funding arrangements, and other systems of incentives. Moreover, the logic comes through as, even though criticized, experienced to be internalized by academics themselves, in the sense that it has to some degree become a logic and a mode of ordering that structures the way in which academics observe and evaluate themselves and their colleagues. In this regard, a form of social control may be experienced, in the sense that academics feel they need to contribute to the joint production by which their community is measured and consequently receives funding (and prestige) according to. Systems of regularly

reporting publications make visible every member's contributions or lack thereof. In the above analysis of the temporal dimension, this logic emerged as an important temporal logic structuring academic work.

It is particularly the focus on producing countable results, especially in the form of publishing scientific articles that come to the fore as an important experience in this regard. Writing and publishing articles is, of course, one of the tasks and responsibilities of academics, and is not necessarily contrary to other aims and responsibilities. However, participants articulate experiences of the strong focus on publication as leading to academic work becoming less about the meaning and contribution to the public, and more about the number of articles that can be accounted for. A one-sided focus on producing countable results is by participants experienced to be in strong contrast to responsibilities involving critical reflection on one's own discipline and its societal contributions, and the taking of responsibility to partake in the public conversation, which comes through as being at the heart of the new mode of ordering. Such responsibilities are experienced as being squeezed out in the margin of the epistemic living space, as something one cannot take the time to pursue, without losing the race: "*You just have to get into a tradition and produce (...) stand on the shoulders of those within the tradition and then move forward*" (P3/4, pg. 93). In particular, for academics "*in recruitment positions*", this logic combined with a competitive environment when it comes to employment for academics at the university, is experienced to mean that an academic must either "*publish or perish*" (P3/4). Taking responsibility, on the other hand, is imagined not as being about producing articles to be reported and counted, but about critical deliberations regarding how the discipline can best attend to its subject matter as well as develop and communicate knowledge that contributes to society and its members in both the short run and the long run. Taking responsibility in terms of cultural and societal contribution is as such experienced as being suppressed by the pressure within the managerial accountability mode of ordering to produce countable outputs in the form of published scientific articles. In this context, participants raise the question of whether "*we use the space of action that we have in spite of everything*" (H3, pg. 100). The raising of this question suggests an experience that the university, or communities within the university, may have let the restraints of the accountability logic become more of a symbolic mode of ordering life within the institution than is perhaps necessary within the current conditions.

7.4.3 Understanding imaginaries and experiences of the symbolic dimension of taking responsibility within the current context

Literature on higher education institutions describes a shift from a situation where academic research was a self-legitimizing enterprise to a situation where the mode of knowledge production is (argued to be) changing, where models of a linear connection between science and technology and a clear division of labor are being replaced by more complex and interactive roles and relationships with many connections and feedback loops (e.g. Henkel 2007: 192-193). Echoing descriptions in the literature (elaborated in Chapter 2), participants experience the current context of academic work as triggering new demarcations of responsibility, as features of the knowledge society imply increasingly interrelatedness between the academy and society, invoking reflexive responsibilities related to how the knowledge of the discipline and society influence each other. While a societal orientation is central to the participants in the present study, an important distinction emerges between responsiveness to expectations from stakeholders outside the university, and proactive engagement in societal questions. This echoes the distinctions made also by Brennan (2007) and Solbrekke and Englund (2011), described in chapter 2. Solbrekke and Englund point out that the accountability logic is about responsiveness, answering to external and predefined demands. To look at how responsibility is *taken*, implies a concept of responsibility that is distinct from the logic of managerial accountability (Green 2011, Solbrekke and Englund 2011). The new mode of ordering elaborated above suggests that counting publications (scientific or popular), strategically funding research, or ensuring “responsible research” (Strassnig, see Chapter 2) is not an adequate measure of the taking of responsibility toward the public. On the contrary, much of the responsibility described by participants in the present study would be difficult to account for in any managerial format, or to predefine in calls for research proposals for funding. Rather, responsibility is envisioned as integral and omnipresent in considerations, decisions, judgments, and actions that academics perform in their everyday academic work—as researchers, as teachers, as experts, as disseminators and debaters, and as members of their institutions.

The conflict between the two modes of ordering is further illuminated by the distinction and tension between economic/political-managerial aims and cultural/democratic aims. This

distinction emerged in both the literature (Chapters 2 and 5) and the present study. For example, Delanty (2001), Bleiklie et al. (2006), Kalleberg (2011) and Vabø (2011) emphasize this distinction, and the three latter, which are studies on the Norwegian context, describe Norwegian universities to be operating between these two roles and expectations. The findings of the present study echo these descriptions. Furthermore, the findings in the present study suggest that the participants experienced the focus on the democratic and cultural obligations as being challenged by the logic of short-term and economic benefits as well as political-managerial modes of ordering. The above mentioned studies of the Norwegian context make similar suggestions. The present study contributes further insight into images of responsibilities related to cultural and democratic aims, and how these aims are experienced as being in tension with and challenged by increased emphasis within the current context on economic and political-managerial aims central to both the promissory logic and the managerial accountability logic (see in particular the above analysis of the temporal dimension).

