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Knowledge Logistics

An Epistemography of the Genesis
of a Governmental Guideline

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Summary

This thesis is about how science and politics interacted in the production of a governmental guideline aiming at directing teachers in Norwegian schools towards more efficient prevention of alcohol- and drug-related problems. The Guideline's genesis is explored on the basis of an ethnographic study of the bureaucratic authorship from the time of its commissioning to the publication of the ready-made document more than four years later. The focus is on the epistemic issues at stake in the governance of professional practitioners at the frontline of the welfare state. As a strategic research *site* in the wider *field* of Norwegian public health policy practices, the study of this particular Guideline provided access to the heterogeneous assemblage of governmental institutions, centres of expertise, policy documents, and hearing procedures that comprised the field. As such, an account of epistemic issues (an epistemography) in the genesis of this particular Guideline speaks to the larger issue of the policy of science-based practice.

The ethnographic account provided in this study stages *documents* as the main actants in this *play of governance*. The authorship involved numerous documents such as minutes, drafts, outlines, emails, reports, policy documents, and scientific publications. Drawing on theoretical resources from Science and Technology Studies (STS), in particular the notions of *performativity* and *recursivity*, the analysis accommodates these language materials as partakers in the process of producing both the textual content of the published Guideline and the content of the authorship's waste basket. The documents enrolled are explored by virtue of what they *do* and with what *effects*. The analysis downplays the role of human intentions as causal explanations for outcomes of policy practices. Rather, the analysis foregrounds the ways in which policy documents produce the object of governance, how they establish a hierarchical geography of expertise, and how they configure a supply line of knowledge, that is, a *knowledge logistics* as the appropriate and effective solution to meet identified challenges.

As the authorship progressed, an ongoing shrinking pattern emerged in terms of textual volume, imperative language, and scientific content. For each new draft, the document became less of a governing tool than it was originally commissioned to be. At one point the Guideline was about to be orphaned, as those who commissioned it as well as those who wrote it no longer were willing to support it. The ready-made document lost its governmental guideline status and was demoted in rank as 'supportive materials'. It was published exclusively on the Internet where it became increasingly hard to find. Yet, for reasons other than the scientific knowledge embedded in its content, the document was produced and finalized. The Guideline's survival depended on the careful

management of its exposure to the outside world, not in the least to the target group of the teachers. This was evident in the execution of the external hearing procedure.

However, the disarming shrinking pattern was also a productive transformation that afforded for the Guideline's casting in the staged *play of governance* within the field of prevention of alcohol- and drug-related problems. Notwithstanding its lenient script and unostentatious launching, it became a policy document reinforcing the hierarchy of expertise conducive to its own genesis. It was a governing tool protected by and simultaneously protecting the *envelope* of science-based practice as a recursive, self-reproducing structure.

Contents

List of figures

Figure 1: Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities (Helsedirektoratet, 2012a)

Preface

On the 4th of July 2012 the Norwegian Directorate of Health published a guideline titled 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities' (see Figure 1). It is in many ways an unremarkable governmental guideline among a crowd of other unremarkable guidelines in the public health policy field. As an anthropologist, I have studied in detail its making, from the document's commissioning to its publication more than four years later. This thesis is about the Guideline's genesis, focusing on the epistemic issues that were at stake in the governance of practices at the frontline of the welfare state, in this particular case, teachers' prevention efforts in Norwegian schools. I have chosen the hybrid-term *epistemography* (Dear, 2001, pp. 128–141) in the title of the thesis. Combining the terms *epistemology* and *ethnography*, epistemography captures the endeavour of studying epistemic issues ethnographically.

I see this study as two parallel voyages of discovery: one into the Guideline's genesis and the other into the theoretical terrain holding the tools I utilize in this account of its genesis. Both journeys were made possible by several people to whom I am indebted and want to express my gratitude. First, I would like to thank the involved staff at KoRus Nord, the Directorate of Health, and the Directorate of Education and Training for their acceptance of an ever-stalking anthropologist into the Guideline's authorship. Special thanks go to the project manager at KoRus Nord, Beate Steinkjer, who continuously offered me the latest news and always kept me informed about new meetings ahead.

My theoretical journey of discovery, including the process of writing this thesis, would not have been possible without the help from my supervisors, Ann Therese Lotherington and Ger Wackers. I am deeply grateful for their ceaseless confidence in my work, their contagious enthusiasm, accordant feedback, and their handwritten comments made on my many different chapter drafts. Throughout my research project, I have had the joy and benefit of being located in an office next to Ger Wackers', along with his voluminous book collection. I was always welcomed into his highly relevant library, from which I borrowed both the books that I asked for and those I did not know existed. Moments of inspiration and clarification followed every borrowing episode. Often I knocked on his door, saying 'Ger, I need one word!', which every time launched us into a longer discussion in which we turned words upside and down, looking for what they did and gradually developing a 'performative' vocabulary. Thanks to both of my supervisors for excellent support and assistance. Being a PhD student under such conditions has truly been a privilege.

Narvik, June 2014

Rolf Andreas Markussen

Chapter 1: Introduction

The large oval table and the surrounding chairs almost occupy the entire floor in the quite small meeting room. Seven people, me included, enter more or less at the same time, each with a full cup of hot coffee or tea in one hand and a stack of papers in the other. As usual, the gathering takes place in a cheerful atmosphere of small talk, jokes, and laughter. We all manage to find our seats without any spilling. The light banter increases while we are waiting as the staff prepares the laptop and projector. Hardly anything fits with the stereotypical image of a serious-minded meeting taking place within a governmental centre of expertise. 'Well, we better get started' appears to be the magic phrase. The project manager enjoys everyone's attention while accounting for the process so far and introducing this meeting's agenda. Feedback from superior directorates on a previous draft will soon be the subject of discussion. Textual sequences have been assessed as 'too lecturing', and concrete deletions are proposed. Except from me, all participants are here by dint of being members of an author group about to carry on with their mission of making the textual content of a governmental guideline. My agenda is different. I am here as a PhD student who has chosen the making of this particular Guideline as my research site. I am an anthropologist and this is a snapshot from my fieldwork.

1.1 A governmental guideline in the making

In 2008 the Norwegian Ministry of Health and Care Services decided to produce a governmental advisory guideline for teachers, aiming at reducing society's alcohol- and drug-related problems through science-based prevention in schools.[1] The initiative was a follow-up of 'The Norwegian National Action Plan on Alcohol and Drugs'[2] (Ministry of Health and Care Services, 2009). As the most conspicuous Norwegian policy document on alcohol and drugs, the Action Plan's overriding objective was 'to reduce the negative consequences of substance use for individuals and for society' (p. 6). According to its preface, signed by the Minister of Health and Care Services, science was set to play an essential part in achieving this overriding objective:

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[1] In the following, I will refer to this particular guideline as 'the Guideline'.

[2] An English version of this document was published in 2009. All my quotes derive from the translated edition. In the following, the document will be referred to as 'the Action Plan'.

> The alcohol and drug field is to be given a professional boost. The goal is better quality in all areas of the field. The efforts are to be based on a platform of research and information about research, knowledge generation and raising levels of expertise. (p. 5)

Once the decision to produce the Guideline was made, the baton was passed on to the subordinate Directorate of Health, who in turn commissioned its subordinate centre of expertise, KoRus-Nord,[3] to compose the Guideline's textual content. This particular institution is one of seven similar centres of expertise, covering various regions in Norway. Each centre has a national responsibility for a specific field of expertise within the broader field of alcohol and drugs policy. KoRus-Nord has a special responsibility for schools as an arena for prevention of alcohol and drugs. Hence, being part of the government's policy infrastructure and given its special field of expertise, the Guideline's textual production was commissioned to KoRus-Nord on the 1st of June 2008, to be precise. More than four years later, on the 4th of July 2012, the ready-made document was published. The fieldwork on which this thesis is based concerns what happened between these two points in time – that is, in the genesis of the Guideline. I will refer to this collective unfolding process of composing the Guideline's textual content as 'the authorship'.

During their research processes PhD students are often confronted with the awkward, almost compulsory question: 'What is your research about?' I too have been groping for answers, resulting in a rather flexible assembly of words and phrases. The struggle of coming to terms, literally speaking, with my own project, as well as the endeavour of making myself understood to those asking, has been a faithful companion throughout my research. Having confessed that there have been various previous blurbs, I offer the following sentence as the one I have landed on for expressing what this research project is about: *Through the study of a guideline's genesis, this project interrogates the seemingly ubiquitous idea of scientific knowledge as an indispensable resource in dealing with welfare problems*. Inevitably, condensing 200 pages into such a one-liner creates more questions than it answers, but it captures my overall ambition of interrogating what I perceive to be a highly interesting wedlock between policy and science – a wedlock that somehow gave birth to the Guideline, which comprises the empirical pivot point of my interrogation of the wedlock itself. In other words, this thesis interrogates the wedlock between policy and science through studying the conception and development of one of the wedlock's offspring.

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[3] KoRus-Nord is short for *Kompetansesenter rus, Nord-Norge*. My translation is Competence Centre for Alcohol and Drugs, Northern Norway.

The one-liner above claims a particular state of being of the world out there. It claims the very existence of an optimistic idea of what science potentially can mend as well as the ubiquity of such a prophecy. In Chapter 3, both claims will be substantiated through a close reading of different policy documents to demonstrate how they authorize scientific knowledge as a potential remedy for welfare problems. But policy documents are not the only language material assigning science such a prominent role. In her New Year's Address, broadcasted on national radio and television on the 1st of January 2014, the Norwegian Prime Minister declared that 'in the future, knowledge will be our oil'.[4] Applying the oil metaphor in a Norwegian context resonates with the role of this resource in building Norway's welfare state since the 1970s. Oil is a powerful metaphor, but as a statement of optimism regarding the utility value of scientific knowledge, it is rather unremarkable. Every day, newspapers, radio, television, and different types of media alike, provide a steady flow of sentences starting with phrases like 'research proves that …', 'science recommends …', 'we need more research before we can …', and 'we need to get all the facts straight before we can …' (see Figure 2). A widespread positive and optimistic belief in the part potentially played by scientific knowledge seems to be the prevailing view.

Figure 2: A collage of Norwegian newspaper headlines exemplifying the wedlock between science and policy

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[4] An English written version of the New Year's Address is available at http://www.regjeringen.no/en/dep/smk/ Whats-new/ speeches-and-articles/statsministeren/talerogartikler/2014/new-years-address-2014.html?id= 748426 (Accessed on the 23rd of January 2014).

Approved responses ought to be based on what we *know* about problems, about their causes, about how we effectively can deal with them, and about how ways of dealing with them can be implemented effectively among those responsible for dealing with them. As key resources propelling society's development, stone, bronze, iron, and oil are all resources that have been applied when naming different eras of human history. Scientific knowledge seems to have gained an analogous position as the raw material on which human progress shall be based. Future historians might well consider our present time as the 'Age of Science', an age in which ideas originating from the Enlightenment were alive and kicking and continuously conquering new ground.

A specific version of the presumed beneficial linkage between science and policy emerges in a particular genre of policy objectives, labelled by terms such as 'science-based', 'research-based', 'evidence-based', or 'knowledge-based' *practice*. Although they carry different names and aim at different challenges within a wide range of policy fields, they are all labels representing and performing the image of science as a problem-solving resource that has to be produced and made to bear in the fields of practice. They are policy objectives articulating a governing and practice-improving project, casting scientific knowledge in the prominent position of the resource needed for improving efficiency in the work of nurses, social workers, teachers, and other groups of professional practitioners dealing with their various target groups at the frontlines of the welfare state.

I have chosen the phrase *science-based practice* to label the larger policy project that gave birth to the particular Guideline I have attended the genesis of. The label is not a translation of a well-defined phrase established in spoken and written Norwegian policy language. As for other policy fields, the field of prevention of alcohol and drugs holds a rather inconsistent and flexible vocabulary (Elvbakken and Stenvoll, 2008; Engebretsen and Heggen, 2012). In choosing among the alternatives offered by previous and contemporary policy language, I prefer *science-based practice* simply because it clearly and crisply brings to the fore its own logic: the type of knowledge needed and its producers, the transmission enterprise, and the reception by its users, namely the professional practitioners at the frontlines of the welfare state.

The policy of science-based practice is the specific variant of the wedlock between policy and science at which the interrogation in this thesis is aiming. As such, it resonates with a large and heterogeneous body of work dealing with complexities and problems related to the policy of science-based, or evidence-based, practice. Inaccurate and oversimplified as it might be, a way to categorize this body of critical literature is to distinguish between contributions that focus on the production of

scientific evidence, works that focus on the implementation of science-based interventions, and works aiming at measuring the effects of interventions. In the first category, one might locate the methodological critiques, for instance critical assessments of the limitations of meta-analysis (i.e. Gøtzsche and Olsen, 2000; Pawson, 2006) or the reductionism embedded in randomized control trials (i.e. Morrison, 2001). In the second category, one might place critical contributions focusing on implementation and impact for those addressed by science-based interventions once they are ready-made (i.e. Baklien and Wejden, 2009; Dusenbury et. al, 2003; Grimen and Terum, 2009; Powers, Bowen and Bowen, 2010). The difficulties of phasing out practices that science disapproves, for instance the intervention of Correctional Boot Camps (Bergin, 2013), might also fit into the category of implementation critiques. The third category accommodates for critical studies of effects or the lack thereof – that is to say, contributions aiming at revealing the effects and goal achievement of science-based interventions (i.e. Babor et al., 2010; Pape, Baklien and Rossow, 2007; Rossow et al., 2011).

As for the contributions mentioned above, this thesis is a critical account of the policy of science-based practice. This thesis is about knowledge *logistics*; it explores what happens in the stage of transmission from the sites of knowledge production to the sites where professional practitioners are supposed to improve the efficacy of their daily endeavours as new supplies of scientific knowledge and science-based recommendations are received. Readers expecting an inquiry into particular scientific claims and how they came about will be disappointed. This is not an examination of the 'evidence' produced by scientists. Nor is it an account of the reception of a science-based intervention among practitioners or an evaluation of goal achievement. Given the configuration of science-based practice as a supply line of knowledge, I will neither turn to the science factories nor to the frontlines, but to the transmission between the science factories and those configured as the users of supplied scientific knowledge.

Relevant and applicable as science might be, it is hard to imagine very much impact on welfare problems by dint of science being published in books, reports, reviews, and journals. Hence, the policy of science-based practice presupposes doing something to make scientific knowledge play its problem-solving part. This 'something' appears under various labels, of which terms like 'science dissemination', 'competence promotion', and 'research-based teaching' are frequently used in contemporary spoken and written policy language. Under the headline 'Current needs for quality and expertise', the Action Plan applies the verb 'communicate' to address the stage of knowledge transmission from the scientific to the practice communities:

Research and development of methods are going to be a priority and knowledge about effective services and effective prevention will be communicated to decision-makers and executive agencies. (Ministry of Health and Care Services, 2009, p. 22)

As will be demonstrated in Chapter 3, portraits of the policy of science-based practice are usually of the lenient kind and likely to contain terms with enticing and democratic connotations, but also mellow colours, bidirectional arrows, and integrated circles. Terms like 'governance', 'knowledge logistics', 'transmission', and 'supply line' hardly fit into this lenient and trustworthy image, but rather connote a top-down knowledge flow within an institutional hierarchy of expertise. However, they serve to make explicit the point where I am aiming at in my exploration of the policy of science-based practice: at the processes and practices involved in the maintenance of an infrastructure for knowledge flow from the scientific communities to the practice communities. This thesis is about the practices of knowledge *infrastructuring* (Pipek and Wulf, 2009; Star and Ruhleder, 1995), or the ongoing practices of assembling a flow of scientific knowledge towards practices at the frontlines of the welfare state.

The science-shipping alternatives applied to meeting the science-transmitting challenges and consecutively revealing the problem-solving potential of scientific knowledge, come in various formats: different science-based programme manuals for practitioners to implement, additional education programmes, conferences and seminars where researchers, politicians, and bureaucrats lecture to practitioners, different types of websites with science-based content, textbooks, guidelines, protocols, along with a variety of booklets and brochures. These are all examples of transmitting technologies playing the part of enabling scientific knowledge to govern professional practitioners at the frontlines of the welfare state. Furthermore, they are all ready-made outcomes of production processes occurring prior to their emergence in the policy fields and problem areas they are set to improve. To my observation, these processes and practices have been quite unsuccessful in attracting attention from researchers engaged in the analysis of welfare policy.[5] It is in this field where I endeavour to make a contribution as one such production process constitutes the empirical pivot point for my interrogation of the ubiquitous and largely celebrated policy of science-based practice. This is an ethnographic study of a knowledge transmitting technology *in the making*.

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[5] For examples on a practice approach to the making of policy documents, see Freeman, 2012; Freeman, Griggs and Boaz, 2011; Hull, 2012.

What then, makes the study of one particular governmental guideline in the making a suitable empirical approach for such an interrogating ambition? When I first entered the meeting rooms I did not know what I would find. But as the authorship unfolded, I found that complexities and problems regarding the 'marital relation' between science and policy manifested itself in the bureaucratic authorship I was studying, especially some very interesting issues that might be subsumed under keywords like power, governance, and expertise. In general, problem definitions imply a *logical* relation between how a problem is defined and the kind of solutions for solving the problem (Callon, 1980). As will be argued throughout this thesis, the making of the Guideline both required and reproduced a specific framing of the problem, as well as science-based guidelines, as a remedy to the problem. Preventing alcohol- and drug-related problems in society through a science-based guideline aimed at governing teachers presupposes some essential capacities and capabilities of the world 'out there':

- The existence of an improvement potential regarding the teachers' practices.
- The feasibility of achieving this improvement potential by supplying scientific knowledge and science-based recommendations.
- Scientists as the experts on how professional teachers should go about in their prevention of society's alcohol- and drug-related problems.
- The feasibility of producing problem-solving science.
- The mobility of scientific claims and its convertibility into how-to-work recommendations.

These are all presuppositions embedded in the *logic* of science-based practice. And, as will be argued in the chapters to come, they were all at stake throughout the Guideline's production. Mundane as it might appear, with all the meetings and documents involved, I found it to be a suitable site for interrogating some essential taken-for-granted aspects of the policy of science-based practice. In that respect the Guideline's genesis appears as my *Balinese cockfight* (Geertz, 1973) on which a 'thick description' of a larger policy logic could be based. Thus, I perceive my choice of research site as suitable not only for making a field report on how a particular policy document came about, but also for studying core presuppositions embedded in the logic of solving welfare problems by the production, supply, and use of scientific knowledge. As suggested by Susan Wright (2011), 'site' and 'field' shouldn't be treated as coterminous:

> If the field is the full range of people, activities and institutions potentially relevant for the study of a chosen issue, one of the arts of fieldwork is to choose sites within this field and design methods for their ethnographic study so that they shed light on the operations of political processes […]. (p. 28)

Applied to this particular research project, the policy of science-based practice is my *field*, and the Guideline's production is the *site* in which the policy is ethnographically studied. The Guideline's genesis is my *strategic research site* (Bijker, Huges, and Pinch, 1987) – strategic in the sense that it provides an opportunity for studying the policy of science-based practice in action (Latour, 1987) as a practice in its own right and for making the bigger policy picture amenable to criticism.

1.2 Theoretical requirements

In its most generic sense, I perceive the policy of science-based practice as a set of socio-material practices, or practices in which both human subjects and non-human objects partake. To paraphrase Braun and Whatmore (2010, p. ix), these *practices of science-based practice* are the 'stuff' that the policy is made of. In and through these practices, whether they unfold within a political, scientific, or bureaucratic institutional setting, or at a professional setting at the frontlines of the welfare state, the logic of science-based practice as a chain of change is produced and reproduced. In making this causal logic amenable to criticism, I want to avoid making a-priori assumptions about the world 'out there' or its changeability, based on the version produced by these 'practices of science-based practice'. To the contrary, the presupposed deficient quality of the work of professionals at the frontlines and the feasibility of amending this deficit through the production, supply, and use of scientific knowledge, are the features that will be subject to interrogation. The 'story told' by the 'practices of science-based practice' and its enrolled documents will not be taken at face value.

To make the policy of science-based practice amenable to criticism, I am in need of theoretical tools capable of opening up and problematizing the presuppositions produced in and through the ongoing practices of the policy. The requirement of such operability in theoretical tools is twofold: On the one hand, I am in need of theory that prevents me from overlooking crucial presuppositions embedded in and produced by the policy of science-based practice. On the other hand, I am also in need of theoretical tools that are helpful when interrogating aspects of the policy that are usually ignored and, therewith, left protected in a taken-for-granted position. In other words, I am in need of theoretical tools that make it both sensible and possible to explore the logic of science-based practice. To be armed with tools helpful for such a *dismantling* enterprise, I need them to meet three criteria for what theory must be able to do.

The first criterion is that theoretical concepts and resources must be able to question the 'nature' of scientific knowledge. This criterion implies methodological abstention from making a-priori assumptions about the capacities of scientific knowledge based on the part science is set to play in the policy of science-based practice. As we will see in Chapter 3, policy documents are likely to enact the aptitude of scientific knowledge as such. The appropriateness of scientific knowledge as a potential problem-solving resource is validated by the words put to use in prescriptions of the policy: The non-contaminating, neutral, and trustworthy modes by which scientific knowledge is produced; the mobility of scientific claims through time and space safeguarded by their immanent factual nature; its epistemic prominence compared to different types of knowledge; its ability to survive transmission through different science-shipping alternatives, and finally, its ability to govern the consignees at the frontline of the welfare state. These are all capacities and capabilities embedded in, and performed by, policy prescriptions of science-based practice that easily can shirk off further interrogation. In my view, avoiding such an analytical sin of making a-priori assumptions that reproduce the actors' self-presentation necessitates a theory that questions the 'nature' of scientific knowledge.

The second criterion is that theoretical ideas and concepts are sensitive to materiality and the agency of materials. In this thesis specific attention will be given to *documents*, to what Freeman and Maybin (2011) recognize as the 'principal artefact' in the practices of policy-making (p. 155). The policy of science-based practice *as practice*, whether it takes place within political or scientific institutions, the governmental bureaucracy, or the frontline of the welfare state, consists of a multitude of enrolled documents of different types. The production practices prior to the launching of the Guideline were no exception. How, then, can the variety of documents be accommodated for in an analysis of a bureaucratic authorship? Do they frame the discretionary space and leeway for the involved human authors, or are they better perceived as non-human co-authors? In my view, these questions are basically empirical, and that is why I am in need of a theory that prevents me from making a-priori assumptions about the potential productive capacities of human versus non-human partakers. This does not imply that I perceive every phenomenon, human or non-human, enrolled in the process of making the Guideline as equally strong or weak. It only implies that strength and weakness, what acts and is acted upon, what is text and what is context, what explains and what is explained, are not to be taken for granted or preordained solely by virtue of being a human or a non-human partaker in the making of the Guideline.

The third criterion is strongly related to the previous one. Acknowledging that documents are partakers in the process of producing the Guideline invokes a need for theoretical concepts and resources that recognize the agency of documents, or in slightly different terms, that elude the prevailing assessment of the document as inanimate representations of the intentions of its human authors, thereby favouring the authors mind as the source of causal effectiveness. Indeed, human intentions exist and are capable of making imprints. But approaching documents exclusively as a textual mediation of someone's intention is to reduce documents' impact potential, or to ignore them for that matter, without paying attention to the processes they engage in. Not only am I in need of a theory that allows for documents to be seated in the meeting rooms where the authorship occurred. I am also in need of theory that acknowledges that once they are seated, they might well *do* things.

Given these basic criteria for what theory must be able to do, where does one find theoretical tools that:

1. Question the 'nature' of scientific knowledge?
2. Are sensitive to materials involved in the processing of scientific knowledge?
3. Acknowledge the agency of materials in production processes?

The short version of my answer is the multidisciplinary field of research usually referred to as Science and Technology Studies (STS), a field combining and integrating strands of research from the philosophy, history, and sociology of scientific knowledge during the second half of the 20th century. It hardly makes sense to embrace STS as a singular theoretical framework suitable for my purposes. It is a research tradition that has progressed in multiple directions from its original empirical research sites of scientific practices, continuously attuning its conceptual apparatus to the exploration of epistemic issues within a wide range of practices. Within this apparatus, certain concepts and principles meet particularly well my criteria for what theory must be able to do. In Chapter 2 these concepts will be introduced along with a more general discussion of how my study of the Guideline's genesis is informed and inspired by the STS tradition.

1.3 The structure of the thesis

This thesis is divided into ten chapters. Following this introductory chapter, the theoretical, methodological, and empirical stage will be set in Chapter 2. I will do this by presenting some features which I consider to be of specific relevance to how this project came about and successively took shape as the thesis it finally became. I will start by introducing some underlying sources of curiosity and then proceed by presenting the theoretical framework that guided me towards studying the Guideline's making, towards ways in which it was done, and towards ways in which it is accounted for in this thesis. Finally, I will set the empirical stage by introducing the very production process that I have attended, namely who and what was involved, the sites where it took place, my position as a researcher, and my trawling for 'stuff' (Brown and Whatmore, 2010) comprising what is commonly referred to as empirical materials or data. Some issues of reflexivity entailed by my choice of research site will also be subject to a brief discussion.

Chapter 3 introduces the readers to the Guideline's production process. I will do this by presenting a core set of documents, focusing on how they portray contemporary Norwegian policy on alcohol and drugs, including how the idea of science-based practice appears within this specific field of health policy. Hence, these are documents that primarily will be approached as policy narratives performing images of the policy in which the Guideline is set to play a part. In that respect they comprised the prescription for the Guideline, or the assembly instructions for its making.

The subsequent six chapters (chapters 4 to 9) constitute my version of the history of the Guideline's genesis. Although there will be a few reflexive detours, these chapters invite the reader into a chronological account of the production process ordered into six stages, from the commissioning of the Guideline, through the making of different drafts and the various trials of strength they went through, towards the publication of a ready-made policy document more than four years later. I acknowledge that this might not necessarily appear as the world's most attractive invitation. The sensation of not getting much drama for free when writing about bureaucratic practices and the making of a singular policy document was indeed present as this study started to take shape, as if an extra narrative challenge followed my attention towards something that is normally perceived as mundane and colourless. However, the sensation disappeared quickly as the Guideline's making progressed. The course of events, with its curious twists and turns, the fine and cheerful people involved, the richness and potentiality in what was said and written, were all features that made this bureaucratic authorship appear as exciting, colourful, and highly intriguing. Therefore, I will not

apologize for inviting readers into the genesis of this particular policy document. If chapters four to nine confirm the prejudices about boring bureaucracy and colourless bureaucrats, then the blame rests on me and not on the process I have accounted for.

Four years of close attendance to how the Guideline came about included taking an interest in the textual materials that throughout the production process ended up in what I choose to call the tool factory's waste basket. Juxtaposing what finally was published with the textual content that was deleted throughout the Guideline's genesis evoked some irresistible questions that will be addressed in Chapter 10. This is the chapter in which I will explicitly argue how the genesis of this specific governmental guideline speaks to the larger issues of power-ordering, governance, and expertise. In short, my bouquet of interrogating questions posed can be subsumed under this umbrella question: What is the Guideline *doing* and with what *effects*? To avoid misinterpretations, this is not a question addressing the Guideline's success or failure according to the part it is set to play in the policy of science-based practice. Rather, it addresses what this governing artefact does and its effects *other than* its proclaimed impact.

Chapter 2: Tools of the trade

Basically, accounting for the genesis of a particular policy document is making a document about the making of another document. Both have their production history. I am comfortable with explicitly accounting for at least some features that I consider central to the production history of my own text, because it provides an opportunity to explicate different aspects of my position and doings as a researcher. I will begin this chapter with a brief self-presentation, emphasizing a few aspects of my professional background that I consider relevant as an inroad to this project. Then, I will proceed by accounting for the theoretical framework that directed me towards the very process I have attended, served as the lenses through which I have zoomed in and observed, and moulded the language deployed in this thesis. Finally, I will account for the 'data collecting techniques' and the 'stuff' (Brown and Whatmore, 2010) comprising the empirical materials of my research.

2.1 Sources of curiosity

I will start this auto-historical account of the genesis of this thesis with my graduation as a social anthropologist at the University of Bergen in 1992. This disciplinary background is relevant to my predilection for ethnography and for fieldwork and observation as the preferred research method. Although *ethnography* has a somewhat more restricted usage within the discipline of anthropology than within Science and Technology Studies (Hess, 1997, p. 134), my understanding of the term applies well to the enterprise of attending to practices through any fieldwork-based method, independent of what practices the attention is directed towards. Production processes, bureaucratic authorships included, can be approached historically through post-hoc interviews and document analysis after the ready-made document has been published (e.g. Freeman, 2012). However, being in the meeting rooms and offices where the authorship took place afforded for real-time observation of discussions and argumentation prior to the writing of and deletions from the Guideline's proposed textual content. It also afforded for unique access to the huge stack of different documents that was enrolled in its genesis as well as access to the tool factory's waste basket. Without making general statements about the epistemological superiority of ethnographic studies, my preferences for, and privileged access to the making of the Guideline *as it unfolded*, has played a significant role in shaping the account embedded in this thesis.

While my background as an anthropologist relates to the choice of an ethnographic approach in this study, it hardly explains the attraction towards bureaucracy and policy documents. By the time I graduated, anthropology on the home ground was scarce. Anthropologists seemed to travel almost everywhere else, accomplishing their fieldwork in settings appearing far more exotic than the grey governmental buildings sometimes located within walking distance from their own universities. From my days as an anthropology student, I cannot recall obligatory reading lists containing books or articles indicating anthropologists' devotion to policy-making and bureaucracy within the governmental institutions of their own native country. To the extent that the fields were located within one's own national border, immigrant groups or different subcultures ruled the empirical ground to which Norwegian anthropologists paid attention. Studies of Norwegian governmental institutions, the practices and processes of policy-making, or policy documents were mainly accomplished by scholars of different disciplines. If there were anthropologists in the bureaucracy's meeting rooms and offices, it was most likely because they took work as bureaucrats after graduation. That was what happened in my case. An eight-year period as a senior executive officer within the Norwegian Directorate of Immigration has affected this thesis in two different manners worth mentioning. First, it largely cured my prejudices against bureaucrats as a somewhat anaemic and humourless group of employees. Second, bureaucracy in action seemed highly interesting, at least when perceived through the lenses of an anthropologist interested in and sensitive to power relations. These two lessons learned, combined with the fascination of approaching a field that fellow anthropologists seemed to be ignoring, made bureaucratic practices and processes appear as an intriguing field of research.

When changing places in 2002, I replaced my work as a bureaucrat with that of an assistant professor at Narvik University College. In this position I was responsible for a supplementary educational course in health promotion and prevention of alcohol and drugs. Apart from digging into a new and rich body of research, my career switch also implied a profound change in the ways in which I was supposed to serve policy. As a lecturer for professional practitioners such as nurses, police officers, social workers, and teachers, I became enrolled into the policy of science-based practice as a *mediator* of scientific knowledge. Within the logic of knowledge logistics, the course served as a device for transmitting scientific knowledge to the frontline of the welfare state, where the potential for more efficient practices and subsequent goal achievements were to be fulfilled. My role as a *servant* for the policy of science-based practice was now circumscribed by the course's curriculum, its formulated learning objectives, and the scientific texts on the list of required reading. Furthermore, the course was partly funded by and co-organized with KoRus-Nord, the regional centre of expertise

that later was commissioned to make the Guideline. Hence, my entanglement in the policy of science-based practice also implied affiliations to institutions playing their various parts in the project of governing practice in this particular field of health policy.

My reasons for emphasizing this part of my previous working life are twofold. First, I am comfortable with being honest and open about my inroad into the policy of science-based practice as my research field. Becoming absorbed by a body of scientific literature to which I was rather unfamiliar, as well as the pedagogical part of my role, was indeed an interesting challenge. However, being positioned as a science shipping agent lecturing to professional practitioners, experienced as some of them were, also attracted my reflexive attention towards the *play of governance* in which I was offered a part. Second, my previous collaboration with employees at KoRus-Nord was of vital importance for my choice of, and access to, the bureaucratic production process comprising the empirical basis of my research. Their generous invitation of what was to become an ever-stalking ethnographer into their authorship is largely due to our common history of collaboration characterized by cheerfulness and mutual trust. It provided me with unique access to the process of writing a governmental guideline and with that, to a strategic research site where I was able to study empirically, as an anthropologist, the relationships between science and governance.

Access is not the only methodological issue relevant for such a close relation between researcher and informants. Some other issues will be subject to further discussion in Chapter 2.3. For now, I confine myself to exhibiting these few historical threads that are relevant for the genesis of this thesis. My exposure as an anthropologist, a former bureaucrat, and a lecturing assistant professor should not be read as the confessions of a contaminated researcher. Rather, it is a consequence of rejecting the image of scientists as neutral witnesses and the non-contingency of scientific accounts, which of course also applies to my own research and to the epistemological status of my own account. Given such a rejection, crucial reasons for making the author invisible in scientific texts are no longer relevant. To the contrary, I consider the exposure of contingencies that have coloured the genesis of this thesis as consistent with the ambition of exposing the presuppositions and contingencies of science transmission through the Guideline. In my view, the intention of making the policy of science-based practice amenable to criticism invokes an obligation to facilitate critical reading of my own text.

2.2 Theoretical framework

The theoretical resources that have inspired and informed this research project are largely drawn from Science and Technology Studies (STS). In this section, I will provide a sketch of the emergence of STS as a field of research in the second half of the 20th century. For me, this research project has been a voyage of discovery, not only into the Guideline's genesis, but also into a theoretical terrain. The brief review of the emergence of STS is for the benefit of readers unfamiliar with this academic field, as I was at the outset of this project. After introducing the STS field, I will indicate the books and papers that I found particularly useful as introductions, works to which I am indebted in the making of my own STS account of the Guideline's genesis. Finally, I will more specifically review findings, ideas, debates, and turns within this academic field which I consider to be of specific relevance for interrogating the policy of science-based practice.

The emergence of STS as an academic field

STS emerged as an academic field in the second half of the 20th century. It brought and weaved together in an interdisciplinary field, strands of research from the philosophy of science, the history of science, and the sociology of science. At the time of its emergence, many philosophers of science were working on questions that had to do with the epistemological demarcation and justification of scientific knowledge claims. Nevertheless, they did not study the production of scientific knowledge empirically. Assuming that the scientific knowledge of their time was superior to other forms of knowledge or beliefs, philosophers of science laboured to legitimize that knowledge by grounding it either in reality or in reason. The scientist-philosophers of the Vienna Circle, for example, tried to ground their scientific worldview in a strict relationship between sensory observations and scientific statements: Statements are meaningful if verifiable by observations (Hess, 1997, p. 9). Hence, the truth value of theories must be judged in relation to empirical data (logical empiricism).

Popper on the other hand recognized that such a programme would be futile (Sismondo, 2005, p. 4). He understood that scientists would never be able to determine the truth of their theories, but thought it possible to approach truth through attempts to falsify scientific theories, that is, to subject them to critical tests designed to prove them untrue. Both the verifiability principle associated with the Vienna Circle and Popper's falsificationism rested on the same notion: Scientific knowledge was considered to be the immaterial product of the human mind, of thought. The particularities,

practicalities, and possible messiness of discoveries could be left for historians and sociologist to describe, but were of no consequence for the *justification* of scientific knowledge. Its epistemic authority was accounted for in terms of theories of truth, establishing an intrinsic relationship between the scientific statement and the reality it described or represented. This relationship set scientific knowledge apart from other forms of knowledge, such as folk theories or beliefs, rendering it unamenable to extrinsic explanation.

In coherence with the notion of scientific knowledge as products of the human mind, mainstream work in the history of science provided meticulously detailed accounts of consecutive theories over time. The history of science was the history of ideas. Some histories of science took present-day scientific knowledge as both starting point and destination, reconstructing the history of science as the relentless, progressive march of reason, from the beginnings of the enlightenment to the contemporary era. These types of histories often adopted 'the teleological view that discoveries and technological innovations were bound to happen because they were there in nature' (Hess, 1997, p. 127).

Parallel to the philosophy and the history of science, there was also a *sociology of knowledge* as exemplified by the works of Karl Marx, Karl Mannheim, and Emile Durkheim. However, these sociologists did not specifically take issue with *scientific* knowledge. There was also a *sociology of science* exemplified in the work of the American sociologist Robert Merton. In his work on 'the ethos of science, the norms of behaviour that guide appropriate scientific practice' (Sismondo, 2005, p. 20), Merton described four ideals that governed the goals and methods of science and that were binding to scientists: communalism, universalism, disinterestedness, and organized scepticism. Still, Merton's sociology of science did not attempt to provide sociological explanations for the *content* of scientific knowledge; it was not a sociology of scientific knowledge.

STS grew out of this complex landscape of largely separate academic disciplines. It could latch on to strands of work in the philosophy of science itself. The philosophers of science Pierre Duhem and Willard van Quine argued for the impossibility of testing a scientific hypothesis in isolation: 'To put the matter in Quine's terms, theories are part of webs of belief. When a prediction is wrong, one of the beliefs no longer fits neatly into the web' (Sismondo, 2005, p. 5). In this view scientific knowledge is always *underdetermined* by empirical observations or data. This also holds for individual sensory observations exemplified and corroborated by work in Gestalt perception psychology. When looking

at Figure 3, for example, the same drawing can be seen as a young and as an old woman. The marks on the paper (or the screen) underdetermine how they are to be perceived.

Figure 3: The underdetermination of perception by the object perceived illustrated by the Boring figure

Profound implications follow the recognition of perception as underdetermined by the object perceived and of scientific knowledge underdetermined by the observations and data gathered. It leads to one of the key notions of STS, namely the *interpretive flexibility* of data and observations. Reality cannot be called upon to judge the truth or falsity of a scientific claim. This implies that the dominant scientific view is not the only possible one and not necessarily true. In other words, scientific knowledge is contingent – that is, it could have been otherwise. If one is prepared to do the work, it is in principle possible to challenge dominant views and propose alternatives. Finally, the notion of underdetermination of knowledge by data opens up a space for external, social explanations of why one theory becomes dominant and another loses plausibility and disappears.

Thomas Kuhn, a professional physicist, developed an interest in the history of his own field. In his historical studies Kuhn did not find scientists conducting experiments designed to prove their

theories untrue, or discarding their theories when encountering possibly debilitating observations. In periods of normal science, scientist solve puzzles while theories remain in the background as part of the paradigm that characterized the period. Normal science is superseded by periods of revolutionary science in which no such guiding principles, or truth criteria, are found. When a new paradigm is established, a new period of normal science commences. In other words, Kuhn proved Popper's philosophy of science to be prescriptive and historically inadequate. He gave up the idea of science progressing towards truth and argued for the incommensurability of different paradigms. As Sismondo puts it,

> This is the most radical implication found in 'The Structure of Scientific Revolutions' [Kuhn, 1970]: Science does not track the truth, but creates different partial views that can be considered to contain truth only by people who hold those views! (Sismondo, 2005, p. 14)

In contrast to Merton's attempts to protect scientific production against particularities, Kuhn's position implies that '[…] the empirical has quite a different significance because in Kuhn's way of thinking it is not possible to make an observation of nature in a neutral way' (Law, 2005, p. 44). In line with Kuhn's historically inspired theory of science, other historians criticized accounts of scientific progress towards truth for being 'presentistic', a type of history that interprets the past from the scientific perspectives of the present (Hess, 1997, p. 127). Within STS this is frequently referred to as 'Whig-history' (see for instance, Law, 2004, p. 101), a term borrowed from Herbert Butterfield's (1931) 'The Whig Interpretation of History'.

Finally, after the publication of Thomas Kuhn's (1970) 'The Structure of Scientific Revolutions', sociologists, anthropologists, and ethnographers ventured into the realm that had been off limits for both the sociology of knowledge and for the sociology of science, namely the social study of the production of the content of scientific knowledge (Knorr Cetina and Mulkay, 1983). In this new sociology of scientific knowledge, the question of scientific knowledge turned into an empirical question that could be studied in appropriate research sites. Social scientists studied active scientific controversies, investigating the processes leading to their closure. They ventured into top-notch scientific laboratories in high-energy physics and neuroendocrinology to study 'laboratory life' (Latour and Woolgar, 1986 [1979]), or how scientific facts were produced in and through practice and how experiments end (Galison, 1987). Scientific knowledge was no longer treated as a product of inaccessible and unassessable brilliant minds, nor was it true by dint of an inaccessible and unassessable relationship with reality as it *really* is. Scientists have to do the practical work to make their scientific statements truer than others.

Together these studies constituted a programme of empirical research on scientific practices called Science Studies, a term that avoids the disciplinary labels of philosophy, history, and sociology. The field quickly expanded to include social studies of technological development (Bijker, Hughes, and Pinch, 1987; Mackenzie and Wajcman, 1985) to become Science and Technology Studies. STS researchers followed science and technology from the site of their production out into various realms of society, among others into law (Jasanoff, 1995), medicine (Mol, 2002), and finance (MacKenzie, 2006; MacKenzie, Muniesa, and Siu, 2007). From a focus on the work of scientists and engineers, STS expanded to include various ways in which users mattered (Oudshoorn and Pinch, 2005). In doing so STS engaged with politically pregnant issues, from military technology (MacKenzie, 1990) to biopolitics (Shiva and Moser, 1995) and environmental issues (Asdal, 2011; Lidskog and Sundqvist, 2002; Wynne, 2010).

From studying science and technology empirically as particular yet ordinary sectors of society, some STS theorist developed their work into social theories in their own right (Latour, 2005; Law, 2004). While classical sociologies focused on intersubjective human relationships, these STS theorists worked to accommodate for materiality in their theories, 'the missing masses' of sociology (Latour, 1992). In the course of a couple of decades STS moved from studying the culture of science and technology to studying technoscientific cultures (Asdal, Brenna, and Moser, 2007), from efforts to understand how abstract products of the mind can represent a single, pre-existent reality to studying how multiple versions of the world are produced in and through a variety of material practices (Latour, 1983; Law and Mol, 2002) – from ways of knowing to ways of world-making.

More thorough accounts of the emergence of STS can be found in textbooks, handbooks, anthologies, and introductory chapters. Among them I would like to acknowledge as well as recommend for further reading a few contributions that have been particularly helpful for my own voyage of discovery into the field of STS. Within the textbook category, 'An Introduction to Science and Technology Studies' (Sismondo, 2005) introduces STS in a thorough and easily accessible way. This is where I would have started if I were to read my way into STS once again. Among the handbooks I would like to point out the 'Handbook of Science and Technology Studies' (Hackett et al., 2008), which provides an impressive, more than a thousand page overview of ideas and topics produced by STS. A classic, paradigmatic book is 'Science in Action: How to follow scientists and engineers through society' (Latour, 1987). This is where my STS reading started some years ago. Among STS-introducing anthologies, I would like to emphasize 'Technoscience – The Politics of

Interventions' (Asdal, Brenna, and Moser, 2007), a book that both provides a historical introduction to STS and introduces different ways in which several influential STS researchers have dealt with 'the political'. Finally, I should draw attention to the introductory chapter in John Law's 'Organizing Modernity' (1994), especially the pages containing his four principles for a 'modest sociology' (pp. 9–18). These few pages have several times assisted in my attempt to avoid accounting for the Guideline's genesis through the lenses of some pre-established ordering of the phenomena enrolled in its making.

While STS from its very beginning has paid attention to the role of politics in science production (Barnes, 1977; Bloor, 1976), my matter of concern is better characterized as the role of science in the production of politics. Exploring the role that science plays in politics is a growing field within STS. Contributions in Jasanoff (2004), Braun and Whatmore (2010), Shore, Wright, and Però (2011), and Ong and Collier (2005) serve as examples. In various ways these contributions question and extend the traditional understanding of what politics is, that is to say, who (human) and what (non-human) does politics, and where politics is done. My study brings STS into the meeting rooms where governmental bureaucrats are supposed to effectuate governmental policy, in this particular case by making a tool that aims at changing professional teachers' ways of working. The following presentation of theoretical resources relates to such a choice of research site and will be ordered according to the three previously introduced criteria for what theory must be able to do (Chapter 1.2).

