"THE GUYS WOULD LIKE TO HAVE A LADY:" THE CO-CONSTRUCTION OF GENDER AND PROFESSIONAL IDENTITY IN INTERVIEWS BETWEEN EMPLOYERS AND FEMALE ENGINEERING STUDENTS

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Abstract

Gender and professional identity are intertwined particularly in professions where women are underrepresented, making gender identities and professional identities simultaneously relevant. A promising area for inquiry into identity construction (and one where the effect of actions to increase the proportion of women in professions such as engineering can potentially be observed) is graduate recruitment, a process designed to put novice professional identities to the test. This paper takes a social constructionist approach in exploring the discursive negotiation of female engineers' professional identities and how these are co-constructed dynamically in interaction with gender identities in this important gatekeeping context. The analysis, which draws on examples from a dataset of 20 naturally occurring interviews between employers and final-year undergraduates at a university in New Zealand, focuses particularly on the interplay of gender in the necessary synthesis of personal and institutional discourses in constructing a professional identity. Ways in which gender is oriented to explicitly and/or implicitly in these gatekeeping encounters are shown to resonate with existing gender divisions (technical vs relational) in the androcentric professional context of engineering, undermining a pro-women recruitment stance. Central to the validation of professional identities by interviewers was the demonstration of "passion for engineering" but ways in which it was deemed to be demonstrated, such as through reasons for career choice and outside interests, were arguably gender-circumscribed. This further set of normative expectations, on top of the existing competency-discourse-driven requirement to fit candidates into prescribed categories, contributes invisibly to maintaining the homogeneous identity of the engineering profession. The tension between conflicting requirements for "difference" and "sameness" in the professional identities of female engineers is highlighted in a discussion of the ways gender is made relevant in the co-construction of these identities.

Keywords: Graduate recruitment; Female engineers; Professional identity; Careers and employment discourse; Gender stereotypes; Co-construction.

1. Introduction

The mainly government-sponsored drives in higher education to double the proportion of women studying engineering and thereby redress the historical shortage of women in the profession have attempted to combat gender stereotypes surrounding the engineering degree and to frame female engineers as an essential resource sought after

in industry. Corporations, in turn, align themselves with this agenda, based on "a business case, rather than a desire for more inclusive organizational cultures" (Powell et al. 2008: 415). Gatekeeping encounters in the transition between university and the workplace are largely where the outcomes of these initiatives are determined, and they offer a particular window on the discursive construction of professional identities.

Research interest in the challenges that face female engineers has not been lacking in itself. Indeed, tensions surrounding the gendered professional identities of engineers that disadvantage and/or perpetuate the underrepresentation of women have occupied researchers in different disciplines over three decades; the many studies that have looked at the situation of early- and mid-career engineers (e.g. Jagacinski & Lebold 1981; Jagacinski 1987; Robinson and McIlwee 1991; Evetts 1996; Jorgenson 2002; Faulkner 2007; Sharpe et al. 2011) are complemented by a growing body of research on female engineers in higher education contexts (Bergvall 1996; Tonso 2007; Stonyer 2002; Küskü, Özbilgin, and Özkale 2007; Pawley 2008; Powell, Bagilhole, and Dainty 2009). Among these, Bergvall's (1996) analysis of students doing gender in mixed small-group laboratory work is a rare study of interaction in an engineering context. Pawley (2008), like Tonso (2007) an engineer-academic, looks to other female faculty's self-constructions of professional identity as well as those of students in theorising the interaction of gender identities and professional identities in the university context.

The transition between study and work is of particular importance because it is where professional identities are formally judged. For most students it is the first time they are acknowledged individually in a professional context with no peer or tutor support and must draw as best they can upon those identity resources they judge appropriate. This study contributes to the research literature on the negotiation of engineers' professional identities in its explicit focus on the gatekeeping context of the graduate recruitment interview, an area where the interaction of gender in the construction of such identities has been neglected. In addition, although culture and ethnicity have been central to discourse analytic research on job interviews (due to the potential of linguistic analysis to reveal ways in which migrant and other minority groups are indirectly disadvantaged), the impact of gender in the professional identity construction of locally-educated migrants (the status of the women in this study) has apparently so far been overlooked.

In adding to the body of knowledge about the construction of professional identities by examining students' first encounters with employers, I aim to show in relation to the above-mentioned recruitment agenda how gender is oriented to directly and indirectly in the way it is indexed and performed. The focus of this paper is on the way participants do gender in this particular context, and accordingly how professional identities are constructed and enacted through discourse (Eckert and McConnell-Ginet 1992).

2. Context of the study

The study pinpoints a stage in the transition between university and the workplace against the background of New Zealand higher education and the narrower context of women studying engineering. Predating this study by a decade, Stonyer's (2002) research on female engineering students at two New Zealand universities led her to

conclude that "the asymmetrical relationship between men and women in the engineering community continutes to be reiterated through the context of engineering education" (392). Her analysis of participant interviews with female students revealed "an awareness [of the fact that] ... to learn engineering they must take up identities compatible with the engineering community" (ibid.: 393). In the last ten years, there have been shifts in the makeup of the NZ engineering community owing to greater numbers of born-abroad undergraduates studying for the professions; as in the UK (Takruri-Rizk, Jensen, and Booth 2006) engineering cohorts show particular ethnic diversity as a result, and this diversity is visible within the University of Auckland's relatively high proportion of female engineering students. In 2011, 24% of first year engineering students and 22% of all engineering undergraduates were female (UoA 2011, July 21), although as the The Institution of Professional Engineers New Zealand indicates in its recent "Women in Engineering Task Force" report, The Retention and Renewal of Women in Engineering (IPENZ 2011), this is not reflected in the proportion of female engineers in the workplace. The discrepancy is commonly attributed to the (male-oriented) "culture of engineering" being hostile to female engineers (Faulkner 2007 inter al.).

However, requiring female students to assimilate into the existing masculine culture of engineering, which Dryburgh (1999: 666) associates with professionalisation, or the "internalisation" of a professional identity, is not part of the official rhetoric of these initiatives to increase the numbers of women engineers. Rather, "diversity", "difference", and "equality" discourses emerge variously in educational and business contexts: in institutional aims for a gender-neutral profession (IPENZ 2011: 1), in special interest groups for women engineers, and in the University of Auckland's funding of New Zealand's only salaried "Women in Engineering" equity advisor, whose role is "to recruit and retain women; support them through university; and advise Faculty on strategies to encourage participation and retention" (IPENZ 2010: 20). Associations existing to promote women's careers in the engineering profession voice a shared concern with the "image" of engineering and engineers, in line with Faulkner's (2007) call for a greater range of identities to be acceptable in engineering. Advocates and professional role models help to make legitimate the "being and becoming" (Jenkins 2004) identity process, and Women In Engineering affiliate groups within the student branches of the global engineering organisation known colloquially as the Itriple-E, the Institute of Electrical and Electronic Engineers (IEEE), are influential in this regard. In common with the 400,000-strong wider IEEE membership network (of which student branch members make up a quarter) one of their goals is to enhance access to career opportunities and support for their members.

Despite all of this institutional and professional support for women in engineering, students entering the profession still face a number of challenges. In Bergvall's study conducted in a US technical college, male students' awareness of "affirmative action" to redress the lack of female engineers in the profession led to their perception (and resentment) of female students "getting preferential consideration in hiring because they are women" (179). This puts an extra pressure on female students, who contest being different when it is for the wrong reasons (cf. Sharp et al. 2011). Recent shifts in the demographic of the NZ engineering community notwithstanding, it may remain the case that "the cultural context in which students learn to become engineers is ... both androcentric and gender-polarized" (Bergvall 1996: 177) and that female students "must either accommodate to or resist the gender roles and discourse of this androcentric profession" (ibid. 174) – even where assimilation is not expected of them and "difference" is valued. How these issues are reflected in students' first interviews with employers will be analysed in terms of participants' orientation to gender in the co-construction of professional identities.

