Chapter 2 – The Problem with the Label 'Women in Tech'

Being a 'woman in tech' you constantly have a target on your back and have to prove you are more than the label.

Rebecca, f, CEO and Angel-Investor, UK

The focus of this chapter is on the ways in which women are discursively constructed in the context of professional spaces in tech clusters. I consider how the label 'women in tech' (WiT) is dominated by the masculine perspective of tech work and characterised by how individuals perform 'identity work'. During the study it became apparent that the WiT label was *already* being used as shorthand for a problem very much with a name. All of the participants shared that they had a troubled relationship with the idealisation of the term and the implied gender difference. This casual use of the label, as I go on to argue, is significant. To give some context, worldwide Google searches for 'women in tech' varied over the period of the study (December 2010 – August 2019) from a score of 13 to 100. Google indexes data from 0 to 100, where 100 is representative of the maximum search interest for the time and location selected. This means that the term 'women in tech', at the peak of interest in it in March 2019, had the highest level of search interest worldwide. While notable as a Google search term, the visibility and dysfunction of the new problems at play through the WiT label are more complex and woven through the spine of this book, hence its place in this chapter.

The chapter is structured as follows: first, under the heading "The problem: The dream condition ... and the reality', I reflect on the 'problem': the manner in which WiT is divisive, seen as both empowering yet also cast through discourses intended to disparage women's individual and collective worth. I also consider the manner in which the WiT label was formed out of a popular media image, and how it limits women's opportunity to get outside of the stereotype determined by its use. In the remaining sections of the chapter I draw on the primary data: in "The straitjacket of WiT label as a status characteristic', I introduce how women's social constructions of gender difference in professional work spaces are constrained by the label, and demonstrate how it can be analysed as a 'status characteristic'. In the next section, 'How women modify the WiT label as a form of "identity work", I consider how tech workers respond to the label as 'identity work'. In the final part, "'WiT": Enabling sexism?', I address how the WiT label is seen to heighten, even enable, a sexism in tech clusters that fits with a particular type of masculine behaviour characteristic of those spaces.

The problem: The dream condition ... and the reality

During my undergraduate days at Sussex University studying for an English Literature degree in the School of English and American Studies, I discovered Betty Friedan's Feminine Mystique ([1963] 2001)). Friedan wrote about the 'problem that has no name' to characterise the contrast and tension between the image of the idealised, happy, suburban homemaker as the dream condition of 1960s womanhood, set against the reality of depression, isolation and economic dependency on her husband. Friedan's own unhappiness ran deep, and she made essential links between this and the ideal image (the mystique) of women as mothers and homemakers compared with the reality of the problem: 'a sense of dissatisfaction' as the suburban wife struggles alone ([1963] Friedan, 2001, p. 15). In framing such a dichotomy of gendered difference, Friedan showed how society valued masculine ideals over equal gender rights and women's power to act. Friedan has been profoundly influential in this study, particularly in its recognising and being able to speak about the tension between the images of pioneering technological innovation and the prestige of career opportunities in tech – the 'dream condition' – and the reality of the dichotomy of gender difference - how 'tech firms are in conflict with the idealised tech worker'. (Alfrey & Twine, 2017, p. 31). While the opportunities for women today are markedly different from those that existed in the context of Friedan's concern about the conditions of the 1960s homemaker, the cultural dichotomisation of gender persists in very damaging ways. Painting with broad brushstrokes, today's women are coloured by a dominant masculine tech culture that intensively, sometimes aggressively, ensures that the message of difference (rather than one of equality) is embedded in understandings of the label 'women in tech'. Moreover, it is the use of such a label that firmly establishes 'women', rather than the barriers they face, as the problem. Thus, the reality of work in the tech sector is very different from the dream condition of the innovation and fast-paced environment of technology firms.

Recent attention to the status of women's work and career progression has raised significant questions about the connections between masculine ideology and how women working in male-dominated industries can raise awareness about misogyny and sexism (Jones & Pringle, 2015; Mendes et al., 2019; Newcomer, Clark, Button, & Weiland, 2018). The emerging global popularity of the WiT label has helped to bring some of these problems into the public discourse, and yet it continues to be defined in such a way as to affirm the collective identity of women in the sector as being somehow 'other'. In this regard, the iterative use of the WiT label has been popularised in three main ways:

- 1. By **women's tech groups**, to advocate for and advance the status of women in the industry. These groups became more visible around the mid-2000s.
- 2. By **the popular media**, using it in news and press articles to describe the state of the tech industry and critique the lack of diversity. Following speculation about the influence of computers and other home technology, access to education to overcome the digital divide, and

the first generation 'born digital', popular press articles using the label 'women in tech' were common from late 2000s.