Criterion 1: Theory that questions the 'nature' of scientific knowledge

My first criterion for what theory must be able to do is that it questions the 'nature' of scientific knowledge, the very resource that is assigned such a vital role in the governing and problem-solving policy project of science-based practice. In a one-sentence attempt to capture the essence of STS, John Law (2004) writes that it is 'the study of science and technology in a social context' (p. 12). Obviously, studying science and technology in a social context presupposes that the production of science and technology takes place within a social context. Law (2004) continues by expressing this fundamental presupposition in the following terms: '[T]he basic intuition is simple: it is that scientific knowledge and technologies do not evolve in a vacuum. Rather they participate in the social world, being shaped *by* it, and simultaneously *shaping* it' (p. 12; italics in the original). In slightly different

terms Sismondo (2005) refers to the same fundamental presupposition when he states that STS '…
starts from the assumption that science and technology are thoroughly social activities' (p. 10).

In Law's and Sismondo's views, the nature of scientific knowledge cannot be defined in terms of its
relation of correspondence to a pre-existing reality, its objective qualities that sets it aside from
other forms of knowledge and beliefs, or by its rational structure. Scientific knowledge is social
through and through. The implication of this is that the 'nature of scientific knowledge' can be turned
into an empirical question and that it is amenable to exploration and investigation using social
scientific methods. The site where scientific knowledge can be studied must be strategically chosen.
The production of scientific knowledge, or its travel, must be studied in places where science is still in
the making (laboratories, active controversies) rather than in places like textbooks, where the
science is ready-made.

Bruno Latour and Steve Woolgar's (1986) rather influential ethnographic account from the
laboratories at the Salk Institute in San Diego, titled 'Laboratory Life: The Construction of Scientific
Facts', is a salient example of a research site where science is still in the making. The book was first
published in 1979, and, as John Law (2004) puts it, 'helped to create a new field, that of the
ethnography of science' (p. 18).[6] The anthropological approach to scientists and scientific practice is
clearly evident in the very title of the book, and even more so in the following assertion:

> Whereas we now have fairly detailed knowledge of the myths and circumcision rituals of exotic
> tribes, we remain relatively ignorant of the details of equivalent activity among tribes of
> scientists, whose work is commonly heralded as having startling or, at least, extremely significant
> effects on our civilisation. (Latour and Woolgar, 1986, p. 17)

To approach scientific laboratories in the same way as anthropologists are well known for
approaching 'exotic tribes' is to treat scientific communities basically as alien. By doing so one
facilitates for asking unfamiliar questions about both scientists and what they do, questions that put
the spotlight on the *practices* in which knowledge and technologies are produced.[7] What, then, are

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[6] Law also refers to Knorr-Cetina (1981) and Lynch (1985) as facilitators in the creation of the 'ethnography of
science'.

[7] These have also been perceived as unpopular and provocative questions. The so-called 'Science Wars' in the
mid-1990s might testify to the heretical in an ethnographical approach to laboratories and their practices. As
David Hess (1997) puts it, the Science Wars were 'a wave of attacks on some prominent figures in science

the basic findings produced by ethnographical approaches to such practices? As John Law (2004) argues,

> […] ethnography lets us see the relative messiness of practice. It looks behind the official accounts of method (which are often clean and reassuring) to try to understand the often ragged ways in which knowledge is produced in research. (p. 18)

The tribe of scientists, Law (2004) writes,

> […] is not very different from any other tribe. Scientists have a culture. They have beliefs. They have practices. They work, they gossip, and they worry about the future. And somehow or other, out of their work, their practices and their beliefs, they produce knowledge, scientific knowledge, accounts of reality. (p. 19)

Ethnographers of scientific knowledge production bring about a shift in focus that runs counter to the image of the non-biased scientist producing knowledge that represents reality. Instead, they argue for an inverse relation between representations and realities (Woolgar, 1988), that realities are *constructed* in necessarily contingent scientific practices. Nature does not come first: '[S]cience and technology do not provide a direct route from nature to ideas about nature, that the products of science and technology are not themselves natural' (Sismondo, 2005, p. 51). Rather, scientific practices come first; it is within these practices where accounts of realities are constructed. Hence, scientific claims are basically *versions* of the world 'out there', versions that could have been different under different practical contingencies.

To clarify how I perceive this fundamental relation between realities (ontology) and science-made representations of realities (epistemology), I draw attention to the picture in Figure 4.

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studies […]. These attacks tended to single out a few feminists and radical constructivists, subject them to distorted readings, then dismiss the entire field as a hotbed of postmodern irrationalism' (p. 1). For an extensive reading about the Science Wars, see Labinger and Collins (2001), who also accounts for efforts to bring about peace and mutual respect.

Figure 4: The mountain of Máttačorru (Photographer: Terje Myller)

It is a photo of a mountain called Máttačorru, not very far from where I'm living. No doubt, the mountain is real. I have been there a few times, and neither the steep and rugged mountainsides nor the heavy heartbeat as I walked them were illusionary. Máttačorru is real. The photo, on the other hand, is not the mountain but a representation of it. Although it might look like a heavily manipulated artistic photo, the glowing sky and the intense blue coloured landscape are familiar for people living where the sun stays below the horizon for a couple of months during the winter. If I did not already know, my guess would be that the photo was taken as the daylight has started to fade on a very cold day in January. Indeed, it represents Máttačorru as mountains can appear under such circumstances. It looks like a *realistic* photo, a factual representation of Máttačorru. The photographer, Terje Myller, is running a blog about photography.[8] This is my translation of some of his comments to this particular picture:

> A sensor is not even close to matching the eye's ability to detect tonal and colour shades from the deep shadows to the crackling highlights. The motif is pretty boring, but the fire of light inside the mountain was great. That was what I wanted to preserve. Sometimes, one wants to preserve, other times one wants to change. To reproduce the scale of colours was not technically easy. The range between the lightest and darkest tones is wide. My Nikon D700 equipped with an expensive Nikkor 70-200mm could barely accommodate for the full tonal range in a 14 bit RAW

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[8] http://merenntusenord.blogspot.no

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file. In the processing of the image, it was important to keep a steady hand in order to preserve the tonal spectrum. It's easy to lose the shades while working. (Myller, 2011)[9]

If we transpose the photographer into the position of a scientist, we might say that he has made a scientific representation (epistemological account) of the mountain (ontology) as it was in the moment the picture was taken. However, the comments on how this representation was made shed light on the practice involved in making the photo: what he wanted to bring to the fore and what he needed to downplay, the work invested in making it happen, the technology involved. Indeed, there could have been different representations of Máttačorru: different intentions, different equipment, a different position of the photographer, different weather, a different season, a different time of the day. These would all be contingences likely to produce different representations. Moreover, the mountain would underdetermine each and every one of the possible photos that could have been made. There is simply no position available for any photographer, independent of what equipment or software he applies, to make a true, factual, or realistic photo of the mountain. The mountain is simply not accessible independent of some sort of practice. Any practice accomplished, whether it is free-skiing, hunting, geological mapping, trigonometry, or photography, would *produce* Máttačorru in a different way. Applying the production term does of course not imply that I claim that photography has the capacity to remove rocks or melt snow. It simply means that any representations made, just as those made by science, are productive in the sense that they necessarily highlight and downplay features of what they claim to represent.

Transposed from photography to science, the mountain corresponds to reality, the photographer corresponds to the scientist, the photo corresponds to a scientific claim, and the work of the photographer, including his struggle with the equipment and software, corresponds to scientific practice. And we might also transpose the multiple ways a mountain can be represented by photographers' practices to the multiple ways realities can be represented by scientists' practices. The 'nature' of scientific claims is that they are versions of the reality they assert to represent, produced in and through necessarily contingent scientific practices. How does this concern my ambition of interrogating the policy of science-based practice? In the following I will highlight what I perceive as two crucial methodological implications. While the first one has to do with the choice of research site, the second regards the question of what a-priori assumptions one can and cannot make as one enters the chosen site.

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[9] http://merenntusenord.blogspot.no/2011/01/januarlys-med-respekt.html

The first implication is as follows: Questioning scientific knowledge as facts necessarily points to the issue of setting science in train. By taking science down from its epistemological pedestal, it is no longer a given that scientific claims are portable problem-solving resources endowed with a sturdiness that makes them resistant to the transmitting enterprise. Just as Diesel's engine does not leap 'with its own strength at the consumers' throat, irresistibly forcing itself into trucks and submarines' (Latour 1987, p. 133), neither does scientific knowledge on prevention of alcohol and drugs have a built-in thruster that makes it reach the pages of a guideline or the teachers' classrooms.

Instead, one might approach the transmission of science from its producers to the fields of practice with the following question: If scientific knowledge is contingent and no longer can be perceived as facts independent of time and space, what happens then when it is set to travel through time and space, for instance by the device of a governmental guideline? This thesis approaches the question by studying the Guideline's genesis ethnographically. The very choice of doing so is based upon the assumption that contingent scientific knowledge underdetermines what a science-shipping technology finally ends up being. Policy language is likely to denominate the science shipping enterprise by verbs like 'communicate', 'disseminate', 'provide', 'support', 'promote', 'spread', or 'share'. Assuming that science is contingent, and (thereby) underdetermining, makes entering a bureaucratic tool factory a sensible strategy for exploring what these verbs obscure.

Refuting the idea of scientific knowledge as immutable facts is to problematize its mobility and thus also the fundamental logic of science-based practice as a supply line of knowledge. That scientific knowledge does not 'leap with its own strength' runs counter to what Bruno Latour (1987) recognizes as 'the model of diffusion', the traditional notion of knowledge transmission as ready-made and science-based innovations, diffusing from the laboratories to the world outside (p. 132). It challenges the transportability of scientific knowledge attributed by policy language, and thereby directs the ethnographer's attention towards the transmission stage. Making a governmental guideline is no longer about experts and bureaucrats merely selecting, synthesising, repacking, and setting in train factual representations of the problem 'out there' and its solutions. Instead, the offices and meeting rooms where the making unfolds become a site suitable for exploring what is going on as science is made to bear on practices in the frontline of the welfare state. In the same way as an ethnographical approach to scientific practices in laboratories makes sense, it likewise makes

sense to approach ethnographically the science-*transmitting* practices within a bureaucratic centre of expertise. What happens in the productive processes cannot be taken for granted.

Acknowledging the contingent production of scientific knowledge and science's underdetermination of its own fate entails a second crucial methodological implication for this study: If scientific knowledge cannot make it to the fields of practices by its own strength, neither can the content of the ready-made Guideline be understood as the outcome of some intrinsic qualities in the scientific components that successfully made it to the ready-made Guideline. The same applies of course for the scientific knowledge that was *unsuccessful* in making it to the Guideline's pages: Its unkind fate in the waste basket cannot be explained by the lack of such intrinsic qualities. It takes effort and work to assemble a knowledge supply line, and it is within the accomplishment of this work – in my particular case the Guideline's production process – that one can pursue an understanding of the dynamics that led scientific content towards the ready-made Guideline or to the waste basket of the authorship. To be more specific, the waste basket contains scientific publications claiming to identify the following:

- different alcohol- and drug-related problems,
- the prevalence and consequences of different problems,
- different causal relations,
- the anticipated effect of different interventions,
- the efficiency of different implementation strategies.

These are all potentially relevant scientific components whose destiny is not predetermined by their trustworthiness, rationality, applicability, or some other intrinsic quality. Throughout the authorship they might of course be attributed with these qualities, but this study of the Guideline's genesis rests upon the assumption that there was no decisive immanent feature in the scientific publications that were at stake. What survived and what went to the waste basket was settled in and through the practices of producing the Guideline, not in advance.

This rejection of science as a carrier of intrinsic qualities that make it relocate by its own is a methodological imperative that facilitates the ethnographer to explore practices but *without* a preordained scheme of causes and effects, strong and weak, what acts and what is acted upon, context and text, or any other a-priori ordering dichotomy. In writing about non-reduction, one of John Law's components of what he calls a 'modest sociology', he reminds us that such dichotomizations imply drawing 'a line between two classes of phenomena by distinguishing those

that drive from those that are driven' (Law, 1994, p. 12). Basically, I read these words as a request for being cautious about a-priori assuming how something comes about without *attending to* how it comes about. For my purpose, this caution is not confined to attributing a driving force to scientific knowledge: Policy documents, the institutional environment, the intended receivers, or any other phenomenon enrolled in the Guideline's making, should not be a-priori ordered as yielding, or having, right-of-way in the progression of the authorship. Instead, as Law (1992) suggests, 'we should start with a clean slate. For instance, we might start with interaction and assume that interaction is all that there is' (p. 2).

As a methodological imperative this is closely akin to two of the four tenets in what David Bloor (1991) calls 'the strong programme in the sociology of knowledge': that of *impartiality* and that of *symmetry*.[10] Regarding impartiality, he suggests that the sociology of knowledge should be 'impartial with respect to truth and falsity, rationality or irrationality, success or failure. Both sides of these dichotomies will require explanation' (1991, p. 7). Applied to this study, I endorse this tenet in the sense that both successes and failures have been subject to exploration. Or more concretely, in accounting for the Guideline's genesis, the textual content that made it to the published guideline, and that which did not, will be treated impartially. They are both classes of textual material that potentially can provide an understanding of the Guideline's production.

With regard to symmetry, Bloor (1991) suggests that the sociology of knowledge should be 'symmetrical in its style of explanation. The same types of cause would explain, say, true and false beliefs' (p. 7). For my purpose, this implies that the textual content of the ready-made Guideline, and the textual content of the authorship's waste basket, will be treated as outcomes of the same production dynamics. In studying what was published and what was deleted, explanation will be sought in the practices that engendered such an ordering of textual content. To paraphrase Bloor, the same type of cause will explain both success and failure.

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[10] The two others tenets are 'causality' and 'reflexivity' (Bloor, 1991, p. 7).

Criterion 2: Theory that is sensitive to the materiality involved in processing scientific knowledge

The second criterion for what theory must be able to do concerns the question of how to accommodate for the materials enrolled in the Guideline's genesis. On the basis of the authorship I attended, an almost endless list of materials could be made containing artefacts such as meeting rooms and offices, whiteboards, computers, telephones, audio-visual equipment, or for that matter, my own recording mobile phone. In this thesis, however, specific attention will be directed towards the various written materials involved in the making of the Guideline, materials that I gather together under the generic term *documents*. According to Freeman and Maybin (2011), a document is 'a mark made on a thing' (p. 159). This means words and other signs on a paper, and, as much of the documents involved were made and shared electronically, words and signs on a screen. To be more specific, the term *document*, as it is used in this thesis, comprises a wide range of written materials, such as assignments, policy documents, scientific reports and reviews, different guideline drafts, hearing submissions, assessments, meeting notices, minutes, tables, emails, notes, and, of course, the very ready-made Guideline. The marks other than words include logos, signatures, colours, fonts, figures, drawings, arrows, smileys, bulleted lists, and textboxes. How, then, should these things with marks made on them be seen and positioned in an analysis of the process of producing the Guideline? What potency do these language materials possess? What part can documents possibly play? How should they be accounted for?

Theoretically the field of STS is quite heterogeneous, drawing on theoretical traditions as diverse as Anglo-Saxon symbolic interactionism, French semiotics, discourse analysis, and feminist theory. Some of the fault lines between theoretical traditions engender debate and friction. One of these revolves around the question of *agency* in relation to human actors and things (Sayes, 2014). In terms of effects, what and how much can or should be attributed to the *intentions*, plans, and agendas of human actors? And in what sense can artefacts be said to have agency in their own right, that is, without the necessity to recur to human intentions? These core questions are conspicuously illuminated by the late 20th century debate within STS, referred to as the *epistemological chicken debate* (Pickering, 1992). The debate took shape as a controversy between scholars of the Anglo-American Sociology of Scientific Knowledge (SSK) and those of the French Actor-Network Theory (ANT).

The bone of contention was the divide between human subjects and non-human objects, and the question of whether analysts should respect or reject this demarcation. The SSK side of the controversy, represented by Harry Collins and Steven Yearley (1992), argued for preserving the divide. Humans and things, or, in more general terms, the social and the natural are fundamentally different ontological entities possessing fundamentally different capabilities: Human actors, as part of the social/human realm, have intentions; they *act*, and human action might be purposeful, strategic, and unpredictable. As part of the natural/material realm, objects and artefacts *behave*, and their behaviour is rule bound and without intentions. Natural objects and artefacts do not possess agency in their own right. In studying construction processes, SSK does not reject the existence of objects and artefacts, but their part played is framed either as contextual (the *behaviour* of scallops circumscribes the *actions* of fishermen and scientists) or as mediators of human intentions (doors and automatic door closers behave on behalf of some human intentions behind the artefact). Construction processes, including scientific construction of facts and technological construction of artefacts, are basically social.

The French side of the epistemological chicken debate, represented by Michel Callon and Bruno Latour (1992), rejected, or, in their own term, *crisscrossed* the divide between humans and things. However, their rejection 'is not a question of asserting that there is no perceptible difference. The point is methodological. […] the distribution of competences and roles should be left open' (p. 356). In their own view, Callon and Latour share with SSK the urge to attack natural realists' hegemony on the definition of nature. But, as Callon and Latour explained, in contrast to SSK,

> […] we have never wished to accept the essential source of their [the natural realists'] power:
> that is the very distribution between what is natural and what is social and the fixed allocation of
> ontological status that goes with it. (p. 348)

Hence, while the SSK side insisted on treating humans and non-humans as fundamentally different classes of phenomena, that is, ontologically, the ANT side insisted on *not* making such a-priori assumptions. Material semiotics provide a language convenient for this symmetrical approach. Callon and Latour introduced the semiotic concept *actant*, encompassing 'whatever acts or shift actions, action itself being defined by a list of performances through trials; from these performances are deduced a set of competences with which the actant is endowed' (Akrich and Latour, 1992, p. 259). In other words, it is through attendance to the performances in which humans and non-humans partake, that their agency should be attributed. Within the ANT perspective, agency is, as Sismondo (2005) puts it, 'an effect of networks, not prior to them' (p. 72).

The methodological implications of an anthropocentric Anglo-American SSK position versus a material-semiotic French ANT position are of vital importance for the question of how documents should be seen and positioned in the analysis of a bureaucratic authorship. In insisting on, or taking for granted, the human–material divide, the SSK position would imply that human agency is built into the documents partaking in the Guideline's production. Documents are representations of the intentions of some*body*, and although they are partaking objects, they partake as mediators of their makers' intentions, beliefs, plans, or worldviews. The success or failure of documents engaged in negotiating the Guideline's textual content is the success or failure of their built-in human intentions. Thus, agency is located prior to the Guideline-making practices. Within the theoretical framework of SSK, the process of constructing the Guideline is basically a *social* construction enterprise.

By its rejection of the human–material divide, the ANT position on the other side affords for documents to be part of a heterogeneous productive partnership that makes no a-priori ranking between human and non-human actants regarding their potential capabilities. In terms of the effect of the performances they engage in, the enrolled documents are endowed with an agency in their own right. It is no longer a question of what documents do on behalf of somebody, but what they do and what they make as performing actors among other enrolled human and non-human actors. In discussing the discipline of anthropology, Matthew Hull (2012) adopts Ben Kafka's assessment regarding how historians have paid attention to documents: Until recently, Hull writes, anthropologists have 'discovered all sorts of interesting and important things looking *through* paperwork, but seldom paused to look *at* it' (p. 12; italics in the original). To look *through* versus *at* documents might be an apt metaphor for capturing the essence of an SSK and an ANT approach to these language materials: An SSK approach likely would look *through* documents, to examine them and explain the outcomes of the practices in which they engage, with reference to the human agendas behind the documents. Conversely, an ANT approach would look *at* documents and how they partake in socio-material practices without reference to the human agendas behind them. Documents are language materials assumed to have agency of their own. By being detached from human intentions documents are endowed with a relative autonomy; to look *at* documents instead of looking *through* them is 'to analytically restore the visibility of documents' (Hull, 2012, p. 13).

Two interrelated STS articles can clarify this point further. Each carries the inversed title of the other: 'Do Artifacts Have Politics?' (Winner, 1986) and 'Do Politics Have Artefacts?' (Joerges, 1999). In the former, Langdon Winner assumes a rather strong link between the intentions of the New York

architect Robert Moses and the low bridges over the highways leading to Long Island's beaches. As Winner tells us, these bridges prevented public transportation from accessing the beaches, thereby also blocking the beaches from New York's poor and black populations. In his article, Winner effectively answers the question in the article's title: Yes, artefacts do have politics! But *what* or *who* is it that *does* politics? Where is agency located? In answering these questions, Winner looks *through* the artefact subjected to his examination, and what he sees is Robert Moses and his somewhat dubious intentions. The bridges are doing politics *on behalf* of the architect behind the bridges.

Winner's article is well known in STS. In discussing the article's great success, Bernward Joerges suggests a different answer to the agency-location question. In the article 'Do Politics Have Artefacts?' (1999), Joerges concludes as follows:

> 'Greater than the mightiest idea is a story well told'. Winner's Moses example is so winning because in itself it is a particularly well constructed artefact, capable of serving a great number of rhetorical purposes. The form of the parable is so seductive because it lends itself to several things: it leaves room for multiple interpretations, yet it preserves concrete, ostensibly historical reference; and it offers in a nutshell a far-reaching, causally formulated theory of technology well in tune with healthy common sense. (p. 420)

The help offered by Joerges is twofold. First, he exceeds the limited understanding of artefacts as something fundamentally different from texts, a symmetry to which I adhere. Documents in all their shapes will not be perceived and treated as something fundamentally different than other materials of the natural world. Basically they too are objects, artefacts, or technologies. Second, and most important for my own position, Joerges demonstrate clearly how looking *at* things deviates significantly from looking *through* them. The success of the artefact subjected to Joerges' discussion (Winner's article) is not explained by looking through the article and into Winner's intentions – say, his urge to hold Moses responsible for designing segregating bridges or his drive for achieving a pedagogical success. The success is explored by looking *at* Winner's article and how it engages in practices, for instance in educational courses in STS. Winner's article is a relatively autonomous artefact that has agency in its own right.

I perceive documents as constructed artefacts with the potential to have politics, but not in the Moses–bridges sense of acting on behalf of the designer's intentions. Documents have politics in the sense that they are able to make impact, especially if they are well-constructed. They are doers, not in terms of being mediators of human intentions, but as artefacts playing part in the productive practices they engage in. What they do and the difference they make, or do not make, might be

studied empirically by attendance to the unfolding of the practices they partake in. Such an understanding of the potential capacity of documents runs parallel to my understanding of the potential capacity of scientific knowledge: Just as I refrain from presupposing that scientific knowledge is carrier of some intrinsic rationality that helped them make imprints on the ready-made Guideline, so do I refrain from presupposing that documents by dint of being carriers of human intentions are capable of making imprints.

Detaching the document from its human intentions has a crucial methodological implication for this study: Regarding their potential acting capabilities as well as the outcome of their part played in the Guideline's genesis, it can no longer be assumed that humans and non-humans are fundamentally different phenomena. Rather, it implies that humans and non-humans *in principle* should be treated *symmetrical*. Expanding the symmetry tenet of the 'strong programme' (Bloor, 1991, p. 7), this removal of the demarcation line between humans and non-humans is recognized as 'the generalized version of the principle of symmetry' (Law, 1987, p. 130) or 'the principle of general symmetry', (Bijker, 1995, p. 273). Closely associated with Actor-Network Theory, and in particular Michel Callon (1986), this version of symmetry implies a 'break with […] the division between human and nonhuman actors' (Asdal, et al., 2007, p. 23).

As a methodological imperative applied to this study of the Guideline's production process, I view the principle of general symmetry as particularly helpful in preventing an undesirable reductionist assumption of what humans and non-humans potentially can and cannot do. As for Bloor's version of the principle of symmetry, the ANT version directs attention to practice in order to explore productive processes. But, the ANT version also provides lenses through which one can attend to those processes without pre-allocating acting capabilities between *whom* and *what* is acting. This has significant implications for how this study of the Guideline's genesis is carried out. The tool factory is not perceived as staffed with human actors alone, but also with a variety of partaking written language materials engaged in the Guideline's production. To presuppose that their acting capacities are of a different nature than that of the human actors involved, for instance by assuming that a policy document confines the human actors' space of possibilities, is to run the risk of pre-ordering the production dynamics without paying attention to them. As Lise Justesen (2005) argues,

> It is all about regarding text as an entity without essence, receiving its meaning by sheer dint of the relations it is included in. By itself, a document is irrelevant and without meaning, but as it

becomes mobilized and included in a network, it receives meaning and performs as an actor in interaction with other actors. (p. 225)[11]

Adhering to the principle of general symmetry also has significant implications for the choice of words put to use in accounting for the Guideline's genesis. Detaching documents from the intentions 'behind' them and acknowledging their acting capabilities implies the need for a symmetrical language, a non-privileging and non-depriving language regarding humans and documents. Humans can no longer be considered the only phenomenon capable of 'doing', 'acting', 'making', 'performing', 'arguing', 'articulating', 'ordering', 'attributing', 'shaping', and a lot of other verbs pointing in a productive direction. Although these are verbs normally associated with productive action accomplished by humans, artefacts likewise possess such capacities: Documents are potential 'doers', 'actors', 'makers', 'performers', 'arguers', 'articulators', 'order-makers', 'attributors', 'shapers', and so on. Throughout this thesis, none of these verbs, nor their equivalent nouns, will be reserved for the humans or non-humans that partook in the Guideline's 'heterogeneous engineering' (Law, 1987).

Criterion 3: Theory that acknowledges the performativity of materials in production processes

The third criterion for what theory must be able to do is that it acknowledges performativity of materials in production processes, or, to be more specific, the performativity of documents in the process of producing the Guideline. This criterion relates strongly to the previous one. As accounted for, I perceive the principle of general symmetry as a methodological imperative that facilitates for the visibility of documents: Through giving documents a relative autonomous position, they can be taken into account in their own right, not just as mediators of some human agenda 'behind' them. Furthermore, the principle of general symmetry evades privileging or depriving a-priori the agency of the human subjects and the non-human objects enrolled in the Guideline's genesis. Finally, the criterion evokes a language convenient for accounting for the production process based on an analysis that seeks to avoid a pre-established subject–object dichotomy.

To adhere to the principle of general symmetry is not done simply by attributing human traits to documents. The use of terms normally associated with human subjects, for instance 'actor' or 'to

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[11] My translation from Danish.

perform', might easily look like anthropomorphisms – a projection of humanity and human capacities onto documents. To be on the safe side, I do not claim that documents can be emotional, that they become enthusiastic, disappointed, angry, or develop malicious plans. But just like humans, documents might well show attention and ignore, support and contest, render possibilities and block them, forbid and permit, make allies and enemies, confirm and change the course of events, call and end a meeting, and so on. However, my point is not to account for the acting capacities of non-human objects *in contrast* to human subjects. In rejecting what Latour (1992) calls 'the Great Divide' (p. 358) between humans and things, the question at stake is rather this: How can we conceptualize the performativity of documents *without* re-establishing the undesired demarcation between human subjects and non-human objects? In line with Michel Callon's (2007) discussion on the performativity of economics (pp. 311–357), I will elaborate on this question with the aid of Annemarie Mol's (2002) discussion on the notion of performativity and performance in sociology.

In reflecting on the persistence of what she recognizes as a nature–culture divide, she suggests that one reason for this is

> […] that many social scientists fear that as soon as the divide is not respected, natural scientific methods will take over. Imperialistically they will reach everywhere and human subjects, instead of being listened to, will get objectified. (2002, p. 34)

The risk of a hostile takeover by natural scientists and their methods was a crucial part of Collins and Yearley's (1992) 'epistemological chicken attack' against Actor-Network Theory in general and Callon and Latour in particular. Mol herself fearlessly proposes an alternative outcome of turning down the nature–culture divide:

> […] not respecting the divide also opens another possibility, one that is hardly ever mentioned: it might also be that the social sciences have methods that are capable of reaching out, of going everywhere – even if they can't do everything. […] One of these is a sociological tradition designed for the study of human subjects. If pulled and pushed a bit, it may be broadened to encompass subject/objects of all kinds. (2002, p. 34)

Mol takes as her starting point Erving Goffman's 'The presentation of Self in Everyday Life' (1959) and his use of theatre metaphors as a way of showing how human subjects perform, not themselves, but *a self*, to each other. As Mol puts it, Goffman

[…] launched a study of social selves. In shops, factories, churches, pubs, schools, hospitals and other settings where sociologists may venture and observe what happens, identity is not expressed: it is performed. (p. 34)

However, Goffman did not launch a sociology that exceeds the nature–culture divide. In his view people 'have real selves deep down, back stage. […] The identity people perform is not deep, it is a mere performance' (Mol, 2002, p. 35). The back-stage identity, the real selves deep down, was 'nature' to be studied by psychologists. The 'mere' performances were 'culture' to be studied by sociologists. Nevertheless, Mol emphasizes, performances are what other people react to; they are 'socially effective' and therefore 'an important object of sociological study' (p. 36).

Mol continues her discussion on performance and performativity by drawing upon Judith Butler (1990) and her concern about gender identity. Butler's argument is 'that there need not be a "doer" behind the deed," but that the "doer" is variably constructed in and through the deed' (p. 142). According to Mol (2002), this position implies that 'the opposition between surface appearance and deep reality has disappeared' (p. 37). The nature–culture divide is exceeded in the sense that gender is conceived of as constituted in and through gender-producing performances; human subjects are *doing* gender. 'But what about the entities of the natural world, the objects?', Mol asks (p. 38). She then reminds us that black ties and yellow dresses, bags and glasses, shoes and desks, and chairs and razors are among the stage props. These are non-human objects that, together with human subjects, partake in the gender-producing performances:

Performances are not only social, but material as well. So there they are, the objects. They take part in the way people stage their identities. But once objects are on stage we can investigate their identities too. (2002, p. 40)

Investigating the identities of objects as they perform on stage is what Mol does in 'The Body Multiple: Ontology in Medical Practice' (2002): 'What is studied here are the identities an object may have when staged, handled, performed.' (p. 41). Mol prefers the verb *enact* to capture the performativity of objects. When introduced, she deliberately abstains from giving any references to the verb enact 'precisely because I would like you to read it in as fresh a way as possible. In practice, objects are enacted' (p. 41). Here is my reading: To say that objects are *enacted* in practice is to direct attention to their performances in the practices they are engaged in as well as to the outcomes of their performances, to the identities that objects achieve as they are enacted in practices.

Crucial to Mol's (2002) argument is that an object's identity is never set for once and for all. Her analysis

> […] does not simply grant objects a contested and accidental history […] but gives them a complex present, too, a present in which their identities are fragile and may differ between sites. It does so by deploying sociological, and more specifically ethnographic, methods of study. (p. 43)

Mol's ethnographical study of medical practices in hospitals demonstrates the 'complex present' of objects: Different practices produce different bodies. Ontology is at stake in practices, not just perspectives on singular realities:

> If practices are foregrounded there is no longer a single passive object in the middle, waiting to be seen from the point of view of seemingly endless series of perspectives. Instead, objects come into being – and disappear – with the practices in which they are manipulated. And since the object of manipulation tends to differ from one practice to another, reality multiplies. (Mol, 2002, p. 5)

For the purpose of interrogating the policy of science-based practice through the study of the Guideline's genesis, Mol's theoretical framework is highly relevant. I will sum up its relevance in four points:

First, her performative approach allows for perceiving documents as stage props partaking in the authoring practices. To paraphrase Mol (2002), documents become 'framed as parts of events that occur and plays that are staged' (p. 44). Hence, they become apparent, visible, and partaking artefacts. Documents become actors in the play, not just inanimate representations to which human subjects adapt more or less obediently.[12]

Second, documents are conceived of as basically without essence. They receive their identities in and through the practices they engage in. The essence of a document – its significance, its status, its meaning, what it represents – is all an outcome of the plays the document takes part in. If a document expresses the feasibility of shipping scientific knowledge through guidelines, this is an outcome of the practice it plays part in. It is, in Mol's terms, transportability *enacted*.

Third, the identity of documents is not fixed. As Mol (2002) puts it, their identities are both fragile and may differ between sites. Hence, a scientific report may achieve the identity of a direction-giving

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[12] For those working in the theatre it is obvious that stage props are not just embellishments.

document at one stage of the Guideline's genesis, but on a later production stage it might appear as a document pointing in the 'wrong' direction. As we will follow the enactment of several documents through different production stages, the fragility regarding their identities will be clearly evident.

Fourth, a performative approach directs attention to the productive aspects of practice. Practice is conceived of as a reality-producing activity, and different practices might produce different realities. Thus, realities are effects of the plays that are staged. To invoke again the parallel with science, the notion that 'practice comes first' is similar to that of an inversed relation between epistemology and ontology (Woolgar, 1988). But according to Mol's (2002) notion on performativity, any type of practice, not just that of science, might be explored as a reality-producing activity.

Applied to the practices of science-based practice, the notion of an inversed productive logic runs counter to the prevailing image of policy practices as responses to problems. Whether it is the practices of policy-making, science-production, science transmission, or the professional practices at the frontlines of the welfare state, they all are practices framed and traditionally perceived as efforts to deal with welfare problems 'out there'. Within such a framing, the measuring of their efficiency makes perfectly sense. Within the frame of performativity as suggested by Mol (2002), one might instead explore ways in which problems 'out there' are produced in and through these practices.

Given my ambition of interrogating the policy of science-based practice through an ethnographic study of the Guideline's genesis, I have argued for the aptness of a performative approach. It affords for the interrogation of how documents played part in the making of another document. But it also affords for an interrogation of the performances of the ready-made Guideline, its part played in the plays that are staged. As a document, the Guideline, once it was completed and published, also became a stage prop in the play of directing teachers towards science-based practice. And as Mol (2002) reminds us, staged plays produce realities. Hence, a performative approach also allows for the interrogation of the 'realities' made in and through the *play of governance* in which the Guideline is assigned a science-shipping part. Chapter 10 is devoted to such an interrogation.

2.3 Methods and data collection techniques

In many respects, the choice of studying the Guideline's genesis ethnographically, as an anthropologist, implied closeness between me as a researcher and the production process subjected to my study. It was fieldwork not only within my own native country, but also within a policy field and a bureaucratic institutional setting with which I was rather familiar. Moreover, the work of assembling the Guideline's textual content was mainly accomplished by an author group holding their meetings in offices and meeting rooms within walking distance – in the same building, just three floors beneath my own office. Due to my former experiences both as a bureaucrat and as a science-shipping agent within the policy field of prevention of alcohol- and drug-related problems, I also felt rather familiar with what they were doing and with the vernacular applied in their efforts of composing the Guideline's textual content. As if that is not close enough, I was acquainted with all of the author group's members via our previous collaboration in supplementary educational courses. For an anthropologists switching hemispheres while doing fieldwork, closeness takes effort while alienation usually is the starting point. At least that is how anthropological literature is likely to portray the fieldwork experience: Alienation 'is where fieldwork begins, the point from which we move toward familiarity, knowledge and understanding' (Gibb, 2005, p. 225). In my case the table was turned: Closeness was the point of departure of my fieldwork; estrangement required efforts.

I had to make an effort to create distance. For an important part, my distance was achieved through what Richard Freeman calls 'theoretical reimagining' (Freeman, 2012, p. 18). The theoretical resources applied in this study provided lenses through which I could observe the Guideline's genesis without taking the actors' versions at face value. Two dimensions are particularly important for my theoretical reimagining: that of *performativity* and that of *recursivity*. The performative dimension has already been introduced (Chapter 2.2.). In short, it implies an analytical detachment from the human intentions 'behind' what was said and written. The materials of language enrolled in the production process are conceived of as having agency of their own. My attention has been directed onwards – that is, the performances of the spoken and the written.

The *recursive* dimension implies a way of thinking about the Guideline and its production as a self-generating process (Law, 1994, p.15), that the making of the Guideline entertains the logic that commissioned it. Such an understanding runs counter to the linear causal logic embedded in the policy of science-based practice. Within the frame of the policy logic, the Guideline is a science-transmitting tool propelling a change in teachers' practice, which in turn affects the actions of their

pupils, which in turn reduces alcohol- and drug-related problems in society. The notion of recursivity allows for exploring how this linear logic of causes and effects is maintained and reinforced by the Guideline's making. Hence, recursivity addresses effects other than those heralded by the logic of science-based practice. The Guideline is no longer a link in a chain of change; it produces the *image* of a chain of change. Escher's 'Drawing Hands' aptly captures in a vivid image this recursive way of thinking (see Figure 5).
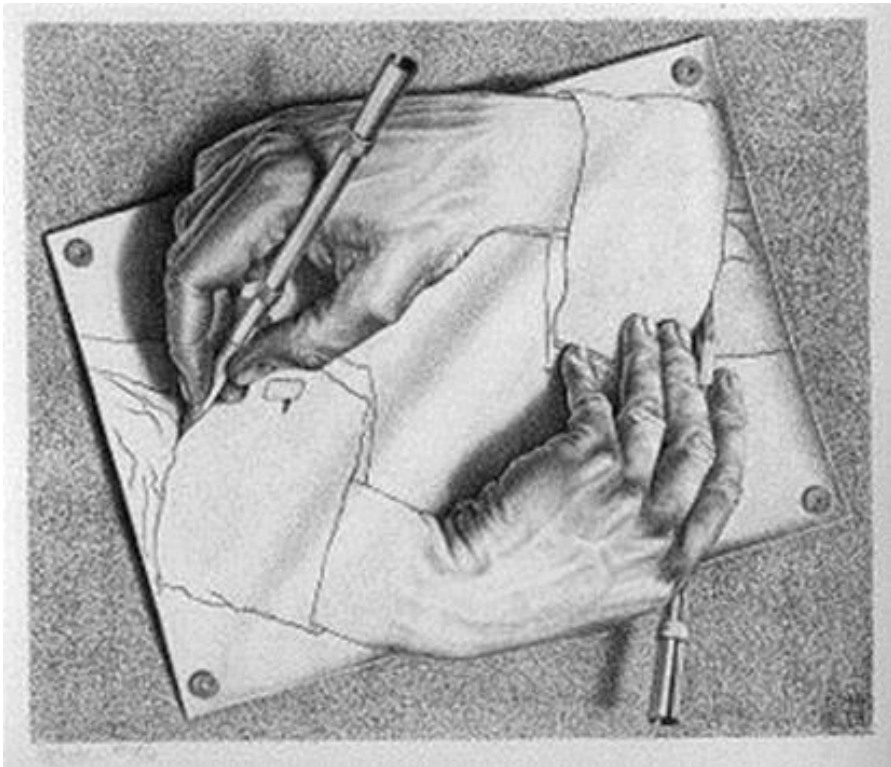
Figure 5: M. C. Esher's 'Drawing Hands' (1948)

I admit that it is difficult to express recursive processes through linear sentences. What *makes* and what is *made by* are no longer in an aligned sequential order. But words and sentences are. Difficult as it may be, my account of the Guideline's genesis hopefully will demonstrate how the notion of recursivity afforded for a theoretical reimagining of a production process that was close to me in many respects.

Yet writing this thesis in English also contributed to distance with regard to my object of study. As a native speaker of Norwegian, the writing process in English has been challenging in different ways. Of specific relevance for the closeness–distance issue is that the Guideline's genesis was enwrapped in spoken and written Norwegian. Only a few documents referred to in this thesis exist as English versions. The vast majority of the written empirical materials and all verbal statements quoted in my text are my translations. Indeed, it has been a struggle to translate the Norwegian bureaucratic vernacular into English. On the other hand, it provided an opportunity to dwell on, carefully consider, and rethink the meaning of words and phrases commonly used in Norwegian policy language. As George Lakoff and Mark Johnson (1980) have pointed out,

> The concepts that govern our thoughts are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities. (1980, p. 3)

If this thesis had been written in Norwegian, I would probably have run a bigger risk of adopting the policy language applied and with that perhaps also the policy logic performed by the language applied.

The closeness between me as an ethnographer and the production process subject to my ethnographical interrogation clearly resonates with different scientific closeness–distance debates. Within the discipline of anthropology it resonates with closeness–distance issues embedded in debates dealing with fieldwork as method and experience. However, the text of this thesis is not moulded by an ambition of contributing to these debates. To the contrary, I resign from the fieldwork debates with which my work resonates. I borrow a rather straightforward statement by Annemarie Mol (2002): To avoid the entanglement with discussions in the literature about the performance term, 'I do not want these resonances, nor do I want this text to be burdened with discussions that it seeks no part in' (p. 41). Relevant as they may be, this section is not an attempt to contribute to method debates. But resigning from them, even those that explicitly deal with different closeness features of the ethnographer, does not prevent a critical reading of this thesis. To the contrary, I consider being open and explicit on relevant contingencies of my own research as affording for a critical reading, also through the lenses of scientific methods. Whether this thesis will take part in the debates with which it resonates or not, will be in the hands of its readers.

Awareness of being so close to the Guideline's genesis in so many respects inevitably gave rise to a concern for not taking aspects of the production process for granted, a concern that manifested itself

in the meticulous ways in which I collected empirical materials. Since closeness might well imply the risk that the researcher unconsciously operates with a pre-established ordering of what counted as relevant and irrelevant, or uncritically adopts the versions of what was going on provided by the people and documents involved, I established the following precautionary principle from the very start: Everything that was said and written, prosaic as it might appear on first impression, had the potential of being relevant empirical material. Hence, the mesh width of my empirical trawl was small, and given that the Guideline's making lasted for more than four years and at some stages was rather intense, the amount of empirical 'stuff' became massive.

According to my own records, I attended altogether 36 author group meetings at KoRus Nord, of which approximately one third included video link participation of the two directorates involved in the production process: The Norwegian Directorate of Health and the Norwegian Directorate of Education and Training. In addition, I attended two meetings outside the KoRus Nord offices: One meeting between the project manager and the two directorates took place in the offices of the Directorate of Health, and one seminar in which the project manager presented the Guideline in progress to the other KoRus centres of expertise and to representatives for the Directorate of Health. A considerable amount of handwritten field notes was the result of my presence in a total of 38 meetings. Almost 25 hours of tape recordings derive from 11 of these 38 meetings.

Indeed, there where meetings that I did not attend. A few times the author group held meetings that I was unable to attend. Neither did I attend internal meetings held within the two involved directorates nor meetings that were held between the two directorates without participation of members of the author group. There were also other meetings held without my presence, for instance those held between the Directorate of Health and an external professional graphic designer or those meetings held within different institutions following the distribution of a hearing draft to 74 different consultative bodies on the 20th of October 2010.

Any attempt to estimate the number of meetings, or, for that matter, hours of work invested in producing the Guideline would of course have to rely on the boundaries set by the estimator. I abstain from making such an estimate. However, it is fair to say that the 38 meetings, each attended by three to eight employees, comprise just a limited share of the activity invested in making the Guideline. Given the frames of my project, it is also fair to say that it would have been an impossible task to be present in all the settings relevant for the production of the Guideline. Hence, to keep track of the production process, I had to rely on additional techniques for collecting empirical

materials. One of them was to arrange talks with members of the author group at KoRus Nord, in particular its project manager, in the aftermath of relevant meetings which I had missed. These were talks that generated yet another stack of field notes – those made as quickly as possible after we were finished talking.

Apart from the sound recordings and the field notes made in meetings I attended, and field notes made after talks with participants in the meetings, documents comprise the major part of my empirical stuff. From the very start of the Guideline's production, I collected all types of documents that possibly could be relevant for my research. These included a variety of policy documents and scientific literature relevant for the making of the Guideline, as well as what turned out to be a huge amount of documents made as the production process progressed: Drafts, letters, minutes, emails, and so forth. My archive of documents was a rapidly growing collection, either in the shape of various computer files ordered in structured folders or as printed versions ordered in several binders.