3. Theoretical background

Of the different social practices that contribute to the construction of identities, linguistic practices are the most significant in institutional contexts such as employability assessment. Social constructionist approaches to the study of identity are now well established. This view of identity characterises it as "an interactional problem" (He 1995) that is not "fixed" or stable but fluid and dynamic, and emphasises that it is jointly constructed in interaction, and a process that is continually ongoing (Halford and Leonard 2006). In line with such a conceptualisation of identity, interviewers' judgments of whether interviewees' professional identities are legitimate or not may be formed and reformed in the course of the interaction on the basis of interviewees' use of verbal and non-verbal resources.

Further, the idea that identities can be single or separate has given way to a social constructionist understanding of multiple identities in constant negotiation with each other (as well as with others' identities), according to the social/institutional context. The importance in employment interviews of juxtaposing different identities appropriately should not be underestimated. Campbell and Roberts (2007) describe the process as "the synthesizing of personal and institutional discourses to produce an acceptable identity" (244). It is reflected in the implicit requirement for candidates to promote themselves as individuals while simultaneously fitting into "broad, homogenising institutional categories – such as being a good team worker" (Roberts and Campbell 2006: 38).

The organisational change theorist Champy (1995), whose work has influenced discourse analysts such as Gee, Hull, and Lankshear (1996), differentiates the personal/institutional in terms of "social" and "work-related" values:

> Let me put the difference between hiring processes then and now in the most chilling way I can think of. Today, it's not only what you know that counts, it's what kind of person you are. What kind of person you are means, essentially, whether you will be able to live up to, or at least aspire to, the "values" both social and work related that I listed. (Champy 1995: 157)

It is the discursively constructed synthesis of the "personal" and the "institutional" that results in the creation of a professional identity. As the personal inevitably includes gender, it is likely to be where gender may or may not be made relevant in the co-construction of such an identity in interviews with employers. According to Ochs (1993), in interaction gender is indirectly indexed through the adoption of stances that are taken, in a particular culture, as being gender-specified. This is where the "personal" – what kind of person you are – and "values" are de facto gendered. It is also true of the "professional" to the extent that the stances conventionally associated with a legitimate professional identity can simultaneously be gendered. In the case of engineering and other male-dominant professions, this is guaranteed to be the case.

Previous approaches to the study of identity in the general recruitment context are largely quantitative and/or experimental studies of interviewer decision-making. These organisational psychology frameworks are dismissed as reductionist by work psychologists Dick and Nadin (2006) in favour of social constructionism, a paradigm that addresses the "distribution of responsibility among interlocutors" for the creation of identities that follows from "taking the position that everything is co-constructed through interaction" (Jacoby and Ochs 1995: 177). A "weak" social constructionist approach, as Stubbe et al. (2003: 380) define interactional sociolinguistics, has traditionally been applied in research on gatekeeping interviews (e.g. Gumperz 1992; Kerekes 2006). The work of Roberts and Sarangi (1999), built on by Roberts and Campbell (2005, 2006), illustrates the "hybridity" of identity as constructed through different modes (professional/personal/institutional) of talk, and does not view identities as fixed, unitary, or just enacted or responded to. However, issues of identity creation and negotiation that are pivotal when the relevance of gender is under consideration are generally not the focus of gatekeeping research. In the workplace context, McElhinny's (1995) study of police work is significant among research in a social constructionist paradigm that has addressed the negotiation of gender and professional identity in women's professional practices within traditionally maledominated domains (see also Dick and Nadin 2006).

The social constructionist stance taken in this paper focuses on the way that professional identities are largely constructed and negotiated through talk, or "talked into being" (Van de Mieroop and Clifton, this volume), in the context of engineering recruitment. My aim is to identify aspects of participants' linguistic practices where gender and professional identities intersect, and locate them in the wider context of the institutional practice that underpins and informs them.

4. Data and methodology

The data under scrutiny are selected from a larger study of job interviews that included practice interviews with careers consultants and a set of interviews for a graduate rotation programme with a national NZ engineering company (Reissner-Roubicek 2010). The interviews analysed here, which are with IEEE-affiliated employers, fall into a third category of job interview, effectively part of a recruitment orientation process serving their companies' selection agenda, and of parallel significance to the student participants. I will call them "employer interviews" for the sake of clarity, to distinguish them from i) interview training with careers consultants and ii) role-played interviews. In the employer interviews the interviewees are getting a chance to advance their application to the companies concerned and benefit from one-to-one encounters with employers who are present in a mentoring capacity as well as a talent-spotting capacity. From a research perspective, the interviews are particularly useful for the purpose of investigating the discursive construction of identities, as they incorporate not only evaluative feedback given directly to the students but also a discussion of their CVs. Institutional norms relating to "the culture of engineering" (Robinson and McIlwee 1991) are thereby brought to the surface and simultaneously made explicit in ways that highlight the taken-for-granted, implicit expectations of participants. Thus as

gatekeeping interactions these encounters offer the analyst a multi-layered source of data, which enables an exploration of the problem posed above: how gender is or is not made relevant in the synthesis of personal and institutional discourses in the construction of professional identities.

The dataset consists of 20 naturally-occurring interviews conducted on campus between employers (6 male and 1 female) and engineering students (8 male and 12 female, in their early 20s) all of whom were members of the Institute of Electrical and Electronic Engineers. Participants were recruited through the student officers of the IEEE from a pool of 60 interviewees and 20 employers. On this particular occasion, each employer was scheduled to interview 6 students and each student was scheduled to be interviewed by 2 employers. Interviews lasted approximately 25 minutes and were recorded using digital voice recorders that the employers operated themselves. The structure of the employer interviews was set out in advance to include 15-20 minutes of interview questions followed by 5-10 minutes of advice on the CV. (The interviewees' CVs had been emailed about a week earlier by their IEEE branch officers to the employers who would be interviewing them, but in many of the 20 interviews recorded the employers had not looked at the CVs beforehand.) Where participants made themselves available, post-interviews of an average 75 minutes' duration were also recorded, in the following week. Only extracts from interviews between female bornabroad engineering students, from India (pseudonyms Kuljit, Chandiya, Neela, and Shavani), Vietnam (Thanh), and China (Feng), and NZ-born employers (Phil, Russ, Mack, and Elaine) are discussed in this paper.

The analytical approach draws selectively on (a) Ochs's (1993) two-step model of the relationship between language and identities used by He (1995: 217) in an analysis of undergraduate counselling interviews, which highlights the situated nature of the verbal and non verbal resources (that index certain stances, etc.) drawn on in the particular activities that participants are engaged in, (b) Wagner and Wodak's (2006) textual realisations of successful identities in women's career narratives (labelling, arguments made for positions, external discourses, perspectives, mitigated/intensified self-constructions, and metaphor) and (c) De Fina's (2003: 23) three-level analytical model used by Van de Mieroop (2007) in her analysis of professional identity construction in speeches, which addresses lexical, textual-pragmatic, and interactional features (specific words or expressions; textual logical and argumentative relationships both explicit and implicit; devices and strategies used by narrators to index their stances and attitudes both towards their own texts and other interlocutors). Categories are integrated in the analysis to illustrate the interdependent and overlapping tensions arising in the data as organically as possible.

5. Analysis

The identities of the novice professionals were co-constructed and contested through three different activities that characterised the encounters. These were not always mutually exclusive; the negotiation of answers to job interview questions (JIQ) and the giving of feedback (FB) on interviewees' answers were not always discrete from the evaluation of their CVs. Advice on how better to answer questions and on the production of a more plausible CV was sometimes integrated. Interview questions centred on why students had chosen engineering, their preferred specialisation within

the field, their specific past, present, and future goals, what they did outside their studies, and what electrical/electronic engineering they had done in (team-based) university projects.

5.1. Explicit orientation to gender

Gender is oriented to explicitly and implicitly, or indeed not oriented to, at different times and in different ways in these interactions. Beginning with the interview in which gender is most explicit, the analysis section is organised according to this distinction. At the same time it is acknowledged that drawing a line between categories is by no means easy, as implicitness and explicitness are not mutually exclusive in these stretches of talk.

