

This is a repository copy of Who runs the arts in England? A social network analysis of arts boards.

White Rose Research Online URL for this paper: https://eprints.whiterose.ac.uk/182874/

Version: Accepted Version

Article:

O'Brien, D., Rees, G. and Taylor, M. orcid.org/0000-0001-5943-9796 (2022) Who runs the arts in England? A social network analysis of arts boards. Poetics, 92 (A). 101646. ISSN 0304-422X

https://doi.org/10.1016/j.poetic.2022.101646

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: https://creativecommons.org/licenses/

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



Who runs the arts in England? A social network analysis of arts boards

Abstract

Recent research on cultural production has drawn attention to significant inequalities. This paper aims to unpack one possible explanation for these inequalities, by focusing on the people with ultimate responsibility for arts institutions: the boards of directors. Using data from the UK's Companies House, it first analyses the boards of Arts Council England's National Portfolio Organisations. It then "hops" to the other organisations with whom arts organisations also share board members, and their directors. While the network of NPOs is relatively sparse, with most organisations not sharing board members with any others, in the one-hop network the majority of these organisations are indirectly connected to one another. In addition to a large number of arts and cultural organisations, this network also contains a large proportion of film funding companies and financial services companies. The most central company in the network, measured by betweenness, is the Royal Opera House, followed by companies associated with significant tax advantages for their directors. Our results raise questions for the governance of culture, drawing further attention to its ties with financial institutions.

Keywords: cultural governance, social network analysis, inequality, brokerage

1.1: Introduction

In 2016 in Museums, Money, and Politics (2018), performance artist Andrea Fraser draws attention to the power structures connecting political fundraising, boards of cultural organisations, and how that underpins inequality around the visual arts in the USA. Her concerns regarding entrenched power in affluent, predominantly white male board members, were amplified by Donald Trump's success in the 2016 presidential election, a candidate heavily connected to the boards of American arts organisations, while seemingly hostile to many of these artistic and cultural institutions and their stated goals. Fraser's findings have ramifications for the sociology of culture, arts management and cultural policy, and our findings on arts organisations funded by Arts Council England (ACE), which provides a public grant structure that explicitly advocates inclusive, egalitarian goals (ACE 2010, 2020) in contrast to the laissez-faire cultural context prominent in USA cultural funding and policy (Lena 2019), suggest her concerns may apply across a range of art sectors and funding structures.

Fraser's research has broad implications that have widened since publication. Inequalities of access to artistic and cultural professions alongside (and potentially entrenched by) the continued homogeneity of senior staff disproportionately affects people of colour, disabled and LGBTQ+ people, those from working class origins, and women remain. The disconnection between new social movements such as Black Lives Matter and arts organisations with few staff of colour and the uncertainties of organisational sustainability (see Brook et al 2020 for a detailed overview) are just some of the many the significant

difficulties likely exacerbated by COVID across the arts. These dynamics have brought the composition of boards as sites of influence and decision-making forward as a major area of practitioner and media interest (Higgins 2021).

We aim to assess these strands through a longer-running tradition within cultural policy, arts management, and sociology of culture, examining the roles and composition of arts boards by first reviewing the literature on inequalities in the cultural sector and identifying the relative absence of work on boards to this subfield. We then discuss research demonstrating the importance of boards to artistic and cultural organisations, as well as debates over the governance of culture. These areas form the basis for the significance of our analysis, which focuses on publicly funded arts institutions in England.

More specifically, we follow Griffiths *et al* (2008)'s work charting the changing formation of elites governing the cultural sector in comparison with Ostrower's (2002) work on the close relationships between arts boards and the commercial sector, particularly banking and finance, in the United States. This suggests that power and influence are, in turn, closely related to inequalities within the artworld for two primary reasons: first the composition of arts boards (i.e. inequalities in terms of *who* holds power and influence over arts organisations) and second the function of arts boards (i.e. their collaborations and commercial interaction with other sectors and the interests represent).

We then connect the arts boards literature to the literature on culture and inequality to aid constructing a means of measurement. The network of boards of directors of ACE's National Portfolio Organisations (NPOs), using administrative data from the UK's Companies House, data charts the relationships between organisations, both direct and indirect, and we measure this in two stages. In stage one we show that governance of the arts in England is just as varied as the range of artistic and cultural practices, scale and sizes, and organisational forms, which are funded by ACE. Our results suggest there are few intersections in our picture of English arts governance.

The second stage of analysis presents a far more detailed structural picture. Here, in drawing on the concept of board interlock, we find far fewer isolated arts organisations via consider indirect ties (boards outside ACE NPOs that directors sit on) demonstrating that financial companies are dominant players in arts boardrooms and are thus crucial to the composition to England's contemporary cultural elite. While the centrality (structural significance) of specific institutions, such as the Royal Opera House, is to be expected (Bereson 2003), the connection between business, policy makers, and artistic and cultural organisations reinforces the concerns of art theorists (Fraser 2018, Shaked 2022) as to the role of financial institutions in arts governance. Using boards, and social network analysis, also offers important new directions for the study of inequality within arts institutions and cultural policy.

1.2: The problem of inequality in the cultural sector

An extensive and longstanding literature describes inequalities within the consumption and production of culture. This literature demonstrates the patterns of inequality, and

suggesting explanations and routes for change. Crucially, the level of institutional governance, for example organisations' boards, has been absent from literature on both production and consumption. However, both literatures on production and consumption are crucial to contextualise why boards contribute to the reproduction of inequalities.

The literature on cultural production makes clear that workforces are marked by significant overrepresentations, compared with the general population, of white men from middle class backgrounds (Brook et al 2020, O'Brien 2018, Saha and van Lente 2020, Nwonka and Malik 2018, Eikhof and Warhurst 2013, McRobbie 2015, Alacovska 2017, Cobb 2019, Dent 2020, Wreyford 2018, Yeh 2018). In specific cultural industries, such as publishing, issues of gender are less acute, but issues of class and race are even more pronounced (Saha and van Lente 2020). This pattern is echoed in museums and galleries (Brook et al 2020). These inequalities are recognised as a problem by ACE, whose strategies have prioritised addressing workforce diversity (ACE 2010, 2020).

There are many reasons for these workforce imbalances. Three examples, race, class and gender, are useful to illustrate this point. For race and ethnicity, we see powerful narratives of what will, and what will not, be successful in cultural markets (Saha 2018), along with outdated stereotypes associated with what it is to be a Black, Asian or Minority Ethnic creative worker (Nwonka and Malik 2017). Similar stereotyping is part of barriers to entry for those from working class social origins, alongside lack of access to financial resources (Friedman et al 2016, Friedman and O'Brien 2017). In the case of gender: stereotyping, the gendered individualisation of caring responsibilities, and access to professional networks, are crucial in accounting for the lack of women in senior positions (Gill 2014, Dent 2020).

While there are distinct theoretical foundations and modes of analysis associated with the study of race, class, and gender inequalities, the previous examples also show important factors in common. Most notable is the set of assumptions and perceptions about a cultural 'fit' with organisations or markets (Saha and van Lente 2020, Brook et al 2020). This point is important when considering the role of boards in setting organisational direction, a point we discuss in the following section.

Although much has been done to understand the dynamics of inequality in cultural work, there are areas without the same levels of engagement. While there are important interventions on commissioning and decision-making processes (e.g. Saha and van Lente 2020, Childress 2017, Friedman 2014) these are focused on senior management and below. Arts governance, although a core topic of cultural policy (O'Brien 2014), has not been central to research on inequality. Two exceptions come from Alexander (2018) and Griffiths et al (2008).

Alexander identifies the shifting demands placed upon organisations by cultural policymakers over the past thirty years. In response to these demands, cultural organisations have reconstituted themselves to be more market-focused, with the attendant shift in institutional governance arrangements and curatorial and programming priorities. The thrust of the analysis here is that cultural organisations have lost elements of their autonomy from the state, and have also become more business-like.

This view of the changing nature of cultural organisations is a long-running area of debate (Hesmondhalgh *et al* 2015 and Hewison 2014 give detailed summaries). However, the *mechanisms* for the change in orientation, for example via senior staffing decisions or organisational governance arrangements, have been given less attention.

Here, Griffiths *et al*'s (2008) work is crucial. Analysing the non-departmental public bodies governing arts, culture, and sport in England, they stressed the complexity of the changes in cultural governance. Rather than a shift from autonomy to state control, they stress a longstanding close relationship among those from a 'gentlemanly' upper class characterised by elite educational trajectories and associations with private members' clubs. While the interpolation between gentlemanly elites, the state, and the arts sounds a note of caution for analysis claiming long-term transformations in England's cultural field, Griffths *et al* demonstrate important changes within the composition of that elite. In doing so they support Alexander's concerns over the reorientation towards business practice and market ethos within the cultural sector. While there has been 'no simple 'marketization' of cultural initiatives', the composition of cultural governance has shifted, with representatives from business and the civil service taking their place alongside fewer aristocrats and academics.

