‘There is Still Some Work to be Done, But We’ve Come a Long Way’: The Changing Position of Women in Technical Television Jobs

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Biography:

Vanessa Jackson is a former BBC series producer and now an associate professor in the Institute of Media and English at Birmingham City University. She teaches television production to undergraduates as well as working on employability and enterprise activities. She completed her PhD in television historiography under the supervision of Professor John Ellis at Royal Holloway, University of London in 2018. Her research interests include the history of television, women’s roles in the television industry, as well as the uses of social media in community history projects. She has also published on the use of social media in enhancing student employability and engagement.

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Abstract

Although there is a body of scholarship concerning women’s roles in the British media industries, few studies have analysed how women’s career paths within these industries have changed over time. This article addresses that omission. It draws on empirical research with 130 women working in the UK television industry, to provide insights into the changing nature of women’s roles across technical, production and editorial areas over the last forty years. Previous research and industry reports have shown women were concentrated in low status, low paid, feminised roles, with little chance of promotion. This new research demonstrates evidence of positive change, such as entry routes being less gendered and increased opportunities in some technical roles, while simultaneously highlighting persistent issues including pay inequality, the ‘old boys’ network’, managing caring responsibilities, and crises of confidence. This study provides significant evidence of women’s career paths now being more varied and flexible, with improved opportunities for women in ‘quasi-technical’ areas within production. Women are now better represented across television production roles, although the same cannot be said for many location-based craft occupations such as camera, sound and lighting, where difficult to tackle, unmanageable gender inequalities remain.

Keywords: television production, technical roles, gender inequalities, oral history, career paths, below-the-line, gender discrimination

Introduction

'You just had to put your big-girl pants on and get on with it, because if you really took it all to heart you'd just leave.'[1] This was how sound-mixer, Judi Lee-Headman, reflected on working in the UK television industry in the 1980s. Judi was one of 130 women working in television who contributed to empirical research carried out in 2018 and 2020, the results of which form the substance of this article.

This study provides an insight into the changing nature of women's roles in the UK television industry over the last forty years, across technical, production and editorial areas. This helps fill a gap that few studies concerning women's work in television have investigated. Previous research and industry reports from the 1970s to the 1990s have shown that women were concentrated in low status, low paid, feminised roles, with little chance of promotion.[2] These studies, however, were not longitudinal, providing only a snapshot of women's career experiences at fixed points in time. In contrast, this new research, which draws on survey and interview material from 130 women currently working in British television, captures longitudinal evidence concerning their whole career trajectories. The data demonstrates positive change in some areas, such as entry routes being less gendered with increased opportunities in some technical roles, whilst simultaneously highlighting persistent issues such as inequality over pay, the 'old boys' network', challenges of caring responsibilities and crises of confidence. This study builds on previous research and provides significant evidence highlighting how women's career paths have changed, becoming more varied and flexible than forty years ago. It also demonstrates increased mobility between technical and production careers. In addition, the study finds improved opportunities for women in contemporary 'quasi-technical' areas within production teams, such as data wrangling and self-shooting. Women

are now much better represented across television production and editorial roles, than in the 1970s and 1980s. The same cannot be said however, for many location-based craft occupations (for example, camera, sound and lighting), where difficult to tackle, 'unmanageable inequalities' remain, a phenomenon noted by Deborah Jones and Judith Pringle.[3] Findings from this study suggest that such roles are frequently incompatible with child-rearing, in addition to highlighting issues around education and discrimination, such as fewer women than men having science qualifications, and the perception that women lack the physical strength to handle kit.

In this article I have classified television roles as: technical, production and editorial. There are different definitions of these roles, and debate around such classifications, which makes them problematic. However, they are useful in categorising the structures of programme making teams. Technical equates to craft roles (for example, editor, camera operator etc), production to administrative roles (for example, production co-ordinator, production manager), and editorial to content-shaping roles (for example, producer, director). When 'production team' is used, this refers to both production and editorial roles. 'Below-the-line' roles align to technical roles, where there is little leadership responsibility. It is a term usually used in film, rather than television. On-location technical roles include camerawork, sound recording and lighting operations, as distinct from roles such as editing or vision mixing, which would not normally be carried out on location.

Reports and data concerning women's work in British television began being produced in the 1970s, making this decade a suitable point for comparison with my contemporary research. In 1975 the Association of Cinematograph and Television Technicians (ACTT) published *Patterns of Discrimination*. This seminal report provided the first comprehensive study of

women's roles in the British film and television industries, and highlighted the complex ways that occupational structures and organisational practices discriminated against women.[4] It demonstrated that sixty per cent of the union's female members were concentrated in just three of the 150 possible grades: production secretary, continuity girl and production assistant.[5] These relatively junior roles were entirely filled by women, with little prospect of career progression beyond production assistant. The ACTT was one of the unions representing film and television workers in Britain; its membership was drawn predominantly from the commercial Independent Television (ITV) companies, with the British Broadcasting Corporation (BBC) recognising the Broadcasting and Allied Staff (ABS) union. This bleak picture of female employment was replicated at the BBC. An internal report in 1973, produced by the BBC, the 'Limitations to the Recruitment and Advancement of Women in the BBC', highlighted the absence of women both in front of the camera and behind the scenes, and noted that women made up less than five per cent of senior roles. It gave a long list of difficulties facing women and published numerous prejudiced quotes from male colleagues.[6] Despite the report little changed and a decade later the BBC 1985 'Sims Report'report found that out of more than 500 secretaries and clerks who had worked for the Corporation for longer than five years, only sixteen had progressed to higher grades.[7] This report was more proactive, recommending the appointment of an equal opportunities officer, and facilitating part-time working and job sharing.[8] Even after the Sims Report, change took a protracted period of time and women continued to face prejudice. The same was true across the television industry, as Frances Galt observed, the recommendations of the ACTT report were slow to be implemented, meaning that in 1981 it was described as 'regrettably up-to-date', with the union acting to inhibit the women's demands.[9]

According to the 1975 ACTT report, more women were working in technical roles in the 1950s and early 1960s, than the 1970s.[10] This may be due to women being recruited into Engineering during the Second World War, when the BBC was short staffed because of men enlisting, and then continuing working for the Corporation afterwards. Angela Coyle, writing about the British television industry of the 1970s, notes that women were paid less than men when carrying out the same work, with many higher technical roles not being open to them.[11] Women were rarely employed to work in technical areas by either the BBC or ITV companies, and until the early 1970s, the positions of floor manager, camera operator, sound engineer, dubbing mixer and lighting assistant were closed to women in the BBC.[12] The ITV companies took a similar position, with women being automatically recruited into secretarial or administrative roles. These roles rarely led to promotion, and salaries were lower than in equivalent technical roles.[13]

