The Relationship between Gender Research and Society in the Norwegian *Brainwash* Controversy of 2010–2011

Pia Vuolanto

Abstract

The author investigates the relationship between gender research and society in the current context of neo-liberal and managerial universities. In this context of the new governance of science, research is expected to actively interact with society and to be involved in transdisciplinary problem-solving in close collaboration with various social actors (Slaughter and Leslie 1997; Gibbons et al. 1994; Etzkowitz and Leydesdorff 1998). The article provides an in-depth empirical study of the relationship between gender research and society by analysing a recent public controversy in Norway that unveiled different social actors' definitions and expectations of gender research. The study focuses on the different views and perceptions that different actors had of the relationship between gender research and society during this unusually large public controversy. The analysis is conducted through a close reading of newspaper articles, articles in scholarly journals and blog posts. The article highlights the diverse understandings of the relationship between gender research and society, and hence strengthens claims that a transformation is taking place in universities from detached research systems to more interactive ones. The academic community as a whole, including gender researchers, can benefit from learning about the rhetorical strategies of the social world of gender research in this debate to maintain and change the public image of the interaction between science and society.

Keywords

Gender Research, Gender Research and Society, Science-society Relationship, Social Relevance, *Brainwash* Controversy, Social Sciences and Humanities, Controversies in Social Sciences

1 Introduction

This article analyses the relationship between gender research and society by scrutinising a recent public controversy in Norway. The controversy started in the spring of 2010, when *NRK*, the Norwegian broadcasting company, presented a popular science series called *Brainwash* (*Hjernevask* in Norwegian). The series started a heated and politicised nationwide debate about the place of science in society, which was especially dominated by a discussion about gender equality and gender research. The debate involved researchers from different disciplines, politicians, policymakers, the media and social movements. This controversy offers a rich and current context in which to study the relationship between gender research and society.

In higher education studies, it is often claimed that the relationship between research activities and society has changed, with a shift from discipline-based knowledge production and isolated research work to transdisciplinary collaborations and active interactions with society that aim to solve the serious problems of our time (Slaughter and Leslie 1997; Gibbons et al. 1994; Etzkowitz and Leydesdorff 1998; Hessels and van Lente 2008; Tuunainen 2013; Albert and McGuire 2014). This 'universities' transformation thesis' has been criticised for concentrating too heavily on the world of science, technology and medicine and not sufficiently including the humanities or social sciences (Albert 2003; Godin 1998). Moreover, it has been argued that the thesis is insufficiently empirically grounded and needs to be made more specific in order to capture the whole of the science-society relationship (Ylijoki 2003; Tuunainen 2005; Ylijoki et al. 2011; Albert and McGuire 2014; Miettinen et al. 2015). With this critique in mind, this article sets out to study the relationship between one social sciences and humanities domain – gender research – so as to provide a view into the variety of understandings of its relationship with society.

Gender research, engaged as it is in the political issues of welfare societies, has been shown to be particularly "vulnerable to distortion and to being framed in a negative, provocative manner" (Grauerholz and Baker-Sperry 2007, p. 274) by

social movements such as anti-feminism. Previous studies on gender research as a discipline have considered its historical formation, academic status and relationship with other disciplines (Widerberg 2006; Skeggs 2008; Griffin 2009; Hemmings 2011; Pereira 2012). There is also research on feminism and anti-feminism as social movements (Blais and Dupuis-Déri 2012; Eriksson 2013; Johansson and Lilja 2013; Giebel and Röhrborn 2015; Derichs and Fennert 2015) and on gender researchers in the media (Scharff 2013). In this article, I unfold the perceptions of gender research among different actors from different social worlds in the context of Norway – a Nordic welfare state – during a large public debate about gender research. This will provide a view of the different aspirations and demands attached to gender research.

2 Theoretical Framework: Controversy Studies and the Science-society Relationship

Controversy studies on public debates involving science fall under the broad umbrella of science and technology studies. These controversy studies have focused on the interplay between science and society by analysing large, contentious topics such as climate change, ethical dilemmas in medical research and problems posed by technological development (Nelkin 1979; Engelhart and Caplan 1987; Brante et al. 1993; Hess et al. 2008; Kleinman et al. 2010). Some controversy studies have analysed the social sciences, both pure and applied (Fahnestock 1997; Salmon 2000; Ashmore et al. 2005; Vuolanto 2015); in particular, cases such as the so-called 'science wars' and the Sokal affair, which engage the field of science and technology studies itself in the debate, suggest that controversies are a fruitful entry point into the science-society relationship in the social sciences and humanities (Segerstråle 2000; Labinger and Collins 2001).