One employer explicitly addresses gender in terms of corporate engineering recruitment. This points to gender being an issue that participants are well aware of. Elaine is a long-established engineering recruiter who is contracted to a number of engineering companies simultaneously; in the context of these engineering undergraduates' opportunities for employment she holds a great deal of gatekeeping power.

Interviews conducted by Elaine are atypical in terms of talk share. In Shavani's interview (below), Elaine's talk share is 80%. Her turns largely consist of advisory monologues preceding and following a question about career goal and preferred specialisation within the field.

(1a) Employer 4 (Elaine) and Shavani: CV

- 1. and also //with most of the companies I've worked for /they love to have
- women engineers on their team /because you have a different way of 2.
- looking at things /and so it gives the company a better balance, 3.
- 4. and sometimes a better way of looking at problems that generates solutions
- 5. /and so you have an advantage over the guys because /if two things are even
- 6. /and one happens to be female /right at the moment on balance the guys
- 7. would like to have a lady
- 8. S yeah hh
- E4 which is really nice 9.

The gender of companies and the gender of women engineers are mutually constructed, in that the first line constructs "companies" and "they" as men through the contrast with "women engineers". The use of labels is marked, where Elaine constructs a similar stance for "companies" (line 1) and "the guys" (lines 6-7), in which the former "love to have women engineers on their team" and the latter "would like to have a lady". The words women, female and lady are variously used to gender label members of the group of professional engineers that she includes Shavani as a part of (plural 2nd person you, lines 2 and 5). The term guy is juxtaposed with the term lady (in preference to an equivalent informal term to guy). In this context a female engineer cannot be one of the guys, she is differentiated from them.

Elaine's condition "If two things are even and one happens to be female" (lines 5-6) makes gender explicit in establishing that these hypothetical circumstances under which a female engineer will be hired may be driven by positive discrimination, or affirmative action - but only if women's skills are equal. Further, it admits two possibilities: males and females being equally qualified for the job and unequally qualified for the job. A discrepancy between them in terms of "person-job fit" and/or "person-organisation fit" (Young and Hurlic 2007) seems to be the default condition or norm underpinning interviewer expectations. "A different way of looking at things" (lines 2-3) indexes gender in that the implicit norm is the way men look at things; difference is associated with women. "It gives the company a better balance" (line 3) invokes as desirable a workplace that is less masculine and more feminine; (the need for) balance implies difference. However, balance is a key term in the new (postequality and post-difference) diversity discourses which are in themselves genderneutral, according to Sharp et al. (2011). Here Elaine invokes a diversity discourse in positioning the organisations's interests as in alignment with the interviewee's (cf. Jones 2004). She explicitly attributes "a better way of looking at problems that generates solutions" to women – mitigating it by the word *sometimes*, however (line 4). Thus her talk, which invokes management rhetoric for a facilitative and collaborative ("feminine") interactional style, draws on diversity discourses, which are associated with gender-neutral practices of gender-neutral subjects: but in referring to women, she re-asserts difference discourses.

Here, a professional identity is constructed for female engineers in opposition to the professional identity of male engineers. In what follows, it is rather the professional identity of the engineer-employers that Elaine constructs. This is part of her advice on the construction of a plausible, that is, "bureaucratically processable" (Iedema 2003), CV, and refers to the way a novice professional engineer's CV is read by (other) employers.

(1b) Employer 4 (Elaine) and Shavani: CV

- 1. E4 ((big sigh)) you need to present something that looks very engineering
- 2. (.) that's very logical /that's how engineers THINK/ no matter what sort of
- 3. position /you choose to concentrate on, you will be interviewed by engineers
- 4. /they will (.) only interview people that they feel comfortable with
- 5. /that fit into a professional engineering BOX /and they make a judgment on
- 6. that on the logic that you show in the way in your CV is presented and
- 7. >>>honestly most of the guys can't tell you<<< that how they judge a CV is
- 8. /is by looking at it and say well, that'll make sense, *I can understand it and*
- 9. *it's got all these five things that I am looking for /*they can't actually tell you
- 10. that because they're not that /um /analytical /but they'll get a feeling for it
- 11. and they say *no it doesn't feel right*
- 12. S oh

After twice using the label *engineers* (lines 2 and 3) Elaine's accelerated aside "honestly most of the guys can't tell you" (line 7) reverts to the gendered label *the guys* as a preface to performing their identities (quoted direct speech in lines 8-9 and 11) in terms of what they say to themselves when reading a CV. "The guys" are constructed as incapable of explaining how they judge a CV "because they're not that, um, analytical" (line 10), whereas "engineers" are constructed as thinking very logically (line 2) and judging a CV "on the logic" shown in its presentation (line 6). The apparent contradiction here suggests conflicting ideologies at play (Billig et al. 1998): one instantiated in a (woman-to-woman) gendered narrative of the uselessness of blokes, the other simultaneously upholding the objective intellect of professional males. That

said, both groups are attributed feelings, engineers in the case of "people they feel comfortable with" and the guys "a feeling" (i.e. intuition) for whether the CV "feels right." A taken-for-granted assumption that the engineers responsible for graduate selection are indeed male is reflected in the use of the label guy. Indeed, the norm is that when a company's interviewers are female they are specialist HR or management representatives (Elaine included), working in tandem with male engineering managers.

Elaine's reference to "people that fit into a professional engineering BOX" draws on the institutional discourses of the job interview (cf. Roberts and Campbell 2005) and its requirement for sameness, in fitting interviewees into prescribed combinations of employment competencies. This is alluded to by Russ in (4) below in the phrase "the matching process". One aspect of fit, person-organisation fit, is described by Dick and Nadin (2006: 23) as a "taken-for-granted process [that] ... reproduc[es] inequalities" because it reinforces the idea that women and men are naturally suited (or not) to certain professions. In a paradigm where "people [that engineers] feel comfortable with" are essentially people like them – again, sameness, at what level are they going to process difference as embodied in the female engineer? This question, which is central to the interaction of gender in the construction of professional identity in this context, will be explored in the discussion, following the analysis of the remaining examples, which all provide the opportunity to see "the guys" in action as they interview and give feedback to female engineering students.

Whereas Elaine's use of gendered labels is marked, in their interviews with female students male employers are almost wholly consistent in using gender-neutral terms (such as somebody, someone, some people, people, a person, and the grammatical plural they instead of singular 3rd person) to refer to hypothetical employees. This shows an awareness on their part of neutrality as a preferred stance (cf. Jaffe 2009). It fits in with the explicit goal of facilitating women's careers, but nevertheless, as the examples will show, the male employers indirectly (and unconsciously) index gender in ways that may disadvantage women in the interview context. The one instance where a male employer uses a gendered label (intentionally) is shown in (2).

Phil, who represents a high-profile design and manufacturing company, asks his interviewee, Feng, to explain her decision to do engineering. This question is a universal feature of engineering graduate job interviews, and the expected response is a story of hands-on "tinkering" activity in early adolescence (cf. Robinson and McIlwee 1991, Faulkner 2007) and/or of inspiration by a role model.

(2a) Employer 6 (Phil) and Feng: JIQ

- 1. okay /what made you /why did you decide to do engineering
- 2. F that's a (difficult) question /I ask myself as well xxx (.) do you want to hear
- F the truth? 3.
- 4. E6 I want to hear the truth
- 5. [I'm a very honest person
- E6 [the whole truth and nothing but the truth 6.
- cos I think that it would be cool /to be a senior engineer 7. F
- 8. E6 okay
- 9. F that's what I think
- 10. E6 okay
- 11. and actually I think (.) uhhh /for a engineering student where you need to
- 12. spend a long time you know more time than other students and uh and don't
- 13. have time /go to the movies /and then do other activities /even in the- in the

- 14. holidays //you still do interviews and do the other projects /but still enjoying
- 15. it hh
- 16. E6 so you're doing engineering cos you /you think it's cool /to do
- 17. F at the beginning hh
- 18. E6 at the beginning /what are you thinking now that you're-
- 19. F now?
- 20. E6 towards the end /you still think you're miss cool? or do you think that it's a
- 21. lot more hard work than you thought?