The international position of women's employment in the creative media industries was historically no better, as evidenced in a United Nations Educational, Scientific and Cultural Organisation (UNESCO) study in 1981, which stated that the proportion of women employed in film, broadcasting or mainstream press organisations rarely exceeded thirty per cent of the workforce.[14] Women at the BBC accounted for thirty-six per cent of staff in 1978, whilst the Canadian Broadcasting Corporation employed only twenty-five per cent in 1975, indicating the global nature of inequalities, with women overwhelming clustered in lower status support roles. A study of the Australian Broadcasting Commission similarly drew attention to women's lower status and pay, lack of promotion opportunities, poor retention and gendered silos in the 1970s and 1980s, which echo observations regarding the industry in the United Kingdom.[15]

Even in the 1990s occupational segregation amongst freelance workers mirrored that identified in the ACTT report, despite structural changes to the television industry, thus challenging the view that short-term projects and more fluid organisational structures would reduce gender inequalities.[16] The British Film Institute's (BFI) *Industry Tracking Study* in the 1990s, Skillset's (now Screenskills) employment surveys from the 2000s onwards, Directors UK's *Who's Calling the Shots* 2014 and 2018 and the Office of Communication's (Ofcom) *Diversity and equal opportunities in television* 2019, have all provided snapshots evidencing the inequalities women have faced across the UK media industry.[17] In 2003, Shirley Dex and Janet Willis argued that although barriers to women's equal opportunities had changed somewhat due to short-term contracting, informal recruitment and a male orientated work culture, inequalities still persisted.[18]

Vicky Ball and Lorraine Porter argue that the ACTT, and later industry reports, have been invaluable for feminist researchers. They have highlighted how women's work has been undervalued, particularly regarding 'below-the-line' roles. This illustrates that the policies and practices of the media industries which have sustained gendered hierarchies and historicised patterns of discrimination, continue to impinge on contemporary creative industries.[19] Interest in the nature of gendered labour in the media industries, and the discrimination women have historically faced, has produced a body of scholarship, with Ball and Porter emphasising that studies of sexism in the creative industries have come full circle, from the early wave of feminist academics in the 1960-70s, to a resurgence in work by contemporary scholars. This research shares similarities around women's creative labour having little visibility (both within industry and academia) and being underrated in terms of cultural value, whilst noting that discrimination in different forms is still pervasive. New forms of sexism, including 'unmanageable inequalities' have been highlighted by Rosalind Gill.[20] This term refers to the

notion that whilst equality is now assumed, men remain privileged, as evidenced by their higher pay, better access to jobs and more powerful networks. This more subtle form of inequality is also more difficult to tackle.[21] The myth of inclusivity in the media industries makes speaking out against new forms of sexism more difficult. Gill argues that sexism has become flexibile, agile and mobile, becoming embedded in new 'labouring subjectivities', where neo-liberal notions around entrepreneurship, individualism and personal resilience pose particular challenges for women.[22]

Historically, while white women have faced exclusion, the position of black women has been worse. Miranda Banks, writing about the television industry in the United States in the 1970s, highlights institutionalised sexism and racism, with few white women, and virtually no women of colour reaching key creative positions. She emphasises that we can learn much that is relevant today by historicising the long arc of debates around gender parity and racial inclusion.[23] Research into gendered labour in the television industry ought to touch on intersections of gender, race and class, as inequalities are frequently enmeshed, with women, working class and non-white people being considered as *other*, with white, middle-class males dominating.

Contemporary research has shown that women are still over-represented in support roles and under-represented in creative areas such as writers, directors and producers. They are often left out, or uncredited in the creative process, with white, male, middle-class creative workers considered the norm.[24] Academic literature frequently focusses on motherhood as the cause of gender inequality in creative jobs, however, women are less prominent in the film and television industries irrespective of their maternal status, and so motherhood, and the failure to support it through structural changes, is not the only issue.[25] Sarah Banet-Weiser explains how

women internalise inequalities and unfairness, sometimes blaming themselves, which chimes with Anne O'Brien's assertion that women need to realise the inequalities they are subject to in media work, in order to bring about change.[26]

There is comparatively little scholarship on women's technical work in broadcasting, but we can draw on allied fields including studies of female 'below-the-line' roles (lower grade technical rather than editorial roles) in film production. Research by Brook et al has noted that most women's contemporary cultural labour has little visibility, and frequently goes uncredited, echoing Erin Hill's research around women's service in supporting male creativity in Hollywood from the 1920-1970s.[27] Natalie Wreyford and Shelley Cobb, focussing on the contemporary UK film industry, argue that through quantitative methods the 'missing women', although not heard, are noted by their absence.[28] Whilst women are under-represented in many below-the-line occupations, especially camera, sound and lighting, others such as costume and make-up are heavily feminised. Miranda Banks's research concludes that costume design are devalued in relation to male-dominated professions.[29] This echoes Melanie Williams' findings about the UK film industry, that the role of continuity is female gendered and critically neglected, asserting that the two observations are intertwined.[30]

Methodology

Feminist media history has to draw on alternative sources, including union records and oral histories, since women media workers are often marginalised and omitted from published histories. Feminist scholars, including Frances Galt, Melanie Bell, Jeannine Baker and Jane Connors, have worked with, and indeed in some cases improved access to, the union records,

including recording oral histories and making them available.[31] Galt, citing Sherry J. Katz, talks about having to research around our subjects, 'working outwards in concentric circles', combining different methods and sources, due to incomplete records, in order to understand women's experiences.[32] Feminist researchers follow a tradition of adopting pragmatic and eclectic approaches to research, constructing a bricolage from different fragments of evidence.

Union membership records provide valuable information concerning the number of women entering the industry during the 1970s and 1980s, when the craft areas of television were heavily unionised. The membership records of the ACTT, and Broadcasting and Entertainment Trades Alliance (BETA) are now accessible through their combined successor, British Entertainment, Communications and Theatre Union (BECTU). The records show that just thirty women were hired as a trainee or assistant camera operator by BBC and ITV throughout the 1970s and 1980s; and only twenty-seven women were recruited into sound roles in the same period. Assistant editors had considerably higher numbers, with 232 women joining between 1970-90.[33] These numbers reveal few women working in location-based technical roles in the final quarter of the twentieth century, with rather more working in post-production. Whilst providing some quantitative data, the union records unfortunately only give a brief description of the initial role of members, with no further career information, meaning that other methods need to be employed to supplement the record.