This understanding of the changing composition of the governance of culture in England prompts two questions: What is the current composition of cultural governance? How, if at all, has this changed in the decade or so since Griffiths et al's (2008) analysis? In turn, these questions underpin a broader question, about the impact on arts governance, in exactly the way raised by Fraser's (2018) study of the interconnections between wealth, politics, and power in the art world. To answer these questions and to understand these interconnections in England, we now turn to focus on the boards of arts organisations.

1.3: Why do boards matter?

Boards of directors have been a focus in management studies, and in social network analysis, for at least a century (Lynch, 1914; Cadbury, 1914). Although boards take various organisational forms, they are united by the function of governing organisations. This governance tends to have finance as its primary focus. In for-profit organisations, boards are responsible to shareholders, and are responsible for approving annual budgets and ensuring the long-term financial stability of organisations. Boards are also responsible for setting the broad strategic direction of organisations, and for appointing (and, potentially, firing) chief executives. As such, they are crucial in setting the context for the inequalities research has observed in both workforces and, as a result of programming decisions, audiences.

In addition to having relationships with the organisations they govern, boards also have relationships with each other. Here, we focus on *board interlock* (Burt 1985, Chu & Davis 2016). This is when two organisations share a board member or members. Board interlock provides the foundation to map the overall governance of the state-funded cultural sector.

Board interlock is also important in practical ways, conferring benefits to individuals and organisations. Organisations benefit from board members in two main ways: board member experience can improve a firm's reputation, and board members with stronger network positions can provide greater access to information and resources. A key priority for

organisations is to have high-quality board members. For some organisations, one marker of such quality is sitting on multiple boards, since having ties to other important organisations improves an organisation's reputation and is a signal of legitimacy (Mizruchi 1996). Someone with desirable characteristics - such as experience in financial management - is likely to be approached by several organisations, and having more experience of serving on boards in turn increases their desirability.

This has the net effect of increasing inequalities in board membership. Not only are there Matthew effects (Merton, 1968), where people with experience of board membership tend to do more of it, but the perceived desirable characteristics that make people attractive as potential directors are associated with further dimensions of inequality. For example, as far back as 1971 Mace (1971) observed that "Here in New York it's a systems club. They are all members of the Brook Club, the Links Club, or the Union League Club. Everybody is washing everybody else's hands." (quoted in Mizruchi, 1996: 279).

Further evidence comes from Westphal and Milton (2000). They investigate demographic minorities in the US, introduced with the framing that "boards have traditionally been viewed as a homogeneous group of elites who have similar socioeconomic backgrounds, hold degrees from the same schools, have similar educational and professional training, and, as a result, have very similar views about appropriate business practices" (2000: 366). Where minorities are present, their effectiveness depends on their role on *other* boards as a marker of legitimacy. Where individual minorities are on boards without interlock, they tend to have lower levels of organisational influence.

Overall, the literature suggests boards of directors can be less diverse than the organisations that they govern. This is partially because the boards are senior appointments, and partly because the importance of networks and networking makes membership highly exclusive. Inequalities are thus perpetuated.

1.4: Boards in the arts sector

Westphal and Milton's (2000) work reflects the more general trend to look at for-profit corporate businesses. The broader literature on corporate boards, about who boards *are* (Hermalin and Weisbach, 1998; Van der Walt et al, 2004; Raheja, 2005), and what they *do* (Amin et al, 2020; Lorsch and Young, 1990), has a number of implications for the study of boards in the cultural sector. These include analysing their makeup in relation to diversity (Terjesen et al 2016, Adams et al 2015), and their relationships with the staff at the organisations they govern. At the same time, arts organisations are distinctive from typical for-profit organisations, with accompanying distinctiveness in board composition and behaviour. They have two missions: maintaining a high-quality artistic programme, and organisational stability and sustainability. These two roles are often narrated as being distinct, and potentially in tension with each other. Arts organisations are traditionally seen as more financially vulnerable (Radbourne 2003), and therefore have different approaches to caution and risk-taking.

Boards of arts organisations, particularly in England, are not always boards of *directors*, as opposed to trustees. At the time of Carty et al's (2017) review of governance in the arts,

79% of NPOs were limited companies with charitable status. Reform of charity and company law has meant that there are several different legal structures that arts organisations now take, but the majority of organisations are governed both by a board of directors (overseeing the company) and by a board of trustees (overseeing the charity). In this section we treat directors and trustees interchangeably, while recognising that different structures imply different roles.

Carty et al (2017), based on a survey of directors of English arts organisations, find the key priority for arts boards is fiduciary responsibility. Specifically, the key agenda items for directors are fundraising, setting long-term strategic priorities, and advocacy. This is reinforced by Turbide et al (2008), who draw on Bertrand and Turbide's five traditional roles of boards (2007). These include reviewing institutional missions and strategic planning, defining long-term objectives, identifying threats, understanding needs of stakeholders, and assessing risks. In their case, in aiming to understand how arts boards respond to financial crises in Quebec, they find that, relative to business and enterprise, "the exercise of accountability is generally less structured" (8).

Exactly what arts board members *do* varies in different contexts. Radbourne (2003) interviewed 12 board chairs and general managers of arts organisations in Australia. Here arts boards were charged with thinking strategically, recruiting the right CEO, understanding legal duties, and being involved and active.

This focus on strategic thinking and governance can be contrasted with Ostrower (2002). who undertook extensive fieldwork in four (anonymous) institutions in the US, the largest museum and opera house each in two different cities. She found that fundraising was a crucial part of the activity, with board members expected to recruit new donors and keep existing donors warm. They were also expected to contribute major donations themselves.

This issue bridges what directors do and who they are: if one role of directors is to donate large sums of money to the organisations they govern, they need to be wealthy. This issue is not as explicit in Dubini and Monti (2018), whose focus is on Italian opera houses, but it is premised on a well-functioning board being instrumental to good relations with stakeholders and donors, and being the key means for riding out or avoiding economic shocks. While Ostrower's work reflects the particular setting of the US funding and cultural policy system, the importance of boards to arts organisations' funding is a global issue.

Ostrower's participants are candid about the expectation that they would donate significant sums to the organisations on whose boards they sat. These expectations are possible because of who the trustees are. Finding that "board composition changes, but it remains exclusive with respect to class" (2), she finds that 96% of the trustees of the boards she studies are millionaires, between 74%-96% per board are multimillionaires, and more than half had annual incomes of more than \$1 million. While 64% were men, which was lower than the equivalent figure for corporate boards, she found that a large number of women trustees had taken on the roles after their husbands – previous trustees – had died, and women trustees generally were neither in paid work nor retired, although those in work were generally in business or finance. By contrast, the majority of the men were in work, and in senior roles in business or finance such as CEOs or chairs. The majority of trustees

were White; some were Hispanic or Black, and none were Asian, while the organisations were both in cities where less than half the population was non-Hispanic White. Crucially, in the context of our discussion of the inequality and culture literature, the process of recruitment was largely self-regulating, with trustees recruiting themselves and people culturally similar to themselves.

This is reinforced by Banks (2017), who investigates the most prominent "mainstream" and African-American museums in New York City: the Metropolitan Museum of Art (the Met), and the Studio Museum in Harlem (SMH). Banks demonstrates inequality between her case studies. Although both organisations have large majorities of elites on their boards, the Met is mostly a White elite and the SMH is mostly a Black elite. The Met's White elite has 8 billionaires, while the SMH's Black elite does not have any.

While elite social closure in the arts (as demonstrated by Ostrower 1998) is one cause of the narrowness of arts boards, it is not the only one. It is notable that the accounts of extreme wealth on boards are drawn from the US. Participants in studies in other countries also express concerns about the narrow social groups from which directors and trustees are drawn. Azmat and Rentschler (2017) interview several in Australia, finding a general attitude that boards should be (more) diverse in terms of gender and ethnicity, and that board members from historically marginalised groups can experience discrimination.

One of Carty et al's participants puts the issue more directly, referring to "a crushing lack of diversity at board level" (5). In an English context, the two issues in tension are that "[s]everal of the larger scale organisations report that gender and cultural diversity can usually be achieved" (24) and that "At the extremes, boards are `closed` groups recruiting from a narrow pool of `insiders` subtly or otherwise excluding those who are different..." (24). This reflects two issues: first, that boards tend not to include people who are not from middle class backgrounds, nor disabled people; second, that trustees are drawn from a very narrow group. This is put more directly, and at length: "It is apparent that the professional networks appear to consist of a limited pool of individuals perceived to have the 'right' skills and experience for board roles. These individuals then rotate from board to board as they increase and extend their confidence and networks. These pools of people result in what can become closed clubs of like-minded individuals that are not porous or 'open' to others from different social or cultural backgrounds. This recycling of individuals obscures the potential contribution of others and perpetually validates the usual suspects." (28)

These inequalities are at least partly a consequence of the processes through which people become board members in the first place. For large arts organisations in Queensland in the 1990s, Radbourne (1993) summarises that "the typical board member is recruited to the board by an invitation from the chairperson" (215); Ostrower explains that, for her four institutions, trustees are the ones who recruit new trustees, and they aim for people who are similar in income, taste, and other preferences. In the UK context in which we work here, Carty et al explain that the process largely comprises "a combination of advertising and appeals to professional networks to source new trustees", where those professional networks "appear to consist of a limited pool of individuals perceived to have the `right` skills and experience", that "are not porous or 'open' to others from different social or cultural backgrounds" (28). While the exact details of appointments to boards differ, the

overall mechanism – where the majority of board appointments initially consist of informal approaches from existing board members who know the proposed new board member, either personally or by reputation – is similar in the different national contexts.