Feng references the comparatively heavy workload of a final year engineering student as part of a justification argument (lines 11-14) for why she has chosen engineering – she is "still enjoying it" even though the hard work has precluded "movies and other [gender-neutral] activities." However, her immediate response is to evaluate the question as difficult, and one she has also asked herself (line 2), which instead establishes a sense of ambivalence about engineering (cf. Wagner and Wodak [2006] on "ambivalence, activeness or passiveness" in women's constructions of their careers). The rhetorical question that follows, "do you want to hear the truth?" presupposes an answer not conforming to interviewer expectations. In this it also invokes the folk belief that "they want you to lie" (Hawthorne 1992) in order to sell yourself in a job interview. Regarding participants' expectations, however, a possible perspective on the interviewer's original question "Why did you decide to do engineering?" is that it is inherently loaded when asked of a woman, because to be a woman in engineering is unusual and demands some special explanation. Assumptions of the question notwithstanding, Feng's answer is gender-neutral. Saying that she "think[s] it would be cool to be a senior engineer" assumes that Phil shares her assessment of engineering as cool. Phil contests this construction of identity (lines 16-21) in explicitly gendered terms, with a challenging and arguably derogatory remark about her stance on engineering that incorporates a gendered label used ironically: "you still think you're Miss Cool?" At the end of the interview, he offers a negative evaluation of Feng's answer, mitigated in the metadiscursive comment "I had a mixed response to that" (lines 2-3 below).

(2b) Employer 6 (Phil) and Feng FB

- 1. E6 you know when I said /why did you get involved in engineering /you said
- 2. /because it was cool? um /I'll be honest with YOU, I had a mixed response to
- 3. that. (.) if it's an honest answer I appreciate the honesty /so on one side I'd go
- 4. /it's a big tick for honesty /on the other side of the coin /I'm really looking
- 5. for- for somebody that's maybe a bit passionate about being in engineering?

However, he validates Feng's self-construction (previous extract, line 5) as "a very honest person", using a voicing strategy to perform the gatekeeper identity of a recruiter "I'd go it's a big tick for honesty" embedded in the feedback he is giving as an expert and as a mentor. He does so as part of a contrastive discursive strategy to invalidate the construction of engineering as cool, juxtaposing it with the requirement

¹ Cf. Faulkner (2007: 334) "There is nothing remarkable about a man choosing to be an engineer. Most of the men I interviewed provided little or no account of their choice; either they never gave it much thought or it was all pretty obvious to them. By contrast, virtually all the women interviewed had *a story to tell* about why they made the choice - in much the same way as women who don't have children have a story to tell as to why: it demands an explanation." [Italics in original]

for "somebody that's maybe a bit passionate about being in engineering?" Contesting a student's novice professional identity on grounds of insufficient passion is a recurring argument in this context and will be further addressed.

Interviewees' reasons for choosing engineering, or to couch it in the formal terms used in recruitment documents, their "orientation to engineering", can be represented by reference to outside interests established as relevant by employers. Outside interests are explicitly stated by employers as contributing to evidence of interviewees' orientation to engineering. They are especially circumscribed in the institutional practice of engineering graduate recruitment; activities should incorporate hands-on "tinkering" of some kind, such as dismantling/rebuilding machinery or circuits. These are gendered (i.e. boyhood) interests that can be directly connected to current technical skills. This aspect of the gendering of engineers continues to be reflected in the ongoing differential construction of male and female engineers' professional identities in the workplace (Robinson and McIlwee 1991; Dick and Nadin 2006; Faulkner 2007).

5.2. Implicit orientation to gender

In what follows I highlight a core tension in the discursive construction of professional identity in these employer interviews, which concerns what students do outside their studies. The common-sense understanding that outside interests should reflect a wellrounded person has been displaced by the institutional precept that such interests or activities should be relevant to a professional identity (here, as an engineer). Employers focused on getting students to adapt this implicitly held existing schema to the new, institutionally acceptable schema. Activities or interests they constructed as relevant to this identity fall into two main categories. Firstly, activities that are team-related are preferred to activities that are solo, as Bob (Employer 3) explains:

> Business is about teams – about um, people with certain skills working with other people with complementary skills - you know, one and one making three all the time? So that's where the team sport you choose is interesting: we get a bit nervous about golfers and tennis players; we get even more nervous about people who like reading books.

Bob's words show the tendency for explanatory feedback to interviewees to contextualise the personal in the context of the institutional discourse (which suggests the sort of synthesising that is required of them), as he does here by linking an individual's personal interests to the rationale for teams in business.

Because team-related activities are primarily sporting ones, and sports are rarely gender-neutral, this is an area where gender is implicit. The next two examples deal with the citing of outside activities in other interviews with Phil. In the first one, orientation to gender is both implicit and explicit.

(3) Employer 6 (Phil) and Kuljit: JIQ

- E6 what do you do outside university? 1.
- K I used to be quite heavily involved with cricket um 2.
- 3. E6 yeah?

- $4. \hspace{1.5cm} K \hspace{1.5cm} \text{so I played for local clubs and coached /and got picked for a regional team} \\$
- 5. /but um /I would say it is- just coursework
- 6. E6 yeah
- 7. K at university here /and I'm part of a number of student-led organisations
- 8. for- and um and I mentor ((smiling voice)) /first and second year engineering
- 9. students
- 10. E6 m'hm
- 11. K I'm also part of the i-triple-e student branch
- 12. E6 okay
- 13. K I've got a couple of leadership roles in the /women in engineering division?
- 14. xxxx and that I'm responsible for organising field trips, and talks from
- 15. industry speakers and careers and things

When Phil asks her what she does outside university Kuljit adopts a particular "discursive strategy of positive self-presentation" (Wagner and Wodak 2006: 393), which is to offer a number of current activities that are university- and faculty-related while contextualizing them against an outside activity she no longer engages with, thus still enabling her to incorporate it and foreground it. Like Feng, who self-constructs a hard-working identity, Kuljit's life outside university has been displaced in favour of "just coursework", however in contrast to the not-relevant social activities Feng no longer has time for, Kuljit's strategy assists her to invoke a sport that is a team sport, which is a plus in constructing an expert professional identity. Cricket, however, is not just a team sport, it is a gendered sport, and along with rugby in New Zealand the sport of engineers – as well as a sport popular in the shared Indian-New Zealand context, not the case with rugby. This establishes potential common ground with future male colleagues, and differentiates her from the majority of her peers. Her mention of cricket and being "quite heavily involved" with it (quite downtones and heavily intensifies this claim) appears from the tone of his response to surprise and impress the interviewer, which points to his different expectations of a female student's interests.

Mention of the IEEE student branch indexes Kuljit's (novice) membership of the wider community of practice; the various constructions of *expertise* included in her answer include "playing for local clubs" and being "picked for a regional team" as well as coaching. In university-related activities, it incorporates mentoring and leadership roles. The smiling voice on "mentoring" suggests a moment of self-consciousness about her novice engineer status in relation to the expert who is mentoring *her* (i.e. doing/undoing power rather than doing gender). None of her other claims are hedged or mitigated. The allusion to leadership roles constructs an expert professional identity in relation to Women in Engineering, explicitly indexing gender. Invoking WIE invokes difference, but difference as it is validated by "the liberal discourses of the university" (Stonyer 2002) and nominally sanctioned by the parent institution, the IEEE.

Employer 7, Russ (the engineer-CEO of a satellite electronics enterprise), discussing Chandiya's CV below, refers in lines 1-2 to the so-called personal statement that is an opening element of many corporate CVs.

(4) Employer 7 (Russ) and Chandiya CV

- 1. E7 a lot of CVs kind of start off with /THIS is what I'm passionate about
- 2. /and THIS is what I want to do /okay; and then everything underneath that /is
- 3. telling the interviewer /or potential employer /why you think /you can do
- 4. that /you know say /I wanna be an engineer /in a company that /makes radios

- 5. for example /so you would have /down in here /your engineering degree of 6. course /you may under your personal stuff /have something under there 7. /that you like fixing radios /or you have a real interest in /how radios are used 8. /and /you build /kits /electronic kits /or /whatever /sort of trying to 9. demonstrate this underlying /thing that you like doing /okay so /wh- when I 10. look at your CV it's- it's kind of hard /um to understand /about YOU? 11. C 12. E7 um in terms of= =what am I passionate about 13. C 14. E7 15. it's hard to see what am I passionate about C 16. E7 so I see here that you have um a lot of interest for your culture /and for the 17. arts /kind of area (.) and BADminton. 18. C 19. E7 and /and /that's all you've told me about yourself (.) so (.) I'm interviewing 20. you for an engineering role /and I think /that would be a good um /social plus to have a person with those interests and flair to come into the 21. 22. company but /in terms of /I have this job that needs to be filled
- 24. C

23.