The central idea of controversy studies has been to analyse all sides of a debate and to symmetrically highlight the views of key participating actors, be they favourable or unfavourable to science as such (e. g. Bloor 1976; Martin et al. 1991; Cassidy 2007). This principle chimes with my intention to study the different views and perceptions of the science-society relationship by concentrating on one controversy in gender research: to study understandings of the science-society relationship among as many actors as possible, regardless of the fact that some of the actors' views stem from a hatred of feminism, gender equality and gender research. Indeed, this pinpointing of hatred of and opposition to science, and the understanding of science's opponents, its proponents and those who stand somewhere in between, is one of my study's contributions to the literature on the science-society relationship.

According to empirical research on the science-society relationship, it has been typical of the social sciences and humanities that their research is targeted at various audiences - including decision makers, public administrators, professionals, and ordinary people and citizens - who are not necessarily such important audiences for other disciplinary groups (Ylijoki et al. 2011). Likewise, it has been discovered that scholars in the social sciences and humanities use various forums to interact with society, including participating in discussions in daily newspapers, sitting on advisory committees, organising professional seminars, having unofficial discussions with policymakers and presenting their research on the Internet (Miettinen et al. 2015). In studies monitoring citizens' understandings of the value of science to society (e.g. Jacobi et al. 2009), the term 'science' is often used in a way that excludes the social sciences and humanities, and hence citizens' expectations of these domains remain largely unknown (Cassidy 2008). This article aims to complement these studies and to provide additional information about how the social sciences' and humanities' relationships with society are understood by a variety of actors researchers, politicians and social movements - many of whom are neglected in studies that concentrate on researchers' or policymakers' views in less contentious situations, but who in controversial situations are actively engaged in defining the issue (e.g. Gieryn 1999; Cassidy 2007).

To empirically study the relationship between gender research and society, I will apply the idea of research markets developed by Ylijoki et al. (2011). They combined quantitative and qualitative data to distinguish five research markets: academic, corporate, policy, professional and public. The main reference group of the academic market is the scientific community, where the basic objective is to contribute to one's own field by publishing in top-rated journals and other established publication forums. In contrast, the reference group of the corporate market comprises companies, and the aim is to find commercial benefit through patents, unpublished reports and conference papers. In the policy market, public administrative bodies are the main reference group of the research, and policy relevance is highly emphasised as the basic objective through reports targeted at policymakers. The professional market aims to reach professionals and targets professional development. Its main outcomes are reports, guidelines and textbooks for the professional community. Ordinary people are the main reference group of the public market, the objective of which is empowerment. Outcomes for this market are published in popular forums such as newspapers, public events and increasingly the Internet. These markets vary greatly among disciplinary groups: all disciplinary groups are engaged in the academic and public markets; the corporate market is predominant in technological fields; the policy market is typical of the social sciences and medicine; and the professional market is important in disciplines closely related to professions such as medicine, nursing or the law. In this article, I specify the various markets of gender research and trace the demands, hopes and expectations that were addressed to gender research in the *Brainwash* controversy.

3 Research Materials and Methods

3.1 The *Brainwash* Controversy

The case through which I will study the science-society relationship in gender research is the 'Brainwash debate', which took place in Norway in 2010-2011. In the spring of 2010, NRK, the Norwegian broadcasting company, presented a popular science series called Brainwash (Hjernevask in Norwegian). The series comprised seven programmes: The Gender Equality Paradox, Parental Effects, Gay/Straight, Violence, Sex, Race, and Nature or Nurture. The first 40-minute programme, The Gender Equality Paradox, discussed gender equality in Norwegian workplaces. Its starting point was that gender equality, despite having been on the policy agenda for decades, had not been achieved in the workplace because women continue to choose to become nurses and men to become engineers. In search of the causes of this so-called gender equality paradox, the programme interviewed researchers who favoured biological explanations. They stated that girls choose 'naturally', because of their different brain functions and genes, to care for human beings, whereas boys, for the same reason, take an interest in technical tools and mechanical toys. In addition, the programme also interviewed gender researchers, using sound bites and cutting long interviews short to present these researchers as stating that the explanation of occupation choices in terms of genetics and biology was ridiculous and old-fashioned and stemmed from poor research. In the programme, gender researchers represented actors who understood the selection of occupations as a culturally learned issue rather than as stemming from biology. They stated that cultural milieus coded choices of occupation, and that children were given relatively limited opportunities to choose an occupation. According to them, there were different cultural expectations of boys and girls, and as a result these choices were not made freely and independently, but instead were determined by norms, upbringing and environment.