This work, spanning different national contexts and different time periods, provides two crucial insights in relation to the literature on inequalities in cultural work. The first is in relation to the elite character of board members. In the US context in which Ostrower and Banks write, board members' eliteness is most visible in relation to their wealth and income, while this appears to be more muted in the UK and Australia.

The second, however, relates to the other industries in which they work. Ostrower's insight that the majority of board members in work are working in banking and finance illustrates the value of these sectors to the arts sector: arts organisations with ties to banking and finance have greater access to wealthy people who may be interested in donating. These ties are also potentially beneficial to the banking and finance sectors. Across two papers, Campa and Zijlmans (2019a, 2019b) demonstrate the importance for engaging in support for the arts across a large number of major European financial firms, both showing that explicit support for arts organisations is viewed and perceived as part of a corporate social responsibility strategy, particularly when it is communicated through social reports (2019a), and that support for art-based initiatives is associated with stronger corporate governance structures (2019b). This can be interpreted by a number of ways, which the authors acknowledge. Engaging in support for the arts can be used as a signal among financial organisations that they are more socially responsible, while also using their influence on arts organisations as a means to manage their reputations and mitigate against criticism. This also extends to arts organisations' relationships with other institutions, most prominently in fossil fuels (Evans 2015). While these relationships are not limited to shared board membership, with corporate sponsorship being the most visible form of other industries' relationship with the arts, shared board membership is a mechanism through which industries including finance can benefit from their relationship with arts organisations.

This final point connects our summary of the literature on arts boards back to the broader context of inequality in the cultural sector. There are two issues at stake first *who* is represented on arts boards; and second the consequences of that representation. Given the roles of boards in the arts are primarily governance and fundraising, and that the existing literature suggests board members are disproportionately older, white, and wealthy, their influence on financial decisions may have consequences for both workforce and programming diversity, as well as individual board members willingness to offer sponsorship or board members organisations' desire to be associated with specific artistic practices (as was Fraser's 2016 concern).

2.1 Data and methods

We have shown the importance of boards, in terms of the specific literature on arts governance and in terms of the connections to the literature on inequality. Who, then, are the board members of arts organisations in England? In order to investigate this, we start with the organisations funded by ACE as its national portfolio. The portfolio consists of the

different art forms supported by ACE: dance, music, theatre, literature, and combined arts, and national portfolio *organisations* (NPOs) are organisations that are regularly funded by ACE: that is, they receive an annual sum of money each year over the period 2018-2022, without needing to apply each year. NPOs range in annual support from £40,000 per year (several smaller organisations) to £24 million per year (Royal Opera House).

Not all NPOs are companies in their own right. Some organisations are charities only, and are not limited companies. In addition, some NPOs are branches of much larger organisations. Several local authorities and universities run museums, which are part of the national portfolio, but their boards govern the entire organisation rather than the museum. NPOs that are not companies, or are parts of larger organisations, are excluded from the analysis. The remaining sample consists of 735 of the 829 NPOs. The majority of these are also registered as charities with the Charity Commission. As we focus on companies, we use the language of directors rather than trustees.

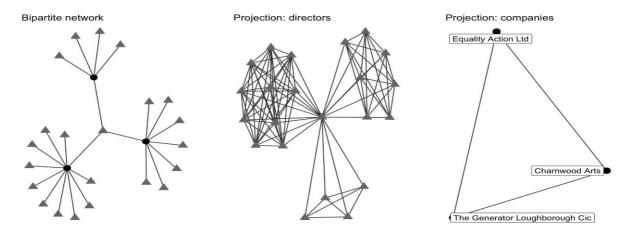
The national portfolio does not encompass the arts sector in England. It does not include large-scale, profit-making commercial theatre, such as on London's West End; or small-scale grassroots activity. It is, however, a clearly-delimited sample of organisations to work with; biases derived from missing data in network analysis are very different from those using other forms of data, such that taking a limited sample of a broader dataset, rather than a complete sample of a smaller dataset, would have major implication for network structure (Kossinets, 2006).

2.2: Data extraction

We extract data from Companies House—England and Wales' public record of registered companies—via its Application Programmable Interface (API, see https://developer.company-information.service.gov.uk/api/docs). Using a list of unique company numbers for each of the 735 NPOs in question, we queried each company's Standard Industrial Classification (SIC) codes and their list of directors on October 19 2020, using the ukboards Python package developed for this project (Rees, 2020). We then constructed a bimodal network where each edge connects different types of entities (nodes), in this case linking directors to companies. Having extracted this network, we can then project unimodal networks, in this case networks of only companies where edges indicate board members shared between two company boards, or only directors, where edges represent boards both directors sit on.

This is illustrated in figure 1, an example connected component from the network. This connected component consists of three companies (shown as black circles), and their directors (shown as grey triangles). The first panel shows the bimodal network, where edges connect directors with companies; the second shows the unimodal projection where directors are connected to directors, while the third shows the unimodal projection where companies are connected to companies.

Figure 1: example component



The companies have different numbers of directors: the company denoted by the top circle in the left panel has five, while the company denoted by the bottom left circle has eleven. Most directors are only on a single board, but one director is on the board of all three companies. The director on the board of all three companies is denoted by the grey triangle connecting all three black circles. It is not necessary that the network is connected, as the above one is: some companies do not share board members with any others.

The second panel shows the projection to directors, where all directors on each board are connected to each other; the third shows the projection to companies, where all companies that share board members are connected to each other. As all companies have at least one board member, and most have several, our network visualisations are of the bimodal projection to companies, for simplicity.

We extend this work through the use of hops (Heckathorn & Cameron, 2017). We call this initial network the NPO network, as the list of companies is equivalent to all NPOs that are companies in their own right; we then hop to all the other companies on which the board members in this NPO network sit, such that the network incorporates these additional companies and their directors, which we call the *one-hop* network. If boards of NPOs are only connected indirectly – for example NPO A and NPO B each have a board member on the board of non-NPO C – this will be captured in the one-hop network, but not the NPO network. We further project this network to networks of companies and of directors, as for the NPO network.

The one-hop network of companies comprises two key types of company: NPOs, and the companies to which they are connected. This allows us to project this network a second time, generating a network of NPOs which includes indirect ties where board members from two NPOs each sit on the board of a third company.

This sampling approach therefore provides us with five projected networks: of each of companies and directors at both the NPO and one-hop levels, and a network of NPOs incorporating indirect ties. This allows us to investigate the most central directors among NPOs, the most central directors among a broader arts infrastructure, the most central NPOs incorporating only direct ties, the most central NPOs incorporating indirect ties, and finally the most central organisations in the broader network, whether NPOs or not.

2.3: Analysis

The first stage of analysis is descriptive statistics of the networks, focusing on the number of components, and the distribution of the sizes of these components - the number of isolates, dyads, and particularly the size of the largest connected component.

Having done so, we analyse the distribution of SIC codes in the networks. By construction, the NPO network should consist of arts organisations, but the one-hop network will be more diverse, as it incorporates all the other companies with which NPOs share directors. We examine both the overall numbers of different industries in the network, and their overrepresentation relative to the number of companies with those SIC codes in England more generally. We calculate overrepresentation as the fraction of companies with that SIC code in the network, divided by the fraction of companies with that SIC code among all businesses, drawing on data from the Inter-Departmental Business Register¹ (IDBR) limited to England & Wales to ensure a comparison that is as accurate as possible (Office for National Statistics, 2020). In the below equation, we define nodes as **V**, each SIC code as **SIC**, the sample of nodes in the relevant network as **sample**, and the sample of nodes in the Inter-Departmental Business Register as **IBDR**.

$$Overrepresentation_{SIC}^{IDBR} = \frac{\Sigma(\textit{V}_{SIC}^{sample})}{\Sigma(\textit{V}^{sample})} / \frac{\Sigma(\textit{V}_{SIC}^{IDBR})}{\Sigma(\textit{V}^{IDBR})}$$

We then analyse nodes within the networks, calculating the degree and betweenness centrality of directors and companies. We can therefore estimate whether there are any nodes in particularly powerful bridging – or gatekeeping – positions in the network, or whether the distribution of measures of centrality is more even. We focus on these measures, where degree is the number of other nodes each node is connected to, and betweenness is a measure of the number of shortest paths between pairs of nodes that pass through each given node. For this reason, we focus particularly on betweenness centrality.