Given the lack of women's career histories from official sources, oral history interviews can provide a rich alternative source to fill the deficit. These histories through personal perspectives enable an understanding of changes in economies of production, relations of power, conditions of labour and professional practice.[34] As Jeannine Baker and Jane Connors explain, oral history allows us 'to map professional and industrial transformations and to comprehend how they

were experienced by individual media workers'.[35] Oral histories, therefore, can provide a voice for women to document their lives, and fill gaps in official narratives. Histories are necessarily selective and written by dominant parties, with women frequently absent, meaning that exclusions can be as significant as inclusions.[36] An interrogation of the archive sometimes reveals the women missing from institutional histories. This can be supplemented by recording living histories with women workers, and adding them to the archive. As Shelley Cobb and Linda Williams argue, oral history is an important feminist research method, which not only generates primary archive material, but also aids the analysis of it.[37] The process is a collaborative one, including reflexivity, where the interviewee may remember or make previously unarticulated connections. The value is manifold, potentially recovering lost practices and contexts and also opening up women's modes of articulating the meaning of what they do, and what they do not do.[38]

My work follows this tradition of feminist scholarship, of research by women, about women, using methods which enable the articulation of practitioners' career experiences and perceptions of their work. In this study, I used a combination of quantitative analysis of survey data with a qualitative study through semi-structured interviews. As Miranda Banks emphasies, combining quantitative and qualitative methods captures the nuances of personal experience along with the extent of inequality, helping fill the gaps in understanding the long history of struggles for equity in media production.[39] The survey and semi-structured interviews were complementary, with the former presenting breadth, and the latter, depth. In combination, these methods provided the tools to investigate the subject area in detail. The resulting data is not necessarily statistically significant, being a relatively small sample size and with respondents being self-selecting rather than demographically representative, however, the data adds value to existing knowledge of women's careers in television.

The online survey was completed by 120 women working in technical, production and editorial roles. Additionally, ten semi-structured interviews were undertaken, primarily with women working in technical roles, to explore their experiences in more depth. The women ranged from those starting their careers in the 1970s and 1980s, to those entering within the last five years The survey asked about the respondent's roles, and the changes they had observed over their careers. It also enquired about the gender split in their production teams, whether some roles were gendered, the challenges facing women workers, and the number of women in senior roles. The semi-structured interviews were undertaken with women who were still active in the industry. Eight of them were working in technical roles previously traditionally undertaken by men, namely camera, sound and lighting. Three of the women began their careers in the 1970s or early 1980s and were therefore able to reflect on changes over a prolonged period. They covered disparate areas of the industry, from drama, to natural history and factual entertainment, and in a variety of settings, such as outside broadcasts, a facilities house, and single camera filming on location. The names of some of the interviewees have been anonymised at their request, whilst others agreed for their quotes to be attributed.

Findings:

Gendered roles

The 120 female survey respondents came from all levels of the television industry, from relatively inexperienced researchers to CEOs of production companies. Some were working for major broadcasters like the BBC and Sky, whilst many worked for independent production companies or were freelancers. Their job titles included: editor, software developer, continuity producer, vision mixer, director, video logger, art director, development producer, production manager, creative director, and many more. The oldest were aged between fifty-five and sixty-

four, and the youngest between eighteen and twenty-four. They had entered the television industry over a wide timespan: ten per cent in the 1980s, twenty-three per cent in the 1990s, thirty-five per cent in the 2000s, and thirty-two per cent within the last ten years. Therefore, a third were able to reflect on working in television before the turn of the Millennium. Twenty-one of the women had worked in technical television jobs, in roles such as: editor, vision mixer, data wrangler, self-shooting researcher/director, ingest operator, cable basher, software developer and interestingly, 'camera*man*' (which is how the respondent described herself), representing a broad range of technical roles.

The majority of the survey respondents worked in editorial and production roles, rather than technical areas of television, and most were following well-established career paths. A typical production management route began with a secretarial role (for those starting work in the 1980s) or runner role (for those who entered the industry more recently), and then progressed to production co-ordinator, junior production manager, production manager, production executive, with head of production the most senior role. The usual editorial route for women began with a secretarial or runner role, before moving into research, then assistant producing and/or directing, producing, series producing and eventually executive producing. The progression experienced by these women suggests that the 'glass ceiling' encountered by those who began their production careers in the 1970s, when promotion beyond production assistant was unlikely, has been removed. The survey data suggests that the proporation of female producers has grown considerably since the 1970s, the role is consistent with feminised traits of communication, organisation and care, which Hesmondhalgh and Baker note as significant in the segregation by sex that occurs in the creative industries.[40] The respondents confirmed that roles such as production management, researching, producing, and script supervising are largely female-dominated, with directing, editing, camera operating, sound recording and

engineering roles, along with higher level management, such as executive producing being male-dominated. Industry research confirms that directing is still a predominantly male role, with Directors UK reporting that the percentage of television episodes directed by women in the UK fell by almost three per cent, to only twenty-four per cent, during the period 2013-16, making it an area of particular concern.[41] The lack of women in higher management is corroborated in a study by the London School of Economics, which found that women were still significantly under-represented in senior roles in media organisations.[42] These results shows that gendered power inequalities within television remain an issue.

In contrast to predominantly female production teams, the survey and interview data confirmed that technical roles continue to be male dominated, with small signs of positive change. These findings are substantiated by industry data from ScreenSkills which found under a quarter of audio roles were undertaken by women, and only one in seven camera personnel were female.[43] The experiences of the interviewees added contextualisation around the disparity. Judi Lee-Headman, when asked about the number of women working in sound, remarked that at her level there was her, and around three other women approximately ten years behind her, in terms of experience. She thought around ninety-five per cent of her peers were male; despite this, she said the gender balance was slowly improving, as was racial diversity. However, she could still count on one hand the number of Black people she has seen working on set, besides actors. 'Kaye', Head of Sound at a facilities house, did not know any other women working at a similar level. Sound recordist Ellie Williams confirmed that she would often be the only woman on the crew. Generally, she thinks technical roles are problematic for women, due to requiring intensive hours and long periods away from home, in contrast to an editorial role where you could 'make quite a normal existence for yourself'.[44] Director of photography (DoP), Sue, estimated that about one per cent of wildlife DoPs were female, and she was not aware of any

black and minority ethnic (BAME) women. 'Linda', the only staff camerawoman in BBC Birmingham, thought the situation was actually deteriorating: she worked with more female operators in 1998 than since. Lighting technician 'Amber', could only name one female gaffer (head lighting technican), and estimated there were ten men to each woman in lighting. However, she thought the picture was improving; a few years ago she could count the women she knew in lighting on one hand, now she needs two. From these accounts, there is significant potential for improving the gender balance within technical roles.

