Upper class trajectories:

capital-specific pathways to power

Abstract

This paper explores a much theorized but rarely empirically investigated temporal component to the structuring of life chances at the apex of the class structure. By following 21 complete birth cohorts, I utilise sequence analysis and systematically explore pathways that lead to the Norwegian upper class during ten years of adulthood. Separate analyses of each cohort map these trajectories at different stages of adult life and wide cross-cohort similarities are found. The analysis reveals that durable access is differentiated from long-range vertical mobility and a stepping stone function of middle class attachment. Trajectories are also shown to be highly capital-specific, thereby indicating that capital conversion within social space rarely traverses horizontal divisions. I argue that elite research and class analysis would benefit from approaching questions of processes of group formation in a manner that entails a systematic account of temporality while acknowledging the class structure in a multidimensional way.

Keywords: class, power, social mobility, sociology, resources

JEL classification: Z130 Social and Economic Stratification, J620 Job, Occupational and Intergenerational Mobility; Promotion

1. Introduction

The tendency for wealth and income to be concentrated in the hands of the few, as opposed to the many, is apparent in contemporary Norway (Aaberge and Atkinson, 2010) despite the largely egalitarian national features that are often emphasised in comparative studies. Although Norway is organised in a corporatist structure – the tripartite cooperation between the state, trade unions and employers' associations arguably creates an important division of power – and the Norwegians have been described as unique in their egalitarian sentiments (Hjellbrekke *et al.*, 2014), an emphasis on the changing nature of Norwegian egalitarianism has recently emerged. In pinpointing the frequent inheriting of large family fortunes, Hansen (2014, p. 7) argues that the beginnings of a 'new Nordic model' are being witnessed, characterised by a layer of closed elites on top of general equality; although Scandinavian 'exceptionalism' generally holds true for the majority, a small minority enjoys vast and increasing advantages (their stocks of capital continue to accumulate increasingly rapidly) and access to such is largely denied to the general public.

Scholarly interest in elites has largely been dominated by economists, however, because sociologists focusing on inequality have mostly been interested in the lower segments of the class structure (Savage, 2015). Arguably, sociological scutiny of the upper strata should be revived as a sociological analysis is not limited to merely registrating top-level income and the preponderance of wealth, but brings to the fore questions of processes of class structuration involving career mobility and intergenerational mobility patterns. In this article I seek to explore the former by mapping intragenerational pathways to the Norwegian upper class. Although mobility processes consitute the crux of most studies of class, existing qunatitative research suffers from a lack of sensitivity to temporality. Consequencely, the theoretical concept of *trajectory* – acknowledged by most class theorists (e.g. Bourdieu, 1984;

Wright, 1985, pp. 185–187; Bourdieu, 1990; Erikson and Goldthorpe, 1992, p. 281; Savage, 2000) – is largely overlooked in empirical investigations at an aggregate level.

One plausible explanation for the absence of quantitative studies of trajectories may be due to the methodological tools available for class analysis. In sociology, upper class recruitment is often investigated by mobility tables, which often only measure two points in time and thus struggle to account for differing pathways (Sørensen, 1986; Bühlmann, 2010). The convention of measuring class mobility at two points in time often involves the assumption that mature class positions prevail, whereas class affiliation may only be temporary (Abbott, 2006; Bühlmann, 2010). Accordingly, any mapping of the distribution of life chances as markers of power or a lack thereof, as well as any understanding of demographic and socio-cultural identities likely to have been brought about by one's social experiences over time (Goldthorpe, 1982; Bourdieu, 1984), arguably remain incomplete if trajectories of class mobility are neglected. However, utilising sequence analysis allows for a detailed mapping of patterns of class trajectories so that pathways are not only distinguished by duration but also by the specific ordering of states. Hence, sequences of class events are acknowledged to be more or less similar depending not only on the types of class affiliations one experiences over time but also on the specific biographical time during which specific class affiliations persist. This provides a holistic account of temporal life chances and enables empirical typologies to be identified (Halpin and Chan, 1998, pp. 113–114; Abbott, 2001; Bühlmann, 2010, p. 201; Bukodi *et al.*, 2016).

Another shortcoming with existing research is that the top layers are often approached as one uniform category; either a *capitalist class* (Wright, 1985), an *elite class* (Savage *et al.*, 2013) or one lower-level *service class* (Goldthorpe, 1995) is distinguished, offering few insights into internal differences within the top groups of society. In contrast, I approach the upper class by using a classification scheme that draws on the Bourdieusian notion of a

structural opposition between power derived from cultural, rather than economic, assets (Wacquant, 1993; Bourdieu, 1996). This will imbue the class structure with vertical and horizontal dimensions. This conceptualisation of upper class fractions has a clear affinity with Shamus Khan's (2012, p. 362) definition of elites where he seeks to transcend Marxian and Weberian definitions of class by reconceptualising elites as 'those who have vastly disproportionate control over or access to a resource.' Within his framework, multiple forms of capital and processes of resource convertibility are the focus of academic scrutiny; 'understanding elites means not just making sense of the resources they control or have access to; it also means considering the conversion of that resource into other forms of capital'. In this article, therefore, by following the notion of multiple forms of capital, different fractions of the upper class are taken as a point of departure where mobility is conceptualised as strategies of the accumulation and conversion of capital (Bourdieu, 1984, pp. 125–141; Savage *et al.*, 2005).[i] Although this is argued to be a key task for sociologists of elites (Khan, 2012), this has rarely been thematised systematically or quantitatively.

In endeavouring to bridge this knowledge gap, this analysis is guided by the following research question: how are upper class trajectories structured; do trajectories traverse horizontal barriers or are forms of capital predominantly accumulated within fractions of social space, for instance within economic fields or cultural fields? This general research question is approached by asking three sub-questions about vertical mobility, horizontal mobility and temporal variation over the life course:

I. In what ways are careers in the upper class characterized by *stability*?

II. What level of *circulation* between the different upper class fractions structures careers?

III. Are there differences in careers at different stages of the life course? For instance, are careers more stable vertically and horizontally later in one's life course?

The underlying assumption regarding class formation is often that stable careers within the upper class and across cohorts, as well as widespread circulation between upper class fractions, facilitate social integration within the upper class as a whole. In elite research, homogeneity in career paths and the circulation of personnel across institutional sectors are also seen as key in facilitating 'psychological affinities' and in easing coordination between elite groups (Mills 1956). Alternatively, fraction-specific careers may indicate more separation and fragmentation within the upper class.