- 25. E7 I'd be looking at really trying to understand about you as a person
- 26. /what you're passionate about /what you want /and your technical abilities,
- /and the parts of your degree where you've really had fun /and really excelled 27.

/what can you tell me about your personal /ah /interests that relate to that?

- 28. /and hopefully that lines up with where you apply to go /and when I'm asking
- 29. questions? I'm trying- I'm doing that matching process

Russ voices the professional identities constructed in "a lot of people's" CVs presenting themselves as "passionate about" things he coordinates with immediate career goals. The outside interests, or passions, that he suggests might be "in your personal stuff" are technical skills-related. Fixing radios and building electronic kits – hands-on tinkering - indirectly index masculinity. "The underlying thing you like doing" constructs a professional identity as an engineer; it must be able to be demonstrated through outside interests, and it is causally connected with being able "to understand about YOU" the person. Russ contrasts this with "a lot of interest for your culture [a reference to traditional dancing], the arts kind of area, and [pause for emphasis] BADminton" (ironically stressed), activities which he validates as "a social plus" but invalidates as relevant to "an engineering role" and thus to constructing a professional engineering identity. Although badminton is not gendered in the way culture and arts are gendered (i.e. index femininity), it is not considered to be teamrelated (cf. Employer 3, Bob, who advised a male student to put cricket before badminton on his CV for this specific reason). Essentially, Russ contests the professional identity constructed in Chandiya's CV through contesting the relevance of her outside interests. He re-invokes the *passion* metaphor in summing up "really trying to understand about you as a person" (lines 25-26). Its crucial role in "the matching process" is evident.

The extract from Phil's interview with Neela (below) should be understood in the institutional context of teamwork skills and communication skills having taken the top two places in most annual wish-lists of graduate employers² for over a decade; even students who have not taken up any careers advice will at this stage of their degree be aware of this.

(5a) Employer 6 (Phil) and Neela: JIQ

- 1. E6 hey /if I employed you at P & K?
- 2. N m'hm?
- 3. E6 and you were part of my design team,
- 4. N m'hm?
- 5. E6 what strengths would you bring to my design team
- 6. N okay I can-like as I've written in my personality thing, uh it said /I do have
- 7. an attitude of getting along with people
- 8. E6 m'hm
- 9. N I've not been so: /demanding and /so stubborn that I want my way to be
- 10. done? because when we worked /for all these projects /last semester /it was a
- 11. group of four /um /we never really ended up having any conflict on
- 12. something? on anything? and probably I can /like /when it comes to meeting
- 13. the deadlines /I have the ability of working hard (.) and putting in an extra
- 14. effort (.) not feeling okay this is the time to go home /that's it
- 15. E6 yeah
- 16. N so. I have those /like I can get along with the team?
- 17. E6 yeap (.)

Phil's question "What strengths would you bring to my design team?" (line 5) is inferred by Neela to relate to her teamwork skills – *team* is the salient word she picks up on. The *design* part (i.e. technical skills) she filters out. His backchannelling in lines 15 and 17, "yeah" and "yeap", which are categorised as *yes-plus* words signalling increased alignment (McCarthy 2003), appear to validate her answer.

In this interaction gender is indirectly indexed through the student's construction of herself as a team player: a professional with particular ways of behaving that are in line with a feminine interactional style: co-operative, collaborative, relationship-oriented, empathetic, supportive and non-competitive (Holmes 2006: 6; Shepherd and Pringle 2004:172). She constructs this professional identity in terms of what she is not, that is, in relation to unspecified others (cf. De Fina 2003), who, it is implied, in contrast to herself, are demanding, stubborn, want their own way, and can't get along with people in general or the team specifically. In other words, others who behave in line with a masculine interactional style: dominating, competitive and individualistic (Holmes 2006: 6; Shepherd and Pringle 2004:172). In addition, these others do not meet deadlines or have the ability to work hard, do not put in extra effort, and give up when they feel like going home. Here there are intertextual links with the common, historic, undergraduate experience of dysfunctional teams (Oakley, Felder, Brent and Elhajj 2004), which is articulated by employers and students elsewhere in the dataset.

The allusion to "conflict" (line 11) in a team sounds a familiar note in the competency discourses of the job interview. It serves as a device used by interviewers to probe further into interviewees' stories and elicit evidence of problem solving and interpersonal skills, and often features in follow-up questions about leadership as well

² Inter al., Victoria University, Wellington careers newsletter (2003) and the analysis of 10,000 UK graduate recruitment vacancies in 2010, which includes them in a shortlist of "generic graduate factors" that are top priorities for employability (University of Warwick careers information 2011).

as teamwork. Candidates in job interviews for an engineering graduate rotation programme who readily acknowledged conflict in teams they had led were successful in the interview, in contrast to candidates who denied the existence of any problems (Reissner-Roubicek 2010). So, ironically, far from being something to an interviewee's advantage, claims for the lack of conflict in a team ("we never really ended up having any conflict on something? on anything?" in lines 11-12) as evidence of a person's teamwork skills are counter-productive. It is necessary to situate oneself figuratively among conflict-causing competitive others in order to self-construct a professional identity as a facilitative, supportive, mediating, or problem-solving person; in this sense gender is indirectly made relevant (cf. Fletcher 1999). Conflict-avoidance may be valued as a positive "feminine" attribute, but itself conflicts with interview expectations.

(5b) Employer 6 (Phil) and Neela FB

- 1. I was /struggling to try and identify /what your strengths really were
- 2. N
- 3. E6 um /and then when I- I asked you that specifically /what strengths would
- 4. you bring to my team,
- 5. N
- 6. E6 it was sort of like /I'm a /I'm a good team player and I'm easy to get on with 7. /like like like /you spoke about your /your personality?
- 8. N
- 9. you didn't really talk about- I'm /I'm not first employing a personality
- 10. I'm employing a designer /I'm /I'm employing somebody who's really into
- 11. engineering
- 12. N
- and /you know somebody whose strength is /I'm going to do good- like you 13. E6
- 14. know /like design-led work or engineering (.) THAT's really what an
- employer's looking for 15.
- N 16. Yes
- 17. E6 is someone who can /can actually do that part of the job?
- 18. N
- 19. (.) you know when I asked you about your project? you gave me very much
- 20. a- you answered my question /but you didn't really kind of light up and start
- to get animated / yeah, let me tell you what I'm doing xxx xxx because that 21.
- 22. kind of highlights to me just /you know A /how much you understand it, and
- B you know /how much engineering is something you're really good at /and 23.
- passionate for? 24.

In this extract from Phil's feedback to Neela, it now becomes clear that Neela had incorrectly inferred the focus of his original question, "What strengths would you bring to my design team?" in (5a) line 5 [italics added], an error that is not genderrelated. Firstly, he picks up on and evaluates negatively her response about team-related strengths and secondly, he highlights the association made between being a good team player and (an easy-to-get-on-with) personality, which reinforces the notion of being a team player as a "soft" skill. Thirdly, he indicates that the omission of the design part of her answer signifies to him a lack of hands-on technical skills, which does not equate with "somebody who's really into engineering" (lines 10-12). The interview shows women's stereotypical strengths being cast as inadequate – bearing in mind that as in (1a) it is only "when two things are equal" that "the guys would like to have a lady"-

and that women are obliged to do a lot of work both to display that equality and to show the integration of technical and relational skills. Thus, the promise of having a leg up due to being a woman is mitigated.

