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Are the Creative Industries meritocratic? An analysis of the 2014 British Labour Force Survey

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Abstract

There is currently widespread concern that Britain's cultural and creative industries (CCIs) are increasingly dominated by those from privileged class origins. This stands in stark contrast to dominant policy narratives of the CCIs as meritocratic and open to all. Until now this debate has been clouded by a relative paucity of data on class origins. However, this paper draws on new social origin data from the 2014 Labour Force Survey to provide the first large-scale, representative study of the class composition of Britain's cultural workforce. The analysis demonstrates that CCIs show significant variation in terms of their individual 'openness', although there is a general under-representation of those from working class origins across the sector as a whole. This under-representation is especially pronounced in publishing and music, in contrast to, for example, craft. Moreover, even when those from working-class backgrounds enter certain CCIs, such as museums, galleries, libraries and IT, they face a 'class origin pay gap' compared to those from higher professional and managerial backgrounds. Finally, the paper discusses how these class inequalities in access and pay *between* individual CCIs point to particular occupational subcultures that resist aggregation into DCMS' broader category of CCIs. The paper concludes by suggesting the importance of disaggregating CCIs, particularly within policymaking, and rethinking the definition and boundaries of CCIs as a meaningful category.

Introduction

There is currently widespread concern that Britain's cultural and creative industries (CCIs), contrary to their image as emblems of a new, fluid and dynamic, 'knowledge economy', are increasingly dominated by those from privileged class origins (Hough, 2014; Plunkett, 2014). Public policy is beginning to take notice of these issues, with the UK's Arts Minister Ed Vaizey making speeches and supporting initiatives to address questions of diversity in cultural production (Vaizey 2016). Moreover, this concern is set against the backdrop of

transatlantic concerns over Black, Asian and Minority Ethnic representation in cultural production (Revior 2016).

At present, however, the debates have generated more heat than light, with concerns over diversity often dismissed using individuals' anecdotes about their career successes and struggles (Sherwin 2016) Attempts to ground these debates in more empirical work struggle to find robust data. For those interested in the representation of different class groups within the CCI workforce this can be a particular problem. The most detailed data on the composition of the creative workforce, for example - provided by Creative Skillset (2013) and most recently by the UK's Department for Culture, Media and Sport (DCMS 2015b) - lacks any information about social origin. This paper therefore capitalises on newly released data from the 2014 Labour Force Survey to provide the first large-scale, representative study of the class composition of Britain's cultural workforce. In doing so, the study returns to discussions of the meaning, definition and coherence of CCIs as a sector.

It makes three interventions. First, it rejects policy narratives portraying the CCIs as open and meritocratic. Instead, it demonstrates that those from working-class backgrounds are significantly under-represented within the CCIs. Investigating this further, it shows significant variation in the 'openness' of individual CCI sectors, noting in particular the social exclusivity of publishing and music and the relative openness of crafts. Second, it shows that even when those from working-class backgrounds enter certain CCIs, such as museums, galleries, libraries and IT, they face a 'class origin pay gap' compared to those from higher professional and managerial backgrounds. Third, reflecting on these distinct class inequalities in access and pay *between* individual CCIs, the article underlines the existence of particular occupational subcultures that resist aggregation into DCMS' broader category of CCIs. This latter point raises questions as to the very coherence of CCIs and problematizes future uses of this aggregate category.

The paper proceeds as follows. It begins with a short summary of the literature surrounding the nature of work within CCIs. Here, we consider two contrasting, if not contradictory, themes at the heart of the CCI narrative: first, that this occupational sector represents an open, meritocratic blueprint for a new form of post-industrial economy; and second that working conditions within CCIs are poor, with uncertain career prospects and low- or even

no-pay. The former view is most closely associated with think-tank and policy discourses, while the latter has led academics interested in the structural conditions of CCI labour to question the meritocracy narrative altogether.

The analysis that follows this discussion directly addresses these two positions in turn, refuting the first and offering a new empirical basis from which to assess the claims associated with the second. Here we begin by exploring the employment profiles of the CCIs in the LFS data using descriptive statistics before turning to regression analysis in order to highlight the inequalities within the UK's CCI sector.

Taken together, these approaches indicate clear differences between the occupations that are currently aggregated together by policymakers to represent the economic performance of CCIs. The article concludes by linking the differences in occupational subcultures to the long running debate over how to define CCIs. These differences suggest that, by continuing to aggregate very different occupations, CCI policy will inevitably be inappropriate for all of the sectors included within DCMS' current category. The analysis suggests, therefore, that the question of what, if anything, binds these sectors together should be reopened, given the fact that the aggregate category of CCIs cannot be based on similarities of occupational structure and culture.

Creativity, Meritocracy and the CCIs

The CCIs, in the UK and elsewhere, have long been subject to claims about their economic potential. These claims have been rooted in how CCIs have been defined as a sector of the economy that can outperform other types of occupations, and - our substantive focus here - their distinctively open and meritocratic nature (Florida's 2002 work is the canonical if much critiqued text on this point).

The current definition of CCIs uses the idea of creativity as the basis for claims about CCIs economic potential. Creativity has a dual role within the definition, linking seemingly diverse occupations, including the arts, software professionals and media work, as well as providing the basis for analysis of economic survey data. The most recent sets of these figures (DCMS

2014, DCMS 2015a, 2015b) are based on Creative Skillset's idea of 'creative intensity', whereby:

'in essence a creative industry is defined as being one which employs a significant proportion of creative people, as identified by those being employed in a creative occupation' (Creative Skillset 2013:11).

And creativity is:

A role within the creative process that brings cognitive skills to bear to bring about a differentiation to yield either novel, or significantly enhanced products whose final form is not fully specified in advance' (NESTA 2013:24)

The idea of creativity as the basis for occupational aggregation yields nine occupational clusters; Advertising and marketing; Architecture; Crafts; Design; Film, TV, video, radio and photography; IT, software and computer services; Publishing; Museums, galleries and libraries; Music, performing and visual arts. These occupations are closely related to a specific vision of work in a post-industrial economy, whereby work is centered on making a living based on citizens' capacity as creative individuals. The citizens' role is not to produce material goods, such as cars, washing machines or foodstuffs. Rather the immaterial products associated with services and intellectual property are at the heart of work in this version of the modern British economy.

As McRobbie (2015) has suggested, this is simultaneously a narrative that promotes an idea of the culture of work in the CCIs as one in which creativity is located as a central mechanism of *la carrière ouverte aux talents*. In other words the 'creative' job is supposedly open to everyone. In British policy and practice discourses, where citizens are rarely described as anything other than innately creative (O'Brien 2014), it is then a short step, within policy and practices discourses, to suggest that those who are able to make a living by capitalizing on their creativity are simply reaping the just desserts of talent and skill. Creative work can, therefore, be read as intertwined with ideas of meritocracy prevailing broadly across modern economic and social organization (O'Brien 2014, Littler 2013).