Sequence analysis has been utilised to investigate work histories more generally (Halpin and Chan, 1998; Pollock *et al.*, 2002; Pollock, 2007; Bühlmann, 2008; Bukodi *et al.*, 2016). Although Bühlmann (2010) has studied routes into the British service class, class trajectories into the more restricted layers of the class structure – among the upper class or elites – have, to my knowledge, never been previously investigated. Nor have differences between class fractions in terms of forms of capital been thematised in these designs. Elites and the upper class often seem to escape academic scrutiny, partly due to the sampling techniques of quantitative sociology (Savage, 1997; Savage and Williams, 2008, p. 6). However, population-wide register data in Norway avoids sampling issues and enables an analysis of the upper class fractions in their entirety. In this study, I construct a subpopulation of individuals who obtained upper class affiliation at least once during a ten-year period in adulthood (2003–2012). I follow 21 cohorts, from 28 to 57 years of age. This offers a new opportunity to dissect elite dynamics in the most highly privileged in society.

2. Approaching upper class trajectories: capital and accumulation

Mapping class trajectories is widely held to be of great theoretical importance for the structuration of classes in a society. For instance, Wright, who defines class formation as 'organized collectivities…on the basis of the interests shaped by…class structure' (Wright, 1985, p. 10), emphasises that one's work mobility patterns may affect one's material class interests. Although he generally approaches the class structure in positional terms, he argues that '[t]he concept of "interests" is inherently a forward-looking concept' (Wright, 1989, p. 329); he thus explicitly states a preference for a 'trajectory view of class' since one's material interests will differ based on knowledge about one's probable trajectory; '[t]he class position of an exploited apprentice is different if that apprentice knows that he or she will become a master artisan than if this is a rare event...' (Wright, 1985, p. 185). To grasp class struggles and class antagonisms fully, class careers should be acknowledged, he argues (see also Wright and Shin, 1988).

In separating such mobilising socio-political aspects of class formation from demographic components, however, Goldthorpe follows Giddens (1981) in arguing that class trajectories are of particular interest in terms of their generation of a homogenous base of experience due to a 'continuity of … class locations over time' (Goldthorpe, 1987, pp. 329–330). Here, class formation relates to whether mobility between class situations is 'easy and typical' from generation to generation and within the individual life course, thereby facilitating 'the formation of identifiable classes' (Giddens, 1981, p. 107). Stable career trajectories are assumed to foster homogeneity 'at the level of demographic identity' (Goldthorpe, 1982, pp. 175–177) that adds to the likelihood of classes becoming collectivities. [ii] There are clear biographical underpinnings at play in Goldthorpe's writings on class formation, especially in his early interest in the formation of socio-cultrual and demographic identities (Bühlmann, 2010).

Perhaps, however, it is in the scholarship of Bourdieu that class trajectories are given the greatest theoretical weight, largely due to his concept of habitus. Within a Bourdieusian framework, different forms of capital (economic, cultural, social, field-specific and symbolic) – in interplay with multiple fields – govern the structuring of life chances within three interrelated dimensions in a multidimensional social space. First, differences in class positions are differentiated along a vertical axis, denoting various volumes of capital. For instance, high salaries and property ownership are distinguished from low income and no property. Second, different sources of capital account for an additional horizontal dimension; capital compositions that predominantly rely on economic capital are differentiated from those that predominantly rely on cultural capital. A third dimension, however, adds a temporal component to life chances, indicating 'the evolution in time of the volume and composition' of capital (Bourdieu, 1987, p. 4).

Emphasising a 'sociogenesis' of the principle behind human behaviour, Bourdieu argues that one's social experiences throughout the life course, with a particular focus on early processes of socialisation and internalisation, serve as a 'generating principle for practices and representations' which becomes embodied in habitus (1996, p. 161). Habitus, however, is not a unique product of one's class origin but is 'multilayered and dynamic', subject to 'permanent revision in practice' (Wacquant, 2016, p. 68). Hence, not only similar origins, but a homogenetiy in pathways are assumed to enable similar dispositions that add to the likelihood of mutual recognition and mutual appreciation wihtin the dominant class. Indeed, investigating trajectories is crucial to understanding different practices, tastes, outlooks and dispositions as '[t]hose who occupy the same position have every chance of having the same habitus, at least *insofar as the trajectories which have brought them to these are themselves similar*' (Bourdieu, 1987, p. 5, emphasis added).

Hence, an analytical interest in class trajectories is widely theoretically acknowledged in most strands of class analysis. Curiously, however, this perspective is largely ignored in empirical quantitative applications, where mobility is conventionally approached as a snapshot (Sørensen, 1986; Savage, 1997; Abbott, 2006). For instance, attempts are sometimes made to incorporate pathways into the standard mobility table by adding one's initial entry into the labour market to the mix of class origins (often measured at age 16) and class destination (often measured at age 35, a time of presumed 'occupational maturity' (Goldthorpe, 1987, pp. 52–53)). However, such tables arguably produce a great deal of uncertainty as to the specific pathways leading to one's class destination, and particularly to the career following this assumed career peak. Arguably, this methodological approach does not resonate well with the biographical underpinnings of the Goldthorpian interest in class formation (Bühlmann, 2010), nor with the general acknowledgement of class trajectory.

Insufficient attention to temporal processes at an aggregate level also characterises the Bourdieusian framework, where biographical trajectories often appear thematised as a snapshot (e.g. Bourdieu, 1984, 1996). Arguably, the disadvantage to the relational approach of multiple correspondence analysis (MCA) – despite its ability to reveal vertical and compositional divisions of capital – is that it often relies on a snapshot approach to the state of the field in question. Because such a framework entails a specific emphasis on capital, this neglect is unfortunate as the conceptual tools of multiple types of capital inherently tap into a temporal logic to class relationships by focusing on the accumulation and conversion of resources (Savage and Warde and Devine, 2005).

Both the conventional mobility paradigm (e.g. Goldthorpe, 1987) and the Bourdieusian approach utilising MCA (e.g. Hjellbrekke *et al.*, 2007; Flemmen, 2012; Ellersgaard *et al.*, 2013) thus rely on a snapshot approach.[iii] Snapshots, however, do not suffice in accounting for the temporal patterning of class trajectories that may indicate

qualitatively different careers that are likely to affect one's biographical identity, dispositions and material interests. In the present analysis, I employ optimal matching techniques in order to reveal typical trajectories leading to the Norwegian upper class. This approach is advantageous as it allows for sensitivity to differences in the duration of events and their specific ordering within individual class trajectories.[iv]

Contemporary quantitative class analysis is also arguably characterised by a lack of attention to top-end dynamics in the class structure in favour of internal differentiation within the middle classes as pointed out by Savage (2015). This partly reflects the difficulty in studying elite groups that are small in size with sampled survey data (Savage, 1997; Savage and Williams, 2008). Moreover, the wider discussion of class often conceptualises class relationships in a 'unidimensional' way by recognising only vertical distinctions within the domains of production or the division of labour and does not thematise horizontal divisions between upper class fractions.

By way of contrast, the theoretical concerns of vertical and horizontal oppositions in social space are conceptualised in the Oslo register data class scheme. This classification is based on a comprehensive categorising of more than 10,000 occupational titles, with supplementary information about income in order to differentiate rentier status – reviving in turn an emphasis on property-owning capitalists (Hansen *et al.*, 2009; Flemmen *et al*., 2017). The scheme is based on occupational information and complete tax records; due to its high level of detail, it is particularly informative in differentiating between the top levels of society.

