

'I can't do with whinging women!' Feminism and the habitus of 'women in science' activists

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Synopsis

This article explores the field of policy, activism, and educational activity around the issue of women's under-representation in science, engineering, and technology (or Women in SET) which has developed since the 1970s in Europe and North America. Critical, radical, and postmodern feminist ideas are marginal in this field, despite the existence of a body of feminist literature on the inter-relationships between gender and SET. Evidence is presented from in-depth interviews with Women in SET activists, most of whom were employed in scientific and technical professions, exploring their reluctance to claim an allegiance with feminism. Bourdieu's concept of *habitus* is used in an attempt to show how these dispositions are connected to the internal dynamics of the Women in SET field and the wider field of SET. It is argued that the activists' 'feel for the game' incorporates a disposition towards reformism and 'neutrality' that relies in part on a dis-identification with feminism. It is therefore concluded that in addition to other factors such as the wider shift in gender politics and the role of personal experience, the status of feminism within particular social fields may be connected to the structures of these spaces and the relative compatibility of resultant dispositions with a feminist identification. The 'reformist habitus' of Women in SET activists, which is directly connected to the constraints under which they work, is posited as a contributing factor to the lack of progress made on Women in SET issues since the 1970s.

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Introduction: women in science, engineering, and technology

The issue of women's under-representation in science, engineering, and technology (or Women in SET) is situated at the nexus of demands for social equality and the shifting requirements of the labour market. Long-standing activist and academic concerns with the male domination (numerical and structural) and assorted cultural masculinities of SET classrooms and workplaces and the symbolic intertwining of SET and hegemonic masculinity (Lohan & Faulkner, 2004) have recently become connected to a keen governmental interest in women's human resource potential in terms of maintaining a competitive position in a globalised economic arena. In the context of a more general alignment of education with

economic policy in Western countries (Henry, 2001), increasing the participation of women in SET is now being defined as essential in order for national economies to be globally dynamic.¹

A field of activist and pedagogic activity around the issue of Women in SET (or the Women in SET field) has grown since the 1970s in Europe and North America. Numerous and diverse groups and networks focus on the distinct disciplines of science, engineering, and technology and sub-disciplines within these, and all levels of education and employment. Activities in the field

¹ See for example: Canadian Committee on Women in Engineering (1992), European Commission (1999), European Commission (2003), Congressional Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development (2000), and Greenfield et al. (2002).

include after-school clubs for girls that aim to engage their interest in SET disciplines, mentoring schemes for female SET professionals in academia and industry, and vocational training schemes for socially excluded women. A common theme uniting many of these activities is that they operate as a *supplement* to existing educational and employment structures rather than a challenge to them. 'Women in SET' activity is largely focused on compensating for the shortcomings of schools, universities, and SET workplaces and/or retrieving girls and women who have been lost to SET disciplines and professions (Phipps, 2005).

The 'economisation' of the issue of Women in SET has had symbolic and structural bearing on the Women in SET field. The growing influence of economically instrumental and marketised discourses around Women in SET in policy documents (Phipps, 2005) has been accompanied by increasing state involvement in the field throughout Europe and North America. This involvement takes the form of policy and funding bodies which coordinate and finance Women in SET activity. The *Promoting SET for Women Unit* at the UK Department of Trade and Industry (DTI) was set up in 1994, after the publication of the White Paper 'The Rising Tide' (Committee on Women in Science, Engineering, and Technology, 1994), and in 2004, a *UK Resource Centre for Women in SET* was created with funding from the DTI and the European Social Fund. The European Commission *Women and Science Unit* was set up in 1999 within the Directorate-General for Research. In Canada, the Natural Sciences and Engineering Research Council (NSERC) created a *National Chair for Women in Engineering Sciences* in 1989, and in 1996 five regional Chairs were created, funded by the government and the private sector, for female professors who would devote half their time to coordinating Women in SET initiatives. In 1993, the US National Science Foundation set up the *Program for Women and Girls* (now the *Program for Research on Gender in Science and Engineering*), which has become the most prominent funding provider for Women in SET activities in the United States.