Expectations and assumptions regarding the nurturing nature of women were evident in the survey and some of the interviews. One respondent listed female roles as 'bringing in cakes, providing advice and nurturing', a light-hearted comment that illustrated how female roles were frequently supportive, rather than positions of power. This caring turn is explored in studies such as Melanie Williams' work on continuity girls in the British film industry, and Jeannine Baker's research on television script assistants.[45] Several interviewees spoke about the positive impact of having female crew members, because it broke up the male bravado, and was supportive, meaning you could check everyone was alright. Years after the event, one interviewee discovered she had been requested on outside broadcasts because the presenter would behave perfectly when she was present, and badly, when not. She found she could defuse tension on location by talking issues through before they escalated, and tried to ensure a mixed crew in order to 'get rid of any masculine measuring contests and female bitchiness'.[46] DoP Sue also thought a mixed crew provides balance, and requested female camera assistants when possible.

Entry roles

The first television job for the majority of participants working in technical roles was within production teams, before moving into their technical specialism. This also applied to the three women who began their careers in the 1970–80s, two of whom went on to pursue technical careers. This implies that since the late 1970s it has been possible to move from production or editorial into technical areas.

While some of the women who entered in the 1990s later transferred from production or editorial to highly technical roles, others stayed within the production team, but carried out technical roles, such as self-shooting (a researcher or director who also films), or data wrangling (copying footage from camera cards to computer back-ups). These 'quasi-technical' roles are more likely to be gender neutral, and have emerged due to changes in technology since the 1990s.

Judi, an award winning sound mixer, who mixes dramas such as *Homeland* (Showtime 2011-20), initially worked as a television researcher in the early 1980s. As a Black woman, she found it doubly difficult to transfer to sound:

> in those days women didn't do that stuff, … it was a matter of trying to find courses that I could go on as a Black woman in Birmingham in the 1980s. There was no support towards it, because it wasn't something I was supposed to be doing.

Another interviewee, Louise Willcox, began her career as a BBC secretary in the late 1970s. She wanted to work in sound and was encouraged to apply to Engineering recruitment:

> I ended up at the training centre at Wood Norton ready to do a three-month course, where ultimately, I would end up at Pebble Mill as a trainee audio assistant and when I landed there I couldn't believe it, it seems like a dream to me now.

Louise was one of only four women out of 130 trainees attending the course, and thought she was part of an initiative to recruit more women into technical positions at the BBC.

[insert figure 1 here]

Figure 1. *Louise Willcox, 'Late, Late Breakfast Show' early 1980s, photograph by Roger Willcox*

Colette Foster, Creative Director of an independent production company in Birmingham, joined the BBC as a secretary in the 1980s, taking an editorial route as a director, then series producer, before undertaking executive roles. Colette employs a high proportion of women in her company and rejects any notion of gender bias: 'I treat everybody the same, with a drive to advance women'.[47] The vast majority of her entrants join as runners and are then steered into editorial or technical roles dependent on their aptitude and motivation. This is an enlightened strategy in supporting and shaping the future careers of production staff and signals a different approach from the restricted career paths for women in television highlighted in the 1975 'Patterns of Discrimination' report.[48]

The interview data suggested that the approach taken by Colette's company was not mirrored in areas of television that hire freelance location-based technical crew. Both Judi and Louise highlighted the problematic nature of entering the sound industry now. Louise stated, 'I'm absolutely certain that with the background and education I had, I don't think I'd be here, or could have got to here, if I'd started now'. One of the problems is that funded technical courses, such as the one she completed, are now rarely offered, and broadcasters are training fewer people in house. Screenskills has noted increased barriers to training, especially for freelancers.[49] The fact that almost all location-based technical workers are freelance, has resulted in the institutional training infrastructure of broadcasters like the BBC, and ITV companies, largely disappearing. Universities now offer far more vocational courses in Media,

including video and audio production, than in the 1970s and early 1980s, however, these do not fully prepare someone for a technical role in television production.[50] Someone aspiring to a career in location sound recording would need to shadow a professional, potentially travelling all over the country, unpaid. This excludes most trainees, especially those from lower socio-economic groups. Judi mentions that, 'It has been extraordinarily difficult to get trainees from diverse backgrounds because they feel intimidated by the industry, it's quite an elitist industry. I've watched people absorb this imposter syndrome and you see them shrink.' The industry is attempting to address the lack of entrants from diverse backgrounds through diversity schemes, but if trainees from BAME backgrounds, particularly women, feel intimidated on set, this is going to be challenging. Screenskills reported sound as a sector having very low BAME representation, substantiating Judi's experiences.[51]

One issue mentioned by two of the interviewees as a possible influence on the number of women entering technical roles is that school pupils are often oblivious to the possibilities of working in sound. Girls frequently make Arts subject choices, rather than Sciences, which can disadvantage them later. Ellie felt that not having taken A Levels such as physics and music technology impacted on the length of time it took her to establish her sound career. She believes that having chosen these, and being aware of the doors they would have opened for her in an area she had a passion for, would have given her earlier confidence and crebility in the television industry. She worked as a production assistant in the BBC's Natural History Unit before moving into sound. In contrast, Kaye, Head of Sound at a facilities house, ventured into sound through happenstance, becoming an editing assistant in the 1990s after an administrative job in the BBC. All her learning in post-production was on the job: offline editing, tracklaying, then dubbing assisting, and eventually dubbing mixing. She noted with disappointment that

she receives very few enquiries from young women wanting to pursue a career in sound post-production, and wishes more could be done to encourage them.[52]

For camera and lighting entry routes are also disparate. Wildlife DoP, Sue Gibson, worked in production for four years before becoming a freelance camera assistant, while camera assistant 'Danielle' entered the industry in the 2000s working for a camera rental company, where she learned about using equipment, and met camera operators she could work for.[53] This appears to be a feasible route into some technical areas. It took lighting technician, Amber, a couple of years to establish her career after graduation. She, Sue, and Danielle, had Media degrees, whilst Ellie had an Arts degree, differentiating them from the earlier generations of women, including Kaye, Louise and Colette, who were not university-educated. This research suggests that there are particular challenges for women wanting to embark on technical television careers, especially regarding training, and these difficulties have persisted over decades. The most popular entry routes are via production, with the possibility of moving into technical areas later, with the caveat that it can take a protracted period to become established.

Quasi-technical roles and opportunities

Before the arrival of good quality, relatively light-weight camcorders in the late 1990s, the majority of broadcast camerawork was undertaken by predominantly male camera operators, using professional equipment. Developments in technology have resulted in a substantial increase in the number of female self-shooting producer/directors, and researchers, working particularly on factual television programming.[54] These operators are skilled at recording using generally lower-end professional cameras, as opposed to the more complex high-end cameras used by specialist camera operators, in addition to undertaking editorial production work. The

majority of survey respondents working as self-shooters began their careers as runners or researchers and had undertaken self-shooting as a logical progression. This was not always the case: for instance, one woman had moved from sound assistant to self-shooting producer/director, proving that the porousness between production and technical roles can be a two-way process. There were other examples of women moving from technical to editorial roles, for example a camera operator who moved into research, and an editing assistant who now combines editing with writing.