The programme did not present these researchers' views neutrally. It took the position that the social sciences and humanities, represented by gender researchers, had forgotten about human biology and genetics, and that they explained behaviour only in terms of cultural norms, upbringing and environment (for an overview, see

Lie 2011 and Helland 2014). In other words, the programme neglected the fact that gender research has widely problematised the nature-nurture debate (e.g. Keller 2010; Åsberg and Birke 2010). Gender research has contested the dualisms of 'sex and gender' and 'nature and nurture', and has called for the integration of perspectives and an interpretation of the concept of gender as having both biological and social dimensions (Fausto-Sterling 2000). However, these gender research perspectives were not taken into account in the programme. Additionally, some actors connected the programme with the ending of targeted funding for gender research at the Norwegian Research Council and the closing down of the *Nordic Gender Institute*, both of which coincided with the debate. This gave certain actors a justification for presenting the view that gender research had been terminated in Norway, a 'promised land of gender equality', and for distributing this message to different countries through the Internet. The programme started a lively public debate that continued as more programmes in the series were released. This debate comprises about 3,700 separate published articles (opinion pieces, columns and reportage), several discussion programmes on television and a broad social media discussion.

3.2 Research Material

My research material consists of the *Brainwash* programme series (the versions available on the Internet with English subtitles; see Hjernevask 2017), articles in Norwegian newspapers, articles in scholarly journals and blog posts. The programme series was analysed to identify the views and understandings of the different social worlds in the debate. The newspaper material was obtained from Retriever, the Norwegian media archive which covers most Norwegian newspapers, both local and national. The data was first sought with the search terms hjernevask and kjønn to find the broadest possible data set to analyse (hjernevask is the name of the Brainwash programme in Norwegian; kjønn is gender in Norwegian, encompassing both the English words sex and gender). After the overlapping articles were eliminated, the results of this search totalled 2,012 separate newspaper articles. The articles were mostly from 2010 (1,325), but also extended to subsequent years (in 2011, 171 articles; in 2012, 122; in 2013, 110; in 2014, 90; in 2015, 72). Within this main article corpus, I searched for articles that included the word kjønnsforskning (meaning gender research) to find the discussion centring on gender research. This search was conducted with the Adobe Acrobat Reader search tool in the PDF files obtained from Retriever. This method revealed 301 articles, forming a core set of research material.

To cover the broader discussion in the social world of researchers in particular, it was also necessary to search for articles in scholarly journals. These were retrieved from *Idunn*, the library database that is the main source for Norwegian scholarly journals, which includes around 26,000 articles. I used the search term hjernevask and found 30 articles (the time frame was not limited; those before the programme were not relevant to this study). Blog posts were obtained from 13 separate blogs. These were found through Google searches for hjernevask and Harald Eia (the name of the journalist who was the main presenter in the Brainwash programme series), and by picking up references to other blogs in the blogs found through the Google search. I also conducted nine interviews with gender researchers during a four-month research visit to the Centre for Gender Research at the University of Oslo in the spring and summer of 2015, five years after the *Brainwash* programme had aired. I started by approaching some people from the centre and asking them to point out individuals who would know about the Brainwash debate. The interviewees I recruited had been working at a Norwegian gender research centre during the time of the debate and knew about the debate. For anonymity reasons, I will not give more details about the roles of the interviewees with respect to the Brainwash debate. The interviews were used as background information for understanding the entire *Brainwash* debate, not as research material.

3.3 Analysis

The analysis focused on the different views expressed in the research material about the relationship between gender research and society. I applied the social worlds framework (Clarke and Star 2008) from science and technology studies, which meant that I centred my analysis on the different meanings that people from different social worlds (Star and Griesemer 1989) attached to the relationship between gender research and society in the arena of the *Brainwash* controversy. The starting point of this framework is that there are "multiplicities of perspective" (Clarke and Montini 1993, p. 45) in any controversy situation. My main research question was: how did participants from different social worlds understand the relationship between gender research and society in the *Brainwash* controversy?