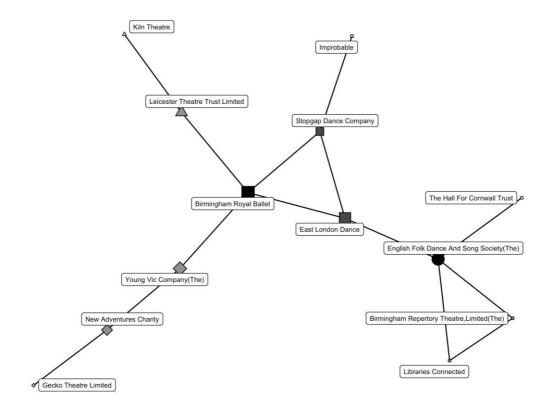
We also consider betweenness clustering. This measure groups sets of nodes by extracting edges that are of greatest betweenness from a connected component, and what partitions of that component are left, until no edges remain (Girvan and Newman 2002). It is a helpful way of also seeing how groups of nodes, rather than just individual nodes, provide bridges between clusters of nodes that would otherwise be disconnected from another significant portion of the network.

The distinction is illustrated in figure 2, which is a component from the NPO network, projected to companies. Here, nodes are shaded according to their degree, sized according to their betweenness, and shaped according to clustering. The nodes at the edges, connected to one other node and never part of any shortest paths between any other pair of nodes, are both smallest and most lightly-shaded; however, two nodes may be of the same degree but have different betweenness. For example, towards the bottom left, New Adventures has lower betweenness than the Young Vic: the Young Vic is part of shortest

¹ ONS Crown Copyright Reserved. Data downloaded from Nomis, 26-10-2020.

paths between both New Adventures and Gecko Theatre and all other nodes, while New Adventures is only part of shortest paths between Gecko Theatre and all other nodes, hence the Young Vic being denoted by a larger circle. There are four distinct clusters: the three nodes towards the bottom left form a cluster, as do the two nodes towards the top left. The largest cluster is towards the centre, with Birmingham Royal Ballet, East London Dance, Stopgap Dance Company, and Improbable; the four nodes towards the right constitute the final cluster.

Figure 2: example component, with nodes shaded according to degree, sized according to betweenness, and shaped according to clustering

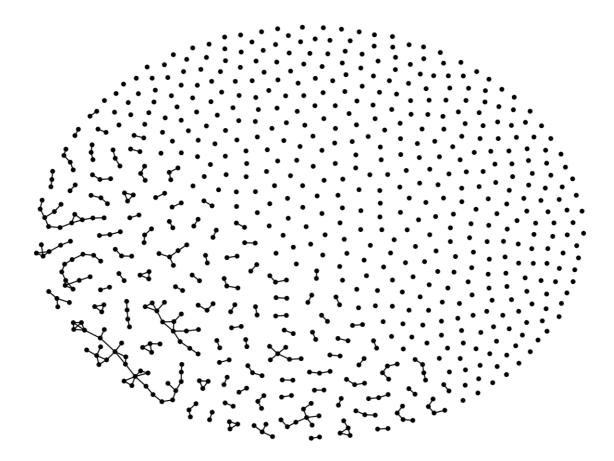


This methodological approach, addressing both sampling and centrality measurement, allows us to do several things. First in terms of sampling, it allows us to map the overall network of boards of directors in the National Portfolio, establishing which companies and directors are connected to which, and how much overlap there is between boards. Second, also in terms of sampling, it allows us to establish how much many NPOs are indirectly connected to one another, via a third (non-NPO) company. Third, it allows us to measure the prominence of other industries in the one-hop network, through the boards on which NPO board members also sit. Fourth, it allows us to identify which companies and directors are in the most central positions. This applies both to NPOs within the broader network, and to any organisations to whom NPOs are connected. Analysis is in the statistical programming language R, with network analysis in igraph (Csardi and Nepusz, 2006), and visualisations in ggplot2 (Wickham, 2016) and ggraph (Pedersen, 2021).

3.1: Results: NPO network

Figure 3 shows the network of companies in the NPO network. Each node is a member of ACE's national portfolio. Where two nodes are connected, they share at least one board member.

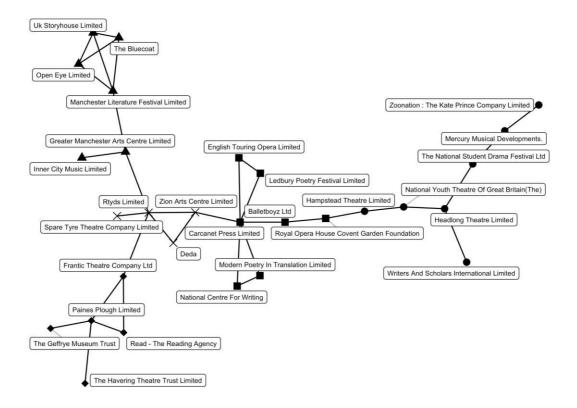
Figure 3: NPO network (companies)



A large fraction of NPOs do not share directors with any other NPOs. 424 out of the 735 nodes are isolates. A further 106 nodes form 53 dyads (connected pairs of nodes). The largest component only has 4% of companies in it. There are few shared board members within the NPO portfolio companies, and with such a sparse network measures of centrality and betweenness are less informative than in a more connected network.

The largest connected component is towards the bottom left corner of the diagram, containing 29 organisations (around 4%). This component is visualised in Figure 4.

Figure 4: largest connected component, NPO network



This component, which consists of five betweenness clusters, illustrates some of the relationships between NPOs. Towards the top left of the plot is a betweenness cluster of institutions based in the North West of England, representing a range of different art forms, denoted by triangles. Each of these organisations is connected to each other by a single board member (Peter Malcolm Mearns). The cluster denoted by crosses (×s), constituted of nodes from London, Derby, and Manchester, bridges this North West cluster with a range of clusters largely constituted of performing arts organisations based in London. The first crucial bridge is between Zion Arts and Carcanet Press, both Manchester-based organisations, where Carcanet Press is linked to four London-based organisations; these organisations form a bridge between the two clusters on the right side of the plot, and the three clusters on the left hand side of the plot. The two triads which include Carcanet Press comprise sets of three NPOs with a single shared board member. The second is between the Regional Theatre Young Directors Scheme (RTYDS), which is based across London and Manchester, and the Frantic Theatre Company, a touring theatre company with offices in London. This bridge links the crosses cluster with other organisations with London offices. Those crucial betweenness bridges link companies outside London to clusters based in London, suggesting how London's governance is significantly connected even at the NPO level.

Figure 5 shows the classification of each of the NPOs, reporting both the count in the dataset (left-to-right), and overrepresentation relative to Companies House in general (bottom-to-top). Both of these are reported on logarithmic scales. As expected, by far the most common industrial categories are those to do with the arts, such as cultural education,

museum activities, and book publishing. While the most common categories are performing arts and artistic creation, the most overrepresented relative to the distribution of businesses in the country is the operation of arts facilities – an NPO is more than 100 times as likely to be classified as that than any random business.

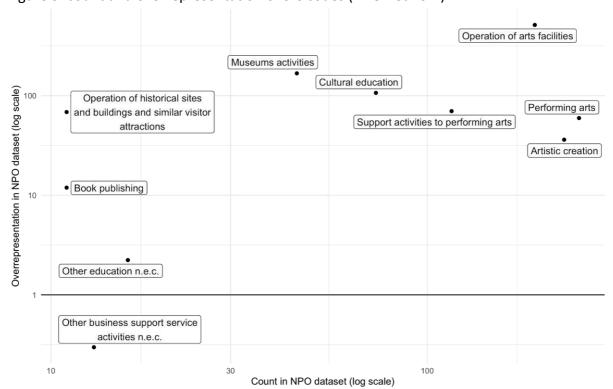


Figure 5: count and overrepresentation of SIC codes (NPO network)

3.2: Results: one-hop network

The one-hop network consists of all the companies and board members in the NPO network; the other companies those board members sit on; and the board members of those additional companies. Table 1 summarises the differences between the networks².

Table 1: descriptive statistics

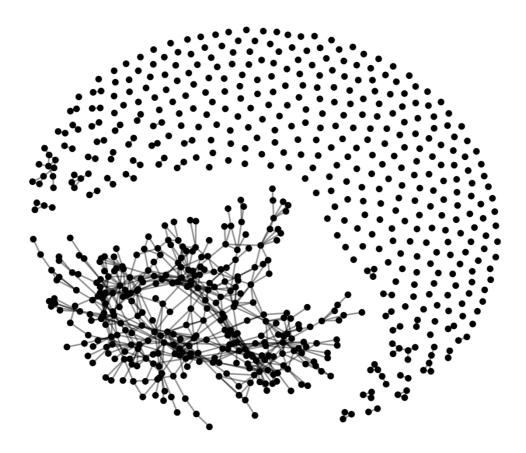
	NPO	One-hop
Components	520	246
Density (overall)	0.025%	0.0052%
Density (largest	0.63%	0.0061%
component)		
Nodes (bimodal, overall)	7211	45617
Nodes (bimodal, largest	320	39350
component)		

² The extension to a two-hop network for comparison can be seen in appendix A1. Summary figures for the network, and data on the companies and directors with the largest betweenness scores, and their associated scores, are included as appendices A5-A6.

Nodes (companies, overall)	735	7093
Nodes (companies, largest	29	5883
component)		
Diameter (largest	28	48
component)		

We project three networks from this broader network: of NPOs, of companies more broadly, and of directors. We present results from each of these in turn, starting with the network of NPOs incorporating indirect ties.