The most powerful account of the meritocratic character of creative work was famously provided by Richard Florida, in his account of the rise of the 'creative class' (2002). Florida argued that the economic advantage of cities in the 'new age of creativity' is increasingly bound up with their ability to attract a cohort of young, highly educated workers with specialist forms of creative, technical knowledge. Crucially, this involves facilitating an environment that aligns with what Florida identifies as this group's core characteristics; namely, its diverse origins, social connectivity, cultural eclecticism and meritocratic ethos (see O'Brien 2014 and Miles 2016 for critiques of these characteristics). Following in the wake of Florida's analysis, various think tanks and policy documents have narrated the CCIs as a dynamic, highly skill-based, sector of the economy, especially symbolic of meritocratic recruitment and working practices, which are in turn considered to be crucial to the sector's success (Work Foundation 2014).

Sociological and cultural studies accounts of the creative industries have subjected these claims to detailed criticism. Most notably, scholars have questioned both the working conditions found in CCIs (Hesmondlagh and Baker, 2010; McRobbie, 2002), and also the narratives of meritocracy attached to those who work in these sectors of the economy. In the United States Koppman's (2015) work has shown how shared cultural tastes correlated with middle class backgrounds are highly influential in hiring practices within CCIs, concurring with Rivera (2015) that hiring is, in effect, a form of cultural matching rather than a meritocratic exercise. Moreover this meritocratic narrative serves to obscure structural inequalities associated with gender (Gill 2002), class (Friedman *et al* 2016) and other forms of discrimination (Littler 2013).

The notion that the UK creative occupational field is socially open or meritocratic is also challenged by more contemporary accounts of its diversity and accessibility from within cultural policy studies (e.g. Allen *et al* 2010, Social Market Foundation 2010). This research highlights inequalities associated with gender and ethnicity, with a recent review of the literature by O'Brien and Oakley (2016) demonstrating structural inequalities resulting from organisational issues, work patterns, hiring practices, and - a central focus in this paper - discriminatory pay gaps (Creative Skillset, 2012;2013).

Work examining the role of class inequality within the CCIs is markedly less developed. As highlighted recently by O'Brien and Oakley (2016), this is in large part due to the lack of large-scale representative data documenting the class origins of those working in the CCIs. There is, however, an important body of work that probes the way class connects to occupational *access* in specific CCIs. This has focused on the classed nature of particular educational pathways (e.g. Banks & Oakley, 2015; Scharff, 2015; Bull, 2014; Allen, 2014) the way the privileged often draw upon powerful social networks in forging cultural careers (Grugulis & Stoyanova, 2006; Nelligan, 2015), or the significant *barriers to entry* faced by those from working-class backgrounds attempting to move into the CCIs (Randle et al, 2014, Eikhof and Warhurst 2012; Friedman *et al* 2016).

Even more recently, Miles (2016) has drawn on the Great British Class Survey (GBCS) to provide arguably the most detailed understanding of the social composition of Britain's cultural occupations. Drawing on the work of Grusky and his various collaborators (e.g. Grusky and Sorensen 1998, Grusky and Weedon 2008), Miles explores the 'micro class' dimensions of occupations in the creative sector, using GBCS data to compare their recruitment profiles, assets (in terms of economic, social and cultural capital) and values. His findings suggest that there are considerable variations in experience, resource and outlook, even between the occupational groups that Florida includes in his 'super-creative core'. This point is in keeping with longstanding debates over the definition and demarcation of CCIs (Campbell 2013), a matter with which this paper engages in its penultimate section.

This paper seeks to extend Miles' work in two key empirical directions. First, by drawing on the LFS, we provide the first *nationally representative* picture of the class composition of Britain's CCIs – as well as how this relates to inequalities of gender, ethnicity and education. Second, drawing on the feminist concept of the 'glass ceiling', we look at earnings of employees within the CCIs and how these may be affected by class origin. For example, recent work (Friedman and Laurison forthcoming) has identified that even when those from working-class backgrounds are upwardly mobile into Britain's high-status occupations they face a 'class origin pay gap' that prevents them from enjoying equivalent earnings to those from intergenerationally stable backgrounds. More specifically, they find that those whose parents were employed in semi-routine and routine (NS-SEC 6-8) occupations earn on

average £6000 less than colleagues from higher professional and managerial backgrounds – even after controlling for a host of factors known to affect earnings. Here we therefore explore whether this finding of a 'class ceiling' also obtains in cultural work.

Data and Methods

As noted, we draw here on data from the Office of National Statistics' quarterly Labour Force Survey, specifically data pooled from four quarterly surveys from October 2013 to September 2014. We first used the DCMS Creative Industries Estimates (DCMS 2015a) to assign occupations (based on 4-digit SOC2010 codes) to nine sectors of the CCIs. The thirty individual occupations in each of these sectors are listed in Table 3, with a total of 2201 respondents employed in these occupations when they responded to the survey. We then identified the respondents employed in these occupations who also responded to the social origin question in the July-September 2014 survey (1769 respondents). This question asks respondents the occupation of the main earner parent when they were 14. We then group respondents' social origin into four groups based on the National Statistics Socio-economic Classification (NS-SEC) classes; those with parents in NS-SEC 1 (higher professional and managerial occupations), in NS-SEC 2 (lower professional and managerial positions), NS-SEC 3, 4, or 5 (intermediate occupations or self-employed), or NS-SEC 6-8 (semi-routine, routine occupations, or unemployed). We also removed all those under 23[1], in full-time education, or over 69, as the LFS collects data on those over 69 differently, since most people in this age group have moved into retirement. This leaves 1637 respondents in CCI occupations, and 918 who also have earnings information (862 with data on all covariates used in regression models).

It is important to note that the LFS does not collect earnings information for respondents who are self-employed; thus all reports of earnings below are only for those who are *employees*. The self-employed are included in our descriptive statistics below, but we are unable to say anything here about the situation for self-employed workers in the CCIs. It

[1] Although it is standard in mobility table analyses to focus on those who are 35 or older and have likely landed in a stable career, we include the widest reasonable age range because we are interested in the composition of the creative and cultural industries' workforce.

does, however, allow the analysis to comment on the class origins of all of those responding to this question within LFS. Appendix table A1 shows the proportion of workers in each sector in each NS-SEC category. Finally the analyses use the recommended survey weighting from the LFS in all analyses, but were replicated with no weighting and the results were found to be consistent; full descriptions of variables and other methodological notes are in the appendix.

Understanding the creative workforce: evidence from 2014 LFS

Who are the creative workers?

We begin our analysis with a descriptive portrait of the demographic composition of the different sectors that make up the CCIs in the UK (according to DCMS's definition). Table 1 thus reports the relative size of each sector among LFS respondents, their gender and ethnic makeup, and the percentage of workers with degrees. Figure 1 also reports average weekly earnings of employees in each sector.

Table 1 and Figure 1 point to three significant findings. First, in terms of economic contribution, Table 1 demonstrates that IT, Software and Computer Services is by far the biggest employer, followed by advertising. Moreover, Figure 1 illustrates that these two sectors also have the highest average earnings within the sector, nearly £100/week more than the average for the CCIs as a whole.