3. In government and industry reports pointing out *the problem*. In the UK "The Equality Strategy – Building a Fairer Britain' report detailed the gender pay gap between 'women and men in science, engineering and technology' from 2010 (Revenue & Customs, 2010); and the United Nations Gender, Science and Technology report (United Nations, 2010) was launched in September 2010, setting out the role of the (then new) Commission on the Status of Women (CSW) for 2010–2014 and commitments on women's and girl's access to and participation in science and technology.

Clear evidence about the lack of diversity in tech is not new and has received attention from many scholars – for example, anticipating a new set of cultural relationships, pleasure and embodiment (Haraway, 1994); deconstructing dualist thinking (Kenny & Donnelly, 2019); speculating about gendered skills and knowledge (Wajcman, 2007); and rendering new boundaries of digital work and interactions (Richardson, 2018). Where we start to see renewed interest in the status of women and the lack of diversity in the sector is with the rapid rise of social media platforms, which are continuing to expand the technical and skills requirements of working in tech in response to agile software development alongside traditional technology hardware production (Duffy, 2016; Duffy & Pruchniewska, 2017; Duffy & Schwartz, 2018). This might reinforce the pigeonholing of women into areas requiring 'soft skills" (e.g. communication, problem-solving and creativity), which are seen as distinct from the 'hard' technical skills expected of men (a critique that forms much of the discussion in Chapter 4). What is evident from the popularity of the WiT label is that the problem of the lack of diversity and equality in tech has a name, and her name is "woman".

The label 'WiT' has been in widespread global use since 2010, during a period of renewed global investment in the tech economy, the rise of women-only tech groups, and innovations with digital social platforms and advanced smart mobile apps opening up a new consumer economy and new career opportunities in tech (Kenney & Zysman, 2016; Richardson, 2018). It is difficult to identify a specific date for the emergence of WiT as a recognised term; many different trajectories and points of origin are responsible for its creation and the manner in which it has become popular. Nevertheless, there is a clear lineage that can be traced through press articles from around the mid-late 2000s around the same time WiT groups and online communities were taking hold. The earliest iterations of the label are found in business index reports about tech businesses with women directors or CEOs (e.g. (Kapin, 2008)), reports on the use of women's bodies in game design (TechNewsWorld, 2008) and access to pornographic content showcasing 'women of tech' (Reuters, 2008). Much of the momentum that initiated the term in the popular press came from the astute observations of, often female, journalists pointing out the widening valley of gender inequality. Take, for example, Claudia Deutsch's (2005) *New York Times* article

'Behind the Exodus of Executive Women: Boredom', which was one of the first press articles to characterise the WiT debate. Deutsch's observations form an early critique of accountability - of who is to blame for women leaving tech. Four years later, Chris Dannen's interview with Adriana Gascoigne, founder of the US-based Girls in Tech network, foregrounds the label 'WiT' to ask: 'What's it like to be a girl in tech?' (emphasis added, Dannen, 2009). The context that is voiced by Gascoigne is now all too familiar - 'Women just engage differently and present differently' - hardening the tech divide of old (Dannen, 2009). Similar stories from the UK report on the new tech business opportunities for women. Writing in the Financial Times, Sarah Mishkin (2014) announces that, as WiT, 'More women are winning backing for start-ups by focusing on tricky areas such as fashion and beauty' (2014). 'Gender poses no barrier', according to the China Daily in an article about Yan Ao'shuang, a woman in tech and deputy general director of the newly formed Beijing Academy of Science and Technology, 'and the only woman among the decision-makers at the academy' (Nan, 2003). While many articles have been written communicating the label 'WiT', these specific reports were bought into discussions by study participants as examples of their first encounter with the term. In the lives of the participants, such articles represented moments of 'inspiration' (Analin, f, Programmer, UK), support for 'how new business ideas formed' (Erica, f, Digital Developer, US), and 'strong [female] leadership' (Song, f, YouTube Actress, China).

