

Feeling your way as an occupational minority: The gendered sensilisation of women electronic music artists

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Abstract

This paper develops a nascent theory of ‘sensilisation’ – a process of learning to be skilled in experiencing and displaying sensory knowledge according to social convention. In particular, I present data from an autoethnography of learning to be a DJ and producer of electronic music, and in-depth interviews with thirty-six women at various stages of their careers as electronic music DJs and producers (hereafter ‘electronic music artists’), in order to present a tentative, sensory-led hypothesis for the enduring male dominance of the electronic music industry. I conclude by suggesting that the lessons learned from this ‘extreme’ case study (Seawright and Gerring 2008), might illuminate more everyday encounters with gender, the senses and management learning and in particular, the Othering of minority individuals in occupational contexts by offerings direction on how a 'sensilisation analysis' might be carried out. In addition, the paper stands as an empirical exploration of Ashcraft's (2020) concept of 'senses of self' in the construction and operation of occupational identities, and in particular occupational segregation - her metaphor of the 'glass slipper' (Ashcraft 2013).

Introduction

This article investigates how women continue to be marginalised in male dominated tech-driven (creative) industries (Eikhof 2017). Through a case study of the ‘semi-conscious bodily encounter[s]’ (Ashcraft 2020: 848) of women learning to be electronic music artists, I investigate the sensory micro-politics that position women as outsiders in this domain. Men make up 71% of all festival acts 2017-2019 (Female:pressure 2020) and 80% of the DJs who played in Amsterdam in 2019 were men (Goedegebuure 2019). Similarly, the numbers of women playing globally in nightclubs in 2019 ranged from between 6% in 150 large iconic ‘A-list’ venues to 11% in smaller capacity, grassroots clubs (DJane Mag 2019). Women are estimated to make up only 9% of Audio Engineering Society (AES) members (Young et al. 2018), and 95% of the 35,700 respondents to the ‘Digital DJ Tips 2020 census’ were men (Morse 2020). The inherently technological character of electronic music performance and production means these genres of music are particularly masculine domains.

Ashcraft’s (2013: 16) concept of the ‘glass slipper’ explains the ‘...alignment of occupational identity with embodied social identities as it yields systematic forms of advantage and disadvantage’. The slipper fits perfectly to some bodies and not others, and because it is glass, it is hard to see – if not invisible. Close attention to that which more normally escapes our notice, or is hard to pin down, is therefore needed to understand occupational segregation – e.g., subtle flows between people, things, discourses, and spaces. Learning to navigate the sensory micro-politics that arise in these affective circuits between the artist, her equipment, history, other artists, crowd, space, and dancers (to name but a few) I am calling ‘sensilisation’ – a process of learning to be skilled in experiencing and mobilising sensory knowledge according to social convention. I argue that sensilisation maintains the occupation of ‘electronic music artist’ as male, with associated material effects for those who do not fit the glass slipper. The development of this concept responds to Ashcraft’s (2020) invitation to subject her more recent thinking to some ‘heavy lifting’ (ibid: 855) and as such ‘sensilisation’

also has the potential to open up fine grained analyses of occupational segregation in wider contexts.

Sensory research should proceed from data which are – in so far as is possible – sensory in character, rather than relying on experiences recounted verbally during interviews (Ashcraft et al. 2020). With this in mind, a sensory auto-ethnography of my own learning to be an electronic music artist – [Artist name] – form the empirical starting point for the paper, alongside in-depth ‘com-passionate’ interviews with thirty women at various stages of their careers as electronic music artists (e.g., DJs and music composers/producers)¹. As well as being a rich source of auto-ethnographic reflection in its own right, my experiences also allowed me to empathise with the women I interviewed in order to investigate the following research questions: How does gender shape the sensory experiences of learning to be an electronic music artist? What impact might this have on women’s experiences of participating in this traditionally male dominated sphere? How can the concept of ‘sensilisation’ help organization scholars further understand the dynamics of learning one’s place and role in contemporary occupations?

In order to stay faithful to the confessional character of autoethnography (Haynes 2018) and connect with ongoing conversations about ‘writing differently’ and ‘feminine writing’ within the pages of this journal, and elsewhere (Gilmore et al. 2019, Pullen and Rhodes 2015), first I present a personal, reflexive account in order to support and introduce the methodology of the research. Reflexive commentary is in line with established protocols for good autoethnography (Haynes 2018: 18), as providing some context around who, where, when and what ‘I’ am as a person, and researcher, is essential so you, as a reader, can assess the

¹ These data were generated as part of a wider project exploring women, technology and cultural production, ‘In the Key of She, funded 2019-2021 by a Research Fellowship from The Leverhulme Trust

plausibility of the analyses I offer below (Doloriet and Sambrook 2012). Autoethnography, com-passionate interviews and an embodied approach to data analysis are then discussed before I present data showing the sensory journey to becoming an electronic music artist. This is blended with secondary material on the empirical context of the study, the extent of gender imbalance in electronic music, and the music industry more broadly. The discussion that follows theorises these data as ‘sensilisation’ with reference to literature from sensory anthropology, management and organization studies, and cultural studies. I conclude by suggesting that the lessons learned from this ‘extreme’ case study (Seawright and Gerring 2008), might illuminate more everyday encounters, the senses and management learning and in particular, the Othering of minority genders in occupational contexts.

Becoming Dovetail

I am a white, British, middle-aged woman who has held a Professorial position in UK universities for eleven of my 19 years as an academic. My parents and grandparents fulfilled traditional gender roles – quite happily for the most part. I came of age in the ‘neo-liberal’ 1980s, around the time the social motifs of the power-suited ‘career woman’ and lager swilling, pub-dwelling ‘ladette’ took hold. I aspired to, and was reasonably successful at both, and though neither of these outfits fitted me well I wore them for years. I was raised, with the best intentions, in what I describe as an ‘anti-feminist’ environment where ‘the menfolk’ (as my Gran called them) came first, were to be looked after, appeased and obeyed. A woman’s place was to be happy at home, and it wasn’t until I studied social theory, and underwent a period of psychotherapy that I actively questioned this. Needless to say, things were never the same for me again. I had grown up with a ‘don’t rock the boat’ mentality when it comes to the patriarchy - upsetting the menfolk was something I felt intensely viscerally when I began this research and although I still feel this, I am learning to make it less debilitating (Warren 2018).

As a teenager in the 1980s, I loved the futuristic sounds and culture of electronic music. I was music obsessed and thought synthesizers – and the guys who played them – were the coolest things ever. But not only were synthesizers out of mine and my family’s financial reach, they were most definitely the domain of men, along with the early computers and other makeshift electronic projects that my father, brother and grandfather tinkered away at. Nonetheless I grew up in a family of early adopters of technology and was surrounded by half-built DIY bits of kit. I was 45 when I started learning to DJ, and 48 when I began to produce my own tracks under the artist name ‘[Artist name]’². To my astonishment (and delight) my debut EP reached number 1 in the ‘new releases’ chart for its genre on the leading online music distribution platform for DJs. I now feel increasingly comfortable describing myself as an electronic music artist. I feel proud to say I have come a long way since plugging in my first DJ equipment and opening up my digital audio workstation software on my laptop for the first time. Although I began teaching myself to DJ in January 2015, it was in February 2018 that I started learning to produce my own electronic music. This is a fairly typical trajectory in electronic scenes – first you learn to mix music made by other people into a set as a DJ, then you start making music of your own (Farrugia 2012: 119).