I proceeded with close textual analysis (see e.g. Fahnestock 2009) of the research material. First, I classified the core research material (301 articles) and articles in scholarly journals, treating the writers of the texts as representatives of social worlds. The blog posts all represented the social world of anti-feminists. Second, I eliminated all the texts where the writer could not be identified or was clearly a journalist. This was done in order to concentrate on writings by the actors themselves, rather than

on commentary or interpretation by journalists. This process excluded about one-third of the core research material. Third, I read all the material that represented one social world, e. g. all the texts by social scientists and humanities practitioners, or those by anti-feminists. Finally, I analysed the views and perceptions inside each social world by trying to find general patterns and similarities within them. Through this analysis, I started to see the most dominant rhetorical strategies in each social world, that is, the means by which the social world expressed the relationship between gender research and society. I understood these views and perceptions as representing a certain social world, not as an individual's opinion of the issue. The quotations from the texts below are to be read as illustrative examples from the research material, not as the only accounts of one rhetorical strategy. All translations from original texts in Norwegian were done by me.

3.4 Limitations

I recognise that the research material has limitations. My analysis is predominantly focused on textual material from newspapers, scholarly journals and blogs. I spent substantial time among Norwegian gender researchers during the collection of the research material, which no doubt had an effect on my interpretations. This was necessary, however, because I intended to write about a field that was not my own (even though I share a lot of the basic ideas of gender research and am a feminist). I am a Finn who was educated in nursing science, and I did my PhD in sociology, and science and technology studies. I have been involved in research on women in science, but the period at the University of Oslo was my first longer attachment to a gender research community. Without the interviews, I would not have been able to capture the entire debate.

In this article I open up the discussion about the relationship between gender research and society that was interpretable through the research material. However, I do not aim to offer an interpretation of the position of Norwegian gender research as a whole. The *Brainwash* controversy makes possible a science-and-technology-studies-oriented study of the relationship between gender research and society, and my primary intention is to try to interpret, as an outsider to Norwegian gender research and as a science and technology studies scholar, the different ways in which this relationship was understood by the actors in the different social worlds.

I found five social worlds in which the relationship between gender research and society became explicit: gender research, social sciences and humanities, natural sciences, policymaking, and anti-feminism. The social world of journalism was much larger in the debate than those worlds that I was able to analyse in this study.

Journalists wrote articles in which they interviewed various social actors who made statements about the relationship between gender research and society, but it would require an entire separate analysis to study the actors involved in these interviews and their views of gender research.

I was not able to discover the perceptions of the general public (other than in the world of anti-feminism) of the relationship, because there were very few people commenting on it in the research material. There were teachers, experts and artists who did discuss the issue, but they did so without using the word *kjønnsforskning*, which I had used as a search term. The different social worlds of research – those of gender research, social sciences and humanities, and natural sciences – are dominant in the analysis for perhaps the same reason: they made explicit claims about gender research, whereas some other social actors might have participated in the debate but used different terms and forums. For a study of the relationship between gender research and society, this might be a sufficient first step forwards, but for a study of all the actors and their interests in the *Brainwash* debate it presents the tip of the iceberg in that it is limited to the analysis of five social worlds.

I present my analysis of the perceptions of the relationship between gender research and society in five social worlds by answering the following questions. How did the actors in this social world come to the controversy, and what was their position in it? What concerns and fears were expressed regarding the place of gender research in society? What was gender research expected to do in society? I discuss the relationship between gender research and society in the light of different research markets, as proposed in Ylijoki et al. (2011).

4 The Multiple Perceptions of the Relationship between Gender Research and Society in Different Social Worlds

4.1 Gender Research

Actors in the social world of gender research could be identified as gender researchers who were active participants in the debate. They were interviewed in the *Brainwash* programme series, in the newspapers and in multiple public seminars during the debate; they also actively wrote in different forums, such as newspapers, scholarly journals, blogs and books. It must be borne in mind that there were also many gender researchers who publicly remained silent. However, it is telling of the comprehensiveness and breadth of the debate in the media that there were probably

no Norwegian gender researchers who were unaffected by its claims, the public attention it brought to gender issues, or the pressure it created to state something about the role of gender research in society. For some gender researchers, the debate might have caused traumas or shifts in their career. One of the major concerns in the social world of gender research was that gender issues would be understood solely within a biological frame, and that the social and cultural frame would be continuously misinterpreted. It was also feared that the role of gender research would be misunderstood and interpreted in the way presented in the *Brainwash* programme: as a field unable to make any improvements to the situation of gender equality in Norway.