In lines 16-20 Phil talks about Neela's actual team project answer. Here he further constructs, in terms of what she did not do ("you didn't really light up and start to get animated") the identity of a professional engineer as someone whose technical ability (lines 22-23) is demonstrated by way of affect. If women only address relational skills, it is seen as a gap (because their relational skills are taken for granted); they have to prove that they have technical skills (because technical skills are doubted). Existing assumptions or prejudices about female engineers' technical ability (Bergvall 1996; Faulkner 2007) may well be implicit when passion for engineering is doubted and ambivalence suspected by interviewers.

Metaphors can be deliberate, as Koller (2004) suggests, and the use of this one by other employers shows that it has become institutionalised in the shared context of graduate recruitment and the culture of engineering. In the examples that follow, the link between passion for engineering and technical skills is further explored through the theme of communication.

The counterpoint to the technical skills predicted by the outside interests around which employers construct an orientation to engineering are the skills that are required to communicate them. Institutionally framed as "soft" skills, or *relational practice* that Fletcher (1999) shows to be crucial in the workplace but which masculine hegemonies have rendered invisible, so-called people skills and communication skills are thereby gendered (Faulkner 2007).

Like Phil, Russ emphasises passion for engineering and links it to technical skills and outside interests (above). Additionally, in his feedback to Chandiya, Russ articulates a more complex argument by constructing passion for engineering rather in terms of the *communication* of technical skills; technical questions are "just really ... to see how good you are at communicating". Technical ability itself is backgrounded in favour of the ability to act as an interpreter of technology because "a large part of engineering is about communicating to different audiences, some technical, some not technical" (lines 3-4). Evidence for this argument is found in the interview, part of which is shown in (3), between Phil and Kuljit. In response to a technical question, What is voltage?, even Kuljit's failed attempt at making an analogy is constructed as preferable to giving a correct answer, because of its advantage as a communication strategy, as Phil allows: "On the technical side you did alright actually, cos a lot of people, some people, say voltage is current times resistance. YOU were trying to do an analogy — I like analogies". In this way communication skills are emphasised in the construction of an expert professional identity.

Sometimes students reveal an awareness of the interview's requirement to index certain stances (towards engineering/towards the interview). In the interview between Mack (a senior engineer in a large electronics firm) and Thanh, which is unique among the interviews recorded for the level of alignment between interlocutors in terms of overlaps and collaborative completions, Thanh describes a hands-on dimension of her project, while talking Mack through a set of diagrams she has brought with her, personifying "the fascination with and desire to talk at length about [hands-on] activities [that] is part of the interactional display of the culture of engineering" (McIlwee and Robinson 1992: 21). In the feedback at the end of the interview, the interviewee rather than the interviewer explicitly invokes passion. Mack and Thanh co-

construct a professional engineer as "somebody who's going to be= / =passionate" about the job, with Thanh latching the word passionate onto Mack's utterance. Mack himself links passion and communication in his positive evaluation of Thanh's interview: "In interview ... you need to be enthusiastic which you are, great, great, you can speak with enthusiasm about what you're doing, absolutely brings the stuff together", which explicitly locates the demonstration of passion in linguistic practice. He constructs a professional orientation to engineering as "doing [it] because you want to, because it's in HERE" (the heart).

Passion is reflexively invoked as an important part of an engineering professional identity and one that has to be demonstrated in a gatekeeping encounter by a novice engineer. Thanh's description of her team project involves technical skills in the construction of passion as well as passion in the communication of technology.

6. Discussion and conclusion

In exploring the identity construction of professional engineers, the analysis variously illustrates both how employers make the link between personal and institutional discourses in the giving of feedback and evaluation of CVs and how these discourses are synthesised (or not) by migrant female student engineers in their answers to interview questions. As Van de Mieroop and Clifton (this volume) point out, aspects of transportable identities such as gender and ethnicity are "quite often not oriented to and thus irrelevant for the interaction". In these gatekeeping encounters, where gender was oriented to it was always more salient than the interviewees' ethnic minority status. Thus the analytical focus has only been on the interplay between aspects of gender and professional identities, "in response to contextual influences" (Holmes 2006: 176) which stem from the local situative context of the interview itself, and the global discursive context of management rhetoric and the culture of engineering.

The whole process of establishing fit in a structured employment interview is specifically designed to be objective, in line with equal opportunity discourses. However, the requirement for objectivity in the selection process is at odds with the kind of intuitions, such as getting "a feeling for it", attributed by Elaine to "the guys". Even if the intuitive desire for someone that "fits" were *not* to perpetuate the status quo, in any case, as Ozbilgin and Woodward (2004) state in reference to Britain, "the standardisation of recruitment ... procedures in recent years has not prevented managers from continuing to select employees who share their own characteristics, but paradoxically, it has actually legitimized gendered employment practices by cloaking them in spurious 'objectivity'" (678). Although employers in these gatekeeping encounters draw on conflicting institutional discourses (equality, difference, and diversity) their main justification for wanting female engineers is because they are different. However, the "homogenisation of categories" (Campbell and Roberts 2007) underpinned by employment competency discourses that is reflected in the requirement to "fit into a professional engineering box" (E4) as part of "the matching process" (E7) requires them to be the same.

This tension between requirements for difference (that here index gender in terms of a feminine interactional style, and are reflected in practices, values and expectations) and sameness (that here index gender in terms of the value put on masculine activities inside and outside work) has been highlighted in reports of unsuccessful efforts to change organisational culture, such as Shepherd and Pringle's (2004) study of a typical "unreconstructed" workplace in NZ. They suggest that resistance to organisational change (the rejection of a more collaborative, inclusive, egalitarian style) is essentially underpinned by an unconscious reassertion of the dominant masculine culture. This culture is discernible in the talk of Elaine, and the way she gender-labels and constructs male and female engineers.

Difference and sameness should not, however, be thought of as a single axis around which identity relations revolve, according to Bucholtz and Hall (2005). They dismiss this as a "widespread but oversimplified view" and propose instead that "indentities are intersubjectively constructed through several, often overlapping complementary relations, including similarity/difference³, genuineness/artifice, and authority/delegitimacy" (598). In that "what counts as difference (or sameness) is determined not by researchers but in the first instance by cultural members" (Bucholtz 2004: 132), these more complex identity processes are variously made visible in the analysis, as the effects of deliberate performance and/or habitual linguistic practice.

Although difference and diversity are reasons typically offered for the drive to recruit more female students into engineering, residual discourses embedded in the culture of engineering seem to be counteracting the fruits of these efforts at an unconscious level: as Shepherd and Pringle (2004) put it, "a competing subconscious resistance that works to maintain the masculine status quo" (p. 173). The concern with the kind of sport a person plays as a part of their self-construction as a professional engineer is one way that interviewers can articulate this tension explicitly. It may well be that they want female engineers because a particular difference is the implicit association with being good team players (thus, actually being a woman is connected to the "desired shift towards incorporating implicitly feminine characteristics" in workplace culture). At the same time, there is evidence in the women's interviews that they do not always articulate their professional engineering identities in expected or approved ways; that in particular, women's interests and outside activities, which are linked to their "orientation to engineering", are not viewed by interviewers as relevant and are not interpreted as presenting a coherent picture of a professional engineer.