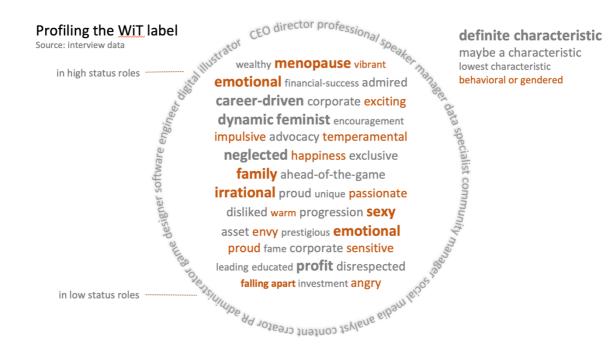
Out of these origins, the WiT label provides an essential pivot around which to give much-needed attention to lack of diversity and to gendered experiences in the tech sector. The label also forms a convenient marketing and PR message, including as part of press coverage, through which individuals, organisations and governments can signpost a commitment to change. Conspicuous examples of diversity and the attention to women in tech can be found in the annual diversity reports of high-tech organisations, such as Microsoft stating the 'transformative power of diversity and inclusion' (McIntyre, 2018); Google's desire to 'create a more inclusive culture' ("Diversity | Google," 2019); and Apple seeking to 'draw on differences in who we are, what we've experienced, and how we think' (Apple, 2019). The past decade has seen a rapid escalation of the separateness of women's professional experiences from those of men in tech – an industry that today accounts for 9.2%, or more than \$1.6trillion, of the total economic activity in the US (Comptia, 2019) and 3.0% of total employment across the EU (Eurostat, 2018); and in Asia has received over \$106billion investment in 2012-2017 (CBInsights, 2018). In this global context, women are reported to make up just a third of professionals in the tech industry (Wong, 2019) and to face significant challenges concerning pay equality and access to high-level positions (Abendroth, Melzer, Kalev, & Tomaskovic-Devey, 2017). The rise in visibility of an undervalued group allows us insight into the mechanisms of exclusion and inclusion and how they operate within the tech workforce, and continues to gain attention from the media. This, in part, explains why the WiT label is such a critical signifier, and the importance of considering the ways in which it is used to distinguish women's and men's ability in order to contextualise power and performance in the industry.

The straitjacket of the WiT label as a status characteristic

There is growing evidence that women suffer additional disadvantages in the workplace depending on how strongly aligned they are to other roles and identities – being distinguished as 'mothers' being the classic point of discrimination (Budig, Misra, & Boeckmann, 2012; Correll, Benard, & Paik, 2007). In a study in the United States about women's disadvantage in the workplace, Ridgeway and Correll analyse motherhood as a 'status characteristic' to underscore the 'perceived conflicts between the cultural definitions of the good mother and the ideal worker'. The authors argue that the effect is to 'make motherhood seem more directly relevant to workplace performance' (Ridgeway & Correll, 2004, p. 683). Here, the authors regard motherhood as 'form[ing] an element in the cultural stereotypes of the people delineated by the social distinction (e.g., whites, nonwhites; men, women; mothers, non-mothers)' (Ridgeway & Correll, 2004, p. 684). Inspired by Ridgeway and Correll's work, we can also interpret the WiT label as an equivalent status characteristic, in that it is a widely-shared (global) cultural marker that ascribes a different status and set of competencies to the category of person it delineates. In this regard, I find the metaphor of the straitjacket fitting to describe how the WiT label severely confines, constricts and disorientates women. The core design is of one category (women) with inferior status and gender competence to that of the prevailing 'norm' of white men (Alfrey & Twine, 2017; S. Han, Cui, Chen, & Fu, 2019; Valentine et al., 2014). To explore the status characteristic of the WiT label - the kinds of discriminatory attitudes that result from the stereotypical use of the term – during interviews, participants were asked about how the label helped to define professional roles within tech clusters. Each participant was asked about the stereotypic associations with WiT and, for comparison, the equivalent 'men in tech' (MiT). The results are separated into profiling the WiT label for women (Figure 2.1) and profiling the MiT label for men (Figure 2.2) and demonstrate the prevalent use of symbolic stereotypes and the tendency towards discriminatory judgement. Respondents categorised characteristics, including behavioural or gendered indicators (shown in orange), as lowest, maybe or definite, Around the circumference of each circle are the roles most recurrently associated with either the WiT or MiT stereotypes.