Taking part in public dialogue surfaced within the new mode of ordering as a way of making a cultural and democratic contribution. Meanwhile, participants found it difficult within the current conditions to prioritize this way of taking responsibility. While the scientific conversation is institutionalized (in academic journals and publishing houses, and other forums of scientific discourse with academic standards and criteria), taking part in the public conversation, and in particular in terms of taking part in public debate, is not to the same extent institutionalized as an academic task (Kalleberg 2000). Academic writing, in the form of books or articles, may communicate in both the scientific conversation and in the public conversation; however, it seems these conversations more often than not demand different genres, and the participants experienced uncertainty with regard to the latter. In addition, the participants express finding themselves in a temporal squeeze, where priorities and choices have to be made with regard to which conversation to engage in. While imagining the public conversation as a central part of one's responsibility, participants experience that pressures and incentives are stronger to take part in the scientific conversation. In particular, in combination with the accountability logic and a competitive environment both within and between universities, where scientific publications in academic journals are what provide merits, the participants in the present study point out that research may increasingly be undertaken simply to ensure individual prestige and further one's career, rather than to fulfill responsibilities toward the public. Echoing the description in Chapter

5, participants seem to experience a development where the orientation toward the international research community, in order to produce the valid currency, is gaining strength; and as (potentially) happening at the cost of an orientation toward the societal role of the discipline. However, the participants in the present study report striving to fulfill a broader societal commitment, and describe understanding and approaching this as integral to their everyday academic work, while experiencing conditions to the contrary.

7.5 The social dimension of taking responsibility toward the public

The social dimension is within the present study about experiences and imaginaries of forms and degrees of togetherness (Felt and Fochler 2010: 6) with regard to taking responsibility.

Academics are members of their expert communities, and their disciplinary community, within their local departments as well as nationally and globally. Also, they are members of the institution of the university. The major findings along the social dimension are that:

- 1) Both taking and demarcating responsibility are understood as needing to be handled together, as a community.
- 2) Meanwhile, the overall experience suggests a lack of institutionalized dialogue about responsibility, and the handling of responsibility is experienced as being left to the individual.

7.5.1 Images of togetherness

In several articulations of taking responsibility toward the public, participants use the pronoun ‘we’, pointing toward an imaginary of responsibility toward the public as something that is shared by the community. To take but a few examples, psychologists express these concerns in phrases such as “*how do we accept and include new knowledge...*” and “*...think that we have a major responsibility*”. Historians ask whether “*...we explore the important questions*” and experience “*...one area that we have failed*”. Biologists emphasize that “*...we educate teachers*” and “*...we perceive it as a very important subject for the general education of the public*”. Sociologists “*...think that the most important role that we have is here at the university...because*

actually, ...we are educating all of these people that will end up in lots of different places and positions”; further, they were concerned with what it is that “...*we are challenging society about*”.

While taking responsibility individually is central to the way responsibility is handled in research, teaching, and communication with the public, fulfilling the larger purposes and responsibilities of the discipline is understood by the participants to rely on the community. Historians addressed this explicitly, pointing out that “...*the discipline is huge and each of us is studying only tiny bits, [and] it is the joint production*” (H4, pg. 100) that can ensure that the discipline takes the responsibility to illuminate important topics. Therefore, “*it is important that colleagues together*” (H4) take this responsibility, and that the “*community...say a department, or a university has a responsibility to ensure that knowledge is produced*” (H4) about important issues.

Further, an institutionalized dialogue about “*prioritizations, choice of topics, the meaning of what we do*” (H3, pg. 100) is imagined as a central part of a “*structure to properly handle the social responsibility*” and “*to justify why what we are doing is important*” (H3). Meanwhile, such dialogue is contrasted to “*decisions by leadership/management, or a research council decision, or a governmental decision*” (H3). This distinction underscores the former suggestion arising from the analysis of the epistemic and the spatial dimensions that autonomy is a central issue to the participants.

In these examples, both the disciplinary community and the university are pointed out by participants as potential levels of togetherness, and taking, conceptualizing, and demarcating responsibility are understood to require some form of institutionalized dialogue and togetherness. However, the dominant experience seems to be that both conceptualizing and taking responsibility toward the public are left to the individual to handle.