So, the implicit ways in which gender is made relevant include the requirement for *outside* interests to signal *engineering* either directly through evidence of hands-on tinkering activities – in other words, to be *inside* interests rather than outside interests – or indirectly through involvement in team sports, preferentially those which are coded as male. The type of interest engaged in lies at the core of an approvable professional engineering identity, in the justification of career choice. The significance of the type of sport played is not trivial either, as the "wrong" sport(s) may even preclude a candidate being shortlisted for interview. According to the divisional manager of a national corporate recruitment consultancy (personal communication), the assumption that what people do in their spare time reveals crucial information about how they relate to others has led to the corporate practice of machine-scanning CVs to pre-screen them for team-oriented or solo pursuits. The "right" sport(s), however, can boost a candidate's chances in the interview itself. Given that the majority of interviewers in engineering recruitment are male engineers, women's opportunities to establish common ground on this basis are limited. Similarly, a plausible CV – "something that looks very

³ Similarity/difference is realised in terms of the notions of "adequation, or the ideological creation of an interactionally sufficient but necessarily incomplete similarity between individuals; and distinction, or the ideological production of social difference" (Bucholtz 2004: 132).

engineering" (E4), cannot safely incorporate non-technical interests, that is, gendered interests such as "the arts kind of area" (E7). This is because despite their acknowledged "social" advantages they are deemed not relevant to the application in that they do not contribute to employers' understanding of the "kind of person" applying because they are not sufficiently synthesising the social and work-related values identified by Champy (1995). This stance reflects the fact that "certain kinds of persons" are collaboratively constructed as members of a community of practice (McConnell-Ginet 1992a: 91). The underlying issue here, as in the issues of relevance and coherence, are the implicit criteria used for evaluating "synthesis" – in particular, the assumption that synthesis is only possible when there is almost total continuity between work and social activities. This assumption reveals that the discourse of "balance" is really only a surface one, since employers do not allow the possibility of balancing divergent interests and orientations; a balanced person is therefore homogeneous, as is the workplace they really envision.

The prioritising of technical activities ties in with a particular gender tension in the construction of professional engineering identities that has been highlighted in the literature. As Faulkner (2007) points out, where current institutional discourses impose a requirement for greater gender balance, justifications for preferring female applicants over males with proven technical skills have revolved around claims for the superiority of their communication skills. But although female engineers are assumed to be better communicators, their opportunities for promotion (leading engineering design projects, etc) have been stalled by the apparently entrenched belief that only hands-on technical activities reflect a real engineer. Their reasons for choosing engineering as a career relate rather to a mathematically oriented ability for problem solving and design than to getting their hands dirty (Robinson and McIlwee 1991). Their people skills and communication skills ("soft" skills) are exploited in administrative areas where relational practice is more visible, rather than in creative roles as senior engineers (Dick and Nadin 2006).

In these employer interviews, the professional identities of novice engineers are co-constructed and contested around values associated with communication skills and technical skills, which are not necessarily polarised in terms of gender and at times constructed as interdependent. Expectations concerning the personal discourses underpinning an orientation to, and passion for, engineering index an underlying gender bias. However, institutional discourses concerning communication competencies, which include teamwork skills, unambiguously call for linguistic practices associated with a "feminine" communication or interactional style (not that this is enough). At a metaphorical level, according to Wagner and Wodak (2006), the concept of teamwork can be linked to gender because one aspect of being part of a successful team is perceived to "correspond... to the stereotypical female capability of caring for others and being involved in interpersonal relationships" (403).

Further with regard to metaphor, passion for engineering is clearly established by the male employers in the study as a criterion for employability. Interlocutors selfconstructed and co-constructed ambivalent professional identities (for Chandiya, Neela, and Feng) and unambivalent ones (for Kuljit and Thanh). Being "passionate about" engineering (E6; E7) or "really into" engineering (E6), "because it's in HERE" (E5), as the employers put it, was not personally claimed for in so many words by students whose professional identities were approved. Rather, it was demonstrated indirectly through the way they talked about "doing" engineering in their team projects, attempted communication strategies such as analogy, and/or further constructed what employers refer to as *a coherent picture of an engineer* through the synthesis of relevant personal interests and the interests of the institution. Thus their professional identities were talked into being. Gender is not indexed or performed explicitly in the construction of passion or the lack of it, but as discussed above, is indirectly made relevant through interdependent categories. It does not simply come down to the technical/non-technical divide, nor to those outside activities engaged in, concerns about which are useful surface indicators of underlying tensions in the gendered professions.

Implicit in these data seems to be the requirement, for women entering male-dominated professions, to acknowledge both assumptions about gender difference and the requirement for sameness, and to negotiate a subtle middle ground where they are not perceived as failed men, but as exceptionally acceptable women. This is exemplified by Kuljit (3), who articulates achievement, authority, and even competitiveness, but also hedges in a way that shows she is not trying to claim a "guy's" identity.

The analysis suggests that in relation to tensions caused by conflicting requirements for what engineering employers interpret as difference and sameness, a more extreme shift in engineering recruitment behaviour – effectively the "substitution of certain mental representations and event models with new ones" (Wagner and Wodak 2006: 403) – will have to occur before these tensions are resolved. One schema overdue for replacement is that professionalisation must entail assimilation to the culture (Dryburgh 1999), because assimilation, according to Powell et al. (2008), "reinforces rather than challenges the dominance of the majority group" (412). Yet emphasising the "special skills" that women bring into the workplace reinforces gender stereotypes (Nentwich 2006: 502), and, on the other hand, when competencies are treated as gender-neutral, equality is undermined (Dick and Nadin 2006: 482). We can at least agree with Faulkner's (2007) assertion that "improving the representation of women in engineering requires promoting more heterogeneous versions of gender as well as engineering" (331). Read cynically, though, a discourse of desired difference and a practice of imposed (masculine) homogeneity offers engineering employers maximal flexibility in their recruitment processes.

A promising area for future research would be a fuller exploration of competencies in line with Dick and Nadin's (2006) argument that "women's interests may be compromised by the way certain competencies are defined and interpreted" (482). Issues concerning participants' orientation to teamwork (articulated in employers' comments and reflected in the dataset) should be addressed in greater depth; it is not an explicitly gendered competency, but it adds a layer of complexity to the implicit criteria used to evaluate interviewees. This is particularly intriguing owing to the tension articulated by employers about the difference between teams at university, (which they construct as individualistic and competitive) in relation to teams in the workplace (whose members are by necessity mutually reliant). The importance of this issue in the construction of legitimate professional identities for engineering students cannot be overestimated in the ongoing and indirectly gender-related changes in organisational culture.

Transcription Conventions

Transcription element	Meaning
	Falling intonation
,	Rising intonation
?	High-rising terminal intonation
he said look we're in a mess	Italics = direct speech being quoted
STRESSful	Capital letters = heavily stressed syllable(s)
:::	Elongated sounds (the more elongated, the more ::)
>>>faster	Start of speeded-up speech
slower<<<	End of speeded-up speech
/	Phrase unit boundary
(.)	Pause of between half a second and a whole second
(1.0)	Pause of 1 second or longer, in seconds
=	Latching (no gap discernible between utterances)
wor-	Broken off word
[overlap	Interrupted or overlapping speech starts
XXXX	Indistinguishable word
((laughing))	Paralinguistic features
hh	Slight laugh on the outbreath

References

Bergvall, V.L. (1996) Constructing and enacting gender through discourse: Negotiating multiple roles as female engineering students. In V.L. Bergvall, J.M. Bing, and A.F. Freed (eds.), Rethinking language and gender research: Theory and practice. London: Longman, pp. 173-201.

Billig, M., S. Condor, D. Edwards, M. Crane, D. Middleton, and A. Radley (1988) *Ideological dilemmas*: A social psychology. London: Sage.

Bucholtz, M., and K. Hall (2005) Identity and interaction: A sociocultural linguistic approach. Discourse Studies 7.4-5: 585-614.

Bucholtz, M. (2004) Styles and stereotypes: The linguistic negotiation of identity among Laotian American youth. Pragmatics 14.2/3: 127-147.

Campbell, S., and C. Roberts (2007) Migration, ethnicity and competing discourses in the job interview: Synthesizing the institutional and personal. *Discourse & Society* 18.5: 243 - 271.

Champy, J. (1995) Re-engineering management: The mandate for new leadership. New York: Harper Business.

De Fina, A. (2003) *Identity in narrative: A study of immigrant discourse*. Amsterdam: John Benjamins Publishing Company.

Dick, P., and S. Nadin (2006) Reproducing gender inequalities? A critique of realist assumptions underpinning personnel selection research and practice. *Journal of Occupational & Organizational Psychology* 79.3: 481-498.

Dryburgh, H. (1999) Work hard, play hard: Women and professionalization in engineering: Adapting to the culture. *Gender and Society* 13.5: 664–682.

Eckert, P., and S. McConnell-Ginet (1992a) Communities of practice: Where language, gender and power all live. *Locating Power: Proceedings of the Second Berkeley Women and Language Conference*, April 4-5 1992, 89-99.