As a first rhetorical strategy for explicating the relationship between gender research and society, the social world of gender research emphasised that gender research was an academic domain which through research aimed to understand and make sense of both the biological and cultural aspects of gender, sexuality, inequality and related issues, and that it had also pioneered the explanation and understanding of these issues in different fields of academia, including the social sciences, humanities, technological fields and natural sciences. In this respect, gender research was perceived as a field that had crossed boundaries between academic disciplines and changed the course of research across academic borders: "Gender research today is a collaboration project that contains society, culture and biology." (Gullvåg Holter 2010, p. 5) It was essential in this rhetorical strategy to give the impression that gender research was deeply concerned with these debates and aimed to make an academic contribution through basic research to intensify scholarly understanding of gender issues, in the gender research domain and beyond. Hence in the *Brainwash* debate the social world of gender research was grounded in traditional academic ethos and ideals, aiming to make a contribution to the academic market, the reference group of which is the broad scientific community (Ylijoki et al. 2011, p. 733).

There also appeared to be a second strategy for demonstrating the relationship between gender research and society in this social world – namely, to stress that gender research was an ally of society that was helping change society for the better: "These disciplines carry out a truly necessary task for the self-reflection, self-critique and self-correcting of society." (Bjerrum Nielsen 2010, p. 5) Hence gender research was also seen to act as a servant of a gender-equal society and the Nordic welfare state, especially with regard to social problems such as inequalities, vulnerable groups and racism. This type of rhetorical strategy is close to what Ylijoki et al. (2011, p. 734) call the *policy market* of research, which aims to give the impression that gender research produces knowledge that is relevant for policymaking by various decision makers and public administrative bodies. According to my analysis, the academic

and policy markets were the main factors in the understanding of the relationship between gender research and society in the social world of gender research.

I could not find traces of corporate, professional or public markets in the social world of gender research. In the case of corporate and professional markets this was not surprising, since gender research was understood as predominantly a social science and humanities domain. Ylijoki et al. (2011) state that the corporate market is most common in technological fields that target the commercial benefits of research, and that professional markets are most common in disciplines that operate in close relationship with professions such as medicine, nursing or social work. However, the absence of the public market is somewhat surprising. In other words, the social world of gender research did not target its message at the general public and did not engage in empowering ordinary people in their lives. This might be interpreted in two ways. First, gender research was in a defensive position in the Brainwash controversy, and to some extent gender researchers were forced to present their discipline as academically and socially credible. Second, it would have been typical of this kind of rhetoric that gender researchers would personally engage in explaining the role of gender research through rather informal discussions about sex, gender, inequality or similar themes.

4.2 Social Sciences and Humanities

Besides the social world of gender research, similar understandings of the relationship between gender research and society were expressed inside the social world of other social sciences and humanities fields, representatives of which were also active in the *Brainwash* debate. I was able to identify sociologists, philosophers, literary and cultural scholars, historians, political scientists, anthropologists, philologists, media researchers, and educationalists. It was actually very difficult to distinguish scholars in the social sciences and humanities from those in gender research, and indeed to do so would not do justice to the penetration of gender perspectives into these disciplines. However, the slight differences from the rhetoric of gender research through which the relationship between gender research and society was presented deserve attention.

The academic and policy markets were emphasised as relevant in depictions of the relationship between gender research and society in this social world. However, the academic market was explicated through a rhetoric that emphasised collaboration between disciplinary groups rather than stressing the role of gender research as a strong academic domain in its own right that could act as a change maker (as was

stressed in the social world of gender research). In this rhetoric, collaboration across disciplines would bring academic strength and enhance the relevance of research:

"Natural-science-oriented gender research gives good results, but to be able to illuminate all sides of the gender situation it needs approaches from the social sciences and humanities. The two fields seem to fertilise rather than exclude each other." (Pötzsch 2010, p. 5)

Likewise, the rhetoric of the social world of gender research with regard to the policy market appeared to have a slightly different undertone. Rather than being regarded as an ally of society, gender research was seen as a critical change agent in society with a special ability to highlight – especially for policymakers – the political strategies through which different social actors sought to legitimate their views and actions and to neutralise social power positions and relations. The final similarity between the social world of gender research and that of the social sciences and humanities was that the other research markets – corporate, professional and public – could not be found.