INSERT FIGURE 2.1 ABOUT HERE

Figure 2.1: Attitudes and behaviours formed around the use of the WiT label in association with women, grouped by higher- or lower-ranked professional groups



In Figure 2.1, profiling the WiT label in association with female professionals, the perception is overwhelmingly gendered and behavioural (characteristics shown in orange). The status characteristic is typified by gendered roles and responsibilities (e.g. family) and behavioural attributes that tend to be regarded as negative (e.g. emotional, angry, envy and irrational). As we move from top to bottom, the tone of the status characteristic takes on more behavioural and gendered dimensions. The interpretation is that women in low-status roles (shown around the circumference of the bottom half of the circle) are lacking in competency and defined by their emotions. Typical roles in this part of the circle include community manager, social media analysis, content creator, PR and administrator. In the upper half of the circle, indicative of women with high-status roles, the most definite characteristic is 'menopause', closely aligned with the repetition of 'emotional', and new dimensions include 'career-driven', 'dynamic' and 'feminist'. Compared with the attributes ascribed to the women in low-status roles, those ascribed to high-status women include more active dimensions. Interestingly, 'menopause' points to a definitive age categorisation for women of high status. Typical roles in this part of the circle include CEO, director, professional speaker, digital illustrator, software engineer, game designer and data specialist.

INSERT FIGURE 2.2 ABOUT HERE

Figure 2.2: Showing the representation of attitudes and behaviours formed around the use of the MiT label in association with men, grouped by higher- or lower-ranked professional groups.

Profiling the MiT label

Source: interview data

in high status roles -

el eneineer CEO director evangelist eneineer educated leading valued important connected powerful successful wealthy career-driven corporate dominant exclusive authority appreciated financial study specialist Success dynamic expert advocate investment shark powerhouse encouragement energetic prosperous sharp progression asset liked commercial respected impressive esteem competent engineer assertive experienced skillful pro hotshot independent robust vigorous capable influential forceful data commanding chief

definite characteristic maybe a characteristic lowest characteristic behavioral or gendered

in low status roles ---

In Figure 2.2, profiling the equivalent MiT label in association with male professionals, the perception is much less behavioural or gendered. In the high-status roles (again, around the circumference of the upper half of the circle) definite characteristics are defined by active dimensions (e.g. leading, connected, important, dominant, success and wealthy). Only one behavioural or gendered dimension forms part of the status characteristic here: 'dynamic'. Typical roles in this part of the circle include CEO, director, evangelist, architect, manager, development lead, corporate specialist, enterprise and design. For low-status professional roles (the lower half of the circle) there are five gendered and behavioural dimensions. This repeats the same pattern in profiling seen for women professionals, whereby professionals with lower-status roles are associated more with gendered and behavioural attributes. Typical roles in this part of the circle include consultant, developer, programmer, fintech, AI, operations and strategy.

Drawing on Figures 2.1 and 2.2 although this is only one way of viewing the complex dimensions of the WiT classification, the analysis here suggests that lower-ranked professionals are aligned more with negative behavioural attributes that are more likely to be gendered. This is true of both men and women, but far more so in the case of women tech professionals.

Out of the set of behaviours and stereotypes captured in Figures 2.1 and 2.2, I propose three important insights:

There is a universal recognition of the status characteristic in the use of the WiT label, forming different expectations about women's and men's professional situation; specifically, the WiT label is likely to create universal disadvantages for women professionals compared with men. There is good evidence to support this proposition in regard to the priming of gender stereotypes in ICT and STEM at a global level (Botella et al., 2019; Kenny & Donnelly, 2019);

- Status biases define how the WiT label will shape expectations of other workers even if it is not
 relevant to the professional role or responsibilities at hand. O'Connor et al. have shown, for
 instance, bias in the relational worth attached to how 'women do femininities' compared with the
 perceived commitment of men in 'masculinist STEM careers' (2018, p. 312);
- Third, tech workers will weight professional competencies and broader performance expectations against the effect of the WiT label. To illustrate this point, Heilman (2001) has shown how performance expectations for a woman at the upper levels of an organisation will be affected by gender bias the ways in which evaluations discriminate against her in relation to both her low status as a woman and her perceived competence compared with that of men. As shown in Figure 2.1, a woman closest to the bottom of the circle will be the most negatively affected by the combination of her association with the WiT label and her low professional status: 'falling apart' and 'irrational'.

Drawing on Figures 2.1 and 2.2 I have intentionally used the WiT label as part of a wider construction of attitudes to the status and position of workers in tech clusters. Specifically, the valley between the WiT label and the equivalent MiT, and 'men in tech' who hold a high professional status elicit the most favourable attributes (e.g. important) and conditions (e.g. wealthy).