Autoethnography and the senses

Intuitively, autoethnography is a good methodology for sensory research because no matter how hard we empathise with others, all we can ever *actually* experience are our own sensations. Studies such as Hockey’s (2009) analysis of sensory work in the military, Lyon and Back’s (2012) multi-sensory, evocative study of work at Billingsgate Fish Market in London, and Brown et al’s (2019) study of sonic regimes in a secure psychiatric hospital are all developed from auto and/or sensory-ethnographic methodologies. In the sociology of pain, illness, and disability studies too, authors also often write from their own experiences to

² For an account of why I chose this name, see Parsley (2018)

convey the deeply embodied ruptures in their lives in ways that draw in the political ordering of those experiences (e.g., Leigh and Brown 2020) as well as their sensations. Although autoethnography is likely to be a familiar methodology to readers of this journal, it is worth restating its value as a management research method. Firstly, as Cunliffe (2018) reminds us all research accounts are a personal and situated retrospective narrative that *makes* sense of the ‘real life’ we have experienced in the field, or for that matter the experiments enacted in the laboratory or statistical data analysed at our desks. Thus, rather than leaving these experiences as unexamined context to what we present as the ‘real data’, autoethnography can be seen as an explicit inclusion of those experiences in order to lay them bare for analysis, through a process of ‘professional distance’ (Anteby 2013). Secondly, the value of autoethnographic accounts lies in their capacity to build connections out from the personal to the social and particularly to the organizational (Doloriet and Sambrook 2012).

Organizational auto-ethnography specifically uses the researcher’s personal experience to illuminate intersections of organizing processes with the self, in relation to work, employment, management, structures, institutions and of course learning (Boyle and Parry 2007). Sambrook and Herrman (2018) give an excellent overview of the varying types of organizational autoethnography as well as an extensive reference list for anyone interested in learning more. Here my intention was to reflect on my experiences of learning to be an electronic music artist, paying particular attention to the sensory and embodied dimensions that entailed. This, in turn, facilitated empathy with my interviewees, allowing me suggest that our experiences might be characteristic of others in the same situation in order to develop new theory, e.g., gendered sensilisation. In sum, a good autoethnography is then no longer confined to one person’s experience of the world, but acts as a spark to ignite others’ experiences too, ultimately bringing organization alive from the inside out. With readers, this can be kindled through what Meier and Wegener (2017) call ‘writing with resonance’,

producing text that invites readers to join themselves with the narrative, imagining the feelings and sensations they might experience themselves if they were there, living through what is being recounted, and so this is what I invite you, my reader, to do in this paper.

Com-passionate interviews

In September 2018 I began to interview other women who were building careers as electronic music producers and quickly realised how useful my own early experiences with the technology, and process of electronic music production were in fostering connection with my research participants, particularly in establishing a shared understanding of the various elements of the process. I decided that my own journey provided valuable insights into how it *felt* to be a woman learning the ropes of this unusual and highly gendered creative occupation, that I could use to resonate with my research participants' sensory experiences, in order to illuminate my research questions and extend my autoethnographic reflections out beyond the personal as I discuss above.

Strati's (1999) term 'imaginative participant observer' refers to putting oneself in another's shoes for the purposes of research – a technique I have used for some years now in my research on aesthetics in and around organizational life (e.g., Warren 2008). It is particularly suited to sensory investigations because it helps '...develop experience-based empathetic understandings of what others might be experiencing' (Pink 2009: 65). Relatedly, Cooren (2020:16) argues that humans not only experience sensations through direct encounters with material objects, but also (re)materialise the world through communication with each other. In doing so, he builds on his earlier work establishing 'animation' and 'passion' during communicative episodes as the primary way material and social worlds constitute each other. Ashcraft (2020) discusses these ideas in affective terms as flows between everything that makes up a given situation – human and non-human, real or virtual – '...operations of feeling

around the edges of awareness that galvanize selves [and] perceptions of coherent wholes *with identities*' (*ibid*: 853)

Translating these ideas into a sensory methodology, I suggest that through my research interviews with other artists, their sensory engagements with music technology become materialised through a process of 'com-passion'. I am departing from the more usual meaning of the term compassion – as in empathy for another's suffering (Bartunek 2019) – denoting this through the use of the hyphen. Com-passion refers to research conversations between people who are animated *with* shared passion about something they love doing. Although I am not seeking to understand and empathise with my participants' suffering, I nonetheless see parallels between the 'ethnography, aesthetics, and emotionalism' that Hansen and Trank (2016: 352) argue are foundational in carrying out compassionate research, and the sensory sharing I am explaining here. Just as 'compassion does not simply recognize suffering, but involves "feeling with" the persons suffering' (Hansen and Trank 2016: 356), so I suggest *com-passion* involves a similar 'feeling with' of (re)materialised sensations during interview discussions. Thus, the *feeling* of producing electronic music and navigating the challenges of being a woman in a male-dominated world was shared between us through recounting experiences, exchanging stories and just 'getting' each other. This paper is based on data from 36 interviews.

The fact that 23 of these interviews were conducted via video call using Zoom makes the com-passionate (re)materialisation of sensory experience through communication a particularly interesting topic. Despite being spatially remote, these encounters felt no less 'real' than the 13 conducted in person, with each sharing the same degree of rapport and connection³. This resonates with Ashcraft's (2020: 854) observation that these technologies

³ Only the audio from these calls was preserved for reasons of anonymity in line with my institutional ethical approval (reference will be added later)

of late capitalism might be exacerbating affective flows by collapsing time and distance between people. The immersive character of video conversation has been recognised for its multimodal affordances and utility in surfacing ‘elusive knowledges’ in research on tacit knowing (Torraldo et al. 2018), embodied cognition (Gylfe et al. 2016), and the experience of smell (Warren and Riach 2015). I note these here because they demonstrate that rather than being impoverished, video can be a generative medium for research on embodied and/or intangible research subjects.

An embodied approach to data analysis

As outlined above, I first focused on the sensory dimensions of my own experiences to make sure that it led the analysis, a process Pink (2009: 67) calls ‘participant sensing’ to distinguish it from the more detached sounding participant ‘observation’. I then selected sensory episodes that were also intensely emotional ones, and in particular ones that provoked shame, guilt, embarrassment and pride. According to Creed et al. (2014) while all emotions are social, these four are especially good at indicating the operation of cultural norms on individuals’ feelings – and corresponding action – and I would argue the interpretation of their sensory worlds too.