[TABLE 1 and Figure 1 HERE]

Second, Table 1 shows familiar demographic skews within the CCIs. In line with the recent DCMS (2015) report, our analysis demonstrates that women are significantly underrepresented in the CCIs, BAME groups are marginally underrepresented, and all workers are significantly better-educated than the population as a whole.

However, these aggregate figures hide significant variations by individual sector. For example, only the IT sector has a higher percentage of BAME employees than the general population, while every other creative occupation is more white than the UK as a whole.

There is also particularly acute under-representation of women in architecture, craft, film and TV, and IT.

Third, Figure 1 demonstrates that earnings for employees (as distinct from all workers) within the CCIs are much higher than the population as a whole. While much recent debate has focused on the precariousness and low-pay of cultural labour (Hesmondlagh and Baker, 2010; McRobbie, 2002), Figure 1 suggests that the CCIs actually offer rates of pay close to that of higher managers and professionals (NS-SEC 1). Thus the weekly average earnings for those in the CCIs is £801, compared to £896 for those in NS-SEC 1, £582 for those in NS-SEC 2, and £522 in the workforce as a whole. This is partially explained by the fact that 33% of people in CCI occupations are themselves classed as higher managerial and professional, but even when these are excluded the CCI sector is still comparatively better paid than the labour force as a whole (the average pay of people in CCIs outside NS-SEC 1 is £613/week).

Again, though, this masks important inter-sector differences. In particular, occupations associated with Music, Museums and the performing arts - where indeed a lot of the qualitative research on precarious labour has emerged (Banks *et al* 2014) – have markedly low average rates of pay closer to that of intermediate and routine occupations.

The Class Origins of the Cultural Workforce

While results so far echo relatively well-documented demographic and earnings inequalities within the CCIs, very little is known about how these map onto the class origins of those employed in the cultural sector. Table 2 therefore examines the social origins of those employed in the CCIs as a whole, and then shows how these compare to the origins of those in higher professional and managerial occupations (NS-SEC 1) and lower professional and managerial occupations (NS-SEC 2), in the population as a whole. Despite the dominant policy narratives of openness and meritocracy, Table 2 shows clearly that there is a significant under-representation of people from working class origins in creative occupations. While 34.7% of the UK population aged 23-69 had a parent employed in a routine or semi-routine working class occupation, the figure among those working in the CCIs is only 18%. This under-representation is mirrored by the comparative over-representation of those from professional and managerial backgrounds (that is, NS-SEC 1

and 2 combined: 50% in the CCIs vs 29.1% in the population). It is also telling that the CCI skew towards those from privileged backgrounds closely mirrors that of Britain's highest occupational class, NS-SEC 1 or higher managerial and professional occupations, which have long been subject to policy concerns about social exclusivity and elitism (Milburn, 2009; 2013; 2015). Indeed these findings clearly puncture romantic notions of the CCIs as an exemplar of merit and accessibility and instead point towards a sector dominated by the children of managers and professionals.

[Table 2 here]

One of the advantages of the large-sample LFS is that it allows for an unusually detailed investigation of how the distributions of class origins vary across different CCI sectors. Table 3 suggests that the CCIs are in no way a coherent formation in terms of their social composition. Some sectors, such as publishing, advertising, and music and performing and visual art, have a particularly high concentration of those from professional and managerial backgrounds (NS-SEC 1&2) whereas the distribution of the origins of those working in craft, by contrast, is much closer to what is found in the general population.

[Table 3 here]

Class, Gender and Pay

While Table 3 describes important variations in occupational 'openness' across different CCIs, another pressing question – in terms of meritocracy at least - is whether earnings variation exists for employees *within* the CCIs according to gender and class origin[2]. We use a series of multivariate linear regression models of earnings in the CCIs to answer this question. Table 4 reports the results of regressions: in the first column is a model with only measures of class origin and gender. The next model adds controls for ethnicity, age, country of birth and hours worked (as well as a control for the wave in which the respondent answered income questions, not shown). The third column includes measures of

[2] It would be ideal to also examine differences between whites and BAME people, however, the number of non-white respondents in most sectors is too small for meaningful analyses.

a host of other factors known to affect earnings: working in London, education, firm size, public vs private sector, job tenure, training, and specific occupation within each creative sector (not shown in the table). Many of these items (such as educational credentials and whether or not one works in London) are associated with class origins (see appendix table A2 and Friedman *et al* 2016)[3].

The hidden barriers, or 'glass ceiling', preventing women from getting to the top of the CCIs are well documented (Gill, 2014; Scharff, 2015; Conor et al, 2015; Skillset, 2010). Table 4 shows that this glass ceiling or gender pay gap is emphatically confirmed in the LFS data: female employees have average earnings of £239/week or over £12,000/year less than men (with similar class backgrounds) in the CCIs as a whole. Some of this pay gap is accounted for by differences between men and women in the CCIs; women in the CCIs are on average younger than men, more likely to work in the public sector and in other less-well-paid occupations within the CCIs, thus women have predicted earnings of £130/week less than men who are otherwise similar on the measures in the base model, and £112/week less than men net of all the controls in the full model. Nonetheless, net of all these controls this is still a substantial and statistically significant pay gap, with women employed in CCIs earning about £5800 less per year than otherwise-similar men.

In keeping with the rest of the analysis presented here, however, the picture is more mixed when drilling down into individual sector data. Table 5 reports the gender pay gap in each of the nine sectors of the CCIs in three ways: the pay for men and the difference for women (Column 1) without any controls; the difference between men and women after demographic and hours-worked controls only (Column 2, the same model as the 'base model' in Column 2 of Table 4), and the full model (Column 3, again the same model as Column 3 in Table 4) We find that statistically significant gender pay gaps persist in Architecture, Crafts, Film TV & Radio, and IT, with estimates ranging from £97 to £288/week, or from about £5000/year in IT to nearly £15,000/year in Film and other media. The pay differences between men and women in Advertising, Design, Publishing and

[3] The rationale for including each of these measures is discussed fully in (Laurison and Friedman forthcoming); some of these variables are properly thought of as controls, such as age, and others (such as education, and, as our other research has shown, working in London) mediate the relationship between class origin and earnings

Museums & Galleries, on the other hand, are not statistically significant in the full model.[4] In sum, though, the new LFS figures underline the striking scale of disadvantage faced by women employed within the CCIs. While a gender pay gap does not represent a new finding, our analysis gives the most granular understanding to-date of how gender inequality plays out in different CCI occupations.