Partly due to the closeness between the Guideline's production process and me as an ethnographer, the mesh width of my trawl also was small when it came to collecting possibly relevant documents. Yet closeness had another significant implication; it provided for easy access to what was written throughout the authorship. My fieldwork was accomplished in what I perceived as an atmosphere of mutual confidence. In contrast to the response that one could expect from bureaucrats being subject to the attention of an ever-stalking ethnographer, I hardly noticed any signs of scepticism and distrustfulness. To the contrary, I have several good reasons to believe that the employees engaged were serious when they expressed their curiosity and satisfaction with their endeavours being subject to my study. Not only did they make frequent friendly jokes, for instance by talking about themselves as 'data' and me as the 'spy', jokes which I take as indications of a positive attitude. They were also highly enthusiastic and interested when I, as a result of being invited, presented parts of my preliminary analysis for them. Regarding my document-collecting enterprise, this appetite for an outsider-looking-in perspective facilitated for a steady supply of new documents. My email address was almost automatically inserted in the copy field of the circulating emails, which provided me both with the emails and the documents attached to them. None of my document requests were denied, neither by employees at KoRus Nord nor by representatives for the involved directorates.

The efforts of sorting out and analysing the observations, field notes, recordings, and documents that comprise the empirical materials generated through my fieldwork, were not conducted with some scheme or strategy established prior to my involvement with the Guideline's genesis. I conceive of

my research project as two parallel, yet strongly interrelated voyages of discovery: one being the empirical voyage into the genesis of the Guideline and the other being a voyage into a theoretical terrain that holds tools convenient for analysing the unfolding of the authorship. Each voyage has successively informed the other in what retrospectively might be perceived as a mutually rewarding relationship between theory and data. Basically, analysis is an order-making activity, and my way of ordering was rendered through alternation between 'the literature' and the empirical stuff from the production process I attended. The ordering of my empirical materials into six different stages of the Guideline's genesis was an empirically informed choice of structure that became visible to me in the final part of the authorship. Looking *at* instead of *through* the documents enrolled in the production was a theoretically informed choice of approach, evolving through a process of close interplay between what I read of literature and what I read of documents.

Chapter 3: Images and logics of science-based practice

> Much of the evidence with which policy is concerned is evidence of the due performance of tasks. In this way, the practice of government, to a very great extent, has become the government of practice. (Freeman, Griggs, and Boaz, 2011, p.128)

The Guideline's making was by no means a one-time phenomenon. Rather, it was one out of a vast number of previous and ongoing guideline productions partaking in the policy project of solving problems by supplying scientific knowledge to professional practitioners at the frontlines of the welfare state. All these authorships aiming at governing professional practitioners have in common that they are enveloped by different policy documents. Looked at through the lenses of performativity (Callon, 2007; Mol, 2002) these surrounding documents might be explored with reference to how they perform the policy of science-based practice, how they *portray* this governing project within the particular policy fields at stake. Regarding the Guideline, we saw in the introduction chapter a few examples of how the Action Plan (Ministry of Health and Care Services, 2009) heralded the remedial potential of scientific knowledge within the policy field of alcohol and drugs, and how 'information about research' and 'to communicate' are words put to use in addressing the stage between producing and implementing science-approved interventions. A performative approach allows for bringing to the fore how documents, such as the Action Plan, through the use of language, but also through different graphical means, configure the policy of science-based practice in specific ways. This implies looking *at* documents rather than *through* them (Hull, 2012, p. 12).

In the pages to come, a few policy documents will be put under scrutiny, including how they portray the science-transmitting enterprise in which the Guideline is set to play part. I will start by introducing a couple of documents addressing the policy of science-based practice more generally and then zoom in on how the Action Plan portrays different elements of the policy within the field of alcohol and drugs. All documents will be explored as matters, or stuff of politics (Braun and Whatmore, 2010) that accentuate what science-based practice 'is' and how it can and should be accomplished. Such an approach does not imply a rejection of human intentions and the possibility of a will to power, hopes, beliefs, or even some cunning plan involved in the making of policy documents. It only implies that *analytically* the documents put under scrutiny will be detached from the agency of the humans involved in their making, and instead treated as autonomous textual materials endowed with the capacity of performing an image of science-based practice. I will argue that policy documents are likely to perform science-based practice as a democratic, rational, and

promising governing project. However, I will also 'go behind' the surface of textual make-up and paint my own contrasting portrait: that of science-based practice as a top-down supply line of knowledge within an institutional hierarchy of expertise.

3.1 Cosmetic portraits of science-based practice

So far I have used the label *science*-based practice when referring to the project of achieving policy goals through production, supply, and use of scientific knowledge. Within contemporary Norwegian policy on the specific field of prevention of alcohol and drugs, *knowledge*-based practice is the label most frequently encountered in spoken and written policy language. 'Science-based' and 'knowledge-based' might connote slightly different qualities regarding, for instance, the sturdiness and irrefutability of the scientific claims on which practice is supposed to be based. The same applies for labels more common in other policy fields, such as evidence-based, data-based, and research-based. Which of these phrases should be applied as the proper name of the game is a question that will not be pursued here. A performative approach recognizes that these labels are elements belonging to the linguistic palette available for the performance of these governing projects, a palette holding words, illustrations, figures, pictures, and colours that allow for flexibility in the way the policy is portrayed. In accordance with the wedlock metaphor applied in the introduction chapter, they are means for depicting wedding pictures between a bride named science and a groom named policy. As I now will turn to some of these wedding pictures, focus will be directed towards how they perform specific qualities in the marital relation.

Google provides an easy and interesting access to portraits of knowledge-based practice. Using the particular label '*kunnskapsbasert praksis*' as a search word generates 134,000 hits (on the 29th of January 2014). Appearing on the top of the hit list is a link to *kunnskapsbasertpraksis.no*, a website performing the policy by the following assembly of words:

> Are you a clinician, teacher, or student of medicine and health care? This web resource on knowledge-based practice (KBP) teaches you how to find, critically evaluate, and use research-based knowledge so that you can make rational decisions. (Høgskolen i Bergen)

As for all portraits of science-based practice, this one tells a story about what the policy is and what it is not. In this case the practitioner, the 'clinician, teacher, or student', is ascribed a subject position both as searcher for and user of research-based knowledge. Moreover, they are invited to 'critically

56

evaluate' such knowledge. Thereby, the textual sequence adds an element of participation and democracy to its portrait of science-based practice: The configuration of practitioners as obeying instruments in a chain of change is toned down for the benefit of subjects who can and should partake in assessing the quality and relevance of disseminated research. The text performs a portrait that adjusts the policy of science-based practice in the direction of a participatory and cooperative project, away from the image of a governing project mounted within an institutional hierarchy of expertise and a rigid division of labour. Yet another interesting feature is traceable in the textual sequence quoted from the starting page of *kunnskapsbasertpraksis.no*. It performs its own success as a knowledge-transmitting infrastructure: It claims that the texts on this web resource 'teaches you how to...' ...for instance accomplish a critical evaluation by clicking on 'critically evaluate' and reading the different texts that appears (Høgskolen i Bergen). This somewhat ironical feature of science-transmitting tools, in this case a website on the Internet, making non-scientific claims about their own pedagogical effect is not at all exceptional. Throughout this thesis we will see several examples of such self-celebrating statements.

Among the myriads of descriptions and prescriptions of 'knowledge-based practice' generated by a Google search, a click on 'Pictures of *Kunnskapsbasert praksis*' provides access to portraits performing the policy, not primarily by use of words and sentences, but by illustrations, figures, pictures, arrows, circles, and various colours. At a first glance, this selection of portraits confirms the impression of science-based practice as a project characterized by participation, equivalence, and relations of mutual benefit and nourishment. Bidirectional arrows, overlapping circles, and mellow colours are typical elements applied in the performance of a democratic improvement project. The illustration in Figure 6 might serve as an instance of such lenient portraits. The illustration appears in slightly different versions on a variety of websites and printed policy documents. This version derives from the website of The Norwegian Knowledge Centre for the Health Services, published under the headline 'Methods and Tools for Quality Promotion' (Nasjonalt kunnskapssenter for helsetjenesten).

KONTEKST

forskningsbasert kunnskap

erfaringsbasert kunnskap

KUNNSKAPSBASERT PRAKSIS

brukerkunnskap og brukermedvirkning

G.Jamtvedt 2002

Figure 6: Illustration of knowledge-based practice

Consisting of five circles in slightly different shades of brown, three-dimensionally integrated into each other with diffusely marked borders, knowledge-based practice (the circle in the centre) is typically performed without any ordering of elements into rigid rankings or fixed alignments. Enclosed by the largest, brightest, and hindmost 'context' circle, the classification into 'research-based knowledge' (the upper left circle), 'experience-based knowledge' (the upper right circle), and 'user knowledge and user participation' (the lower circle) are performed as sources of equal value to knowledge-based practice. Hence, the illustration might be perceived as a lenient performance to those associating the policy of knowledge-based practice with top-down governance and transmission of superior research-based knowledge to the professional practitioners, who are 'devoid' of this superior knowledge. In contrast, both governance and the superiority of research-

based knowledge are less obscured aspects of the policy in the self-presentation by the Norwegian Knowledge Centre for the Health Services:

> [The Centre] supports the development of quality in the health services by summarizing research, promoting the use of research results, contributing to quality improvement, measuring the quality of health services, and working to improve patient safety. (Høgskolen I Bergen)

By equalizing the knowledge sources on which professional practice shall be based, the illustration in Figure 6 might be perceived as a portrait performing the policy of knowledge-based practice as a rather promising and harmonious project. The same effects can be observed in a different portrait (see Figure 7) taken from the front page of a scientific book titled 'Evidence-based practice in working with children and young'[13] (Ogden, 2012).
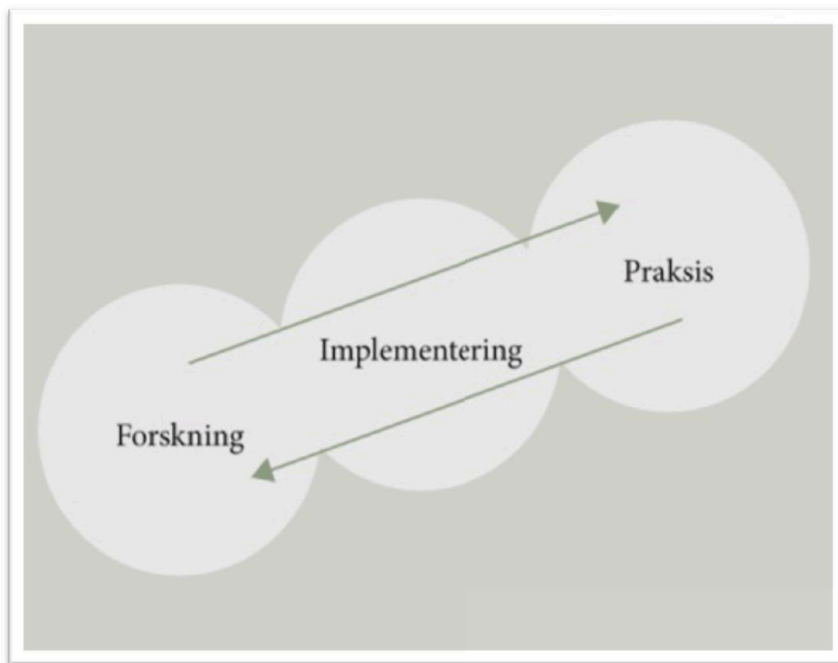
Figure 7: Illustration of evidence-based practice (Research, Implementation, Practice)

Although this is an illustration primarily performing the interrelations between the various activities involved in evidence-based practice, it is yet another portrait applying soft colour tones and

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[13] My translation of the Norwegian title 'Evidensbasert praksis i arbeidet med barn og unge'.

integrated circles. Promptness and ease are enacted by arrows passing through an unimpeded corridor, from the 'Research' circle (lower left), through the 'Implementation' circle (middle), to the 'Practice' circle (upper right), and then back again. Simultaneously, the location of the 'Research' circle below the 'Practice' circle counteracts an image of evidence-based practice as a top-down implementation enterprise. Rather, science is portrayed as an activity of supporting the work of professional practitioners.

3.2 The logic of science-based practice as a supply line of knowledge

The portraits presented above have the common feature of being enticing performances. Indeed, there are different and less indulging portraits, but the general impression is that the policy of science-based practice usually is promoted by rather embellishing documents and textual sequences, performing the policy as a carefully considered, well-disposed, and promising problem-solving project. However, approaching documents performatively might also imply treating them as carriers of some deep, immanent structures or fundamental logics that may be difficult to immediately spot – that they are versions of the world 'out there' that effectively hide their own basic presuppositions. In moving on to 'The Norwegian National Action Plan on Alcohol and Drugs' (Ministry of Health and Care Services, 2009), the document that initiated the Guideline, the ambition is to carve out some of these presuppositions hidden within and between the words and sentences employed in the document. How does the Action Plan perform the policy of science-based practice within the policy field of alcohol and drugs?

The Action Plan became the most salient policy document on Norwegian policy on alcohol and drugs for the period from 2008 to 2012. Its 'overriding objective' is 'to reduce the negative consequences of substance use for individuals and for society' (p. 6). Subordinate to the overriding objective, the main target that most explicitly addresses scientific knowledge as a resource for goal achievement is 'Better quality and more expertise' (p. 24).[14] This target formulation might well be perceived as a policy portrait performing a presupposition: the causal relation of quality as something that can be achieved *by* expertise. Moreover, the phrase 'Better quality and more expertise' implicitly defines knowledge as a resource of greater need by this particular policy field. Aiming at making practice

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[14] The other targets are '[c]lear focus on public health', 'more accessible services', 'more binding collaboration', and 'greater user influence and better care for children and next of kin'.

'better' presupposes that contemporary practice has a potential for improvement. Practice is lacking qualities that 'more expertise' can provide. Without these presuppositions the phrase would be meaningless.

According to the Action Plan, 'Better quality and more expertise' shall be achieved by a list of measures:

- Support more research projects through the new Alcohol and Drug Research Programme
- Establish a substance use research centre at the University of Oslo
- Generate more knowledge about the need for health and social services among people with alcohol and drug problems
- Research and development work on organization and professional development in the social services will be boosted (p. 24).

The reliance on scientific knowledge as a problem-solving resource is performed by all these measures. Simultaneously, they are formulations performing a contemporary lack of scientific knowledge and a need for increased scientific knowledge production, along with heralding a certain impact of an intensified production of this resource: It will engender better quality among practitioners and consequently improve the achievement of the overriding objective.

The policy objective of science-based practice and the way it is expressed in this particular policy document is not only enacting knowledge as a problem-solving, but also as a scarce resource. It presupposes an asymmetric distribution of this resource among the producers and the users of scientific knowledge. Under the heading 'Current need for quality and expertise', the Action Plan states that 'the link between research and practice must be strengthened' (p. 22). The image of a 'link', the idea of what it links together, and what a link can mend, are more concretely provided by words and sentences expressing the purpose of the link between research and practice:

Research and development of methods are going to be a priority, and knowledge about effective services and effective prevention will be communicated to decision-makers and executive agencies. A concerted approach to improving quality and expertise is needed. (p. 22)

Embedded in this is the idea of a top-down flow of scientific knowledge. The defined objective of strengthening the 'link' presupposes a need for flow *from* those who have the knowledge 'about effective services and effective prevention' *to* those who do not – from producers to users, from research communities to practitioners, from the knowers to the doers. Notwithstanding the veiling effect of using the verb 'communicate', the quote above portrays the transmission of knowledge as a

crucial link in the chain of change. 'Communicate' means the forging of access to practices through which scientific knowledge can flow. In less obscuring terms, the Action Plan performs a transmission enterprise; a flow of 'research' and 'methods' becomes a prerequisite for practices of 'better quality', science-based practice, that is.

So far, I have tried to demonstrate how language use in the Action Plan frames the policy of science-based practise as a supply line of knowledge. Policy language enacts knowledge as a problem-solving resource, as an asymmetrically distributed resource, and as a resource that has to be transmitted from those who produce it to those who need and are supposed to use it. In accordance with this supply line configuration, the Action Plan is explicit in pointing out institutions with a specific responsibility for knowledge supply. The Action Plan maps 'a geography of responsibility' (Olaussen, 2010, p. 91): *Who* is responsible for producing, distributing, and using knowledge. With regard to the institutions responsible for the transmission enterprise, the Action Plan states that '[e]ducational institutions and research communities have an independent responsibility to generate knowledge and communicate it to the services and society at large' (p. 23).

Thus, knowledge producing institutions are assigned not only a knowledge producing role but also a responsibility to set science in train, to communicate scientific knowledge to 'the services and society at large'. By decomposing it into stages of production, transmission, and consumption, and by attaching responsible institutions to each stage, a portrait of the policy of science-based practice as a supply line of knowledge emerges. In this particular quote, 'educational institutions and research communities' receive the responsibility both for the production stage ('to generate knowledge') and for the transmitting stage (to 'communicate'), while 'the services and society at large' receive the responsibility of putting knowledge to use.

In addressing the seven regional resource centres (the KoRus centres) subordinate to and funded by the Norwegian Directorate of Health, the Action Plan states that

> the role of go-between between practice and research communities must be defined more clearly, and the centres' functions of supporting development of quality and knowledge-based prevention strategies and social health services is going to be reinforced. (p. 23)

Also, this quote is in compliance with the configured supply line of knowledge: It performs a gap between practice and research communities, an intermediary role, and the regional resource centres, of which KoRus Nord is one, is to assume this role.

Above, we have seen how the Action Plan configures institutions responsible for producing, transmitting, and using scientific knowledge, institutions that are complementary interrelated within the Action Plan's own configuration of challenges and solutions. Hence, policy language configures challenges, solutions, and institutions in relations of mutual exchange of legitimacy: In a recursive manner (Law, 1994, pp. 14–16), the image of an asymmetric distribution of knowledge produces the need for 'research communities' to 'communicate'. Simultaneously, the assignment of a communicating responsibility to specific institutions produces the portrait of the asymmetrical distribution of knowledge. It would hardly make sense to communicate knowledge to those who know better. Knowledge must be communicated to those who do not know enough. Regarding the performed gap between 'practice and research communities', it supports the need for both bridges and bridge constructors. Simultaneously, these bridges and bridge constructors perform the gap and the need for bridges. It would hardly make sense to build bridges in a continuously flat landscape.

The policy objective of science-based practice framed as a supply line from production to consumption of scientific knowledge entails the essential challenge of making knowledge mobile. Its problem-solving potential depends on its ability to be transmitted from 'research communities' to 'practice communities' or 'executive agencies', which in turn are supposed to transform the supplies into 'better quality' services. Again, the question pursued here is not if the Action Plan portrays the mobility of scientific knowledge 'truthfully'. Rather, a performative approach addresses a different capacity of the document, namely how the mobility of scientific knowledge is performed by the Action Plan. How does the document attribute this specific quality to scientific knowledge?

To pursue this question one might turn to how the Action Plan configures the supply line's production stage: Who are the knowledge producers, what are they doing, and what do they make? In addressing the production stage, the Action Plan draws a conspicuous demarcation between knowledge users and producers. The knowledge producers are labelled 'research communities', in contrast to the users of scientific knowledge who are labelled by terms such as 'the practice communities' or 'executive agencies'. Several proposed measures in the Action Plan underscore the need for more knowledge production and support this identification of knowledge producers as producers of science and research, for instance '[e]stablish a substance use research centre at the University of Oslo' or '[s]upport more research projects through a new Alcohol and Drug Research Programme' (p. 24). Both are measures that clearly assign research institutions and researchers as those undertaking the production stage of the supply line of knowledge.

What then, do researchers and research institutions do? How is knowledge made by 'research communities'? Or more precisely, how does the Action Plan attribute specific qualities to research activities? Although the Action Plan is explicit in appointing the producers of knowledge, the document is not particularly concrete in prescribing criteria by which knowledge is going to be produced. However, it is fair to say that an objectivist science discourse is apparent in its language use, for instance in this previously quoted phrase:

> Research and development of methods are going to be a priority, and knowledge about effective services and effective prevention will be communicated to decision-makers and executive agencies. (p. 22)

Heralding more research about 'effective services and effective prevention' presupposes that it is not only possible, but also necessary to measure effects by universalistic criteria, from a neutral, objective, and value-free position external to the 'services' and 'prevention' that are being measured. Research communities accomplish their tasks from the 'neutral outside', while practice communities do it from the 'involved inside'. Once again the demarcation between practice and research becomes essential. Inscribed as separate parties in the policy of science-based practice, they differ not only in the matter of who they are, but also in the matter of what they do. Research activities are framed as something fundamentally different from practitioners' activities. Conducted by scientific methods, knowledge production avoids entanglement with the 'interferences' of human subjectivity present in non-scientific activities executed by 'practice communities'. Practices of researchers are epistemologically privileged compared to other practices because they are objective, disinterested, distanced, and non-contaminated by individual preferences or politics.

Locating knowledge production in 'research communities' and framing the products as generated by universalistic methodological criteria, the Action Plan enacts specific epistemological qualities of scientific knowledge. Because analyses and measurements are done by scientists, knowledge receives its robustness and becomes objective, unambiguous, univocal facts that mirror realities. The science producers and their production processes ensure the products' truth value and thereby also the immutable mobility of knowledge. Due to its objectivity, ensured by its producers and modes of production, scientific knowledge is able to constitute a basis for a variety of epidemiological accounts and prescriptive how-to-work advices. Hence, by dint of its objectivity scientific knowledge is transmittable from one location to another – from 'research communities' to 'decision-makers and executive agencies'. The Action Plan performs what Bruno Latour (1987) refers to as the traditional

notion of knowledge transmission, where ready-made and science-based innovations diffuse from the laboratories to the world outside (p. 132).

So far I have tried to demonstrate how the Action Plan *does* the policy of science-based practice by ordering this particular policy objective into a supply line of knowledge containing a production, a transmission, and an implementation stage. I have also tried to illustrate how specific producers, modes of production, and products are ordered. Given that knowledge is performed as a movable problem-solving resource, my next step will be to explore how movements are performed. How does this policy document configure the infrastructures through which knowledge flows? As already exemplified, the Action Plan applies a variety of terms to address the transmitting stage of the policy of science-based practice. Verbs, such as 'communicate', 'provide', 'support', 'promote', 'spread', and 'share' are among the ones most frequently encountered. These are all verbs that buttress the notion of putting knowledge into motion. 'To spread' or 'to share' makes use of what George Lakoff (1987) recognizes as the 'activation is motion' metaphor (p. 523); they are words describing actions that are putting scientific knowledge into motion.

While use of these verbs configures a flow of knowledge through its channels, they do not specify by which means this flow is supposed to be accomplished. But in the lists of 'measures', following each description of 'sub-targets', the Action Plan more concretely describes the infrastructures through which scientific knowledge is supposed to flow, for instance by initiating knowledge transmitting activities such as producing 'informational and advisory materials', 'prevention programmes', 'charting tools', 'templates', 'advisory guidelines', 'circulars', 'knowledge reviews', 'further education programmes', and 'regional conferences'. Through all these measures the Action Plan performs an alignment of a knowledge flow from its producers and down to its users. Knowledge is supposed to be launched into these science-shipping alternatives which presumably are capable of relocating scientific knowledge from 'research communities' to 'practice communities'. According to the Action Plan, scientific knowledge is supposed to be loaded into, for instance, a governmental advisory guideline aimed at improving the prevention practices accomplished by teachers in schools. Hence, the infrastructures are configured basically as spokespersons for knowledge as well as speaking knowledge, and become the link between those who possess it and those who don't.

Regarding the mobile 'nature' of scientific knowledge and the suitability of the infrastructures, I have argued that perceived through the lenses of performativity, they are both capacities attributed by the Action Plan. This is not primarily an explicit attribution, and the Action Plan does not employ

terms like 'mobility of knowledge' or 'infrastructures'. My argument is rather that these attributions of capacities primarily are embedded in and 'between' the words and sentences applied in the document. In a mutual and co-productive relation of exchange (Jasanoff, 2004), the mobility of science and the suitability of the suggested infrastructures attribute each other. As mobile facts, scientific knowledge performs the need for infrastructures, a mobile resource that calls for transmitting tools. At the same time, the infrastructures perform the mobility of scientific knowledge; its 'supply ability' is enacted by the tools for transmission. Perceived this way, the linkage between scientific knowledge and its infrastructures is a recursive process of mutual attribution. The logic of the policy of science-based practice is produced through the performances of policy documents.

Through a performative approach to policy documents, in particular the Action Plan's portrayal of the policy of science-based practice, I have illustrated how policy language creates specific problems that require a downward supply line of knowledge, configured as coherent stages of production, transmission, and implementation of scientific knowledge, a supply line to which diverse institutions, sites, and practices contribute (see Figure 8).

PRODUCTION STAGE:
➤ PRODUCERS (Research communities)
➤ PRODUCTION MODES (Scientific methods)
➤ PRODUCTS (Facts)

TRANSMISSION STAGE:
➤ TRANSMITTERS (Expertise institutions)
➤ TRANSMITTING MODES (Packing activities)
➤ INFRASTRUCTURE (Transmitting tools)

CONSUMPTION STAGE:
➤ CONSUMERS (Practice communities)
➤ CONSUMPTION (Acquisition of knowledge)
➤ CHANGE OF PRACTICE (Use of knowledge)

ACHIEVEMENTS OF POLICY GOALS

Figure 8: The logic of the policy of science-based practice as a supply line of knowledge

Furthermore, I have also argued that the different elements that constitute the imagery of this policy project are recursively produced. Lack of knowledge in the practice communities supports and is supported by additional knowledge production. Knowledge as mobile facts supports and is supported by research communities as its producers. The infrastructures support and are supported by the mobility of knowledge. The elements that constitute the configuration of the policy of science-based practice are connected by relations of a mutual exchange of legitimacy. Perceived this way, the Action Plan's performance is that of elements drawing on each other in a self-generating process.

The linkages, exchanges, and recursive relations between the constitutive elements of the policy of science-based practice might be conceived of as an 'ecology of expertise' (Ong, 2005). As an enveloped, stable, and harmonic ecosystem, embracing heterogeneous elements interwoven by symbiotic and complementary relations, the Action Plan is a policy document performing a logically coherent, feasible, and necessary governing project. Within this configuration, the essential presuppositions embedded in the policy of science-based practice are maintained and reinforced:

- ✓ The improvement potential in the practices taking place at the frontline of the welfare state;
- ✓ The potential remedy in supplying scientific knowledge and science-based recommendations to professional practitioners;
- ✓ Scientists as the experts on how professional practitioners should go about in their daily work;
- ✓ Problem-solving science as producible;
- ✓ The mobility of scientific claims and their convertibility into how-to-work recommendations.

These are 'realities' that comprise the supporting beams of the policy of science-based practice. However, they are all capacities and capabilities performed by the Action Plan's self-generating logic. In Annemarie Mol's terms, they are realities *enacted* (2002, p. 41).

This thesis aims to interrogate the policy of science-based practice. Such an ambition implies not taking at face value the policy documents' own version of the world 'out there'. We will now enter into the practices of science-based practice – that is, into the tool factory where the Guideline was made. As indicated in the introduction chapter, the presuppositions embedded in the policy of science-based practice were all at stake throughout the Guideline's genesis. In the chapters to follow,

we will delve into what happed in an endeavour to set scientific knowledge in train by converting it into a policy document with the ambition of directing teachers towards 'better quality' prevention.

Chapter 4: The commissioning of the Guideline

The story of the Guideline's making could begin from several plausible points of departure. I will start at a point close in time to the author group's first meeting and the subsequent process of text production – that is, with the commissioning of the Guideline. However, each point of origin is itself a result of preceding processes. Therefore, I will start by introducing a cluster of five documents sharing the feature of being enrolled in the production of the Guideline prior to the making of the first draft. One of them, the Action Plan, was already introduced in Chapter 3. The other documents are a research report, a curriculum, an assignment and an outline.

4.1 The Nordahl Report

The first document I will draw attention to is a research report jointly published by the Norwegian Directorate of Health and the Norwegian Directorate of Education and Training in 2006 (see Figure 9).

Figure 9: The Nordahl Report (Utdanningsdirektoratet, 2006)

The title of the document is *Prevention Efforts in Schools: Report from research groups appointed by the Directorate of Education and Training and the Directorate of Health and Social Welfare on behavioural problems, the prevention of alcohol and drugs, the teacher as leader and implementation strategies*.[15] Hereafter the document will be referred to as the Nordahl Report, named after its principal author, Professor Thomas Nordahl. The report is the result of the work of four different expert committees, each with a specific mandate (2006, pp. 7–8):[16]

Assessment of programmes for the reduction of problem behaviour and developing social skills
There shall be provided a research-based assessment of various programmes and training packages aiming to prevent and manage problem behaviour and lead to increased social competence and a good learning environment in basic education. The committee will provide advice and recommendations on the use of programmes in basic education.

Assessment of various school programmes for prevention of substance abuse
There shall be provided a research-based assessment of various programmes and training packages aiming to prevent substance abuse. Prevention of substance abuse refers to alcohol, drugs and tobacco, i.e. addictive substances.

The state of knowledge about the teacher as leader
There shall be a review of research-based knowledge about various aspects of the teacher as leader in education. The committee should place particular emphasis on the potential impact it has for students' academic and social learning. On the basis of the review recommendations shall be made about how teachers can best stand out as a leader in education.

Implementation strategies in schools
Based on research, the committee shall assess and prepare an overview of the principles for implementation that appear to be necessary to achieve results regarding the prevention and reduction of various behavioural problems, the development of social skills and establishing appropriate learning environments in schools.

As a research report, this document was inscribed in the genesis of the Guideline by the Action Plan's qualification of the Nordahl Report as a document that 'will indicate the recommended direction for efforts to improve the quality of anti-alcohol and drugs work in schools' (Norwegian Ministry of Health and Care Services, 2009, p. 61). Although the Action Plan itself (see Figure 10) does not explicitly initiate the concrete task of making guidelines for teachers in schools as part of such an

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[15] My translation of the original title: *Forebyggende innsatser i skolen. Rapport fra forskergrupper oppnevnt av Utdanningsdirektoratet og Sosial- og helsedirektoratet om problematferd, rusforebyggende arbeid, læreren som leder og implementeringsstrategier*.

[16] My translation. Bold in the original.

effort, the Nordahl Report is explicitly nominated as influential when discussing efforts to 'further develop anti-alcohol and drugs work in school' (p. 62).
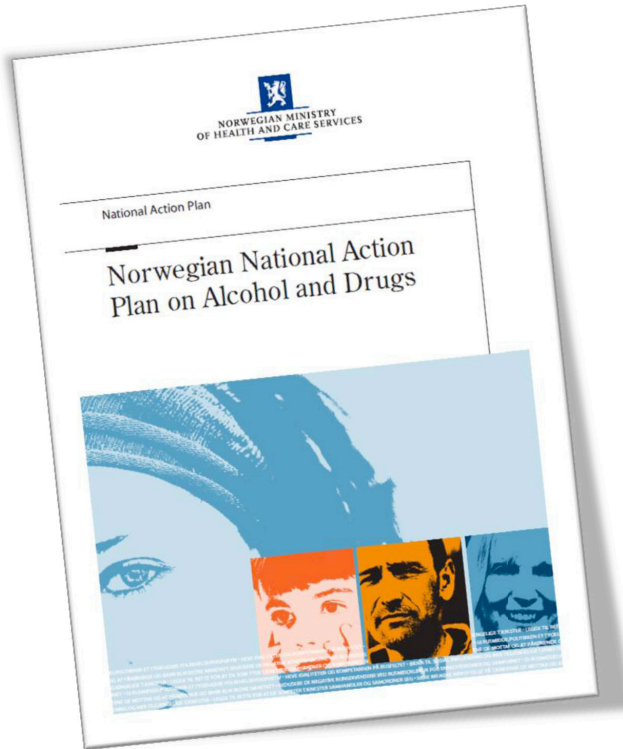
Figure 10: The Action Plan (2007)

Picking the Nordahl Report and the Action Plan as starting points for an empirical description of the making of the Guideline makes sense simply because according to policy language, they constitute a crucial part of the pre-existing context of texts for the authorship that was about to commence. In terms of content, the Nordahl Report comprises an assembly of scientific knowledge addressing prevention in schools, including evaluations of different existing prevention programmes and recommendations based on these evaluations. Politically authorized by the Action Plan, it prescribes the direction for measures aiming at 'anti-alcohol and drugs work in school'. Hence, these two documents were already relevant for the process of making the Guideline even before any decision about its production was made. By the time the making of this governing tool began, the tool factory was already pre-staffed with significant policy documents ready to partake in the production process.

4.2 The Assignment

According to the authority warranted by the Action Plan, the Nordahl Report had a significant imprints on additional documents directly related both to the decision to make the Guideline and to the organizing of the authorship – for instance, an email correspondence prior to, and the minutes following, the initial meetings between those involved at the time. The Report's guiding status was also illustrated by a third document to be included in the cluster of materials enrolled in the Guideline's production prior to the commencement of the authorship (see Figure 11).
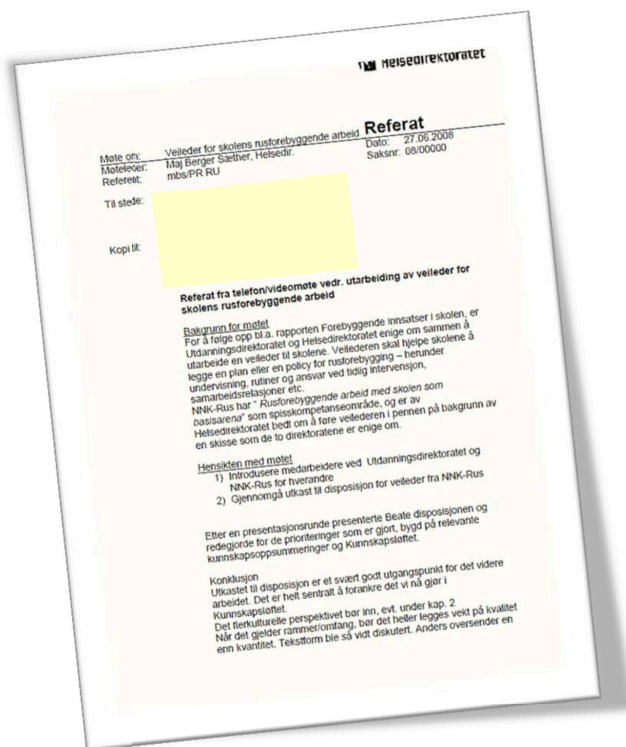
Figure 11: The Assignment (27th of June 2008)

This document is a set of minutes issued by the Norwegian Directorate of Health (dated 27th June 2008) recording a meeting between a representative from the Directorate of Health, one from the Directorate of Education and Training and three representatives from KoRus-Nord. In the following, I will refer to this document as the Assignment. It clarifies that:

> [...] in order to follow up Prevention Efforts in Schools [shorthand for The Nordahl Report] the
> Directorate of Health and the Directorate of Education and Training have agreed jointly to make a
> guideline for schools.

By the time the Assignment was written, the decision to make the Guideline had already been taken, including the delegation of the text production to KoRus-Nord. Hence, the Assignment was a document confirming plans that were already in place as the result of a foregoing process, involving representatives from both of the directorates and the management at KoRus-Nord. However, the fact that it was a document rendering decisions already taken does not necessarily make it less significant in terms of being a document able to partake in the making of the Guideline. By dint of its direct relevance to the Guideline and its presence prior to the process of composing the textual content, the Assignment merits being included in the cluster of pre-existing policy documents pre-staffing the tool factory.

4.3 The Curriculum

In framing the task of making the Guideline, the Assignment invokes a fourth significant policy document which I will refer to as the Curriculum (see Figure 12). Its full title is *The National Curriculum for Knowledge Promotion in Primary and Secondary Education and Training* (Ministry of Education and Research, 2006). In Norwegian the Curriculum is called 'kunnskapsløftet', metaphorically involving the physical effort required to lift knowledge to a higher level. The Curriculum was the overriding regulatory document in the field of Norwegian education and training policy, comprising various subject curricula and including competence aims for each subject. Within the various subject curricula, different competence aims were of relevance for the Guideline's subject matter – for instance:

> 7th grade: SCIENCE – Body & Health
> The aims are to enable pupils to gather information and discuss health effects that can occur with
> the use of various drugs.[17]

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[17] http://www.udir.no/kl06/NAT1-03/Kompetansemaal/?arst=372029323&kmsn=461102025. Accessed on 4th
March 2014.

The Assignment links explicitly to the Curriculum by stating that 'it is vital that what we do [to make the Guideline] is rooted in the Knowledge Promotion [shorthand for the Curriculum]'. By this linkage, another policy document enters the tool factory. Alongside the Nordahl Report, the Curriculum addresses what to take into consideration during the forthcoming authorship: the Nordahl Report was designated as a waypoint defining 'the recommended direction' for a future guideline 'rooted' in the Curriculum.
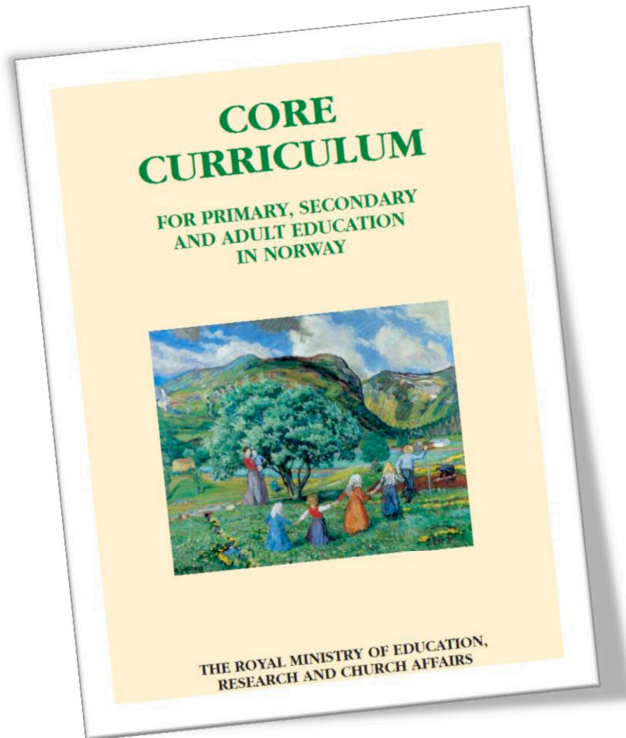
Figure 12: The Curriculum (2006)

4.4 The Outline

The process prior to the making of the Guideline's first textual draft included the appointment of a project manager at KoRus-Nord, whose first task was to prepare an outline for subsequent discussion with the directorate representatives in their initial meeting. This document will be referred to as the Outline, and it is the last to be introduced as one of the five documents pre-staffing the tool factory. The Assignment, the minutes from this particular meeting, states that the Outline is a 'very good

foundation for the proceeding work'. Regarding the Outline's textual content, it is ordered into ten chapters, each with a number of subordinate headings (see Figure 13).

Veileder for rusforebyggende arbeid i skolen

FORORD

1. INNLEDNING
1.1. Bakgrunn for veileder
1.2. Hva er forebygging?
1.3. Kunnskapsbasert forebygging

2. RUSFOREBYGGING I SKOLEN
2.1. Skolen som forebyggingsarena
2.2. Kunnskapsløftet om rusforebygging
2.3. Læringsmiljøet
2.3.1. Sammenheng mellom rus og atferd
2.3.2. Risiko – og beskyttelsesfaktorer

3. PLAN FOR DET FOREBYGGENDE ARBEIDET
3.1. Elementer i en helhetlig plan
3.2. Når bør ulike tiltak iverksettes
3.3. Pedagogiske tilnærminger
3.4. Lærer som leder
3.5. Valg av strategi og tiltak i det rusforebyggende arbeidet
3.5.1. Sentrale elementer i anbefalte tiltak

4. SAMARBEIDSPARTNERE
4.1. Samarbeid skole/hjem
4.2. Lokalmiljøsamarbeid
4.3. Hjelpeinstanser

5. IMPLEMENTERING
5.1. Forankring i planer og ledelse
5.2. Kompetanseheving
5.3. Strukturelle faktorer
5.4. Aktørfaktorer
5.5. Trofasthet versus lokal tilpasning

6. PRAKTISKE RÅD I RUSFOREBYGGENDE ARBEID
6.1. Rettet mot klassen
6.2. Rettet mot enkeltelever

7. OPPSUMMERING

8. NYTTIGE KILDER OG HJELPEMIDLER

9. OVERSIKT OVER DE REGIONALE KOMPETANSESENTRENE FOR RUSMIDDELSPØRSMÅL

10. VEDLEGG
  • Faktatekst om alkohol
  • Faktatekst om illegale rusmidler

Figure 13: The Outline (2008)

The textual implications of the Outline's index were at the time a highly open question. This also applies to the viability of the headings themselves. We will see several examples of this as we proceed. But as a document linking explicitly to the Action Plan, the Nordahl Report, the Curriculum, and the Assignment, the Outline fitted nicely with the documents already in the tool factory. For instance, the headings 'Background for the Guideline' and 'Knowledge-based prevention' indicate forthcoming text espoused by the Action Plan's priorities, while headings like 'Essential elements in recommended measures' and 'Teacher as leader' clearly relate to the Nordahl Report. The Curriculum made a discernible imprints on the Outline with the inclusion of headings like 'The curriculum on prevention of alcohol and drugs' and 'Pedagogical approaches'.

In a coherent way, these five policy documents comprise a context of texts present prior to the author group's composition of the textual content. By the time the authoring of the Guideline's first draft was about to commence, these documents had already taken their seats in the tool factory. Separately they address specific aspects of the Guideline's making: why make it, how to make it, and what to make. Considered collectively, the Action Plan, the Nordahl Report, the Curriculum, the Assignment, and the Outline emerge as an integrated cluster of separate texts. They are interwoven by the kind of sentences quoted above, which address and are addressed by, direct and conform to, authorize and are authorized by each other. These sentences of inter-linkages between policy documents can be apprehended in terms of what Bruno Latour (1987) calls modalities: 'we call these sentences modalities because they modify (or qualify) another one' (p. 22). In the case of the documents comprising the context of texts prior to the making of the Guideline's first draft, it is the sentences' capacity of *qualifying* one another that is significant here.

Such qualifying effects emerge when the Action Plan states that the Nordahl Report 'will indicate the recommended direction for efforts to improve the quality of anti-alcohol and drugs work in schools'. This sentence links the two documents together in a mutual exchange: the Nordahl Report gains strength from the Action Plan, receiving a promise of persistent impact as a direction-giving document. Simultaneously, the sentence might be perceived as a self-authorization performed by the Action Plan: In embracing the Nordahl Report as the direction-giving document, the Action Plan performs its capacity of being a document in command. To appoint a navigator is to enact authority of delegation. The same kind of mutual transaction is immanent in the Assignment's assessment of the Outline as a 'very good foundation for the proceeding work'. In this sentence the Assignment gains status as an assessing document, while the Outline gains strength as a document that frames what the Guideline's content should embrace. These are the types of linkages that made the Action Plan, the Nordahl Report, the Curriculum, the Assignment, and the Outline to dovetail together in a script for the authorship to come.

Approaching policy documents by paying attention to their language use and how sentences produce inter-linkages of exchange within a network of documents, contests the more traditional idea of policy-making processes as alignments of policy documents, each produced as the result of a foregoing initiating document. Such a frame of reference would be likely to equip the policy documents enrolled in the Guideline's genesis with immanent capacities without paying attention to the part they play in the authorship – for instance, their capacities for having an impact or

conforming to prescriptions. Rather than establishing an a-priori ordering of policy documents in a causal alignment and investigating the degree to which they comply with their initiating documents, for instance how the Guideline's making conforms to intentions embedded in its surrounding documents, my attention is directed towards how these policy document *perform* in the process of making the Guideline. This implies an investigation of the part policy documents play in the making of one another, but against a backdrop of a fixed environment of documents. The documents brought to attention here comprise a hierarchy of texts; they earn their position with sentences interlinking them together, as well as by the authors' positioning in a broader bureaucratic environment. Hence, they *perform* as 'overriding', 'direction-giving', 'to be based on', and so forth, in the Guideline's production process. The documents' ranks and their impact on the Guideline's textual content are basically an outcome of the parts they played throughout the Guideline's genesis. As we will see in the following chapters, difficult trials were awaiting this seemingly sturdy, coherent, and firmly inter-linked document assembly that was present as the authorship was about to commence.