Once I had identified key themes in these autoethnographic episodes, I turned to the interview data, re-listening to the audio recordings in order to re-feel the compassion in our conversation and annotating excerpts from the written transcript accordingly. However, this process can never be entirely codified, since everything I have experienced to date, and which I anticipate for the future, shapes the way I experience the world on an ongoing basis – including how I interpret my data. Davies (2014: 734), herself following the ideas of Barad (2014) labels this ‘diffractive analysis’ to denote how meaning that is seemingly derived from a given point in space and time is actually a splintered array of shards from past,

present, and future, that dissolve boundaries between imagined, real, self, other, individual, social, body, mind, an idea similar in character to Ashcraft's (2020) 'senses of self' as constituted by affective, socio-material flows. In other words, our interpretation of an event is always and inextricably bound up with everything that brings us to that point, and the aspirations/ intentions we have for what is yet to come, as Barad (2014: 168) eloquently expresses it '...there is no moving beyond, no leaving the 'old' behind. There is no absolute boundary between here-now and there-then.' With this in mind, the data presentation later in this paper is also layered with personal/ historical/ aspirational reflections throughout the text.

In the following section, I present data that describe the sensations that arise when learning to be an electronic music artist. First, I describe how I am developing a synaesthetic relationship between (at least) seeing, hearing, touch and haptic sensations in learning to beatmatch as a DJ. Secondly, I explain how touch, gesture, movement and expression are implicated in learning how to perform as a DJ with 'kinaesthetic legitimacy' as well as learning how to *produce* electronic music. In line with my com-passionate methodological commitments, I weave quotations from my interviewees through this presentation where our sensory experiences 'struck a chord', along with theoretical support where it is apposite to do so.

Seeing, hearing, touch and gut: the sensory art of beat-matching

Learning to beat-match to be emotionally traumatic. It challenged my identity and at one point I lost all sense of competence. During an all-female DJ training course I attended, it was a shock to learn that after nearly two years of learning (which had already included sharing mixes publicly online and DJing in front of a festival crowd), without using automated technology I couldn't 'jog the wheels' to get the music perfectly in time. Worse still, after 20 years of going to raves, I couldn't even *hear* that there was a problem. In the DJ booth of a dark, empty, warehouse club in January, in front of my classmates, the tutor leaned across me

to nudge the platter. “No, it’s not quite ‘in’ yet...” she patiently explained, after my very best attempt to beatmatch the tracks. I felt sick. My cheeks burned with embarrassment. I was a fraud. Not only was I crap, but everything I had done up until that moment was crap. It was based on a lie. I couldn’t beatmatch. I would never be a DJ, and I cried silently while writing these fieldnotes on the London Overground as I made my way home after our lesson.

Beatmatching is the skill of playing two or more records precisely in time with one another, which in turn, is the foundation of DJing. If you don’t have your beats in sync when you allow your audience to hear both (or more) tracks through the speakers, at best you’ll hear a faint and annoying delay or ‘ghosting’ of the drums and high hats (cymbals). At worst, it sounds like horses galloping along a track and your audience are likely to wince or even boo you off the decks. Lately I have started to get better at beat-matching and the joyous pride I feel when forensically dissecting a recording of a perfect, seamless mix that *I have made* is huge. Hearing my own slightly ghosted mixes, on the other hand, is a source of disappointment, embarrassment and shame, even when others say they can’t hear anything wrong. Like most new DJs, my relationship with ‘beat-matching’ has been long and difficult. I have been practising beatmatching for about 18 months now, involving hours of repetition, in common with my fellow artists:

“I had the decks and I was like oh yeah let’s give this a go, and mixed some records badly in my room for the next year or two...” (Nancy)

“I would just practice for hours and hours and hours, like mixing two records, probably the same two records for hours. (Kate)

“I just spent lots of time at home just like mixing the same two records for about a year” (India)

These three women learned to DJ with vinyl records on turntables whereas I am a DJ of the digital age, despite being born in the 1970s. My ‘record bag’ is a tiny 128gb USB stick that holds my entire music collection, and instead of turntables my decks are digital music players

called CDJs (which stands for compact disc jockey) into which I plug my USB stick to access my record collection. You can still learn to beatmatch on CDJs, as they emulate turntables as I explain further below, and as Nelly elucidates here the sense of achievement in acquiring this skill is no different:

“...when I was first starting off I would lock myself away for, like, 10 hours a day... it took me two months to get beat matching, *two months*, this is on CDJ 200s which are notoriously finicky, but when I *did* get it - I remember the moment - I ran around the house screaming, crying, and then I was scared I'd never be able to do it again.”
(Nelly)

When the only option for a DJ was to play vinyl records on turntables (decks), beatmatching was a physical process of twisting, pushing and applying pressure to the turntable spindle, or edge of the record, with the assessment of success done largely by ear. This is how you beatmatch when using vinyl and turntables still, in fact. The speed of each deck is adjusted using the pitch-shift control to slow down or speed up each record so they play roughly in time, before tiny pressure adjustments, twists and taps are made with the fingers and edge of the hand. This subtly shifts the tempo (pitch) faster or slower to get to the sweet spot where the beats sit *just right*. That sweet spot is what DJs refer to as getting the records ‘in’. ‘In’ is a magical place where the tracks groove perfectly, and the kick drum seems to drop a semi-tone. The first time I got tracks truly ‘in’ I *felt* this drop somewhere behind my sternum before I heard it with my ears, and then, similarly to Nelly above I felt a fountain of joyous pride “I can *do* this!!” It is the settling of this skill almost to the level of instinct that the repetition described above aims to achieve.

One of the most important impacts of the transition to CDJs – and particularly digital files – has been the incorporation of software-driven displays of visual waveforms depicting the sonic properties of the music. This provides information including the speed of the track (beats per minute – bpm), and even the key of the song to simplify the DJs process of selecting tracks that will sound pleasing together. All these things are displayed in colourful

text, LED lights and indicators. My CDJs (which are actually XDJ's since they don't actually accept CDs as inputs) have touch screen control as well – the craft of DJing has become highly visual with the advent of the digital age. However CDJs also have physical push buttons, twistable knobs, and sliders, and broadly resemble traditional turntables. They have large circular 'jog platters' on the top, which the DJ pushes back and forth to get – and keep – the tracks 'in', just as they would if they were using vinyl on a turntable. This is despite the fact that all these platters are doing is controlling software which could be arguably be done much more efficiently with a touch strip, or knob.