Figure 6: NPO network, including indirect ties



The network of NPOs once we incorporate indirect ties – defined as where two NPOs each have a board member on a shared third (non-NPO) company – is significantly more dense than the network that does not include this information. The giant component, towards the bottom left of the diagram, incorporates 323 NPOs, 44% of the total, where the giant component of the no-hop network contained 4% of NPOs. It also contains a total of 648 edges between NPOs. At the other extreme, 302 NPOs (41%) are still isolates when indirect ties are incorporated, down from 424 (58%).

The increased size of the largest connected component allows us to investigate the most central NPOs within the network. Figure 7 shows the relationship between degree and betweenness for NPOs, including indirect ties.

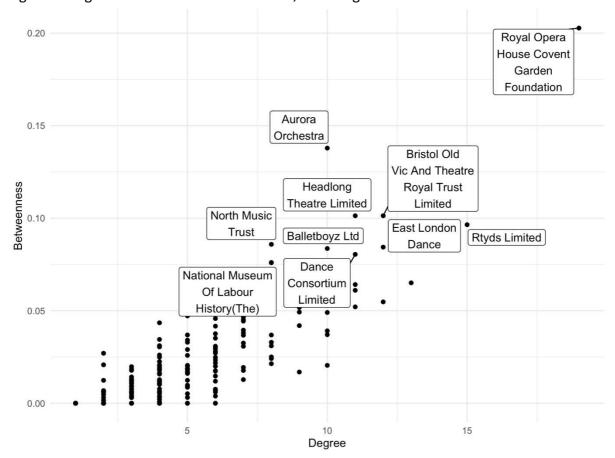


Figure 7: degree and betweenness for NPOs, including indirect ties

Figure 7 shows a strong relationship between degree and betweenness for NPOs; while there is not a perfect correlation, there are no organisations with low degree and high betweenness, though there are several NPOs with moderate degree and low betweenness.

The Royal Opera House is the most central NPO on both measures by some distance. Indeed, a number of the organisations with highest betweenness are also in the giant component of the original NPO network, suggesting that component may form the core of the broader network. At the same time, several organisations in that component do not have among the highest betweenness scores, and several organisations with high betweenness scores (such as East London Dance and North Music Trust) are not in that component. This shows that organisations which may not have seemed well-connected when only taking direct relationships into account are in fact well-connected when we consider indirect relationships.

This is further illustrated in table 2, which reports the degree and betweenness scores for these highlighted NPOs, and distinguishes between direct and indirect edges.

Table 2: Betweenness, indirect, and direct edges for NPOs

NPO	Betweenness	Indirect	Direct
		edges	edges
Royal Opera House Covent Garden	0.203	17	2
Foundation			
Aurora Orchestra	0.138	9	1
Bristol Old Vic And Theatre Royal Trust	0.101	9	3
Limited			
Headlong Theatre Limited	0.101	8	3
Rtyds Limited	0.096	10	5
North Music Trust	0.086	7	1
East London Dance	0.084	9	3
Balletboyz Ltd	0.084	8	2
Dance Consortium Limited	0.080	8	3
National Museum Of Labour History(The)	0.076	5	3

The most central NPO in the network on both betweenness and degree, the Royal Opera House, only shares directors with two other NPOs. However, it indirectly shares directors with another 17 NPOs, by far the largest number of any NPO. Aurora Orchesta, in second place, only shares a director with one other NPO – but, again, its high betweenness is driven by the large number of indirect edges with other NPOs.

This goes some distance to explaining the most central NPOs in a broader context, and illustrating the fact that the most central organisations are not simply the ones that have the largest number of shared directors with other organisations.. Next, we move to analysis of the overall network, retaining information about the non-NPOs where these indirect ties are taking place.

The one-hop network, projected to all companies, is shown in figure 8. Because of the larger number of nodes and edges, they are semi-transparent.

Figure 8: one-hop network (companies)



While the NPO network consisted of 735 companies, the one-hop network consists of 7,093, 5,883 of these forming the largest connected component. Betweenness clustering yielded 181 clusters, with 8 large clusters with greater than 100 nodes - the largest consists of 206 nodes - with 93% of components (168) consisting of fewer than 70 nodes each. It is difficult to visually distinguish either communities or individual nodes and edges in the network. We therefore summarise some of the differences between the NPO and one-hop networks³.

The crucial difference between the networks is in the large, central component. In the NPO network the largest component contains around 4% of nodes; in the one-hop network it contains 43% of NPOs, as explained above, but 83% of all organisations. That means that NPOs in the largest connected component are, on average, connected to significantly more non-NPO companies than are NPOs outside of it. It is in the centre of the diagram above. The NPO network contained 424 isolates and 54 dyads, whereas the one-hop network contains 55 and 54 respectively. That means that 247 of the 302 isolates in the NPO network that incorporates indirect ties share board members with at least one other company. The largest component outside the central component consists of 28 nodes.

In figure 5 we reported the distribution of more detailed (four-digit) SIC codes. In figure 9 we report the distribution of less detailed (two-digit) codes. This is because the number of different four-digit codes in the one-hop dataset is significantly larger. This allows us to assess broader categories, such as "Creative, arts and entertainment activities", and therefore compare large industrial sectors. Because of the size of the dataset, we do not label every point, but only those that occur at least 150 times, or at least twice as often in the one-hop dataset as in the overall register of businesses. For example, a SIC code that applied to 0.2% of businesses in our dataset and less than 0.1% of businesses in our dataset House would be highlighted; a SIC code that applied to 0.2% of businesses in our dataset

_

³ Full details of the results of the betweenness clustering for the one-hop network can be reproduced by running code provided as appendix A2.

and 0.4% of businesses in Companies House would not. This figure summarises the new cases introduced through the one-hop sampling, but does not include the original NPOs, thereby summarising the other companies on whose boards NPO board members also sit.

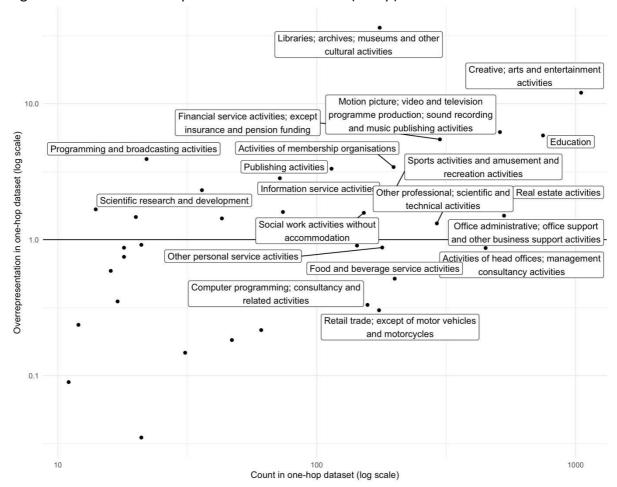


Figure 9: count and overrepresentation of SIC codes (1-hop)

While the arts categories that we saw in figure 5 remain the most overrepresented in this figure, even though the NPOs themselves are not included, this figure shows a new set of industrial activities that are overrepresented in the one-hop network. The most overrepresented categories – libraries, archives, museums, and other cultural activities, and creative, arts, and entertainment activities – are the categories most associated with Arts Council funding, and comprise the majority of the four-digit categories from figure 5.

Other categories, such as those associated with film and TV production and broadcast, are also closely related. Indeed, we might expect that people who govern theatres and producing companies might also have connections to film and TV production companies. Education also features heavily, as it did in figure 5. This is because some NPOs have educational roles themselves, and several directors of arts organisations are also on the boards of universities.

Some categories are generic, but are overrepresented. In these cases, they capture the kinds of organisation that are highly-represented among organisations more generally. For example, "Activities of membership organisations" include organisations such as the Royal

Television Society, Bafta, and UK Music, as well as civic trusts, business improvement districts, and students' unions. The "other business support activities" category covers organisations including the Clore Leadership Programme and the Russell Group of Universities.

Other groupings are less clearly constitutive of the arts sector. The most striking are financial service activities and real estate activities. These are the categories that have concerned researchers who have warned against the marketisation of arts organisations (Alexander 2018) and are the organisations that are an important presence on the American arts boards that Ostrower (2002) and Fraser (2018) studied.

Figure 7 shows that there are more than five times as many financial service organisations in the one-hop dataset as one would expect from a random sample of companies from Companies House in general. This is striking because the other categories with these significant overrepresentations are either closely allied to the arts, or are the broader, more generic categories of membership organisations, civic trusts, or sector support agencies.

For the remainder of the analysis, we focus on the largest connected component. We first show the relationship between degree centrality and betweenness⁴ centrality for both projections, then describe the directors and organisations who are most central using these measures⁵.

Figure 10: degree and betweenness (companies)

⁴ Our measure of betweenness is normalised, to allow comparison between the two networks which have different numbers of nodes. The results are normalised according to Bnorm=2*B/(n*n-3*n+2), where Bnorm is the normalized, B the raw betweenness, and n is the number of vertices in the graph (Csardi and Nepusz, 2006).