Given that 'dominant' forms a definitive characteristic for high-status men, we might (given the context of this study) ask to what extent a negative outcome is implicit in this characteristic (e.g. in the form of dominance over women's professional status). In contrast, the behavioural and gendered stereotypes encapsulated by the WiT label combined with low professional status are the most negative (e.g. irrational, emotional). The low-status roles for men show an association of a more positive set of attributes with specific roles and responsibilities (e.g. engineer, independent, influential, skilful). These responses give a sense of the patterns of stereotypical traits, distinct attitudes and related prejudices specific to gender that are present in tech clusters. Grounded in the status characteristics of the WiT label, this profiling identifies underlying behavioural and gendered dimensions to women's and men's professional status (at the top as 'menopause' vs 'leading' and at the bottom 'irrational' vs 'respected'); the roots of these distinctions in stereotypes (at the top 'feminist' vs 'wealthy' and at the bottom 'disliked' vs 'influential'); and the corresponding discrete emotions (e.g. assertive, angry). As an analytical strategy, this approach underscores how the WiT label is modified by attitudes about women's and men's professional status and the stereotypes that prevail. This framework helps to explain the identity work in the next section.

How women modify the WiT label as a form of 'identity work'

Since I have made the case that the WiT label can usually be analysed as a status characteristic, the assumption is that those identified as WiT form a group with a different set of competencies to those of

other tech professionals. Yet, there is another means by which the WiT label may become notable as a status characteristic. In this interpretation, the WiT label is treated as liberating, and a mechanism through which women can distance themselves from the stereotype of tech male identity, from invisibility, from the bias of other women, and as a form of activism (of which more in Chapter 5). For all this, the same stereotypes and prejudices remain to reproduce 'the problem' around women's gender difference, with a powerful impact on job roles and performance and on suitability for long-term high-level careers. The evidence analysed in this study treats the label 'WiT' as forming part of a wider set of messages about women's roles and professions to indicate how they are being singled out by their gender and by expectations about family-orientated dependencies. By this definition, of course, it is the case that not all women tech workers will have such dependencies, though since it is the expectation that women will bear the primary family responsibilities, the cultural stereotypes of the WiT label are closely aligned to stereotypes of women (especially motherhood) in general (Ridgeway & Correll, 2004). As an analytical strategy it might be possible to view this alignment as part of a more extreme and literal interpretation of the general stereotype about women's roles, and to view bias inherent to the WiT label as simply an extension of prejudice against women in the workplace. I think this interpretation gets us most of the way to understanding how the straitjacket of the WiT label has become tightened. However, we also need to recognise how the label is fashioned in a way that is analytically distinct from simply a gender category, to consider how the straitjacket restricts status beyond being identified as a woman or man.

Signifiers and classifications of the other workers themselves deeply affected the experiences of the participants interviewed. While the WiT label had a primary role in shaping perceptions, other turns of phrase were equally impactful in their casual sexism: from 'grinding in', a term used in a mixed focus group in Silicon Valley to describe the various (aggressive) ways in which new workers faced a period of probation and were expected to network, to 'hook-up', used to refer to the successful acquisition of a new client. Additional terminology from the UK included the phrase 'to skirt out', which characterised 'the way women act differently' at tech networking or pitch events. Interviewees from East Asia used the phrase 'cute', which was 'dedicated to girls in tech'. Taken together these terms range from innocent satire to the heavily gendered and sexually laden. One male Angel Investor speaking from Silicon Valley emphasised the behavioural aspects of his role:

You go through periods of high energy activity, lots of *grinding in* to build your reputation; usually, late at night, beers in hand, and something easy-on-the-eyes for sensual entertainment. Then it slows down, and you're waiting around to see who's forming alliances [...] You don't see many women at that level. (Alnus, m, Angel Investor, US)

The perception above, almost tauntingly provocative, was not uncommon. In this context, despite the more malign characteristics of the WiT label (Figures 2.1 and 2.2), clearly the emphasis of difference has a

place in tech. To mitigate such chauvinism, some women tech professionals had developed ways to make the WiT label fit with their identity. A female entrepreneur based in London shared that:

[the WiT label] has helped my business. Some of the pitches I have been invited along to have been because I fit with calls for 'diversity pledges.' A lot of those negotiations are built around supporting women in tech. Certain things in tech are built specifically so women can achieve them. Again, that's a label thing. (Betula, f, Entrepreneur, UK)