CDJs are made to look like turntables because the embodied skill of the DJ flipping the vinyl onto the deck, dropping the needle and syncing the beats in an intricate dance between hand, gut and ear, are fundamental sensory elements of the reputational capital of what it means to be a DJ. Olive intimates this here, and I expand on this further in the discussion section below:

“I purposely sometimes don't quantize my [tracks]... so I'm still forced to mix them by ear... I think it's important to somebody who learnt on vinyl, I like to keep my ear in and just 'can I still do that?' without looking at the screen” (Olive)

Thus, in order to have credibility (e.g., sell well) it is important that CDJs allow DJs the opportunity to mobilise that 'sensory capital' – and importantly to display they possess it – even though it is no longer technologically necessary to do so. In fact, the beats of digital file formats can be synchronised perfectly by the software with a press of a button. When the 'sync' button is enabled, the tempo and beat pattern of each track are locked in time with one another. It completely takes away the need to beatmatch, leaving you free to focus on creative blends and cuts – that is to say adjusting frequency levels so new harmonies emerge (known as EQing), or chopping quickly between frequencies, or even whole tracks for dramatic effect.

For a good two years, I loved the possibilities the sync button offered me as a digital DJ: looping segments, jumping forward and back through up to four separate tracks, all while they stayed perfectly in time. By adding in short samples and effects I could create exciting ‘edits’ and ‘mash-ups’ on the fly too. As a digital DJ I didn’t *need* to learn to beatmatch. Instead, I planned to develop my craft by fully utilising the creative potential of DJ software to do things with music that would never have been possible to do with a vinyl record and a turntable. This is what tech is for, right? To automate traditional skills and allow new ones to emerge?

However, on day one of the women-only DJ course, I quickly learned that if I didn’t become skilled in beatmatching, and continued using ‘sync’, I was not only letting myself down, but betraying the entire sisterhood. Of course no-one said as much, but the message I noted in my field diary was clear – ‘we need to give the men absolutely *no reason* to doubt that we are just as good as them. When a woman steps up behind the decks she is not only playing for herself, and her crowd, but is an ambassador for her entire gender.’ To use the ‘sync’ button, then, places you as an object of derision, and ridicule, or at the very least someone to be pitied as a newbie, and not taken seriously, despite the fact that what I *wanted* to do with the sync button was *feel*, to perform and *groove*...to be creative, not technical.

Leaving the sync button aside, there is also a prevalent discourse that you can’t always trust the software to beat-grid the track correctly– especially for certain types of music with irregular rhythms or ‘swing’. So your eyes can mislead you if you only rely on the visual counter to *show* you the beats are ‘in’. Although in practice this happens rarely, it is a pervasive belief among artists (e.g., along similar lines to the sentiments expressed by Olive above) and has, over time, convinced me that relying too heavily on looking at the waveforms and visual counters in order to mix tracks is ‘cheating’. I am now fully invested in training my ears to ignore what my eyes are telling me. As I became more concerned with

being a ‘proper DJ’ and wanting to be seen as such, this discourse has sedimented into my sensory practice. This was shared by some of my interviewees too who suggest that to do this thing ‘properly’ was to return to foundational skills of beatmatching ‘by ear’. In Yvette’s case this extended to moving away from digital formats all together, and learning to DJ with vinyl, and as we can see from Zara in particular, this sensory accomplishment translates into career success – people now took her seriously:

“I actually took some DJing lessons [because I] thought ‘I need to learn how to beat match and EQ *properly*’” (Ines, my emphasis)

“I was like I want to DJ on CDJs... and then after that vinyl. Playing on vinyl’s really, really, really hard and it takes a lot of dedication and a ton of practice. But getting the *feel* of working with vinyl and the records I think... [is priceless]” (Yvette, my emphasis)

“...[when I] moved to USBs [on CDJs], basically [I] had to reteach myself how to DJ, actually learn *properly* how to DJ ... and I was like “Oh! I can do this with ears only!”, ... and that’s kind of when I really started, bookings started picking up and I started having more of a style as a DJ” (Zara, my emphasis)

‘Proper’ beatmatching then, involves developing heightened aural-visceral awareness of when the beats are “in” as if I were wearing a blindfold, emulating how I would have learned back in the days of vinyl only. The best way I can describe this is that I am trying to wire a synaesthetic relationship between what I hear, through the medium of how that feels in the movements of my fingers and wrists, against the resistance of the controls that are fused with them, which I then kind of ‘feel’ in my core. The Deleuzian term ‘agencement’, is the closest term to use as a shorthand for these generative elements, since it also takes into account past and present social and cultural influences: ‘human and non-human, textual and material, social and technical assemblages ‘from which action springs’ (McFall 2009:51) In particular ‘agencement’ emphasises connections between elements (what I am referring to as affective circuits) rather than the elements themselves and as such is distinguished from ‘assemblage’ despite the two terms being used interchangeably (Phillips 2006).

Not peeking at the waveforms is hard, and I often give in. I feel a little seedy when I know that's what I am doing, but I also feel increasingly proud that I am improving. I now trust my aural-visceral skills over the indicators I can see on the screen. Sometimes the counter seems to show the tracks are slightly out of time but my ears tell me they aren't, and my hips swing involuntarily to the groove. Like Zara above, I feel my ability to use CDJs and beatmatch 'properly' has earned me respect among my peers. I am now able to rock up to a gig in a club with just my tiny memory stick and play on 'big girl's decks' – as one of the organisers of a festival I was booked for put it. It feels great.

Gesture, movement and expression: learning kinaesthetic legitimacy.

However, it is not enough to privately feel the appropriate sensations when DJing. Displaying your sensory competence is also essential. The first time my partner saw me DJ in public – at a friend's party – he told me I needed to look like I was doing more while the music was playing. When I first saw a video of myself I was also struck by how little I appeared to be 'doing', whereas at the time I'd actually felt like I'd been busy. I was carefully listening, cueing up the next track, checking the sound levels, and so on, but I was also very aware of *not* wanting to take the risk of touching any of the buttons in case I mucked up the mix, knocked something or made a terrible sound. It was much less stressful to just let the music play and worry about touching things when the time came to blend in the next track. This anxiety felt paralysing. If I did reach out to make changes, my fingers shook, and the tiniest twist, press, slide or turn felt like a haptic leap into the abyss, accompanied by icy fingers around my stomach and held breath. And all of this while not letting the concentration or fear show. It's got to look like not only do you *know* what you are doing, but that you can *feel* it at the level of almost automatic intuition, but at the same time that you are doing enough to show off your skill. It's also important for inviting reciprocal responses from your crowd

(whether in person, or via live-streamed video and chatbox) that then mingle with your gestures in an affective circuit.

I knew this reticence to touch and to *show* what I was sensing was making me look like an amateur, or that all I was doing was ‘just pressing play’ and standing back – an accusation often levelled at female DJs, whose skill is regularly doubted and contested. I have seen this evidenced in countless comments on social media videos (almost always by men) and felt the chill grip of fear in the pit of my stomach that one day that might happen to me. Brereton et al. (2020: 228) sum up the effects of these assumptions on the women working in electronic music scenes: ‘under-represented, overlooked, undervalued, overcriticized, excluded, and sexualised as performers, composers and producers. [Women] face entrenched sexism, a lack of role models and multiple barriers to entry...’, I suggest that one of these barriers to entry relates to the embodied, sensory character of learning to use music technology hardware and software as I am describing it here, and I return to these ideas in my discussion below.