A number of the job titles of respondents would not have existed before 2000, for example, ingest operator and data wrangler. In both cases advances in technology have resulted in a previously higher-grade technical role being de-skilled to become a junior role - potentially the reason for more women occupying these jobs. Data wrangling began with the technological development of recording onto camera cards, rather than videotape. The data wrangler copies the rushes (the raw recorded footage) from the camera card to a computer hard drive, so that the footage is safe, can be edited and the card reused.[55] It is a quasi-technical, junior role, that can be embedded within either the production or post-production team, making the subsequent career path for the individual flexible between taking a technical, or editorial route. Previously this job would have been undertaken by an assistant editor. The survey respondents who had worked as data wranglers had production backgrounds, and their careers had proceeded along non-technical paths. Ingest operators occupy similar territory. They record video feeds usually coming in to a television station, for example news or sports items. This entry level job would previously have been undertaken by a videotape engineer, which was a skilled, male-dominated role. Three respondents had entered the industry as ingest operators, all at Sky News. Of these women, one still worked in ingest, another had moved into production, and the third had subsequently taken a technical route, as a playout operator, then vision mixer and finally a

studio director. These disparate career paths illustrate the benefits of quasi-technical entry level jobs in allowing individuals to choose the route that best suits their skills and preferences. They provide women with a variety of progression options which were not widely open to them in the 1970-80s.

Removing the glass ceiling

The survey highlighted some positive change in the position of women in television: only fourteen per cent of respondents reported no women in senior management in their organisation. All respondents who began their careers in the 1980s reported that women now occupied senior positions in their organisation, and many were in senior positions themselves. This mirrors the trend observed within the BBC by Georgina Born, that from the 1990s, equal opportunities initiatives led to a steady rise in the number of women occupying senior positions.[56]

Other examples of positive change were noted, such as an increase in the number of women self-shooting, working in special effects, camera operating and following technical paths. Some talked of a conscious decision to recruit female operators in graphics and editing. However, they also shared frustrations around lack of change, such as the disproportionately large numbers of women at the bottom of the production/editorial career paths, with a few men at the top. This chimes with research in the 2000s into intersectional inequalities around age and parental status, which found women concentrated in younger age groups in the creative industries.[57] One director noted a 'huge gap in women carrying out technical roles in television', which raises questions that the survey data could not address, as no respondents were currently working in location-based craft roles, such as camera, sound and lighting,

although a number were editors and vision mixers. Vision mixing historically tended to include more women, than the location-based crafts.[58] The experiences of women in location-based technical roles were, therefore, explored through the interviews.

Progression

Several respondents believed their slow career progression was partly due to their own lack of confidence. A software developer, commented, 'the main challenge for me when I changed career paths from production to the technical side, was the male dominated environment that seemed daunting at first'. For Ellie, lack of confidence was a recurring theme in her career, based around fear of failure, or of not knowing the job intimately enough to do it competently. While working as a production co-ordinator on a series, she lived for a year in the South Pacific, looking after the camera and sound equipment which would be stored in her house between shoots. Despite her fascination with sound, she did not have a play with the equipment:

> I really admired the sound recordists and I really wanted to do it, but still at that stage, I was too scared to try. I couldn't imagine myself in that role, not helped by the fact that I only knew of men in this role. There were only soundmen. Could a woman do it, especially one from an admin role?

[insert figure 2 here]

Figure 2. *Ellie Williams recording audio, photograph by Ellis Roberts*

This reticence chimes with Managing Director BBC Network Radio (1993-6) Liz Forgan's observations concerning the need to signal to girls and women that science and engineering is for them, as much as their male counterparts.[59] Gender conditioning, and the perception that

some television roles are male gendered exacerbated this lack of confidence. Sue echoed the same feelings: 'I know I'm good enough, but am I good enough? And it's a battle in my head. I don't know if that's a gender thing.'

[insert figure 3 here]

Figure 3. *Sue Gibson on camera in Africa, photograph by Mark McClean*

Even in the 2000s, she saw younger men progressing ahead of her, despite knowing that her skills were as good as theirs. Danielle mentioned the same phenomenon, 'I think women suffer a lot more from self-doubt than guys do, and guys are quite good at blagging their way into situations and schmoozing cameramen and being in the right place at the right time.' She had seen male contemporaries become cameramen, whilst she remained an assistant. However, after observing the responsibilities of being the camera operator in charge of an underwater shoot, she doubted herself: 'that was the dream, but now I don't know if I've got it in me'.

Amber, a lighting technician, expressed contentment with her current level, and talked about progression with some trepidation, 'I think reluctantly I might have to become a gaffer'.[60] The additional pressure, responsibility and the number of people to manage are all off-putting. Ellie was mostly satisfied with her current role as a sound recordist as it meant working with exciting people on exciting projects, but she noted that production co-ordinators (the vast majority of whom are women) progressed very slowly and received relatively low pay. This was a contrast with those in the more gender-balanced editorial team, who seemed to progress faster regardless of gender. This echoes the survey results regarding gendered roles in production, with lower pay being more prevalent in female dominated areas. Pay inequality was raised by

several respondents, and one recalled a pay gap between two operators with the same experience, with the man paid more than the woman.

Regional news camera operator, Linda, painted an increasingly depressing picture of her own career progression. When she started in the 1990s, there were few opportunities and poor pay, but opportunities have dwindled further, especially outside London. She complained that many posts are closed or downgraded when someone leaves.[61] It seems that being one of the small number of staff camera operators is no easier than being a freelancer. Ellie summed up the intertwined issues of confidence and progression, thus:

> I think women seem to sink into roles that are kind of supportive, until they get the hang of what they are doing and then they have the confidence. And that might be why it takes women longer to progress. Also, in my experience, often by the stage we're ready to move up, we've been pigeon-holed, so it's harder then to gain confidence and support from others. By taking so long and going into supportive roles first, we're holding ourselves back.