7.5.2 Experiences of conceptualizing and taking responsibility being left to the individual

Above, in the analysis of the other dimensions, a landscape of responsibility is described that requires complex and continuous considerations. Balancing different concerns and modes of ordering, and finding and enacting the appropriate boundaries of responsibility have surfaced as

central to both experiences and imaginaries of taking responsibility. As the above descriptions of images of togetherness suggest, the handling of responsibility is experienced as something that needs to be shared, and to be subject to continuous institutional discussion. Experiences come to the fore, however, indicating that the participants find themselves standing alone in the conceptualization and demarcations, as well as the taking of this responsibility. This is not to say they do not see their colleagues as taking responsibility, but that only to a limited degree do they experience a sense of togetherness in the demarcating and taking of responsibility. While free to initiate and engage in togetherness with colleagues, which to some extent they describe doing, they experienced the lack of both individual time and institutionalized time and space to hinder this.

As elaborated in the analysis of the temporal dimension, participants experience the shortness of time to intensify within the current institutional logic of managerial accountability. Furthermore, they experienced the institutional logic as having taken an unproductive direction, where the focus is on “producing,” and where there is no time and space made for responsibility discussions. The lack of time and space made for institutionalized discussions about responsibility materialize as representing a condition that hinders the community from taking a responsibility that needs to be shared. The lack of togetherness is experienced to hinder the taking of responsibility in two ways. First, as described above in the example from history, the individual member of the community can contribute only some parts to the discipline’s taking responsibility. Second, participants experience the taking of responsibility as being hindered by the lack of institutional dialogue about and shared reflections on how to conceive, demarcate, and take responsibility. As elaborated in the analysis of the epistemic and spatial dimensions, the drawing of boundaries of taking responsibility is experienced as challenging. In particular, taking responsibility through engaging in public debates is understood to be a central way of taking responsibility, but also experienced as a way of taking responsibility that is difficult to handle due to uncertainty about the boundaries for such engagement. Reluctance to take part in debates due to uncertainty were experienced both with regard to oneself and with regard to colleagues. In particular, participants experienced uncertainty with regard to the kind of claims and arguments one can use as an academic partaking in debates based on one’s professional, research-based knowledge. Based on this experience of reluctance on behalf of the community to engage in

public debate because of challenges with regard to demarcating the responsibility, participants express worries that the university is losing its voice in the public.

7.5.3 Understanding imaginaries and experiences of the social dimension of taking responsibility within the current context

Traditional boundaries of responsibility have been disrupted in the knowledge society (illuminated both in Chapter 2 and the above analysis), and academics taking part in the present study experience a need to shift and re-draw boundaries. The shifting and re-drawing of boundaries, however, is experienced as being both “outsourced” to external stakeholders and “insourced” to the individual (Beck and Beck-Gernsheim 2002). I draw this conclusion based on the articulated experiences of a lack of institutionalization and shared dialogue about responsibility, combined with experiences of external pressures and expectations steering decisions and epistemic orientation (through mechanisms of funding and audit in particular). This outsourcing takes the form of, for example, external (private or public) funding of research, and government bureaucrats’ defining what is measured and valued within the logic of managerial accountability. As elaborated along the epistemic dimension however, the participants experience and imagine responsibility toward the public as intrinsic to academic work. A shared deliberation about the responsibility of the institution and the discipline, for example by discussing what research questions to pursue and in other ways fulfill responsibility toward the public, are explicitly articulated as necessary for the institutions and the discipline to fulfill their responsibility. While all participants in the presents study are concerned with responsibility and take responsibility individually, they also find that they cannot fulfill the range of responsibilities of the discipline by themselves—these responsibilities must be shared. While responsibility is imagined as something shared, and thus something which needs to be discussed within the epistemic living spaces, such discussions are experienced as more or less absent. Participants find time and an institutionalized arena for discussing issues of responsibility to be wanting. The experienced lack of shared effort to understand and demarcate responsibility may be seen as echoing previous findings that the current conditions have rattled the collective identity as an autonomous institution (Delanty 2008: 133), and that this lack of collective identity suggests a community without a shared and internally developed purpose (Henkel 2011) as well

as the individualized culture described by MacFarlane (2011). Meanwhile, academic work has a strong tradition for being individualized (Kerr and Lorenz-Meyer 2009). Still, it seems reasonable to suggest that the logic of managerial accountability, imposed from outside but also experienced as having become a logic that has to a certain degree been adopted as a mode of ordering by the institution and even the collegial communities, may be reinforced by experiences of a lack of institutionalization of responsibility and responsibility discussions. Lack of togetherness hinders a collective “responsibility response”, even though responsibility strongly concerns the participants and works as a mode of ordering (as described in the analysis of the symbolic dimension) on the individual level.

Chapter 8: Concluding discussions

Literature on higher education from the last decades draws attention to the issue of the responsibility of the university and its academics toward the public. So far, however, empirical knowledge about how responsibility toward the public is understood and approached by academics themselves has been scarce. The present study contributes such empirical knowledge and points toward implications in terms of the conditions for taking responsibility, and for discussions and further research on academics' responsibility toward the public. In addition, the analytical and methodological approach developed during the course of the study contributes to this field of research.