My desire to look professional and competent has got stronger over time and I regularly feel the weight of the sisterhood on my shoulders when I perform in public. Increasing numbers of bookings to play virtual and live events (including the odd paid gig), receiving requests to provide guest mixes on other artists’ radio shows and podcasts, seeing my own tracks being released on record labels and so on, are constructing a potential future where ‘part-time DJ’ could actually become integrated into an occupational identity of ‘academic DJ’. I have moved from learning to DJ as a hobby that has little bearing on my sense of self, to realising that perhaps I’m not just a middle-aged lady playing with Garageband⁴ in her shed, and perhaps I am *actually good at this*. Maybe that odd little girl of my schooldays really *can* be cool. This is both astonishing to me and beyond my wildest dreams to the point where it now *really matters* how I act and perform in the here and now.

⁴ GarageBand is Apple’s entry level digital audio workstation for music production

So I intently watched what other DJs do, both in person, and on videos/ live streams. They seem to do a lot, which increasingly I have grown to realise is mostly for show. As a DJ myself, I question whether it is *really* necessary to keep tweaking, twisting, flicking, tapping, and making tiny, minute adjustments to the knobs, buttons and platters all the time. And by the same token, are such exaggerated movements needed to turn such small, sensitive knobs? Leaving aside the wash of inadequacy that floods me when I watch, my analytical brain learned that whilst this continual display might not be needed for crafting the music coming from the speakers, it *is* essential in terms of demonstrating that you know what you are doing. Importantly this sensory display is essential to show you are skilled at *hearing* and *feeling* when tiny adjustments need to be made to show you have earned the right to be there,:

“... you’re there at the front, you’re the focus for the crowd’s attention so look as though you deserve it... (Esther)

Yeah, and you’ve got to have the skills and that’s when you get the respect, because it’s like otherwise you get up there and you make a dogs dinner of it and then everyone’s like well yeah you’re a woman aren’t you? (Evelyn)

I now tweak, touch, tilt my head, frown, flick, slide, cup my head phones, and press with the best of them, and it makes me feel like I am doing this right, and that I belong. I am a DJ and I deserve to be there, as Esther says. It is also important because standing behind the decks without being obviously busy is also a poor experience for your audience of dancers:

“I’m here to show you what my joy looks like so you can feel your joy and then we can just cycle that through...” (Hayley)

Thus sensory display goes beyond a disciplined performance, it is also needed to elicit reactions from your audience which complete sensory and affective circuits as Hayley explains above. Biehl (2019: 341) refers to this as the kinaesthetic empathy – a feedback loop between DJ and dancers, dancers and DJ. The DJ does something, and that’s the crowd’s cue to do something too – whether shouts, whoops and movement in person on the dancefloor, or

via emojis and comments in the chatbox of a livestream. Kinaesthetic empathy changes depending on the space too, it is site-specific (Biehl-Missal 2016), and is an exemplar of Ashcroft's (2020) argument that occupational identity is dispersed beyond any one person or thing.

However, "you need to be careful not to dance too much". This is something I have read and heard from female DJs on social media, and in personal communications with them.

Excessive dancing and making a lot of eye contact with the camera (in the era of live-stream DJ performances ushered in by the Covid-19 pandemic) apparently detracts from the serious skill you should be displaying as a sensorally adept DJ. Furthermore, it appears to give off a sexualised impression. Recent data from the Association for Electronic Music's 'Electronic Music Inclusion Initiative' (2021) shows that almost half the incidents of harassment and discrimination reported by artists occurred in a club or festival environment. 80% of the women interviewed for the wider study from which these data are drawn reported unwanted sexual attention during gigs, ranging from uncomfortable comments to attempted rape. In many cases these were normalised as 'to be expected', 'not that bad', or 'harmless drunks'.

So even though the bass and drums are literally pulsing in waves through my body, even though I am playing music that I love, I need to take care not to dance *too* much. Even though I am feeling ecstatic joy at creating sublime 'sweet' blends that *just work*, and even though people tell me how much they love my energy and vibe behind the decks, if I want the industry gatekeepers to take me seriously – and book me for gigs one day – it would be better if I didn't look *too* excited, or like I am enjoying myself as much as I am. To avoid mean, upsetting comments online, and being touched up or threatened by men - *even in my 50s* – I need to dampen my enjoyment in what I am doing. Male DJs behaving in the same way are never berated for 'coming on' to the crowd, sexualising themselves, or accused of being talentless. In undertaking this research I have often been confronted with statements that life

for women in electronic music *has* improved in recent years, and indeed, in male-dominated spheres more broadly. However, the ‘gains’ referred to are often those of a handful of high-profile artists, rather than representing any significant change at grass roots ‘everyday’ level. As Tess remarked to me sarcastically during her interview with me, *‘yeah, there’s no gender discrimination in music anymore, because: Nina Kraviz’*. Furthermore, those who make these statements are usually indicating their own privilege in not seeing the daily, invisible struggles that even highly successful women have. As my data demonstrate, under these conditions – what McRobbie (2009: 24) calls ‘feminism undone’, discriminatory practices are perhaps stronger than ever, since they have shifted to more subtle manifestations that mean they are harder to recognise, or report, yet cruelly appear as wins, or freedoms. Not only do women suffer from an insidious and insistent undermining, they are deprived of a legitimate voice – you should just be grateful for the gains that have been made, young lady. The longer I research this topic, and the more of an electronic artist I become, the angrier these situations make me. I am seething as I write this.

Touching/ not touching: ‘getting stuck in’ and creativity

Being reluctant to touch knobs for fear of breaking something, is also related to how those learning to be electronic music artists enact their sensory capital, as was noted by several interviewees, either about their own learning, or when teaching others – and in Lauren and Evelyn’s case, teaching children:

“I never used to touch any of the other buttons, it’s a girl thing isn’t it that you’re just scared of buttons and getting it wrong and making a mistake and effing it up, and how do I turn it off again?” (Nancy)

“...I think that’s one of the hardest things to learn is that it’s like almost like there’s a precious, just touching the buttons is the hardest part but that’s how you’re going to learn...” (Hayley)

“...the boys they could almost not wait for you to finish what you were saying, they just wanted to jump on the kit and play. Whereas the women were totally different... they would listen to you, they would listen to what the kit is, what the buttons do, the cross fader, the up faders, or the EQ, before [they touched anything]” (Evelyn)