Work examining earnings inequality by class origin within the CCIs is less developed. Yet elsewhere in British sociology, Laurison and Friedman (forthcoming) have demonstrated that even when those from working-class backgrounds do successfully enter high-status occupations they have, on average, considerably lower incomes. At present there is little understanding of whether this 'class ceiling' extends to the CCIs. The new LFS data we present here, then, with its detailed and accurate measures of parental occupational class and employees' individual earnings, represents a unique opportunity to address this gap. Returning to Table 4, this suggests that there is a class-origin pay gap within Britain's CCIs. The first and second models return statistically significant and substantively meaningful differences in earnings between employees with parents in NS-SEC 1 occupations (the reference category) and those from NS-SEC 2 or NS-SEC 6-8 backgrounds: workers from working class origins have earnings on average £157/week or over £8100 less per year than demographically-similar people (working the same number of hours) from privileged backgrounds. However, these differences are much smaller, and statistically insignificant, in the full model; this suggests that earnings differences by origin are accounted for by differences in the educational levels, particular work contexts and occupations of those from working-class origins. That differences in earnings may be accounted for by education levels and working context should, in itself, be a major cause for concern given what recent sociological research has suggested on the links between class and education, class and occupation, and class and geography (Savage 2015).

[Table 5 about here]

[4] We also report the results of models for Music and Arts, but the very small number of respondents with income information in this group makes these results unreliable.

Finally, in Table 6 we turn to the evidence of 'class ceilings' in individual sectors of the CCIs. Here, we show the differences between employees from privileged NS-SEC 1 origins and everyone else, that is employees whose parents were in any other NS-SEC category below NS-SEC 1. There are statistically significant differences in pay, net of all controls, for those from backgrounds outside NS-SEC 1, in Film, IT, and Publishing, ranging from £117/week to £444/week or about £23,000/year. Conversely, there is also a class origin bonus of £189/week in Advertising.

All of these estimates of class and gender differences in earnings, especially in individual sectors with small numbers of respondents, are necessarily approximate, and change somewhat depending on the particular covariates in each model. Further, none of these regression models can identify the causes of these discrepancies. They are, however, clear indications that there are both gender and class-origin income inequalities facing employees in many of the CCIs, and that these are not accounted for by measurable differences between women and men, or between people from different class origins.

Conclusion: Rethinking CCIs.

DCMS' (2015a, 2015b) most recent economic estimates suggest CCIs are a well performing area of the economy. This makes them highly attractive to policy makers looking for a vision of the future for a British economy increasingly dependent on service sector occupations (Engelen *et* al 2011). Indeed, some elements of the findings from this paper support a picture of CCIs as well remunerated, even, in the case of advertising, giving better pay to those employees from non-elite class origins. However, the main thrust of the narrative is that important questions remain about how far the economic success of the CCIs rests on common set of socio-cultural foundations. Indeed, it is in those occupations most closely associated with the arts, such as Film, TV, radio and photography, that employee wage differences based on social origins are most pronounced. Even where the working class or women are able to make it as employees in this sector they face lower wages associated, as suggested by the analysis of the Labour Force Survey, with their class or their gender.

The uneven distribution of diverse social groups working within CCIs, alongside the disparities in rewards, suggests two things. First is the intersectional nature of inequalities in

the CCI labour force (an issue addressed at length by Oakley and O'Brien 2016). This begins, as table 4 shows, with educational inequalities and is compounded by the uneven geography of access to creative work, specifically individual's ability (or not) to work in London. The factors reflect a complex configuration of interactions between class, ethnicity and gender, across a range of CCIs that have very different occupational cultures. More work, of the kind highlighted by Conor *et al* (2015) and Hesmondhalgh and Saha (2013), is needed to fully detail both the operation of these intersections and how they vary over time and across different jurisdictions (e.g. Koppman's work on American CCIs 2015).

This latter point gestures towards the second implication of this analysis. There is a clear question raised as to the coherence of aggregating CCI occupations into a single sector of the economy. Here our analyses speak directly to a longstanding concern within academic literatures on CCIs that the occupational groups included in their definition are simply too distinct from each other to represent a coherent sector of the economy. This conclusion draws attention to the need for a decomposition of CCIs and attentiveness to the diversity within and between the individual parts. Whilst this has traditionally been approached on an occupation by occupation basis, understanding the components of the CCIs relationally has become central to recent calls from cultural studies scholars to better understand the future role of CCIs in economy and society (McRobbie 2015).

Research on inequalities in recruitment with a particular focus on pay gaps (particularly those associated with social class origin) has, until now, not featured in studies of CCIs. Whilst DCMS has published estimates focusing on employment (2015b), in the absence of any concerted analysis of the social origins of the CCI workforce the central thrust of the government's work has been on the 'good news' of CCIs' economic contribution and their seemingly meritocratic profile.

In contrast, our analyses show clear and often striking inequalities across and between the CCIs. Some of these concern longstanding policy and media issues, such as the underrepresentation of women. However, introducing class origin into these debates - as we have done here - raises a number of new and important questions about the particular nature and consequences of inequality within the CCIs. For example, given the dominance of the children of professionals and managers in publishing, what are the implications for

English literary culture? What are the implications for the way we think about cultural value (O'Brien and Lockley 2015) if the sector is so unevenly accessible for those from different backgrounds?

Moreover, the 'good' economic news about the CCIs is substantively driven, as Campbell (2013) has noted, by two sectors: IT and Advertising. Our analyses in Table 1 and Figure 1 above reiterate the longstanding point that IT, Software and Computer Services is by far the biggest employer, followed by advertising. These are also the best-remunerated occupational groups. The fact that they represent the best-paid cultural professionals, and together make up the 53% of the total CCI workforce, clearly shows how their inclusion skews any understanding of the economic contribution and potential of the CCI sector as a whole.

This skewing of the CCIs economic contribution is echoed in our analysis of their in internal inequalities. As we noted with regard to Table 3, CCIs do not exhibit uniform patterns with reference to the social origins of their workers. This internal differentiation not only points to important differences in the relative openness of different CCI occupations, but shows how the DCMS aggregation of the CCI sector hides significant inter-occupational class inequalities.

What our research here suggests is that, following Miles (2016) there are very different occupational cultures within DCMS' CCIs, whether in terms of the social origins, genders or ethnicities of the workers, or in terms of their remuneration. This indicates that sector analysts and policy-makers need to re-open the definitional debates that organisations such as NESTA, with the idea of 'creative intensity', hoped to settle. This is not for reasons of nit picking or academic quibbling but because, as the LFS shows, we are talking about occupations that are profoundly different from one another. For example pay rates, ethnic diversity and class origins are vastly different in IT as compared to publishing, whilst educational attainment levels in craft could not be further away from a sector like architecture. Which policy and practice frameworks offer the most appropriate understanding of CCIs therefore remains open to question, particularly when thinking about regulation of employment practices, such as internships or low or no pay forms of work, which are the basis for entry into many cultural occupations. This question is thrown into

particularly sharp relief when considering the ability, or not, of CCIs to deliver on the promise of a meritocratic, socially mobile, and well remunerated new economy, given the inequalities so clearly displayed by the current labour force.