Figure 1 displays the logic of the scheme, where two dimensions of social space are explicitly accounted for, evident in both horizontal and vertical divisions. The first dimension, concerning capital volume, is reflected in a tripartite division between the upper class, middle classes (higher and lower) and working classes (including primary industries). A relative income boundary distinguishes the vertical dimension within the economic sphere. This

implies an acknowledgement that the occupational statuses of 'managers' – while perhaps reflecting a service as opposed to labour contract (Goldthorpe, 1995) – should be internally differentiated according to level of remuneration as a function of such occupational engagement. The second dimension is mirrored on the left- and right-hand sides of the scheme, where the former reflects capital possession that predominantly relies on cultural capital whereas the latter denotes economic capital. A middle category distinguishes those class situations that reflect a balanced capital holding, typically rewarded with high salaries while requiring formal credentials. Within the upper class, this horizontal division pinpoints, for instance, (1) professors, publishers and artists (cultural), (2) doctors, lawyers and military officials (balanced); and (3) rentiers, highly paid directors, managers and financial brokers (economic). When combined, these fractions consist of less than 6 per cent of the complete birth cohorts between 1955–1975.

[Insert Figure 1 here]

Figure 1: The Oslo register data class scheme. Examples of occupations and percentage shares for full 1955–1975 cohorts in years 2003–2012.

A distinct relationship between class origins and recruitment to the top fractions of society is consistently revealed in the scholarly literature, a tendency found in Norway (see, for instance, Mastekaasa, 2004; Flemmen *et al*., 2017) and internationally (see, for instance, Hartmann, 2000; Khan, 2012). However, any patterning throughout the life course is addressed to a lesser extent. The present study thus fills an important knowledge gap with respect to the processes of upper class formation. If classes are structured multidimensionally, as suggested by the Bourdieusian approach, mobility barriers can be expected between the various fractions in social space, making class careers predominantly a matter of vertical

mobility or immobility within class fractions. In terms of horizontal circulation within upper class trajectories, intragenerational crossovers along the horizontal dimension can thus be anticipated to be the exception to the rule.

Some existing analyses of elites support this. Hjellbrekke and Korsnes (2009), using survey data about positional elites, suggest that most individuals experience sector-internal careers and that cross-sector career shifts, although rare, typically occur late in one's working life. However, some occurrence of 'pantouflage' is suggested in the literature, where long-term experience in the political field facilitates the conversion of political capital into economic capital, for instance by way of consultancy services (2009, p. 98; Denord *et al.*, 2011, p. 268). In an intergenerational perspective, both vertical and horizontal mobility barriers structure upper class reproduction in Norway (Flemmen *et al*., 2017).

In terms of temporal variation across the life course, more instability may be expected in the trajectories of the younger cohorts than for the older ones who are observed later in their careers. Instability in the early phases of one's career may be predicted both from a 'counter-mobility thesis' – which holds that individuals tend to end up in positions resembling their class origins, but only after some shifting around – and a 'job-search model', highlighting that it takes time to accumulate the seniority and qualifications for a good job match. Also, 'cultural, linguistic, educational and property attributes' may be to younger peoples' disadvantage (Mayer and Carroll, 1987, p. 19). It may take time to gain access to the upper echelons of the class structure and more turbulence may thus be expected in the career patterns of the younger cohorts than the older ones.

3. Data and methods

The dataset pertains to the whole Norwegian population born from 1955 onwards. A subpopulation consisting of the 1955–1975 birth cohorts has been constructed for the present

analysis. As sequences are only available for 2003–2012, this strategy allows pathways to power to be mapped at different stages of adulthood (ranging from age 48–57 for the oldest, to 28–37 for the youngest birth cohorts) during which most of these individuals were unlikely to be enrolled in education or have retired. Possessing complete population data avoids the problem of drawing inferences from a sample to the whole population and therefore strengthens the validity of the sequencing tools.

I condition on a minimum of one year of upper class affiliation in any of the three upper class fractions shown in Figure 1 and only include non-missing sequences (i.e. individuals who are assigned a class position during the period of 2003–2012). This produces cohorts with an average of 4,652 individuals, with a minimum value of 3,367 individuals for the 1975 cohort and a maximum value of 5,140 for the 1966 cohort. Women are underrepresented in this subpopulation; the proportion of women amounts to 30 per cent across cohorts, with a minimum share of 23 per cent in the 1955 cohort and a maximum value of 35 per cent in the 1975 cohort.[v] In order to address the third research question, the analyses are conducted separately for each cohort.

Sequencing tools are excellent ways to detect similarities and differences in complex successions of states. Optimal matching can achieve this by employing an algorithm that optimises the matching of sequences by finding the least expensive route to change one sequence into another. Three operations enable piecewise matching: substitution, insertion and deletion, each of which generates a predefined cost. The predefined substitution costs are a key concern in optimal matching procedures. While they facilitate sociologically informed modelling, they also affect the resulting sequence distances, making the analysis itself vulnerable to erroneous assumptions (Halpin, 2014). An explicit justification for the substitution matrix chosen is therefore required for the results to be deemed adequate and reliable (Lesnard, 2014).

One way of thinking about sequence analysis is to consider the trajectory space derived from a given state space. Distances between trajectories should mirror distances between positions within state space (Halpin, 2014, p. 77). The substitution costs should reflect the structure of a theoretically informed state space, so the advantage of relying on an existing class scheme, itself structured multidimensionally, helps create the substitution matrix (for a similar approach, see e.g. Halpin and Chan, 1998; Bukodi *et al*., 2016). The class scheme implies an anticipation of which states are similar to each other and which are more distant, and by adopting the two oppositions between capital volume and capital composition, I have constructed the following substitution matrix.[vi]

[Insert Table 1 here]

Table 1: Substitution matrix following the ORDC logic.

The logic is as follows. First, the costs reflect vertical distinctions, placed hierarchically as the upper class, then the upper middle class and the other/lower levels.[vii] This means that the lower middle class has been collapsed into one category along with all 'lower' class categories (see Figure 1). For each level, distances are represented by a substitution cost of +1; hence the distance between the upper class and the other/lower category amounts to 3, whereas the distance of 2 separates the upper middle and upper classes.

Second, the horizontal dimension of the state space is included in the substitution matrix, accounting for the composition of capital within the upper middle and upper classes, by reducing distances between the upper middle and upper classes within the same capital fraction by 0.5. Thus, the economic upper class is separated from the economic middle class by 1.5, but is 2 distant from the balanced middle class. As insertion or deletion imply time warping, and therefore partly lessen the advantage of finding trajectories that match

temporally (Abbott and Tsay, 2000, pp. 12–13; Lesnard, 2014), greater weight is given to the substitution operations by confining the cost of the former (indel) to half of the maximum substitution cost (Pollock, 2007, p. 170; Bukodi *et al*., 2016, p. 5).