Despite a long-standing and growing body of research on the *reasons* for women's under-representation in SET, little attention has been paid to the structures and discursive framings of the Women in SET field itself. Directories of the various initiatives and overviews of competing conceptual frameworks² have not yet been

brought together into overarching sociological analysis. This situation links the Women in SET field with other activist or social movement fields, which as Crossley (1999) has argued, tend to feature in sociological research in terms of the problems they highlight rather than as a separate subject of study. This article presents evidence from a larger research project (Phipps, 2005) that was an attempt to gain a purchase on the workings of the Women in SET field. The discussion in this article focuses in particular on why feminist ideas and identities are situated at the margins.

Since the 1970s, activity around the issue of Women in SET appears to have drawn selectively on feminist ideas, largely making use of liberal-feminist 'equal opportunities' perspectives which are focused on incorporating girls and women into existing educational and employment structures (Arnot, David, & Weiner, 1999; Henwood, 1996; Weiner, 1994). The discussion in this article will highlight a continuing ascendancy of 'equal opportunities' perspectives, and will link this to the wider political climate and the structures of the Women in SET field and the field of SET itself. It has been convincingly argued that working from critical, radical, and postmodern feminist analyses of the gendered structures and discourses through which educational and professional trajectories and identities are produced is necessary to meaningful action on the issue of Women in SET (see for example Henwood, 1996, 1998; Faulkner, 2001). The relatively slow progress made on the issue of Women in SET since the 1970s (Gilbert, 2001, Institute for Employment Research, 2003) also suggests that the liberal-feminist 'equal opportunities' perspectives which have dominated the field may be inadequate, and could indicate a need for a more critical and radical feminist consciousness.

The data presented in this article suggest a dis-identification with the label 'feminist' on the part of activists in the Women in SET field, which is interesting due to the fact that the goals of these activists are broadly liberal-feminist and also because feminism has long been accused of principally representing the interests of white, middle-class, professional women such as these (Simien, 2004). Interviews with activists showed a distancing from feminism coupled with its construction as an extreme and radical discourse, side by side with an attachment to the liberal-feminist discourse of 'equal opportunities' which was nevertheless not identified as part of the feminist canon. An 'attitude-identity discrepancy' (Reid & Purcell, 2004; p. 759) in which support for feminist goals is combined with a reluctance to identify as feminist has been highlighted by academic researchers (see also Callaghan, Cranmer, Rowan, Siann, & Wilson,

² See for example: European Commission (2003), Faulkner (2001), Henwood (1996), Vlaeminck, McKeon, and Comber (1997), Völman, van Eck, and Ten Dam (1995), and Women Into Science and Engineering Campaign (2004).

1999; Liss, Crawford, & Popp, 2004), and has been linked to factors such as the neoconservative backlash and accompanying negative stereotypes of feminism, the increased success of women in education and the workplace and concomitant feeling that feminism is no longer necessary, and lack of personal exposure to feminist ideas and/or gender discrimination.³

In this article, Women in SET activists' dis-identification with feminism and the marginality of critical, radical, and postmodern feminist ideas will be explored via Bourdieu's concept of *habitus* (Bourdieu, 1977, 1990b, 1993, 1998). *Habitus* enables the dispositions of the activists to be linked sociologically to the structures of two of the fields in which they are positioned, namely: the Women in SET field of policy agencies, activist groups, and educational projects; and, the broader field of SET disciplines themselves. In other words, the continued marginality of critical, radical, and postmodern feminist ideas in the Women in SET field can be explored with reference to the constraints under which Women in SET activists exist and work. The first part of the article will consist of an overview of the concept of *habitus* and the possibilities of using it to throw light on the dispositions of agents within social fields. In the second part of the article, the data will be presented and analysed in terms of how the activists' relationships to and constructions of feminism can be connected to the wider political climate (in particular the backlash against feminism), the structural shift in the Women in SET field towards greater state involvement, and the symbolic, cultural, and structural masculinities that shape the broader field of SET.

Structures and dispositions: the concept of *habitus*

The concept of *habitus* enables a sociological linkage between the attitudes and actions of individuals and groups and the structures of particular social fields. In other words, it can bring to bear the notion of *power* on discussions of the tastes, opinions, and identifications of individuals. For Bourdieu, *habitus* is a set of deeply embedded dispositions that social subjects acquire through their participation in social fields. A field is a network of relations that is the site for 'entirely specific struggles' (Bourdieu, 1993; p. 163), mediated by various forms of

³ There appears to be little qualitative, sociological research on identifications and dis-identifications with feminism: much of the literature consists of quantitative studies conducted in psychology and political science. Some of the findings of these studies have been used here as a basis for critical comparison, while the notion of *habitus* has been employed in order to try to gain a sociological purchase on the issue.

capital, and *habitus* is a device by which these power relations are inscribed upon bodies and dispositions, an embodiment of structure (Nash, 1999), or 'the incorporation of the social into the corporeal' (McNay, 1999; p. 99).