⁵ For comparison, we also calculate closeness and eigenvector centrality for the projections to companies and directors of the largest connected component. For companies, the rankings of closeness and betweenness are fairly similar; the key difference is the LLPs that are prominent on betweenness are even more prominent on closeness. The large professional services firm EY has by far the largest eigenvector centrality; other organisations with high eigenvector centrality bridge key directors, such as Medefer and the National Museum of Labour History. The majority of directors with high closeness centrality who do not also have high betweenness centrality are on the board of Inside Track LLP and related companies, while the majority of directors with high eigenvector centrality are on the board of EY. Appendices A3 and A4 include centrality scores on all four of these measures, alongside rankings, for both companies and directors who are in the top 50 on betweenness, closeness and eigenvector centrality; degree is omitted because of the very large number of companies with degree of 157, and the very large number of directors with degree of 3316.

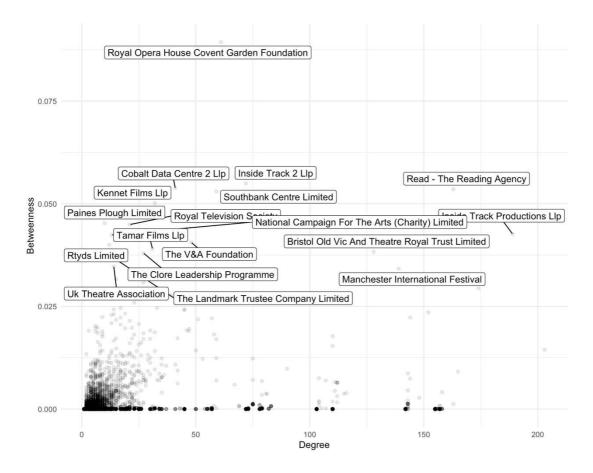


Figure 10 shows the relationship between degree and betweenness for companies, with companies with the highest betweenness scores (over 0.034) highlighted.

That most companies score low or zero is not surprising; the majority of companies are not NPOs, having been brought into the network by virtue of sharing a board member with an NPO. When companies do not bridge NPOs, they end up at the periphery of the network. This heavy skew on both measures is a consequence of the sampling method.

Even beyond the number of nodes with low or zero degree, the overall distributions of both betweenness and degree are right-skewed. A large fraction of paths between companies pass through only a small number of organisations, and a small cluster of organisations seem to share a large number of board members between each other. Both these small groups have the potential to be in crucial gatekeeping roles.

The organisation with the largest betweenness score is the Royal Opera House (ROH). Its betweenness is 0.0894; the organisation in second place (Inside Track 2 LLP) is less than two thirds of this. The ROH was also the NPO with the largest betweenness score in figure 7. However, none of the other NPOs from figure 7 is among the highlighted companies here, illustrating the importance of non-NPOs to this network structure.

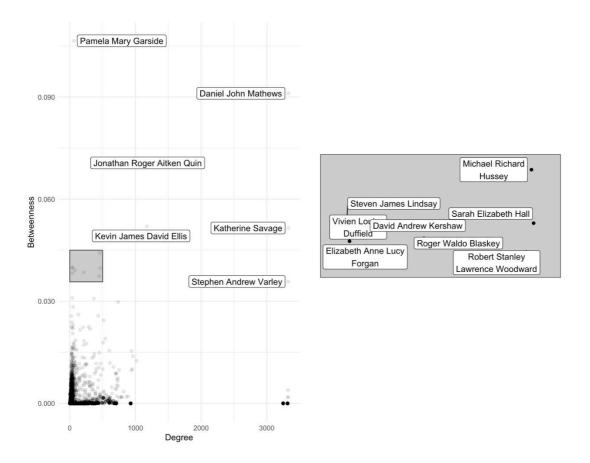
The ROH is followed by a range of Limited Liability Partnerships (LLPs). According to the descriptions on their websites, most of these are film funding schemes: Inside Track Productions (and Inside Track 2) and Kennet Films. Cobalt Data Centre 2 is a data centre that was empty until at least 2016 (Williams, 2016). These are institutions associated with

significant tax relief policies: for the funding schemes, film tax relief; for the data centre, the location in an enterprise zone. In both cases, concerns have been raised that they are primarily being used for tax avoidance; they have been subject to judgments by HMRC, the UK's tax authority, that insufficient tax was being paid, and that directors owed millions of pounds in unpaid tax, although in Cobalt's case this was overturned on appeal (Cobalt Data Centre 2 LLP and Cobalt Data Centre 3 LLP v Revenue and Customs 2019; Ingenious Games LLP and others v Revenue and Customs 2019). These organisations have large numbers of directors – Inside Track has 139, hence the very high degree – but only a small fraction of these directors hold directorships on other companies in the network.

Other than these limited liability companies, which are best-known for their tax benefits and their interactions with HMRC, the other organisations with high betweenness are more expected. There are four more NPOs: two theatres, Bristol Old Vic & Paines Plough, one multi-use venue, the Southbank Centre, and the Regional Theatre Young Directors' Scheme. These are all institutions associated with theatre. They are also not among the most prominent organisations in the direct or indirect networks of NPOs; instead, it is their connections to non-NPOs that lead to their high betweenness scores. The V&A Museum – not an NPO, but directly funded by DCMS – and a range of institutions that work across institutions in arts and culture are also present. UK Theatre and the Royal Television Societies are both organisations representing their sectors; the National Campaign for the Arts represents organisations across the ACE brief; and the Clore Leadership Programme supports and develops leaders in the sector. These are the sorts of institutions we would expect to be in bridging roles in the network, bringing together the institutions that they represent.

Figure 11 shows the equivalent data for company directors. Here, we report company directors with betweenness of over 0.035. Because there are eight directors with very similar degree and betweenness, we zoom into that part of the plot.

Figure 11: degree and betweenness (directors)



As with companies, both degree and betweenness are right-skewed. This is particularly pronounced for degree, where a small fraction of directors have degree in the thousands; this is true of four of the directors with betweenness greater than 0.035.

Table 3 presents information about these highlighted directors, with their betweenness, degree, any NPOs whose boards they sit on, and some prominent non-NPOs. We then describe the connections between directors and key organisations, and between directors themselves.

Table 3: directors in the one-hop network with betweenness greater than 0.035

Name	Betweenness	Degree	NPOs	Prominent non-NPOs
Pamela Mary	0.107	63	Punchdrunk	Medefer; Whizz-Kidz
Garside				
Daniel John	0.0911	3325		Ernst & Young; Whizz-
Mathews				Kidz
Jonathan	0.0706	428		Inside Track 2; Medefer
Roger Aitken				
Quin				
Kevin James	0.052	1173		Pricewaterhousecoopers
David Ellis				; Cherwell Films
Katherine	0.0515	3330	National Museum	Ernst & Young
Savage			of Labour History	

Michael Richard Hussey	0.0441	458	Southbank Centre	Cherwell Films
Steven James Lindsay	0.0399	36	National Museum of Labour History; Manchester Young People's Theatre	Kay Johnson Gee
Vivien Louise Duffield	0.0398	45	Royal Opera House Covent Garden Foundation; Imperial War Museum Foundation	Clore Leadership Programme
Sarah Elizabeth Hall	0.0397	463	New Perspectives Theatre Company	Inside Track 2 ; Landmark Trust
David Andrew Kershaw	0.039	75	Southbank Centre	Clore Leadership Programme; M&C Saatchi
Roger Waldo Blaskey	0.0384	212		Kay Johnson Gee
Elizabeth Ann Lucy Forgan	0.0382	42	Aurora Orchestra; Bristol Old Vic and Theatre Royal Trust	Landmark Trust; Guardian Foundation
Robert Stanley Lawrence Woodward	0.0373	446		Inside Track 2; Royal Television Society
Stephen Andrew Varley	0.0357	3327		Ernst & Young

The three directors with degree more than 2,000 and betweenness over 0.035 are on the board of the professional services firm EY Europe, which has more than 3,000 directors; Kevin James David Ellis is on the board of the professional services firm PwC, which has more than 1,000. We do not expect significant information-sharing to occur across groups of this size. This leaves two directors outside of the cluster we've highlighted. Pam Garside, with by far the highest betweenness, sits on the board of Medefer (which describes itself as providing virtual outpatient services) with Jonathan Quin, who has the third highest betweenness score. Garside is on the board of Punchdrunk, an NPO; Quin is on the board of Inside Track Productions and related companies. In this way, their shared board bridges the more theatrical- and commercially-oriented parts of the network.