Cluster analysis using the Ward algorithm is employed to organise sequence distances into empirical typologies. In the present analysis, a cluster solution of 6 has been chosen as it corresponds favourably with the substantive interest in the analyses, was found to be sociologically meaningful when inspecting detailed and ordered indexplots (not shown) and is justifiable when comparing different validation metrics obtained from the TraMineR (Gabadinho *et al.*, 2011) and the WeightedCluster (Studer, 2013) packages in R (see Appendix 2).[viii] As indicated by the dendrograms in Appendix 1, a solution of 6 is unhelpful for the younger cohorts, so a cluster solution of 5 is utilised to depict the trajectories of the birth cohorts between 1970–1975.

4. Findings: identifying typical trajectories

Although each cohort is at very different life stages, the cluster algorithm identifies groups of sequences that are similar for all age groups. These include (1) one group of clusters that primarily operates within the cultural fractions of social space (mean N=697), (2) one consisting of successions of balanced upper class affiliation, (mean N=917), (3) one operating in the economic upper class (mean N=812), (4) a group characterised by vulnerability and instability, illustrated by predominant states beneath the upper middle classes in social space, (mean N=803); and two clusters denoting middle class affiliation with minor upper class attachment: (5) the balanced fraction (mean N=960) and (6) the economic fraction (mean N=883) of social space, respectively. As noted, the last group is less distinguishable for the youngest age groups and sequences within the economic sphere are therefore grouped in cluster 3. With respect to the three research questions addressed, the partitioning of typical

sequences thus reveals (1) a distinction between typical pathways that are stable and trajectories that are vertically mobile, (2) limited circulation between class fractions as evident in capital-specific trajectories, (3) cross-cohort similarities in the typologies identified through the clustering procedure.

In the following, each cluster is presented through cohort-specific state distribution plots. This helps to highlight both similarities and differences within each cluster throughout the life course. In each plot, the x-axis depicts one's age between 2003–2012, while the y-axis denotes shares of class affiliation at each point in time within a specific cluster. Despite the large cross-cohort similarity, the sizes of each cluster vary to some degree – especially for the six youngest cohorts, who are primarily differentiated into five typologies – and cluster sizes are therefore highlighted in the title of each plot. While the solution of 6 provides meaningful typologies, heterogeneity herein is accounted for by highlighting sub-features within each cluster in the analysis.[ix]

4.1 Cluster 1: A cultural fraction

Based on a neighbourhood density criterion (Gabadinho *et al.*, 2011, p. 31), one sequence suffices to depict a representative trajectory in this cluster consisting of complete states of cultural upper class affiliation or one cultural middle-class entry state depending on cohort.[x] . Across all age groups, approximately half of the sequences belonging to this cluster consist of complete spells within the cultural upper class, implying that trajectories in this cluster are fairly stable throughout one's working life. However, the level of stability differs somewhat according to cohort; the lowest percentage share is detected in the 1975 cohort, with 18 per cent constant upper class affiliation, and the highest in the 1964 cohort, where persistence in this trajectory is 82 per cent.[xi] These stable trajectories are chiefly composed of work in

research, academia or professions such as architects. However, some artists, such as conductors, composers and musicians, and professional designers, also have stable trajectories.

[Figure 2 about here]

Figure 2: State distribution plot. Cluster 1, the cultural fraction

About one-fifth of these sequences represent an advance from the cultural middle class to the cultural upper class. These trajectories are more persistent among the younger cohorts. Often, movement from the middle class into the upper class is industry-specific, such as when PhD students become established academics.

This cultural cluster contains career paths that only infrequently engage with other domains of social space. However, some 'other' states are visible, which predominantly denote lower middle class affiliation in any of the three lower middle class categories. Within the cultural sphere, this typically includes technical designers or graphic designers, whereas clerical work often indicates balanced lower middle class affiliation and advertising and marketing indicate economic lower middle class affiliation. The balanced middle class category is also visible in the plots, often reflecting advisory or consultancy work.

4.2 Cluster 2: A balanced upper fraction

The first cluster was composed of many complete sequences within the cultural upper class. The second cluster, classifying balanced upper class affiliation, is characterised by even greater stability at an average of 60 per cent. Generally, the highest average silhouette widths are found in this cluster (see Appendix 2), indicating coherence and cluster homogeneity (Studer, 2013, p. 13). The lowest share of total spells in the balanced upper class is within the 1975 cohort (32 per cent), while the largest is for the 1957 cohort (76 per cent). Across the

cohorts, these trajectories chiefly reflect work within law, medicine and civil engineering (and pilots). The representative sequence consists of complete spells of upper balanced class affiliation for the most cohorts, although first year-states in the upper balanced middle class also figure as representative for some cohorts.

[Figure 3 about here]

Figure 3: State distribution plot. Cluster 2, the balanced upper fraction

Trajectories that include states other than the balanced upper class typically involve middle class advancement within the balanced fraction. About 13 per cent of all trajectories follow this pattern and the largest share is found within the 1975 cohort (25 per cent). Balanced middle class affiliation often consists of work that requires technical skills, such as technicians, engineers in specialised fields, computer systems designers and computer programmers, but also more general occupations such as advisors or consultants.

This cluster also contains states outside the balanced fraction of social space – for instance, there appears to be some crossover with the economic field. This crossover is often associated with leaving the balanced upper class and entering the economic upper class; about 5 per cent of all trajectories in this cluster follow this path. A typical trajectory of this type might involve being promoted from engineer to director or chief executive officer. A similar proportion of sequences shows the transition from the balanced upper class to the economic upper middle class. This reflects a similar crossover, but one where incomes from managerial positions in the economic sphere do not suffice to ensure membership of the upper class (accordingly, a middle class position in terms of income).

4.3 Cluster 3: An economic upper fraction

The third cluster – defined by states within the economic sphere – is characterised by greater instability compared to the two clusters above. In this cluster, the frequency of complete sequences of upper class affiliation is less common (only 18 per cent) and we observe greater differences throughout one's working life; fewer than five per cent of the six youngest cohorts enter the economic upper class for a sustained period, whereas around 30 per cent of the oldest cohorts in this cluster remained in the economic upper class between 2003–2012. Individuals with such stable trajectories are typically directors, chief executive officers, managers or financiers, but about one-third are also rentiers. On average, individuals who experience consistent periods within the upper class in the economic fraction have double the income of those who alternate between the upper and middle classes. These individuals are also more likely to be employed in the financial sector or to be self-employed/rentiers. For the cohorts between 1955–1968, a representative sequence of only economic upper class membership, or first-entry economic upper middle class, suffices to depict the typical sequence in this cluster. For the remaining cohorts, however, multiple sequences depicting upwards mobility within the economic fraction are representative, where upper class states at the end of one's career follow several years of middle class affiliation.