References

Allen, K. 2014. ' What do you need to make it as a woman in this industry? Balls!' Work Placements, Gender and the Cultural Industries in *Cultural Work and Higher Education*, Ashton & Noonan (Eds) Basingstoke: Palgrave MacMillan

Allen, K. Quinn, J., Hollingworth, S. and Rose, A. (2010) *Work placements in the arts and cultural sector: diversity, equality and access* London: equality challenge Unit

Banks, M., Gill, R. and Taylor, S. (2014) *Theorizing Cultural Work*
Labour, Continuity and Change in the Cultural and Creative Industries London: Routledge

Banks, M. and Oakley, K (2015) Class, UK Art Workers and the Myth of Mobility in Maxwell, R (ed) The Routledge Companion to Labor and Media, New York: Routledge.

Bull, A. 2014. Reproducing Class? Classical *Music Education and Inequality. www.discoversociety.org/2014/11/04/reproducing-class-classical-music-education-and-inequality/*

Campbell, P. (2013): Imaginary success?—The contentious ascendance of creativity *European Planning Studies* DOI:10.1080/09654313.2012.753993

Conor, B., Gill, R., and Taylor, S. 2015. *Gender and Creative Labour.* Wiley-Blackwell

Creative Skillset. *2012 Employment Census of the Creative Media Industries.* Available at http://creativeskillset.org/
assets/0000/5070/2012_Employment_Census_of_the_Creative_Media_Industries.pdf.

DCMS 2014 *Creative Industries Economic Estimates 2014* London: DCMS

DCMS 2015a *Creative Industries Economic Estimates 2015* London: DCMS

DCMS 2015b *Creative Industries: Focus on Employment* London: DCMS

Englen, E., Erturk, I., Froud, J., Johal, S., Leaver, A., Moran, M., Nilsson, A., Williams, K. (2011) *After the Great Complacence* Oxford: OUP

Friedman, S., O'Brien, D. and Laurison, D. (2016) '"Like skydiving without a parachute": How class origin shapes occupational trajectories in British acting' *Sociology*

Florida, R. (2002) *The rise of the creative class* New York: Basic Books

Gill, R (2002) Cool, creative and egalitarian? : exploring gender in

project-based new media work in Europe *Information, Communication and Society* 5(1) pp70-89

Grusky, David B., and Kim A. Weeden. 2002. "Class Analysis and the Heavy Weight of Convention." Acta Sociologica 45: 229-36.

Grusky, David B., and Kim A. Weeden. 2008. "Are There Social Classes? An Empirical Test of the Sociologist's Favorite Concept." Pp. 65-92 in *Social Class: How Does it Work?*, edited by Dalton Conley and Annette Laureau. New York: Russell Sage Foundation.

Grusky, David B., and Jesper B. Sørensen. 1998. "Can Class Analysis Be Salvaged?" *American Journal of Sociology* 103, pp. 1187-1234.

Grugulis, I., Stoyanova, D. (2012) 'Social Capital and Networks in Film and TV: Jobs for the Boys?' Organisation Studies, 33**: 1311-1331**

Hesmondhalgh, D. and Baker, S. (2010) *Creative Labour* New York: Routledge

Hesmondhalgh, D. and Saha, A. (2013) 'Race, ethnicity and cultural production' *Popular Communication* 11(3) 179-195

Hough, A. Julie Walters warns of future where only 'posh' can afford to act. *Daily Telegraph*, 3rd September 2012. *www.telegraph.co.uk/culture/culturenews/9515821/Julie-Walters-warns-of-future-where-only-posh-can-afford-to-act.html*. Retrieved 28/02/14.

Koppman, S. (2015) 'Different Like Me- Why Cultural Omnivores Get Creative Jobs' *Administrative Science Quarterly* doi: 10.1177/0001839215616840

Laurison, D. and Friedman, S (forthcoming) 'The Class Pay Gap in Higher Professional and Managerial Occupations.' *American Sociological Review*

Littler, J. (2013). Meritocracy as plutocracy: the marketising of 'equality' within neoliberalism. *New Formations: a journal of culture/theory/politics*, 80-81, pp. 52-72

McRobbie, A. (2002) 'Clubs to companies' *Cultural Studies* 16(4) 516–31

McRobbie, A. (2015) *Be Creative* Cambridge: Polity Press

Nelligan, P. (2015) *Walking the Vocational Tightrope: narratives of aspiration, creativity and precarious labour*. Unpublished PhD. University of Western Sydney.

Oakley, K. and O'Brien, D. (2016) 'Learning to labour unequally' *Social Identities*

Plunkett, 2014 Working-class talent being priced out of acting, says David Morrissey. *The Guardian*, Tuesday 16th September. Available at *www.theguardian.com/culture/2014/sep/16/david-morrissey-working-class-actors-priced-out. Retrieved 2/2/15*.

Randle, K., Forson, C., Calveley. (2014). 'Towards a Bourdeiusian analysis of the social composition of the Uk film and television workforce', *Work, Employment and Society*, 1-17

Revior, P. (2016) 'Idris Elba to warn MPs over lack of diversity on British Television' *The Guardian* available from http://www.theguardian.com/culture/2016/jan/17/idris-elba-black-actors-lack-of-diversity-uk-television accessed 25/1/2106

Scharff, C. (2015) *Equality and Diversity in the Classical Music Profession.* London: Kings College London.Sherwin, A. (2016) 'Michael Caine urges black actors to be patient over lack of representation at Oscars' *The Independent* available from http://www.independent.co.uk/arts-entertainment/films/news/sir-michael-caine-urges-black-actors-to-be-patient-over-lack-of-representation-at-oscars-a6827471.html accessed 25/1/2016

Vaizey, E. (2016) 'We all have a part to play in the fight for TV diversity' *The Guardian* available from http://www.theguardian.com/media/2016/jan/22/tv-diversity-ed-vaizey-idris-elba accessed 25/1/2016