8.1 Summary of main findings

Images of extensive, heterogeneous, and related responsibilities come to the fore in the present study. I have discerned and described a wide range of ways in which these responsibilities are taken, and experiences thereof. By interpreting these within the framework of epistemic living spaces, some overarching findings and conclusions were proposed in the previous chapter. The main findings can be summarized in six broad and related points:

1. The taking of responsibility toward the public is experienced and imagined as integral to academic work, in terms of research, teaching, and communication to and with the public.
2. Responsibility toward the public is discipline-specific in terms of what the responsibility is for, in terms of specific publics, and in terms of specific epistemic aspects. Still, central features are also found across disciplines.
3. Responsibility is taken in a variety of related ways, and taking and demarcating responsibility involves balancing different and sometimes conflicting considerations and modes of ordering. This is not performed once and for all, but rather needs to be performed in the concrete instances of taking responsibility.
4. Drawing the boundaries of responsibility and balancing the different modes of ordering, and thus enacting responsibility, tend to be experienced as challenging.

5. Dealing with the challenges of demarcating and taking responsibility is experienced as being left to the individual to handle due to an experienced lack of institutionalized discussion. However, findings from the present study suggest that the taking of responsibility requires strong communities, where the members are given time and space to engage in responsibility discussions within the community, in order to orchestrate a bundle of related responsibilities.
6. Discrepancies between experiences and imaginaries of taking responsibility come to the fore, which illuminate how features of the current responsibility conditions are experienced to pose restraints rather than supporting the taking of responsibility toward the public.

While the research question of the present study concerns academics' imaginaries and experiences of taking responsibility *toward* the public, some imaginaries and experiences of taking this responsibility emerge also as ways of taking responsibility *for*, *with*, and *through* the public. For example, by enabling the public to manage nature's resources, biologists take responsibility *for* nature *through* the public. While more mixed with features of taking responsibility *toward* the public, a similar feature arose within the other disciplines, where contributing to public discourse and debate is understood as a way of influencing societal actors, for example sociologists enabling political decision-makers to make decisions that improve society. This emerges a way of taking responsibility *through* the public, and also *with* the public. Contributing knowledge to the public (through research, teaching, and communication) may also be seen as a way of taking responsibility *for* the public, for example as a way of taking responsibility *for* public debate being more informed and knowledge-based.

The imaginaries and experiences of taking responsibility toward, for, with, and through the public that come to the fore in this study are both illuminated by the current conditions of academic work, and illuminate the current conditions as *responsibility conditions*. Thus, the present study provides insight into the challenges and opportunities for envisioning and enacting responsibility toward the public within the current context. The present study echoes findings of previous empirical research that conditions in the knowledge society pose both challenges and opportunities for the university with regard to the taking of responsibility toward the public. As also indicated by previous research, the present study identifies competing logics and conflicting

concerns that are experienced to transform and challenge the university and its particular role, but also to open up new possibilities for the university as a societal actor. By discerning and illuminating the fine-grained picture of responsibility issues imagined and experienced by the academics interviewed, the present study adds empirically based understanding of taking responsibility toward, for, with, and through the public in the knowledge society.

8.2 Discussing the contribution and the implications of the study

The present study adds to a growing body of research inquiring into how academic work is experienced and understood by academics themselves within the current context. The contribution of the present study is empirical in the sense that new knowledge about how responsibility toward the public is envisioned, approached, and experienced is gained. The contribution of the study is methodological in the sense that a bottom up approach is used and developed that may contribute to further inquiry into this domain. Furthermore, the study represents a possible contribution to current discourses on the role and responsibility of the university and its academics within the current context, as it has implications for how academics' responsibility toward the public may be further discussed and explored.

While the empirical findings are contingent and perhaps most relevant in a Nordic context, based on the combination of the contextual descriptions and the literature reviewed in Chapter 2, I find it reasonable to suggest that the findings from the present study are to a large degree of general relevance in the sense that the issues that arise in the analysis would in various ways find resonance with academics in general in Western liberal democracies. While national, institutional, and disciplinary contexts differ, and thus the issues of responsibility will be imagined, lived, and experienced in different ways, the central findings in terms of issues that seem relevant to academics' imaginaries and experiences of taking responsibility toward the public seem relevant beyond the local context of the present study. The discussions of the findings in light of perspectives and findings from international studies in the summaries of Chapter 7 arguably support this claim.

In addition to providing insight and understanding into how taking responsibility toward the public is experienced and imagined, the contributions of the present study lie in the implications

that can be drawn with regard to conditions that restrain or nurture the taking of the responsibility imagined; with regard to how to discuss responsibility; and with regard to how to further explore the question of university academics' responsibility toward the public. The empirical findings are summarized above. The following sections discuss the contributions in terms of implications as well as the contributions of the methodological approach.