As Bourdieu (1990a; p. 10) argues, 'dispositions are adjusted in accordance with one's position, and expectations in accordance with opportunities': in other words, our tastes, perceptions, and actions can be understood with reference to where we are located in particular social fields. This set of dispositions informs the practices of individuals, and what Bourdieu calls the 'feel' for the game—or the internal dynamics of the field—becomes entrenched. Bourdieu (1990a; pp. 107–108) refers to *habitus* as

an intentionality without intention which functions as the principle of strategies devoid of strategic design, without rational computation and without the conscious positing of ends.

Habitus mediates between the ideas of structure and agency, since it is acquired through practice and both reflects the relations of the field and endows these with meaning (Bourdieu & Wacquant, 1992). However, it could be argued that the concept tends to obscure the idea of a consciously rational agent, referring to 'almost unconscious knowledge of the implicit rules, which allow for ascendancy in any given field' (Reay, 2004a; p. 34). As Bourdieu (1990b) points out, the 'logic of practice' may have order and meaning, but this does not necessarily lead to a rationalist interpretation.

Action guided by a 'feel for the game' has all the appearances of the rational action that an impartial observer, endowed with all the necessary information and capable of mastering it rationally, would deduce. And yet it is not based on reason. You need only think of the impulsive decision of the tennis player who runs up to the net, to understand that it has nothing in common with the learned construction that the coach, after analysis, draws up in order to explain it and deduce communicable lessons from it. (Bourdieu, 1990a; p. 11)

Bourdieu (1990b) does not rule out the possibility that the *habitus* could be accompanied by a more conscious 'feel for the game' in the form of strategic calculation. However, he argues that such calculation could only take place within the cognitive structures or the 'implicit, taken-for granted understandings' (Reay, 1997; p. 227) defined by the *habitus*, since these understandings are the source of recognising opportunities to act and the nature of the resultant action (Bourdieu, 1990b). Only in

situations of ‘crisis’, Bourdieu (1990a) argues, in which the structures of the field fall out of step with the habitus, could habitus be *superseded* by such strategic calculation. Social and educational researchers have recently drawn on an understanding of habitus as incorporating more conscious strategies and commitments, or the ‘genuinely creative possibilities of action’ (Crossley, 1999; p. 658) in social fields. Reay (2004b; p. 438) argues for a conception of habitus that

weaves together conscious deliberation with unconscious dispositions so that we can attempt to grapple analytically with aspects of identity such as our personal and political commitments that current conceptualizations of habitus marginalize.

This article will attempt to embrace such a conception of habitus, which is particularly useful when thinking about the dispositions of activists in the Women in SET field. The notion of activism itself has strong political connotations, presupposing a creative, or at least a conscious, participation in and ‘feel’ for a specific and deliberately chosen game.

For Bourdieu (1993; p. 459), the field is ‘not a product of total consensus, but the product of a permanent conflict’, and individuals and groups in the field seek to improve or safeguard their positions through practices referred to as ‘position-takings’ in which they take up positions relative to other individuals or groups in the field. Bourdieu’s (1998; p. 6) theory of practice is based on the relation between social positions (or structure), individual dispositions (or habitus), and position-takings, ‘that is, the “choices” made by the social agents in the most diverse domains of practice, in food or sport, music or politics, and so forth’. As Bourdieu (1998; p. 8) argues,

Habitus are generative principles of distinct and distinctive practices—what the worker eats, and especially the way he eats it, the sport he practices and the way he practices it, his political opinions and the way he expresses them are systematically different from the industrial owner’s corresponding activities.

The concept of habitus will be used in this article to link the Women in SET activists’ ‘position-takings’, or their attitudes to feminism and corresponding activist practices, to the structures of the Women in SET field and the broader field of SET.