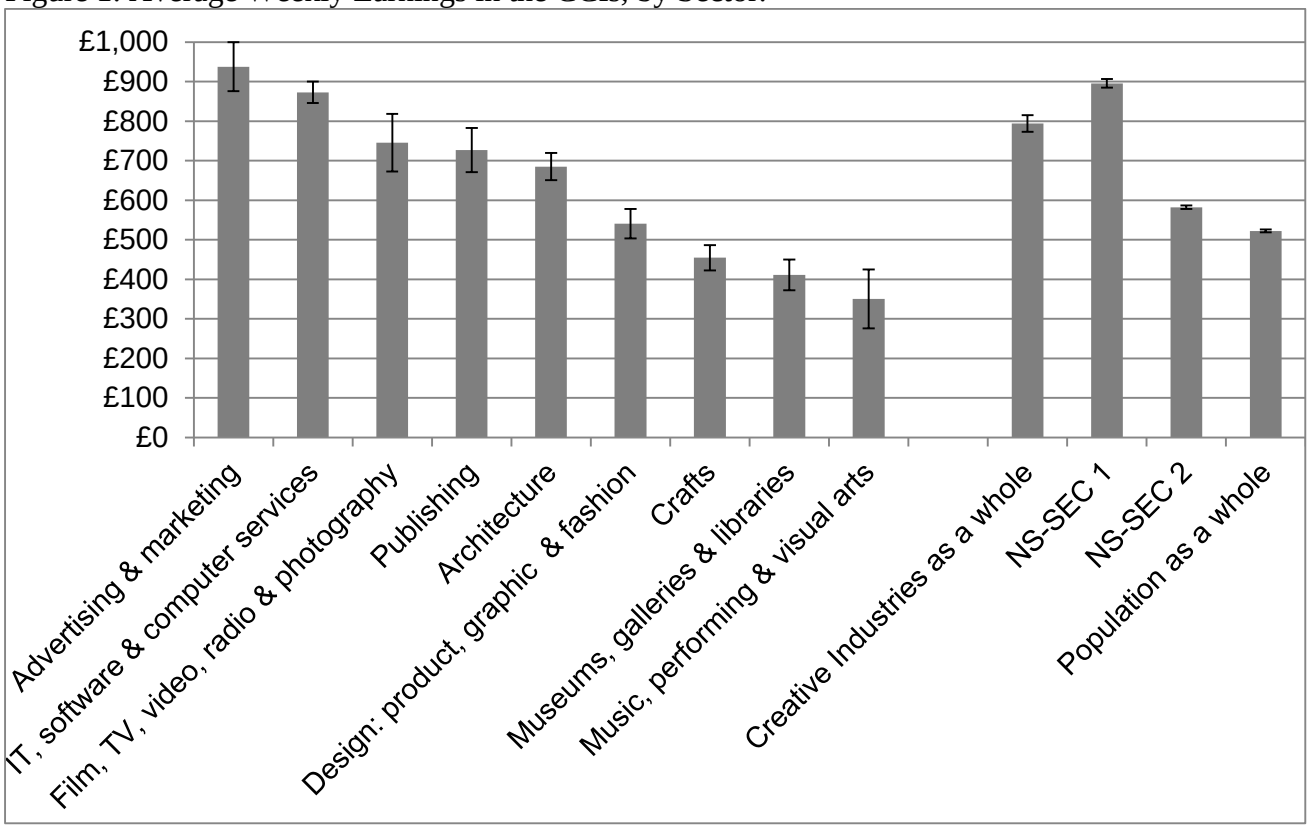
Tables & Figures: *Are the Creative Industries meritocratic?*

Table 1: Composition of the Culture and Creative Industries

	percent male	percent white	Percent w/ Uni degree or higher	*weighted percent of CCIs*	*n*	*n with income*
IT,software and computer services	85.2%	85.5%	68.4%	*29.80%*	*478*	*348*
Advertising and marketing	51.7%	92.6%	65.5%	*23.20%*	*372*	*244*
Music, performing and visual arts	55.1%	92.9%	60.4%	*8.90%*	*147*	*14*
Design: product, graphic and fashion design	53.7%	96.1%	55.3%	*8.10%*	*136*	*69*
Publishing	45.6%	93.1%	71.0%	*7.80%*	*133*	*55*
Film,TV, video, radio and photography	75.9%	93.2%	59.6%	*7.30%*	*117*	*37*
Crafts	76.6%	95.0%	20.6%	*6.10%*	*106*	*41*
Architecture	70.1%	91.7%	87.2%	*6.40%*	*105*	*74*
Museums, galleries & libraries	37.3%	97.5%	76.3%	*2.40%*	*43*	*36*
Total in CCIs	65.8%	91.1%	64.0%	*100.00%*	*1637*	*918*
Total in NS-SEC 1	65.7%	89.9%	66.3%			
Total in NS-SEC 2	44.8%	91.7%	48.5%			
Total in Population	49.1%	89.8%	29.7%			

Note: Weighted percentages based on recommended survey weighting. All respondents reporting an occupation assigned to a CCI sector, aged 23-69 and not in full-time education.

Figure 1: Average Weekly Earnings in the CCIs, by Sector.



Note: Average weekly earnings for all non-self-employed respondents reporting an occupation assigned to a CCI sector, aged 23-69 and not in full-time education

Table 2: Origins in Creative Industries compared with population & NS-SEC 1 & 2

	NS-SEC 1 Origins	NS-SEC 2 Origins	NS-SEC 3-5 Origins	NS-SEC 6 - 8 Origins
Creative Industries as a whole	26.1%	23.9%	32.0%	18.0%
NS-SEC 1	26.4%	20.6%	33.5%	19.5%
NS-SEC 2	18.3%	20.2%	35.9%	25.7%
Population as a whole	14.1%	15.0%	36.2%	34.7%

Note: Weighted percentages based on recommended survey weighting. All respondents reporting an occupation, aged 23-69 and not in full-time education. N= 1637 for CCIs, and 5491 for NS-SEC 1, 9,614 for NS-SEC 2, and 45,356 for population as a whole.

Table 3: Origins for each sector and occupation

	Higher Prof & Mgrs	Lower Prof & Mgrs	Inter-mediate Occs	Routine & Semi-Routine	*n*
Publishing	***43.2%***	***17.7%***	***27.1%***	***11.9%***	***133***
Authors, writers and translators	47%	15%	28%	10%	72
Journalists, newspaper and periodical editors	38%	20%	26%	15%	61
Advertising and marketing	***30.8%***	***24.0%***	***26.3%***	***19.0%***	***372***
Public relations professionals	38%	26%	24%	12%	51
Marketing and sales directors	33%	23%	27%	17%	137
Advertising accounts mngrs and creative directors	29%	22%	28%	20%	24
Advertising and public relations directors	28%	22%	29%	21%	24
Marketing associate professionals	27%	24%	25%	23%	136
Music, performing and visual art	***28.3%***	***25.0%***	***32.9%***	***13.8%***	***147***

Musicians	38%	21%	30%	10%	54
Dancers and choreographers	24%	24%	41%	11%	9
Actors, entertainers and presenters	22%	29%	29%	21%	36
Artists	21%	27%	38%	14%	48
Design: product, graphic and fashion design	***26.1%***	***19.2%***	***33.6%***	***21.2%***	***136***
Graphic designers	32%	15%	32%	21%	69
Product, clothing and related designers	20%	23%	35%	22%	67
Architecture	***24.3%***	***24.0%***	***38.2%***	***13.5%***	***105***
Architects	27%	20%	44%	10%	53
Chartered architectural technologists	27%	0%	73%	0%	3
Town planning officers	25%	29%	24%	22%	26
Architectural and town planning technicians	18%	31%	37%	14%	23
IT,software and computer services	***22.5%***	***25.4%***	***32.6%***	***19.6%***	***478***
Web design and development professionals	32%	28%	29%	11%	57
Programmers and software development professionals	21%	28%	32%	18%	245
IT and telecommunications directors	21%	21%	36%	21%	83
IT business analysts, archtcts and systms designers	21%	21%	32%	27%	93
Museums, galleries & libraries	***27.8%***	***24.5%***	***22.2%***	***25.6%***	***43***
Archivists and curators	41%	27%	15%	17%	13
Librarians	21%	23%	25%	30%	30
Film,TV, video, radio and photography	***17.2%***	***35.2%***	***38.4%***	***9.1%***	***117***
Arts officers, producers and directors	20%	37%	39%	3%	53
Phtgrphrs, AV and broadcasting equipment oprtrs	15%	33%	38%	14%	64
Crafts	***12.9%***	***14.8%***	***43.1%***	***29.2%***	***106***
Smiths and forge workers	39%	0%	31%	30%	3
Glass and ceramics makers, decorators and finishers	20%	14%	38%	28%	17
Furniture makers and other craft woodworkers	13%	20%	42%	25%	38
Other skilled trades n.e.c.	9%	12%	48%	31%	42
Weavers and knitters	0%	14%	34%	52%	6