Further, when involved in start-up pitch competitions, efforts were made to ensure the whole process could be made more accessible to candidates (not only women) who were just starting out:

Certain things in the pitch process we set up, specifically, to be more open and fairer to women. Again, that's an experience thing. If you've got *anyone* setting up a start-up in tech, they're going to benefit from the same terms. (Cassia, f, Tech Evangelist, UK)

In such situations, the WiT signposting created opportunities for women to shape and negotiate their professional identity, resulting in a more 'straightforward' and, as one female CEO stated, 'courteous and trustworthy' set of experiences. However, these kinds of interventions under the label 'WiT' were only put in place by those in a position of influence or during a period when new tech communities were being built. This meant that the levels of support were far from self-sustaining – and in some cases had the opposite effect to that intended, in that gender difference was reinforced by the processes. The resulting effect, as a Game Developer from Shanghai expressed, is that: 'Girls in technology are treated differently' (f, East Asia).

After nearly a decade of talking about labels and context, I came to recognise the behaviour of women shaping and negotiating their professional identity, and the many complexities behind it, as a form of 'identity work'. Such modified behaviour is not unique to the tech sector – though it is distinct for other reasons concerning divisions between types of work, roles and responsibilities, valued and devalued work, and gender-segregated employment patterns. In other male-dominated industries, similar patterns of behaviour emerge. By way of example, Robin Leidner's study of the service industry (serving hamburgers) and insurance selling reinforces the cultural valuation of the different identity work 'considered appropriate to each gender' in each setting (1991, p. 154). More recently, Janine Swail and Susan Marlow's article analysing entrepreneurship reveals tensions with the feminine identities of 'wife' and 'mother' that prompt women 'to undertake specific forms of identity work to bridge the gap between femininity, legitimacy and entrepreneurship.' (2018, p. 256). Rydzik and Ellis-Vowles, writing about the brewing industry, note how women align themselves with the masculine brewster identity – flexing biceps and satirising strength – to enable a shared sense of belonging and recognition for overall competency in the

job (2018, p. 10). In this context, identity work forms part of often subtle and seldom acknowledged practices that 'communicate and constitute gender in paid work settings' (Martin, 2006, p. 254). Such practices can allow individuals to redefine the cultural facets of their role and image. However, much of this identity work amplifies traditional boundaries separating women's and men's roles and their professional expertise, and thus it undermines diversity.

In this study, there are two equivalent forms of identity work:

- first, work to emphasise more typically masculine qualities in order to avoid conflict or differential treatment, 'so you are one of the bros';
- and second, work to highlight and align with the characteristics associated with the WiT label in order to – as one coder from Beijing noted – 'feel positive with your "sisters".

During an online focus group with women tech workers speaking from Hsinchu's Science Park in Taiwan, the group considered their collective identity and the effort (work) they put into reframing stereotypes around the label 'WiT':

I think that having more girls working [here] challenges what the stereotype is of the man in tech. (Hee, f, Data Analyst).

I'm not bothered by all the men. I'm quite strong and independent. I've always done sports and it means that I am strong. (Diu, f, Marketing and Innovation).

It's important that you learn from your role models. Like you can't be shy, you speak up for you want. I think that I would like to have more time to change the perception of what women do [here]. I would be less afraid to change my mind and seek advice from others to make things better. (Li, f, Project Manager)

When I came here, I found that if I started to behave like the men, then I would get more respect. Act like the most senior person in the room. Even though gender discrimination is challenging, I try not to take this personally.' (Hopea, f, Business Development).

Focus group, East Asia.

Note the juxtaposition of the terms 'girls' and 'men'. The very existence of 'girls in tech', to borrow the group's term, set against the category 'men', entails gender bias and is telling of how tech clusters sustain that bias. Here, I am reminded of Wajcman's observation on opportunities for technology being seen traditionally in terms of 'male machines rather than female fabrics' (2006, p. 8). In the above exchange, Diu talks about how she has adopted qualities of independence, strength and endurance, undertaking identity work that reproduces the prototypical tech professional as male. Diu's identity work takes on stereotypically masculine elements (the first form of identity work outlined above); such behaviour suggests that for some women defining their job as masculine allows them to feel 'in control of their interactions and prospects'. Compared with Diu, Li frames her behaviour and conducts her identity work

in a slightly different way. Like Diu, she is clearly singling out her professional competence through perceived gendered norms, but in the performance of her identity work Li is also interested in changing the way that women are perceived more broadly. This change in perception is also a key concern for Hopea and Hee. By noting the features of strength and ability, the group expresses pleasure in their image as 'girls in tech', characterised in the same manner as the WiT tag. Through this co-produced image, these women have developed a unique discourse in which they feel they can comfortably unburden themselves of the 'men's ways of doing things.' (West & Zimmerman, 1987).