The inset figure includes directors with distinct patterns of board membership. Three are on the board of Inside Track; Hussey bridges Inside Track with the Southbank Centre, Woodward bridges Inside Track with the Royal Television Society, and Hall bridges Inside Track with the Landmark Trust (which conserves historic buildings) and a large number of

theatre companies. Other directors are more prominent within the arts, bridging different art forms. Liz Forgan, on the board of the Landmark Trust with Hall, is also on the boards of the Bristol Old Vic and Aurora Orchestra (both NPOs), and the Guardian Foundation (the charitable wing of the Guardia Media Group); Vivien Duffield is on boards across different art forms, the Royal Opera House, Imperial War Museum, Balletboyz, and Clore. Meanwhile, Kershaw bridges the Southbank Centre and Clore, as well as a large number of advertising firms. Finally, Lindsay and Blaskey are the only directors who are not mainly on the boards of London institutions, both being Manchester-focused. Lindsay is on the board of two NPOs, Contact Theatre and the People's History Museum, the latter of which he shares with Savage. He is also on the board of an accountancy practice alongside Blaskey, and is on the boards of a number of film production companies sharing board members with Inside Track.

Thus, we can see three distinct varieties of board members with high betweenness. First are directors sitting on an NPO board along with a large professional services firm board. In these cases, the high betweenness may be an artefact of the large number of directors that professional services firms have. The second is directors who bridge different parts of the cultural sector. They bridge large organisations in music and theatre, or museums and opera, for example. The third is directors who bridge NPOs with Inside Track Productions, which is by far the most prominent organisation in the network representing an industry outside the Arts Council brief⁶.

4.1: Discussion: A new, old, cultural elite?

What does our analysis reveal about questions of power and influence in the arts, and how does this relate to studies on inequalities in consumption and production? Here we return to the recent literature on arts governance and cultural policy, alongside the more general concerns found in work on the cultural sector and inequality.

Our findings speak directly to the trends identified by Griffiths *et al* (2008), and the concerns raised by Alexander (2018). Griffiths *et al* (2008) charted a shift in those dominating the governance of culture. The shift was from an elite whose members predominantly studied at particular schools and universities, and were members of gentleman's clubs, to an elite more closely associated with the worlds of business and finance. Our analysis suggests a marked acceleration of the shift identified by Griffiths *et al* (2008).

In terms of individuals, we see a clear dominance of business, financial, and accounting services expertise covering over half of the 'top 20' individuals within England's governance network. This is to be expected, given the needs of organisations for specific skills in these areas. Individuals from the world of business sit alongside media elites, with both screen production and financing representing important presences.

The dominance of business expertise also connects directly to Alexander's (2018) concerns around the decline of autonomy in the cultural sphere as a result of new forms of governance that are both marketized and state-influenced. The 'top 20' individuals show a

⁶ The extension to a two-hop network for comparison can be seen in appendices A3-A4. In this case, the LLPs and professional services firms discussed become even more prominent.

prominence of the new financial and business elite noted by Griffiths et al (2008). Their centrality to the network of arts boards in England is an important feature of the governance landscape, and there are parallels with Fraser's (2016) analysis of US arts governance. However, they are not quite the billionaire business people noted by Banks' (2017) study of the Met, and they are present as much as for expertise as for their possible philanthropic role. 14 of the companies of the 20 that are most central to the network are in this business and finance category.

Again, there is the need for nuance. This is not a straightforward story of corporate takeover of cultural governance. Rather, as we look more closely at the makeup of those 14 corporate organisations, we see two kinds of activity: funding film projects and property development. We further see that these industries are more dominant in the network more generally. These trends connect directly to Alexander's (2018) analysis of the impact of changes in funding arrangements, as well as the more general literature on the rise of building projects and place based cultural regeneration (Mould 2018).

Nonetheless, there has been no total corporate or business takeover at the centre of England's cultural governance. The Royal Opera House, which has a central position in the largest connected component of the NPO network, is the organisation with the highest betweenness in the one-hop network. Baltic in Gateshead and the Southbank Centre in London (both NPOs) are also very prominent in the one-hop network; also prominent are Mercury Musical Developments and the Royal Television Society, organisations supporting theatre and media industries respectively. The centrality of the Royal Opera House indicates the continuities with the older system of 'gentlemanly' cultural governance identified by Griffiths et al (2008).

The ROH is the central arts institution, as measured by both its position as an organisation and the key individuals involved with its board. By any metric, whether funding, audience, or workforce, opera is England's most elite artform and the ROH that artform's most elite institution. As a result, while the presence of both arts administrators and business elites within England's arts governance network may have changed the *expertise* of who runs the arts, the dominance of the Royal Opera House suggests elite structures are adept at adaptation to changing demands, in order to protect and secure their positions in the field (Accominotti et al 2018). This can be seen in the presence of key individuals with connections directly to Griffiths *et al*'s (2008) 'aristocratic' elite.

Griffiths et al also highlight the importance of education, which persists in our results. The presence of the Russell Group, a membership organisation of elite UK universities, and Linda Merrick, Principal and Professor at the Royal Northern College of Music, suggest that elite education is still an important part of cultural governance in England, albeit not as prominent as the business and media elites at the centre of the network.

Dame Vivien Duffield, an arts philanthropist and key part of arts leadership training in her role at Clore, and Dame Liz Forgan, former chair of ACE, both fit the mould of the aristocratic and arts administrator elite identified by Griffiths et al (2008). That they are examples of outliers in the network would not have been conceivable a decade, or longer,

ago. The declining presence of the aristocrat arts administrator is a counterpart to the increasing dominance, for good or ill, of business expertise within English arts governance.

The network structure of the analysis allows us to investigate both the most central organisations in the network, and the varieties of organisation that are most prominent. There has not been a complete corporate takeover of the arts. At the same time, the industries which boards of directors for arts organisations are most disproportionately likely to sit – other than other arts and media organisations – are in financial services. Existing research on the relationship between the arts and the financial sector has illustrated relationships between them, but this analysis shows not only that these relationships extend beyond corporate sponsorship of arts organisations into significant numbers of shared board memberships between financial organisations and arts organisations, but that this extends beyond the very largest and most high-profile arts organisations studied elsewhere, and applies across the publicly-funded arts sector in England.

5.1: Conclusion

We began our paper with the artist Andrea Fraser's (2018) analysis of the close connection between politics, power, and the art world in the United States. Her concerns were primarily about the broader social inequalities that underpinned the contradictory relationships in the same people's governing elite cultural institutions and their engagement in the Trump administration that was hostile to them. Her contribution from within the art world has been echoed by voices across the cultural sector, questioning the relationship between social and cultural inequalities and governance in the arts (Higgins 2021).

Our analysis suggests that there have been important changes in England in the decade or so since the question of who governs the arts was last asked by Griffiths *et al* (2008). The rise of management and business represents a break from the twentieth century's aristocratic, administrative, and academic cultural elite. Yet there are still continuities for those most central to arts governance. This is most strikingly illustrated by the centrality of one institution, The Royal Opera House, and the centrality within the overall governance network of its most prominent board members.

This elite dominance is in contrast to the efforts of cultural policy to democratise the arts (ACE 2010, 2020). It prompts the question of why the same problems of workforce and audience inequalities persist, despite clearly demonstrated changes in the individuals and organisations that are influential in cultural governance. The role of boards in holding organisations, and staff, accountable is a site for future policy and academic analysis given the continuity of inequalities identified in the literature and the changes in boards that we have noted.

There are several strands of future research suggested by this overview of the network and the individuals and organisations within it. Charting the impact of different elite fractions on organisational programmes; understanding the exact modes of action and accountability; thinking through the demographic characteristics of people with influential network positions; and international comparisons, would all be fruitful areas for research. If other case studies and examples from cultural policy and cultural production are a guide (see

O'Brien 2014 for a full discussion), we expect similar patterns to those reported in our findings here in other countries.

References

Accominotti, F., Khan, S. and Storer, A. (2018) How Cultural Capital Emerged in Gilded Age America: Musical Purification and Cross-Class Inclusion at the New York Philharmonic American Journal of Sociology 123(6)

Adams, R.B., de Haan, J., Terjesen, S. and van Ees, H., 2015. Board diversity: Moving the field forward. Corporate Governance: An International Review, 23(2), pp.77-82

Alacovska, Ana (2017) The gendering power of genres: How female Scandinavian crime fiction writers experience professional authorship. *Organisation* 24(3): 377-396

Alexander, V. (2018) Heteronomy in the Arts Field: State Funding and British Arts Organizations. *British Journal of Sociology*, 69(1), pp. 23-43

Amin, A., Chourou, L., Kamal, S., Malik, M. and Zhao, Y., 2020. It's who you know that counts: Board connectedness and CSR performance. *Journal of Corporate Finance*, *64*, p.101662.

Arts Council England (2010) *Great art and culture for everyone: 10 year strategic framework 2010-2020.* London: ACE.

Arts Council England (2020) Let's Create: Strategy 2020-2030. London: ACE

Azmat, F. and Rentschler, R., 2017. Gender and ethnic diversity on boards and corporate responsibility: The case of the arts sector. *Journal of Business Ethics*, 141(2), pp.317-336.

Banks, M. (2017) Creative Justice: Cultural Industries, Work and Inequality London: Rowman & Littlefield

Banks, P.A., (2017). Ethnicity, class and trusteeship at African-American and mainstream museums. *Cultural Sociology*, *11*(1), pp.97-112.

Bereson, R. (2002) *The operatic state: cultural policy and the opera house*. London: Routledge.