This perspective demonstrates that women frequently blame themselves, not appreciating that they may not lack confidence, but rather, as Anne O'Brien explains, they experience exclusion.[62]

Discrimination and Unconscious Bias

Adapting to male dominated working cultures was an issue reported by several respondents, particularly those in technical areas. They mentioned a 'drinking lads' culture' in post-production, which alienated women, and the 'long standing boys' club, that is inherent in the industry'. Some interviewees mentioned the difficulty of challenging male 'banter', because it

risked making colleagues feel uncomfortable, which could affect future work. Very experienced women, like Judi, had the authority to curtail negative behaviour, having little tolerance for bullying, sexism and racism on set. She protected her assistants in a way that the recordists she worked for early in her career, did not shield her. Judi was made aware of her difference, in gender and race, everyday: 'You had to really focus on the end place that you wanted to get to, to say … I want to end up mixing shows, so I have got to endure this, and endure it was.' When asked how she coped, she replied that she learnt to swear. Fortunately, the situation has improved since the 1980s, and she talked about the atmosphere on set as being significantly better now. Despite the higher proportion of women in production, women still reported discrimination. Colette remembered casual sexism from male crews on location as an inexperienced director in the late 1980s. She was, however, the victim of a serious case of discrimination when series producing *Tracks* (BBC 1994-7) in the mid-1990s. Pregnant with her second child, she was taken off the series she had devised:

> It was appalling the way I was treated… You're already a young mum killing yourself by trying to do it all and even though you've launched a hit show, that had phenomenal viewing figures, they gave it to a man. It was the worst form of sex discrimination ever.

The decision was taken by the male executive producer, and Collette was not informed of the reason and had no recourse to challenge it. She decided to leave the BBC shortly afterwards.

A number of survey respondents recalled not being taken seriously because of their gender. An editor complained that she was not trusted to solve technical problems by an older male colleague, and another spoke about a lack of trust when assisting male camera and sound operators on location. Several women felt patronised by men asking if they needed help

carrying kit, or assuming they worked in departments like make-up rather than in technical roles. Similar concerns emerged from the interviews. Kaye encountered sexism from some of the talent recording voice-overs with her, and became adept at managing their behaviour without antagonising them. Camera operator, Linda, complained that in the late 1990s, one camera supervisor would not let her work on camera, because she was female, and, 'females did not do camera'. She was allowed to floor manage instead. This shows that prejudice has persisted since the 1970s, despite legislation such as the 1975 Sex Discrimination Act.[63]

Unconscious bias was also reported. Ellie mentioned that male colleagues on location sometimes gave her 'advice' about how to hold her boom pole, or conduct location sound recording, undermining her expertise. Interestingly, Ellie noted her own unconscious bias:

> If I see another woman in a technical role, my first instinct is to think they are not as good as a man – isn't that weird? I know it's wrong. I think it's the exposure I've had all my life, that women aren't technically minded and therefore not as competent.

[insert figure 4 here]

Figure 4. *Ellie Williams organising her audio equipment, photograph by Josh Tarr*

Danielle, an underwater camera assistant (a highly technical role), remembered a cameraman telling her that he usually hired male assistants, because they were naturally more technically minded. She agreed that men were better technically, and thought women have to work harder to prove their worth. This notion is reflected in hierarchies of sexual difference and male power, although some studies observe the gender-technology relationship is changing positively. Perceptions of physical strength were also an issue. When a cameraman told Danielle that

women were not strong enough to undertake underwater filming, she started working out to build her strength. Amber also felt discriminated against because of assumptions about her physical strength and although she thought prejudice was reducing, she suspected it would always be a problem.

Judi highlighted another issue related to bias: she was tired of being 'rebranded' each decade since the 1980s regarding her ethnicity, and felt that acronyms such as BAME were established to let managers know that the candidate is not white . She wanted to be selected for her skills and experience, not for her race or sex. She also explained that affirmative action initiatives to hire diverse trainees were sometimes counterproductive, because they assumed there were no experienced people of colour in the industry, meaning that sometimes only non-white trainees were hired, leaving experienced operators without a job booking. This point illustrates that what we understand of as a contemporary emphasis on improving diversity within programme making, is in fact decades old. Whilst Judi had observed improvements during her career there is still significant underrepresentation.

Motherhood

Motherhood has been recognised as a major challenge affecting women working in television. Suzanne Franks comments that nearly all women who succeeded in the BBC in the 1960-70s were childless, and a 1990's BFI study found that fifty-three per cent of women in the industry over forty did not have children, in contrast to only fifteen percent of men.[64] More recent studies, such as Anne O'Brien's research into why women leave media work and Janet Willis and Shirley Dex's work on mothers returning to television production work highlight that motherhood is a persistent limitation on women's television careers even now.[65]

Combining motherhood with working is particularly problematic for women in technical roles, with long hours and location working making it difficult to fit around childcare. One editor explained that the partners of most of her female colleagues had taken on the care of their children. The logistical obstacles cannot be ignored. Both Judi, talking about the 1980s, and Ellie, in the 2020s, spoke about managing their childcare arrangements like military operations. According to Ellie, in technical location jobs there is no flexibility around caring responsibilities. This echoes findings by ScreenSkills, that industry working patterns prove a barrier to parenting, whilst Lizzie Thynne notes the negative impact that working freelance, with informal recruitment and unpredictable working hours had on women trying to combine a career with motherhood.[66] News camerawoman Linda, mentioned that three of her peers left the industry due to the practicalities of family life and the unsociable working conditions.

Even more worrying was the prejudice experienced by pregnant women and mothers. Judi did not tell her employer for two and a half years that she had a child, because she felt her commitment would have been questioned. Ellie felt more discriminated against as a mother, than as a woman, and she did not discuss parenthood with colleagues, despite her belief that being a mother made her better at her job. Regarding pregnancy, Judi noted that, ‘once you start showing, you’re off’, because productions do not want to risk having a pregnant woman on set. Other interviewees felt that motherhood would compromise their careers, with pregnancy being incompatible with some activities, like underwater filming.

Being a parent, and particularly a mother, can be difficult to combine with a television production career, but as a freelancer in a location-based role, it is even more challenging. Freelancers do not have the benefits of maternity pay and leave from an employer, are often

required to be away from home for long periods, and are not in control of shoot hours. Despite this depressing picture, there are signs of some positive change within the industry. Companies like Colette's are allowing employees to work more flexibly, and whole productions are experimenting with new ways of working. In 2020 the wildlife production company Wildstar Films began producing a series for National Geographic about female-led animal communities, with the working title *Queens*, scheduled for transmission in 2023.[67] Fittingly for the subject matter, the production team was female-led, with a majority female crew, and use of in-country talent, for example employing local camera and sound operators abroad. This has positive implications for sustainability and diversity, in addition to female empowerment. Much is at stake, as these new ways of working are under scrutiny and the series must have high production values, or, as Chloe the series producer confided, it could be dismissed as 'that show the girls made'.[68] Hopefully this production, and others like it, will begin a culture of change that results in fairer and more flexible ways of working, for the benefit of all television workers, but particularly those with caring commitments.