Table 4: Models of Earnings in the CCIs

Variable	1 No Controls	2 Basic Controls	3 All Controls
Female (vs Male)	-239***	-130***	-112**
Social Origins (vs NS-SEC 1 origins)			
NS-SEC 2 parents	-110**	-80*	-40
NS-SEC 3-5 parents	-29	-67	43
NS-SEC 6-8 parents	-132**	-157***	-21
BAME (vs White)		-44	-27
Age		86***	48***
Age Squared		-1***	-0***
Birth Country			
Outside UK		96	20
Northern Ireland		11	49
Scotland		-73	-36
Wales		77	7
Paid Hours worked		18***	12***
Degree (vs University Degree)			
Less than Uni Degree			-113**
Postgrad			17
Work in London			139***
Public Sector worker			-195***
Firm Size (vs less than 25 employees)			
25 to 49 employees			103**
50 to 499 employees			81**
500 or more employees			266***
NS-SEC Category (vs Higher Managers & Administrators, 1.1)			
Higher Professionals (1.2)			-337*
Lower Managers & Professionals (2)			-475***
Everybody else (3-8)			-562***
Years at Current Job			0
Participated in Job-Related Training last 3 months			38
Constant		-1641***	-35
N		877	862

Note: * p<.10, ** p<.05, ***p<.01. The second column shows the results of a regression with only demographic variables and number of hours worked (plus dummy variables for which the quarter in which the respondent reported their income and occupation, not shown). The second column includes a full range of controls, including dummies for quarters and individual occupations within the CCIs (not shown).

Table 5: Gender Pay Gaps

	1		2	3	
	Men	Women, No Controls	Women, Base Controls	Women, Net of Controls	*n, full model*
Advertising and marketing	1163	-458***	-261**	-105	*232*
Architecture	732	-137**	-51	-151**	*72*
Crafts	439	139	6	-272**	*39*
Design: product, graphic and fashion	593	-128*	-85	-109	*67*
Film, TV, video, radio and photography	773	-83	-4	-288**	*35*
IT, software and computer services	906	-211***	-114**	-97*	*336*
Publishing	770	-74	63	-47	*53*
Museums, galleries & libraries	402	15	-42	-1	*34*
Music, performing & visual arts	450	-194	-405***	9879***	*14*

Note: * p<.10, ** p<.05, ***p<.01. The first column gives the average income for men, no controls; the next column gives the difference between the average earnings for men and those for women without any controls. The third and fourth columns give the coefficients for women in each sector from models with the same covariates as columns 2 and 3 of Table 4, respectively. Column 4 thus gives the estimated gender penalty net of controls for age, class origin, working in London, ethnicity, education, hours worked, firm size, public vs private sector, job tenure, training, and specific occupation within each creative industry. Non-significant or otherwise unreliable coefficients are in light grey.

Table 6: Class-Origin Penalties

	1		2	3	
	No Controls		Base Controls	Full Controls	
	NS-SEC 1 origins	NS-SEC 2-8 Origins	NS-SEC 2-8 Origins	NS-SEC 2-8 Origins	*n*
					23
Advertising and marketing	871	103	112	189*	*2*
Architecture	709	-32	-63	-8	*72*
Crafts	541	-94	-65	78	*39*
Design: product, graphic and fashion	534	9	-113**	-27	*67*
Film, TV, video, radio and photography	1067	-401**	-459**	-444***	*35*
					33
IT, software and computer services	1011	-180**	-198**	-117*	*6*
Publishing	805	-162	-269**	-191*	*53*
Museums, galleries & libraries	367	61	-45	3	*34*
Music, performing & visual arts	329	34	-131		*14*

Note: * p<.10, ** p<.05, ***p<.01. The first column gives the average income for people from NS-SEC 1 origins, no controls; the next column gives the difference between the average earnings for privileged-origin people and those with parents in any other NS-SEC category, without any controls. The third and fourth columns give the coefficients for NS-SEC 2-8-origin people in each sector from models with the same covariates as columns 2 and 3 of Table 4, respectively. Column 4 thus gives the estimated class-origin penalty net of controls for age, class origin, working in London, ethnicity, education, hours worked, firm size, public vs private sector, job tenure, training, and specific occupation within each creative industry.

Data and Methodology Appendix

Data note

The UK Labour Force Survey has a uses a rolling panel survey design, with each respondent contacted in five consecutive quarters, but earnings only reported by each respondent in their 1st and 5th quarters of participation. Thus, the July-September LFS Quarterly survey data only contain earnings information for two-fifths of respondents willing to give earnings data (those who were in their first or fifth survey-wave); in order to obtain a larger sample size for these analyses, data were obtained with a special user license from the UK Data Archive at Essex University, with permission from the Office of National Statistics. These records contained individual-level identifiers allowing us to link respondents for whom July-September 2014 was their 2nd, 3rd, or 4th wave to their first wave in the survey, and thereby obtain a 4-quarter pooled dataset with earnings data for all eligible respondents. Earnings compared in these models are thus from four different consecutive quarters in 2013-14, however results for models run on each wave separately return substantively identical results to those reported , and we include a dummy variable for survey wave/earnings-reporting quarter in all regressions we report.

Weighting: the Labour Force Survey provides two weights with each survey: one for making inferences *about earnings* to the population of employed persons, and another for inference about anything other than income. However, the earnings weight provided was calculated based only on each quarter's respondents, and is inappropriate for use with the pooled data; instead, we use the person weight (*pwt14*) given for each respondent in the July-September 2014 quarter, which accounts for attrition in responses over the five waves of the survey and other aspects of survey design. On comparing these results to those with the earnings weight (*piwt14*) and without weights, we found there to be no meaningful differences.

Variable definitions and notes

Exact question wordings available from the Office of National Statistics at *http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/labour-market-statistics/volume-2---2014.pdf*.

NS-SEC categories and Professional vs Managerial: from *nsecm10* and *nsecmj10*

Origin: from *smsoc10*, using Office of National Statistics Table 10 (http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/index.html) to assign parents' 4-digit occupations to NS-SEC classes; for the 325 cases with only 3-digit soc10 origin codes, matched them to the NS-SEC class for the largest number of 4-digit codes within that 3-digit code. The 1057 respondents with only 2-digit or 1-digit origin codes were not included in these analyses.