Bertrand, C. and Turbide, J., 2007. Boards in small NPOs: what about friendship and solidarity? *Nonprofit Quarterly*, 14(2), pp.16-23.

Brook, O., O'Brien, D., & Taylor, M. (2020). Culture is bad for you. Manchester: Manchester University Press.

Burt, R.S., 1980. Cooptive corporate actor networks: A reconsideration of interlocking directorates involving American manufacturing. Administrative science quarterly, pp.557-582.

Cadbury, E., 1914. Some principles of industrial organisation: the case for and against scientific management. *The sociological review*, 7(2), pp.99-117.

Campa, D. and Zijlmans, E.W.A., 2019a. Corporate social responsibility recognition and support for the arts: Evidence from European financial institutions. *European management journal*, *37*(6), pp.818-827.

Campa, D. and Zijlmans, E.W.A., 2019b. Art-based initiatives and corporate governance of financial institutions: European evidence following the revised OECD corporate governance framework. *Poetics*, *72*, pp.81-93.

Carty, H. S., Bryan, D., and Murch, A. 2017. Achieving good governance: a challenge of our time. London: The Clore Leadership Programme.

Childress C (2017) *Under the Cover: The Creation, Production and Reception of a Novel.* Princeton, NJ: Princeton University Press.

Chu, J.S. and Davis, G.F., 2016. Who killed the inner circle? The decline of the American corporate interlock network. *American Journal of Sociology*, 122(3), pp.714-754.

Cobalt Data Centre 2 LLP and Cobalt Data Centre 3 LLP v Revenue and Customs [2019] UKUT 0342 (TCC). (2019). Retrieved

from https://www.bailii.org/uk/cases/UKUT/TCC/2019/342.html. Accessed November 17, 2020.

Cobb, S. (2020). What about the Men? Gender inequality data and the rhetoric of inclusion in the US and UK film industries. *Journal of British Cinema and Television*, 17(1), 112-135

Csardi G, Nepusz T: The igraph software package for complex network research. InterJournal, Complex Systems 1695. 2006. https://igraph.org

Dent, T. (2020). Devalued women, valued men: motherhood, class and neoliberal feminism in the creative media industries. *Media, Culture & Society, 42*(4), 537–553

Dubini, P. and Monti, A., 2018. Board Composition and Organizational Performance in the Cultural Sector: The Case of Italian Opera Houses. *International Journal of Arts Management*, 20(2).

Eikhof, D.R., and Warhurst, C. (2013) 'The promised land? Why social inequalities are systemic in the creative industries', *Employee Relations*, 35(5), 495 - 508.

Evans, M. (2015) Artwash: Big oil and the arts. Pluto: London.

Fraser, A. (2018). 2016. In Museums, Money, and Politics. MIT Press.

Friedman, S. (2014) Comedy and Distinction. Routledge: London

Friedman, S., O'Brien, D., and Laurison, D. (2016) 'Like skydiving without a parachute': How class origin shapes occupational trjaectories in British acting. Sociology 51(5): 992-1010.

Friedman, S and O'Brien, D. (2017) Resistance and resignation: responses to typecasting in Brritish acting. Cultural Sociology 11 (3): 359-376.

Gill, R. (2014). 'Unspeakable Inequalities: Post Feminism, Entrepreneurial Subjectivity, and the Repudiation of Sexism among Cultural Workers.' *Social Politics*, 21(4): 509-528.

Girvan, M. and Newman, M.E., 2002. Community structure in social and biological networks. Proceedings of the national academy of sciences, 99(12), pp.7821-7826.

Griffiths, D., A. Miles and M. Savage. 2008. "The End of the English Cultural Elite?" *Sociological Review*, Vol. 56, p. 187–209.

Heckathorn, D.D. and Cameron, C.J., 2017. Network sampling: From snowball and multiplicity to respondent-driven sampling. Annual review of sociology, 43, pp.101-119.

Hermalin, B.E. and Weisbach, M.S., 1988. The determinants of board composition. *The RAND Journal of Economics*, pp.589-606.

Hesmondhalgh, D., Oakley, K., Lee, D. and Nisbett, M. (2015) *Culture, Economy and Politics: The Case of New Labour*, London: Palgrave MacMillan.

Hewison, R (2014) Cultural Capital: The Rise and Fall of Creative Britain London: Verso.

Higgins, C (2021) How did Osborne, king of cuts, become the British Museum's fundraiser-in-chief? London: The Guardian.

Inc Arts (2020) Hold on. Diversity and management in the arts. London: Bridge Group.

Ingenious Games LLP and Others and Revenue and Customs: [2019] UKUT 226 (TCC) (2019). Retrieved from https://www.bailii.org/uk/cases/UKUT/TCC/2019/226.html. Accessed November 17 2020.

Kossinets, G., 2006. Effects of missing data in social networks. *Social networks*, 28(3), pp.247-268.

Lena, J. (2019) Entitled: Discriminating Tastes and the Expansion of the Arts Princeton: P Fraser 2016

Lorsch, J. and Young, J., 1990. Pawns or potentates: The reality of America's corporate boards. *Academy of Management Perspectives*, 4(4), pp.85-87.

Lynch, M.C., (1914). Diligence of Directors in the Management of Corporations. *California Law Review*, pp.21-41.

Mace, M.L. 1971. Directors: myth and reality. Boston: Harvard Business School.

McRobbie, A (2015). Be Creative: Making a Living in the New Culture Industries. Polity Press.

Merton, R.K., 1968. The Matthew effect in science: The reward and communication systems of science are considered. *Science*, *159*(3810), pp.56-63.

Mizruchi, M.S., (1996). What do interlocks do? An analysis, critique, and assessment of research on interlocking directorates. *Annual review of sociology*, *22*(1), pp.271-298.

Mould, O. (2018) Against creativity. Vancouver: Verso.

Nwonka, CJ and Malik, S (2017) 'Top Boy: The Allure of Urban Social Realism in a Post-Multiculturalist UK' *Journal of British Film & Television*

Nwonka, C. and Malik, S. (2018, in press) Cultural discourses and practices of institutionalised diversity in the UK film sector: 'Just get something black made' *Sociological Review* 66(6): 1111-1127.

O'Brien, A. (2019) Women, Inequality and Media Work London: Routledge

O'Brien, D. (2014) Cultural policy: management, value and modernity in the creative industries. London: Routledge.

Office for National Statistics (2020) UK Business: Activity, Size and Location - 2020. Retrieved from

https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/ukbusinessactivitysizeandlocation

Ostrower, F., 1998. The arts as cultural capital among elites: Bourdieu's theory reconsidered. *Poetics*, *26*(1), pp.43-53.

Ostrower, F., 2002. *Trustees of culture: Power, wealth, and status on elite arts boards*. Chicago: University of Chicago Press.

Thomas Lin Pedersen (2021). ggraph: An Implementation of Grammar of Graphics for Graphs and Networks. R package version 2.0.5.

Radbourne, J. (1993) Recruitment and Training of Board Members for the Nineties and Beyond, The Journal of Arts Management, Law, and Society, 23:3, 211-224.

Radbourne, J., 2003. Performing on boards: The link between governance and corporate reputation in nonprofit arts boards. *Corporate Reputation Review*, 6(3), pp.212-222.

Raheja, C.G., 2005. Determinants of board size and composition: A theory of corporate boards. *Journal of financial and quantitative analysis*, 40(2), pp.283-306.

Rees, G. (2020). ukboards: Query UK Charities Commission and Companies House board data (Version v0.5.0). Presented at the Virtual Sunbelt (INSNA), Paris, France: Zenodo. http://doi.org/10.5281/zenodo.4381055

Saha, A. (2018) Race and the cultural industries Cambridge: Polity Press

Saha, A. and van Lente, S. (2020) *Rethinking 'Diversity' in Publishing* available from https://research.gold.ac.uk/28692/1/Rethinking diversity in publishing full booklet v2.p

Shaked, N. (2022) Museums and wealth: the politics of contemporary art collections. London: Bloomsbury.

Turbide, J., Laurin, C., Lapierre, L. and Morissette, R., 2008. Financial crises in the arts sector: Is governance the illness or the cure?. *International Journal of Arts Management*, pp.4-13.

Van der Walt, N., Ingley, C., Shergill, G.S. and Townsend, A., 2006. Board configuration: are diverse boards better boards?. *Corporate Governance: The international journal of business in society* 6(2): 129-147.

Westphal, J.D. and Milton, L.P., 2000. How experience and network ties affect the influence of demographic minorities on corporate boards. *Administrative science quarterly*, 45(2), pp.366-398.

Wickham, H. (2016) ggplot2: Elegant Graphics for Data Analysis. Springer-Verlag New York.

Williams, F. (2016). HMRC claws back celebrities' tax profit on empty data centres. BBC News: https://www.bbc.co.uk/news/uk-england-tyne-37645051

Wreyford, N. (2018) Gender Inequality in Screenwriting Work London: Palgrave

Yeh, D. (2018). The Cultural Politics of In/Visibility: Contesting 'British Chineseness' in the Arts. In Yeh, D. and Thorpe, A. (Eds.), *Contesting British Chinese Culture* London: Palgrave