Feminism and the ‘feel for the game’ in the Women in SET field

The data presented here come from in-depth, semi-structured interviews with a sample of 16 activists in the

Table 1
Interviewees

Pseudonym	Country/region	Profession	Approximate duration of involvement in field
Elaine	Canada	Engineer	5 years
Sandra	Canada	Engineer	5 years
Sarah	Canada	Engineer	5 years
Laura	Europe	Biologist	5 years
Susan	Europe	Social scientist	20 years
Abigail	Europe (UK)	Chemist	30 years
Barbara	Europe (UK)	Social scientist	20 years
Jane	Europe (UK)	Biologist	10 years
Jean	Europe (UK)	Engineer	10 years
Jenny	Europe (UK)	Social scientist	10 years
Margaret	Europe (UK)	Physicist	30 years
Pam	Europe (UK)	Chemist	30 years (now deceased)
Rita	Europe (UK)	Biologist	10 years
Fiona	US	Computer scientist	20 years
Hannah	US	Computer scientist	10 years
Rachel	US	Social scientist	10 years

Women in SET field. These activists were or had previously been involved in a variety of activities, including membership organisations to support and represent women scientists, educational projects for schoolgirls and women, and policymaking and political lobbying. They were located in Europe and North America, had been involved in the field for varying lengths of time, and were largely employed in natural science and technical professions (although four were social scientists). All the women were white and should probably be described as middle class. Some pertinent details about the sample are presented in Table 1.⁴

The sample was not large enough to be representative of the field of activity in general. However, it was broad enough to be indicative, and the interview findings were triangulated with more extensive questionnaire-based research undertaken at the beginning of the study (see Phipps, 2005 for more details). During the interviews, the activists were asked a variety of questions about Women in SET activity and their involvement in it: however, the discussion in this article solely makes use of their responses regarding feminism.

⁴ The classifications ‘Europe (UK)’ and ‘Europe’ reflect the difference between activists whose major focus was the United Kingdom and those with a broader focus on Europe at large.

In their characterisations of feminists, many of the activists made use of constructions that have typified the backlash against feminism, or the attempt in conservative policy and media circles to halt or even reverse progress towards gender equality by discrediting feminism and/or creating the impression that it has 'gone too far' (Callaghan et al., 1999; Faludi, 1992; Hawkesworth, 1999). For instance, Margaret characterised feminists as too demanding, saying, 'they do seem to think that everything should be given'. Laura associated feminism with 'butchness and aggression', and Rita similarly felt that what she called 'aggressive feminists' were off-putting to men. Fiona, who did see herself as a feminist, nevertheless felt that the woman's liberation movement of the 1970s and 1980s had been 'very aggressive' and defined her own work, as a director of an agency concerned with promoting the participation of women in computing through grant-giving and educational projects, as being concerned with action on behalf of 'equal access, equal rights and equal opportunities, but...in a very quiet way'. Feminism was also associated with the idea of hysteria, playing into ancient stereotypes of femininity (Ehrenreich & English, 1979). For instance, Margaret said that she '[couldn't] do with whinging women', positioning this 'whinging' in opposition to her own demands for 'equality of opportunity'. 'I'll go for equality of opportunity,' she said, '[but] I won't go for whining on about what the men are currently doing to me.' Margaret had largely been involved with educational projects for girls and young women that operated as a supplement to existing provision: it could be suggested that this reflected an inclination against challenging established structures.

These depictions of feminists as loud, aggressive, hysterical, and demanding evoke the neoconservative idea of a society in which men are browbeaten and women are enraged (Callaghan et al., 1999; Faludi, 1992). Margaret's phrase 'whinging on' has particularly unattractive connotations, implying that feminists see themselves as victims and conveying a sense of the persistently unreasonable that has been identified as a common negative perception of feminists (Callaghan et al., 1999). These constructions also reflect a focus on the personal characteristics of feminists rather than the substance of feminist ideas, which has been cited as a prime differentiating factor for women who have what could be termed 'feminist attitudes', between identifying as a feminist and rejecting feminism (Reid & Purcell, 2004). This can be linked to backlash politics in which 'the focus is never on feminism but on feminists, who are portrayed as radical, unbalanced, unattractive, and

inimical to family life' (Callaghan et al., 1999; p. 164). Laura's negative mobilisation of the notion of 'butchness' reflects the widespread popular construction of feminists as unfeminine (Toller, Suter, & Trautman, 2004), and the tendency for women who dis-identify with feminism to link it to lesbianism 'in a derogatory manner' (Callaghan et al., 1999, p. 175).