These five documents and the way they were integrated in a network of texts are not highlighted here because they are the only ones worth mentioning. Neither are the Action Plan, the Nordahl Report, the Curriculum, the Assignment, and the Outline introduced at this stage of the production history due to their later impact. Rather, they merit their position by dint of the impacts they presage. As texts *per se* they heralded a governmental advisory guideline for teachers in Norwegian schools, with implications for how such a guideline should be made and what it should contain. They were five documents ready to take part in the forthcoming authorship. Separately, and in alliance with each other, they were *actors* among other actors, be they humans, documents, or different artefacts, playing roles in the practices of producing the Guideline. The part they played throughout the authorship, including how they coped in tension with other contesting written and spoken statements, remains for the pages to come.

Chapter 5: First Stage – going by the book

I will take the initial meeting between the directorates and KoRus-Nord, which occurred in late June 2008, as the starting point for the making of the Guideline's first textual draft. On this occasion the task of producing the Guideline was formally confirmed, along with some vital guiding conditions embedded in policy documents already enrolled in its making. The minutes from this initial meeting, the Assignment, also confirmed the delegation of the authorship to KoRus-Nord by virtue of its special field of expertise: '[KoRus-Nord] is by the Directorate of Health asked to write the Guideline'. In August 2008 KoRus-Nord established an author group coordinated by the previously appointed project manager, and in compliance with the Assignment they recruited exclusively among the employees of KoRus-Nord. Altogether six authors, the project manager included, constituted the author group involved in the completion of the first draft, five of whom had qualifications at a master's level representing the disciplines of sociology, human geography, and special needs education.

While the constitution of the author group was carried out according to the Assignment's prescription, the Outline played a significant part in organizing the actual writing. Based on the Outline's various headings, the tasks of writing were allocated among the authors according to text production and publications they previously had been involved in. Hence, the author group members most familiar with the topics took care of the making of text under headings such as '1.3 Knowledge-based prevention', '2.3.2. Risk and protective factors', '3. Planning of prevention', or '5. Implementation'. This principle for organizing the production of text for the first draft was confirmed in an author group meeting on 22nd September 2008, and in the period that followed, each of the authors worked on their given subtopics independently with a deadline of the 1st of November 2008. The authoring of the first draft was set in train as a writing endeavour circumscribed by prescriptions of the broader policy within which the Guideline belongs (the Action Plan), a knowledgebase on which the textual content was to be based (the Nordahl Report), regulations in the field to be intervened (the Curriculum), the task commissioned by the superior Directorate of Health (the Assignment), and the proposed and approved Outline for the Guideline. A mission in the shape of formulated policy language originating from a cluster of documents was ready to play part in the forthcoming text production.

5.1 Recycling of texts

Emphasizing the assemblage of five documents as the mission statement for the making of the Guideline by no means implies that these documents were the only ones affecting the content of the first draft. Each of them referred to a large number of other documents, which also became enrolled and made their impact on the first draft's textual content. For instance, besides being the backbone for linking specific author group members to particular topics, in its headings the Outline also linked to a different cluster of publications, which had previously been produced by members of the author group and which were considered relevant for the making of a governmental advisory guideline for teachers in schools. Hence, new documents previously published by KoRus-Nord became enrolled in the production process, and the network of documents expanded as the actual writing progressed.

In terms of making imprints on what ended up as the first Guideline draft, one of the most conspicuous documents previously published by KoRus-Nord was *Prevention and Health Promotion Work, From Research to Practise: A Research Review with Advice and Recommendations* (Schancke, 2005)[18]. Hereafter I will refer to this document as the Yellow Book (see Figure 14), the shorthand title frequently used in the author group meetings. The title of the drawing on its front cover is 'The hunt for effective prevention' (my translation).

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[18] My translation of the Norwegian title: 'Forebyggende og helsefremmende arbeid, fra forskning til praksis. En kunnskapsoppsummering med råd og anbefalinger'.
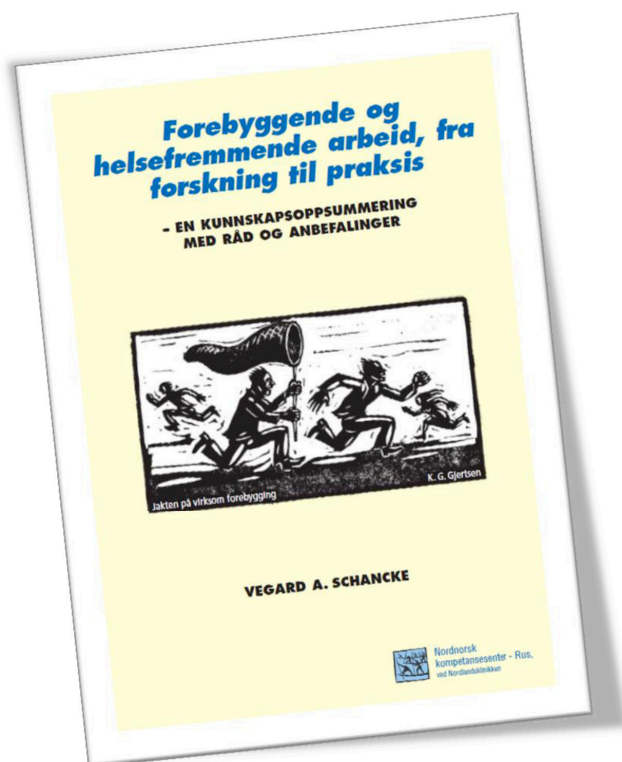
Figure 14: The Yellow Book (2005)

Its prominent position at this stage of the Guideline's production is indicated by the first draft's explicit references to the Yellow Book and by the reuse of both text and illustrations. A sample of text from the first draft's Chapter 1, 'What is prevention?', illustrates the reuse of text from the Yellow Book, in this case explaining and exemplifying the categories of universal, selective, and indicative prevention interventions, a categorization based on types of target groups addressed by different interventions. The very reason for disseminating this particular piece of knowledge is replicated in the Guideline's first draft in almost identical terms. The Yellow Book version describes universal interventions like this:

> Universal interventions aim at the population as a whole. Examples of such interventions are alcohol tax, alcohol monopoly, information campaigns, legislation on driving under the influence of alcohol and measures aiming at reducing the availability of alcohol such as regulation of licenses to sell alcohol and regulation of opening hours. (Schancke, 2005, p. 23)

In the Guideline's first draft this text appears in a slightly adjusted version:

Universal interventions aim at the population as a whole *or large population groups*. Examples of such interventions are alcohol duty, alcohol monopoly, information campaigns, legislation on driving under the influence of alcohol and measures aiming at reducing the availability of alcohol such as regulation of licenses to sell alcohol and regulation of opening hours. *Prevention and/or health promoting school programmes aiming at all pupils is another example.* (my italics)

Besides illustrating the reuse of previously published text, the disparity between the two extracts also illustrates how the conversion of textual content from one document to another came about. In this case text from the Yellow Book 'giving directions and advice for concrete interventions' (Schancke, 2005, p. 6) was converted to a governmental advisory guideline for a more limited group of practitioners, namely teachers in schools. By modifying 'the population as a whole' through the addition of 'large population groups', schools, grade levels, and classes were included among potential groups that might be subject to universal interventions. The same goes for the extension of the examples employed in the first draft. By the addition of a short sentence, school programmes were explicitly embraced by the definition of what universal interventions might be.

Comparing these two quotes illustrates how previous policy documents partook in and impacted the process of creating the Guideline in terms of the reuse and adaptation of text. However, this is primarily an example of high convertibility. For previously written text to be customized and relocated with such ease, some prerequisites are needed. First, the text to be imported has to be relevant, given the purpose of the new document. What was written previously to exemplify and explain universal interventions must also fit the script for the making of a new governmental guideline, a new document intended for a different, or at least a more defined group of users. Second, it must also be approved by the authors as fitting the script, which is a different matter. Making the first draft was by no means a self-evident, copy-and-paste activity. Rather than perceiving texts as stable entities and seeing their convertibility as immanent in the words themselves, reuse and adaption from previously published documents became a question of *making* them fit into the assembly of policy documents comprising the Guideline's script. Customization of text implied trials of strength for the text subject to import, as well as for the Action Plan, the Nordahl Report, the Curriculum, the Assignment, and the Outline.

In the universal interventions example above, both sides passed such trials: The text in question went through with only minor adjustments, and the policy script for the Guideline's making was not contested. Text explaining and exemplifying universal interventions became a piece of knowledge adapted into the first draft as relevant for teachers doing prevention in schools, implying that this

was knowledge not already possessed by the target group, in contrast to the experts who were writing the guideline for them. The short textual sequence imported from the Yellow Book is a clear example of the extension of the network of documents playing a part in the making of the Guideline's first draft, characterized by previously published documents that coincided with the aims of the Guideline as it was commissioned.

5.2 From intuition-based to knowledge-based prevention

Another import from the Yellow Book that achieved smooth customization was an illustration (see Figure 15) showing the essence of the ambition of governing practitioners towards science-based practice within the field of alcohol and drugs policy (Schancke, 2005, p. 29). In the Guideline's first draft the illustration is titled 'From intuition-based to knowledge-based prevention', and it appears in the first draft without any modification under the chapter heading 'Knowledge-based prevention'. The illustration itself is a conspicuous performance of the policy of science-based practice, a desired movement *from* the red-coloured 'intuition-based' interventions *towards* the green-coloured science-based interventions, which in this illustration are labelled as 'theory-based' and 'data-based' interventions.
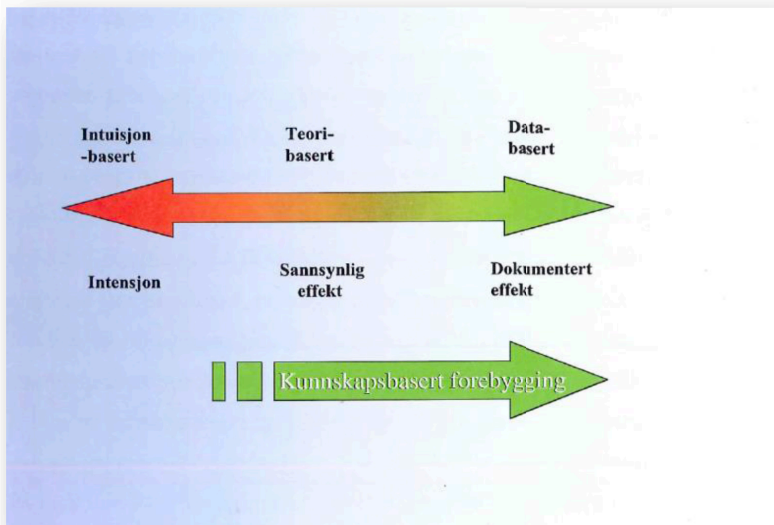
Figure 15: From intuition-based to knowledge-based prevention

Heralded effects are also attached to the different types of interventions: data-based interventions imply 'documented effects', while 'probable effects' are the outcome of theory-based interventions. Intuition-based interventions lack the kind of science-based predictability attached to the theory-based and data-based categories, and is left with an 'intention' at the red end of the axis. Regarding the images of science-based practice presented in Chapter 3, the colours applied in this image are relevant not primarily as cosmetic devices, but as amplifiers of the preferred versus the unwanted direction of change. The meaning of the colours red and green is culturally embedded in many other fields, for instance in traffic lights. In this illustration, green appears as the colour of recommendation (go there!), while red is the colour of dissuasion (do not go there!).

In the first draft, text following the illustration elaborates on its content:

> The figure illustrates a width of approaches within the field of prevention, ranging from interventions based on good intentions to implementations based on knowledge about what has proven to have documented effects. Prevention work in school should be based on factual knowledge instead of on assumptions and guesses. The advice is for schools to implement knowledge-based strategies.

Both the illustration and the text perform and reproduce three crucial aspects of the policy of science-based practice. First, they articulate what actually goes on in the world out there, recognising that interventions of all categories exist in practice, including the undesirable intuition-based category. Second, they perform a policy ambition, delineating a desire for a change in the direction of theory-based or preferably data-based interventions, and a termination of interventions based on practitioners' intuition. Third, by locating both 'intuition' and 'intention' on the undesirable red side of the illustration, the illustration also displaces the experience base of intuition, and thereby devalues intuition as a form of knowledge produced by practitioners in their daily work. The figure and the subsequent text are artefacts devaluing the practitioners' own production of knowledge through their daily work. Intuition, the illustration suggests, is not a form of knowledge.

The qualities of the two preferred 'knowledge-based' categories are specified by a subsequent customized textual import, this time from the Nordahl Report. It appears in the first draft in the form of a yellow textbox titled 'The Nordahl Committee's scientific justification for categorizing programmes and efforts' (see Figure 16). In short, the three criteria for categorizing school programmes frame category 1 (intuition-based interventions) as *lacking the science-produced attributes* attached to categories 2 (theory-based interventions) and 3 (data-based interventions).

Based merely on 'good intentions' and 'subjective experience', the first category is lacking in scientific reasons to expect a desired outcome, reasons that are apparent in the knowledge-based interventions. Hence, the demarcation line between scientific practices and the practices carried out by the practitioners implementing the interventions is maintained. While scientific practices produce reliable predictability, professional practitioners produce unreliable 'subjective experience' and 'intuitions'.

Programme with a low probability of results (category 1)

- The programmes are based on low levels of theory and empirical evidence to substantiate the desired results within the target area
- The programmes are characterized by the fact that ideology and subjective experiences take priority over research-based knowledge
- The programmes rarely have clear implementation strategies
- The programmes are:
  - Often not evaluated
  - If they are, the evaluation gives no facility for documenting results
  - The evaluation does not document results

Programme with a high probability of results (category 2)

- The programmes are based on theoretical/empirical knowledge that substantiates the desired results
- The knowledge justification is pointed out and documented in the programme descriptions, guides, and manuals
- Supported through evaluations, not through documented effects on the intended goals
- The programmes have implementation strategies which support them over time in schools

Programme with proven results (category 3)

- The programmes are founded on research-based knowledge to support the assumptions and results
- The programmes have documented positive results through at least one evaluation, based on the following criteria in the evaluation design:
  - There are before and after measurements in the evaluation
  - The evaluation has a basis for comparison
  - The results are documented in relation to the desired target variables
  - The programme is evaluated primarily in Norway
  - The programme has clearly defined implementation strategies supporting it over time

Figure 16: The Nordahl Committee's scientific justification for categorizing programmes and efforts

The illustration pasted from the Yellow Book (Figure 15), the subsequent explanatory text, and the yellow textbox imported from the Nordahl Report (Figure 16) all perform the essence of the policy of science-based practice: current practice is insufficient, but this can be remedied by science. A definition of a problem and a way to solve it, so commonplace in documents dealing with the policy of science-based practice, were coherently reproduced by the textual content of the first draft. The writing of the first draft followed the script; it was text-making by the book.

5.3 Textual recommendations

Even though the textual implants presented so far share the feature of being pre-produced texts fitting a new script, they do represent different types of content. While the text defining and explaining universal interventions might be considered a *scientific statement*, the figure-text textbox section is an example of *policy prescription*. Another piece of text from the first draft illustrates a third type of textual content: *textual recommendations.* The fourth chapter of the Guideline's first draft carries the heading 'Positive learning environment', and comprises approximately one third of the draft's total content. Within this chapter, under the heading 'Authoritative leadership' a green textbox (see Figure 17) recommends this specific style of leadership and explains how it can be performed by teachers.

As a teacher you can **perform** authoritative leadership **yourself by:**

- **Facilitating a positive learning environment in the classroom** (e.g. pupils sit in an orderly fashion, assistive devices have a specific location and are easily accessible, name the baskets/pegs in the cloakroom, name shelves in the classroom)
- **Showing that you care about the pupils** (e.g. friendly greeting, seek eye contact, pat on the shoulder)
- **Showing interest and listening to each pupil** (e.g. call on the pupils to speak and show by your behaviour that you are listening, make sure that all pupils are heard)
- **Providing clear and visible rules in the classroom** (written down and hung in a visible place – a maximum of 5 rules)
- **The rules should refer to pro-social (desired) behaviour** (e.g. 'be polite', 'raise your hand for permission to speak' instead of 'not allowed to swear' and 'not allowed to hit')
- **Enforcing rules in a thoughtful and equitable manner** (e.g. plan in advance on how to react in certain situations)
- **Being focused on resources and giving attention to pro-social behaviour** (e.g. give attention to pupils when they follow the rules, such as 'Glad you spoke politely. You followed the rule we have in the class that we should all speak politely to each other' (referring to the rules). Tell pupils what to do instead of what not to do, such as 'leave the classroom', 'raise your hand and wait until you are called upon', 'be quiet', etc.)
- **Controlling your own emotions and voice** (speaking in a calm and determined manner)

Figure 17: Authoritative leadership

The textual content of the green textbox derives from documents within a project titled 'Early Intervention for Prevention of Alcohol and Drugs' conducted by KoRus-Nord. I will refer to this project as the TI project, a commonly-used abbreviation of the Norwegian title 'Tidlig rusforebyggende intervensjon'. This is another example of members of the Guideline's author group drawing upon text they had already produced. It is also another example of the customization of text originally created for a different purpose. The TI project, which was a programme-developing project, gave rise to a manual (Johnsen, 2009) and a research review (Johnsen and Schancke, 2010), both in

progress by the time the first draft was made, and both written by authors who were also members of the author group creating the Guideline's first draft.

The recommended actions prescribed in the textbox are an adapted version deriving from the research review's extract of the targets of the TI project (Johnsen and Schancke, 2010, p. 56):

> Based on the described knowledge base, an intervention consisting of the following topics is developed:
> 1. **Facilitation of the learning environment**
>   (Gravrok et al., 2006; Ogden, 2006; Nordahl et al., 2005; Nordahl et al., 2006; Sorlie, 2000; Eriksen, 2002, 2006; Schancke, 2005; Olweus, 1999)
> 2. **Show that you care**
>   (Rye, 2005; cf. ICDP (International Child Development Programs))
> 3. **Adjustment and common focus**
>   (Rye, 2005; cf. ICDP (International Child Development Programs))
> 4. **Rules and good messages**
>   (Patterson and Forgatch, 2000; Atferdssenteret i Vest-Agder, 2002)
> 5. **Praise, attention and reward**
>   (Patterson and Forgatch, 2000; Atferdssenteret i Vest-Agder, 2002)
> 6. **Rules and boundaries**
>   (Patterson and Forgatch, 2000; Atferdssenteret i Vest-Agder, 2002)
> 7. **Help your child/pupil to control their own emotions**
>   (Elliott and Gresham, 2002)

The TI manual itself corresponds to this numbered list by being structured in seven parts under the same headings. Hence, a description of topics in a concrete programme aiming at 'parents and teachers of children/pupils with elevated risk for developing behavioural and alcohol and drug-related problems' (Johnsen, 2009, p. 6) is adapted and relocated into the Guideline's first draft as a list of recommended actions for creating a positive learning environment through authoritative leadership.

Through this link between the first draft and the TI publications, another alliance was created and the network of documents enrolled in the making of the Guideline was expanded further. This specific textual import is also suitable for illustrating that creating the Guideline also invokes the authors' alliances by linking to text from existing documents; by applying the seven topics of the TI project, explicit references to the scientific publications supporting them were also interwoven in the Guideline's network of documents. The text recommending how to perform authoritative leadership was not only an enrolment of the TI documents; through this textual import, Elliott and Gresham (2002), Patterson and Forgatch (2000), Ogden (2006), and the rest of the scientific references in brackets above became enrolled as documents representing the body of science on which the advice

about authoritative leadership was based. They became part of the scientific knowledge supposed to be transmitted to practitioners through the Guideline. In this particular case this meant that scientific knowledge was converted into recommendations about what teachers should do and how they should behave.

5.4 A draft made by the book

By March 2009 the first draft was submitted by email to the Directorate of Health and the Directorate of Education and Training – that is, to the same recipients who had delegated the authorship to KoRus-Nord ten months earlier. This event indicated that the first stage of the Guideline's production had come to an end. The draft was now in the hands of those who had commissioned it, and the author group at KoRus-Nord went into standby mode waiting for responses and further work on the proposed text.

The making of the first draft was a production process done by the book: The designation of the centre of expertise responsible for the authorship, the composition of the author group, and the way they organized their work fitted the script for the making of the Guideline. The same applies to the first draft's textual content. Its explanations of the policy of science-based practice, in which the Guideline was set to play a science transmitting and governing part, were in coherence with the assemblage of policy documents comprising its script. Knowledge statements, whether scientific justifications for recommended action, the introduction of theory and concepts, the presentation of causal connections, or epidemiological information, also added up in agreement with a prevailing 'body of knowledge' about the prevention of alcohol and drugs, as well as with the policy documents framing science-based practice as a downstream flow of scientific knowledge to the field of practice. Also, the textual content recommending what teachers should do fitted the Guideline's script both in terms of being explicitly interlinked with the scientific publications they were based on, and by adhering to the ambition of governing current practice. However, the selection of text for the first draft did not guarantee survival through subsequent trials of strength, not even if the imported text fitted the policy of science-based practice extremely well.

Chapter 6: Second Stage – Internal trials of strength

The 29th of April 2009, approximately two months after the submission of the first draft, the two directorates gave feedback in a meeting with three members of the author group at KoRus-Nord. This occasion marked the starting point for the second stage of the Guideline's genesis, a stage characterized by numerous meetings and extensive changes to the proposed textual content of the first draft. Within this stage, a total of 12 different drafts were completed, submitted to the directorates, and subsequently commented, culminating in a ready-made hearing draft that was distributed to 74 external consultative bodies on the 20th of October 2010.

A detailed account of the course of events throughout this stage of the Guideline's production would exceed the limits of this thesis. Instead of digging into every textual change and discussing how it came about, I will highlight what stands out as distinctive characteristics of the production dynamics within this period of almost 18 months. Based on my attendance at most of the meetings that took place, access to email correspondence and a tall stack of drafts and minutes, I choose to elaborate on the production dynamics by emphasizing three major productive *forces* at play throughout the making of the Guideline. For the sake of simplicity all three will be given names, and the first to be introduced is 'the Teacher'. It is hardly surprising that the Guideline's recipients and users, those who are supposed to be governed by the Guideline according to the policy of science-based practice, played a part as the shaping of the textual content progressed. The same goes for the second productive force, which I have chosen to call 'the Science'. As a tool for transmitting scientific knowledge and science-based recommendations to teachers, it is rather obvious that the 'voice of science' was also present throughout the making of the Guideline. The third clearly discernible force is 'the Governing Enterprise'. The mission of making this governing tool implied a delegation of a managerial prerogative to the authors, who were supposed to compose a guideline capable of governing teachers towards a defined type of practice. Thus, an expectation of making an expedient document rested upon, and played a significant part in, the process of making the Guideline.

Foregrounding the Teacher, the Science and the Governing Enterprise as the three major productive forces at play throughout the production process is my way of making order out of what was said and written. These are the hooks on which I hang statements, assertions, and expressed opinions, whether verbal utterances or written text. However, my ambition encompasses more than just sorting out. What was said and written had performative properties, forming language materials that configured the Teacher, the Science, and the Governing Enterprise. These productive forces were all

characterized by plasticity. In this chapter I will illustrate how the Teacher, the Science, and the Governing Enterprise became subject to a configuring process throughout the production stage, culminating in a final hearing draft. I will start by introducing 'the Teacher'.

6.1 The plasticity of the Teacher

Making a guideline for teachers implies configuring them. As argued in Chapter 5, the first stage was characterized by text-making by the book. 'The book' is used here as a metaphor for the policy documents prescribing and giving priority to the policy of science-based practice more generally, as well as the documents that comprised the script for making this specific guideline. Furthermore, 'the book' did not merely frame why and how the Guideline was to be made. It also located the Teacher in a specific position within a configured supply line of knowledge, as the recipient and user of scientific knowledge and science-based recommendations supplied by a governmental guideline. Such a position attaches specific attributes to the Teacher. What he does and does not do, what he knows and does not know, his preparedness for being governed – these are questions that are largely answered by the subject position assigned to him by the policy prescription of science-based practice: what he currently does is insufficient, he lacks knowledge of what to do, and he will change his way of working in the light of new information. The Teacher was configured in a particular way by dint of the position he was offered in the supply line of knowledge.

Note that my use the pronoun 'he' attributes a male version of the Teacher. In fact, such an attribution runs counter to the gender distribution among Norwegian teachers. In primary and lower secondary school, three quarters of the teachers are women (Barne-, likestillings- og inkluderingsdepartementet, 2013, p. 39). However, a review of the recordings from the author group meetings indicates that the Teacher generally was imagined as a male character. The use of the words 'him' and 'he' increased as the Teacher was increasingly configured as a hard-governed professional throughout this particular stage of the Guideline's genesis. Thus, my attribution of a male gender to the Teacher resonates with the language applied in the tool factory, but not with the actual gender distribution among teachers in Norwegian schools.

The Teacher configuration and how he played his part in the authorship changed significantly from the first stage to the second. In the first stage the Teacher's configuration conformed to the script;

his attributed capacities were in coherence with the endeavour of governing him through knowledge supplied by a science-based governmental guideline. The Teacher dovetailed smoothly with the Science and the Governing Enterprise; he was configured so as to be in need of what was being developed, and he was prepared to put it to use. Throughout the second stage this image of the Teacher as obedient and eager to learn gradually lost its stability. From being a recipient and executor of scientific knowledge, with capacities that did not hamper the making of the first draft, the Teacher broke his silence and began to resist the part he was set to play.

The loss of the stability that pervaded the Teacher's role during the making of the first draft commenced on the 29th of April 2009, as soon as the first draft became subject to feedback from the directorates in a meeting with the author group. Discussions dealing with the challenge of drawing teachers' attention to the Guideline illustrate this destabilization. In the minutes from the meeting (also dated 29th of April 2009) written by the Directorate of Health, the assessments from the representative for the Norwegian Directorate of Education and Training were rendered in an abridged style with incomplete sentences and keywords:

> A lot of guidelines aiming at schools are made – overflowing, mutual competition; sharpening the content in compliance with the target group and the purpose of the Guideline; […] methodical and pedagogical approach (not lecturing). Too academic: consider the amount of footnotes.

These remarks reflect a concern for the abundance of guidelines in Norwegian schools. The Guideline in progress would be received in a field of practice already 'overflowing' with guidelines, and with new ones about to be implemented. This would cause 'mutual competition' for teachers' attention. By expressing such a concern, the Teacher, who was initially configured as a recipient and user of scientific knowledge waiting for the experts to make their delivery, was assuming a different configuration characterized by exposure to a variety of scientific claims, recommendations, and instructions. From the makers of this specific guideline's point of view, the challenge was not primarily that teachers strive to deal with the amount and variety of governing documents flowing down from above, but rather that they were framed as an *autonomous* group of guideline consumers. They enjoyed a certain freedom to choose what to pay attention to, even if scientific knowledge and science-based recommendations were being delivered by experts or a governmental institution.

This concern about the Teachers' attention is not only ascribing capacities to the environment in which he accomplishes his daily work; it also enacts a change of attributes attached to his image. He

changed from playing a part in the making of the Guideline as a passive medium for transforming scientific input into better quality prevention, into an active interpreter of governing messages. He was reconfigured as a user, this time equipped with capacities for paying attention as well as ignoring, and was thus in a position to either pass on or shut off the supply line of knowledge. If the authors did not succeed in attracting the Teacher's attention – that is, if the forthcoming Guideline was ignored – its publication would only signal its premature death. Therefore, a potential problem-solving resource intended to improve the prevention of alcohol and drugs would be rendered ineffective. The reduction of 'the negative consequences of substance use for individuals and for society' (Ministry of Health and Care Services, 2009, p. 6) would not be achieved. The Teacher was positioned as a shutoff valve within the very chain of change embedded in the policy of science-based practice.

Facing the risk of an ignored guideline shifted the emphasis towards shaping the Guideline's textual content in accordance with those it was intended for. In the abridged minutes from the first feedback meeting (dated 29th of April 2009), the need for user customization of text is clearly indicated by terms such as 'too academic', 'downplay the list of references', 'consider the amount of footnotes', and 'sharpening the content in compliance with the target group and the purpose of the Guideline'. This kind of characterization addressed the need for changes to be made to the Guideline's first draft. However, changes made in the interests of the Guideline's users also changed the configuration of the Teacher's interests. When the first draft was characterized as 'too academic', the comment pointed at the Guideline's academic language style as well as the excessive use of scientific citations and footnotes. However, it also configured the Teacher as disapproving of such features. These particular properties of the first draft needed to be modified in order to comply with the Teacher's preferences. Hence, such assessments simultaneously attached attributes to the Guideline's proposed text and to the Teacher, who was configured a disapprover of academic-styled governmental guidelines.

So far I have illustrated a distinctive productive dynamic that was apparent throughout the making of the hearing draft during the second stage of the Guideline's genesis. Whether it occurred in the discussions in the author group meetings, in written minutes, or in email correspondence, configuring the Guideline's textual content also configured its recipients. Making the Guideline implied making the Teacher. Based on a few samples from the minutes of the first feedback meeting, we have seen how he was constructed as:

1. A professional within a working environment overflowing with governing messages;

2. An autonomous professional free to pay attention to what attracts him;

3. Disapproving of governmental guidelines that are 'too academic'.

A tiny figure as he might seem, the Teacher's *working context*, his *position* within it, and his *preferences* were all subject to change from the very first feedback on the initial draft. Throughout the second stage of the process of making the Guideline, new capacities were repeatedly attached to him. However, before elaborating on how the Teacher progressed to assume a more full-blooded configuration, I need to draw attention to the other two productive forces at play.

6.2 The plasticity of the Science

As with the Teacher, the Science is assigned a distinctive role within the policy configuration of science-based practice as a supply line. Science is the very asset to be transmitted to the Teacher, either in the shape of scientific statements or as practical recommendations based on science. Also, as with the Teacher, the Science adhered fairly well to its assigned role during the process of making the first draft. In section 6.1 above I argued that working on the Guideline's textual content implied working on the configuration of the Teacher. In turn, the reconfiguration of the Teacher had implications for the changes made to the scientific content of the drafts. Such an implication was heralded by the minutes from the first feedback meeting, assessing that changes needed to be made to the excessive use of footnotes and the list of references in order to avoid a 'too academic' guideline.

To some extent these changes were already made by the time the author group at KoRus-Nord submitted the second draft to the directorates on the 26th of June 2009. The amounts of both footnotes and references to scientific publications had shrunk significantly from the first draft to the second. In these modifications the Teacher's disapproval of 'too academic' governmental guidelines had taken its toll on the Science. But these early deletions of footnotes and references to scientific publications in order to tone down the Guideline's academic tone are not the only type of modification that illustrates the plasticity of the Science. Also, larger textual sequences paraphrasing scientific claims found their way into the waste basket throughout this stage of the production process.

Deletions from the first draft's section 5.2, titled 'Multicultural perspective', illustrate such changes. Throughout the making of the hearing draft, a total of two pages of text, including a textbox with practical recommendations, was reduced to two sentences under the heading 'Use of intoxicating substances in Norway'. This particular shrinkage of the Guideline's proposed content resulted in the deletion of text dealing with topics such as non-drinking immigrant families, the issue of immigrant parents dropping out of parent–teacher meetings, a lower consumption of alcohol among Sami and immigrant adolescents compared to Norwegians, and the potential for encouraging Norwegian adolescents to adopt the immigrants' strategies for resisting pressure to drink alcohol. Out of these topics, as well as a few others concerning cultural diversities and similarities, only the scientific claims embedded in the following two sentences survived:

> When it comes to the use of different substances various studies show that both Sami adolescents and young people with immigrant backgrounds use less alcohol, marijuana, and snuff than ethnic Norwegian youth. But when it comes to adolescents developing an abusive consumption pattern of licit and illicit substances, there are no major differences between Norwegian adolescents and young people with different cultural backgrounds.

Footnotes, references to scientific publications and textual sequences paraphrasing scientific claims that found their way to the first draft were now sent to the waste basket in the tool factory. An investigation of the tool factory's waste basket suggests a lower standing for the Science as a productive force than one might assume, given that this was a *science*-based guideline in the making. It is by no means obvious why multicultural topics ended up in the waste basket while the two sentences quoted above remained in the hearing draft. The assumption that the scientific statements about multicultural topics were removed because they were unreliable, irrelevant, or already known by the Guideline's target group, whereas the two remaining sentences passed such trials, is questionable. Furthermore, at a later stage the two surviving sentences also ended up in the waste basket. Hence, it is not the intrinsic scientific quality of statements that decides their fate. The explanation must be found elsewhere. I will explore such dynamics as soon as I have introduced the third major productive force. At this point I will confine myself to asserting that the Science indeed played a part in the Guideline's making, but not as an input in the form of a fixed and stable raw material to be processed within the tool factory. As with the Teacher, the process of making the Guideline was a process of reconfiguring the Science.

6.3 The plasticity of the Governing enterprise

The making of this specific governmental guideline was enveloped by the prevailing idea of governing practitioners at the frontline of the welfare state via the supply of scientific knowledge. As pointed out earlier, this is a change-making logic that configures both those to be supplied (the Teacher) and the supplies themselves (the Science). But in addition, it configures what is between the Science and the Teacher, specifically the infrastructures necessary to make science flow and allow changes in teachers' practice to emerge. The Guideline is assigned to this in-between position in the configured supply line of knowledge; the ready-made and distributed Guideline is supposed to be a change-making tool. Hence, the Guideline's *modus operandi* is attached to the process of making such a tool; the expectation is that the tool will be able to fulfil its ascribed function. In this particular case, that means a ready-made guideline with the ability to elicit specific changes in the ways teachers accomplish their prevention of alcohol and drugs; it is supposed to serve as an *efficient* governing tool.

I do not see this expectation as a phenomenon located within the authors' minds in terms of intentions and beliefs. Rather, it is an expectation of the causal effectiveness performed by the spoken and written texts enacting the policy of science-based practice. The Guideline's governing potential is an essential part of the policy script, and as such it partook in the production process. Composing the Guideline's textual content was an enterprise enveloped by the expectation of propelling changes among the Guideline's recipients. Choices among the optional narrative means at hand all related to the Guideline's ability to govern, whether these were paraphrases of scientific claims, textboxes with how-to-work recommendations, texts explaining the purpose of the Guideline, illustrations and figures, the design of an appetizing layout, or the use of imperative terms.

For the author group, this expectation of bringing about a change clearly implied a creative challenge, requiring downward attention to the use of a textual palette in order to make the Guideline fit into the change-making script. Simultaneously it called for upward attention to what was said and written by institutions within the bureaucratic environment enveloping the production of the Guideline, at this stage the two directorates that delegated the text production to KoRus-Nord. Therefore, by being appointed as the designers of a change-making tool, the author group was simultaneously *entitled* and *obliged* to make the Guideline bring about a certain impact. It is through this delegation of authority to the authorship that the Governing Enterprise becomes a force in the Guideline's genesis. Metaphorically, the authors were commissioned with the task of constructing a

pipeline to contribute to the spinning of a hydraulic turbine, a task expected to bring about the funnelling of water as well as channelling it in a way that stroked the turbine's blades and thereby amplified its spinning movement. But, in contrast to flowing water, the output effect of flowing knowledge is not necessarily determined by the altitude of its source.

Downstream attention

As the making of the Guideline proceeded, the Governing Enterprise played its part as a productive force both in terms of downstream attention towards the changing capacity of the proposed textual elements and upstream attention towards feedback from the superior directorates. The drawing titled 'The drugs and alcohol preventive school' (see Figure 18) illustrates the downstream attention directed towards the outcome of the optional means for transmitting scientific knowledge by a governmental guideline. In this particular case, the figure shows an idea for creating easy accessibility by condensing the Guideline's general recommendations into a single comprehensive illustration.

Figure 18: The alcohol- and drug-prevention school

From the very start of the Guideline's production, the idea of visualizing its essential messages was considered to be a suitable device for counteracting the somehow tedious impression and weak effect supposedly engendered by the use of written text alone. Accordingly, an external illustrator was engaged, and although the drawing was altered from one draft to the next, it showed strong viability as an ingredient and ended up in the final chapter of the published guideline. The version presented here derives from a draft referred to by the author group as the Fourth Revised Draft, submitted to the directorates on the 17th of October 2009.

While the drawing might serve as an example of the use of the textual palette in order to raise the probability of a desirable outcome through a favourable reception, the use of imperative terms and sentences might serve as an example of attempting to reach the same goal by rather different linguistic ingredients. In these cases the aim was not primarily to have an impact by textual allurements, but rather to give clear instructions on what to do and what to omit. Terms like 'one should…', 'it is recommended to…', 'avoid…', or 'it is important not to…' are frequently found especially in the early drafts, usually accompanied by scientific justifications substantiating such prescriptive formulations. The governing logic underlying the use of these linguistic agents is that the Guideline's recipients will adhere to instructions: If they are told, advised, or at least requested to act in specific ways, and given a reasonable supporting scientific explanation, they are likely to follow the Guideline's recommendations.

Ironic as it might seem, in all the drafts and even in the final Guideline, this underlying pedagogical logic – that you act effectively if you are told what effective action is – was described as insufficient when it comes to how teachers should accomplish prevention efforts with their pupils. Activity and participation are emphasized as essential if a change in behaviour is likely to occur, and are embedded in all the recommended prevention activities involving pupils. But moving a step upwards in the supply line of knowledge where the target group is the teachers themselves, participation is seemingly no longer considered a necessary condition for behavioural change. The Guideline is basically a monological governing technology supposed to propel modified action among teachers merely by means of them reading its textual content.

Neither the assessment of the potential governing force of the drawing nor the use of imperative phrases – or any other linguistic means, for that matter – were fixed and stable throughout the Guideline's production. The textual components, as well as the expressed reasons for their inclusion

and exclusion, were highly variable. What once was written for the purpose of gaining a governing effect could, for the opposite reason, find its way into the waste basket later in the production process. A short sequence from a meeting between the author group and the representatives of the directorates on the 1st of July 2009, when the second draft was discussed, illustrates such alterations. When the previously presented textbox (see Figure 17) with the title 'As a teacher you can yourself perform authoritative leadership by:' was subject to examination, the representative from the Directorate for Education and Training remarked that:

> In the first bullet point it is written: facilitating a good educational setting in the classroom, how the pupils should be placed and so on. We [the Directorate for Education and Training] probably mean that the first bullet point is so obvious that we suggest that it should be left out. Because, here we are dealing with … well … that here we are getting into that lecturing style again. If there is something the teachers already know, then it's this. We should be cautious, we talked about this last time we went through this, that we have to be cautious so that we don't, in a way, become too lecturing. There are quite a few things so well known that it is unnecessary to take it in, in a way. So we are uncertain when it comes to the entire box.

During the making of the next draft the entire textbox was deleted, along with seven bullet points, all containing imperative sentences addressing teachers. Among them were sentences like 'Show that you care about the pupils', 'Provide clear and visible rules in the classroom', and 'Enforce rules in a thoughtful and equitable manner'. Language use that once was considered to be action-oriented and carrying governing capabilities switched to being regarded as precluding a change of action due to its lecturing style. Accordingly the entire textbox was deleted.

Upstream attention

In the above case the spoken assessment leading to the subsequent deletion came from a representative of one of the superior directorates. The assessment and subsequent deletion of the textbox (Figure 16) illustrate another significant aspect of the Governing Enterprise in the Guideline's making: the author group's upstream attention towards the superior bureaucratic institutions who had assigned them the mission of making it. Sensitivity to inputs from the superior directorates was particularly distinct in the stage of the production process leading up to the point when the Directorate of Health distributed the hearing draft. This was a period characterized by a recursive process consisting of proposed text submitted to the directorates, subsequent feedback that was implemented in new drafts that were then submitted, and so on. This pattern of repetitive internal trials also included an internal hearing in September 2009, in which several departments within both

the directorates were consulted. As a result, feedback brought by the regular representatives of the two directorates also included opinions expressed by others located elsewhere in the bureaucratic landscape.

In striking contrast to the making of the first draft, the making of the hearing draft was characterized by a growing involvement from the directorates in the activity of creating and deleting text, which often took the form of proofreading on a very detailed level. Feedback on specific sentences, words, and even grammatical issues was frequently given by the directorates throughout this production stage. For the author group at KoRus Nord, this growing involvement from the Guideline's commissioners seemed, at least for the period from August 2009 to February 2010, to bring about a significant change in the way they organized their work. The project manager's role increasingly took the form of a recording secretary responsible for implementing the feedback from the directorates, while the remaining members of the author group to a large extent withdrew from the ongoing process. Later, in Chapter 8, I will return to this temporary shift in the ordering of the authorship, which was not without implications for the Guideline's evolution once the author group members and the management at KoRus-Nord gradually returned to their chairs in the tool factory. For now I will confine myself to discussing the recursive pattern of recurrent trials of strength.

A sequence from a discussion in an author group meeting in August 2009, the last meeting before the temporary reduction of its workforce, might illustrate this pattern. As is typical for this particular production stage, the dialogue is taking place as members of the author group examine a draft from the beginning to the end, paying detailed attention to what the directorates had said and written about it previously, as well as discussing ways to adapt to their inputs. AM is an author group member, while PM is the project manager:

AM: Have we reached Chapter 5.2 now?
PM: Yes.
AM: Yes, because it's written that research shows that if parents are restrictive with regard to young people's use of alcohol, their drinking debut is postponed and they drink less. And then we refer to Koutakis and Stattin [a scientific report from the Swedish Örebro project]. Isn't there a Norwegian reference to this that we could use instead? Indeed there is!
PM: [Interrupting] Yes, but then it was very important for them to include the Örebro project [referring to what was said in the previous meeting between PM and the directorates]. This is deliberately included because it is a project promoted by the Directorate of Health. They have been very clear on that point.

The fact that this particular scientific claim, along with its associated reference at stake in this dialogue, survived the trial and even is to be found in the ready-made guideline, should not lead to the conclusion that the expressed will of the superior bureaucratic institutions determined the Guideline's content. Later, we will see distinctive examples indicating quite the opposite, that both creating and deleting textual content was carried out despite the directorates' proposals, a disobedience that seemed to be a productive force itself in terms of affecting the feedback received from the directorates. What acted and what was acted upon within the bureaucratic hierarchy was by no means as obvious as one might assume. Once again, following the process of making the Guideline indicated that there were hardly any immutable phenomena involved in the process. This applies not only to the expressed will of the superior directorates, but also to the authors' responsiveness to what was said and written. The written and spoken feedback materials enrolled in the making of the Guideline's content are in my view more fruitfully perceived as performing actors than as orders to obey. Notwithstanding, the Governing Enterprise was definitely to be regarded as a productive force, not least in terms of the authors' upward attention. However, its ability to actually *force* the process was determined in the battles against as well as alongside the other forces at play in the tool factory.

6.4 The battle of forces

The examples in the two previous sections derive from various drafts and meetings. They were employed to introduce the Teacher, the Science, and the Governing Enterprise as three crucial productive forces. Furthermore, my aim was to illustrate both the flexibility of these forces and the ever-changing marks they made on the different drafts. As with any other version of the Guideline's genesis, my account makes a certain order in the production dynamics. The narrative choice of presenting the Teacher, the Science, and the Governing Enterprise separately and one by one is analytically based: Bringing these three major productive forces to the fore facilitates further analysis of how they *intersected* as the text production progressed. The author group's meeting rooms were by no means sites where the Teacher, the Science, and the Governing Enterprise entered one at a time. Rather, they were *multiple* productive forces *simultaneously* at play. Moreover, these intersections seemed to lack clear and stable regulations regarding right of way and duty to yield right of way. In that respect, I endorse the following assertion by John Law and Annemarie Mol (2002):

Often it is not so much a matter of living in a single mode of ordering or of 'choosing' between them. Rather it is that we find ourselves at places where these modes join together. Somewhere in the interferences something crucial happens, for although a single simplification reduces complexity, at places where different simplifications meet, complexity is created, emerging where various modes of ordering (styles, logics) come together and add up comfortably or in tension, or both. (2002, p. 11)

We have already seen how the assessment of the first draft as 'too academic' implied configuring the Teacher as a character disapproving of academic-styled governance. After all, the 'too academic' comments were not uttered by just anyone, but by one of those who had commissioned the Guideline's making. This illustrates how the Governing Enterprise took its toll on the Teacher. But it is also a case illustrating how the Teacher reconfigured the Science, with a configuration materialized by scientific citations and footnotes finding their way into the tool factory's waste basket. It might also be interpreted as the Teacher displacing the Governing Enterprise insofar as the recommendations in the green textbox (see Figure 17) were deleted. Hence, this specific incident is a case suitable for illustrating what I regard as a fundamental characteristic of the production dynamics. In the shape of spoken and written language, the Teacher, the Science, and the Governing Enterprise were always partaking in the making and deletion of the Guideline's textual content.