[Figure 4 about here]

Figure 4: State distribution plot. Cluster 3, the economic upper fraction

The vertical dimension of the economic fraction in the ORDC scheme is ranked by income. Within the business sector, the three income groupings are the top 10 per cent of incomes, the 50^{th} to 90^{th} percentiles and the bottom 50 per cent, making this fraction especially vulnerable to changes in assigned class positions over time. Because the economic middle and upper classes are separated by an arbitrary boundary to a greater extent than the other class fractions,

sequences that shift rapidly between these categories are arguably an artefact of the model, rather than representing substantial class mobility (see also Hansen *et al*., 2009, p. 16).[xii] However, because the sequencing tools describe the duration of states and their ordering, while rapid movements may be an artefact, long-term periods of middle class affiliation turning into upper class attachment arguably denote de facto middle class advancement within the economic sector. For instance, approximately 11 per cent of sequences start and end with at least three years of economic middle and upper class affiliation, respectively.

Although the economic fraction of social space dominates within this cluster, some engagement with the balanced upper class, balanced middle class and the 'other' category is also discernible, especially at the beginning of the trajectories. Although the vast majority of the 'other' category reflects affiliation with the lower middle class *within* the economic fraction, states of balanced middle class indicate technical expertise, such as technicians, specialised engineers and computer programmers. States in the balanced upper class within this cluster chiefly consist of lawyers and civil engineers entering the economic field.

4.4 Cluster 4: On the threshold of power

The fourth cluster shows sequences that are predominantly on the fringes of power. Bearing in mind how the subpopulation is constructed, so that all individuals have at least one year of upper class affiliation, there are no sequences that completely comprise 'other' states. Instead, this cluster indicates trajectories that reach the upper class for short spells, or pathways towards the upper class that leapfrog upper middle class attachment. This cluster is generally characterised by the greatest degree of heterogeneity; an average of 15 representative sequences is required to depict its defining features. Two interesting characteristics of this cluster should be emphasised; first, these sequences rarely include states within the cultural fraction of social space, but predominantly consist of paths through the economic and

balanced fractions. Second, this cluster contains sub-clusters of both inflow into the top echelons of social space and outflow into the 'other' category. As such, it captures two distinct patterns of existence on the fringes of power, one involving a great leap upwards and the other involving downward mobility. The representative sequences consist primarily of long-range upwards mobility among the youngest cohorts, while the older cohorts are represented by both upward and downward mobility patterns.

[Figure 5 about here]

Figure 5: State distribution plot. Cluster 4, on the threshold of power

The economic fraction is most clearly associated with downward mobility, with trajectories that end up in the 'other' category. This 'fall from grace' consists of entry to the economic lower middle class about 40 per cent of the time, indicating a significant loss of economic capital. Upward mobility also seems contingent on capital composition; for instance, sequences ending in the balanced fractions often originate in the balanced lower middle classes, and the same applies to the economic fractions of social space. Previous research has shown that the political field is the most open of all elite sectors within social space (Hjellbrekke *et al.*, 2007; Hjellbrekke and Korsnes, 2009) and political careers can be expected to be less stable throughout an individual's life course. Indeed, more than one-quarter of all politician states are grouped within this cluster. Lastly, there are also clear instances of advancing from the working classes – approximately one quarter of the trajectories start out in the skilled or unskilled working classes – often indicating craftsmen acquiring additional technical competence or managerial skills, such as the trajectory from electrician or machine operator to civil engineer or operations department manager.

4.5 Cluster 5: A balanced middle fraction

Whereas the second cluster was mainly characterised by long-lasting membership of the balanced upper class, the fifth cluster is dominated by successive states of balanced middle class affiliation. An average of three sequences are representative of this cluster denoting two different pathways: one in which long spells of balanced middle class attachment lead to balanced upper class membership – the familiar capital-specific path of middle class advancement – and one in the opposite direction, denoting downward mobility from the upper to the middle class. However, there is no clear pattern with respect to age as to which of these trajectories is the most common.

[Figure 6 about here]

Figure 6: State distribution plot. Cluster 5, the balanced middle fraction

These balanced middle class trajectories also traverse social space. About 40 per cent of these mobile trajectories lie within the economic fraction, often involving technical expertise, such as production and operations managers, while an equally sized share involves the cultural fractions. The latter often involves employment in teaching positions, journalism or types of academic work. However, although balanced middle class engagement is shown to lie within the economic and cultural fractions of social space, trajectories cross-cutting this horizontal dimension between the cultural and economic spheres are rare. Some other-states are also visible, often indicating mechanical technicians, but also secretaries or clerics.

4.6 Cluster 6: An economic middle fraction

The final cluster is also characterised by middle class affiliation, but within the economic fraction. As noted previously, in the economic sector the distinction between the clustering of

middle and upper class sequences was primarily identified for the 15 oldest age cohorts (for individuals between 34–57 years of age). In contrast to the third cluster, we can see that the majority of states lie within the economic middle class, with only infrequent – and rarely successive – states within the economic upper class. As the vertical dimension of the economic fraction in the ORDC scheme distinguishes between economic volumes of capital, it seems reasonable to assume that the last cluster identifies individuals who operate within the business sector, but who are not the most successful of their kind.

[Figure 7 about here]

Figure 7: State distribution plot. Cluster 6, the economic middle fraction

This cluster also contains states other than the economic upper and middle classes. Some crossover within the balanced fractions is evident, and these states predominantly reflect engineering positions, while the 'other' category often denotes economic lower middle class positions and thus less economically successful business activities.

5. Discussion and conclusion

A renewed focus on elites has largely been dominated by economists' mapping trends in top-level income and wealth shares in society. Although such approaches are useful in understanding the level of concentration of privilege over time, they do not provide much insight into the extent to which top groups consist of the same individuals over time and whether privilege is reproduced within individual biographies. Questions of limited opportunities for mobility – both within and across generations – do feature, however, in the sociological approach to class analysis where processes of social class formation have conventionally been of prime analytical interest. Better insight into the structuring of

contemporary elites would benefit from a renewed sociological interest in class mobility and processes of group formation.

I have argued thus far that the academic field of class mobility seems to suffer from two elements that obstruct a dynamic understanding of the formation of the upper class. First, a theoretical emphasis on individual class trajectory is rarely investigated empirically as most methodological tools tend to conflate time and rely on a snapshot approach. Optimal matching techniques therefore seem beneficial in this respect as both temporal duration and temporal order are accounted for when assessing the level of similarity or dissimilarity between sequences of events. Social sequence analysis thus allows for the theoretical concept of class trajectory to be an object of systematic empirical scrutiny.

Second, conceptualisations of the class structure have primarily focused on theoretical boundaries within the lower segments of the class structure (Savage, 2015) or operationalise only one unified category at the top. In contrast, a more nuanced classification of class fractions within the upper layers allows one to investigate whether class trajectories may not only be more or less stable at the top, but whether they traverse horizontal class boundaries along a dimension of capital composition. Introducing multidimensionality when approaching class divisions implies moving strategies of capital accumulation and capital conversion into the centre of class analysis (Savage *et al*., 2005) which is a key task for the sociology of elites (Khan, 2012).