Conclusion

Perhaps the current position of women television workers is best summed up by production sound mixer, Judi Lee-Headman, 'there is still some work to be done, but we've come a long way'. This chimes with the study findings, suggesting there is some room for optimism regarding the position of women working in television, with evidence of positive change in areas such as entry routes being less gendered, together with more mobility, albeit not always easily, between production/editorial and technical roles. Women's career paths in the television industries are more varied research about the 1970s-1990s has shown, with elements of flexible

working in production/editorial and stronger representation of women in both production/editorial and technical areas.

To a significant extent, the position of women working in production teams has improved from the 1970s and 1980s, with women now occupying all levels of seniority. However, they are still significantly under-represented in certain key roles, such as director. There remain female gendered silos, such as production management, where progression is reportedly slow. Yet for those women undertaking editorial career paths, there is less discrimination and greater opportunities and rewards, than earlier generations encountered. Evidence suggests that many production companies are tackling gender under-representation and being progressive in their advancement of women, shaping careers in a positive fashion.

In contrast, the position in technical areas, particularly location-based roles, is bleaker. Women still occupy a small percentage of traditionally male craft roles in camera, sound and lighting departments, despite there being some change for the better since the 1990s. Whilst this is an improvement from the 1970s and 1980s, when frequently there were no women in these roles, there are still considerable challenges, particularly regarding the impact of girls' educational choices, limited entry routes and the dearth of formal training. A lack of confidence, combined with explicit and implicit bias, frequently limits women's careers. This is exacerbated by freelance working patterns and the importance of informal networks, which seem to hamper women's progression. Motherhood undoubtedly brings significant difficulties for women undertaking location-based technical roles with several of the interviewees delaying or deciding not to have children because of its complications. The study signals the need for further research into the experiences of women working in location-based craft roles and the issues they continue to face particularly around unconscious bias and motherhood.

The intersectionality of gender and race is a particularly challenging area and although only touched on briefly within this research it was notable that many women cited issues regarding the lack of diversity in the television industry. Whilst the importance of the issue is acknowledged within the industry, with initiatives being trialled in an attempt to address it, from the evidence of interviewees like Judi Lee-Headman the culture on set will need to alter significantly if BAME workers at all levels of experience are to feel valued. This highlights the need for more research in this area, within both production teams and crews.

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[1] Judi Lee-Headman, interview by the author, via Zoom, 10 June 2020. All subsequent direct quotes are from this interview.
[2] *Patterns of Discrimination*, Association of Cinematograph, Television and Allied Technicians (London, 1975); *Limitations to the Recruitment and Advancement of Women in the BBC* (BBC, 1973); Monica Sims, *Sims Report*, BBC (1985); *Television Industry Tracking Survey, The First Year: An Interim Report*, British Film Institute (London, 1995); 'Screenskills', accessed 30 November 2020, https://www.screenskills.com/; *Diversity and Equal Opportunities in Television: Monitoring Report on the UK-based Broadcasting Industry* (Ofcom, 18 September 2019).
[3] Deborah Jones and Judith K. Pringle, ‘‘Unmanageable Inequalities’: Sexism in the Film Industry’, *Sociological Review,* 63, S1 (2015): 37-49.
[4] Valerie Antcliff, 'Gender Differences in the Impact of a Casualised Labour Marker on Workers in the UK Television Industry' (PhD diss., University of Manchester, 2002), 76.
[5] ACTT, *Patterns of Discrimination*.
[6] Suzanne Franks, 'Attitudes to Women in the BBC in the 1970s – Not So Much a Glass Ceiling as One of Reinforced Concrete', *Westminster Papers* 8, no.3 (2011): 125-142, 127.
[7] Loretta Loach, *Campaigning for Change*, (London: Entertainment Producers Alliance for Cinema and Television/Broadcasting, Cinema and Television Trade Union 1997).
[8] Suzanne Franks, 'Attitudes to Women in the BBC in the 1970s’, 139.
[9] Frances Galt, ‘“Regrettably up-to-date”: The Patterns of Discrimination against Women in the Film and Television Industries Report (1975) in Historical Context’, *Feminist Media Histories*, 4, no.4 (2018): 130-159, 153.
[10] ACTT, *Patterns of Discrimination*.
[11] Angela Coyle and Jane Skinner, *Women and work : positive action for change* (Basingstoke: Macmillan Education, 1988).
[12] Antcliff, 'Gender Differences in the Impact of a Casualised Labour Marker on Workers in the UK Television Industry', 73. Lis Kustow, 'Television and Women', in *The Body Politic: Writing from the Women's Liberation Movement in Britain 1969-1972*, ed. Michelene Wandor (London: Stage 1, 1972), 60-71.
[13] Ibid.