This claim does not imply that the human authors expressed equal sensitivity to, or took equal account of, all the productive forces all the time. In some situations they even appeared as not paying attention at all to the Teacher, the Science, or the Governing Enterprise – for instance, in the process of deleting the 'multicultural content' in the first draft. In this case the Teacher and his need for scientific knowledge dealing with these topics was barely a subject in the preceding discussions. Yet that does not exclude him from being part of what happened. Any making or deletion of the Guideline's textual content somehow shaped the Teacher as well as the Science and the Governing Enterprise. In this particular case the Teacher was implicitly receiving one shape by the inclusion of two pages of 'multicultural content' in the first draft, and another shape by the same content's absence in the next draft. The lack of discernible participation for a productive force in text-making sequences might indicate their displacement, but not their absence.

By painting a warlike picture of the tool factory's meeting rooms as some kind of battlefield involving three ever-present battling forces, I probably run various risks. One of them is the risk of reducing the human authors' part to some kind of recording secretary or adjusting executives, that their making and deletion of content was done *according to* the voice of the Teacher, the Science, or the

Governing Enterprise. On the contrary, in my attempt to introduce the three major productive forces, I have tried to emphasize that what was said, written, and deleted by the authors should not be perceived exclusively as an outcome, but also as performative and productive in terms of configuring the Teacher, the Science, and the Governing Enterprise. To regard the productive forces as frames, context, limitations, possibilities, or any other phenomenon carrying exclusively input-related qualities, would be to equip them with a sturdiness that can hardly be confirmed by my observation of the production process. Indeed, they were forces in the sense that they partook in the text-making battles. However, as forces in a more military understanding of the term, their fire-power was significantly affected by the battles they took part in.

Notwithstanding the peacefulness and cheerfulness that usually pervaded the author group meetings, a combative image of the Guideline's production might also help in outlining another important aspect of the production dynamics. The Teacher, the Science, and the Governing Enterprise were not only ever-present and always at stake. Their simultaneous presence was frequently marked by mutual tension as well as alliance. In that respect, a productive force was battling not only for its offspring in terms of imprints on the Guideline's textual content; in such an effort, it was simultaneously battling against as well as alongside the other productive forces. Once again, the deletion of references and footnotes following the assessment of the first draft as 'too academic' may serve as an example: The Teacher and the Governing Enterprise became allies and displaced the Science by their joint attack. Two 'modes of ordering' (Law and Mol, 2002, p. 11) came together in alliance and displaced the third one.

But then again, this should not be perceived as if the Teacher and the Governing Enterprise stood firm while the Science backed down. This was an alliance made possible by a reconfiguration of the Teacher as well as the Governing Enterprise: the Teacher became a disapprover of academic-styled text, while the Governing Enterprise reduced its insistence on academic-styled governance. Hence, the Science was displaced by the co-adaptation of the Teacher and the Governing Enterprise. In the aftermath of this particular battle, the Teacher withdrew, having gained some scepticism against governance by expertise but lost some of his academic curiosity. The Governing Enterprise gained some teacher-configuring power, but at the same time the idea of governance via the supply of scientific knowledge was impaired. In other words, the Teacher became harder to govern while and the Governing Enterprise's ability to govern weakened. In other production sequences, alliances and enmity among the ever-present and ever-mutating productive forces was ordered differently – for instance, in the creation of the drawing (see Figure 18). In this case it was the Science and the

Governing Enterprise that mutually accommodated and merged, ascribing governability to the Teacher.

6.5 Shrinking patterns in the fluid

In accounting for the productive dynamics unfolding in this particular tool factory, I have repeatedly underscored the fluidity of both the Guideline's textual content and the spoken and written language materials enrolled in its making. Juxtaposed against the Guideline's prescribed mode of operation in a supply line of knowledge and what is supposed to be done to make it fulfil such a role, my account of a fluid production stands in a rather striking contrast. Hence, my account thus far already holds the potential for contesting the optimistic story told by policy documents and speeches. Having accounted for a guideline production that was far more fluid and complex than suggested by the policy script, I will now move on to consider the question of how the Guideline arrived at its final form. What directions did it take throughout its making, and what was channelling its ongoing modifications? Were there any traceable patterns in the fluid?

The production process throughout the second stage of the Guideline's genesis comprised multiple as well as flexible forces working in both alliance and tension during ongoing productive battles, each of them leaving imprints on a total of 12 different drafts. Produced consecutively over a period of 18 months, these drafts provide access to the textual bits and pieces that were added and subtracted as the document was made. By comparing these drafts and the way they changed, some significant patterns of text-making and deletion become visible. Since we will keep these patterns under surveillance throughout the Guideline's progression through the next stages, the remaining part of this chapter will be devoted only to their introduction.

The second stage of production started with a first draft and ended with a hearing draft. In comparing these two drafts, the most conspicuous disparity between them is their length. Over the course of this production stage, the proposed guideline's content was reduced by more than 25% according to the word-count function on my text editor. Counting the words of different documents is by no means an advanced analysis and hardly provides any information about exactly what was thrown overboard – and even less, if possible, about *how* or *why* it was thrown out. Nevertheless, it indicates a shrinking tendency in terms of length that continued throughout the entire production of

the Guideline: Over more than four years of production, every new draft was shorter than the preceding one, a pattern so sturdy that it stands out within the otherwise fluid progression of the Guideline's making. What characterized the textual components that survived and those that were deleted?

The shrinking length of the document was characterized by an ongoing deletion of what I prefer to call *demanding content*, a concept employed for embracing all types of textual elements enacting an obligation on the part of the recipients. We have already seen how text directly addressing the Teacher's actions was routed towards the waste basket. Whether imperative formulations or lists of recommended behaviour, these prescriptions did not survive the trials against an ever more autonomous and hard to govern Teacher. The same fate seemed to affect larger textual sequences paraphrasing scientific claims that *indirectly* put an obligation on the Teacher. Such properties were inherent in the content of three of the first draft's main chapters, respectively titled 'Positive educational setting', 'Collaboration school-home', and 'Implementation and performance' (my translation of the first draft, dated 3rd of April 2009):

4. POSITIVE EDUCATIONAL SETTING
  4.1. Positive educational setting
  4.2. Adapted education
  4.3. Risk and protective factors/TI
  4.4. Life skills
  4.5. Methods that activate pupils
  4.6. Authoritative leadership style
  4.7. The school's physical environment
5. COLLABORATION SCHOOL-HOME
  5.1. Collaboration school-home
  5.2. Multicultural perspective
  5.3. Affiliates
6. IMPLEMENTATION AND PERFORMANCE
  6.1. A comprehensive prevention plan for school
  6.2. The role of the school administration
  6.3. Skills upgrading
  6.4. Framework factors (structure/actor)
  6.5. Faithfulness versus local adaptation

All these chapters, comprising fifteen sections, contained scientifically justified textual content addressing both teachers and school administrators and telling them what they should do. In the hearing draft this content, originally more than 20 pages long, was reduced to 11 pages under one common chapter heading titled 'Recommendations for prevention of alcohol and drugs in school' containing three sections (my translation of the hearing draft, dated 20th of October 2010):

4. RECOMMENDATIONS FOR PREVENTION OF ALCOHOL AND DRUGS IN SCHOOL

4.1. How can teachers facilitate the prevention of substance abuse and health promotion in classes?

4.2. How can the school administration facilitate the prevention of substance abuse and health promotion in school?

4.3. School Health Service, Educational Pedagogical Service and other partners

Most of the deleted text deriving from the three originally-proposed chapters had the common feature of enacting obligations on the recipients. It was not a rating of scientific value that sealed their destiny, but rather what the transmission of scientific knowledge was implicitly aiming at. Other types of scientific claims, having to do with, for instance, the average age of different types of substance debuts or harm caused by substance use, seemed to have far better chances of survival. Of course, insofar as they kept their position as guideline content these are also topics aimed at teachers, but at best the aim is at a general awareness of the problems caused by alcohol and drugs, and teachers' dispositions to take prevention seriously. They don't place any obligation on the teacher in terms of what to do and what not to do; they are informative and non-demanding, but still science-based.

I have used the notion of *script* (Akrich, 1992) to account for how spoken and written materials partook in the making of this guideline. Commonly associated with technologies in a more traditional understanding of the term, the script concept captures what a technical object asks its users to do without presupposing that they do as they are 'told'. Technological objects allow for *anti-scripts*. A dashboard display might tell you to fasten your seatbelt otherwise the car won't start (Latour, 1992), but your response is not determined by the script. For instance, you could ask a mechanic to dismantle this specific device, or you could keep the seatbelt behind your back. Translated to texts, for instance an action plan, a written assignment, a consultative statement, or an email from the Directorate of Health, the script concept recognizes that these documents perform; they frame and define, ask for something to occur, call for action to be taken, or assign subject positions. But the responses cannot be taken for granted. As with technologies, documents have scripts and allow for anti-scripts. We may trace scripts by attending to the documents themselves, but in exploring how they are being acted upon our attention needs to be directed towards the practices documents partake in.

The ready-made Guideline may be perceived as a designed artefact carrying its own script. But as with different technologies, policy documents also differ with regard to the degree and the textual

means by which they impose governance; i.e. the *strength* of their scripts varies. On this account, an act of Parliament mandating penal provisions would enact a strong script in contrast to a governmentally published information brochure, for instance. Between these extremes one might draw a line along which different policy documents may be placed according to the strength of their scripts. The ongoing deletions of demanding content implied a movement along this line away from a strong-scripted governmental guideline towards a guideline enacting a weak and open script. In other words, the outcome pattern of the Guideline's progression was that it gradually deviated from the part it was set to play in the supply line of knowledge. Successively, the Guideline became less of what it was meant to be; this was a pattern that persisted all the way to the closure of the tool factory, but it was already conspicuous in the making of the hearing draft.

Chapter 7: Third Stage – External trials of strength

Following an internal acceptance procedure within the Norwegian Directorate of Health, a ready-made hearing draft was distributed to 74 different consultative bodies[19] on the 20th of October 2010, almost two and a half years after the onset of the authorship. This date marks the beginning of the third stage. The deadline for comments was set to the 2nd of December 2010. Altogether 21 written responses were submitted. The distribution of the hearing draft as well as the reception of the hearing responses were the responsibility of, and were executed by, the Directorate of Health. The process of revising the hearing draft was conducted by representatives from both directorates in collaboration with the project manager at KoRus-Nord. Three meetings were arranged subsequent to the arrival of this set of written hearing responses, and two new guideline drafts were drawn up. The second of these two drafts, from now on referred to as *the post-hearing draft*, was submitted by the project manager to the two directorates as well as to the management at KoRus-Nord on the 15th of February 2011, for final comments and formal approval. This submission of what appeared to be an almost finished document close to publication marks the end of the third stage of the Guideline's production – a stage lasting for almost four months.

Through the external hearing round yet another stack of documents entered the tool factory, leading to new trials for the Guideline's proposed content. In this chapter my attention is mainly directed towards how the external hearing was carried out and how imprints on the post-hearing draft came about. However, to understand what this hearing was about, I will provide a brief glimpse into a few policy documents and how they generally portray hearings as a procedural arrangement applied in Norwegian policy-making.

7.1 Portraits of hearings as bidirectional devices

Within a Norwegian policy context the concept of a hearing comprises a variety of procedures and practices. Depending partly on the subject area and partly on the character of the intervention, different types of scripts address how a hearing shall progress and for what purposes. But

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[19] Some addressees were requested to initiate distribution of the hearing draft within their own organization. Insofar as this was done, the total number of bodies entitled to comment increased.

independent of the objects, procedures, practices, and documents regulating hearings in governmental and local policy-making, all hearing arrangements exhibit the common feature of enlisting the participation of the parties affected by a policy intervention. In that respect, hearings take the shape of an invitation for external involvement. This invitation is portrayed as an instrument for the opening up of the traditional sites of governmental policy-making, widening the scope of policy-making agents (Asdal, 2011; Asdal and Moser, 2008). However, according to different policy documents regulating hearing procedures, the reasons for public involvement through hearing procedures are not exclusively to comply with people's democratic right to participate in the making of what is going to be imposed on them. According to the website of the Norwegian Ministry of Local Government and Modernization, the general purpose of hearings is

> […] to 'hear' what stakeholders (public and private institutions, organizations and other ministries) have to say to a proposal in progress. The background is the desire to better assess the financial and administrative implications of government actions.[20]

This formulation enacts the hearing as an instrument for the mutual benefit of both the policy-relevant public and the policy-making institutions. The 'public and private institutions, organizations, and other ministries' are provided with an arrangement facilitating their democratic right to make their opinions known to the policy-making institutions. At the same time, hearings are instrumental for the benefit of the policy-making institutions. Assigning the parties concerned a role as providers of information relevant for the subject matter facilitates better assessments of 'the financial and administrative implications of government actions'.

This emphasis on the hearing as instrumental for both democratic participation and efficient governing can be retrieved from various Norwegian hearing scripts. For instance, the hearing procedure required for adjustments of local government taxes is regulated by the Norwegian Public Administration Act's paragraphs addressing the local administration's obligation to inform and involve the parties concerned. In this case, questions of the matters that need to be subjected to a hearing procedure, who the parties concerned are, the setting of deadlines, and a series of other procedural arrangements are to a large extent prescribed by the law and regulations laid down by the law, emphasizing both the local government's assessment duty and disclosure requirement.

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[20] My translation of http://www.regjeringen.no/nb/dep/kmd/dok/hoeringer.html?id=1940 (Accessed on the 4th of February 2014).

Chapter 5 in the Norwegian 'Instructions for Official Studies and Reports', laid down by Royal Decree of 24th June 2005, provides another script regulating hearing procedures as part of the making of, for instance, a proposition to be submitted to the Norwegian parliament. The Instruction states its purposes as follows:

> The purpose of these instructions is to ensure the proper preparation and administration of all work relating to official reforms, amendments to regulations and other measures. They shall contribute to ensuring cooperation and coordination in administrative procedures, high quality of the studies and an effective process of communication between the body submitting the matter and consultative bodies. These provisions are especially intended to ensure that financial, administrative and other significant consequences of reforms and measures are clarified. This is important in order to evaluate the cost to the government and the nation, and to prepare for the implementation of reforms in the best possible way.
>
> The Instructions achieve this purpose in the following way: […] they contain provisions to ensure that the institution responsible for the matter assesses all relevant and significant consequences, and that the bodies affected and the general public are included in the decision-making process before a decision is made.[21]

As for the Norwegian Public Administration Act, the Instruction expresses the purposes of external involvement throughout a hearing procedure as twofold: It serves the quality of the intervention, for instance by supporting the assessment of consequences or by preparing for the 'implementation of reforms in the best possible way'. At the same time it provides the 'bodies affected and the general public' with an opportunity to participate in the decision-making. The hearing arrangement is thus configured as an instrument both for efficient governing and for endowing the policy-relevant public with their democratic right to participate and thereby affect the governing interventions imposed on them. As such, the hearing is portrayed as an arrangement for the benefit of both the governor and the governed.

These two examples of documents regulating hearing procedures address the processes of making economic and legal interventions, respectively. Governmental advisory guidelines are commonly classified as a pedagogical and more lenient genre of governing measures.[22] However, their lack of

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[21] Quoted from the English version published on

http://www.regjeringen.no/upload/FAD/Vedlegg/Statsforvaltning/Utredningsinstruksen_eng.pdf

(Accessed on the 4th of February 2014).

[22] See, for instance, the White Paper from the Norwegian Ministry of Local Government and Regional Development: Report to the Storting 12 (2011–2012), 'State and Municipality – Government and Interaction'.

economic incentives and formal legal status do not make a hearing procedure redundant. On the contrary, executing an external hearing is also standard procedure when it comes to the making of governmental guidelines. As for economic and legal governing measures, the making of these pedagogical provisions is regulated by documents internal to the administrative bodies responsible for their production. This also applies to the hearing procedure executed as part of the Guideline's production, which was prescribed in a document titled 'Methods Book for the Making of National Guidelines'.[23] According to its foreword, this internal document within the Norwegian Directorate of Health is primarily 'designed to provide support and guidance in the preparation of the Directorate of Health's national guidelines' (p.3). Although it is not very forthcoming on the purpose of its prescribed procedures, the document does refer explicitly to the goal of public participation. It states that 'professional guidelines are prepared according to a set procedure in which the emphasis is on current scientific knowledge, openness, […] and user involvement' (p. 54).

In other words, hearing scripts enact hearing arrangements as participatory technologies. The reasons for calling upon public participation are twofold, in the sense that participation serves the parties concerned and their democratic rights on one hand, and the governing institutions and their enterprise on the other. Hearings appear as procedures that enable, or at least provide the possibility for, the parties concerned to state their case and thereby exert influence. As such they appear as an instrument for democratic involvement from the policy-relevant public and non-governmental institutions. At the same time, external access and involvement are performed as beneficial for the processes of making and implementing governing interventions. Thus, the hearing might also be viewed as a technology for efficient governing, whereby the participation of the parties concerned provides quality assurance for the benefit of the governing intervention in progress. Such a configuration, a bidirectional relation between the governor and the governed afforded by hearing procedures, is also apparent when it comes to 'openness' and what in legal terms are referred to as 'disclosure requirements'. According to their scripts, hearing arrangements support such principles and accommodate the democratic rights of the governed. At the same time, the openness provided by hearings also attributes controlling power to the governed and supports their rights to be

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Available in Norwegian at http://www.regjeringen.no/nb/dep/krd/dok/regpubl/stmeld/2011-2012/meld-st-12-20112012.html?id=671829 (Accessed on the 4th of February 2014).

[23] My translation of 'Metodebok for utarbeidelse av nasjonale retningslinjer' (Norwegian Directorate of Health, 2009). The document was revised in 2012 and published with a new title: 'Guideline for the Development of Knowledge-based Guidelines' (my translation of 'Veileder for utvikling av kunnskapsbaserte retningslinjer').

informed. Hence, external hearings are also portrayed as an oversight technology as well as a technology for disseminating information.

The labelling of the hearing instrument as a technology for participation, democratic involvement, quality assurance, efficient implementation, external oversight, and dissemination of information is undertaken with reference to the presented hearing scripts. However, by recognizing that the practices of external hearings are also underdetermined by their scripts, the question of who they serve remains empirical. In this particular hearing process my attention is on how the script as well as other documents are enrolled in the hearing procedure and how they partook in this stage of the Guideline's production. This includes a focus on the outcomes in terms of both changes made to and preservation of the textual content of the exposed hearing draft. I will do this by focusing on a list of hearing addressees, a stack of written hearing responses, a document summing up the responses, and the Guideline draft that was made subsequent to the hearing round.[24]

7.2 Assembling stakeholders

Seventy-four consultative bodies received the hearing draft. I have chosen to classify them into public bodies, non-governmental organizations, scientific institutions, employers' and employees' associations, and school-related institutions. Their names and ordering within these categories is shown in the following overview:

54 public bodies:
- ✓ The Norwegian Ministry of Health and Care Services
- ✓ The Norwegian Ministry of Children and Family Affairs
- ✓ The Norwegian Ministry of Education and Research
- ✓ The Norwegian Ministry of Justice
- ✓ 18 county governor offices
- ✓ 18 county administrations
- ✓ 2 regional resource centres subordinate to the National Support System for Special Needs Education

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[24] There are no translated versions of these documents. Hence, all quotes are my translations.

- ✓ 4 regional offices subordinate to the Norwegian Directorate for Children, Youth, and Family Affairs
- ✓ The Norwegian National Crime Prevention Council
- ✓ 6 regional resource centres for alcohol and drugs (KoRus)

6 non-governmental organizations:
- ✓ Alcohol and drug abusers' interest organization
- ✓ The Norwegian Council for Mental Health
- ✓ The National Federation against Drug Abuse
- ✓ Actis – Norwegian Policy Network on Alcohol and Drugs[25]
- ✓ Adults for Children[26]
- ✓ The Women's Shelter Secretariat

2 scientific institutions:
- ✓ The Norwegian Centre for Child Behavioural Development
- ✓ The Norwegian Institute for Alcohol and Drug Research

2 employer and employee organizations:
- ✓ The Norwegian Association of Local and Regional Authorities
- ✓ The Norwegian Medical Association

10 school-related institutions:
- ✓ The National Parents' Committee for Primary and Secondary Education
- ✓ The Pupils' Organization
- ✓ 5 Norwegian primary and lower secondary schools
- ✓ 3 Norwegian upper secondary schools

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[25] An umbrella organization for various NGOs and associations dealing with alcohol, drugs, and addiction issues.

[26] A nationwide organization for the promotion of children's mental health.

Inclusions and exclusions

Generally, a performative approach to different types of policy documents aims to bring into focus how they partake in ordering the world. This is an approach that fits well with a list of bodies entitled to comment on the hearing draft of a governmental advisory guideline for the prevention of alcohol- and drug-related problems. The list of addressees is suitable as a condensed example of a specific performative capability of policy documents: It draws a demarcation line between institutions that are entitled to give their opinion and those that are not. As such, it is an artefact sorting out the Guideline's stakeholders. The list of consultative bodies is policy material enacting the Guideline's stakeholders.

The drawing of the demarcation is not fixed; rather it is a result of a selection related to a larger historical and cultural backdrop that includes prevailing ideas on how the struggle against alcohol- and drug-related problems is framed and organized within a Norwegian context.[27] Furthermore, the process of assembling the list of consultative bodies involved not only human considerations and decisions, but also non-human agents such as the previously made list of consultative bodies that was used as a starting point. This was a document drawn up in 2005 (dated the 28th of September 2005) and related to an external hearing conducted by the Directorate of Health in their making of a document named 'Knowledge platform for education in schools on alcohol and drugs'.[28]

Considered collectively, the most striking feature of the assembly of bodies entitled to comment is the emphasis on *public* stakeholders. From a total of 74, 56 (three quarters) of the addressees were governmental institutions on a national, regional, or county level. Hence, it is not unreasonable to argue that the making of the Guideline appears as primarily a governmental affair. To make the Guideline was to make a governing tool, and as such it pertains primarily to the governors. Accordingly, the list of addressees contains a copious selection of governmental institutions dealing specifically with issues of alcohol- and drug-related problems, or adjoining policy issues such as public health, legal regulation and enforcement, conditions of upbringing, or education.

The governmental institutions counted as relevant in the list of addressees for this specific hearing do not seem to be a selection determined by any consistent logic. For instance, the absence of

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[27] For more on this historical and cultural backdrop, see for instance Fekjær (2009).

[28] My translation of 'Kunnskapsplattform for rusmiddelundervisning i skolen'.

governmental institutions dealing with economic or cultural policy issues cannot be understood by assuming their lack of relevance. Instead, relevance should be seen as an attribution that is *done* within policy-making practices such as the one at hand in this particular hearing round. The list of addressees does not reflect relevance, but rather enacts an order of irrelevant policy issues and public institutions. The same holds for the other organizations defined as relevant by dint of their appearance as hearing addressees. The selection of non-governmental organizations, scientific institutions, employers' and employees' organizations, or school related institutions is not determined by the Guideline's subject matter, the idea of science as a problem-solving resource, the use of the Guideline as a science-shipping alternative, or its target group. As bodies entitled to comment they were *enacted* as relevant by the same device that rendered irrelevant the institutions expunged by the list of addressees.

What logic forced the inclusion of the Women's Shelter Secretariat on the list of stakeholders, entitling it to comment on a policy document made to govern teachers' work on the prevention of alcohol- and drug-related problems? What logic excluded bodies organizing nurses who work on a daily basis with pupils in school health services? These questions are indeed likely to provoke some curiosity. The same applies to the inclusion of the Norwegian Medical Association in contrast to the exclusion of – and this is probably the most curious of all – the teachers' employee organizations. After all, the professional teachers' part in the supply line of knowledge is to be the Guideline's principal target; the teachers are those who are supposed to be governed by it. Given the stated purposes of hearing procedures, one would expect the teachers' organizations to be on the list of addressees. Yet they were conspicuously absent. Interesting as these notable selections might be, I will not go into detailed accounts of why such an assembly of stakeholders came about. I will instead turn my attention towards the performance of the hearing and its artefacts. What are these selections and omissions doing, and with what effects?

Effects of absence

The omission of organizations representing the target group, those directly involved in the type of work subject to governance, is hardly consistent with the prevailing image of hearings as a technology for participation. Rather, it makes the hearing look like a technology for the maintenance and support of the policy configuration of science-based practice as a supply line of knowledge: The omission of teachers' organizations as stakeholders reinforces the instrumental position assigned to

teachers as the Guideline's target group. It enacts the fundamental division of labour embedded in the policy of science-based practice between those who are entitled to recommend what to do and those who are required to implement their recommendations. Hence, the assembly of stakeholders might be perceived as consolidating the policy prescription of science-based practice and its inherent geography of expertise. It enacts the gap between scientific communities and practice communities and permits 'the knower' to remain entitled to govern 'the doer'.

The configuration of an autonomous and hard to govern teacher on one hand, and the exclusion of the teacher's associations on the other, might at first sight appear as paradoxical. In dealing with the challenges of governing the hard to govern, one would expect inclusion and participation as a response. As that was obviously not the case, this instance of non-involvement could easily be accounted for as a displacement of the Teacher for the benefit of the Governing Enterprise; the teachers are going to be governed no matter how obstinate they are. However, an analysis of any underlying tension between the governor and the governed also needs to take into account the optional outcomes in terms of changes made to the Guideline's text. As two different 'modes of ordering' (Law and Mol, 2002, p. 11) the Teacher and the Governing enterprise were not in tension, resulting in textual changes for the benefit of one or the other. As argued in Chapter 6, a different optional outcome emerged as the one most likely to occur throughout the process of making the Guideline: *withdrawal from governance* through the Guideline, an outcome that manifested itself by textual deletions that loosened the Guideline's script. The tension inherent in the endeavour of governing hard to govern teachers channelled the Guideline towards a lenient textual content. In slightly different terms, making a non-governing governmental guideline enabled withdrawal from battles against the image of the hard to govern teacher.

My argument is that the omission of the teachers' associations from the hearing addressees, as well as the teachers' non-involvement in the Guideline's genesis more generally, needs to be understood in relation to the ongoing shrinking of the Guideline. The propensity for the involvement and participation of the target group strongly relates to the tightness of the Guideline's script. To illustrate, suppose that the Guideline provided a tight script, for instance by stating that all teachers were obliged to acquaint themselves with the Guideline's content and should implement its recommendations as pedagogical means for the effective prevention of alcohol- and drug-related problems. According to contemporary ideas of governance, imposing such strong demands on the teacher is likely to involve at least some kind of participation on behalf of the governed. If the Guideline provides a loose script, for instance by being a document hinting at pedagogical means for

teachers to employ only if they find it appropriate, the risk of backfiring caused by non-participation is reduced. On this account, the omission is congruent with the making of an inconspicuous guideline.

The omission of teachers' associations is an example of what I will call *exposure management*. A non-committing guideline allows for non-involvement from the target group, and thereby protects itself against trials of strengths entailed by the participation of the governed. Perceived as such, this is an instance of the Teacher and the Governing Enterprise 'adding up in comfort' – an underlying truce between the governor and the governed. By abdicating from governance through loosening the Guideline's script, the production process could unfold through the external hearing, avoiding potential obstacles caused by involving those who are set to play the part of governed practitioners. The omission of the teachers' associations as bodies entitled to comment may seem odd, but it fits rather coherently into the Guideline's shrinking pattern. Maintaining a distance between the Guideline and its recipients kept the tool factory going. That includes distance in terms of keeping the teachers out of the Guideline's production, as well as not calling too strongly upon their action. Governing power may well imply abstention from governance, especially when it comes to the application of monologic governing technologies.

Assembling of stakeholders, anticipating responses

Hearings are likely to be portrayed as arrangements that give way to the parties concerned. Stakeholders are given an opportunity to be heard. However, what is spoken relates to who is speaking, or to be more accurate, what is written relates to who is writing. The responses can be anticipated. In this particular hearing, the linkage between the selected addressees and the statements received may be illustrated by the Norwegian Ministry of Justice's hearing response (letter dated the 29th of November 2010): 'We will therefore request that the Guideline also points to the prevention efforts conducted by the police'. This request for making the police's prevention efforts more visible was a response given by the ministry responsible for the police. The same connection between institution and response applies to a hearing response from Juvente[29] (letter

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[29] Juvente received an invitation to the hearing through further distribution by the NGO umbrella organization Actis. According to their own website (http://juvente.no/) Juvente is an NGO engaged in alcohol and drug policy and prevention for youth between the ages of 13 and 26.

dated the 7th of December 2010), stating that 'we find it peculiar that NGOs are not at all mentioned as a potential collaborating partner in the Guideline'. Basically, this is an NGO finding it peculiar that NGOs are not mentioned.

This type of feedback exemplifies what hearing procedures, according to their scripts, are set to support. They are arrangements inviting parties concerned to declare their own point of view and promote their own interests. My point is that given this opportunity to feather their own nests, the assembling of stakeholders was simultaneously a tool for anticipating the responses that were likely to be received. Being in the position of selecting which bodies to invite to the hearing afforded at least some influence on the feedback received. On this account, the hearing no longer appears exclusively as a democratic procedure providing a way for the parties concerned to state their case, but also as an arrangement that, by excluding and including stakeholders, afforded for some measure of control over the feedback that was received. The hearing is also a tool for exposure *management*, not merely for exposure.

Roughly, the responses submitted in the external hearing can be sorted into three categories: contestations, approvals, and silence. The responses from Juvente and the Norwegian Ministry of Justice are both contestations by dint of requesting changes to the hearing draft's textual content. But as the selector of stakeholders, the Directorate of Health could also facilitate the receipt of statements that approved and celebrated both the proposed textual content and the very idea of making the Guideline. Keeping in mind that KoRus-Nord was responsible for authoring the exposed hearing draft, the selection of the remaining six KoRus centres as consultative bodies, for instance, may be viewed as a selection increasing the probability of supportive responses. The hearing response from KoRus, Region South (email dated the 29th of November 2010) stated that 'by and large, our understanding is that this document will be well suited as a contribution to the school's work on such topics and that this is a guideline that the schools want'. This was a response definitely more likely to come from a fellow KoRus institution than from some of the other bodies on the list of addressees. The same applies for the response from KoRus, Region West (letter dated the 30th of November 2010), assessing the hearing draft as 'concrete, readable and good'.

The hearing as a procedure affording for the Directorate of Health to affect the hearing responses also needs to take into account the possibility of producing silence – that is, by affecting the number of responses through the selection of consultative bodies. I have previously noted how this was done by de-selecting the teachers' and nurses' employee organizations, an action that of course excluded

their hearing responses. However, also within the list of bodies entitled to comment, estimates could be made of the likelihood of receiving a response, for instance on the basis of the addressee's relation to the Guideline's subject matter or its previous participation in different hearings. For example, the failure to receive responses from the individual schools included in the hearing was no surprise to the representatives from the directorates. Rather, it complied with the lack of responses from schools in previous hearings. Despite this anticipated non-response, five primary and lower secondary schools and three upper secondary schools received the hearing draft for comment, which illustrates how the number of addressees can be extended without raising the likelihood of a corresponding increase in the response number. In slightly different terms, the democratic rights of parties concerned to state their case can be acknowledged without increasing the likelihood of critical responses.

By emphasizing ways in which the Directorate of Health is able to retain some control over the production of responses through the selection of addressees, a rather different version of the hearing procedure emerges. Compared to the version performed by policy documents emphasizing participation and democracy, the hearing in this case appears more like a controlling device under the pretence of participation and democracy. Such an inverted picture of the purposes supported by a hearing could be taken to the extreme, depriving the parties concerned of all their power to exert influence on the process of making the Guideline and reducing them to marionettes in a play engineered by unscrupulous guideline authors. However, that would be a caricatured and conspiratorial version that needs some important modification. The addresser of the hearing draft enjoyed some latitude regarding who to address and who to omit, but at the same time the work of assembling stakeholders was constrained, for instance by a written procedure and by previous hearings. The Directorate of Health could exert influence on the contestations, approvals and silence that was submitted, but then again, this was control in terms of influencing the likelihood of different types of feedback, not in terms of determining what was written or not in the hearing responses.

According to my observations up to the point where the hearing responses were received by the Directorate of Health, a more appropriate account of the hearing settles somewhere in between the official cosmetic policy picture of a democratic technology for participation, and that of the hearing as a disguised tool for exposure management. It appeared to be a highly flexible technology, allowing the Directorate of Health to partake in the shaping of external feedback on the exposed hearing draft. Such an image fits the policy scripts of the hearing in the sense that certain parties concerned were invited to state their case, and indeed some of them did. At the same time it acknowledges that

the hearing allowed for anti-scripts (Akrich, 2002) in the sense that the representatives of the directorates partook in the shaping of external responses by virtue of being in the position of assembling stakeholders. However, the consequences of the hearing responses, in terms of any changes made to the hearing draft, were not given. In the following section I will focus on the destiny of these newly-arrived documents and how they were processed.

7.3 Sorting the feedback

By the hearing deadline the Directorate of Health had received 21 written responses, which added a new stack of documents to the ever-expanding network of texts enrolled in the Guideline's making. An overview of the hearing responses, sorted according to the previously used categories, looks like this:

13 public bodies:
- ✓ The Norwegian Ministry of Children and Family Affairs
- ✓ The Norwegian Ministry of Education and Research
- ✓ The Norwegian Ministry of Justice
- ✓ 3 county governor offices
- ✓ 1 county administration
- ✓ 1 regional office subordinate to the Norwegian Directorate for Children, Youth and Family Affairs
- ✓ 5 regional resource centres for alcohol and drugs (KoRus)

4 non-governmental organizations:
- ✓ Alcohol and drug abusers' interest organization
- ✓ Juvente
- ✓ JUBA[30]

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[30] JUBA received their invitation to the hearing through further distribution by the NGO umbrella organization Actis. According to their own website, JUBA is 'a voluntary youth and children's organization that works to reduce alcohol and drug use in society, to train children for democratic participation and to contribute to a more equitable distribution of wealth in the world' (http://www.juba.org/. Accessed on the 5th of February, 2014).

✓ DNT[31]

2 scientific institutions:
- ✓ The Norwegian Centre for Child Behavioural Development
- ✓ The Norwegian Institute for Alcohol and Drug Research

1 employer and employee organizations:
- ✓ The Norwegian Medical Association

1 school-related institution:
- ✓ The National Parents' Committee for Primary and Secondary Education

The hearing responses diverged considerably concerning their assessment of the hearing draft. Notwithstanding this divergence, all the newly arrived documents implicitly addressed the Guideline's script; that is, how strongly the teachers should be called upon in terms of detailed procedure descriptions and imperative language use. In accounting for the production process prior to the hearing (Chapter 6), I emphasized how the different drafts, through ongoing deletions of 'demanding content', evolved in the direction of an increasingly looser script. When all these newly arrived hearing responses entered the tool factory, they implicitly addressed the Guideline's leniency, either by virtue of supporting the proposed guideline or by statements invoking changes to be made. Hence, the hearing draft's preliminary script, conspicuously loose as it appeared, was at stake throughout the hearing.

This even applies for feedback such as 'The Norwegian Ministry of Education and Research have no comments on the Guideline's hearing draft' (email dated the 2nd of December 2010). Although there might be blurred reasons for making a comment or not making a comment, such a sentence hardly invokes revision. Rather, it enacts endorsement and protection of the proposed Guideline's textual content. The same goes for comments that more explicitly articulate satisfaction with what was written in the hearing draft, such as 'The need for a national research-based guideline is great and the Guideline meets this need' (letter from the Norwegian Medical Association dated the 3rd of December 2010), or 'The Guideline provides a good first impression as we perceive it, having good

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[31] Acronym for *Det Norske Totalavholdsselskap*. My translation: the Norwegian Association for Total Abstinence. DNT also received their invitation to the hearing through further distribution by the NGO umbrella organization Actis.

language, being logically structured, concise, and knowledge-based, and leading to applicable recommendations' (letter from the County Governor of Østfold County, dated the 29th of November 2010). More or less explicitly, this type of statement supported the settled tightness of the Guideline's script. They approved the present level of detail on what teachers should do, as well as the degree of imperativeness in the words and sentences employed to make them do so.

By requesting textual changes, other submitted statements addressed the tightness of the Guideline's script in rather different ways. I categorize these challenging statements into those calling for *tightening* the script inherent in the hearing draft's textual content, and those calling for *loosening* it. Both types of statement expressed a need for adjustment, but they pointed in opposite directions regarding the level of concrete recommended action for teachers. It is important to note that these requests for a looser or tighter script are at the level of statements. However, they do not easily translate to the level of the hearing response as a whole or to the level of the consultative body. This would surely have been a clear and pleasant way of mapping the parties involved in this trial, but the hearing responses simply did not fit into such a scheme. As a rule, individual submitted documents normally contained statements requesting adjustments in both directions, which means that it is not possible to sort the hearing bodies according to this divide. One example is the response from the County Governor of Nord-Trøndelag (letter dated the 29th of November 2010). This response invoked a looser script by suggesting a deletion of two particular pages under the hearing draft's heading 'Good advice for the prevention of alcohol and drugs in schools', assessing them as being 'well-known to teachers'. Another assessment from the same document points in the opposite direction, that is, towards a tighter script:

> The Guideline is not informative enough either for those standing face-to-face with their pupils or for different target groups. As such the Guideline is too vague – both with regard to facts/research and suggestions for how the individual teacher can work.

These quotations illustrate the type of ambiguity that was inherent in most of the hearing responses, at least when they are looked at through the lenses of how they invoked adjustments of the Guideline's script. But simultaneously they are suitable for illustrating ways in which the loose script was challenged by the new stack of hearing responses. The statements requesting specific textual additions or deletions to the hearing draft implicitly invoked a tightening or loosening of the script.

Responses addressing the question of the extent to which the Guideline should recommend or warn against specific preventive school programmes clearly demonstrate this challenging capacity of the

received statements. No programmes were explicitly mentioned in the hearing draft, despite the fact that the Nordahl Report, along with its evaluative assessment of existing school programmes, was cast as the direction-giving document for the making of the Guideline's textual content. The hearing draft contained references to the Nordahl Report. Its criteria for assessing school programmes followed as an attachment. But the proposed draft provided no explicit possibility for its reader to figure out what programmes were recommended by the Nordahl Report or by any other written assessment of preventive school programmes. Instead, the hearing draft withdrew from a focus on specific programmes to a more overriding focus on the 'strategies' that were recommended by research. The following text derives from page 2 in the hearing draft:

Research shows that some strategies can prove or demonstrate documented effect. These are strategies that have:
- solid theoretical foundation
- focus on enhancing social competence in children/adolescents
- methods to activate the target group
- include multiple venues (e.g. school-home-leisure)
- longevity and continuity
- adapted to children's and young people's stage of development
- are able to demonstrate proven results
- focus on implementation
- the recommendation is that schools only use instruments that are research based

Nevertheless, even if specific school programmes and their ranked position according to research-based assessments were omitted, the hearing draft contained ten green textboxes with detailed suggestions on how teachers should go about their teaching – for instance, in relation to 'facts about alcohol and drugs' or in their 'planning of prevention efforts'. The textual content of these example boxes was largely adopted from specific programme manuals and different programme-related documents, but without explicitly mentioning the sources. In one of the hearing responses, the somewhat paradoxical choice of applying content from specific school programmes while abstaining from identifying and ranking them was commented in these terms:

We recognize the examples shown from different programmes. We recommend that it is made clear where they are taken from. Then the schools may seek more information in the programme descriptions. (letter from KoRus-Region West dated the 30th of November 2010)

In another hearing response this reticence regarding existing school programmes was characterized in rather refreshing terms:

As mentioned above, it seems like there is a topic in the Guideline that appears as an elephant in the room. The topic is in the background, but is not mentioned; the use of external prevention programmes. (letter from Juvente dated 7th December 2010)

Other responses also addressed this 'elephant' on behalf of the Guideline's target group, teachers and schools:

In the last section it is mentioned: 'We have knowledge about the efficiency of specific programmes and strategies...' Here, one should specify which. The schools should get this information without having to search for it. (letter from the Norwegian Centre for Child Behavioural Development, dated the 2nd of December 2010)

The assessment criteria for the conclusions in the Nordahl Report are attached, but there is no summary of which programmes are preferred. We believe that the schools would want clearer recommendations. (letter from KoRus-Region West dated the 30th of November 2010)

7.4 Damaging feedback

By asking for a specification of preventive school programmes that were recommended by research, all these statements invoked an adjustment of the Guideline's script in a tighter direction. They requested textual additions to bring the Guideline's content to a more detailed level of recommendation and dissuasion. However, the hearing responses were not unanimous in this respect. Other statements explicitly supported the loose script by expressing contentment with the abstention from naming programmes and conveying researchers' rankings:

The choice of abstaining from pointing at recommended prevention programmes is supported by KoRus-South because this is an evolving and ever changing field. (email from KoRus-Region South dated the 29th of November 2010)

However, adjustments in the direction of dissuading from school programmes might also imply a tighter script. The hearing response from SIRUS (the Norwegian Institute for Alcohol and Drug Research)[32] might be perceived as containing statements with such script-tightening capacities:

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[32] The hearing response from SIRUS was submitted by email dated the 9th of December 2010. The entire consultation response is published (in Norwegian) on their website: http://sirus.no/Veileder+om+rusforebygging+i+skolen.d25-SMRbUZ1.ips (Accessed on the 5th of February 2014).

A major goal of the current guideline is to get schools to draw on the research-based knowledge in the field. More specifically, the purpose is to promote the school's commitment to initiatives that contribute to reduced alcohol and drug use among pupils, and to anchor this in school learning plans. The salient point is whether there actually are school measures that can be expected to give intended effects on behaviour.

This quote questions whether there are *any* measures or programmes based on research that can be recommended. With reference to three scientific publications, none of them mentioned in the hearing draft, this rather fundamental question is answered negatively in a subsequent section:

The international literature on school-based interventions aiming at prevention of substance abuse is extensive, but generally not very uplifting. Many summaries of this literature, including several in Norwegian, have been published in recent times. This includes the NOU report (no. 4/2003) […] which concluded that '[school] programmes primarily affect the actual knowledge about alcohol and drugs, and to a lesser extent, if at all, behaviour'. A similar conclusion is found in a new SIRUS report (no. 5/2010), which is based on both Norwegian and international research: 'Studies of the […] school-based measures show essentially no effect on alcohol use or related problems.' The most important international publication about various prevention strategies is probably 'Alcohol – No Ordinary Commodity', which appeared in a revised version earlier this year. Also here research on the effects of school measures is summarized in a not very uplifting way.

Supported by this *alternative* scientific knowledge-base, the content of the hearing draft received a rough reception, at least compared to most of the remaining consultative responses:

SIRUS finds it worrying that a guideline that aims at promoting evidence-based practice builds on basic premises that are lacking research justification. This also raises ethical questions, including whether […] those planning various school-based prevention programmes are being deceived. Similarly, one might ask whether it is ethical to encourage schools to implement costly measures – without calling attention to the fact that efforts are unlikely to have an effect on pupils' use of drugs and alcohol.

SIRUS also finds it worrying that the proposed guideline leans upon the recommendations in the so-called Nordahl Report. These recommendations are largely based on assumptions and inadequate documentation, and therefore provide no basis for schools to choose prevention measures 'that are research-based and that can show results' (as it says on page 25 in the proposed guideline).

There are certainly studies that suggest that school-based prevention programmes give intended effects, but they have almost exclusively been conducted by researchers with potential self-interest in revealing the beneficial effects of prevention programmes they themselves have helped to develop.