In contrast to the difficulty involved in studying the upper class and elites by means of sampled survey data, access to population-wide data has permitted the career trajectories to be traced of all individuals who, at some point between 2003–2012, gained access to the Norwegian upper class (between 28–57 years of age). Although everyone in this subpopulation gained access to the upper class fractions, there are large differences behind such access; while some people's membership is durable, others remain on the fringes of

power. The present study thus reveals large differences between the privileged; such differences would remain overlooked if one were, for instance, to measure the mere likelihood of achieving an upper class position during adulthood. Further, internal distinctions between the privileged are not limited to duration; pathways also follow a logic that is capital-specific – this dynamic would be underappreciated if power resources were perceived to be restricted to economic means. The mechanisms producing this patterning of trajectories also seem fairly persistent over the life course, as evident in the similar typologies of the cohorts.

In terms of the level of *stability*, I have found vast differences in upper class pathways. The typologies revealed by the clustering procedure clearly distinguish between three fairly stable groups in each upper class fraction, from three clusters that denote vertical mobility and thus less durable affiliation at the top. Upper class pathways are thus differentiated with respect to levels of vertical mobility. At a more finely honed analytical level, however, some interesting differences can be observed between these three stable clusters; stable upper class careers appear to be the most persistent within the balanced fraction – this probably indicates the favourable career opportunities secured by educational training within the elite professions, as law, medicine and civil engineering dominate such sequences. Interestingly, the cultural fraction appears just as closed as the economic fraction of the upper class as also discovered elsewhere (see e.g. Flemmen *et al*., 2017). Some degree of instability within the stable sequences in the economic fraction could partly be due to the arbitrariness of income boundaries distinguishing the upper class from the middle classes. The classifying principle in the employed scheme opts for differentiation following the logic of 'capital volume' although the disadvantages involved in drawing such arbitrary boundaries should be acknowledged. This issue, however, appears considerably more serious when approaching the economic elite solely in terms of economic means, regardless of property relations or the division of labour, such as in notions of 'the one per cent' or equivalent.

Concerning *circulation* – or capital conversion – between class fractions, the barriers to mobility persist and clearly separate the various typologies. Apart from the fourth cluster (individuals who primarily operate in the lower middle or working classes), all clusters are dominated by capital-specific sequences evident in the tripartite distinction between holdings of economic, cultural and balanced capital. Whether visible through successive states within the upper class fractions, or through pathways into or away from the vertically lower middle classes, the majority of trajectories at the apex of the Norwegian class structure are maintained within horizontal boundaries of capital distinctions.[xiii] By extension, this lends support to and illustrates the fruitfulness of a multidimensional understanding of class.

Although horizontal mobility is limited, some crossovers stemming from the balanced fraction (often from the upper middle class) can be observed when looking at some sub-features of the main typologies. These trajectories often involve expert knowledge that appears to be a highly convertible asset; expertise is often the basis for recruitment into the economic, as well as the cultural, sphere. While the cultural fraction recruits predominantly advisors and consultants, the economic fraction attracts a broader range of expertise, such as technicians, engineers and computer programmers, but also legal expertise and consultancy services. Also, in line with previous research (Hjellbrekke and Korsnes, 2009), politicians with 'political capital' are characterised by mobile trajectories across space.

With regard to *life course variation*, the empirical typologies identify strong similarities throughout one's working life and the mechanisms thus appear highly durable. Although some sub-features of each typology seem to reflect age differences – such as the relatively higher frequency of middle class advancement into the upper class in the younger cohorts, or the relatively higher proportion of stable trajectories in the older cohorts – the overarching pattern of the six typologies is similar. In all cohorts differences have been found in terms of vertical mobility – separating stable membership from upward or downward

trajectories – as well as barriers to horizontal mobility– distinguishing clusters that operate in distinct spheres of social space. However, one notable exception stands out. Interestingly, the internal partitioning within the economic sphere – distinguishing the upper from the middle classes – seemingly occurs later in one's career; only at the age of 34 and older are these typologies reasonably distinctly different. Again, the education of the elite professions may facilitate a more direct route to the balanced upper class, whereas it appears reasonable that a career leading to the economic upper class is less readily available in one's late 20s and early 30s.

In summary, studying upper class recruitment using a multidimensional and temporal approach allows for a dynamic investigation of pathways to power. In taking the Norwegian upper class as a point of departure, I have found that the upper layers are not one cohesively integrated group; instead, there appear to be rather durable barriers to mobility that separate career typologies. Although everyone studied has reached the upper echelons of the class structure, they have embarked on very different pathways to the upper class; this demonstrates rather different biographical experiences. This arguably entails important implications for processes of group formation and taps into conditions for elite coordination across the horizontal divide of capital composition. Fragmentation appears to structure the careers of the privileged, rather than unity. It would seem that we can follow Goldthorpe (1987, p. 147) in the distinction he draws – with reference to Pitirim Sorokin – between two elements of classes: 'one more or less permanent "core", the other made up of mobile individuals of relatively recent membership and whose affiliation remains uncertain.' Indeed, upper class trajectories are differentiated by a rather sizable share (approximately half) of more or less stable membership at the top and the remainder by unstable career profiles. However, it would be erroneous to consider the stable trajectories as encompassing one core – instead, rather durable barriers to mobility along a horizontal divide separate the cultural from the economic

fractions. Instead, I would suggest that what we can observe are *multiple upper class cores* that engage in quite distinct societal domains following a principle of capital-specificity. Although sub-features within the clusters reveal some evidence of the convertibility of capital, circulation is primarily confined to career paths originating in the balanced fractions of the social space and long-range horizontal mobility remains untypical. In future work, therefore, it should perhaps be acknowledged that pathways to power are temporally structured and follow multiple dimensions along the volume and composition of capital.

References

Aaberge, R. and Atkinson, A. B. (2010) 'Top Incomes in Norway'. In Atkinson, A. B. and Piketty, T. (eds) *Top Incomes. A Global Perspective*, Oxford, Oxford University Press, pp. 448–481.

Abbott, A. (2001) *Time Matters: On Theory and Method*, Chicago, University of Chicago Press.

Abbott, A. (2006) 'Mobility: What? When? How?'. In Morgan, S. L., Grusky, D. B. and Fields, G. S. (eds) *Mobility and Inequality: Frontiers of Research in Sociology and Economics*, Stanford, Standford univeristy press, pp. 137–161.

Abbott, A. and Tsay, A. (2000) 'Sequence Analysis and Optimal Matching Methods in Sociology. Review and Prospect', *Sociological methods & research*, **29**, 3–33.

Bourdieu, P. (1984) *Distinction: A Social Critique of the Judgement of Taste*, Cambridge, Harvard University Press.