4.3 Natural Sciences

Actors in the social world of natural sciences represented biology, medicine and evolutionary psychology, among other fields. They entered the debate by being interviewed on the *Brainwash* programme, in newspapers or at public seminars. They also wrote opinion pieces in newspapers and scholarly journals. One way of participating in defining the relationship between gender research and society in this social world was for a natural scientist to read a text (article or book) by a gender researcher and then comment on it in a newspaper in the manner of a book review, concentrating on defining what science is and what it is not. A major concern in this social world was that the basic principles of good science would be forgotten in the academic community, and that this in turn would harm the reputation of research. The *Brainwash* programme emphasised the benefits of the natural sciences for the understanding of society, and actors in this social world aligned themselves with the view that gender research must not emphasise the sociocultural environment too much and instead must take into account the findings of the natural sciences.

As a first strategy to explicate the relationship between gender research and society, the social world of the natural sciences stressed the impressiveness of research based on facts, empirical findings and logic. In this strategy, this social world seemed to have the impression that gender researchers had not updated their knowledge about the natural sciences, behavioural genetics, evolutionary psychology, biolog-

ical and evolutionary sciences, and other related disciplines, and that this had led to a neglect of the basic facts of the natural sciences and the foundation of gender research exclusively on theories rather than empirical research (Mysterud 2011). In this social world, the social and scientific impact of all research, including gender research, should rest on the scientific nature of research, and not on ideological or political wishes or abstract individual feelings:

"There is hope that the Norwegian researchers that have been criticised in both the [Brainwash] programme and book have become more motivated to rid themselves of certain fundamental academic 'duds' that have gone out of date." (Mysterud 2011, p. 237)

The actors in this social world emphasised the traditional academic ethos and ideals of the natural sciences, or "the correct presentation of facts, claims based on empirical data and usual logic" (Gundersen 2010, p. 57), and argued that scientific knowledge must therefore be fundamental to gender research too. This type of understanding of the relationship between gender research and society speaks to what Ylijoki et al. (2011, p. 735) call the *academic market*. However, this particular academic market differs greatly from that presented in the social world of gender research (or the social sciences and humanities). Here it is understood within the frame of natural sciences, emphasising the benefits of deploying the scientific method (or even its world view) rather than having an impact by bringing up gender issues across the academic community as in the social world of gender research.

In this social world, research, including gender research, hardly had relevance to the policy market (Ylijoki et al. 2011, p. 734). One way to explicate this was to say that science was not and should not be political if it was to have credibility as a knowledge mediator. In this social world, science aimed to provide knowledge, and its goal was not to set up ethical or political norms in society. It seems that in this social world, policymaking, social planning and decision-making were messy domains to be kept separate from knowledge-making in the scientific domain. The requirement for the credibility and purity of gender research was to keep it politically neutral and not to mingle too much with government bodies, politicians or other decision makers. This finding is not surprising in light of Ylijoki et al.'s (2011, p. 732) claim that in the natural sciences the academic market seems to be especially vital and relations with international academics to be especially fundamental. However, it is interesting that in making claims about gender research, the social world of natural sciences did not acknowledge the variety of demands and hopes pinned on other disciplinary groups, but instead represented the view that the academic market of the natural sciences ought to be generalised to the whole of the academic community. This may be interpreted as a certain unwillingness to

see that the relationship between research and society takes in different fields, and a reluctance to admit the various links that different disciplines have in society.

4.4 Policymaking

The *Brainwash* debate extended to various policy issues, especially in science, education, gender equality, health and immigration. The actors in the social world of policymaking were politicians from the different parliamentary parties in Norway. Actors could be identified on the right, centre and left of the political spectrum. They took part in the *Brainwash* debate in interviews on the original programme and in newspapers, in discussions in public and in parliament, and by writing articles and blogs. One of the main concerns within this social world was that the *Brainwash* debate would provide reasons for an opposing party to change Norwegian policies in the wrong direction. This concern stemmed from the fear that the policies that one's own party was fighting or had fought for would be forgotten, neglected or nullified to society's detriment, causing harm to one's supporters. As a consequence, politicians were actively involved in the debate and presented their views about how Norwegian society should be run, what the main concerns and targets of domestic policymaking ought to be, how the policies previously implemented in Norwegian society could be defended, and what Norwegian society should be like in the future.