Interpreting these constructions of feminists via the notion of habitus, and viewing them as 'position-takings', points to a disposition on the part of the Women in SET activists towards low profile manifestations of their political beliefs, and a conflict between what might be called a 'feminist habitus' and the maintenance of this low profile, as well as the preservation of normative femininities and heterosexual identities. The fact that the activists were working towards what could be termed a feminist goal (promoting women's participation in SET) but were unwilling to identify as feminist suggests that their dis-identification was bound up with more than the substance of feminist ideas: rather, it seemed to be concerned with how they understood feminists to look, think, and behave. It is interesting to note here Butler's (1990) argument that heterosexuality depends on a clear articulation of gender difference, which is threatened by women who do so-called 'men's work' (Henwood, 1998): this perhaps warrants a certain amount of 'identity work' (Snow & Anderson, 1987) on the part of women in SET such as the activists in this study, in order to preserve their femininities and heterosexualities.

In talking about the issue of Women in SET, many of the activists constructed their views and approaches as different from those they understood to be feminist. The language they used largely focused on notions of formal equality and access which, although associated with liberal feminism, they positioned in opposition to feminist demands for 'special treatment'. Feminist identification has been associated with recognition of gender-based power inequalities (see for example Reid & Purcell, 2004): however, for many of the women in this study the issue was not gendered power structures in SET fields but simply access to these fields. The focus of their activist work was on *incorporating* girls and women into SET by opening up the field and making it more accessible. For instance, when talking about the aims of her membership organisation for women in science, which engages in activities such as networking events, educational projects, and lobbying at federal and state level, Rachel seemed concerned to highlight:

We're not talking about quotas, and we're not talking about hiring incompetent women—what we're talking about is giving women the opportunity and access

to the networks that create the opportunities and the access.

Rachel's reference to the 'networks that create the opportunities and the access' suggests a disposition towards political moderation in the form of working women in to established old boys' networks rather than questioning their existence. It also highlights a fear of being associated with the practice of positive discrimination (understood as synonymous with 'hiring incompetent women') which Callaghan et al. (1999) have linked to dis-identifications with feminism and which Hawkesworth (1999; p. 137) associates with the conservative anti-feminist backlash. For conservative women, she argues,

giving less qualified women and minority group members 'preference' in admissions, hiring, and promotion can only result in new forms of discrimination that will entail the erosion of the principles of merit, scholarly quality, and integrity.

The activists' characterisation of feminism as being concerned with special treatment pointed to a deeper interpretation of equality as treating everybody the same, and echoes the broader polarisation in the women's movement between 'sameness' and 'difference' camps (Bacchi, 1990). Many of the activists showed a reluctance to emphasise gender difference: as Pam put it, talking about difference was too 'partisan'. Fiona and Rita both explained that activists in the Women in SET field tend to work from the point of view of 'excellence' rather than the position of gender. Such a focus reflects the dominance of individualistic ideologies in Western industrial countries and the political shift to the right since the 1980s, as well as the 'post-feminist' idea that women have 'made it' (Callaghan et al., 1999; p. 164). It is underpinned by the construction of the ideal neoliberal subject as self-inventing and ultimately personally responsible for success and failure (Harris, 2004) and the conservative assumption that society operates as a meritocracy (Hawkesworth, 1999), and echoes research findings that show anti-feminist women as seeing success as being bound up with personal effort and individual talent (Hawkesworth, 1999; Reid & Purcell, 2004). This adds support to theories about the importance of recognising difference, and therefore a group identity, to developing a feminist consciousness (Reid & Purcell, 2004; Simien, 2004).

The activists' discursive strategy of constructing feminism as biased and concerned with special treatment allowed them to position themselves within the more mainstream notions of equality and access and avoid a

challenge to the established norms of the wider field of SET and existing educational, employment, and political structures. This seems to concur with Bacchi's (1990; p. xi) observation that activists in the women's movement have used 'sameness' and 'difference' arguments *strategically*, rather than as reflective of 'some ineluctable truth about women's destiny'. Bacchi links such strategies to the wider social and political context: this article additionally attempts to explore the more immediate contexts of the fields in which the activists were positioned, in relation to their sub-conscious and conscious strategies. Bacchi (1990; p. 259) argues that debates around sameness and difference reflect a context in which there are only two options: 'joining the system on its terms or staying out'. Thus, the activists' reluctance to emphasise difference can be seen as a function of their attempts to fit women to the mold of the SET professional: however, it can be argued that this strategy ultimately undermined their politics in preventing them from challenging the sex-specific disadvantages that women face in SET, and from contemplating the fact that some women may be positioned as, or see themselves as different, within SET cultures which are influenced by masculinity or SET disciplines which are symbolically masculine.