NS-SEC Classes (including higher professional vs higher managerial distinction): from *nsecm10* and *nsecmj10.*

Occupations and Occupational Groups: from *soc10m,* for respondents with 4-digit occupational codes, grouped all those in creative and cultural industries occupations into 9 groups.

Earnings: from *grsswk* for weekly gross earnings.

Age, **Age squared** from *age* in years.

Female: *sex.*

Not White: from *ethukeul.*

Country of Birth: from *cry12.*

Paid hours: *paidhru.*

Educational Qualifications: from *hiqul11d* and *higho*.

Degree Classification: from *degcls7.*
Job-Related Training: from *ed13wk.*
Job Tenure: from *emplen*, recoded into years by taking the mid-point of each category (e.g. 3 months but less than 6 months recoded to 0.375).
Work in Lond: from region of work, *gorwkr*
Public or Private Sector: from *publicr*
Firm size: recode of *mpnr02*
Weighting: While the LFS has separate weights for inferences about income and for other inferential analyses, the income weights provided are inappropriate because they do not correct for attrition from the survey, while the person-weights provided for respondents in the quarter in which they answered the origin variable do take this into account. In these analyses, therefore, we use the person-weights, but results are substantively similar without weighting and with the income-specific weighting.

Table A1: Average Earnings by NS-SEC Group
Appendix Table A1: Percent in each NS-SEC category

	NS-SEC 1	NS-SEC 2	NS-SEC 3	NS-SEC 4	NS-SEC 5	NS-SEC 7	NS-SEC 8	total
Advertising and marketing	23%	68%	0%	8%	0%	0%	1%	100%
Architecture	73%	26%	0%	0%	0%	0%	1%	100%
Crafts	0%	0%	0%	42%	31%	26%	1%	100%
Design: product, graphic and fashion	0%	20%	43%	36%	0%	0%	1%	100%
Film, TV, video, radio and photography	0%	51%	9%	38%	0%	0%	2%	100%
IT, software and computer services	77%	17%	0%	5%	0%	0%	1%	100%
Publishing	0%	99%	0%	0%	0%	0%	1%	100%
Museums, galleries & libraries	0%	100%	0%	0%	0%	0%	0%	100%
Music, performing and visual arts	0%	100%	0%	0%	0%	0%	0%	100%
all CCIs combined	*33%*	*47%*	*4%*	*12%*	*2%*	*2%*	*1%*	*100%*

Note: Weighted percentages based on recommended survey weighting. All respondents reporting an occupation and origins and assigned to a CCI sector, aged 23-69 and not in full-time education. N=1637.

Table A2: Variable Distributions by Origin

	Higher Mgr & Prof Origins	Lower Mgr & Prof Origins	Inter-mediate Origins	Routine & Semi-Routine Origins	*total/avg across CCIs*
Female	43%	34%	31%	28%	*34%*
Age	40.4	39.2	43.1	44.3	*41.7*
BAME	7%	6%	12%	7%	*9%*
Paid Hours/Week	37.2	37.2	37.7	36.9	*37.3*
Work in London	35%	29%	25%	16%	*27%*
Work in Public Sector	9%	12%	7%	12%	*10%*
Years with Current Employer	8.1	8.5	9.6	9.6	*8.9*
Job Related Training	27%	22%	18%	19%	*21%*
Education					
LT Degree	25%	31%	44%	52%	*38%*
Uni Degree	56%	55%	46%	40%	*49%*
Postgrad	19%	14%	10%	9%	*13%*
NS-SEC category					
Higher Managers and O	9%	7%	8%	6%	*7%*
Higher Professionals	22%	26%	27%	28%	*25%*
Lower Mgrs & Profs	53%	47%	41%	42%	*46%*
Everybody else	16%	20%	24%	25%	*21%*
Birth Country					
England or UK DK	73%	76%	73%	74%	*74%*
outside UK	17%	14%	16%	11%	*15%*
Northern Ireland	2%	1%	3%	4%	*3%*
Scotland	6%	7%	5%	9%	*7%*
Wales	3%	2%	2%	2%	*2%*

Table A3: Stepwise Regressions in whole CCIs, with all covariates

	1	2	3	4	5
	No Controls	Basic Controls	Education	Work Context	All Controls
Female (vs Male)	-239***	-130***	-143***	-150***	-112**
Social Origins (vs NS-SEC 1 origins)					
NS-SEC 2 parents	-110**	-80*	-61	-47	-40
NS-SEC 3-5 parents	-29	-67	-25	8	43
NS-SEC 6-8 parents	-132**	-157***	-110*	-43	-21
BAME (vs White)		-44	-60	-83	-27
Age		86***	87***	79***	48***
Age Squared		-1***	-1***	-1***	-0***
Birth Country					
Outside UK		96	68	43	20
Northern Ireland		11	-30	12	49
Scotland		-73	-89	-95	-36
Wales		77	49	68	7
Paid Hours worked		18***	17***	15***	12***
Degree (vs University Degree)					
Less than Uni Degree			-170***	-163***	-113**
Postgrad			79*	69	17
Work in London				176***	139***
Public Sector worker				-272***	-195***
Firm Size (vs less than 25 employees)					
25 to 49 employees				178***	103**
50 to 499 employees				184***	81**
500 or more employees				350***	266***
NS-SEC Category (vs Higher Managers & Administrators, 1.1)					
Higher Professionals (1.2)					-337*

Lower Managers & Professionals (2)					-475***
Everybody else (3-8)					-562***

Table A3, Continued

	1	2	3	4	5
	No Controls	Basic Controls	Education	Work Context	All Controls
Years at Current Job					0
Participated in Job-Related Training last 3 months					38
Specific Occupations (reference = Marketing & Sales Directors, 1132)	*SOC 2010 code*				
Advertising and public relations directors	1134				-386**
IT and telecommunications directors	1136				-281*
IT business analysts, archtcts and systms designers	2135				-470**
Programmers and software development professionals	2136				-442**
Web design and development professionals	2137				-520***
Architects	2431				-532***
Town planning officers	2432				-480***
Chartered architectural technologists	2435				-770***
Librarians	2451				-469***
Archivists and curators	2452				-497***
Journalists, newspaper and periodical editors	2471				-379***
Public relations professionals	2472				-486***
Advertising accounts mngrs and creative directors	2473				-153
Architectural and town planning technicians	3121				-495***
Artists	3411				-497***
Authors, writers and translators	3412				-499***

					-
Actors, entertainers and presenters	3413				477***
Musicians	3415				-334**
Arts officers, producers and directors	3416				-367**
Phtgrphrs, AV and broadcasting equipment oprtrs	3417				-398**
					-
Graphic designers	3421				489***
					-
Product, clothing and related designers	3422				403***
					-
Marketing associate professionals	3543				523***
					-
Weavers and knitters	5411				541***
Glass and ceramics makers, decorators and finishers	5441				- 573***
					-
Furniture makers and other craft woodworkers	5442				613***
					-
Other skilled trades n.e.c.	5449				576***
Constant		-1641	-1654	-1644	-35
N		877	874	867	862