Eckert, P., and S. McConnell-Ginet (1992b) Think practically and look locally: Language and gender as community-based practice. *Annual Review of Anthropology* 21: 461-490.

Evetts, J. (1996) Gender and career in science and engineering. London: Taylor & Francis.

Fairclough, N. (2000) Discourse, social theory, and social research: The discourse of welfare reform. *Journal of Sociolinguistics* 4.2: 163–195.

Faulkner, W. (2007) 'Nuts and bolts and people': Gender-troubled engineering identities. *Social Studies of Science* 37.3: 331-356.

Fletcher, J.K. (1999) *Disappearing acts: Gender, power, and relational practice at work.* Massachusetts: MIT Press.

Gee, J., C. Lankshear, and G.A. Hull (1996) *The new work order: Behind the language of the new capitalism.* St. Leonards, N.S.W.: Allen & Unwin.

Gumperz, J. (1992) Interviewing in intercultural situations. In P. Drew, and J. Heritage (eds.), *Talk at work: Interaction in institutional settings*. Cambridge: Cambridge University Press, pp. 302-327.

Halford, S., and P. Leonard (2006) Negotiating gendered identities at work. Basingstoke: Macmillan.

Hawthorne, L. (1992) Migrant engineers' job interview performance: A cross cultural analysis. *Australian Review of Applied Linguistics* 15.2: 90-119.

He, A.W. (1995) Co-constructing institutional identities: The case of student counselees. *Research on Language and Social Interaction* 28.3: 213-231.

Holmes, J. (2006) Gendered talk at work. Constructing gender identity through workplace discourse. Malden MA: Blackwell.

Iedema, R. (2003) *Discourses of post-bureaucratic organization*. Amsterdam; Philadelphia: John Benjamins Publishing Company.

IPENZ (2010) Minority groups in education. Report prepared for the National Engineering Education Plan Project. Wellington: IPENZ. Available at

http://www.ipenz.org.nz/ipenz/Education_Career/Report_Minority_Groups_in_Engineering.pdf

IPENZ (2011) The retention and renewal of women in engineering: An IPENZ Plan to encourage diversity in and sustainability of the engineering profession. Wellington: IPENZ. Available at www.ipenz.org.nz/ipenz/downloads/RetentionRenewal_WIE.pdf

Jacoby, S., and E. Ochs (1995) Co-construction: An introduction. *Research on Language and Social Interaction* 28.3: 171-183.

Jagacinski, C.M. (1987) Engineering careers: Women in a male-dominated field. *Psychology of Women Quarterly* 11.1: 97-110.

Jagacinski, C.M., and W.K. LeBold (1981) A comparison of men and women undergraduate and professional engineers. Engineering Education 72.3: 213-220.

Jaffe, A. (ed.). (2009) Stance: Sociolinguistic perspectives. Oxford: Oxford University Press.

Jenkins, R. (2004) Social identity. London: Routledge.

Jones, D. (2004) Screwing diversity out of the workers? Reading diversity. Journal of Organizational Change 17.3: 281-291.

Kerekes, J.A. (2006) Winning an interviewer's trust in a gatekeeping encounter. Language in Society 35.1: 27-57.

Koller, V. (2004) Metaphor and gender in business media discourse: A critical cognitive study. Basingstoke: Palgrave Macmillan.

Küskü, F., M. Özbilgin, and L. Özkale (2007) Against the tide: Gendered prejudice and disadvantage in engineering. Gender, Work & Organization 14.2: 109-129.

MacLachlan, M., S. Forsyth, and L. Cassells (1992) Job winning in New Zealand. Auckland, N.Z.: Penguin Books.

McCarthy, M. (2003) Talking back: 'Small' interactional response tokens in everyday conversation. Research on Language and Social Interaction 36.1: 33-63.

McElhinny, B. (1995) Challenging hegemonic masculinities: Female and male police officers handling domestic violence. In K. Hall, and M. Bucholtz (eds.), Gender articulated: Language and the socially constructed self. New York: Routledge, pp. 217-243.

Nentwich, J.C. (2006) Changing gender: The discursive construction of equal opportunities. Gender, Work & Organization 13.6: 499-521.

Oakley, B., R.M. Felder, R. Brent, and I. Elhajj (2004) Turning student groups into effective teams. Journal of Student Centered Learning 2.1: 9-34.

Ochs, E. (1993) Constructing social identity: A language socialization perspective. Research on Language and Social Interaction 26.3: 287–306.

Ozbilgin, M.F., and D. Woodward (2004) Belonging and otherness: Sex equality in banking in Turkey and Britain. Gender, Work and Organization 11.6: 668-688.

Pawley, A.L. (2008, July) Work in progress: Engineering identity markers in faculty members. Paper presented at the Research in Engineering Education Symposium. Davos, Switzerland.

Powell, A., B. Bagilhole, and A. Dainty (2009) Women engineers do and undo gender: Consequences for gender equality. Gender, Work & Organization 16.4: 411–428.

Reissner-Roubicek, S. (2010) Communicative strategies in the behavioural job interview: The influence of discourse norms on graduate recruitment. Unpublished Ph.D. dissertation, The University of Auckland.

Roberts, C., and S. Campbell (2005) Fitting stories into boxes: Rhetorical and textual constraints on candidates' performances in British job interviews. Journal of Applied Linguistics 2.1: 45–73.

Roberts, C., and S. Campbell (2006) Talk on trial: Job interviews, language and ethnicity. DWP Research Report No. 344.

Available at http://statistics.dwp.gov.uk/asd/asd5/rports2005-2006/rrep344.pdf

Roberts, C., and S. Sarangi (1999) Hybridity in gatekeeping discourse: Issues of practical relevance for the researcher. In S. Sarangi, and C. Roberts (eds.), *Talk, work and institutional order: Discourse in medical, mediation and management settings.* Berlin: Mouton de Gruyter, pp. 473-503.

Robinson, J.G., and J.S. McIllwee (1991) Men, women, and the culture of engineering. *Sociological Ouarterly* 32.3: 403–421.

Sharp, R., S. Franzway, J. Mills, and J. Gill (2011) Flawed policy, failed politics? Challenging the sexual politics of managing diversity in engineering organizations. *Gender, Work & Organization*. Article first published online: 20 January, 2011.

Shepherd, D.M., and J.K. Pringle (2004) Resistance to organizational culture change: A gendered analysis. In R. Thomas, A. J. Mills, and J. Helms Mills (eds.), *Identity politics at work: Resisting gender, gendering resistance*. Oxford/New York: Routledge.

Stonyer, H. (2002) Making engineering students - making women: The discursive context of engineering education. *International Journal of Engineering Education, Special Issue on Women in Engineering* 18.4: 392-399.

Stubbe, M., C. Lane, J. Hilder, E. Vine, B. Vine, and M. Marra (2003) Multiple discourse analyses of a workplace interaction. *Discourse Studies* 5.3: 351-388.

Takruri-Rizk, H., K. Jensen, and K. Booth (2006) Experiences of engineering students: Is Gender an issue? Paper presented at the *Education in a Changing Environment Conference*, University of Salford. Available at

http://www.ece.salford.ac.uk/proceedings/papers/ht_06.rtf

Tonso, K. (2007) On the outskirts of engineering: Learning identity, gender and power via engineering practice. Rotterdam: Sense Publishers.

The University of Auckland. (2011, July 12) Engineering rewarding for women. Retrieved from http://www.auckland.ac.nz/uoa/home/template/news_item.jsp?cid=405333

Young, A., and D. Hurlic (2007) Gender enactment at work: The importance of gender and gender-related behavior to person-organizational fit and career decisions. *Journal of Managerial Psychology* 22: 2: 168-187.

Van de Mieroop, D. (2007) The complementarity of two identities and two approaches: Quantitative and qualitative analyses of institutional and professional identity. *Journal of Pragmatics* 39.6: 1120-1142.

Wagner, I., and R. Wodak (2006) Performing success: Identifying strategies of self-presentation in women's biographical narratives. *Discourse & Society* 17.3: 385-411.