The activists' attachment to the notions of excellence and neutrality conflicted with their efforts to preserve their femininities on an individual level and for the purposes of this article invites examination of the fact that such notions are central to the scientific enterprise and can also be seen as implicitly masculine (see for example Harding, 1986; Walkerdine, 1988). For Bourdieu (1993), habitus is a product of *all* biographical experience, and as Harding (1987; p. 182) argues, science is supposed to be 'value-neutral, objective, dispassionate, [and] disinterested'. Within the framework offered by the concept of habitus, this perhaps explains the contradiction between the activists' attempts to preserve their femininities in a personal sense and their reluctance to emphasise difference in a general sense, if the latter is understood as being a property of a scientific and/or technical habitus. Similar inconsistencies between women's personal gender identities and the construction of SET disciplines have been highlighted by other theorists attempting to explain women's under-representation in SET (see for example Gilbert, 2001; Hughes, 2001; Jenson, de Castell, & Bryson, 2003). The activists' rejection of feminism, coupled with their position in the field of SET which is infused with various cultural and symbolic masculinities, challenges research suggesting that masculine women are more likely to identify as feminists (Toller et al., 2004), unless the rejection of

feminism is seen as a form of identity work enabling the activists to preserve their femininities.

As has already been suggested, habitus can be seen as a combination of embedded dispositions and conscious deliberation. Evidence of such conscious deliberation emerged in many of the interviews, as the activists openly reflected on the *strategic* problems of identifying with feminism. This was connected to the construction of feminism as an extremist ideology, and much of the activists' concern was with the possible reactions of powerful groups within the Women in SET field and the field of SET in general. It was thought that identifying as a feminist could generate hostility among these groups, and there was a sense that this could obstruct the activists' work: for instance, Abigail said that '[feminism] generate[s] hostility, and gets in the way of people understanding what I'm trying to say'. There was also much concern with making men feel insecure; a notion of feminism as emasculating that can be linked to the backlash (Faludi, 1992). For instance, Margaret said, '[it's] not the way you get your own way. I mean, there are other ways of getting what you want rather than tackling them head-on—if you make [men] feel insecure, you're not going to do anything'. Pam similarly said that 'there are some people for whom 'feminist' is rather a strong word'. The 'supplementary' activities of these particular activists, which included after-school workshops for girls and networking/mentoring schemes for women scientists, seem to fit with their idea that a moderate approach is more appropriate.

At an organisational level, many of the activists proactively avoided connections with feminism. Laura said that her organisation had attempted to 'distance itself from feminism, as it has very negative connotations'. Mainly funded by the European Commission, her organisation develops and implements activities such as educational initiatives for girls and young women and networking/mentoring schemes for practicing scientists. It is deeply entrenched in the European Commission's policy of 'gender mainstreaming' (in oversimplified terms, embedding gender in mainstream policy and practice) which has feminist origins and transformative potential but has yielded disappointing results and become implanted in neoliberal marketised policy agendas (Goetz, 2004; Walby, 2005). Rachel, whose US-based organisation undertakes a great deal of policy work at federal level, exhibited similar strategic distancing during the actual interview situation. Although she felt that there had been an unfair backlash against feminism, in which 'feminism ha[d] become a bad word', after identifying her organisation as 'an organisation of feminists,' she began to revoke this, describing her organisation as

'almost humanist', reiterating her support of men, and expressing a desire for an alternative language 'to articulate what [they were] doing'.

We're definitely an organisation of feminists. But we're feminists in terms of...I would say we're almost humanists. In that we care about humanity, we care about men and women, and what's happening. And unfortunately, as an advocate for women, sometimes people think you're not an advocate for men. So I think...we haven't created a new language that we need to articulate what we're doing. So you tend to find that the language really fails to express [that].