8.2.1 Responsibility conditions

By zooming in on the lived experiences of the actors within the university, multiple and heterogeneous responsibilities have been highlighted. By asking the actors, knowledge has been gained not only about how they respond to external claims and demands, but also about how responsibility is envisioned and taken proactively and from within, as integral to academic endeavors. The combination of the phenomenographic approach and epistemic living space approach has delivered new empirical knowledge about academic work; in particular, it has contributed to illuminating the relation between the micro stories of individual and collective experiences, and the stories about epistemic changes on the macro level.

The participants in the present study articulate not one responsibility toward the public, but rather several responsibilities to fulfill toward multiple and heterogeneous publics. The analysis portrays responsibility toward the public as multifaceted, complex, and sometimes ambiguous, as there are multiple considerations that have to be balanced in concrete instances in order to fulfill the responsibility they see themselves as having. According to experiences, however, features of the current conditions are not facilitating an environment where these rich images of responsibility can thrive. Rather, specific conditions that are emerging related to the logic of managerial accountability and the promissory logic are to a large degree experienced as eroding such an environment.

By distinguishing between imaginaries and experiences, the present study identifies challenges that are related to discrepancies between images of a complex set of multiple responsibilities, and the experienced epistemic living space that the participants in the present study inhabit. Discrepancies pertain to the temporal, symbolic, and social conditions that participants experience as framing and steering their work. Potentially the findings from the present study

can contribute to future institutional discourses and arrangements that better support the complex responsibility toward the public that the participants in the present study envision. As such, the approach of the present study has not only a descriptive, but also a critical-constructive potential.

According to the experiences and imaginaries of the academics partaking in the present study, responsibilities toward the public are integral to academic work, and the various responsibilities and ways of taking responsibility are related. This means that it becomes important to approach the academic role as a bundle of roles in order to understand and provide conditions for taking the responsibilities that lie within the nexuses of the roles in the bundle. Current developments, however, include a division of labor as the use of dedicated teaching or research position increases within universities. This development is expected to continue (Enders and Musselin 2008: 139). Also, in a situation of globalization and a competitive market of employment, combined with a system of financing that rewards research more than other areas of academic work, academics are to an increasing extent recruited and promoted on research merits (and assumed potential) (Goastellec, Park et al. 2013). Enacting the other roles in the bundle, and taking responsibility through teaching and communication to and with the public do not lead to individual merits nor institutional funding or ranking in the same way, and are thus not as important in processes of recruitment. If the reported division of labor continues, and academics (are forced to) specialize in roles as either researcher or teacher, the other responsibilities and moreover responsibilities that lay in the nexuses between the different roles in the bundle may wither from view if the academic is no longer to hold the bundle of integrated roles.

Further, the handling of this bundle of heterogeneous and related responsibilities is experienced to be in need of some orchestration on behalf of the disciplinary and institutional communities, and the participants call for institutionalized dialogue about the responsibility of the discipline toward the public. Just as an orchestra needs some coordination in order for all the players to (be able to) fulfill their responsibility in relation to each other, and thereby create the complete soundscape, the community of academics is experienced to need some orchestration in order for the individual academics (to be able) to fulfill the parts of a complex landscape of responsibilities. Images of such orchestrations, in the form of institutionalized dialogue, are explicitly contrasted to executive decisions, but linked to institutionalized discussions, where responsibility is not defined once and for all, but is about a continuous and shared deliberation

and reflection. Also, it is worth pointing out that one of the ways of taking responsibility that comes through in the present study is engaging in such dialogue with colleagues.

However, the analysis along the social dimension showed that demarcating and taking of responsibility is experienced as individualized. This means that strong communities that together and autonomously define and demarcate their responsibility toward the public are not developed/maintained. In a situation where external stakeholders increasingly take claim on defining the purpose of academic institutions and academics' work, an internal dialogue becomes increasingly important (Henkel 2011). The lack of such communities may under the current conditions constitute a risk that the accountability logic and the promissory logic, or other external demands become (even more) dominant. Also, the experiences of difficulty with conceptualizing and demarcating the responsibility to engage in public debate, combined with the experience of standing alone with this challenge, may (as noted by participants) lead to university academics refraining from taking part in public debate. Participants in the present study suggest that if academics refrain from taking part in the public due to difficulties with conceptualizing this role, the university may be put(ting itself) in the margins of public debate.

The present study has illustrated that the question of *what* the responsibility is for is central to understand experiences and imaginaries of taking responsibility toward the public.

Responsibility is in part dependent on the domain of knowledge and epistemic issues within the various disciplines. Thus, while generic features of academics' responsibility toward the public are important, explorations, discussions, and orchestrations of academics' responsibility toward the public arguably need to take place not only on the general level, but also within the disciplinary communities. As pointed out by Jensen and Nygård (2000), only within the specialized communities do the members have the fine-grained vocabulary, or the possibility to develop such vocabulary within their practical context, to discuss their very specific responsibility toward the public. It is within the communities that the language and concepts with which the members communicate are developed and shared, and thus develop and transmit their understanding of the world, individually and collectively (Henkel 2009). The current condition of increasing specialization and differentiation (Jensen and Nygård 2000) expectedly poses new challenges in terms of institutionalizing responsibility and responsibility discussions.