There is a norm for girls not to touch, which hangs over into adulthood, whereas the boys just ‘get stuck in’. The glass slipper of technical education and occupation fits them perfectly – as if it were made for them, which as we shall see below is exactly the case (Ashcraft 2013). I felt this particularly acutely at a music industry conference I attended – part of me desperately wanted to go and play with the racks of expensive, futuristic black boxes that were tantalizingly displayed in the ‘gear labs’. As I noted earlier in this article, I have always been attracted to synthesizers as cool pieces of kit, but at the same time, I am fearfully repelled by their complexity and bewildering array of mystical controls that I have little idea how to use. This is not a coincidence. Electronic music’s ‘identification [with] gadgets seen as ‘boys’ toys’ and hegemonic masculinity is a potent sociological force that marginalizes women’s presence and participation... in the studio, as well as consumer magazines, in the instruments industry... Internet forums, in the classroom as well as the music shop.’ (Prior 2018: 88). As Bayton (1997: 42) further explains, to be feminine means to inherit a ‘socially manufactured physical, mechanical and technical helplessness’, while ‘technical language is often used as a power strategy in a mystifying way to exclude women’ (*ibid.*). Both of these issues, along with the historically gendered character of (digital) technology (Plant 1997) and music more broadly (Armstrong 2011), construct the electronic music space as fundamentally masculine in tools, language and activity, whilst masquerading as a neutral enabler of the democratisation of music production. Look! The glass slipper fits! Importantly, this operates through nuanced sensory learning and felt, embodied processes to ensure ‘subtle and not so subtle mechanisms of symbolic violence, institutional and discursive boundary work... position [women as] strangers to the world of digital and electronic music...’ (Prior 2018: 89). Standing in the foyer surrounded by young men and synthesizers, the paralysing force of

my embarrassment and utter sense of ‘this is not for me’ fizzed my skin into armour, hand closed tight against my shoulder, I held my conference bag as a shield. I stayed well away on that occasion, feeling frustrated and weak as I ambled off to the safety of the bar.

But at the second trade fair I visited I forced myself to push through this discomfort, and to go and fiddle with the equipment. I still didn’t know what I was doing, but I felt proud that I was a woman not afraid to touch. In contrast to the stark racks of gear at the previous event, the Moog ‘psychedelic Synthesizer Sanctuary’ (ADE 2019) was a magical grotto of lights, colour, wires, pulsing sound and psychedelic decoration more akin to a rave than a music technology store. Designed to ‘stimulat[e] the senses...promot[ing] creative connection through a multi-coloured display of music machinery featuring self-guided lessons in analog synthesis’ (*ibid.*) it was a space that felt immediately familiar. I was home! The assemblage of room, aesthetics, colour, light, my late-night hangover haziness, and countless other elements constructed me as playful and experimental – a very different identity to my last encounter. Hearing the sound bend and warp as my fingertips gently nudged the ‘pitch’ and ‘modulation’ wheels forward and back on an analogue synthesizer was thrilling and I even felt a little competent. From that moment I knew that this intuitive sensory engagement with sound through touch was what I needed to feel at home in my own music production practice – movement translated into melody, something I shared with my interviewees too:

“I’m very drawn to, that more tactile approach to music sound making ... I need to get my head out of the screen and go back to just something sort of tactile and tangible to feel inspired” (Lauren)

“I thought how synaesthetically pleasing it felt, and just feeling really overwhelmed by how many dimensions of touch and sounds you’d get just from one finger, and a little wobble just triggers like a completely different movement of a sound.” (Grace)

I have experienced the cutting edge piece of music technology that Grace is talking about and agree with her sentiment. You don’t need to know that the interface is using MPE (midi

polyphonic expression) to change the parameters of the sound beyond the note to know that you are making cool noises with every element of your touch. How the sound is generated changes through variations of attack, delay, reverberation, pitch and so on (you can customise these) that you control via the pressure, sideways sliding, rolling, forward/ backwards and lifting movements of your finger and hand. But importantly, you *feel* your way around this instrument. It is a viscerally controlled interface for an otherwise logic driven, digital piece of electronic technology. Hayley goes so far as to link this expressiveness with her gender:

“...it’s just very intuitive, it’s how you touch it is going to be how it responds, and that to me was like some sort of like feminine intuition about it” (Hayley)

When I played it, my emotions and creative intentions flowed through the movements of my fingertips and into musical expression without me even thinking about what I was doing, and I was shocked when the product specialist at the display stand told me I had been absorbed (lost?) in this highly sensual form of music making for over an hour! It also didn’t *look* so much like traditional music tech – more akin to a child’s toy in fact. The learned occupational pattern of ‘music producer’ were disrupted allowing me to make new associations. What appeared was ‘the potential to become otherwise abound[ed], even when things seem[ed] overdetermined.’ (Ashcraft 2020: 863).

Discussion: sensilisation as a political process of occupational identity construction

Drawing on the above data, theorised with literature from sensory anthropology, management and organization studies, in this discussion I theoretically develop ‘sensilisation’ as a concept: as a theory that explains the process of learning to be skilled in sensory knowledge according to social convention, for the purposes of accruing reputational capital in a given occupational field. Importantly sensilisation is a politically infused, and potentially exclusionary practice. I am extending the more familiar concept of ‘*socialisation*’ as a

‘developmental [process] through which individuals acquire the values, behaviors [sic], and motivations necessary to become competent members of a culture’ (Morawski 2014: 21) in order to explicitly identify the senses as integral elements of that cultural competence – in this case electronic music culture. I wish to be clear that sensilisation differs from ‘*sensitisation*’ which only denotes becoming aware of a stimulus, and ‘*sensualisation*’ as a narrower process of making something more appealing to the senses (Collins English Dictionary 2020). Creating new words could be seen as superfluous or unnecessarily complicating matters, but I hope to demonstrate that sensilisation is a qualitatively different concept than neighbouring ones, although of course they may be united through family resemblance as Wittgenstein reminds us (Hacker 2005).

(1) The senses as holistic, embodied experience

It is tempting to think of making music as only an aural/tactile interface, between the musician and her instruments but as my data show, while music is heard, knobs tweaked and platters jogged, waveforms are also seen, and ‘vibe’, ‘groove’, ‘sweet spots’, when the tracks were ‘in’, and so on, become sense-able through racing hearts, tapping feet, tightly pursed lips (the ‘bass face’), nodding head, air punches, butterflies in the stomach, and a tingling spine as they affect and are affected by other elements of agencement. Furthermore, making *electronic* music is far more complex than being part of a band, playing one instrument, or being a song writer which perhaps rely more solidly on the aural/ tactile relationship. Often it is the same person who composes, arranges, writes, plays, engineers, produces, mixes and sometimes even masters the music (Wolfe 2020: 96). Clearly such wide-ranging musical practices involve more than just sound and touch.

The difficulty with which I, and my fellow artists, struggled to explain our agencement in terms of any one sensory modality illustrates how arbitrary it is to think of sensory learning in

terms of the sense organs that seem to generate it. Ingold (2011: 138) observes that referring to ‘the senses’ is more accurately a shorthand for the constant ebb and flow of felt experiences that arise from our ‘embodiment’ and emplacement’ in the world (see also Pink 2009). In sensory management studies, although we may speak of sight (Bell et al. 2014; Warren 2008), sound (Brown et al. 2019; Corbett 2003; Shortt 2013), smell (Corbett 2006; Riach and Warren 2015), touch (Rippin 2013), and even taste as discrete elements of work and organizing, these are really only the channels through which this ebb and flow of embodied, emplaced experience appears to materialise to us.