Bourdieu, P. (1987) 'What Makes a Social Class? On the Theoretical and Practical Existence of Groups', *Berkeley Journal of Sociology*, **32**, 1–17.

Bourdieu, P. (1990) *The Logic of Practice*, Standford, Standford University Press.

Bourdieu, P. (1996) *The State Nobility: Elite Schools in the Field of Power*, Standford, Standford University Press.

Bukodi, E., Goldthorpe, J. H., Halpin, B. and Waller, L. (2016) 'Is Education Now Class Destiny? Class Histories across Three British Birth Cohorts', *European Sociological Review*, **32**, 835–849.

Bühlmann, F. (2008) 'The Corrosion of Career?—Occupational Trajectories of Business Economists and Engineers in Switzerland', *European Sociological Review*, **24**, 601–616.

Bühlmann, F. (2010) 'Routes into the British Service Class Feeder Logics According to Gender and Occupational Groups', *Sociology*, **44**, 195–212.

Denord, F., Hjellbrekke, J., Korsnes, O., Lebaron, F. and Le Roux, B. (2011) 'Social Capital in the Field of Power: The Case of Norway', *The sociological review*, **59**, 86–108.

DiPrete, T. A. and Eirich, G. M. (2006) 'Cumulative Advantage as a Mechanism for Inequality: A Review of Theoretical and Empirical Developments', *Annual review of sociology*, **32**, 271–297.

Ellersgaard, C. H., Larsen, A. G. and Munk, M. D. (2013) 'A Very Economic Elite: The Case of the Danish Top Ceos', *Sociology*, **47**, 1051–1071.

Erikson, R. and Goldthorpe, J. H. (1992) *The Constant Flux: A Study of Class Mobility in Industrial Societies*, Oxford, Clarendon Press.

Flemmen, M. (2012) 'The Structure of the Upper Class: A Social Space Approach', *Sociology*, **46**, 1039–1058.

Flemmen, M. P., Toft, M., Andersen, P. L., Hansen, M. N. and Ljunggren, J. (2017) 'Forms of Capital and Modes of Closure in Upper Class Reproduction', *Sociology*, 0038038517706325.

Gabadinho, A., Ritschard, G., Mueller, N. S. and Studer, M. (2011) 'Analyzing and Visualizing State Sequences in R with Traminer', *Journal of Statistical Software*, **40**, 1–37.

Giddens, A. (1981) *The Class Structure of the Advanced Societies*, 2nd, London, Hutchinson.

Goldthorpe, J. H. (1982) 'On the Service Class, Its Formation and Future'. In Giddens, A. and MacKenzie, D. (eds) *Social Class and the Division of Labour*, Cambridge, Cambridge Univeristy Press, pp. 162–185.

Goldthorpe, J. H. (1987) *Social Mobility and Class Structure in Modern Britain*, 2nd, Oxford, Clarendon Press.

Goldthorpe, J. H. (1995) 'The Service Class Revisited'. In Butler, T. and Savage, M. (eds) *Social Change and the Middle Classes*, London, UCL Press, pp. 313–329.

Halpin, B. (2014) 'Three Narratives of Sequence Analysis'. In Blanchard, P., Bühlmann, F. and Gauthier, J.-A. (eds) *Advances in Sequence Analysis: Theory, Method, Applications*, London, Springer, pp. 75–103.

Halpin, B. and Chan, T. W. (1998) 'Class Careers as Sequences: An Optimal Matching Analysis of Work-Life Histories', *European sociological review*, **14**, 111–130.

Hansen, M. N. (2014) 'Self-Made Wealth or Family Wealth? Changes in Intergenerational Wealth Mobility', *Social Forces*, **93**, 457–481.

Hansen, M. N., Flemmen, M. and Andersen, P. L. (2009) *Oslo Register Data Class Scheme (Ordc), Final Report from the Classification Project*, Department of Sociology and Human Geography, University of Oslo, pp. 1–22.

Hartmann, M. (2000) 'Class-Specific Habitus and the Social Reproducation of the Business Elite in Germany and France', *Sociological Review*, **48**, 241–261.

Hjellbrekke, J., Jarness, V. and Korsnes, O. (2014) 'Cultural Distinctions in an 'Egalitarian'society'. In Coulangeon, P. and Duval, J. (eds) *The Routledge Companion to Bourdieu's Distinction*, New York, Routledge, pp. 187–206.

Hjellbrekke, J. and Korsnes, O. (2009) 'Quantifying the Field of Power in Norway'. In Robson, K. and Sanders, C. (eds) *Quantifying Theory: Pierre Bourdieu*, Netherlands, Springer Netherlands, pp. 31–45.

Hjellbrekke, J., Le Roux, B., Korsnes, O., Lebaron, F., Rosenlund, L. and Rouanet, H. (2007) 'The Norwegian Field of Power Anno 2000', *European Societies*, **9**, 245–273.

Khan, S. R. (2012) 'The Sociology of Elites', *Annual Review of Sociology*, **38**, 361–377.

Lesnard, L. (2014) 'Using Optimal Matching Analysis in Sociology: Cost Setting and Sociology of Time'. In Blanchard, P., Bühlmann, F. and Gauthier, J.-A. (eds) *Advances in Sequence Analysis: Theory, Method, Applications*, London, Springer, pp. 39–50.

Mastekaasa, A. (2004) 'Social Origins and Recruitment to Norwegian Business and Public Sector Elites', *European Sociological Review*, **20**, 211–235.

Mayer, K. U. and Carroll, G. R. (1987) 'Jobs and Classes: Structural Constraints on Career Mobility', *European sociological review*, **3**, 14–38.

Mills, C. W. (1956) *The Power Elite*. Oxford, Oxford University Press.

Pollock, G. (2007) 'Holistic Trajectories: A Study of Combined Employment, Housing and Family Careers by Using Multiple-Sequence Analysis', *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, **170**, 167–183.

Pollock, G., Antcliff, V. and Ralphs, R. (2002) 'Work Orders: Analysing Employment Histories Using Sequence Data', *International Journal of Social Research Methodology*, **5**, 91–105.

Savage, M. (1997) 'Social Mobility and the Survey Method: A Critical Analysis'. In Bertaux, D. and Thompson, P. (eds) *Pathways to Social Class: Qualitative Approaches to Social Mobility*, Oxford, Clarendon Press, pp. 299–232.

Savage, M. (2000) *Class Analysis and Social Transformation*, Buckingham, Open University Press.

Savage, M. (2015) 'Introduction to Elites from the 'Problematic of the Proletariat' to a Class Analysis of 'Wealth Elites'', *The Sociological Review*, **63**, 223–239.

Savage, M., Devine, F., Cunningham, N., Taylor, M., Li, Y., Hjellbrekke, J., Le Roux, B., Friedman, S. and Miles, A. (2013) 'A New Model of Social Class? Findings from the BBC's Great British Class Survey Experiment', *Sociology*, **47**, 219–250.