> Therefore, it would have been more honest if the Guideline related to the following question: How can schools deal with the prevention of alcohol and drugs – considering that the efforts cannot be expected to lead to reduced use among pupils?

These quotations may as well be looked upon as a condensed example of the contingent, ambiguous, and flexible nature of the science base in the policy of science-based practice. In the same manner as the Guideline's makers, SIRUS assembled a knowledge base and proposed transmitting this knowledge through a guideline. Both parties turned to science and suggested shipping the scientific knowledge to the teachers in schools. But their assembled knowledge-bases were different, and so were the recommendations they made. The hearing draft was indeed accused of obscuring existing prevention programmes, even if they were positively evaluated by scientists, but according to SIRUS' statements the Guideline had gone way too far in its recommendations. Based on their alternative selection of scientific publications, including one of their own, the appropriate recommendation to schools should be that there was hardly any action to recommend. Apart from conveying this rather different message to schools, SIRUS also suggested more emphasis on transmitting knowledge about *efficient* measures instead of those aiming at forming pupils' attitudes, which were basically inefficient:

> SIRUS' research indicates that Norwegian pupils know little about alcohol and drugs and the use of these substances. Contributing to increased knowledge on this subject appears to be an important task. In a preventative context, it is particularly important that schools provide knowledge on effective policy measures. This is a point mentioned in the Guideline that, with advantage, could have been elaborated more.

These rather critical and damaging statements from SIRUS' hearing response needed to be dealt with in the subsequent process of making a post-hearing draft. The same goes for all the other statements, whether they expressed contentment or requested specific additions or deletions to the textual content that had been exposed in the hearing. The Guideline's makers were now facing a new stack of documents containing statements confirming the textual content of the hearing draft as well as statements suggesting adjustments in not only different but also contradictory directions. All the hearing responses had addressers holding positions in the Guideline's institutional environment – positions that related to the Directorate of Health's own position within a bureaucratic landscape in general as well as by virtue of being responsible for advising teachers, based on scientific knowledge, on how to go about their prevention of alcohol- and drug-related problems. For instance, SIRUS holds the positions of being both 'an independent research institution' on the Guideline's subject matter and 'an administrative government body under the Ministry of Health and Care Services' (SIRUS,

2009) – a position they share with the Directorate of Health, the administrative governmental body responsible for the Guideline.

7.5 Disarming damaging feedback

To illuminate ways in which hearing responses were dealt with, I will follow the destiny of the quotations from SIRUS' hearing response. What imprints did they have on a new revised post-hearing draft? Crucial to the feedback's processing was yet another document made by the Directorate of Health (dated the 16th of December 2010). This was a schematic outline summing up the received hearing responses (see Figure 19). Once again in the history of the Guideline's making, documents were translated into new documents, thereby extending the network of documents enrolled in its production. Furthermore, once again these translations turned out to be a rather flexible endeavour that was underdetermined by the documents subject to translation. The quotations from SIRUS were converted into the schematic outline as follows:

1. SIRUS:	To be implemented	For information	Argument/comments
Are there school measures that can be expected to have an effect on behaviour?		F.i.	Is behaviour a particular entity? Yes, according to the response from the Norwegian Centre for Child Behavioural Development. Social skills programmes and bullying programmes can have positive effects, but we also have programmes and measures that have negative effects.
Critical to whether it is ethical to encourage schools to initiate resource-intensive measures that may not have any effect.		F.i.	The assignment was to create a guide that would make this work easier for the schools. Schools are not encouraged through the Guideline to make use of resource-intensive programmes, rather the contrary.

Misses literature that is critical to effect. Ex: NOU Report 4/2003, SIRUS Report 5/2010, and 'Alcohol no ordinary commodity'	To be implemented		May well take in the literature references suggested. Source reference: Consider where this should be implemented. The work has been going on for so long that new literature has arrived. We'll carry out a new, fresh literature search, possibly taking out something of older date.
Critical to the Guideline relying on the Nordahl Report		F.i. To be incorporated in the introduction.	The Nordahl Report is a critical analysis of measures and programmes, which this guideline embraces. This report applies to both directorates and is ordered from both ministries/directorates. Mental health programmes have the same results.
Proposes the following problem: 'How can schools deal with prevention of alcohol and drugs – considering that the effort cannot be expected to lead to reduced use among pupils?'		F.i.	We must relate to the Curriculum and the request for a simpler, better, and more uniform practice. Doing more of what works and none of the things that do not work (introductory text).
Requests further elaboration on alcohol policy measures	To be implemented		Implement a separate section in Chapter 4.1 and 4.2 with regard to structural/regulatory measures.

Figure 2: Schematic outline summing up SIRUS' hearing response

The left column shows all the previously quoted statements from SIRUS' hearing response which reappeared in a translated version. In comparing this new version with the source document, significant modification becomes visible. Text that originally articulated an alignment of statements in a coherent argument was transformed into disengaged and disarticulated textual sequences, located in six different rows. To illustrate how such a dismantling of hearing responses became essential to the making of a post-hearing draft, I suggest an alternative condensing translation of SIRUS' argument:

1. Question asked: Do school measures have effect on pupils' behaviour?
2. Assembling scientific justification: Scientific publications supporting a negative answer are highlighted, whereas those supporting a positive answer are displaced.

3. Question answered: Science does not support the school measures' effects on pupils' behaviour.

4. Consequence: Significant adjustments need to be made to the Guideline's textual content.

5. If not: The Directorate of Health runs the risk of acting unethically and deluding teachers and schools into the wasting of resources.

Like the schematic outline in Figure 19, this condensed version also splits up linear text into parts, but it preserves the structure of the argument performed by the source document. Also, this structure reflects exactly what was deleted in the conversion behind the document that summed up the hearing responses. Words and sentences can be retrieved from the schematic outline, but the part they once played as building blocks in a coherent argument has become indistinct.

The disengagement of textual components transformed the subject for counter-argumentation from an overall contesting argument into textual components standing on their own and that could be processed further individually. In the schematic outline, the fundamental question – 'Are there school measures that can be expected to have an effect on behaviour?' – appears alone, and as such it could be handled without taking SIRUS' answer to the question into account, and without considering the scientific basis for their answer, the proposed consequences of the answer, and the warning about not accepting such consequences. Disconnected from these other components, the question could now be responded to by a different question: 'Is behaviour a particular entity?' This question is given a positive answer, justified by a statement from the Norwegian Centre for Child Behavioural Development that was submitted in another hearing response on another topic, namely anti-bullying programmes.

This mutual relation between disconnectedness and flexible translation also applies to the scientific publications that performed the justification for the non-effect conclusion in the source document. In the translated version this statement reappears as SIRUS 'misses' three specific literature references critical to the effect. The job once performed by the scientific publications in their joint attack against the hearing draft became lost in translation, although they were still employed. In the schematic outline's right column the scientific references receive a new but transformed function as a general reminder: 'The work has been going on for so long that new literature has arrived. We'll carry out a new, fresh literature search, possibly taking out something of older date'.

Disengaging textual components does not equate to non-engagement, but rather to a transformation of the ways in which words and sentences engage. For instance, when the ethical issue articulated in SIRUS' hearing response reappears as unethical in advising in favour of 'resource-intensive' measures and programmes, this might well be perceived as such a reengagement. In the source document, the resource issue performed as an amplifying modifier:

> […] one might ask whether it is ethical to encourage schools to implement *costly* measures – without calling attention to the fact that efforts are unlikely to have an effect on pupils' use of drug and alcohol. (my use of Italics)

In the schematic outline this particular statement is translated into 'critical to whether it is ethical to encourage schools to initiate resource-intensive measures that may not have any effect'. The original statement performs the paradoxical work of recommending measures without effect, a paradox that becomes even more importunate by the fact that such measures are 'costly'. In the translated version the resource issue reappeared in a rather different context, namely an accusation of the Guideline in terms of encouraging resource-intensive measures. The resource issue reengaged through translation, and hence made sense of the following counter-comment in the right column:

> The assignment was to create a guideline that would make this work easier for the schools. Schools are not encouraged through the Guideline to make use of resource-intensive programmes, rather the contrary.

As textual components disengaged and reengaged in a schematic outline, overall arguments in the hearing response from SIRUS and other addressers could be dealt with separately. Perceived this way, the fragmentation of challenging hearing responses protects the hearing draft that was exposed to the outside world. The schematic outline modified the target on which the received responses were aiming, and hence served as a defender against textual attacks that invoked profound changes of the Guideline's proposed content. In slightly different terms, feedback challenging the Guideline's script was disarmed by translation into a schematic outline. In moving forward to the next step of translation in the process of making the Guideline – that is, how the schematic outline was translated into a revised post-hearing draft – the efficiency of this textual defence becomes visible.

7.6 The hearing draft and the post hearing draft compared

Two and a half months after the reception of the hearing responses, on the 15th of February 2011, a post-hearing draft was submitted by the project manager at KoRus-Nord to the Directorate of Education and Training, the Directorate of Health, and the management at KoRus-Nord. This date marks the end of the hearing stage of the Guideline's genesis, which also implies the end of processing what was received throughout the hearing procedure. The hearing responses contained a diversity of statements. Juxtaposing the hearing draft and the post-hearing draft provides the possibility for exploring what became of them. What survived and what was lost in translation into the new and revised post-hearing draft? The general answer is that by and large the hearing draft made it through the hearing procedure largely undamaged. This also applies to what I termed its lenient script – the way the textual content performed a prudent and humble calling upon teachers' actions. Some changes were made, but these were mainly in terms of restructuring already existing textual sequences.

In light of the damaging hearing response from SIRUS, the impression of a hearing draft standing firm throughout its trials becomes even more conspicuous. After all, this was a hearing response submitted by a prominent research institution invoking profound changes. In a search for its traces in the post-hearing draft, only one imprint is visible. In the introduction chapter under the heading 'Why the school as a prevention arena?' a recognizable sentence appeared at the end of a sequence arguing for the adequacy of schools as an arena for prevention measures:

> School measures against the use of alcohol and drugs in general have little effect, but there are indications that some measures promoting pupils' psychosocial skills (Life Skills Training), which require active participation from the pupils, stand out positively.

An endnote was attached to this sentence, referring to two of the publications SIRUS engaged as scientific justification for non-effects in their hearing response: 'SIRUS report (no. 5/2010)' and 'Alcohol – No Ordinary Commodity'. These remnants of what was once a coherent argument attacking the textual content of the hearing draft and calling for profound changes reappeared in the post-hearing draft as a misplaced and confusing sentence at the end of a textual sequence *promoting* schools as an arena for preventive measures. Once performing as a contesting scientific justification for the non-effect of school measures, the sentence as well as its associated references now performed more like a wounded combatant left behind the enemy lines. Given such a destiny, it is fair to conclude that the hearing procedure allowed for effective ways to defend the proposed

hearing draft against any textual attacks entailed by exposure and external involvement. Such defensive dynamics became visible by following the alignment of documents being translated into new documents. In this particular case, the translation was from a hearing draft towards a post-hearing draft, via a hearing response and its rewritten disarticulated version in a schematic outline.

7.7 An image of a hearing as a tool for exposure management

In accounting for the Guideline's hearing process, I set out from different Norwegian hearing scripts, arguing that they portray hearing procedures as technologies for the participation of the policy relevant public. Furthermore, the expressed reasons for calling upon public participation are articulated as twofold in the sense that hearings both serve the parties concerned and their democratic rights on one hand, and the governing institutions and their governing enterprise on the other. Having approached this particular hearing as a productive practice underdetermined by its script and with an emphasis on the part documents play in such practices, my version suggests a rather different image of the hearing – namely a technology for the taming of potentially damaging responses from the outside world. It is the course of events, the translations and transformations taking place between the distribution of the hearing draft and the ready-made post-hearing draft that substantiate the hearing arrangement as a tool for exposure management in the hands of the governing institutions.

Indeed, the received hearing responses indicate that the hearing was an arrangement affording for participation. However, the failure of critical responses to leave significant imprints can only be explained by a conflicting feature of the hearing process, namely its inherent capacity of affording a defence of what is already made. Such defensive opportunities emerged as a result of the flexibility regarding the list of stakeholders, allowing for considerable latitude in the selection of bodies entitled to comment. In turn, this made room for the Directorate of Health to partake in the shaping of the responses they were about to receive, as well as regulating the likelihood for receiving responses at all. The same preservation of control applies to the translation of responses into a new document, which in turn provided the possibility for transforming received statements and thereby the targets they were aiming at. Portraying this particular hearing procedure as allowing for preservation of control over the Guideline's production, diverges from the prevailing hearing portrait enacted by policy documents prescribing different hearing procedures. While official hearing scripts

emphasize democratic participation, my account brings to the fore how hearing procedures also allow for exposure management. Here it was a technology for protection against external influence from the democratic participation it is set to support – a participatory device simultaneously allowing for participation and its taming.

In facing these two rather divergent portraits of hearings, one might of course object that this is just another story about policy documents embellishing realities, or, for that matter, a story about governing institutions resisting giving up their power. Indeed, these are also plausible versions performed by my account of a governmental guideline going through an external hearing. However, a crucial aspect disturbs this image of a power-seeking and crafty governmental institution slinking away from expressed opinions from outside. The outcome of the hearing I have recounted is not about enhanced governing power, at least not in the ordinary sense of the term. On the contrary, it was the Guideline's lack thereof, that is, its non-governing capacity, that was most challenged and most successfully defended throughout the trials of the hearing. Once again in the genesis of the Guideline, governing power appeared to include the power to abstain from governance, this time materialized in a ready-made post-hearing draft that retained its loose and undamaged lenient script. The contradiction of governing teachers by a seemingly non-governing guideline had survived the external hearing. But, as we proceed to the next stage of its production history, new trials are standing in line, ready to take their toll on what was, for the time being, considered as a post-hearing draft close to completion.

Chapter 8: Fourth Stage – The dismissal

By the time the external hearing procedure was accomplished, the making of the Guideline had been in progress for more than two and a half years. Approximately midway through this period the composition of the author group engaged in its making – the staff of the tool factory – was subject to a significant change. Throughout what I have accounted for as the first production stage, an author group consisting of six employees at KoRus-Nord worked to assemble the Guideline's textual content. The group included a project manager in a coordinating as well as an authoring role. As the process of shrinking the first draft progressed throughout the next production stage, this author group dissolved quite rapidly. Roughly speaking, the involvement of the author group at KoRus-Nord coincided with the work of assembling the content of the first draft, while they withdrew from the authorship, at least temporarily, as the representatives of the directorates engaged in the work of deleting what had been assembled by the original author group. The submission of the third draft by the project manager to the directorates on the 31st of August 2009 might serve as a marker of this change in the tool factory's staff. After this point, the representatives from the directories took over the authorship along with the project manager at KoRus-Nord, who was gradually taking on the role of a recording secretary. Hence, a new author group constellation appeared, consisting of one representative for the Norwegian Directorate of Education and Training, two representatives from the Norwegian Directorate of Health, and the project manager employed at KoRus-Nord.

Except for the project manager, this shift in the tool factory's staff implied that those who originally constituted the author group had not been directly involved in the Guideline's production for one and a half years when they received the post-hearing draft for final comments and formal approval on the 15th of February 2011. As chronicled in the previous two chapters, this was a period in the Guideline's production process that was characterized by extensive textual deletions in the hearing draft, as well as the protection of this shrunken and vague draft with its lenient script through the external hearing. Hence, when the post-hearing draft was received by KoRus-Nord, members of the original author group were confronted with a text quite different from the one they had last seen approximately one and a half years earlier. Two members of the original author group occupied management positions at KoRus-Nord.

8.1 The lull before the storm

During the completion of the post-hearing draft there were no discernible signs indicating an anticipation of new trials ahead. On the contrary, email correspondence and meeting conversations between the authors involved at this stage all pointed to an optimistic atmosphere regarding the approaching conclusion of the Guideline's genesis. Accordingly, an email dated the 6th of January 2011 from one of the representatives for the Directorate of Health summed up a meeting that had taken place two days earlier with the following opening words: 'Hurray!!! We're approaching the end of the work'. In its continuation the email confirmed the new schedule they had agreed upon in the meeting:

> New schedule:
> 1. Deadline for submission [from the project manager to the directorates] of a new draft: Friday, 4th of February 2011.
> 2. Processing the new draft on the 10th or 11th of February 2011.
> 3. One or two weeks to finish (no later than the 25th of February 2011) before external proofreading.

Throughout the Guideline's production, schedules and estimates of its time to completion had been both made and postponed several times. As the production progressed during the next couple of months, that also turned out to be the destiny of this schedule. Nevertheless, the first two steps in this plan for finishing a guideline draft ready for proofreading within six weeks were accomplished scrupulously according to the schedule. A new draft was submitted by email from the project manager to the three representatives of the directorates on the 4th of February 2011, once again accompanied by an expression of expectation that in retrospect proved to be overly optimistic: 'I hope that this draft is better than the previous, and that only small adjustments are needed before we can say that we have finished the job!'

A new meeting between the four authors involved at this stage was held on the 10th of February 2011, and the second step was accomplished according to the schedule. Apart from going into detail about particular formulations in the present draft, a crucial issue of formality was subject to some consideration during this meeting. The making of the Guideline had been formally delegated to KoRus-Nord on the 1st of June 2008, and the original author group had not been involved very much since August 2009. To deal with these historical circumstances in a proper way, a specific approval procedure was agreed upon. KoRus-Nord, as the institution formally responsible for the Guideline's making through the Assignment (dated 27th of June 2008), should receive the ready-made post-

hearing draft for final comments and subsequent formal submission to the Directorate of Health. The minutes from the meeting referred to this particular agreement in a sequence of tasks that the project manager would be responsible for in the days to follow:

> Clarify with KoRus-Nord when the mission can be submitted to the Directorate of Health as accomplished, i.e. that the product we receive must be approved and forwarded by [the manager at KoRus-Nord].

However, in a short break during the meeting, the management at KoRus-Nord already was informed by the following email from the project manager at KoRus-Nord:

> Then [the directorates] and myself have had another meeting regarding the Guideline for prevention of alcohol and drugs in schools. According to the directorates it is approaching the end now, and in that regard there was talk about the original authoring group that was established at KoRus-Nord. When I think back, it's a long time since you've been involved in the writing process, and a LOT has happened since then!
>
> All major decisions and choices are made by the directorates, and the Guideline has become increasingly smaller in terms of number of pages (currently about 30 pages), which has been an important goal, especially for the Directorate of Education and Training. We have also talked about the fact that KoRus-Nord is formally responsible for this guideline, and I feel a great need for you to ensure the quality of the work done. **Therefore, the question from us is whether you (and possibly others in the original author group) can read the final draft of the Guideline and come up with any input.** This is important before the designer begins to put together the Guideline and it proceeds to publishing. (bold in the original email)

Five days later, on the 15th of February 2011, a ready-made post-hearing draft was emailed to the management at KoRus-Nord, accompanied by the following text:

> As mentioned, the Guideline has gone through many rounds, and this draft is the result of feedback from the consultative bodies, internal opinions in the directorates and a desire to get to a document with a minimum number of pages. […] The designer has already started working with the Guideline's figures and layout, and the plan is for it to go to publishing this spring.

Two days later the manager at KoRus-Nord replied, not in terms of comments on the received draft, but by requesting a meeting for communicating his assessment:

> I have read and have some comments – they are perhaps best suited for a 'conversation/dialogue form', I think.

8.2 Judgement Day: The 22nd of February 2011

KoRus-Nord arranged an internal meeting between the manager, his deputy, and the project manager on the 22nd of February 2011. As always when meetings were arranged throughout the production of the Guideline, I was invited – this time to the office of the manager at KoRus-Nord. As usual, I took a seat slightly further from the table than the other participants, reclining in the chair with the notebook in my lap, a cup of coffee in my hand and a recording mobile phone as close to the table's edge as it could get. In short, I was in my self-imposed initial position as the 'discrete' ethnographer attending bureaucrats in action, ready to notice and record whatever was said and done. Without claiming to be clairvoyant, I had forebodings regarding the feedback from the KoRus-Nord management. After all, they were about to deliver their assessment of a draft lacking a vast amount of the textual content which they themselves had created. There was no doubt that the circumstances were set for an eventful meeting, at least perceived through the eyes of an ethnographer interested in the making of policy documents.

In retrospect, it would be no exaggeration to characterize KoRus-Nord's assessment of the post-hearing draft as a complete dismissal, and the meeting itself as the beginning of what turned out to be a final trial for a document that now had been in progress for almost three years. Notwithstanding the hard time given to the post-hearing draft for almost two hours, this was not at all a meeting characterized by a depressed or tense atmosphere. The project manager took notice of the objections raised by the manager and the deputy at KoRus-Nord, and as so often during the meetings held in the production process, talk on the subject matter was mixed with smiles, laughter, and friendly jokes.

The usual meticulousness in the project manager's preparation of minutes was also apparent when the minutes from this particular meeting were submitted by email to the meeting's participants (including the ethnographer) and the representatives from the directorates, shortly after midnight the same day. According to my own observations of the meeting, the minutes thoroughly covered the variety of comments on the draft. Considered collectively, these were comments addressing different levels of inadequacy, and so was the translation of what was said into different bullet points in the minutes. Pointing out the incoherence in the post-hearing draft's use of terms might serve as an example of the rather detailed but harmless objections:

> The terminology used can be confusing. Programmes? Measures? Strategy? Preventive efforts? Use the terms consistently and give definitions of the chosen concepts at the beginning of the Guideline.

Even though this is an objection invoking textual changes, I consider it to be quite gentle both to the text at stake and to the prevailing schedule for publishing within a couple of months. However, other objections were not equally gentle, for instance these two quotes addressing specific topics that were no longer present in the proposed guideline:

> [The management at KoRus-Nord] wants more focus on risk and protective factors. As it now stands, this is 'just a poster' in Section 2.3. It should also be more prominent in all the chapters, especially in Chapter 4 [Title: Recommendations for working in schools on the prevention of alcohol and drugs].

> More focus on learning style/parenting style as a protective factor. How much influence skilled teachers can have.

Large textual parts concerning both 'risk and protective factors' and teachers' 'learning style' had been relegated to the waste basket for more than a year. Now the management at KoRus-Nord was requesting to undo these deletions.

Comments invoking the repair of inconsistent use of terms, or even a reuse of textual material from the waste basket, can hardly be seen as a dismissal of the textual content as such. After all, the production process, especially throughout the external hearing, clearly indicated that criticism did not at all imply the end of the road for the Guideline. Furthermore, the above quotes requested feasible improvements that could have been made within the scheduled deadline. However, the comment that in my view dealt a deathblow to the post-hearing draft was the allegation that the present textual content was self-contradictory with regard to what the Guideline claimed to be. To put it bluntly, what was meant to be a guideline transmitting scientific knowledge and science-based recommendations concealed both the scientific knowledge and its recommendations. In the minutes, this ironic relation between the draft and the commissioning of the Guideline was referred to in different bullet points:

> This draft is more 'woolly' than earlier drafts. They [the management at KoRus-Nord] find it very unclear on what teachers and school leaders actually are going to do! [The Guideline] never gets to the point. Working on the learning environment + making a plan [for prevention in their school], but so what?

> [The management at KoRus-Nord] question if the recommendations described under

'suggestions' (green boxes) are knowledge-based and consistent with what we write elsewhere in the [guideline's] chapters. For example, we say in the introduction that research shows that the dissemination of information and knowledge about various drugs is not enough to change people's attitudes and behaviours ... at the same time, many of the things we suggest in the 'suggestion boxes' are just knowledge about different drugs and information dissemination.

What knowledge-based recommendations can the Guideline provide when measures and strategies that can show positive results shall not be mentioned? When one cannot be that specific, the document becomes 'woolly' and useless to the target audience.

Some implications of KoRus-Nord's assessment of the hearing draft were suggested in the email to which the minutes were attached. Here, the project manager wrote that:

Prior to the meeting, the plan was that I should incorporate feedback from KoRus-Nord in a new document and send it to the directorates, but because the proposed amendments were that serious, the way ahead should be made clear before any proposals are incorporated. After the meeting, I gave [a representative of the Directorate of Health] brief oral feedback on what transpired at the meeting. [She] suggested that [the management at KoRus-Nord] writes a few words about how they envision the continuation of the work, and specifically says something about what they want to improve in the Guideline (although hopefully most of it appears in the minutes). This will then be sent to [the representative of the Directorate of Health], who will take the written assessment up to her superiors.

The email ended with the following request from the project manager:

To [the management at KoRus-Nord]: If there is anything unclear about what to write, I recommend that you contact [the representative of the Directorate of Health]. You now have her address, and her direct number is: [...]. The best would be if formal contact goes directly between KoRus-Nord and the Directorate of Health, without me as 'the broker woman'.

Hence, yet another document in the Guideline's genesis was generated, a turn that implied displacing the existing plan for a completion of the Guideline. Incorporation of feedback from the management of KoRus-Nord no longer appeared as an easy task. The fate of an almost ready-made guideline that was only in need of final adjustments before layout and publication had suddenly become uncertain. Strange as it might appear, a hearing draft approved by the superior Directorate of Health had been dismissed by the subordinate organization responsible for its making. It is hardly surprising that the project manager requested relief from the role as a connecting link, or 'broker woman', between the directorates and the management at KoRus-Nord. Having worked as an employee in the subordinate and dismissing institution, and at the same time having worked with and for the superior and approving institutions for quite a long period, she was now torn between

opposing assessments as well as institutions – imaginably a confusing place to be as the Guidelines'
further destiny was being settled.

8.3 Delivery of a verdict

Six days after the assessment meeting, the requested note (dated the 28th of February 2011) was
submitted from the management at KoRus-Nord to the Directorate of Health. In this one-page
document, KoRus-Nord's assessment of the post-hearing draft was translated into the following
words:

> The draft of the Guideline has been appraised through many rounds with the involved
> directorates and a final version was available after an external hearing. Throughout the
> rounds/adjustments/changes that have taken place over the past year and a half, it might look as
> if the specific recommendations have been more and more deleted. The management of KoRus-
> Nord is of the opinion that this implies multiple challenges related to the finalization of the
> document.
>
> The main challenge – as we see it – is that one in principle wants a knowledge-/research-based
> guideline, while at the same time the scientific substance has been more and more deleted. A
> knowledge-/research-based guideline will be in line with the paramount policy directions, among
> others embodied in Norwegian National Action Plan for Alcohol and Drugs, IS-1846 [...]. As the
> Guideline appears today, the knowledge-based advice remains a 'well-kept secret'. At the same
> time it is unclear what the knowledge foundation for some of the given advices is. In short, we
> find that the current draft is not user-friendly to the target audience. Our assessment is that in
> the process of making a guideline, the document's scientific foundation is 'peeled' away. What
> remains is so general and 'woolly' that it probably can be accepted as 'advice' by all
> parties/groups – but still not very action-oriented. We therefore pose the critical question of
> whether it is appropriate to have a guideline on this particular field – given this backdrop.
>
> If the conclusion of the above-mentioned issue is that the making of the Guideline shall be
> completed, a number of new measures must in our view be taken, e.g. related to elucidation of
> concepts, risk- and protection factors, and also more concretization of how teachers can actually
> work in an appropriate manner. This does not imply a total revision of the current draft, but a
> critical review and adjustment/concretization. Time-wise, we envisage that this will be possible
> before the end of the summer.'

If the formal and bureaucratic connotations have survived through my translation of this Norwegian
policy document into English language, the difference in style compared to the many emails and
minutes previously quoted should be detectable. However, this was not a document about detailed
textual amendments or the scheduling of forthcoming meetings, but a document addressing, and

basically jeopardizing, the post-hearing draft as such. The quality of the draft, and implicitly also the questions of which institution was in the position of judging as well as approving the present draft, were at stake. A shift of style into more formal language, uncommon as it was compared to other documents created throughout this production process, enacted the seriousness of the matter.

The same applies to the very *form* of this particular document. Throughout the preceding year and a half, most of the correspondence between KoRus-Nord, usually represented by the project manager, and the engaged representatives for the directorates had been carried out by email in a rather informal style. Sometimes these emails were accompanied by minutes from recently held meetings, which were also written in a rather loose and unfixed style. Fixed templates, logos, or handwritten signatures were hardly ever used. Sometimes titles and institutional affiliations occurred, but usually as a result of an automatic signature function on Microsoft Outlook. Most of these documents were only signed by the addressers' first name, sometimes not even with a capital first letter. However, these were documents shipped between human authors who were well known to each other and who were sharing the common task of accomplishing a science-based governmental guideline. Of course, they all had professional titles and belonged to different institutions within a bureaucratic hierarchy, but their co-authoring enterprise seemed to overshadow their individual rank and affiliation, at least in the sense that markers of institution and position were hardly ever present in the written materials that they produced.

KoRus-Nord's written assessment of the post-hearing draft was a document in a different style. An official note template was applied, carrying the following heading in enlarged as well as bold fonts:

Note from KoRus-Nord
28.2.2011
– regarding guideline for prevention of alcohol and drugs

Furthermore, handwritten signatures from both the manager and the deputy at KoRus-Nord, followed by their typed full name and professional titles, were placed in a ranked order at the bottom of the document. Finally a paper version of the document was scanned and attached to an email submitted to the Directorate of Health, addressed to the same representative that had been involved for the last year and a half.

As standard as this change of wrapping might be in bureaucratic procedures, these seemingly mundane features of policy documents have evoked curiosity among ethnographers interested in the materiality and practices of policy making and bureaucracy. Bruno Latour's account of the course of events taking place in a Parisian courtroom as a result of a missing signature on a decree of appointment is a brilliant example (Latour, 2010, pp. 21–33). Although mine is quite a different document *with* signatures, the basic recognition that gives direction to the analysis is the same: Policy documents *do* things! In interrogative form, this recognition could address the particular document at hand by posing the following question: What do formal language, fixed templates, markers of the addressing institution, handwritten signatures, and professional titles do? What are the effects of these 'mark[s] made on a thing' (Freeman and Maybin, 2011, p. 159)?

An answer to this question starts with the concept of *competence*. According to the Concise Oxford Dictionary (9th edition), competence has two different meanings relevant for my analytical purpose: 1) 'ability; the state of being competent' and 2) 'the legal capacity to deal with a matter'. Hence, both *expertise* and *authority* are captured by the same word. These rather divergent capacities are brought together if one presupposes that those who know best are those who can legitimately decide. Given such a highly questionable presupposition (see for instance Collins and Evans, 2007), the two different capacities encompassed by the competence term merge in the sense that they both point to one subject holding both capacities: the expert.

How, then, can this seemingly awkward semiotic structure be helpful in exploring a policy document's *form*? Formal language, a fixed official template, a marking of the addressing institution, handwritten signatures, and professional titles perform KoRus-Nord as an institution of *authority*. In contrast to the many different informal emails that were exchanged during the endeavour of making the Guideline's textual content, this particular document was 'dressed up' to invoke the competence to judge and decide, not only to convey an expert's assessment. The expert assessment made by the KoRus-Nord management had already been performed in informal minutes written six days earlier. What was new this time was not the substance but the wrapping that claimed KoRus-Nord's legitimate authority to approve or dismiss the post-hearing draft. The document, in terms of both its substance and its form, enacted KoRus-Nord's institutional position as a centre of both expertise and authority; it claimed *competence* in both meanings of the word. This was a document performing a verdict delivered by a legitimate judge and not just a written expert opinion given by a qualified institution.

One might have expected the dismissal of the post-hearing draft to fuel some kind of conflict. After all, the parties involved were all affected, either as the authors of texts that had been laid to rest in the tool factory's waste basket throughout the authorship, or as the authors of text that made it into the dismissed post-hearing draft. Moreover, as the making of the Guideline was approaching its three-year anniversary, it is not hard to imagine some frustration caused by the dismissal of a draft that until recently had been considered as almost finished and on the threshold of being published. Yet another aspect with the potential to nourish a conflict was that the rank of involved employees and institutions, at least in relation to this particular production process, was not unambiguous. In the aftermath of KoRus-Nord's dismissal, disagreement and negotiations about who to resist and who to obey conceivably could have been the next stage in the Guideline's genesis. However, that was not the case. In the subsequent period both emails and oral statements from the involved parties outside KoRus-Nord expressed not only acceptance, but even support and relief over the document's dismissal. As if somebody had made something they did not want, the post-hearing draft suddenly appeared as an 'orphan work' (Rognstad, 2009, p. 286), helplessly lost without any allies. Suffering an unfortunate destiny confusingly similar to that of Dr Frankenstein's monster[33] (Shelley, 1969), the post-hearing draft finally reunited in the tool factory's waste basket with all the text it had once contained in a first draft made two and a half years earlier.

8.4 The orphaned Guideline at the crossroad

As previously described, for quite a while I had been witnessing a production process that successively reduced the Guideline in terms of volume, imperative language, and scientific content. For me, the question of what would remain at the end of the road, if anything at all, was inevitable. As a researcher I had to consider the possibility of my work ending up as a study of the making of nothing, so to speak. Such an outcome, or rather *lack* of outcome, of the Guideline's production process had also been joked about several times in my talks with the project manager. In the situation that now had occurred she addressed the issue once again, but this time in a slightly less facetious manner: 'You know what – I'm starting to believe that you might be right in your concern. It could easily happen that there will be no guideline'.

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[33] Frankenstein's mistake was that he did not love the creature he had produced and turned his back on him.

I have to add that I did not at all regard such an eventuality as a deathblow to *my own* project. A cancelling of the Guideline's publication would by no means imply that nothing had been produced throughout the production process. It would only imply that everything that *was* made became waste in the end. My interest in the stuff that ended up in the waste basket, as well as the processes through which it was transformed into waste, had been present from the very outset of this project. Textual waste is not considered as some kind of second-rate empirical material in this account.

However, the sentiment that the project manager expressed illustrates the confusing status of the Guideline's destiny at the time. The post-hearing draft had been subject to an uncontested dismissal, and nobody seemed to be able to make a qualified guess about what would be the way forward, or indeed if there was a way forward at all. Some kind of decision was still expected by those employed at KoRus-Nord, unlikely as it was that all the involved parties should simply leave the project as if nothing had happened. For my own part, I was waiting in suspense not only for a decision, but for a decision *document*. Whether it would be the last document or merely the next one, quite literally a new chapter had to be written. According to the formalities, the legitimate makers of such a document would be the superior Directorate of Health who had once delegated the making of the Guideline to KoRus-Nord. But a ready-made decision can also fruitfully be distinguished from a decision in the making, and according to my observations of what went on in the subsequent days, weeks, and months, the *decision-making process* was not at all something that took place behind closed doors within the directorate. On the contrary, the period of uncertainty, ranging from KoRus-Nord's submission of the dismissal note on the 28th of February 2011 to the reception of a clarifying document on the 19th of May 2011, was a period of extensive activity involving all the previously engaged parties. Phone calls were made, emails were exchanged, meetings were held, and several minutes, internal notes, and even a brand new outline for a possible new version of the Guideline were created and distributed. In the following step-by-step account of the course of events throughout this period, some of these events and documents will be highlighted.

After an internal process within the Directorate of Health, a telephone meeting between the manager at KoRus-Nord and the representative of the Directorate of Health was held on the 15th of March 2011. According to what seemed to be the standard procedure following meetings between KoRus-Nord and the directorates, this particular meeting was also followed by a document summing up what was agreed upon. The representative of the Directorate of Health prepared an email consisting of a numbered list of eight main points. Noteworthy with regard to the Directorate of Health's reception of KoRus-Nord's dismissal, point number two stated that

> We [the Directorate of Health] fully agree that the present guideline cannot be published. (Our arguments agree with those given by [the manager at KoRus-Nord] in the report dated 28th of February 2011 [...])

With regard to the way forward, point four stated that

> We will take the resolving decision after the matter has been considered internally at KoRus-Nord and, respectively, the Directorate of Health and the Directorate of Education and Training.

While these two quotes confirm the rejected status of the post-hearing draft as well as the need for more consideration within all the involved institutions, point five may be interpreted as a foreshadowing of a way forward in the Guideline's genesis:

> Currently, we [the Directorate of Health] incline to a further development [of the Guideline].

A new meeting between the same parties on the 25th of March 2011 concluded with yet another groping step towards a rescue of the Guideline's destiny. In a short email from the Directorate of Health to the manager at KoRus-Nord the same day, it was written that

> Today we [the Directorate of Health and KoRus-Nord] agreed that KoRus-Nord prepares a proposal for a 'way forward' for the 'school guideline' [...]. If anything is unclear, just contact us!

Although it still was an open question whether a new version of the Guideline was going to be made, the request for a proposal of a 'way forward' implied resuming the work and restoring the author group at KoRus-Nord. In an email from the manager submitted on the 5th of April 2011, the correspondence between the representative for the Directorate of Health and the manager at KoRus-Nord that had taken place over the last couple of weeks was forwarded to those from the original author group who were still employed at KoRus-Nord, with the following addition:

> Hello! Suggest that we – i.e. 'the remainders' of the group that originally was established to work up the Guideline for prevention in schools of alcohol and drug related problems – meet [...] to discuss how we shall proceed regarding the Guideline.

The meeting was held three days later, and by this event the author group was set in production again. Their proposal for 'the way forward' was submitted by email from the project manager to the representative for the Directorate of Health on the 13th of April 2011 and consisted of an attached document with a commented outline for a new guideline, and the following text in the email:

As agreed, we forward a proposal for an outline for the Guideline […]. Regarding the work within the author group at KoRus-Nord, a few questions and needs for clarification appeared. Among other things, we discussed what the idea of releasing this guideline is and the way forward in terms of implementation. As we see it today, the printed version of the guideline can be quite brief, and a device for the target audience to engage in alcohol and drug prevention on the level of classes and schools. In addition, we envisage an online version, with the ability to go into greater depth on the various topics covered in the printed edition. We also envisage that it will be natural to run courses, perhaps through the network of [the seven KoRus institutions] […]. This will also be an opportunity to go into greater depth on the message conveyed in the Guideline. These are thoughts that we want to get feedback on, since they could have an impact on how we are going to deal with the work on a possible paper version of the Guideline. […]

The implementation of the Guideline once it was finished, as well as an online version, had been subject to discussion since the very start of the Guideline's making in the summer of 2008. The issues were now brought to attention again, this time as elements relevant to the forthcoming decision that was about to be made by the Directorate of Health. The same applies to a set of premises in case of a progression decision, suggested by KoRus-Nord in the same email:

KoRus-Nord suggest the following premises for the proceeding work with the Guideline:
Purpose: To give recommendations that lead to improved prevention strategies on the level of classes and schools.
Level of concretizing the strategies: The Guideline will not recommend specific programmes.
Mandate: Following the approval of the outline and clarification of the above issues, KoRus-Nord will make a relatively finished product that will be submitted to the directorates for feedback/hearing.
Timeframe: The Guideline will be submitted to [the directorates] by autumn 2011.

Then we are awaiting feedback from you in the Directorate of Health, both on the proposed outline and the framework.

This package of texts proposing a 'way forward' can hardly be interpreted as a demand for conditions to which the Directorate of Heath needed to agree if they wanted their subordinate KoRus-Nord to keep on with the authoring enterprise. Perceived performatively, this is rather an enactment of a compromise – a cautious sketching of a final product as well as a way of making it – that plausibly could be acceptable both to the publishing directorates and to those responsible for composing a new version of the Guideline. The email and the attached outline might be conceived of in terms of what Arthur W. Frank (2010) calls an *emplotment*. With reference to Cheryl Mattingly's active sense of the term (Mattingly, 1998), Frank describes emplotment as 'proposing a plot that will affect how future events are anticipated' (Frank, 2010, p. 193). To capture this specific type of proposition work engineered by documents, I choose the verb form of the term: the documents proposing a 'way

forward', submitted during a phase of uncertainty regarding the Guideline's future, were *emplotting* a navigable trajectory towards a final destiny, a low-threshold channel avoiding the obstacles that had been experienced throughout the attempts to make the previously dismissed version of the Guideline. The email was not only enacting the feasibility of a second try, but also the appropriateness of doing so: The Guideline's fundamental science-transmitting function, the very logic on which the making of such a governing tool was based, was kept intact by the articulation of the 'Purpose'. A part of the plot was still to make a device that governs teachers towards 'improved prevention'. The email and its attached outline were emplotting a *thalweg*[34] towards a new guideline *in coherence with* the logic of science-based practice.

The prospect of making recommendations without indicating 'specific programmes' illustrates how KoRus-Nord's proposal of 'a way forward' could be perceived as an emplotment of a path of least resistance. To recommend or dissuade from existing preventive school programmes had proven to be a vital obstacle, especially to the Directorate of Health. The suggested 'way forward' cleared away this potential challenge: 'Level of concretizing the strategies: The Guideline will not recommend specific programmes'. The proposal also enacts the removal of another obstacle that turned out to be vital for KoRus-Nord: A mandate that facilitated for authoring process aiming towards a 'relatively finished product' implies keeping the directorates at a distance throughout the work of assembling the new guideline's textual content. According to the proposal documents, the involvement from the directorates would be restricted to a final 'feedback/hearing', and thus the troublesome production process that led up to the dismissal of the post-hearing draft could be avoided.

On the 13th of April 2011, the same day that KoRus-Nord submitted the way forward proposal, a short email reply from the Directorate of Health indicated a rather positive reception and an improved prognosis for the continuation of the Guideline's making:

> The first impression is very good! Have not had time to look at the details. […]. Seeing no reason for us to put our foot down now ☺. Until then, Happy Easter [first name of the representative for the Directorate of Heath]!

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[34] 'Thalweg' is a term I encountered in my search for an equivalent to the Norwegian term 'djupål'. The following definition made me consider the term as a helpful metaphor: 'In hydrological and fluvial landforms, the thalweg is a line drawn to join the lowest points along the entire length of a stream bed or valley in its downward slope, defining its deepest channel. The thalweg thus marks the natural direction (the profile) of a watercourse. The thalweg is almost always the line of fastest flow in any river' (http://en.wikipedia.org/wiki/Thalweg).

In a performative analytical approach to documents, the use of smileys also deserves attention. In this particular email I interpret the mark as a submissive gesture by someone who is formally superior.

The project manager at KoRus-Nord received the final decision by email[35] from the representative of the Directorate of Health on the 19th of May 2011. By then, a meeting between the two involved directorates had taken place, and its formal minutes had been distributed to superiors within both directorates. The minutes from this previously held meeting between the directorates, dated the 2nd of May 2011, followed as an attachment to the email that declared the decision. The essence of the discussion, performed as such by use of bold as well as italicized fonts in the minutes and repeated in the accompanying email, was formulated in these terms:

> *Our conclusions and suggestions for further work with the Guideline will be rooted in the respective heads of department internally and in the Directorate of Education and Training as follows:*
> ***KoRus-Nord prepares a minimum version of the 'school guideline' […]. This shall be accomplished as soon as possible and published on the two directorates' websites. The Guideline will not be published in a paper version.***

As for KoRus-Nord's proposal of the way forward, this New Assignment emplotted the route towards completing the Guideline. Although it addresses the forthcoming production by requesting completion 'as soon as possible', this document and its formulation of a conclusion is primarily addressing the ready-made guideline and not the ways in which it is going to be made. It enacts the addition of two essential constraints to which a ready-made guideline needs to adapt. The first one concerns the substantiality of a future guideline, in that the final product shall be a 'minimum version'. Despite the plasticity inherent in such a characterization, I regard the formulation as an enactment of a general 'less-imperative' – a call for a future guideline with less textual volume, less scientific content, and less tightness of its script. As such, the use of the term 'minimum version' enacts a constraint that facilitates the prolongation of the most prominent production pattern that emerged in the process of making the post-hearing draft, i.e. the ongoing shrinking of the Guideline's textual content.

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[35] In the following I will refer to this particular document as the New Assignment.

A second constraint enacted by the New Assignment from the Directorate of Health relates to the Guideline's format, the infrastructure through which its textual content will be channelled. The forthcoming guideline would now be published on the two directorates' websites *instead of* in a paper version. Whether this switch of infrastructures also fits into the shrinking pattern is basically an empirical question. Of course, one might argue that online publishing eases the distribution of the Guideline compared to a paper version, and that it retains the possibility for upgrades which might be called for by new relevant scientific publications, for instance. These are arguments that hardly underpin a shrinking pattern. However, it may also be argued that a web-based version facilitates for hiding the Guideline, or at least keeps open the possibility for its withdrawal. It provides flexibility with regard to where the document is situated on the web. For example, it could easily be located to the background of a particular website so that accessing it requires multiple clicks. Furthermore, it might be relocated from one website to another within the governmental hierarchy, implying a change in the enactment of the Guideline's authority. In any case, the shift of infrastructure would allow for a continuation of the shrinking pattern. It supported the possibility of making a guideline for teachers without attracting too much of their attention.