Given that this involves identity formation that conforms to and confirms gender difference, we might take issue with how liberating such identity work is and ask questions about the impact upon future generations of women working in tech clusters. In essence, if what these women are responding to are masculine styles of working then we are no further along towards eliminating gender discrimination against women. Indeed, a tension throughout this research was whether the problem lay in the perception of men's domination, or whether the culture and spaces of tech are in some sense inherently patriarchal. Adopting qualities associated with masculinity was a behaviour used by some women in this study to show they could 'share the same status as men' (Constance, f, Digital Film Director, UK) and, in doing so, loosen the straitjacket of the WiT label. In some circles, women expressed pride in their personal affiliation with women's tech networks and the heightened visibility of the WiT label, sharing how they 'felt safe' to emphasise their 'femininity' (aligning with the second form of identity work outlined above). When speaking at tech events, the WiT label signalled their competence in a traditionally male space and their professional experience. In this way, the label can serve to announce and underscore a positive professional identity, demonstrate values and propose new attitudes. However, re-emphasising being or feeling 'feminine' in such spaces underscores the gender divide that is so pervasive, and seemingly inescapable, throughout tech culture.

WiT': Enabling sexism?

One key aspect of the WiT label is that it is formed partly in response to sexist attitudes. In an interview with a woman CEO in Silicon Valley at the height of the #everydaysexism project in 2016, Linda talked about how she downplayed experiences of everyday sexism as 'just part of being a woman in tech', along with the undesired attention that her gender attracted: 'I dress like a man, so I don't get accused of being the wife, secretary or a hooker' (again emphasising the point made in the previous section: equating being successful or good at the job, or judged capable of being so, with being 'like a man'). She later reflected, 'I think that it takes a unique woman to get to where I am and be able to enjoy where you've got to. [...] it's refreshing to break the norm, break through beyond being a label.' (Linda , f, CEO, US). Talking about the public perception of the WiT label, a focus group held in London involving both female and male programmers contended that it was not just gender but also categories of 'technology' that caused tensions and 'enabled sexism [...] because of attitudes' held about the label:

I think that if you're a woman coming into tech and you play the WiT card to get attention, it's not about how experienced or intelligent you are, it's only about your gender. (Samuel, m, Programmer).

Not just women though is it, men play the same card. You know the way some organisations play up the number of women on the payroll. Nothing about their expertise or capabilities, everything about their gender. (Franklin, m, Music Technologist and Programmer).

I'm quite surprised by how sexist I find the WiT label. I expect to be treated equally and to walk into the office and be recognised for my skills [...] A new client came to the office to walk through the next project. After meeting with him for an hour he asked 'Do you know when's the meeting going to start? When will I get to speak to the programmer then?' 'Well it's me who is looking after your project, it's me you are going to be working with.' I had an email from him the next day asking me out saying 'I was so sexy'. (Lucille, f, Programmer).

I feel that I am in a privileged position, I mean as a programmer. So, you don't get many programmers at my level who are women and I've found that really helps me. So, I get asked a lot about my experience and I always get a good reaction 'oh you can do that, oh I hadn't expected that'. (Andrea, f, Programmer).

Focus group, London, UK.

The group also talked about 'building up stamina' and ways to manage others to counter negative reactions. Lucille's and Andrea's experience is illustrative of techniques used to discursively 'disarm' unwanted attention focused on them due to their gender. Samuel's comment underscores the lack of movement away from gendered divisions. In parallel, where once masculinity was critiqued as embedded in the technology itself (Game & Pringle, 1983; McNeil, 1998; Phillips & Cockburn, 1983), today one might counter that those tech organisations using the WiT label should be exposed to this critique, in that the label continues to reinforce traditional conflicting structures and norms.