While literature describing the current context of academic work emphasizes change, as Musselin points out, the academic profession has always been changing, and there is no ideal, universal, and stable state of being a university academic. Musselin (2007: 175) explains that “as all social bodies, it is a living entity, able to adapt, sensible to external changes but also trying to enact its environment”. The approach used in the present study is sensitive to current changes, as the dimension of epistemic living spaces is developed to encompass these changes. The implication is that, within a different context, other dimensions may be included in the framework.

Further, academics are within the frameworks of epistemic living spaces approached as actors. Thus, the approach of the present study, in particular the analysis of the spatial dimension has, by looking at how responsibility is *taken* and *demarcated*, illuminated how the participants enact responsibility and thereby challenge, shift, and draw boundaries of responsibility. Echoing descriptions in the literature of closer intertwinedness between the academy and society, participants enact responsibilities toward the public in their research, teaching, and communication to and with the public. However, ambiguity is experienced within epistemic living spaces where, on the one hand, more traditional boundaries are defended, while on the other hand, boundaries are challenged and shifted, and where also externally imposed modes of ordering are experienced to come into play.

Based on the findings from the present study of responsibility as intrinsic to academic work, it seems reasonable to claim that the university, rather than orient toward external claims (as Maassen (2014) indicate is the case at management levels within the university) should orient toward the responsibility towards the public that lies inherent in academic work. The present study suggests that individual researchers orient toward the inherent responsibility toward the public, but that this orientation is not experienced as institutionalized. Thus, the university risks becoming even more vulnerable to the tendencies, conditions, and logics found to contradict the inherent responsibility.

The present study has shown that responsibility conditions are about time and space, about symbolic values and modes of ordering, about epistemic reflections, and about institutional arrangements and collegial communities. In order to support an environment where such responsibility can be envisioned and exercised, there is a need to explore responsibility

conditions further. The findings of the present study also have implications with regard to how it would seem fruitful to discuss and further explore university academics' responsibility toward the public, as discussed in the following.

8.2.2 Discussing and further exploring academics' responsibility toward the public

The academics partaking in this study articulate responsibility toward the public as central to their work, as something they aim to fulfill through their research, through their teaching, and through taking part in public spaces, both individually and (ideally) together, as members of communities. Responsibility comes through as taken, conceived, and demarcated from within as well as internal to academic work, rather than imposed from outside. Therefore, research aiming at further understanding responsibility arguably needs to explore the taking of responsibility accordingly.

The present study, and the way that boundary drawing is vital in the analysis, opens up for seeing boundaries as something continuously negotiated, challenged, defended, drawn, and torn down. This has allowed me to capture experiences and imaginaries of responsibility toward the public as something "living" rather than something "static." As a result, the approach has allowed me to capture not only stable understandings of responsibility, but the more fluid discourses and possible shifts and changes in the ways boundaries are drawn in terms of responsibility. Approaching the question from this perspective facilitates the capture of important tensions where more often than being a question of mutually exclusive alternatives/positions, boundaries are discussed (and placed) in order to attain an appropriate balance, and where positions are formulated that take multiple considerations into account, leaving responsibility and its boundaries as something fluid rather than something fixed. Complex considerations are made in order to handle one's responsibility, and these considerations tend to take place in situations marked by tensions and ambiguities. Traces of continuous efforts of demarcation suggest that the boundaries of academic responsibility toward the public are not clearly drawn once and for all. Rather, boundaries are fluid and subject to constant reordering and negotiation in concrete settings, depending on the area of knowledge, the specific public in question, the purpose of the discipline, and the even more specific purpose of the concrete endeavor of research, teaching,

dissemination, and engagement in debate. These findings suggest that it would not be fruitful to discuss responsibility toward the public based on an assumption about and aiming at identifying a final set of boundaries.

Furthermore, the complexities highlighted in the present study imply that criticizing the managerial accountability logic and the promissory logic is not sufficient if the aim is to nurture and institutionalize responsibility. Active engagement with a comprehensive concept and logic of responsibility is needed. In a situation of related, competing, and sometimes conflicting concerns, finding the appropriate balance comes forth as essential in order to handle responsibility. Moreover, rather than being about finding a fixed point of universal balance, finding the appropriate balance and demarcation must be handled in the concrete instances of academic work, be it research, dissemination, or education, and in the interrelatedness between these aspects of academic work. The complexity uncovered in the present study resembles the experience articulated by Verducci:

Exploring the concept of responsibility is like dancing with an octopus. Just when you begin to groove, an unattended arm of the concept taps you on the shoulder, disorienting you. When you finally corral that wayward arm and reestablish your rhythm, yet another arm taps and the cycle begins anew (Verducci 2007: 43).