These comments tap into ideas about feminism as being mired in 'anti-male dogma' (Callaghan et al., 1999; p. 163) and illustrate habitus as being ingrained at a deeper level than rational thought (Bourdieu, 1990b). Although on a conscious level Rachel was able to identify a backlash against feminism, this rational knowledge of the political context informing particular constructions of feminism did not stop her from distancing herself from them. This suggests that examining the cognitive aspects of habitus should not lead to a naively agentic interpretation, and reiterates the conception of an interaction between strategic action and the deeply embedded aspects of habitus. Interestingly, Rachel positioned herself academically as a social scientist, which set her apart from those activists whose habitus could be said to be shaped by the structural, cultural, and symbolic masculinities influencing their natural science/technology disciplines. Her strategic distancing from feminism aligned her with Susan, a social scientist engaged in policy work in Europe, who owned that she would not identify herself as a feminist in certain circles within the Women in SET field. This implies that the structures of the Women in SET field itself, in addition to the structures of the broader field of SET, have a role in constructing the dispositions of activists.

The statements from Laura, Rachel, and Susan highlight the fact that, as stated in the introduction, the Women in SET field has recently come under the influence of state policy and funding bodies, and perhaps raise questions about the importance of economic capital in activist fields (Crossley, 2003) and the discursive power which accompanies this (see also Godard, 2002). During the interviews, the politically charged nature of the Women in SET field became apparent as a number of interviewees asked if they could edit their transcripts, and during this process changed statements that could be perceived as critical of governmental agencies and official agendas. The discursive construction of policy on Women in SET is almost exclusively economic: promoting women's

participation is put forward as a panacea to the skills shortages in scientific and technical fields that are thought to have accompanied globalisation (see Phipps, 2005 for a more detailed discussion). However, these official documents contain almost no reference to possible reasons for women's under-representation in SET and no frameworks for activist and pedagogic interventions: perhaps this absence of a contemporary moderate framework is why Women in SET activists rely on the 'equal opportunities' approaches of the 1970s and 1980s in the formulation of their views and development of their work.

Fiona, a computer scientist, was unusual among the interviewees in defining herself as a feminist, and was able to articulate how maintaining a distance from feminism was an important part of the 'feel for the game' for other activists in the Women in SET field.

Fiona: I don't know if I could characterise [the activists in the field] as feminists, I'd like to think they are, but I couldn't say so without asking them. So I wouldn't really like to guess. There's this very strong way of trying to do it just from the excellence of the discipline. You know, 'we're computer scientists rather than feminists.'

Q: Why do you think that is?

Fiona: I think perhaps it's less threatening to their male counterparts. Perhaps that's the way they have achieved credibility...you know, they've had to get credibility in the Universities by doing what the men do. I see that as the way that things change. You have to play the rules of the men's game, until you get to the top—and then you can change the rules. You can't change the rules from the bottom. Because you can be discriminated against for doing this, or for being a feminist. It does not behoove you...it did not behoove me well in the University. So I guess they may think of themselves as computer scientists first, and feminists second.

In these quotes, Fiona invokes the idea of feminism as threatening, a discourse that it is only safe to mobilise from a position of relative power. The phrase 'you have to play the rules of the men's game' reminds us that progress in a SET career for a woman often involves fitting in with environments which are both numerically and structurally male-dominated and culturally informed by assorted heterosexual masculinities,⁵ and

Fiona equates 'credibility' with 'doing what the men do' accordingly. Interestingly, Fiona herself defined her own feminism as different from 'women's liberation' discourse, which she understood to be 'very aggressive'. Barbara (a UK-based social scientist) also expressed the opinion that feminist views were 'very difficult for professional scientists to have' until they reached a certain stage of success in their careers. She pointed out that 'the few women who do [have feminist views] tend to be the women who've made it, and who feel secure enough sitting at the top'. Barbara and Jenny, both social scientists from the UK, were the only two women in the sample who unequivocally defined themselves as feminists, which raises questions about the UK context for activism and the culture of UK social science, as compared to that of mainland Europe and the US. However, it is also interesting to note that neither of these women had been involved in mainstream Women in SET activity for at least ten years, whereas the other two social scientists in the sample, Susan and Rachel (who had more ambivalent relationships with feminism), were active in the mainstream of the Women in SET field.