Two main rhetorical strategies of the social world of policymaking could be identified with regard to the relationship between gender research and society. The first strategy, found especially in the accounts of the representatives of left-wing and centrist parties, was to demonstrate the benefits of gender research to society in terms of increasing educational opportunities for women and other minorities and decreasing different forms of social inequality, and to present the parties that did not see the benefits of gender research as "opposed to knowledge" (Lødrup 2010, p. 4, left-wing party). In this strategy, gender research had helped make society more democratic and open to different people. According to this logic, gender research was valuable to society's policymaking and social planning - in other words, it produced policy-relevant knowledge for the use of diverse public administrative bodies. This is a typical way of understanding what Ylijoki et al. (2011, p. 734) call the policy market of research. In this market, knowledge produced by research is valuable for national, regional and local policymaking and for solving social problems. This is a usual way to understand the relationship between research and society in the social sciences and medicine, and it is no surprise that it came up in the social world of policymaking when the actors were discussing gender research, the quintessence of a social science field in this respect.

The second rhetorical strategy in the social world of policymaking was to present the ideological nature of gender research and its character as a politically programmatic discipline:

"The left wing has kidnapped women's issues, dipped them in its own equality ideology, wrapped them in sacrificial ideas, and now presents the results as a scientific fact. Based on the socialist movement's goal that we should all be equal, the women's movement does not accept either fundamental biological or cultural differences between women and men." (Listhaug 2010, p. 5, populist right-wing party)

These views were typically expressed in the accounts of the right-wing populist party. This strategy stressed that biological differences had been obscured by policies that were driven by current gender research and that strove to reduce inequality, and it claimed that these policies had led to an unrealistic and unfeasible wish for a gender-free society. By contrast with the first strategy, this appeared to be a counter-policy market discourse, as the rhetoric suggested that research should be politically neutral. There seemed to be some aspects of this rhetoric that could also be related to the corporate market of research (Ylijoki et al. 2011, p. 733): this rhetorical strategy discussed the credibility of research in monetary terms in that it stated that society should expect value for taxpayers' money from research, and if research was irrelevant or outdated its government funding should be removed. In terms of actual political actions in the Brainwash debate, the right-wing populist party did make a case about the funding of Norwegian gender research on the basis of this rhetoric: the Norwegian Minister of Education and Research was approached on the matter. After some months, the news broke that the Norwegian Research Council had ended its funding directed to gender research, and the logical continuation of this rhetoric was to spread the story that Norwegian gender research had been debunked.

The different rhetorical strategies reveal the two different ways of understanding the value of research for society in this social world, and reflect the opposing political parties' views about gender research in particular. Yet both strategies show that the policy market of research is important for this social world, and that the academic and professional markets are less relevant here. What about the public market: why does it not appear here? The reference group of the public market consists of ordinary people and citizens, the very audience to which politicians seek to appeal. It could be interpreted that the social world of policymaking targeted its message at researchers and other policymakers rather than at the general public because it was trying to make sense of the role of gender research in a situation where policies based on it had been questioned. Had the audience been the general public, the message would not have been the same, and the public market might

have been more dominant. This might also have to do with the vulnerability of the public market, or an expectation among politicians that the general public would not be very interested in gender research – even though the *Brainwash* debate had proved the opposite.

4.5 Anti-feminism

The actors in the social world of anti-feminism were activists in men's rights and various anti-feminist or anti-democratic social movements. They took part in the *Brainwash* debate especially by writing and commenting in blogs and opinion columns. One of the major concerns of this social world was that science would strengthen views that did not fit or that opposed its own social goals and views. The fear was that science would strengthen the position of the enemies of this social world instead of the position of anti-feminism. Hence the social world of anti-feminism took actions to nullify and debunk gender research, which it saw as a threat to its values concerning men's rights, traditional family values and sexual relations based on male dominance.

One rhetorical strategy used by this social world was to underline the harmfulness of gender research to society, especially its destructive nature in terms of traditional family values and men's rights. Another strategy was to present gender research as unscientific and contrast it with real science by using such terms as 'pseudoscience':

"Norway's bogus science provoked amusement and incredulity among the international scientific community – especially because it was not supported by any empirical research, was based on mere theory and had no scientific credentials... when confronted with empirical science, the 'Gender Researchers' were speechless, and completely unable to defend their theories against the reality check." (WMSAW 2013, no pagination)

This latter strategy included the portrayal of gender research as based on feelings and theories. The expectation in these strategies was that science would be seen to validate the authority of certain – especially anti-feminist – social groups and would strengthen their social position through that validation. If gender research were to be valuable for society, it would empower the ordinary people who belonged to these social movements. The message of this social world was that gender research had failed to do that empowerment work, and in this way was not answering its expected reference group, the general public.