[14] Margaret Gallagher, *Unequal Opportunities: The Case of Women and the Media* (Paris: Unesco, 1981).
[15] Ibid.; Jeannine Baker and Jane Connors, 'Glorified Typists' in No-man's Land: the ABC Script Assistants' Strike of 1973', *Women's History Review* 29, 5 (2020): 841-859, 843; ibid.; Antcliff, 'Gender Differences in the Impact of a Casualised Labour Marker on Workers in the UK Television Industry', 70.
[16] Antcliff, 'Gender Differences in the Impact of a Casualised Labour Marker on Workers in the UK Television Industry', 84.
[17] BBC, *Limitations to the Recruitment and Advancement of Women in the BBC*; Sims, *Sims Report*; BFI, *Television Industry Tracking Survey*; Screenskills; Directors UK, *Women Directors - Who's Calling the Shots: Women Directors in British Television Production* (2014); Directors UK, *Who's Calling the Shots? Gender Inequality Among Screen Directors Working in UK television* (2018); Ofcom, *Diversity and Equal Opportunities in Television*.
[18] Janet Willis and Shirley Dex, *Mothers Returning to Television Production Work in a Changing Environment*, in Cultural Work: Understanding the Cultural Industries, ed. Andrew Beck (London and New York: Routledge, 2002): 121-141.
[19] Vicky Ball and Lorraine Porter, 'Editors' Introduction: Gendered Patterns of Discrimination in the Creative Industries', *Feminist Media History* 4, no.4 (2018): 1-7, 1.
[20] Ibid.
[21] Rosalind Gill, 'Sexism Reloaded, or, It's Time to Get Angry Again!', *Feminist Media Studies* 11, no.1 (2011): 61-71.
[22] Rosalind Gill, 'Unspeakable Inequalities: Post Feminism, Entrepreneurial Subjectivity, and the Repudiation of Sexism among Cultural Workers', *Social Politics* 21, no.4 (2014): 509-528, 517.
[23] Miranda Banks, 'Gender Inequalities and Precarious Diversity in the 1970s US Television Industry', *Feminist Media Histories* 4, no.4 (2018): 109-129, 124.
[24] Orian Brook, David O'Brien, and Mark Taylor, *Culture is Bad for You: Inequality in the Cultural and Creative Industries* (Manchester: Manchester University Press, 2020), 224.
[25] Ibid.
[26] Sarah Banet-Weiser, *Empowered: Popular Feminism and Popular Misogyny* (Durham: Duke University Press, 2018).; Anne O'Brien, *Women, Inequality and Media Work* (London: Palgrave, 2019).
[27] Brook, O'Brien, and Taylor, *Culture is Bad for You: Inequality in the Cultural and Creative Industries*, 223; Erin Hill, *Never Done* (New Brunswick, New Jersey, London: Rutgers University Press, 2016).
[28] Natalie Wreyford and Shelley Cobb, 'Data and Responsibility: Towards a Feminist Methodology for Producing Historical Data on Women in the Contemporary UK Film Industry', *Feminist Media Histories* 3, no.3 (2017): 107-132, 108.
[29] Miranda Banks, J., 'Gender Below-the-Line: Defining Feminist Production Studies', in *Production Studies:Cultural Studies of Media Industries*, ed. Vicky Mayer, Miranda Banks, J., and John Thornton Caldwell (New York: Routledge, 2009), 87-98, 90.
[30] Melanie Williams, 'The Continuity Girl: Ice in the Middle of Fire', *Journal of British Cinema and Television* 10, no.3 (2013): 603-18, 604.
[31] Frances C. Galt, 'Researching Around Our Subjects: Working Towards a Women's Labour History of Trade Unions in the British Film and Television Industries', *Alphaville: Journal of Film and Screen Media* no. 20, (2020): 166–188; Melanie Bell, 'BECTU Membership Forms, Women's Work in British Film and Television,'; Baker and Connors, "Glorified Typists' in No-man's Land'.
[32] Galt, 'Researching Around Our Subjects': 167.

[33] Melanie Bell, 'BECTU Membership Forms'.
[34] Miranda Banks, J., 'Oral History and Media Industries: Theorizing the personal in production history', *Cultural Studies* 28, no.4 (2014): 545-560, 547.
[35] Baker and Connors, "Glorified Typists' in No-man's Land, 843.
[36] Shelley Cobb and Linda R Williams, 'Histories of now: listening to women in British film', *Women's History Review* 29, no.5 (2020): 890-902.
[37] Ibid., 892.
[38] Ibid., 899.
[39] Banks, 'Gender Inequalities and Precarious Diversity in the 1970s US Television Industry', 109.
[40] David Hesmondhalgh and Sarah Baker, 'Sex, Gender and Work Segregation in the Cultural Industries', *The Sociological Review* 63 (2015): 23-36.
[41] Directors UK, *Who's Calling the Shots? Gender inequality among screen directors working in UK television*.
[42] *Confronting Gender Inequality: findings from the LSE Commission on Gender, Inequity and Power* (London: LSE Gender Istitute, 2016).
[43] *Workforce Survey 2014* (Screenskills, 2014), https://www.screenskills.com/media/1559/creative_skillset_creative_media_workforce_survey_2014-1.pdf.
[44] Ellie Williams, interview by the author via Skype, 4th June 2020. All subsequent direct quotes are from this interview.
[45] Williams, 'The Continuity Girl: Ice in the Middle of Fire'; Baker, '"Once a Typist Always a Typist" The Australian Women's Broadcasting Co-operative and the Sexual Division of Labor at the Australian Broadcasting Commission'.
[46] Louise Willcox, video interview by the author 29th March, 2019, Birmingham. All subsequent direct quotes are from this interview.
[47] Colette Foster, interview by the author, via Skype 22nd April, 2020. All subsequent direct quotes are from this interview.
[48] ACTT, *Patterns of Discrimination*.
[49] Screenskills, *Survey, 2014*.
[50] Kevin Cowle, 'Training for Film and Television in the United Kingdom', *Educational Media International* 26, no.4 (1989): 232-236.
[51] *Creative Skillset Employment Census of the Creative Media Industries* (Screenskills, 2012), https://www.screenskills.com/media/1552/2012_employment_census_of_the_creative_media_industries.pdf.
[52] 'Kaye', interview by the author, via Zoom, 12 August 2020.
[53] Sue Gibson, interview by the author, via Skype, 5 June 2020; 'Danielle', interview by the author, via Zoom, 03 June 2020. All subsequent direct quotes are from these interviews.
[54] Royal Television Society, 'Self-shooting Guide to Stardom', *Royal Television Society, Television Magazine (online)*, 2014, https://rts.org.uk/article/self-shooting-guide-stardom.
[55] 'Unscripted TV: Data Wrangler', Screenskills, accessed 20 June 2020, https://www.screenskills.com/careers/job-profiles/unscripted-tv/technical/data-wrangler/.
[56] Georgina Born, *Uncertain Vision – Birt, Dyke and the reinvention of the BBC* (London: Secker & Warburg, 2004).
[57] Bridget Conor, Rosalind Gill, and Stephanie Taylor, 'Gender and Creative Labour', *The Sociological Review* 63, no.1 (2015): 1-22.
[58] Lizzie Thynne, 'Women in television in the multi-channel age', *Feminist Review* 64, Spring 2000 (2000): 65-82.
[59] Forgan, 'Pink Lego in Broadcasting House: Engineering and other creative activities'.

[60] Ibid.; ‘Amber’, interview by the author, via Skype, 10 June 2020. All subsequent direct quotes are from this interview.
[61] ‘Linda’, personal correspondence, 19 May 2020.
[62] O'Brien, *Women, Inequality and Media Work*.
[63] *Sex Discrimination Act*.
[64] Suzanne Franks, 'Attitudes to Women in the BBC in the 1970s', 137; BFI, *Television Industry Tracking Survey, The First Year: An Interim Report*.
[65]Anne O’Brien, (2014) ‘Men *own* television’: why women leave media work, *Media, Culture & Society*, 36 no.8, (2014): 1207-1218; Janet Willis and Shirley Dex, *Mothers Returning to Television Production Work,* 122.
[66] *Balancing Children and Work in the Audio Visual Industries* (Skillset, 2008), https://www.screenskills.com/media/1404/balancing_children_and_work_in_the_audio_visual_industries_2008.pdf.; Thynne, 'Women in Television in the Multi-Channel Age'.
[67] 'Wildstar Films', accessed 21/08/2020, 2020, https://www.wildstar.tv/.
[68] Chloe Sarosh, interview by the author, via Zoom, 20 August 2020.