KoRus-Nord's proposal for 'a way forward' as well as the New Assignment from the Directorate of Health were both textual materials emplotting a forthcoming production phase and its final outcome. At the time they were documents enrolled in the re-opening of the tool factory, and although they enacted constraints, these should not be viewed as fixed trajectory-defining conditions. At the outset, the blurriness inherent in formulations such as 'a relatively finished product' or a 'minimum version' hardly rendered them capable of enclosing the progression of the future production or the final product. Like all the other documents enrolled in the Guideline's making, the outcome was not determined by what was written. The documents had produced a diffuse plot, but the actual navigation was yet to come – and so was the destination.

Chapter 9: Fifth Stage – The remaking of the Guideline

In a meeting on the 25th of May 2011 the New Assignment from the Directorate of Health was discussed and accepted by KoRus-Nord. This particular event marked the beginning of the fifth and final stage of the Guideline's genesis. However, due to the need for approval of 'the way forward' from the department heads within both directorates, the process of producing a new version of the Guideline did not properly begin until after the summer of 2011. In an initial meeting between the manager, the deputy, and the project manager at KoRus-Nord on the 17th of August 2011, the re-making of the Guideline was organized and scheduled. A first draft of the new version was made, internally distributed and discussed in a new meeting on the 26th of August 2011. Amendments were made, and yet another draft was subject to discussion in the next meeting less than a week later, on the 1st of September 2011. The pace of work was set for the new author group at KoRus-Nord, a group that was now reduced to four employees, of whom three had been members of the original author group. The cyclical production process, switching between new revised drafts and subsequent meetings, proceeded at a rather high frequency, with meetings arranged on the 20th and the 29th of September, and on the 6th, the 24th, and the 31st of October 2011. Altogether eight meetings were held within a period of two and a half months, and in between each and every one of them a new draft was prepared.

On the 2nd of November 2011, two days after the last meeting in this production period, the project manager at KoRus-Nord submitted an email to the directorates, containing a draft version of the new guideline as an attachment and the following message:

> Hello!
> Attached you'll find the Guideline for alcohol and drugs prevention in schools, which we will present to you on the 8th of November. […] Hope you are satisfied with the product and that you will regard this guideline as a good tool for alcohol and drug prevention in schools ☺ ☺ Happy reading!

A copy of the email was also submitted the same day to the other members of the new author group at KoRus-Nord, containing the following addition:

> Then the Guideline is sent to the directorates …. ☺.

A relatively short, intense, and uninterrupted period of textual production was rounded off by this short reply from the manager at KoRus-Nord:

'Congratulations, – so far ☺'.

9.1 From guidelines to suggestions for learning activities

On the 8th of November 2011, less than a week after the submission of the Guideline's new draft version, the manager and the project manager at KoRus-Nord presented the document to representatives from both directorates in a meeting at the Directorate of Health. On the 9th of November 2011, one of the participating representatives from the Directorate of Health submitted an email to all the meeting's attendees, summing up what had been agreed in four main points. However, in the email's quite wordy subject field a significant turn in the Guideline's genesis was already indicated:

> Information about the status of the work on Substance Abuse Prevention in School – Suggestions for Learning Activities.

After almost three and a half years of guideline-making, the very title enacting the status of the document in progress had changed. All of a sudden, 'Governmental Guideline for Prevention of Alcohol and Drugs in Schools' had become 'Substance Abuse Prevention in School – Suggestions for Learning Activities'. The idea of a new title was launched by the representative for the Directorate of Education and Training during the meeting, and agreed upon in the subsequent discussion. Along with three main numbered points summing up the meeting, the Guideline's renaming was confirmed in the following terms:

> The Guideline shall be named Substance Abuse Prevention in School – Suggestions for Learning Activities (and shall not be a guideline in the formal sense).

This event in the Guideline's genesis is about the replacement of words on the front page of the document. As such it provides yet another example of some text finding its way into a document while other text is routed to the tool factory's waste basket. However, a closer look behind and beyond this renaming incident might provide a thicker description of the switch from 'Guideline for

Alcohol and Drug Prevention in Schools' to 'Substance Abuse Prevention in School – Suggestions for Learning Activities'.

As argued, the Guideline's textual content had been subject to an ongoing shrinking, a pattern that had manifested itself since the first draft became subject to discussion with the directorates in a meeting on the 29th of April 2009 and which continued right up to the point where the post-hearing draft was completed two years later. From each draft to the next the textual volume diminished, and so did the amount of scientific statements and imperative formulations. The result was a mitigated and blurred post-hearing draft. The new assignment should not be seen as a recall for textual content that had been deleted during the previous couple of years. As noted, the new version was going to be a 'minimal version' and should 'not recommend specific programmes'. Hence, the thalweg that channelled the resuming text-making did not indicate a U-turn back to earlier guideline drafts. Rather, it pointed in the direction of an even more prudent document.

However, I do not perceive the making of the Guideline's new version as a rectilinear continuation of the shrinking pattern that had previously permeated the production process. After all, it would be rather strange if the new version contained the same type of flaws but to an even greater extent. The dismissal of the post-hearing draft enacted some gradients that moulded a significant turn in the Guideline's genesis. This turn was already heralded by KoRus-Nord's previously quoted suggestion for a new version of the Guideline – that it should contain recommendations 'on the level of classes and schools'. The idea was to put stronger emphasis on the textual content that directly addressed the actual learning activities taking place in classrooms, and less emphasis on the textual content that addressed the teacher as a target for transmitting scientific knowledge. As was often suggested in the new author group meetings throughout the autumn of 2011, this was going to be a guideline with more emphasis on *how* to do prevention and less about *why* it was necessary to do it.

To illustrate this particular turn in the Guideline's genesis, it might be helpful to distinguish between *educational* and *instructional* textual content. A short explanation is in order. I will use the phrase *educational* textual content as a collective term to describe the Guideline's textual sequences that paraphrase scientific claims. These are sequences that perform a science-disseminating ambition and configure the Teacher as subject to education. The sentence 'there is a general decline in the use of drugs in Norway' might serve as an example of educational textual content. I will use the phrase *instructional* textual content for text that prescribes how to go about doing something. These are

textual sequences that configure the action and interaction taking place in classrooms as subject to instructions, and the Teacher as an instrument for such interventions.

Given such a distinction, the making of the new guideline version appeared to be a process that displaced the educational content at the expense of the instructional. A word count of *Substance Abuse Prevention in School – Suggestions for Learning Activities*, which was finally published in July 2012, provides a picture of this displacement. The entire document consists of five main chapters:

1. Introduction
2. Central Elements for Alcohol and Drug Prevention in Schools
3. Suggestions for Learning Activities
4. Russetid[36]
5. Conclusion

The educational textual content, mainly located in Chapters 1 (pp. 5–9) and 2 (pp. 10–14) comprises approximately 1,800 words. In comparison, the instructional content, mainly located in Chapters 3 (pp. 28–29) and 4 (pp. 15–27) accounts for approximately 4,000 words. In total, the document is 6,953 words long, of which the chapter named 'Suggestions for Learning Activities' alone accounts for 3,018 words. The prominence of this particular chapter is also confirmed by counting the pages in the pdf version[37] of the document: the chapter consists of 13 pages, which amounts to more than one third of the pages in the entire document.

A closer look at the main chapter, 'Suggestions for Learning Activities', provides a sharper view of the instructional textual content that was privileged in the new version of the Guideline. The chapter as a whole is structured on the basis of the Curriculum's formulation of competence aims regarding tobacco, alcohol, and drugs. Each description of learning activities contains a heading with a grade, a subject, and a citation of the specific competence aim from the Curriculum, followed by a description of a topic, the reason for the choice of the topic, and a bullet-point list of learning activities. To

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[36] The Norwegian term 'russetid' refers to a period prior to graduation from upper secondary school. For approximately three weeks students celebrate the end of 13 years of compulsory school attendance, with a peak on the Norwegian National Day on 17th May. For a rite of passage perspective on 'russetid', see Sande, 2000.

[37] http://www.forebygging.no/Global/Skole/stottemateriell.pdf (accessed on 20th January 2014).

illustrate, Figure 20 shows how the subject 'Social Studies' in the 7th grade appears in the web version:[38]

SOCIAL STUDIES [7th grade]
the aims are to enable pupils to
- *discuss questions about use and risks related to consumption of tobacco, alcohol and drugs*

Knowledge about adolescents' use of tobacco, alcohol and drugs

Reason:
It is important that the use and risks related to the use of tobacco and drugs are based on factual knowledge so that pupils get a realistic sense of what the situation actually is among people at the same age.

Suggestions for learning activities on adolescents' use of alcohol and drugs
- *First the teachers can ask the pupils in the class to write down how many they think have tried smoking, drinking alcohol, and how many they think have been drunk in the 7th and 9th grade.*
- *A table or a figure can be created based on what the pupils think, which in turn can be compared with data from the [Norwegian 'Youth Survey'[1]] (found at sirus.no and NOVA: ungdata).*
- *Then discuss the results further, and focus on the fact that the majority of pupils in the 7th and 9th grade actually have not had their alcohol debut.*

Suggestions for learning activities on gender and alcohol/tobacco
- *The pupils can use the Internet to find the development of girls' and boys' drinking patterns over the past 10 years. Has this changed? What could be the reason for such a change?*
- *Why the results are as they are can be discussed in groups or in the whole class collectively. Discuss further whether getting drunk may have different consequences for girls and boys, and if so, why?*

Figure 20: Learning Activities in 7th-grade 'Social Studies'

As previously noted, detailed descriptions of what to do in classrooms, for instance in the shape of green example boxes, were also present in previous guideline drafts. What was different as the remaking of the Guideline gradually took shape was the preferential treatment of these instructional textual sequences. By the time the draft was presented to the directorates, the new version of the Guideline had already become a document privileging the descriptions of concrete and action-

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[38] http://www.forebygging.no/en/Skole/LARER/Stottemateriell/Forslag-til-laringsaktiviteter/ (Accessed on the 20th of January 2014).

oriented learning activities for teachers to implement. Considering this backdrop, the seemingly sudden and unexpected renaming that took place on the 8th of November 2011 can be seen as a belated adjustment to the already achieved manual-like textual content of the document. The renaming was a coherent step forward in making a document aiming more directly at affecting what goes on in the classrooms of Norwegian schools. Ironic as it appears, a guideline abstaining from identifying, recommending, or dissuading existing school programmes ranked by scientific reports was now itself taking the shape of a programme. The fact that some of the descriptions of learning activities derive from the same non-identified programmes makes this even more ironic.

The intensified emphasis on the Guideline's programmatic features throughout the making of the new version implied a turn in the Guideline's genesis towards a more concretized and action-oriented content. As such it amended some of the woolliness that the post-hearing draft was accused of. However, along with this alteration of its course, the destiny of the production process was altered. The renaming was not only a coherent replacement of words on the front page of the document. The document actually changed its imperative status. The email from the Directorate of Health (dated the 9th of November 2011) stated that '(It shall not be a guideline in the formal sense)'. Although the Guideline's textual content had become more concretized and action-oriented, its authority was reduced from a governmental advisory guideline to a document suggesting learning activities. It was no longer going to be a governmental guideline aiming at providing science-based *recommendations* to teachers, but a document providing *suggestions*. It specified more clearly what to do, but simultaneously reduced the obligation to actually go ahead and do it. Despite their basis in scientific knowledge, these learning activities were no longer recommended, but only suggested.

The accusation of woolliness against the post-hearing draft and its subsequent dismissal definitively created some gradients relevant to the further trajectory of the Guideline's genesis. However, according to my observations, it did not reverse the shrinking pattern. On the contrary, the renaming of the Guideline implied a continuation of the diminishing of the document's imperative status. This time the actual 'guideline' term went into the waste basket – not only the one that had been located on the front page of the document since the very first draft, but also each and every instance of the term in the entire document. Anything that could possibly claim the legal status of a governmental guideline was displaced by the title of the document's prominent chapter: 'Suggestions for Learning Activities'. So as to avoid any confusion with governing documents of higher legal rank, the phrase 'Supportive Materials' was added to the top of the front page of the final and published version (Helsedirektoratet, 2012a, p. 1). A governmental guideline for prevention of alcohol- and drug-

related problems in schools ended up as 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities'. Stripped of its decorations, the shrinking of the Guideline continued towards an even more open script. It was now a governing tool performing the Teacher's part in the supply line of knowledge as fundamentally optional.

9.2 From sheet to screen

After the meeting on the 8th of November 2011, the work of accomplishing 'Suggestions for Learning Activities' continued with new meetings, emails, and phone calls between the involved parties at the directorates and KoRus-Nord. Throughout the spring of 2012 the document was progressively approaching its final shape, which also included rounds of proofreading and layout in cooperation with an external professional designer. Finally, on the 4th of July 2012 an email was submitted from the project manager at KoRus-Nord to eighteen colleagues and the ever-stalking ethnographer:

> Hey guys!
> After 4 long, interesting, educational, frustrating, 'backwards-and-forwards' years of writing, the Supportive Materials is finally finished! Thanks to all who have contributed in one way or another ☺ ☺ And Rolf [my first name]: Everything did not end up in the waste basket, even though we both were a little sceptical for a while ;-)
>
> The main publication channel for the Supportive Materials is [...] http://www.forebygging.no/en/Skole/LARER/Stottemateriell/.

Figure 21: 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities'

'Suggestions for Learning Activities' (see Figure 21) had now been uploaded onto the Internet, and the Guideline's genesis as well as my own fieldwork finally came to an end. Given the new title, it is of course questionable to declare that the *Guideline's* genesis came to an end on the 4th of July 2012. Probably it is more appropriate to declare that the tool factory closed down, since the tool that was eventually produced diverged considerably from the Guideline as it had been commissioned more than four years earlier. However, in this section it is not the document's textual content that will be discussed, but rather the change of platform applied in the endeavour of transmitting that content. The New Assignment from the Directorate of Health that followed the dismissal of the post-hearing draft stated that the new version of the Guideline was going to be 'published on the two directorates' websites' and that 'the Guideline will not be published in a paper version'. How does this particular switch of platform relate to the pattern of ongoing shrinking throughout the authorship?

As mentioned in Chapter 7, I regard the above question as basically empirical. One might anticipate that publishing on the Internet facilitates a more effective distribution as well as future upgrades of the document. If that turned out to be the case, it would make sense to argue for the Internet as a more efficient governing infrastructure, and to suggest that the switch of format was a contra-demoting decision. On the other hand, one could also argue that the Internet might provide a hiding-place, and hence represent yet another shrinking step in the Guideline's genesis. My surveillance of the Guideline was mainly confined to its making and not to its reception among teachers in schools. However, a closer look at how the document finally became situated on the Internet might provide some basis for assessing whether switching to a web-version enabled or disabled the document in playing its part in the supply line of knowledge.

The most obvious feature of the Guideline's publication on the 4th of July 2012 is probably that the ready-made document was not situated where it was supposed to be – at least not according to the New Assignment from the Directorate of Health, which stated that it should be 'published on the two directorates' websites'. As the URL-address in the email from the project manager indicated, the document was instead placed on *www.forbygging.no*, the domain name[39] of a website for which KoRus-Nord has operational and editorial responsibility. From its launch in 2000 the Norwegian Institute for Alcohol and Drug Research (SIRUS) funded and had principal responsibility for this website, but in 2010 this role was transferred to the Directorate of Health. According to its own front page, forebygging.no is 'a knowledge base for alcohol and drugs prevention and health promotion'. The website is divided into several sub-domains, of which '/skole'[40] is the host site for the document.

How, then, does this change in the hosting website relate to the pattern of an ongoing shrinking throughout the Guideline's genesis? The question primarily addresses how the performance of the document is affected by publishing on www.forebygging.no instead of the websites of the Norwegian Directorate of Health and the Norwegian Directorate of Education and Training. A plausible answer is that this particular choice of host site appears as yet another demoting step. The document had already lost its authority as a governmental guideline, and hence it is hardly surprising that it is conspicuous by its absence among the 158 publications filed in the publication category of 'Guidelines' on the official website of the Norwegian Directorate of Health. Neither is it to be found among the 853 publications comprising the current online archive on www.helsedirektoratet.no,

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[39] The Norwegian word 'forebygging' corresponds with the English word 'prevention'.

[40] The Norwegian word 'skole' corresponds with the English word 'school'.

which includes publications classified in more prudent categories of governing tools such as 'Brochures', 'Handbooks', 'Information Material', or 'Training'.[41]

Despite this absence, it would be an exaggeration to say that four years of guideline production had left no traces at all on the publisher's own website. A newsflash item about the launching of the 'Supportive Materials' was published on the 20th of July 2012, providing a link to www.forebygging.no/en/Skole/LARER/Stottemateriell/, and this particular news text was also present in a reduced version on the website of the Norwegian Directorate of Education and Training. These newsflashes were the textual remainder of what was once intended to be an online version 'published on the two directorates' websites'. However, due to the principle of putting the latest news on the top, the news about the newly launched 'Supportive Materials' was quite rapidly displaced from the front page and then relocated to the news archives. After six months on the website of the Directorate of Health, it had become the 73rd most up-to-date news item, located on page 8 in the news archive. Apart from clicking through the news archive, the news item and its link to the document was also traceable through clicking on the top 'topical' menu on www.helsedirektoratet.no – either through 'Public Health' and then 'Public Health Work', or through 'Mental Health' and then 'Work on Alcohol and Drugs in Municipalities'. On the website of the Norwegian Directorate of Education and Training, www.Udir.no, a shorter version of the news text was traceable through clicking on 'Educational Setting' on the main menu, and then successively 'Health in The School' and 'Alcohol and Drug Prevention in Schools'. The final click provides a short introduction as well as a direct link to 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities' on www.forebygging.no. Obviously, there are easier ways to find the document. Due to an integrated version of the document on www.forebygging.no/skole, as well as a pdf version for downloading, the document is easier to trace with the help of search engines. That is, of course, if the user enters the indexed search words.

Notwithstanding the transparency of the Internet and the difficulty of creating a hiding place, I perceive the situating of the document as a continuation of the shrinking pattern. Publishing on a website operated by a regional centre of expertise instead of the directorates' official websites appears as yet another demotion enacted by locating the document separately from other policy documents published online. It was deprived of the authority that would have been attributed by being a policy document made by the directorates in their governing endeavours. The rather poor

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[41] Accessed on the 6th of February 2014.

promotion on the directorates' websites adds to the image of a document dissociated from those who once ordered it and who had subsequently played a significant part in its making. The online launching of 'Suggestions for Learning Activities', as well as the successive displacement of news about its delivery, reinforces the image of an illegitimate and rejected child residing in a foster home with the following address: www.forebygging.no/en/Skole/LARER/Stottemateriell/.

9.3 Deleted matter exhibited

In my historical account of the Guideline's genesis I have tried to accommodate the textual materials that did not become part of the ready-made document. I have employed the 'waste basket' metaphor in order to foreground these textual materials that were unsuccessful in making imprints on the final and published version of the document. Although the metaphor might suggest that the making of policy documents in general engenders some kind of waste disposal site where deleted and rejected materials are laid to rest, this was hardly the case. As time passes, emails are deleted, waste baskets (in the literal sense of the term) are emptied, and the memory of the involved human actors blurs. Once a document is ready made and published, it might be hard to trace the textual deletions, and doing archaeology on the mundane bureaucratic practices of the past can be a challenging enterprise. In this particular production process, the waste basket is basically an archive of written and spoken language materials that have been collected, and to some extent have also been collectable, through the ethnographer's attendance to the document's genesis as it unfolded.

Of course, I was not the only filing clerk in action throughout these four years of production. There are filing rules by which public bodies have to abide, and quite a few of the documents referred to in this account, for instance those related to the external hearing, are to be found in the different archives of the involved public bodies. Notwithstanding that this may not be perceived as the world's most enviable possession, I can claim that I probably have the largest and most comprehensive archive related to this particular guideline-producing process. No documents enrolled, at least to my knowledge, were kept from public access, and this combined with the great generosity of all the humans involved allowed for a rich and relatively easy accessibility to what was said and written throughout the production process. An abundant collection of textual materials in the shape of published policy documents, reports, books, drafts, minutes, emails, agendas, letters, sketches, tape recordings, and notes from production meetings requires quite a lot of space on my hard disk, my desk-top, and in my bookshelves. However, the vast majority of this textual matter does not consist

of premature and unfinished components that at a later stage became the building blocks of the published document. Rather, it is the dead-end language materials of the tool factory's waste basket – the premature and unfinished textual components for the assembly of different, never-made versions of the Guideline.

One might argue that textual waste is a necessary by-product of all authoring processes, and as the Guideline evolved through a process of trial and error, deleted text was replaced either by improved textual substitutions (or by nothing, for that matter), all in the service of making the Guideline as commissioned. Here is my counter-argument. If the making of this particular document was somehow shepherded by such an underlying rational productive force, one might expect the textual waste of the process to contain various kinds of defects compared to the text that was published. In slightly different terms, one might expect the non-published texts laid to rest in the waste basket to be less of a document as commissioned, less of the science-transmitting governing tool that the Guideline was meant to become. However, as argued throughout this historical account, this is hardly an adequate way of characterizing the textual content of the waste basket. On the contrary, a closer examination of the waste suggests that the Guideline, as it was commissioned when the production process commenced, ended up as waste, while the published document diverged significantly from the blueprint this particular governing tool. A couple of juxtapositions between the Guideline as it was commissioned and the document that was finally published will illustrate this rather ironic outcome after more than four years of guideline production.
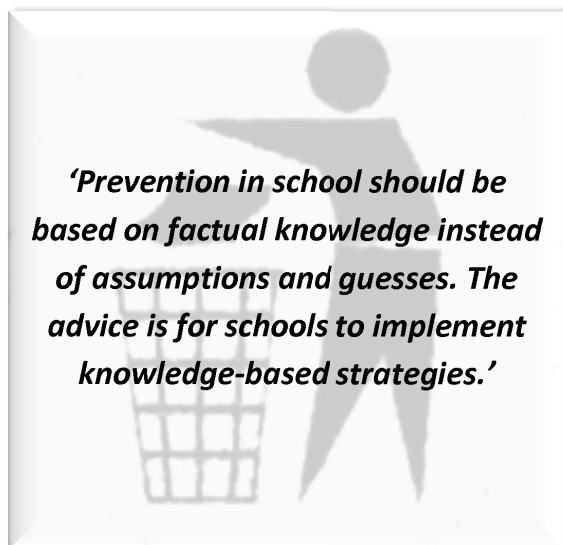
At the outset of this historical account, I pointed out five documents generating the script for the Guideline's production. The Action Plan, the very document initiating the making of this governing tool, stated that the Nordahl Report 'will indicate the recommended direction for efforts to improve the quality of anti-alcohol and drugs work in schools' (Norwegian Ministry of Health and Care Services 2007, p. 61). In the published 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities', the only trace of this direction-giving research report is found on page 10, where it is written that

> In prevention of alcohol and drugs in schools there are three central elements: a plan for prevention, a good educational setting and cooperation with parents and other collaborating partners.

A short endnote is attached to this phrase: 'Based on Nordahl et al. 2006'. While this is the only imprint of a document that was supposed to be direction-giving, the waste basket holds a

considerable amount of textual sequences related to the Nordahl Report, for instance texts that recount the report's assessment of different school programmes, the criteria by which the programmes were assessed, and the overall recommendations given by the report. In short, the direction-giving status of the Nordahl Report is hardly traceable in the published document but quite easily found in the tool factory's waste basket.

Another example of this type of procedural drift can be found in the expressed purpose of making a guideline that provides 'common recommendations' to all Norwegian schools (Helsedirektoratet, 2010, p. 146). As we have seen, it was not a governmental guideline, but 'Suggestions for Learning Activities' that was published, and the *recommendations* that were once part of the drafts' textual content were to a large extent either deleted or transformed into suggestions. Also in this case, the text conforming to the Guideline as it was commissioned from the outset is easily found in the waste basket. That includes a vast amount of imperative formulations that were once proposed as the Guideline's textual content, as well as the guideline format itself. Texts created in adherence to a guideline commissioned as a policy document for the governing of teachers through the transmission of science-based recommendations ended up as waste. The textual deletion in Figure 22, dovetailing perfectly with the logic of science-based practice, may serve as an illustration of the waste basket as a site for the Guideline as commissioned.

'*Prevention in school should be based on factual knowledge instead of assumptions and guesses. The advice is for schools to implement knowledge-based strategies.*'

A short reflexive breather

Apart from being the date for KoRus-Nord's dismissal of the post-hearing draft (Chapter 8.2), the 22nd of February 2011 witnessed another incident which I have not discussed. Although it hardly concerns the history of the Guideline's genesis in terms of affecting the course of events, it concerns the making of this particular ethnographic and historical account of the Guideline's genesis. Shortly after the closure of the 'dismissal meeting' I received a phone call from the project manager at KoRus-Nord. It was neither the first nor the last time we had talked on the phone during more than four years of guideline production, but this time it was not about me trying to keep track of its progression, or her offering me the latest news. What had happened during the meeting had made her reflect on her own role throughout the authorship. These were self-critical reflections about what she could and should have done differently to avoid this unpleasant situation. At the same time, she defended herself against her self-imposed accusations, pointing to the role she had been set to play by the directorates, and suggesting that the management at KoRus-Nord had shown little interest for quite a long time in keeping track of what went on. Now she wanted to share her reflections and get my opinion as 'one who knows every detail of this history', as she put it.

For me it was not at all hard to relate to her ambivalence and her need to bring in someone from the outside to take part in such a trial in her own mind. Having been there quite a few times, and with deep respect for the difficult job she had done within a complex production setting, I responded as supportively as I could. Whether or not I managed to contribute to her acquittal from her own accusations is irrelevant to my reason for bringing this particular event into my story. The point I want to make is rather of the reflexive kind, addressing the fundamental contingency of *my own* account. Our conversation was a different social game than the one I was playing as a researcher. It was no longer about an informant delivering research relevant materials to the ethnographer, but rather the ethnographer delivering, or at least trying to deliver, support to one of his informants. The table had turned.

Notwithstanding the sensation of having been brought out of my position as a researcher, I took some notes immediately after we hung up – the kind of notes that one is likely to take in adherence to the methodological imperative of recording as much as possible in case of some overlooked potential 'behind' what happens, and not really because I scented a catch important for my research. On the contrary, this particular incident and the notes that I took along with it were intuitively

classified as a 'by-catch' and stored together with other 'non-relevant' empirical materials. And there they stayed until I reencountered these notes on my way through the chronological review of the Guideline's making. Reviewing them did help me to recall that I had felt sorry for her and wanted to help, but our conversation still did not fit into my account.

Well, there they were. The reason for bringing this seemingly immaterial event into this text is to acknowledge that my account also has a waste basket of deleted and non-used materials. An 'out of the order' or 'off the record' conversation with one of my key informants, recorded sequences of laughter and quick replies, spoken words and sentences on the edge of and beyond acceptable language, friendly jokes about the ever-stalking ethnographer – these are all empirical bits and pieces that found their way to the waste basket of *my own* text production. Like the Guideline's making, my writing was a waste-producing enterprise. My story of the Guideline's making could indeed have been a different one. This also includes how its makers of flesh and blood are portrayed by my narrative choices. To the extent that my use of metaphors creates an image of cold and boring bureaucrats working in the supply line of scientific knowledge, this is an image pretty far from what I saw and heard throughout my four years of fieldwork. Although it might be self-evident that research is a waste-producing activity, I am comfortable with exhibiting these deleted artefacts of my own waste basket.

Chapter 10: Guidelines in the Play of Governance

10.1 The Guideline's genesis summarized

When it was commissioned by the Norwegian Directorate of Health in 2008, the explicit goal of producing the Guideline was to reduce society's alcohol- and drug-related problems through the governance of teachers towards science-based prevention in schools. By transmitting scientific knowledge and science-based recommendations, the document was assigned a governing part in the policy of science-based practice. In my ethnographical account of the history of the production process, we have followed the Guideline's making from the very start to its launch more than four years later: from the first draft, through multiple revised drafts, to the completion of a ready-made document. One might expect that it would be possible to trace, through the successive drafts, the gradual establishment of a scientific base for the recommendations. But the opposite was the case. The progression of the Guideline's proposed text can be characterized rather as a series of *translations,* a *movement* from one draft to the next that simultaneously constituted a *transformation* consisting of textual content being deleted and routed to the waste basket. Gradually, the document became less of the tool it was meant to be according to its assembly instructions. This shrinking process manifested itself in the following ways:

- ✓ In terms of textual volume (the number of pages), each new draft held less content than the previous one.
- ✓ The amount of scientific content (scientific claims, quotes, references) was successively reduced from one draft to the next.
- ✓ Imperative formulations ('It is recommended that…', 'teachers are advised to…', 'one should not…', etc.) were successively deleted throughout the production process.
- ✓ Its formal status was downgraded from a 'National Guideline' to 'Suggestions for Learning Activities'.

In addition to this shrinking pattern, I have also emphasized some paradoxical features regarding both the ready-made Guideline and in the production process prior to its completion:

- ✓ All the drafts and also the final guideline underscored that activity and participation from the target group are essential if a change of behaviour among pupils is likely to occur. However, moving a link upwards in the supply line of knowledge, efforts to change the behaviour of teachers are enacted by a monologic guideline made without any involvement from its target group. The Guideline runs counter to its own recommendations.

- ✓ The dismissal of the post-hearing draft was due to allegations that the textual content was self-contradictory with regard to what the Guideline was supposed to become. What was meant by being a tool for transmitting science and science-based advice concealed both the science and advice. In spite of this recognition, the deletions continued as the authorship progressed.

- ✓ Ironically, a document that abstained from identifying, recommending, or warning against existing school programmes assessed in scientific reports was itself taking the shape of a school programme. The fact that some of the descriptions of learning activities derive from the same non-identified programmes makes this even more ironic.

- ✓ 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities' diverged significantly from the Guideline as it was originally commissioned. A closer examination of the waste basket suggests that the Guideline as it was envisioned at the outset of the production process ended up as waste.

10.2 A few obtrusive questions

I might have arrived at the ironic conclusions that I had witnessed more than four years in the production of a non-political political device, and that governing power might well imply abstention from governance. However, what makes such conclusions difficult are some obtrusive questions induced by my close attendance to a production process that resulted in a ready-made document deviating considerably from the governing tool it was once intended to be. All the counter-intuitive features apparent in its making beg the naïve question of why the Guideline was made. It simply does not fit the part it was set to play in the policy of science-based practice. Nevertheless, a final document did eventually see the light of day. Its unostentatious script notwithstanding, the

Guideline's tenacity appears to be strong, and, by the same token, rather mysterious, if one takes the policy prescription of science-based practice as the frame of reference.

In digging into this mystery of the Guideline's genesis I will start by taking the 'official' prescription of the policy as the frame of reference. I will zoom out from the narrow focus on this particular guideline production to a more general focus on guidelines as a genre of policy documents within contemporary Norwegian welfare policy. What are the hallmarks of these devices? What characterizes their appearance? Do guidelines as a genre of governing tools possess characteristics that make the appropriateness, suitability, and expediency of this particular guideline more plausible? Does a closer look at the guideline genre provide reasons to believe that 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities' will have a governing impact on teachers and go on to counteract society's alcohol- and drug-related problems? Let us start by assessing the magnitude of guidelines as a genre of governing technologies.

10.3 The abundance of guidelines

The guideline I attended throughout its genesis is by no means an extraordinary case. Guidelines comprise a comprehensive genre, whether measured by numbers or prevalence within different policy fields. Although my assessment of the ubiquity of guidelines primarily regards contemporary Norwegian welfare policy, their abundant presence outside the country's borders is clearly indicated by Marion McMurdo (2010), a professor of ageing and health who has identified 'Guideline Fatigue Syndrome', defined as 'a debilitating condition characterized by irritability and overwhelming lethargy in the presence of guidelines'. Guidelines are obviously a frequently applied technology within contemporary health policy in other countries as well as Norway.

In the Norwegian context they abound in almost all fields of welfare policy, and they appear to be particularly numerous in the policy fields of health and education. According to its own website[42], the Norwegian Directorate of Health has issued 160 current publications categorized as 'Guidelines', of which 149 have been made since 2006. Among their most recently produced guidelines is one launched in September 2013 (see Figure 23) aiming at health workers in antenatal care: 'Early

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[42] http://helsedirektoratet.no/publikasjoner/Sider/default.aspx (Accessed on the 12th of December 2013).

Conversation about Alcohol and Living Habits: Guideline for health workers in antenatal care' (my translation).

Figure 23: 'Early Conversation about Alcohol and Living Habits: Guideline for health workers in antenatal care'

The following month the Directorate of Health launched yet another guideline (see Figure 24), this time aiming at employees within municipalities and county authorities: 'Good Overview – A Prerequisite for Good Public Health: A guideline for working with an overview of health status and determinants' (my translation).

Figure 24: 'Good Overview – A Prerequisite for Good Public Health: A guideline for working with an overview of health status and determinants'

Both of these newly published guidelines are typical examples of an ongoing and rather voluminous production of policy documents within the guideline category. In addition, different publications produced by the Directorate of Health are categorized under headlines akin to 'Guidelines' – for instance, 147 documents are subsumed under the category of 'Brochures' and 58 under the category of 'National Professional Guidelines'. It is no exaggeration to assess the guideline industry as alive and kicking within the health policy field, even to the extent that there are guidelines made for guideline makers. In 2002 the Directorate of Health launched 'Guidelines for Guidelines', with a revised version published in October 2012 (Helsedirektoratet, 2012b) where the title was changed to 'Guideline for the Development of Knowledge-based Guidelines' (my translation). According to this

57-page document (see Figure 25), this is a guideline aiming at 'those who produce knowledge-based guidelines in health and care services' (p. 11).[43]

Figure 25: 'Guideline for the Development of Knowledge-based Guidelines'

Given the number of current guidelines as well as various related documents such as 'wizards' or 'supportive materials', and the variety of policy fields and target groups they are aimed at, it is fair to say that guidelines comprise a numerous, prevalent, and adaptable genre of policy documents.

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[43] My translation of what is written at http://helsedirektoratet.no/publikasjoner/veileder-for-utvikling-av-kunnskapsbaserte-retningslinjer/Sider/default.aspx (Accessed on the 12th of December 2013).

Hence, neither the decision to make the Guideline nor the fact that it ended up as 'Supportive Materials' is particularly remarkable. On the contrary, it fits perfectly into an ongoing and active guideline industry within the policy of science-based practice. However, being part of a popular genre does not necessarily indicate that the Guideline will bring about more efficient prevention of alcohol- and drug-related problems in society. Rather, the ubiquity of guidelines expands the scope of interrogation. The question begged by the paradoxical and counter-intuitive features of the particular authorship I have attended might as well be directed towards the genre more generally: Are guidelines effective governing tools?

In the following I will approach this question by focusing on guidelines' appropriateness, suitability, and expediency. Although these three adjectives might appear to be synonyms, I will use them to address three different dimensions. In questioning the *appropriateness* of guidelines the focus will be on the distinctive character of the device itself and how guidelines are in compliance with contemporary ideas of governance. In questioning their *suitability* the focus will be on guidelines as science-transmitting tools: Are they a suitable means for conveying scientific knowledge and science-based recommendations? In questioning the *expediency* of guidelines, the focus will be on their change-making capabilities: Do they propel changes in what professional practitioners do?

10.4 First interrogation: The appropriateness of guidelines

Whether the target groups are professionals at the frontline of the welfare state or the policy relevant public more generally, governance is likely to be portrayed as a democratic project locating the governed in the position of the active participant, as subjects whose voice should be taken into account. The space of governance has been increasingly dialogized (Karlsen and Villadsen, 2007; Mic-Meyer and Villadsen, 2007). This does not necessarily imply that the tenacity of governance is waning within 'advanced liberal states' (Miller and Rose, 2008; Rose, 1999). Neither does it imply that participation of the governed necessarily takes place or makes any difference when governing projects are designed or implemented (Villadsen, 2007). As described in Chapter 7, the genesis of the Guideline included quite an extensive obligatory external hearing procedure, but without the participation of any teachers or teachers' associations. Yet, my point is not about whether hearing arrangements imply participation or not, but how they, as procedural practices involving both humans and documents, do a different job. Just like the bidirectional arrows, integrated circles,

mellow colours, and words with democratic connotations that we looked at in Chapter 3, hearing arrangements are examples of what might be perceived as a contemporary fashion of governance. They are all textual elements taking part in a performance that is likely to make governance appear as a participatory project, made and implemented in consensus between the governor and the governed for the benefit of all parties. Simultaneously they downplay governance and governing technologies as top-down enforcements. 'Discipline', 'obedience', 'compulsion', or 'sanction' are terms that are rarely encountered in the language used to prescribe or describe governing enterprises. Rather, 'participation', 'user involvement', 'empowerment', and 'dialogue' appear to be the buzzwords.

How then does governance by guidelines fit into this image of contemporary governance fashion? Their making might involve the participation of and dialogue with different parties concerned, including those subject to governance. But once a guideline is a ready-made document launched in the field of practice it is set to affect, it hardly allows for participation and dialogue. On the part of the governed, it is of course possible to disagree, object, ignore, and even tear guidelines to pieces. Inevitably, though, any attempt to enter into dialogue with a guideline would be futile. It makes no sense to try to make them listen, convince them, or to make them change their mind. Talking with a guideline makes about as much sense as talking to a speed bump in order to make it treat your car's suspension more carefully. Guidelines are basically fixed and ready-made monologues that configure the governed as passive consignees. As reading receptors of guidelines' content the target groups become the point of destination for the information channelled. A guideline allots to those supposed to be governed by it the subject position of the audience in a monologic performance. They are listeners to what is being said – or, perhaps better, they are the readers of what has been written.

As monologues in an age that breathes dialogue and participation as essential to most governing enterprises, governance by guidelines hardly fits with the contemporary fashion of governance. In juxtaposing contemporary ideas of governance with the monologic nature of guidelines, the latter rather appear as a governing tool from bygone days. Judging by their ubiquity, one would expect that governance by guidelines is an appropriate way of achieving policy goals. However, considering their monologic nature and the subject position offered to those supposed to be governed by them, the appropriateness of guidelines is questionable; their success in terms of numbers can hardly be explained by their monologic format. What then about the *suitability* of guidelines? Can the viability of the genre be explained by guidelines' status as suitable technologies for conveying scientific

knowledge and science-based recommendations to professional practitioners at the frontline of the welfare state?

10.5 Second interrogation: The suitability of guidelines

The mystery of the vigorous guideline genre is not only based on their unfashionable and outmoded monologic nature. Guidelines' role as science-transmitting and governing tools within the policy of science-based practice also rests on a highly questionable epistemological assumption: The knowledge required at the frontlines of the welfare state can be translated into text and subsequently acquired by professional practitioners through their reading of the text. The underlying logic is that guidelines are supposed to be conveyors of textualized knowledge, and as the packages are unwrapped, intended changes will emerge. With regard to the endeavour of wrapping scientific knowledge into a guideline, my account of one particular guideline's genesis shows that this enterprise is a lot messier than might be suggested by the idealized image performed by the policy prescription of science-based practice. In that respect, my account, although it concerns only one among a considerable number of guideline production processes, questions the very transmissibility of scientific knowledge through conversion into the textual content of a governmental advisory guideline.

However, knowledge transmission and the subsequent governing of professionals by guidelines are amenable to criticism on a more general basis. One could, for instance, ask whether the type of knowledge that professionals lack and therefore need for achieving policy goals, are of such a portable nature that allows for their relocation through guidelines. Indeed, the type of knowledge addressed in the prescriptions of science-based practice – that is, knowledge produced by scientists – is supposed to be sturdy enough to survive transportation to the practitioners. But the privileged part that scientific knowledge is set to play in the policy of science-based practice does not imply that it is inaccessible to criticism. Hence, we have the following counter-question: What about the practitioner-produced knowledge generated through daily encounters between professionals and their different target groups? Is practice-based knowledge an irrelevant type of expertise? And if not, can it be relocated by translation into text? The following example may clarify this point.

Most people who know how to ride a bicycle will endorse the assertion that disseminating this knowledge through textual mediation to somebody who does not possess such skills would be rather futile. Although Sheldon Cooper, a character in the TV series 'The Big Bang Theory', claimed to have learned from the Internet how to ride a bicycle, for obvious reasons no how-to-ride guideline is attached to bicycles bought in stores. Yet when it comes to the knowledge required for the proper assembling of an IKEA bookshelf, textual dissemination makes a lot more sense. Accordingly, assembly instructions are attached to almost every single product bought at an IKEA store. These two rather obvious observations illustrate that different types of knowledge relate to different types of knowledge infrastructures. But, and this is my point, the relation between types of knowledge and ways of transmitting them is not fixed and unyielding. The relations between channels and what is channelled by them is subject to negotiations, in which guidelines partake as negotiating devices. Another example might clarify this point.

Imagine that Norwegian traffic authorities actually made and distributed a governmental how-to-ride-a-bicycle guideline (see Figure 26). If they did, they would simultaneously have made an artefact claiming the transportability of bicycling-knowledge through a transformation into written language, as well as the possibility of the unskilled bicyclist being governed by reading it.
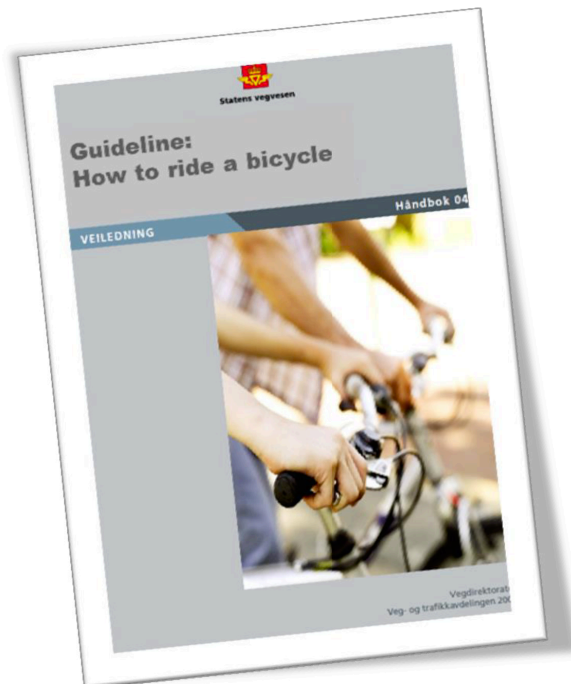

Figure 26: Guideline for bicycling

176

A sentence like 'as you put pressure on your right pedal, push the bicycle to the left and transfer the weight of your upper body to the right in order to keep your bicycle balanced' would hardly be helpful to anyone. Still, it would be a sentence arguing for the feasibility of learning to ride by reading text. The recommendation to do something claims the doability of what is recommended. Such a guideline will probably never see the light of day, and if it does it is hard to imagine that 'reading to ride' would ever be accepted as an efficient way of achieving the knowledge needed for bicycling. My point is that guidelines *per se* perform the mobile and governing 'nature' of knowledge: They are negotiators for the cause of the immanent mobility and potential governing capacity of the knowledge they are supposed to pass on. For instance, the type of knowledge which teachers need for increasing the effect of prevention in schools is pushed in the direction of a bookshelf-assembling type of knowledge by the Guideline. Simultaneously, the Guideline *displaces* the idea that the knowledge needed for efficient prevention in classrooms is produced through working in classrooms. Guidelines perform their own instructional potential and locate the expertise and the experts outside the practices they are made to affect.