Savage, M., Warde, A. and Devine, F. (2005) 'Capitals, Assets, and Resources: Some Critical Issues', *The British Journal of Sociology*, **56**, 31–47.

Savage, M. and Williams, K. (2008) 'Elites: Remembered in Capitalism and Forgotten by Social Sciences'. In Savage, M. and Williams, K. (eds) *Remembering Elites*, Oxford, Blackwell (Sociological Review Monograph), pp. 1–24.

Studer, M. (2013) 'Weightedcluster Library Manual: A Practical Guide to Creating Typologies of Trajectories in the Social Sciences with R', *LIVES working papers*, **24**, doi: http://dx.doi.org/10.12682/lives.2296-1658.2013.24.

Sørensen, A. B. (1986) 'Theory and Methodology in Social Stratification'. In Himmelstrand, U. (ed) *Sociology: From Crisis to Science*, London, Sage, pp. 69–95.

Tilly, C. (1999) *Durable Inequality*, Berkeley, University of California Press.

Toft, M. and Flemmen, M. (forthcoming) 'The Gendered Reproduction of the Upper Class'. In Korsnes, O., Heilbron, J., Hjellbrekke, J., Bühlmann, F. and Savage, M. (eds) *New Directions in Elite Studies*, Routledge.

Wacquant, L. (1993) 'From Ruling Class to Field of Power: An Interview with Pierre Bourdieu on La Noblesse D'etat', *Theory, Culture & Society*, **10**, 19–44.

Wacquant, L. (2016) 'A Concise Genealogy and Anatomy of Habitus', *The Sociological Review*, **64**, 64–72.

Weber, M. (1978) *Economy and Society. An Outline of Interpretive Sociology*, Berkeley, University of California Press.

Wright, E. O. (1985) *Classes*, London, Verso.

Wright, E. O. (1989) 'Rethinking, Once Again, the Concept of Class Structure'. In Wright, E. O. (ed) *The Debate on Classes*, London, Verso, pp. 269–348.

Wright, E. O. and Shin, K.-Y. (1988) 'Temporality and Class Analysis: A Comparative Study of the Effects of Class Trajectory and Class Structure on Class Consciousness in Sweden and the United States', *Sociological Theory*, **6**, 58–84.

Endnotes

[i] An emphasis on the accumulation of resources as a key mechanism for producing inequality is evident in a wide range of sociological contributions, such as in notions of 'opportunity hoarding' (Tilly, 1999), 'cumulative advantage' (DiPrete and Eirich, 2006) and, importantly, Weber's (1978) notion of closure.

[ii] Here, an interesting distinction in the notion of temporality emerges between Wright's and Goldthorpe's approaches to class formation. Wright and Shin (1988) emphasise how temporality is approached in two separate ways when dealing with class trajectories; on the one hand, a *processual view* emphasises the notion of *past* trajectory in forming experiences that facilitate homogeneous embodied identities, while on the other, a *structural view* highlights perceived *future* trajectory that affects class interests. The primacy of biographical experience in Goldthorpe's approach to class formation draws primarily on a processual emphasis on *past time*, while Wright's conception of class interests and mobilised struggle makes him more concerned with *future time*: '…a full account of "class structure", where class structure is meant to designate the interest-generating process linked to exploitation, has to include some kind of recognition of … probable trajectories' (Wright, 1985, p. 186).

[iii] It should be noted that some MCA approaches make use of career data (see e.g. Ellersgaard *et al*., 2013), while favouring summary measurements of duration (such as the number of career changes) rather than duration and order.

[iv] Attention to the order of events makes sequence analysis more favourable than other methods that entail some level of time sensitivity, such as event history analysis (Bukodi *et al*., 2016, p. 2).

[v] I perform a pooled analysis for the sexes as separate analyses for a female subpopulation yielded a very similar logic as that to the combined population. Instead of 6, 5 clusters were distinct; three upper class typologies, one 'other' typology and one cluster dominated by middle class attachment within the balanced fraction. However, in the pooled analysis, the share of female trajectories within each typology decreases drastically when moving from the left- to the right-hand side of the class structure. Although women are less likely to achieve upper class affiliation than men, those who gain access are more likely to follow a cultural trajectory (overrepresented by 10 percentage points in cluster 1) or balanced trajectory (overrepresented by 4 percentage points in cluster 2) than an economic pathway (underrepresented by 12 percentage points in cluster 3). See Toft and Flemmen (forthcoming) for an analysis of gender-specific and gender-neutral modes of reproduction of the upper class fractions in an intergenerational framework.

[vi] Note, however, that the main results prevail when employing alternative matrices such as substitution costs of equal sizes, i.e. where all states are treated as equally distant from each other, or when using the observed transition matrix as a basis for substitution costs.

[vii] The states are registered annually based on information of the most income-rewarding occupation within each year.

[viii] Statistics for different number of clusters as well as homogeneity and stability measures for the chosen solution are provided in Appendix 2. As commonly found when studying social phenomena (Bukodi *et al*., 2016), I find that the clusters are somewhat weakly structured although the groups are significantly different from each other. Also, these metrics sometimes yield divergent suggestions; some propose the inclusion of additional clusters (e.g. AWS, HC, HG) while others suggest a higher level clustering (e.g. CH and CHsq). However, the indices for the chosen solution do not deviate extensively from each index recommendation and the solution is arguably substantiated by the dendrograms as reported in Appendix 1. It should, however, be noted that for some cohorts initial partitioning resembled a trisection rather than a quartering. However, substantively, lower level clustering arguably consists of cross-cohort resemblance.

[ix] Note, however, that choosing fewer clusters would yield results that clearly demonstrate the general findings of capital-specific trajectories as well. For instance, when choosing only three clusters, we find one cluster identifies the trajectories that are 'on the fringes of power', one cluster identifies the economic fraction and the third mixes cultural and balanced trajectories. Solutions of four and five clusters also group sequences along similar dimensions, either by separating fractions from each other completely, or by mixing the balanced fraction with either the cultural fraction or the economic fraction. Hence, higher order clustering neglects the vertical distinction between the predominance of upper class versus middle class attachment, while recognising the horizontal opposition between trajectories engaged in the economic versus the cultural sphere.

[x] Plots of representative sequences for each cluster by cohort are available on request.

[xi] Note that percentages are computed relative to cohort-specific cluster sizes. Hence, a larger number of individuals with complete sequences are detected for the 1955 cohort than for the 1959 cohort.

[xii] Note that the updated version of the ORDC scheme in the present analysis uses a relative income criterion when distinguishing the economic fraction, as opposed to an absolute income limit as documented in Hansen *et al*. (2009).

[xiii] This horizontal distinction is in part modelled by the substitution costs in the optimal matching algorithm, yet these costs do not completely generate the observed pattern, since, as previously noted, validation techniques with alternative matrices yield similar results.