This understanding of the relationship between gender research and society represents what Ylijoki et al. (2011, p. 735) call the *public market* of research. To

put it differently, in the social world of anti-feminism it was hoped and demanded that the relationship between gender research and society would participate in strengthening positions in the struggle between different social groups. The public market seemed to be dominant in the social world of anti-feminism, with no other understandings of the relationship. This was not surprising, because Ylijoki et al. (2011) see the public market as distinguishable from all but the technological fields. What was apparent was that the strong division between the two worlds – the natural sciences on the one hand and the social sciences and humanities on the other – was decisive in the public market. This division was strongly present in the *Brainwash* programme, and was adopted and transferred by different social actors to strengthen their own views – and not only among Norwegian anti-feminist groups: the same rhetoric involving the public market of research also travelled to such countries as Poland, Germany and France to serve the purposes of anti-feminist, anti-democratic and racist groups.

5 Discussion and Conclusion

This article contributes to our understanding of the transformation of universities in the context of one domain, gender research. The analysis highlights the various expectations and hopes pinned on gender research, and hence it strengthens claims that a transformation is indeed taking place in universities, from a detached research system to a more interactive one. The analysis of the research markets in the different social worlds is a helpful tool for tracing this variety. Inside the academic community, views about the relationship between gender research and society largely draw on the impact of knowledge production as such, but even there the relationship with policymaking is emphasised. The closer the actor is to the general public, the more references there are to views that research is meant for ordinary people, to empower their ways and views of living in society. My analysis of the relationship between gender research and society may indicate that the different research markets will also appear in similar ways in other social science and humanities controversy situations. Hopefully, this study opens up ideas for further research, and especially develops ways to analyse contemporary controversies in science and technology studies.

Based on the finding that the professional market seemed to be absent, it could be argued that gender research's linkage to the professional market might be looser than for fields with strong links to professional domains such as medicine, law or nursing. However, Ylijoki et al. (2011, p. 735) argue that "all disciplinary groups

have some sort of linkage with some professional fields, but the strength of the relationship varies across them". In line with this argument, it is also possible that the professional research market was not sufficiently strong in gender research to emerge in the *Brainwash* controversy, or at least not as strong as in nursing science, for example, which I have analysed elsewhere (Vuolanto 2017). Therefore it is also likely that in the social world of the general public there might have been teachers or other professionals, for instance, who could have highlighted the professional market in education in schools. This is to be investigated more closely in future studies of *Brainwash* and other debates in gender research.

One contribution of this article has been to show that a controversy situation invokes different interpretations of the science-society relationship with regard to gender research, and also exposes different understandings of the boundaries between scientific knowledge and unscientific knowledge in the public market. It is striking - and telling of the hierarchies of knowledge production - that in the social world of the general public, understandings of the science-society relationship can be targeted against some areas of knowledge production while giving weight to other fields of knowledge production. The strong division between the two worlds - the natural sciences on the one hand and the social sciences and humanities on the other – is a powerful tool for devaluing areas of knowledge production, which researchers in all fields need to take into account when they talk about research and science in public. The Brainwash debate indicates that the public understanding of research collaborations and interdisciplinary efforts needs to be clarified. This means explaining the relevance of many disciplinary perspectives in knowledge production and respect for the variety of disciplinary traditions to the public. To place this pressure on only one domain (such as gender research) is not fair – it is a responsibility all researchers should take.

For the social world of gender research, the *Brainwash* debate was an occasion when multiple demands and expectations concerning its duties in society became visible. It was a time when there was an attempt to make this domain vulnerable. Referring to such controversies, Grauerholz and Baker-Sperry (2007, p. 287) put it bluntly: "Assume that your words and work will be misinterpreted [in the public domain]." Nonetheless, the rhetorical strategies deployed in the *Brainwash* controversy powerfully illustrate the strength of this domain, and could be applied to other situations and academic disciplines as well. There is a need to continuously demonstrate the power of crossing the boundaries of academic disciplines in a united effort by all disciplines to attract and maintain the academic market, which is becoming more and more important in the face of the pressures (evidenced by this article) arising from the current transformation of the science-society relationship. It is equally important to explicate the mission of the university as a change maker

and ally of society, a rhetorical strategy powerfully deployed in the debate by the social world of gender research. The academic community as a whole, including gender researchers, can benefit from learning about these rhetorical strategies.

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