As the quote illustrates, the question of responsibility is experienced and imagined to be more about establishing and reestablishing the rhythm than about finding a final answer. As Verducci visualizes in the quote, the concept of responsibility is complex and many-faceted, and when dealing with one aspect of the concept, other aspects interrupt. For example, responsibility to contribute to public debate invokes responsibilities taken through research as well as educational responsibilities. When dealing with responsibility toward the general public to disseminate knowledge, responsibilities toward those written about may interrupt. Alternatively, when taking on a responsibility to engage in public debate, either through acting in a concrete space of debate or through pursuing knowledge to illuminate questions further, a responsibility to stay neutral and academic is invoked and (sometimes) experienced as interrupting. When pursuing one research question in order to fulfill a responsibility to a particular public, responsibility toward other publics may interfere because it seems irresponsible to leave them aside. When exploring and discussing responsibility toward the public, it is important to keep this feature in mind, in order to attend to the multiple and related aspects of taking responsibility toward the public.

As described, participants envision a bundle of related responsibilities toward the public. The different responsibilities are enacted in different spaces, and in different ways. This means that the taking of responsibility toward the public cannot be understood only through the vocabulary discussing “responsible research” (a current buzzword) and/or the responsibility of academics to disseminate knowledge to the public. The present study shows that taking responsibility is about performing research and teaching, and about including (and demarcating) responsibilities toward the public in that work. It is about engaging in discussions on the responsibility of the discipline. It is about enacting and taking part in public spaces, and about demarcating the way to participate in these spaces. Moreover, these responsibilities are bundled, and thus need to be explored and discussed as such.

The present study sheds light on central imaginaries and experiences of taking responsibility across and beyond disciplinary sites. However, the present study has also shown the need to look at experiences and imaginaries of responsibility specific to the various knowledge domains and traditions in order to see *what* the responsibility toward the public is experienced and imagined to be about. If we leave out the specific substance matter, responsibility discussions stand the risk of being reduced to more or less empty rhetoric. The value of exploring the “*what-dimension*” of responsibility became evident in the first step of analysis where concrete examples illustrate what the participants see themselves as having specific responsibilities toward specific publics related to their domain of knowledge and related to how knowledge is produced within their disciplines. This arguably implies that, within specific disciplines, more in-depth explorations of the “*what*” and “*how*” of responsibility toward the public, and the development of a fine-grained vocabulary to handle and discuss it, should take place among the members of these communities.

With regard to the findings across disciplines, the elaborate notion of the reciprocal relation between science and society revealed in both the present study and previous literature, and the understanding of responsibility toward the public as inherent in academic work, it seems reasonable to conclude that exploring researchers’ discussions of their responsibility with a clear-cut distinction between the university as one space and society/the public as another is not adequate for understanding how researchers live their responsibility. The spatial and symbolic boundaries between epistemic living spaces and the public are experienced as porous, blurry, and complex with regard to responsibilities related both to research and to partaking in the public.

Thus, while the previous chapter suggested that autonomy is still an important issue with regard to academic work, it cannot be discussed as independent from society. Rather, it needs to be discussed in terms of developing a reflexive and purposeful voice and role in relation to the public.

8.3 Suggestions for further research

As described above, the present study has captured not only how academics envision taking responsibility toward the public, but also for, with, and through the public. This has arguably contributed to bringing to the fore a vision of the public as active agent, and the academy and the public as co-actors. This implies that the responsibility of university academics is not understood as merely to serve a society seen as a more or less passive recipient, nor as merely to respond to society's demands on the university. Rather, an image emerges of taking responsibility as a way of contributing to making the public capable of solving current challenges, and of the public being a co-responsible actor that university academics take responsibility *with*. I suggest this perspective to be an important one to pursue in further research on the role and responsibility of university academics in relation to the public.

With regard to the above suggested path of further research, it is important to bear in mind that the present study is situated within the context of Norway. The Nordic context is particular with regard both to higher education and to images of the public. Empirical knowledge from other regional and national contexts could illuminate the issue of university academics' responsibility further, and comparative focal tools between national contexts could provide additional insight both regarding the findings from the present study and findings from other/future studies.

The lack of institutionalization of responsibility and responsibility discussions is a central finding/implication of the present study. This finding points to a need to explore the question of academic responsibility toward the public through a framework that can capture the institutional level. Further, such a framework should capture actors within multiple levels of the institutions, as well as the communication between the different levels, in order to explore (if and) how the university has/may create spaces for institutionalization of a shared responsibility, and vivid responsibility discussions. Further, by including the level of governance nationally and

internationally, and the hierarchy of decision-making, understanding may be developed about processes of institutionalization as well as room for institutional and individual agency with regard to issues that the present study suggests as central. Thus, further exploration could benefit from combining the cultural perspective with institutional perspectives.