10.6 Third interrogation: The expediency of guidelines

The ironic outcome, after more than four years of guideline production, begs the question of why guidelines comprise such a popular genre. Their unfashionable monologic character adds to the reasons for asking this question. The same applies to their suitability as conveyors of scientific knowledge. What, then, about their expediency? Can the successful survivability of the guideline genre be explained by guidelines' efficient contribution to the achievements of the policy goals they are aiming at? My own research is not about measuring the intended effect of the ready-made 'Suggestions for Learning Activities', and it can hardly be used to affirm the expediency of guidelines. But are there plausible answers hidden in implementation studies, effect measuring studies, evaluation studies, or within pedagogical research, for instance? Are there any randomized controlled trials that testify to the expediency of guidelines? If so, one might consider the extensive production of guidelines to be a science-based activity: Guidelines are made because science supports them. Such 'evidence' would clearly be in coherence with the privileged status granted to scientific knowledge by science-based guidelines themselves. If science supported the transmission

of science through governmental guidelines, this would provide at least some explanation for the popularity of the genre – they are popular because they work.

Admittedly limited to the area of Norwegian welfare policy, my search for scientific support for the efficiency of guidelines has been rather unsuccessful. Apparently, the general confidence in the ability of scientific knowledge to improve practices at the professional frontline of the welfare state, and in guidelines as tools of mediation, is not matched by scientific 'evidence' of their effectiveness. In fact, it has hardly been possible to find any research measuring the success or failure of implemented governmental guidelines. One exception can be found in a report from a survey published by the Norwegian Department of Teacher Education and School Research (Rødnes and de Lange, 2012), which measures the extent to which teachers are aware of and use guidelines created by the Directorate of Education and Training for governing 14 different subject areas. The report should definitively count as an evaluation, but it hardly supports the expediency of governmental guidelines in its content and conclusions. About half of the 117 teachers who responded to the survey had never heard of the guidelines. Among those who had, only 41% responded that they had used them. Regarding one particular guideline, 98% responded that they had never used it.

Although the limitations of my own searching capacity might be a contributing factor, I would say that there is a conspicuous incongruity between the abundance of governmental guidelines and the lack of scientific publications testifying to their efficiency. The same applies to the attention researchers have directed towards guidelines more generally. Of course, ordinary Google searches combining terms such as 'guidelines' with those of 'implementation', 'evaluation', or 'effect' generate a lot of hits. But, and perhaps symptomatic for their prevalence, guidelines dealing with how to implement, evaluate, and measure effects appear on the first page of the search results. Attempts to make guidelines themselves subject to such investigatory endeavours are conspicuous by their absence. Somehow, the practices of making guidelines seem to escape the scientific testing so essential to the idea of governing practice in accordance with scientific findings. While the standard of scientific proof is likely to be requested for any type of practice executed at the frontline of the welfare state, the vibrant guideline industry itself seems to be exempted.

This brief overview of the guideline genre might be summed up in the following way: Considering their ubiquity in almost all fields of welfare policy, guidelines seem to play a vital role in the governance of professional practitioners at the frontline of the welfare state. However, the viability of guidelines as a genre of governing devices is by no means self-evident. They are basically

monologues in a time that breathes dialogue and participation by the governed, and as such they would seem to be a rather unfashionable and inappropriate type of tool. The suitability of guidelines as knowledge-transmitting infrastructures should not be taken for granted, and neither should their potential capacities of forging a change in the ways practitioners work towards their different target groups. Despite the questionable appropriateness, suitability, and expediency of guidelines, the genre still appears rather successful, at least in terms of the number of guidelines produced annually. Hence, guidelines somehow appear as successful, yet without any obvious reasons. This is, nevertheless, only if one takes the policy prescription of science-based practice as the frame of reference: Given the chain of change in which guidelines are set to bring about specific changes in ways professionals accomplish their daily work, the ubiquity of the genre is not matched by 'scientific evidence' of its successful viability.

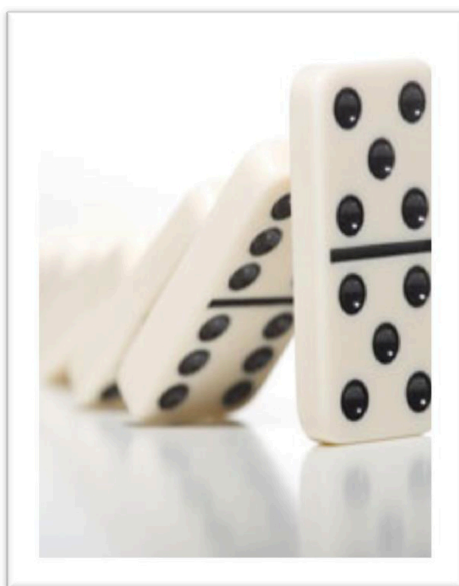## 10.7 The policy of science-based practice as a domino theory

I have argued that the Guideline's appropriateness as a monologic governing device, its suitability as a science-shipping device, and its expediency as a change making tool should not be understood as the reasons why it was made, because it scores poorly on all three counts. Rather, the failure of these criteria could be expected to cause the death of the Guideline before it was completed, or even as reasons to abandon the very idea of making the document. However, that did not happen. Although it ended up quite far from the Guideline as it was commissioned, the final document made it through several threatening trials and finally ended up as yet another policy document in the field of prevention of alcohol and drugs. It survived harsh objections in the external hearing process, and like a phoenix it rose from the ashes, even at the stage of dismissal when the document appeared to be an orphan without any allies. This tenacity of life begs the question of why it was made. My search for answers has so far been attempted within the logic of science-based practice as the frame of reference. I have discussed possible reasons for its conception with reference to the unidirectional chain of change within which the Guideline is a crucial link:

1. Scientific knowledge is supposed be assembled in the Guideline's textual content,
2. The Guideline's textual content is supposed to bring about specific changes in the way teachers work,

3. The changes in the way teachers work are supposed to bring about changes in the behaviour of their pupils,

4. The changes in pupils' behaviour are supposed to bring about a reduction of alcohol- and drug-related problems in society at large.

This fundamental logic embedded in the policy of science-based practice has the shape of a hypothetical alignment of causes and effects – a *domino theory* in which effects are produced by previously occurring causes, which in turn cause subsequent changes (see Figure 27).

Figure 27: Science-based practice as a domino theory

On the basis of the Guideline's genesis, I question the operability of this hypothetical change-making policy machinery, especially its first two steps. Regarding the first step, we have seen how scientific knowledge brought about the textual content in the waste basket of the authorship, rather than the textual content of the published Guideline. Regarding the second step, neither the document's timid script nor its inconspicuous launch on the Internet suggests that teachers' practices have been, or will be, significantly changed as a result of the document.

Having argued for the questionable operability of the hypothetical change-making machinery embedded in the policy of science-based practice, I will now proceed to argue that a consideration of

different types of effects from the Guideline's emergence provides plausible explanations for its survival. The argument requires detachment from what Ian Hacking (1983) refers to as *causal realism* – a type of realism in which 'the theoretical terms of the theory denote theoretical entities which are causal responsible for the observable phenomena' (p. 28). Within this logic of strong causality, the hunt for answers to why preordains the phenomenon subject to explanation (the explanandum) as connected to their causes (the explanans) by a unidirectional productive alignment.[44] The causes are *responsible* for, and therewith ordered prior in time to, the emerging phenomenon subject to explanation. Explaining the emergence of the Guideline by evoking the causal alignment in which it is set to take part as a frame of reference presupposes a division of phenomena into two different classes: those that explain (for instance, the Guideline's appropriateness, suitability, and expediency), and those that are explained (the ready-made document). My further interrogation of the Guideline's mystery implies detachment from such a division between causes and effects. Instead I will argue that one needs to take the Guideline's productive capacities – that is, those *other* than supposedly being able to produce a change in what teachers do in their classrooms – into account in efforts to explain its successful tenacity of life. The notion of performativity (Callon, 2007; Mol, 2002) is essential for my exploration of such 'side-effects'.

10.8 The Guideline's play in ten acts

Explored within the conceptual framework of performativity, the Guideline is no longer conceived of as a result of some underlying causes responsible for its making. Rather, a performative approach allows for bringing the document itself into the explanation of its own tenacity of life. A performative approach enables the document to be examined *as an actor in the play of governance* within which it is allotted a science-shipping and governing part. What, then, is the order performed by the Guideline? What is the document doing in the staged play of governance in which it is offered a part? And how does its performance relate to the reasons why it was made?

My answer is that the Guideline reproduces the reasons for its own production. It is not merely a *product* of the policy of science-based practice; the Guideline is *producing* the image of science-based practice as a chain of change leading to solutions for alcohol- and drug-related problems.

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[44] The terms *explanandum* and *explanans* derive from Carl Hempel and Paul Oppenheim (1948). See also David Hess (1997, p. 33).

Perceived through the lenses of *recursivity* (Law, 1994, p. 14) the Guideline takes the form of a self-generating governing device that maintains and fortifies the idea of science-based practice as a solution to alcohol- and drug-related problems. It is within this configuration that the making of the Guideline becomes an appropriate, suitable, and expedient 'domino' in the problem-solving chain of change. In the same way as a bicycling guideline would perform the possibility of conveying bicycling skills through guidelines, the Guideline too performs the possibility and the necessity of governing teachers towards science-based practice. Appropriateness, suitability, and expediency would in both cases be capacities performed by the documents themselves. In that respect, guidelines do politics, even if they are seemingly non-political.

The claim that the Guideline performs and thereby reproduces the *imagined reality,* in which its viability makes sense, can be substantiated by a closer look at the very performance of the document. What are the features of the 'reality' performed? The following list is not exhaustive, but it contains the crucial elements that fortify and maintain the appropriateness, suitability, and expediency of the Guideline as a governing and science-shipping technology within the policy of science-based practice. This is the Guideline's play in ten acts:

1. The Guideline performs *the insufficiency of contemporary practice at the frontline of the welfare state.* Hence, the Guideline enacts an improvement potential in teachers' practice. Perceived antithetically, there would be no point in making the Guideline if teachers' practice was considered as flawless or without improvement potential.

2. The Guideline performs *the achievement of the improvement potential by governing teachers through the supply of scientific knowledge and science-based advice.* Perceived antithetically, there would be no point in making the Guideline if scientific knowledge was considered as a resource irrelevant for achieving improvement potential.

3. The Guideline performs *the epistemological superiority of the knowledge produced by scientists.* Perceived antithetically, there would be no point in making the Guideline if teachers, through their daily work, were considered to be the producers of the expertise relevant to their own practice.

4. The Guideline performs *the feasibility of producing potentially problem-solving science.* Perceived antithetically, there would be no point in making the Guideline if

scientific knowledge was considered as epistemologically uncertain and lacking in truth value.

5. The Guideline performs *the mobility of scientific knowledge.* Perceived antithetically, there would be no point in making the Guideline if scientific knowledge was considered to be non-transportable or non-convertible into problem-solving action.

6. The Guideline performs *the need for brokers bridging the gap between the scientific communities and practice communities.* Perceived antithetically, there would be no point in making the Guideline if teachers were considered to make efficient choices without governance by external experts.

7. The Guideline performs *the suitability of guidelines as a science-shipping alternative.* Perceived antithetically, there would be no point in making the Guideline if it was considered unsuitable as a device for conveying scientific knowledge and science-based recommendations to teachers.

8. The Guideline performs *the success of its own distribution.* Perceived antithetically, there would be no point in making the Guideline if it was considered likely to become a document unable to reach its target group.

9. The Guideline performs *the governing potential of reading guidelines.* Perceived antithetically, there would be no point in making the Guideline if status quo was considered to be the result of reading it.

10. The Guideline performs *the reduction of alcohol- and drug-related problems through teachers' changed practice.* Perceived antithetically, there would be no point in making the Guideline if it was considered to be ineffective regarding the policy goals at which it is aiming.

10.9 The envelope of science-based practice as a recursive structure

All these elements might be perceived as self-celebrating acts performed by the Guideline in the staged play of governance within the policy field of prevention of alcohol- and drug-related problems. They are self-celebrating in the sense that the document, by its own performance, maintains and fortifies an ecology of expertise (Ong, 2010) within which it fits comfortably. In a recursive manner, the Guideline reproduces the 'reality' convenient for its own emergence. This recursive structure constitutes its own logic and frame of reference, within which the Guideline appears as appropriate, suitable, and expedient. Within a different frame of reference such capacities become rather questionable. Hence, the question of whether the monologic format is appropriate must be answered with a double answer, both 'yes' and 'no': 'yes' within the recursive structure of policy making and with reference to its constitutive logic, and 'no' with reference to contemporary dialogic and participatory ideals of governance. The question of whether a guideline is a suitable transmission device must also be answered in the same way: 'yes' with reference to the logic of the world imagined in and performed by the policy documents, and 'no' with reference to what happened throughout the Guideline's genesis. Finally, the question of whether the Guideline is an expedient governing device must be answered with a 'yes' within the frame of a self-sustaining policy world. With reference to the ready-made document's timid script and limited exposure to its target audience, the answer is 'no'.

I choose the word *envelope* as a metaphor in order to grasp this recursive structure that supports, and simultaneously is supported by, the Guideline's genesis – namely 'the science-based practice envelope' (SBP envelope). As a recursive, self-reproducing structure the SBP envelope entertains an image of a mechanistic causal realism for its own operation. The envelope term reifies the 'reality' of science-based practice; it brings to the fore the materiality of the envelope's content: the networks of documents, the institutional arrangements, and the heterogeneous practices shaped by and shaping the policy of science-based practice. It also brings to the fore the boundaries between what is inside and outside the envelope, the membrane that encapsulates the self-generating process of science-based practice. Moreover, the verb *to envelop* emphasizes the ongoing work within the SBP envelope that recursively reinforces the 'reality' on which the practices of science-based practice are based.

Given this image of an encapsulated, internally coherent, and self-generating 'reality', the Guideline's genesis might be perceived as an SBP-enveloping activity accomplished within the SBP envelope.

Hence, I suggest that explanations of the Guideline's tenacity of life need to consider that the SBP envelope gave birth to and sheltered the Guideline's genesis, and that its production as well as the ready-made document reinforced the sheltering capacity of the SBP envelope as an effect. The document was made within a self-sustaining sphere that preserved its conception. Notwithstanding that it once appeared as an orphan, the document ended up as a legitimate child of the wedlock between policy and science, and by the same token it reinforced the wedlock itself.

Arguing that the Guideline was made because it was the making of an SBP-enveloping policy document within the SBP envelope could easily be conceived of as a deterministic explanation – as if it was meant to be by shear dint of fitting smoothly into the self-generating logic of science-based practice. A few important clarifications are needed for moderating the possible impression of such a strong causality. First, I do not claim that the document was meant to be. It could definitively have been a document with a different textual content. The authorship could also have ceased without any publishing at all. The external hearing (Chapter 7) and the stage of dismissal (Chapter 8) were phases in the history of the Guideline that could have led to different outcomes. Second, the SBP envelope as the prevailing frame of reference for the document's appropriateness, suitability, and expediency could have been challenged. For instance, a request for scientific evidence that testifies in favour of any guideline's capability of propelling science-based practice could have jeopardized or impeded the authorship. I do not consider the membrane of the SBP envelope as impermeable. Third, I do not perceive the SBP envelope as some *perpetuum mobile*, a machinery independent of the input of energy. In the same manner as the success of the diesel engine depends on continuous work, for instance the addition of diesel oil (Latour ,1987, p. 133), the (relative) success of the policy of science-based practice depends on persistent SBP-enveloping efforts and work. It is not unlikely that the contemporary successful logic of governing professional practitioners towards science-based practice in the future will be challenged, impaired, or replaced by different responses to alcohol- and drug-related problems. But for the time being the SBP envelope, as well as SBP-enveloping practices, for instance those leading to new governing technologies, appear to be a solid recursive structure.

10.10 Exposure management

The history of the Guideline's genesis could have been different or even non-existent. The same applies to the idea of scientific knowledge as a remedy for alcohol- and drug-related problems, or the

idea of responding to these problems by producing a guideline aimed at governing teachers in schools. Nevertheless, 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities' was launched on the Internet on the 4th of July 2012. As argued, its successful completion must be understood in relation to it being enclosed within and protected by the SBP envelope. How, then, did the document manage to avoid devastating allegations that could have led to the closing of the tool factory without any final product? How did it manage to navigate through such treacherous seas for more than four years?

I have argued that exposure to the 'world' outside the SBP envelope would imply the risk of undermining the rationale for the document's making. Within a different frame of reference, its appropriateness, suitability, and expediency become questionable and potentially fatal for the document's continued existence. Hence, its making relied on keeping distance from frames of reference that were potentially threatening. Given the production process I have described, I suggest that the document's successful escape from a fatal outcome depended on its limited exposure to those it is supposed to govern. Paradoxically, keeping a distance from its target group appears to have been an important prerequisite for this governing tool to be made. Such distancing manoeuvres are evident in the production as well as in the publishing of 'Suggestions for Learning Activities':

1. The idea of making the guideline came from within the SBP envelope. No teachers or teachers' associations were involved to confirm that it was wanted or needed in schools.

2. No teachers or teachers' associations were involved in the authorship. The only teacher present in the writing process was the one *configured* by the authors.

3. No teachers' associations were consulted as the hearing draft was distributed to 74 different consultative bodies.

4. Instead of publishing in the format of a booklet distributed to all Norwegian schools, the ready-made document was published on a governmental website where it rapidly became displaced by newer items, dropping off the computer screen and becoming increasingly hard to find.

5. A conspicuous shrinking pattern manifested itself throughout the genesis of the document, resulting in a timid script without demanding textual content.

6. The governmental guideline format was replaced by a document titled 'Supportive Materials: Substance Abuse Prevention in School – Suggestions for Learning Activities'.

All these features of the authorship might be perceived as aspects of *exposure management*. They protected the document against potentially fatal attacks by reducing the likelihood of being exposed to those who were supposed to be governed by it (1–4), or, in case of exposure, by making it into a non-demanding document that could easily be ignored (5–6). Hence, both the document itself and the way it was published reduced the likelihood for potential fatal allegations from outside the SBP envelope.

I started out by suggesting the possibility of concluding that the rather counter-intuitive execution of governing power I have attended basically was four years of production of a non-political political device, and that governing power might well imply abstention from governance. Throughout this final chapter I have suggested that there is politics in the making of a seemingly non-political device after all. Perceived through the lenses of performativity and recursivity, the Guideline does politics: It is an actor in an ongoing play of governance that unfolds within the policy field of the prevention of alcohol- and drug-related problems. As much as the document depends on the privileged status of the policy of science-based practice, the policy also depends on documents and practices that reinforce its privileged status. In that respect, the document does politics. Whether it is effective in terms of governing teachers in Norwegian schools towards science-based practice is highly questionable. But, and this is my point, its success as a reproducer of the policy it is part of does not depend on its effects according to its proclaimed impact. It is a governing device that could be made independent of its ability to accomplish the job it is set to do. Moreover, it appears that deviation from the Guideline as it was commissioned simultaneously increased the likelihood of the document's survival; careful exposure management allowed for the document to take part in the staged play of governance.

In conclusion, the Guideline was made because its timid script and low-key launch afforded the avoidance of potentially fatal obstacles. Given such an explanation, the shrinking pattern that occurred throughout the genesis of the Guideline appears not as a disarming of the document, but as

arming it for a different task, namely successfully playing a part in the policy of science-based practice and thereby maintaining and reproducing the SBP envelope. The Guideline's shrinking pattern was a productive transformation, an adaption that allowed for its casting in the staged play of governance unfolding on the policy field of the prevention of alcohol- and drug-related problems. Perceived performatively, the Guideline appears as an artefact that does a type of politics, although one other than its proclaimed impact.

10.11 A final reflexive consideration

As outlined in the introduction chapter, this thesis is an interrogation of the policy of science-based practice, largely inspired and informed by works within the academic field of Science and Technology Studies (STS), particularly works that elaborate on the concepts of *materiality*, *performativity*, and *recursivity*. These are contributions I consider helpful in accommodating *documents* in the analysis, not primarily as representations of human intentions but as performing language materials that partake in the practices of science-based practice. My analysis is empirically based on the practice of making a governmental guideline. However, the theoretical resources applied in this study mercilessly reflect back on the epistemological status of my own text. One of the hallmarks of STS is the denial of scientific knowledge production as a neutral activity of uncovering realities. Within STS, research is conceived of fundamentally as a contingent practice. As John Law (1994) puts it,

> […] there is no reason to suppose that we [researchers] are different from those whom we study. [Scientific practice] has nothing to do with immaculate conception, or any other form of privilege. (p. 16)

What, then, are the implications for my own account? How do I consider the epistemological status of this thesis? What would be the appropriate moment to back down in the epistemological 'Game of Chicken' (Collins and Yearley, 1992, p. 301)? Wiebe Bijker (1993) addresses this apparently paradoxical problem of reflexivity in the following terms:

> Modern students of science deconstruct the special character of scientific knowledge. To do so, they need to maintain a privileged stance for the knowledge that their own studies produce, and hence they refute their basic claim. They saw off the branch on which they sit, and they saw it off between their seat and the tree. (1993, p. 116)

In a defence against this self-imposed attack on the epistemological status of my own thesis, I settle for the following final remarks. I do not want to claim a privileged stance for my own text in the sense that it is the 'true' version of how the policy of science-based practice is done within the field of alcohol and drugs prevention. Although I consider it to be a plausible version based on what I saw, heard, and read throughout the Guideline's genesis, this thesis is basically a contingent scientific product. My version could have been a different one, and at least one such alternative version exists. That is the version of the policy of science-based practice embedded in the documents that I made the subject of my analysis in this thesis. What I *do* want to maintain is that my account makes sense and runs counter to the versions performed by the policy documents performing optimistic prophecies of what scientific knowledge potentially can mend. In refusing to take for granted the presuppositions embedded in these documents – an interrogatory approach made feasible by the assistance of work within the field of STS – the celebrated policy of science-based practice becomes amenable to criticism.

So what, then? What are the purposes of an account that runs counter to the optimistic image of the problem-solving potential of science? My answer is that it facilitates further heuristic questions that might deserve attention, reflection, and debate from researchers as well as from those playing their different parts in the practices of science-based practice and in society in general:

✓ Is the priority granted to science as a problem-solving resource displacing the need for different resources at the frontline of the welfare state – for instance, the need for an increased workforce, more functional buildings, or a supply of tools other than guidelines, protocols, and manuals?

✓ Does the priority of knowledge produced by science imply a transformation of political or ethical questions into questions of what science recommends?

✓ How does the configured ecology of expertise embedded in the policy of science-based practice privilege and disregard specific institutions, interests and practices? Who benefits?

✓ Does the policy of science-based practice imply the delegation of the responsibility for fulfilling welfare promises, from the elites of politics and science to the frontline of the

welfare state? Who is to be blamed in case of failure? Practitioners for failing to apply the tools given to them?

✓ Is the policy of science-based practice a problem-solving project that legitimizes and protects the inter-institutional making and circulation of documents without having to provide 'evidence' for their effectiveness?

✓ How do the practices of creating governing and science-transmitting devices escape the request for science-approved effects?

These are questions that cannot be answered on the sole basis of the bureaucratic authorship I have accounted for. The Guideline's genesis is one singular process within a myriad of policy fields, institutions, practices, and documents comprised by the policy of science-based practice. Each and every production process is a potential research project of its own, which could of course lead to versions quite different from mine. However, even if I refrain from making any general statements, I do claim that the more general questions above can plausibly be *raised* on the basis of what I have observed and described in this thesis. Answers will require more research, and moreover, that researchers take more interest in the interrogation of the recursive effects of the policy of science-based practice.

References

Akrich, M. (1992). The De-Scription of Technical Objects. In Bijker, W. and Law, J. (Eds.): *Shaping Technology/Building Society. Studies in Sociotechnical Change* (pp. 205–224). Cambridge, Massachusetts: MIT Press.

Akrich, M. and Latour, B. (1992). A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies. In Bijker, W. and Law, J. (Eds.): *Shaping Technology/ Building Society. Studies in Sociotechnical Change* (pp. 259–264). Cambridge, Massachusetts: MIT Press.

Asdal, K. (2011). *Politikkens natur - naturens politikk*. Oslo: Universitetsforlaget.

Asdal, K., Brenna, B. and Moser, I. (Eds.) (2007). *Technoscience: The Politics of Interventions*. Oslo: Unipub.

Asdal, K. and Moser, I. (Eds.) (2008). *Ekspertise og brukermakt*. Oslo: Unipub.

Babor, T. F. et al. (2010). *Alcohol: No Ordinary Commodity: Research and Public Policy*, Second Edition. New York: Oxford University Press.

Baklien, B. and Wejden, T. (2009). *Evaluering av prosjektet "Barn i rusfamilier – tidlig intervensjon"*. Report no. 1/2009. Oslo: SIRUS.

Barne-, likestillings- og inkluderingsdepartementet (2013). Meld. St. 44 (2012–2013): *Likestilling kommer ikke av seg selv.*

Barnes, B. (1977). *Interests and the Growth of Knowledge*. London: Routledge.

Bergin, T. (2013). *The Evidence Enigma: Correctional Boot Camps and Other Failures in Evidence-Based Policymaking.* Burlington, USA: Ashgate Publishing Company.

Bijker, W. (1993). Do Not Despair: There Is Life after Constructivism. *Science, Technology, & Human Values* 18(1): 113–138.

Bijker, W. (1995). *Of Bicycles, Bakelites, and Bulbs: Towards a Theory of Sociotechnical Change*. Cambridge, Massachusetts: MIT Press.

Bijker, W., Huges, T. and Pinch, T. (Eds.) (1987). *The Social Construction of Technological Systems*: *New Directions in the Sociology and History of Technology.* Cambridge, Massachusetts: MIT Press.

Bloor, D. (1991). *Knowledge and Social Imagery*, Second Edition. Chicago: University of Chicago Press.

Braun, B. and Whatmore, S. J. (Eds.) (2010). *Political Matter: Technoscience, Democracy, and Public Life.* Minneapolis: University of Minnesota Press.

Braun, B. and Whatmore, S. J. (2010). The Stuff of Politics: An Introduction. In Braun, B. and Whatmore, S. J. (Eds.): *Political Matter: Technoscience, Democracy, and Public Life*. Minneapolis: University of Minnesota Press.

Butler, J. (1990). *Gender Trouble: Feminism and The Subversion of Identity*. London: Routledge.

Butterfield, H. (1931). *The Whig Interpretation of History*. London: Bell.

Callon, M. (1980). Struggles and negotiations to define what is problematic and what is not: The socio-logic of translation. In Knorr, K. D., Krohn, R. and Ehitley, R. (Eds.): *The Social Process of Scientific Investigation* (pp. 197–219). Dordrecht: Reidel Publishing.

Callon, M. (1986). Some Elements of a Sociology of Translation: Domestication of the Scallops and the Fishermen of Saint Brieuc Bay. In Law, J. (Ed.): *Power, Action and Belief: A New Sociology of Knowledge?* (pp. 196–233). London: Routledge and Kegan Paul.

Callon, M. (2007). What Does It Mean to Say That Economics Is Performative?. In MacKenzie D., Munesia, F. and Siu, L. (Eds.): *Do Economists Make Markets? On the Performativity of Economics* (pp. 311–357). Princeton, New Jersey: Princeton University Press.

Callon, M. and Latour, B. (1992): Don't Throw the Baby Out with the Bath School! A reply to Collins and Yearley. In Pickering, A. (Ed.): *Science as Practice and Culture* (pp. 343–368). Chicago: University of Chicago Press.

Collins, H. and Evans, R. (2007). *Rethinking Expertise*. Chicago: University of Chicago Press.

Collins, H. and Yearley, S. (1992). Epistemological Chicken. In Pickering, A. (Ed.): *Science as Practice and Culture* (pp. 301–326). Chicago: University of Chicago Press.

Dear, P. (2001). Science Studies as Epistemography. In Labinger, J. A. and Collins, H. (Eds.): *The One Culture? A Conversation about Science* (pp. 128–141). Chicago: University of Chicago Press.

Dusenbury, L. et al. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research* 18(2): 237–256.

Elvbakken, K. T. and Stenvoll, D. (Eds.) (2008). *Reisen til helseland: Propaganda i folkehelsens tjeneste*. Oslo: Fagbokforlaget.

Engebretsen, E. and Heggen, K. (Eds.) (2012). *Makt på nye måter*. Oslo: Universitetsforlaget.

Fekjær, H. O. (2009). *Rus. Bruk, motiver, skader, behandling, forebygging, historikk*, Third Edition. Oslo: Gyldendal Akademisk.

Frank, A. W. (2010). *Letting Stories Breath: A socio-narratology*. Chicago: University of Chicago Press.

Freeman, R. (2012). Reverb: Policy making in wave form. *Environment and Planning* A 44(1): 13–20.

Freeman, R., Griggs, S. and Boaz, A. (2011). The practice of policy making. *Evidence & Policy* 7(2): 127–136.

Freeman, R. and Maybin, J. (2011). Documents, practices and policy. *Evidence & Policy* 7(2): 155–170.

Galison, P. (1987). *How Experiments End*. Chicago: University of Chicago Press.

Geertz, C. (1973). *The Interpretation of Cultures*. New York: Basic Books.

Gibb, C. (2005). An anthropologist undone. In Meneley, A. and Young D. J. (Eds.): *Auto-Ethnographies: The Anthropology of Academic Practices* (pp. 216–240). Peterborough, Ontario: Broadview Press.

Goffman, E. (1959): *The Presentation of Self in Everyday Life*. New York: Anchor Books.

Gotzsche, P. C. and Olsen, O. (2000). Is screening for breast cancer with mammography justifiable? *The Lancet* 355: 129–134.

Grimen, H. and Terum, L. I. (Eds.) (2009). *Evidensbasert profesjonsutøvelse*. Oslo: Abstrakt forlag.

Hackett, E. J. et al. (2008). *Handbook of Science and Technology Studies*, Third Edition. Cambridge, Massachusetts: MIT Press.

Hacking, I. (1983). *Representing and Inventing*. Cambridge, Massachusetts: Cambridge University Press.

Helsedirektoratet (2010). *Opptrappingsplan for rusfeltet. Statusrapport 2009.* IS-1836.

Helsedirektoratet (2012a). *Støttemateriell. Rusmiddelforebyggende arbeid i skolen – forslag til læringsaktiviteter*. IS-1978.

Helsedirektoratet (2012b). *Veileder for utvikling av kunnskapsbaserte retningslinjer*. IS 1870.

Hempel, C. and Oppenheim, P. (1948). Studies in the Logic of Explanation. *Philosophy of Science* 15: 135–175.

Hess, D. (1997). *Science Studies: An Advanced Introduction*. New York and London: New York University Press.

Høgskolen i Bergen. Kunnskapsbasert praksis. URL: http://kunnskapsbasertpraksis.no (accessed on the 29th of January 2014).

Hull, M. S. (2012). *Government of Paper: The Materiality of Bureaucracy in Urban Pakistan*. London: University of California Press.

Jasanoff, S. (1995). *Science at the Bar: Law, Science, and Technology in America*. Cambridge, Massachusetts: Harvard University Press.

Jasanoff, S. (Ed.) (2004). *States of Knowledge: The Co-Production of Science and Social Order*. London: Routledge.

Joerges, B. (1999). Do Politics have Artefacts? *Social Studies of Science* 29(3): 411–431.

Johnsen, L. (2009). *Manual for tidlig intervensjon i hjem og skole – parallelt*. KoRus-Nord.

Johnsen, L. and Schancke, V. (2010). *Tidlig rusforebyggende intervensjon: Kunnskapsgrunnlag og implikasjoner for handling*. Skriftserie from KoRus-Nord, 1/2010.

Justesen, L. (2005). Dokumenter i netværk. In Järvinen, M. and Mik-Meyer, N. (Eds.): *Kvalitative metoder i et interaktionistisk perspektiv: Interview, observationer og documenter* (pp. 215–234)*. København: Hans Reitzels Forlag.

Karlsen, M. P. and Villadsen, K. (2007). Hvor skal talen komme fra? Dialogen som omsiggribende ledelsesteknologi. *Dansk sociologi* 2(18): 7–28.

Knorr Cetina, K. D. (1981). *The Manufacture of Knowledge: An Essay on the Constructivist and Contextual Nature of Science*. Oxford: Pergamon Press.

Knorr Cetina, K. D. and Mulkay, M. (1983): *Science Observed: Perspectives on the Social Study of Science*. London: Sage.

Kuhn, T. (1970). *The Structure of Scientific Revolutions*, Second Edition. Chicago: University of Chicago Press.

Labinger, J. A. and Collins, H. (Eds.) (2001). *The One Culture? A Conversation about Science*. Chicago: University of Chicago Press.

Lakoff, G. (1987). *Women, Fire and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.

Lakoff, G. and Johnson M. (1980). *Metaphors We Live By*. Chicago: University of Chicago Press.

Latour, B. (1983). Give Me a Laboratory and I Will Raise the World. In Knorr Cetina, K. D. and Mulkay, M. (Eds.): *Science Observed: Perspectives on the Social Study of Science* (141–170). London: Sage Publications.

Latour, B. (1987). *Science in Action: How to follow scientists and engineers through society.* Cambridge, Massachusetts: Harvard University Press.

Latour, B. (1992). Where Are the Missing Masses? The Sociology of a Few Mundane Artifacts. In Bijker, W. and Law, J. (Eds.): *Shaping Technology/Building Society: Studies in Sociotechnical Change* (pp. 225–258). Cambridge, Massachusetts: MIT Press.

Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory*. New York: Oxford University Press.

Latour, B. (2010). *The Making of Law: An Ethnography of the Conseil D'État*. Cambridge: Polity Press.

Latour, B. and Woolgar, S. (1986). *Laboratory Life: The Construction of Scientific Facts*, Second Edition. Princeton, New Jersey: Princeton University Press.

Law, J. (1987). Technology and Heterogeneous Engineering: The Case of Portuguese Expansion. In Bijker, W., Huges, T. and Pinch, T. (Eds.): *The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology* (pp. 111–134). Cambridge, Massachusetts: MIT Press.

Law, J. (1994). *Organizing Modernity*. Oxford: Blackwell.

Law, J. (2004). *After Method: Mess in Social Science Research*. London: Routledge.

Law, J. and Mol, A. (2002). *Complexities: Social studies of knowledge practices*. Durham and London: Duke University Press.

Lidskog, R. and Sundqvist, G. (2002). The Role of Science in Environmental Regimes: The Case of LRTAP. *European Journal of International Relations* 8(1): 77–10.

Lynch, M. (1985). *Art and Artifact in Laboratory Science: A Study of Shop work and Shop Talk in a Research Laboratory*. London: Routledge & Kegan Paul.

MacKenzie, D. (1990). *Inventing Accuracy: A Historical Sociology of Nuclear Missile Guidance*. Cambridge, Massachusetts: MIT Press.

MacKenzie, D. (2006). *An Engine, Not a Camera: How Financial Models Shape Markets*. Cambridge, Massachusetts: MIT Press.

MacKenzie, D., Muniesa, F. and Siu, L. (Eds.) (2007). *Do Economists Make Markets? On the Performativity of Economics*. Princeton, New Jersey: Princeton University Press.

MacKenzie, D. and Wajcman, J. (Eds.) (1985). *The Social Shaping of Technology*. Philadelphia: Open University Press.

Mattingly, C. (1998). *Healing, Dramas, and Clinical Plots: The Narrative Structure of Experience*. Cambridge: Cambridge University Press.

McMurdo, M. (2010). Remedy for guideline fatigue syndrome. *British Medical Journal* 341:c6165.

Mik-Meyer, N. and Villadsen, K. (2007). *Magtens former: Sociologiske perspektiver på statens møde med borgeren*. København: Hans Reitzels Forlag.

Miller, P. and Rose, N. (2008). *Governing the Present*. Cambridge, Massachusetts: Polity Press.

Ministry of Education and Research (2006). *The National Curriculum for Knowledge Promotion in Primary and Secondary Education and Training.*

Ministry of Health and Care Services (2009). *The Norwegian National Action Plan on Alcohol and Drugs*. URL: http://www.regjeringen.no/nb/dep/hod/dok/rapporter_planer/planer/2009/norwegian-national-action-plan-on-alcoho.html?regj_oss=1&id=549775.

Mol, A. (2002). *The Body Multiple: Ontology in Medical Practice*. Durham and London: Duke University Press.

Morrison, K. (2001). Randomised Controlled Trials for Evidence-based Education: Some Problems in Judging 'What Works'. *Evaluation and Research in Education* 15(2): 69–83.

Moser, I. (2010). Fra flyt til fluiditet: Om metaforer for og modeller av informasjon i helsefaglige praksiser og e-helseplaner. In Aanestad, M. and Olaussen, I. (Eds.): *IKT og samhandling i helsesektoren: Digitale lappetepper eller sømløs integrasjon?* (pp. 39–56). Trondheim: Tapir Akademisk Forlag.

Nasjonalt kunnskapssenter for helsetjenesten. Metoder og verktøy for kvalitetsforbedring. URL: http://www.ogbedreskaldetbli.no/metoder_verktoy/Metode_for_kvalitetsutvikling/1108 (accessed on the 13th of February 2014).

Ogden, T. (2012). *Evidensbasert praksis i arbeidet med barn og unge*. Oslo: Gyldendal Akademisk.

Olaussen, I. (2010). *Disability, Technology & Politics: The entangled experience of being hard of hearing*. Centre for Technology, Innovation and Culture. Series of dissertations submitted to the Faculty of Social Sciences, University of Oslo, No. 208.

Ong, A. (2005). Ecologies of Expertise: Assembling Flows, Managing Citizenship. In Ong, A. and Collier, S. (Eds.): *Global Assemblages: Technology, Politics and Ethics as Anthropological Problems* (pp. 337–353). Oxford: Blackwell.

Oudshoorn, N. and Pinch, T. (2005). *How Users Matter: The Co-Construction of Users and Technologies*. Cambridge, Massachusetts: MIT Press.

Pape, H., Baklien, B. and Rossow, I. (2007). Villedende om rusforebygging i skolen. *Tidsskrift for Den norske lægeforening* 10: 127.

Pawson, R. (2006). *Evidence-Based Policy: A Realist Perspective*. London: Sage Publications.

Pickering, A. (Ed.) (1992). *Science as Practice and Culture*. Chicago: University of Chicago Press.

Pipek, V. and Wulf, V. (2009). Infrastructuring: Towards an Integrated Perspective on the Design and Use of Information Technology. *Journal of the Association of Information Systems* 10(5): 306–332.

Powers, J. D., Bowen, N. K. and Bowen, G. L. (2010). Evidence-based programs in school settings: Barriers and recent advances. *Journal of Evidence-based Social Work* 7(4): 313–331.

Rødnes, K. A. and de Lange, T. (2012). *Læreres bruk av og erfaringer med veiledninger til læreplaner for fag og veiledning i lokalt arbeid med læreplaner*. Institutt for lærerutdanning og skoleforskning, Det utdanningsvitenskapelige fakultet, Universitetet i Oslo.

Rognstad, O. (2009). Opphavsrett. Oslo: Universitetsforlaget.

Rose, N. (1999). *Powers of Freedom: Reframing Political Thought*. Cambridge, Massachusetts: Cambridge University Press.

Rossow, I. et al. (2011). Effect and process evaluation of a Norwegian community prevention project targeting alcohol use and related harm. *Contemporary Drug Problems* 38(Fall): 441–466.

Sande, A. (2000). Den norske russefeiringen: Om meningen med rusmiddelbruk sett gjennom russefeiring som et ritual. *Nordic Studies on Alcohol and Drugs* 17: 5–6.

Sayes, E. (2014). Actor-Network Theory and methodology: Just what does it mean to say that nonhumans have agency? *Social Studies of Science* 44(1): 134–149.

Schancke, V. (2005). *Forebyggende og helsefremmende arbeid, fra forskning til praksis: En kunnskapsoppsummering med råd og anbefalinger*. Skrift 1/2003. Kristoffersen trykkeri.

Shelley, M. (1969) [1818]. *Frankenstein*. New York: Oxford University Press.

Shore, C., Wright, S. and Però, D. (Eds.) (2011). *Policy Worlds: Anthropology and the Analysis of Contemporary Power*. New York: Berghahn Books.

Shiva, V. and Moser, I. (Eds.) (1995). *Biopolitics: A Feminist and Ecological Reader on Biotechnology*. London: Zed books.

SIRUS (2009). URL: http://www.sirus.no/eng/.

Sismondo, S. (2005). *An introduction to Science and Technology Studies*. Oxford: Blackwell Publishing.

Star, S. and Ruhleder, K. (1995). Steps towards an Ecology of Infrastructure: Design and Access for large Information Spaces. *Information Systems Research* 7(1): 63–92.

Utdanningsdirektoratet (2006). *Forebyggende innsatser i skolen. Rapport fra forskergrupper oppnevnt av Utdanningsdirektoratet og Sosial- og helsedirektoratet om problematferd, rusforebyggende arbeid, læreren som leder og implementeringsstrategier.*

Villadsen, K. (2007). Magt og selvteknologi: Foucaults aktualitet for velfærdsforskningen. *Tidsskrift for velferdsforskning* 3(10): 156–167.

Winner, L. (1986). Do Artifacts have Politics?. In *The Whale and the Reactor: A Search for Limits in an Age of High Technology.* Chicago: University of Chicago Press.

Woolgar, S. (1988). *Science: The Very Idea*. London: Tavistock.

Wright, S. (2011). Studying Policy: Methods, Paradigms, Perspectives; Introduction. In Shore, C., Wright, S. and Però, D. (Eds.): *Policy Worlds: Anthropology and the Analysis of Contemporary Power*. New York: Berghahn Books.

Wynne, B. (2010). Strange Weather: Climate Science as Political Art*. Theory, Culture & Society* 27(2–3): 289–305.

This thesis is about how science and politics interacted in the production of a governmental guideline aiming at directing teachers in Norwegian schools towards more efficient prevention of alcohol- and drug-related problems. The Guideline's genesis is explored on the basis of an ethnographic study of the bureaucratic authorship from the time of its commissioning to the publication of the ready-made document more than four years later. The focus is on the epistemic issues at stake in the governance of professional practitioners at the frontline of the welfare state. As a strategic research site in the wider field of Norwegian public health policy practices, the study of this particular Guideline provided access to the heterogeneous assemblage of governmental institutions, centres of expertise, policy documents, and hearing procedures that comprised the field. As such, an account of epistemic issues (an epistemography) in the genesis of this particular Guideline speaks to the larger issue of the policy of science-based practice.

The ethnographic account provided in this study stages documents as the main actants in this play of governance. The authorship involved numerous documents such as minutes, drafts, outlines, emails, reports, policy documents, and scientific publications. Drawing on theoretical resources from Science and Technology Studies (STS), in particular the notions of performativity and recursivity, the analysis accommodates these language materials as partakers in the process of producing both the textual content of the published Guideline and the content of the authorship's waste basket. The documents enrolled are explored by virtue of what they do and with what effects. The analysis downplays the role of human intentions as causal explanations for outcomes of policy practices. Rather, the analysis foregrounds the ways in which policy documents produce the object of governance, how they establish a hierarchical geography of expertise, and how they configure a supply line of knowledge, that is, a knowledge logistics as the appropriate and effective solution to meet identified challenges.

As the authorship progressed, an ongoing shrinking pattern emerged in terms of textual volume, imperative language, and scientific content. For each new draft, the document became less of a governing tool than it was originally commissioned to be. At one point the Guideline was about to be orphaned, as those who commissioned it as well as those who wrote it no longer were willing to support it. The ready-made document lost its governmental guideline status and was demoted in rank as 'supportive materials'. It was published exclusively on the Internet where it became increasingly hard to find. Yet, for reasons other than the scientific knowledge embedded in its content, the document was produced and finalized. The Guideline's survival depended on the careful management of its exposure to the outside world, not in the least to the target group of the teachers. This was evident in the execution of the external hearing procedure.

However, the disarming shrinking pattern was also a productive transformation that afforded for the Guideline's casting in the staged play of governance within the field of prevention of alcohol- and drug-related problems. Notwithstanding its lenient script and unostentatious launching, it became a policy document reinforcing the hierarchy of expertise conducive to its own genesis. It was a governing tool protected by and simultaneously protecting the envelope of science-based practice as a recursive, self-reproducing structure.