This formulation of mind-sense-body-culture as indivisible, is a fundamental part of understanding how we acquire skills which are ‘...[not] a property ... of the individual human body as a biophysical entity, a thing-in-itself, but of the total field of relations constituted by the presence of the organism-person, indissolubly body and mind, in a richly structured environment.’ (Ingold 2000: 353). From the bodily micro-adjustments anaesthetists learn during surgical operations (Hindmarsh and Pilnick 2007), the ‘sensual signifiers’ that construct and transmit organizational norms in office culture Riach and Warren (2015: 802), through the ways dancers ‘collaboratively create’ choreography (Satama et al. 2021), and the affective flows apparent in craft work (Bell and Vachhani 2020), to the attunement’ that railway workers develop to safely dispatch trains (Willems 2018: 27), these ideas have been empirically illustrated in management learning research on skills acquisition for a number of years. What my study adds to this body of knowledge is a recognition of the gendered sensory micro-politics of occupational exclusion because the senses are acculturated along colonial, heteronormative and heteronormative lines as well as patriarchal ones, and other power-laden fissures.

To summarise this component of sensilisation, then, we should pay attention to holistic embodied experiences rather than reduce sensory data to the sense organs that generate them.

How do sensations combine to produce sensory knowledge in a holistic manner? What gestural and sensory modalities do participants use to demonstrate they are sensorally competent in their setting?

(2) *The senses and the social as immanent*

The reductionism referred to above can be seen as a social and political process of understanding the senses as associated with certain groups in society. Even though on the face of it they appear as biological, and bodily, as sensory anthropology has shown, they are also raced, classed, and gendered along socially infused lines as this section discusses.

Particularly relevant to this paper is the observation that ‘inside’ sensations intimately connected to the body – such as smell, taste and touch – have long been associated with women’s ways of interfacing with the world, whereas the higher faculties of sight and hearing were associated with the soul, thought, and with men (Classen 1997, 1998, Howes 2004). This was because sight and hearing appeared to be more amenable to experiencing the world at a distance and were therefore regarded as more objective in character – which was in line with prevalent beliefs about male and female nature at the time. As Howes (2004: 6) notes, the fact that both hearing and sight were also regarded as senses that could be more-or-less faithfully reproduced (through audio recording, and photography), further added to their status as objective faculties, particularly around the early 20th century. In fact in antiquity, sight was conceptualised as a mental faculty, and therefore beyond the senses altogether (Classen 1998: 73). This meant that men didn’t even need to go to the messy business of feeling at all, firmly ascribing the remaining sensory experiences in the realm of womanhood, and importantly, of lesser status, since the body was seen as ‘a betrayal of and a prison for the soul, reason, or mind’ (Grosz 1994: 5). Women’s competences therefore become devalued *because* they are ascribed to feminine traits that originate from the senses of touch, smell,

taste and so on. As Boucher (2016: 26) explains, ‘...the very definitions of what is considered ‘skilled’ is both socially constructed and deeply gendered’. Although Boucher (2016) is writing on migrant labour, focusing on structural and labour market explanations for differential opportunities to develop skills, her argument that men and women’s human capital is differentially valued is highly relevant to the idea of a gendered economy of sensory skill.

On the face of it, this should mean that the viscerality of feeling your way around a set of decks, or a synthesiser using bodily sensation *should* favour the way women have been acculturated to relate to the world. The synaesthetic and holistic relationship between hearing, sight, touch and other hard-to-describe sensations should, on the face of it, sit well with a feminine view of the senses. Yet an insistence on strategic listening and beatmatching ‘by ear’ as the only really legitimate way to DJ maintains a distant and quasi-objective relationship with the practice at the same time as it masquerades as a neutral sensory practice. Likewise, the move to visual displays on CDJs, whilst it is derided, still gives the appearance of the whole pursuit as abstracted from the *feel* of the craft – lots of lights, waveforms, visual cues, and complex language impart a scientific complexity that is coded to appeal to men and exclude women whilst appearing neutral, androgynous, and a-political (Armstrong 2011).

Whilst it didn’t seem necessary for me to know what the controls on a synthesiser were actually *doing* when I moved them and produced sounds that ‘moved’ *me*, I still don’t feel like I have ‘earned my stripes’ until I know all the technical detail, correct terms and so on. Thus it is the *abstraction* from the felt senses of the body into codified mental models and technical language that ultimately usurps the kind of sensory capital that might favour women. This opaque codification to anyone not in the know, particularly supports and elevates masculine identity since technology and machines have long been synonymous with ‘maleness’ on their capacity to be sources of power and control (Cockburn 1985). In music

performance, production and composition, as the body (seemingly) recedes, these activities are regarded as mental rather than bodily in character. Therefore ‘knowledge and control of compositional technique... becomes an affirmative part of masculine identity, [because it is an] identity not grounded in the corporeal’ (Armstrong 2011: 32).

Thus the second component of a sensilisation analysis is to explicitly consider what social and cultural factors may be implicated in the formulation of sensory experience. Strategies for undertaking this might include mapping the cultural and sensory histories of cultural occupations – what holistic embodied knowledge is prized, and what has been excluded? What are the ‘right’ ways of presenting in this context, and do those appear to privilege certain groups and not others. ‘What if?’ thought experiments can be useful here, such as inverting a situation to make it unfamiliar to better spot the cultural influence e.g., ‘what if a gay person reported this, or a black person behaved like this, etc. How would that change the associations we might have?’

(3) Sensilisation involves agent/environment interaction: ‘agencement’

As we also saw from the data, the senses are not confined to the felt experiences of individuals, but also recognizable in their mobilization (Vannini et al. 2012: 44) through circuits of affect. An engaged yet serious face is important to show whoever is watching that you are busy with the difficult business in hand, which in turn enables them to show *you* that they are engaged in enjoying your performance. But you must not show too much concentration since you must also demonstrate your skills are now instinctive in order for them to respond to you as competent. Furthermore, making and performing even seemingly *disembodied* digital/electronic music involves manipulating, operating and handling *things* (Peters 2012), things which are regarded as contributing to the gendering of the occupation

though their very materiality as ‘boys’ toys’ and the masculine coding of the studio space (Wolfe 2020).

Affective circuits also flow through the artist and her tools even before the point of performance or even use. For instance as we saw above, the ‘sensory capital’ possessed by the traditional vinyl DJ influences the design and affordances of legitimate hardware formats (CDJs) which must be used if you want to be taken seriously. This then feeds back into the sensations that the learner learns are valuable in developing an identity as ‘a good DJ’ (and therefore the ones that they pay particular attention to). This, in turn, makes the hardware necessary. Therefore identity, dominant forms of sensory capital, *and* the CDJs give rise to what are ‘proper’ sensory skills in a self-reinforcing affective circuit, along with the reactions of the crowd, and others who may pass judgement on the performance – forming an agencement that is ripe for analytical dissection as part of a sensilisation analysis.