If the present study in any way contributes to further discussions on and explorations of the taking of responsibility and its conditions, I dare to suggest that it has fulfilled an important purpose—and even a responsibility toward the public.

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Appendices

Appendix 1: Information letter



UNIVERSITETET I OSLO
DET UTDANNINGSVITENSKAPELIGE FAKULTET

Ester Fremstad
Pedagogisk forskningsinstitutt
Universitetet i Oslo
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Oslo 14.09.10

Kjære informant

Informasjonsskriv til informanter i forskningsprosjektet *Forholdet mellom fagkunnskap og etikk – slik det forstås av akademikere og studenter*

Dette er et PhD-prosjekt der det undersøkes hvordan akademikere og studenter forstår forholdet mellom fagkunnskap og etikk. Spørsmålet undersøkes gjennom intervjuer med akademikere og studenter fra fire ulike fag: et profesjonsfag, et fag fra humaniora, et fra samfunnsvitenskapene og et fra naturvitenskapene. Den metodologiske tilnærmingen er fenomenografisk. Det betyr at forholdet mellom fagkunnskap og etikk undersøkes gjennom å kartlegge variasjonen i måter å oppfatte fenomenet. Akademikere og studenter intervjues om sine erfaringer med og oppfatninger av forholdet mellom fagkunnskap og etikk. Akademikere spørres også om i hvilken grad og på hvilken måte denne forståelsen kommer til uttrykk i deres undervisning. Studentene spørres om sine erfaringer med hvordan forholdet mellom fagkunnskap og etikk kommer til uttrykk i utdanningen.

Intervjuene er semistrukturerte. Det vil si at jeg har en del forberedte spørsmål som jeg ønsker at vi snakker om, men at jeg ønsker å forfølge de temaene som kommer frem i samtalen og at vi snakker om det du er opptatt av i tilknytning til temaet. Intervjuet vil antakelig ta ca. en time og tas opp på lydbånd som deretter transkriberes.

Det er ikke individdata som er sentralt i denne typen undersøkelse, og i fremstillingen vil anonymitet etterstrebes. Imidlertid er det mulig at personer med god kjennskap til fagmiljøet vil kunne gjenkjenne synspunkter, og slik identifisere informanter.

Det er helt frivillig å delta i prosjektet og du kan på hvilket som helst tidspunkt trekke deg og kreve personopplysningene som er gitt anonymisert, uten å måtte begrunne dette nærmere. Ut over mine veiledere og transkriberere, er det ingen andre enn jeg som vil få tilgang til personidentifiserbare opplysninger. Vi er alle underlagt taushetsplikt og opplysningene vil bli behandlet strengt konfidensielt.

Prosjektet er tilrådd av personvernombudet ved NSD. Etter at prosjektet er avsluttet, senest 2014, vil opplysningene bli anonymisert. Det vil si at lydopptak og navnelister slettes. Det kan imidlertid bli aktuelt å foreta videre studier. Dersom det blir aktuelt å bruke dataene i videre forskning vil du bli kontaktet for å godkjenne dette.

Dersom du har spørsmål er det bare å ta kontakt.

Vennlig hilsen
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Appendix 2: Interview guide

Introduction (information to the interviewee):

Thank you for partaking.

Introduce the project and its aims: to get hold of different aspects of and different ways of understanding the relation between discipline and ethics, related to how the participants understand their role and responsibility as academics.

About protecting individual identities: aim at ensuring anonymity. The analysis is not to be performed on the level of the individual. However, people who know the communities may recognize arguments and viewpoints.

About the interview: I have an interview guide, but will not use it strictly. We will talk about what occurs during the conversation and what occupies you. I may ask follow-up questions that seem a bit “ongoing” or even silly. This is not because you have said something strange, but because I wish to know more, to get hold of concrete examples, and to get your articulations of reasons and the like.

Any questions before we start?

Questions (to be covered during the conversation)

1. I wish to start by talking a bit about your work. Can you tell be a bit about it?
 - Do you find ethics are relevant related to that? How? Why?
2. Do you have (further) examples of value questions or ethical/moral questions that may arise within your field?
 - Related to the use of knowledge within your field?
3. Can you think of any questions within your discipline that need to be illuminated not only with knowledge, but also with ethical considerations?
4. Can you think of any ethical questions that your discipline can help illuminate?
5. How do you see your societal responsibility - or role as an academic in society?
6. Do you think that the study program should contribute to the students developing ethical judgment – or competence with regard to issues we have discussed?
 - What do they need to learn?
 - How can learn this?
7. Do you teach? What do you teach? Do you take up/cover issues related to ethics – or issues that we have talked about in your teaching?
8. Do you see yourself as influencing the students’ set of values?
9. Do you have examples of conversations with colleagues on the things we have discussed?
10. Thank you for your time! Do you wish to add anything?