Conclusion

The data presented here were elicited from a broad sample of Women in SET activists from Europe and North America: however, despite the breadth of the sample a strong common theme was found in the activists' general disposition towards moderation, which interacted with more conscious strategies and was revealed in their dis-identification with feminism. It has been argued that this reflects the wider political climate, the influence of state bodies in the Women in SET field, and the symbolic, cultural, and structural masculinity(ies) of the broader field of SET. It has also been seen that the activists' rejection of feminism is linked to their own personal gender identities, namely the preservation of their femininities and heterosexual orientations, which reiterates the idea of SET as symbolically masculine and underlines how personal gender identities inform approaches to public life. It is interesting that these activists are so moderate, since Crossley (2003) has argued that involvement in social movement fields (such as the Women in SET field) facilitates the development of a *radical* habitus. This radical habitus, Crossley (2003; p. 52) suggests, is defined by action, protest and critique. It consists of:

- (1) perceptual-cognitive schemas which dispose the agents to question, criticize and distrust political elites and processes,
- (2) the political know-how to trans-

⁵ See for example: Cockburn, 1983, 1985, Gilbert (2001), Hughes (2001), Letts (2001), Lohan and Faulkner (2004), and Walkerdine (1988).

form this distrust and criticism into action, (3) an ethos which encourages engagement...and binds a sense of individual meaning and worth to it, (4) a 'feel' for protest and organizing which allows agents to derive purpose and enjoyment from it, to 'believe' in it and to feel 'at home' doing it.

In contrast to this, it seems that the dominant habitus in the Women in SET field is predicated on working *within* existing educational and employment structures, and avoiding contestation of powerful groups in policy circles and the field of SET. This could perhaps be described as a *reformist* habitus, and questions can be raised about how this habitus informs attempts to tackle the problem of women's under-representation in SET. The activities of the women interviewed for the purposes of this research were largely supplementary and underpinned by 'equal opportunities' frameworks: although it can be argued that reformism and radicalism both have a place in the complexities of political change, it has been suggested that without analysis of the inter-relationships between masculinities and SET cultures and deconstruction of the symbolic coproduction of SET and hegemonic masculinity (offered by critical, radical, and postmodern feminist approaches), efforts to promote the participation of women in SET may be held back (Faulkner, 2001; Henwood, 1998). Certainly, the relative lack of progress on the issue of women's participation in SET in the past thirty years seems to suggest that the 'equal opportunities' approaches which have dominated the field so far are not adequate.

The discussion in this article adds to work undertaken by other researchers, who have identified causes of feminist dis-identification in 'changes in gender relations, shifts in the political climate, the nature of the debate within feminism and negative media stereotypes of feminism' (Callaghan et al., 1999; p. 162). As well as personal psychological and these broader contextual factors, this article suggests that feminist identifications and dis-identifications can be connected to the immediate constraints that shape practice in particular social fields. The notion of habitus has been used in order to suggest that the dispositions and discursive strategies of activists are connected to such immediate constraints in the Women in SET field and the broader field of SET, and there has been an attempt to engage with the 'dynamic relationship between objective constraints and subjective forms of consciousness' (Reay, 1997; pp. 226–227). In Bourdieu's theory, the field, or the 'space of positions', directs the habitus, or the 'space of position-takings' (Bourdieu & Wacquant, 1992; p. 105), and this has facilitated the exploration in this article of some of

the position-takings or discursive strategies of activists in the Women in SET field.

This article highlights a dilemma: although it has been argued that the issue of Women in SET demands a challenge to the field of SET and an engagement with critical, radical, and postmodern feminist ideas, the Women in SET field is peopled by many activists who must conform to the dominant habitus in the field of SET and for whom a feminist identification would generate personal, professional, and political problems. This highlights how, as Bourdieu (1977; p. 161) argues, the habitus 'tends to reproduce the system of objective conditions of which it is the product', and perhaps helps us to understand why there has been so little progress on the issue of Women in SET and to identify with the difficulties facing Women in SET activists. It may be appropriate to note here that more thoroughgoing critical analyses, focusing on the coproduction of gender and SET, have been emanating since the 1990s from feminists situated in science and technology studies and philosophy of science.⁶ These theorists are generally positioned marginally with reference to the fields of Women in SET and SET itself, and therefore do not have to negotiate their internal dynamics: it is possible that their habitus is constituted differently from that of women who are science and technology professionals and Women in SET activists such as those in this study. This seems to be a compelling reason for the promotion of these more radical feminist critiques within the mainstream of SET and the Women in SET field.

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⁶ See for example: Faulkner (2001), Fox Keller and Longino (1996), Harding (1986), Henwood and Miller (2001), Lohan (2000), Mayberry, Subramaniam, and Weasel (2001), and Wajcman (2000) for overviews of work in feminist science and technology studies and philosophy of science.

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