Many of the sexist anecdotes shared in the course of this research reinforce the multiplicity of ways in which the WiT label is limiting – from the shaggy-dog story about the investor who arrived late at a restaurant for his pitch meeting who later found out the 'wife' he ignored for the whole meal was the CEO he had been 'so keen to meet' with her male PA, to the alarmingly offhand account of the woman who changed jobs six times in one year to escape 'offensive behaviour from an old business partner', set in the context of this being 'pretty common behaviour in the Valley'. These stories, of which there were enough to take up another book, accentuate the collective contribution of masculine tech cultural stereotypes as a continued obstruction to equality and divider of women and men in tech. One intended role of the WiT label is to supersede sexist attitudes and the demarcation of certain job experiences as 'male', so that, as one Community Manager in Taiwan put it 'As a girl, you can follow your dreams and realise your dream work.' It is also worth noting that women's first step into tech typically followed an

unfixed and non-linear route, often after another career, having a family, preparation in another sector, or coming out of education with qualifications in non-computational subjects (in this study, 17 participants came from non-tech backgrounds). This co-construction of the journey into tech reinforced the need for collective identity in the sector and, in that context, the ability to gain some elements of comfort from wearing the WiT straitjacket.

You don't get bad women in tech. I mean, that, of course, you get people that you don't like, but really every woman I've met is damn good at her job. That's because you constantly have to justify your position, do double the work to get half as far, face rejection constantly, put up with the banter and just get over being a woman.

(Gail, f, Director for Charity Start-Up, US).

Gail's experience takes into account the transformative effects of seeking to attract more women into the tech sector - which form part of how she constructs her identity and sees skills and knowledge in other women. An aspect of this effect is also the reframing of the discourse around the WiT label in ways that move beyond gender. Here WiT functions to communicate distinctiveness to male peers, to establish a professional identity at the same level and confidence in skilled roles (e.g. technical knowledge). However, the major limitation is the way the WiT label can be misinterpreted or actively resisted, and invites questions specific to the extension of traditionally female roles. In this way, the seemingly limitless opportunities opening up for women to work in tech are at the same time limited to certain spaces, roles and responsibilities, and are formed in ways that circle around the distinctive masculine culture. The evidence above shows how the status attached to the WiT label comes from the very restricted competences of tech women who are commonly recognised as working in low-level administration positions, relegated to being the 'sexy' tech woman, or not considered as 'career-driven' because they have other roles and dependencies outside the workplace (Figures 2.1 and 2.2). This message is clearly damaging, implying a lesser commitment to work and re-emphasising Crittenden's (2002) and others' critiques of prejudice against women who are seen to have other responsibilities that impact negatively on their careers. But in some cases, the extent of the cultural stereotypes associated with the WiT label enabled women to celebrate their greater sense of difference:

I use my tech expertise to get men over the disappointment of my gender' (Ceilia, f, digital maker, UK)

'I might be a Woman in tech, but that doesn't mean that I want to be known as a Woman in tech' (Nina, f, software engineer, US)

'oh, well men, I think, expect us to conform to their parameters, whereas I'm thinking what part of the chauvinism I can kick next?' (Lyn, f, app developer, US)

'I am proud of being a high-tech girl' (Biyu, f, engineer, China)

To highlight their professional status, each of these women forged a distinctive methodology for 'dealing with' the expectations and reactions of men. This was achieved at both individual and collective levels through repurposing (through identity work, as discussed above) and making new claims of the WiT label.

Conclusion

The title and focus of this chapter imply an etymology of the WiT label. While the label is well known in popular culture and academic literature and it seems likely that it is here to stay, it has a complex history, set against the wider context of feminist debates and labels on gender and technology, and alongside critical analysis of the introduction of women into and their contribution to male-dominated industries. The dawn of the digital age and the opportunity to shift the focus of identity away from physical social relationships has failed to get us beyond the embedded character of patriarchal structures, returning us to a very essentialist view of tech – one that Wajcman is adroitly critical of, drawing on the 'historical variability and plurality of the categories of "women" and "technology" (2006, p. 10). The trap that is easy to fall into is the continuation of a dualistic conception of the difference marked by WiT. The stickiness of this trap leaves marks that spread through the remaining chapters of this book.

Not only digital but now global, the emerging relations of work and production appear to suggest a more equal set of interactions – promising to get us beyond the much-scrutinised masculine tech culture of old. Are we there yet? No; we are more conflicted than before. The social and creative nature of technology extends the opportunities for professionals and enables millions to share, in very public ways, their lives and experiences. In this respect, the experience of place (the physical location of tech work) alongside space (the digital replication of work and identity) takes on new significance. How women and men mark these new relationships shifts us uneasily back to old prejudices, as the next chapter reveals.