The parameters of sound that actually arise through a nexus of doing- sensing-hearing- feeling, are codified into music technologies for both playing and production through complex scientific formulae, numbers, scales, graphs, visual meters and so on, denoted by their own language and rules. Therefore, the more difficult and complex the technology is to master (and that verb is telling), the more boys and men are drawn to engage with it as it ‘symbolic[ly] affirm[s] ... technological masculine identity’ (Armstrong 2011: 63). As Doubleday (2008) also observes, ‘[i]t may be hard for girls even to imagine playing an instrument that is culturally assigned to males’. We can see this clearly from the interviewees’ accounts above of girls and women they teach being reluctant to come forward and ‘get stuck in’ with music technology hardware, and my own experiences of feeling fascinated with, but repelled by technology displays at trade shows and in music stores, but nonetheless forcing myself to physically engage, no matter how acutely embarrassed I felt.

Yet, devices (and software) which are seen as more intuitive to operate, or ‘simpler’ – even if they are highly complex behind the user interface – become relegated to the status of a ‘feminine technology’ as they are less useful in constructing masculine identity. I say relegated because the label ‘feminine’ is usually invoked as a value judgement (Green 1997) with apparently simpler ‘feminine’ technologies located as inferior to more complicated ‘masculine’ ones, even when technological developments mean that they are in fact, more advanced. This is how ‘gendered ideologies are embedded in a range of technologies largely designed by men... but intended for use by women’ (Armstrong 2011: 74). Although Armstrong is referring to the domestic washing machine here, this argument equally applies to music technology that is designed by men, elevates desirable masculine identity, yet is presented as neutral, or androgynous.

Thus the final component of sensilisation is paying attention to the agencement – the element of, and circuits of affect that construct the sensorally skilled worker. Ashcraft (2020: 14) gives an evocative account of this in her description of her mis-labelling of a restaurant sommelier as ‘mere waiting staff’ on account of their embodied and material presentation intermingled with Ashcraft’s own unconscious biases, her positioning in the relationship and the situational factors of the room and event. I propose that a similar mapping of all the human, non-human and affective elements is the third stage in a carrying out a sensilisation analysis.

Conclusion: sensilisation, its material effects and the study of management learning

In this paper I have presented autoethnographic and interview data that demonstrate how a process of ‘gendered sensilisation’ underlies how female electronic music artists learn their craft in a highly male dominated occupation. In the discussion above, I laid out three components of a sensilisation analysis – (1) attention to holistic embodied experiences, (2)

consideration of the effects of the social in those experiences, and (3) attention to agent/environment interaction, or ‘agencement’ (e.g., McFall 2009). In the present case, this analysis has led to the following empirical and conceptual contributions.

The sensibilisation involved in becoming an electronic music artist fundamentally challenges what it means to be female, with women having to engage in sensory practices that do not support their feminine identities, while men’s technological prowess swells their gender identity. In short, using music technologies make men more like men, which makes most music technology more associated with masculinity, and whilst these discourses are not impossible to challenge (the women in this study are doing just that) it is not an easy process, since doing so means going *against* affective reinforcement of female gender identity (Armstrong 2011). Thus, as Vannini et al. (2012: 33) note, these ‘different performances of the gendered body illustrate that social scripts lay out clear gendered sensory roles...allowing for differential sensory socialization patterns... [so] it is not uncommon for most men and women to learn to sense the world differently.’

Exuberant smiling, eye contact or intimate crowd interaction might well be necessary for the DJ to be a ‘circuit of joy’ as Hayley put it, but for women, these displays come at the cost of not being taken seriously by those who may have influence over their careers. In contemporary visual culture, women are regularly depicted as objects of entertainment, sexualised decoration, and ‘eye candy’ under the male gaze (Mulvey 1989). Although appearing to be ‘natural’, or ‘neutral’, women on stage or in mass media, are largely presented for the pleasures of a heterosexual male viewer, whether in film Mulvey (1989), as nudes in painting Pollock (2006) or dancers in music videos (Leonard 2015). Because of these visual conventions, even when engaging in truly joyful behaviours that reflect their embodied experience of the music they are playing, enacting their affective circuits for female DJs runs the risk of being accused of being inauthentic and lacking technical skill, and

so dancing and/or other frivolities should be limited to protect her from the abuse and negative outcomes described above.

The answers to addressing gender imbalance in the industry are suggested as combatting overt misogyny, discrimination and sexism (e.g., Fielding 2020, AFEM n.d.), and engaging in positive action raising women's visibility through diversity quotas for events line-ups (e.g., Keychange n.d.). In addition, it is assumed that by encouraging more women to get involved, particularly through the vehicle of all-female collectives, initiatives, courses and so on, gender balance will slowly be realised (Shortlidge 2019). However, if we take a sense-first approach to skill acquisition, we can see that these important and well intentioned activities are not the full story, since they do not account for the affective circuits that quietly hum along maintaining the glass slipper's fit – firmly placing it as (young, white, heterosexual) male footwear. Ear training, knob tweaking, getting stuck in and so on, are vital to an electronic music artist's personal sense of competence, identity and ability as reflected back to her by other humans and non-humans she encounters.

With the above in mind, it follows that a sensilisation analysis – in this case learning to become electronic music artists – could open up the 'subtle and not so subtle mechanisms of symbolic violence' that Prior (2018:88) locates as one of the roots of women's disenfranchisement in digital music technology contexts. I contend that similar processes are likely to be apparent in any occupation that is heavily gendered, raced, classed or otherwise segregated as Ashcraft's (2013, 2020) ideas of the 'glass slipper' attest. In the case of gender these ideas are particularly likely to be evident in STEM subjects with a heavy technological bias, and where levels of female participation are persistently low, despite years of initiatives to make STEM careers more appealing to women. What sensilisation adds to Ashcraft's (2020) formulation of occupational identity as an affective human and non-human

assemblage is a way to study *how* the glass slipper is made to fit some bodies while others are excluded what she calls the ‘pre-individual’, ‘molecular’ level. And as she sets out, there are nonetheless possibilities for action (Ashcraft 2013: 18-20) if we change the affective flows to include more diversity in ‘actual practitioners’, at the same time as redefining ‘task features’ which ‘begins with the creative reconstruction of the identity of the work itself’.

I hope to have shown sensilisation as a conceptual and analytical tool more fully incorporates sensory data into accounts of how and why people work in the ways they do, particularly when addressing inequalities and more critical dimensions to processes of learning at work. Attention to the tiny, taken for granted sensory minutiae of learning a skill forces us to pay attention to the things we might not – on the face of it – consider to be terribly important because we are too busy focusing on the big, social stories of inequality and discrimination in workplaces. However, it could be in the everyday lived experience and subtle, sensory affective flows between bodies and things that we learn the most.

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