

# **Is Britain pulling apart? Evidence from trends in socio-economic social distance**

**Paul S. Lambert, Dave Griffiths, Erik Bihagen, Richard Zijdeman, Vernon Gayle, Mark Tranmer**

8<sup>th</sup> May 2014

Please do not cite or reference without prior permission of the authors (contact [paul.lambert@stir.ac.uk](mailto:paul.lambert@stir.ac.uk)).

This paper is funded by the 'Is Britain Pulling Apart?' project, led by Prof. Paul S. Lambert, as part of the ESRC Secondary Data Analysis Initiative (SDAI) Phase 1. Versions of this paper have been presented to the ISA RC28 Spring Meeting (8-10 May 2014, Budapest) and the Radical Statistics annual conference (8 March 2014, Manchester)

## **Abstract**

We present evidence on trends in patterns of 'social distance' between individuals as measured by key socio-economic indicators over time and across countries. Social distance is characterised as the gap between different social positions as evident from the levels of social interaction between the individuals that hold them. Alternative means of characterising social distance and its trends are discussed and the relationship between empirical evidence and theoretical claims about social trends is elaborated. Findings mostly reject social theories and commentaries which assert the substantial and dramatic widening of social inequalities over recent decades. Instead they tend to support a model of 'tolerated social reproduction', that is, the evolution of societies characterised by substantial social stability but featuring the organisation of social inequality in a way that is less objectionable than many theoretical accounts suggest.

## 1. Theories of social trends

When any form of social commentary is provided about social processes, it can seem more common than not that a story of social change is presented. Popular social commentary can seem particularly reliant upon expressing its points within a narrative of social change. Any observer, for example, of politicians' claims about the challenges facing their society, or of journalists' accounts of contemporary social affairs, or indeed of cultural expressions, such as books and films, that engage with the topic areas of social inequality, will struggle to avoid exposure to the staple claims of social change such as that "things are not what they used to be" or that "we're heading for trouble". Yet is this story of social change so plausible, given the overwhelming structural stability that has been experienced by privileged societies such as the UK over at least the last century?

There is no difficulty finding comparable claims of heightened social change across academic literatures in sociology and its cognate social sciences. This probably occurs for three reasons. Firstly, many social theorists develop a logic of social change or transformation. In the 19<sup>th</sup> century, Marx described how tensions of capitalist production should be expected to lead to growing polarisation of resources that could ultimately be expected to generate violent challenge and social upheaval; in the 21<sup>st</sup> century, popular critiques of neo-liberalism portray an innate bias in capital markets that fosters both global and local inequalities, as well as terrible attacks on environmental and cultural surroundings (e.g. Miller 2012; Therborn 2013). A second reason for stories of social change in academic literatures is that the empirical evidence presented by social scientists does indeed often support the case for evidence of important social change. This might not seem surprising, since many aspects of modern society are self-evidently dramatically different compared even with the recent past (e.g. uses of IT, transport and communication patterns; educational participation, partnership and family formation timings). Nevertheless, we will argue below that, across a range of important factors, the empirical evidence of important social change is less than compelling. Finally, it is plausible that a third explanation for the abundance of academic accounts about social change is that many social scientists are exposed to pressure to communicate their work in terms of exciting or different patterns. Impact may be more effective if expressed with the language of important or dramatic social change. Of course, this mechanism probably applies equally to scholarly and to popular publication outlets.

Within contemporary sociology at least three outlooks on contemporary social change are widely supported. In one model, the neo-liberal critique, society is characterised as spiralling out of control, with rapidly rising social inequalities purveyed by a small minority of privileged capitalists, who use the machinery of globalisation to pursue their interests at the cost of wider society (e.g. Winlow and Hall 2013; Dorling 2014). In another, post-modernity, society is characterised by the rapid diminution of traditional structures and barriers, which is associated with both positive (mainly

cultural) and negative (mainly socio-economic) effects upon populations (e.g. Bauman 2001). In a third model, of Bourdieusian reproduction, the central role of individual behaviours in securing positions in the social structure is emphasised, with arguments that the reproduction of inequality generally interacts with organisational social change to lead to a hardening of social barriers over time (e.g. Savage et al. 2013). Each of these positions offer broadly pessimistic perspectives on long terms social prospects.

However, several other literatures come to dramatically different characterisations. Some social scientists who could be portrayed as 'modernists' have highlighted the largely beneficent effects of recent social developments, which are characterised as modest social change over a long time period, leading generally to improved social structures such as of meritocracy and 'fairness' (e.g. Marks 2014). Alternatively some traditions in social history highlight very long term social stability in the social organisation of inequality (e.g. Clark 2014). A number of accounts of contemporary social mobility and social reproduction highlight the general stability over recent generations in the transmission of social position from one generation to the next (e.g. Erikson and Goldthorpe 2008). These accounts seek to provide some theoretical explanations for social stability rather than social change. They could, arguably, be supported by a vast volume of empirically based social reports which tend overwhelmingly not to identify dramatic statistical patterns of social change over the last century, such as in stability, for example, in public attitudes and values; or in working and family arrangements across the life-course .

An enduring problem in reconciling debates between accounts of social stability and of social change concerns what phenomena to concentrate upon. Some social patterns must inevitably change due to technological restructuring such as in changing labour market compositions or changing proportions studying at different educational levels. It has been common for research on levels of social change to focus mainly on patterns in socio-economic inequalities, such as in changes in 'social mobility' levels or in the distribution of income or wealth. Such studies often face considerable challenges of harmonisation in research measures, which may have the potential to conflate social changes that are of genuine importance with those that are 'artefacts' of measurement or operational arrangements. On the other hand, a number of social scientists from across disciplines highlight the importance of understanding inequalities beyond traditional socio-economic markers, although research in this perspective faces the limitation that alternative relevant measures (such as lifestyle and cultural preference markers) are not widely available in comparative secondary survey datasets.

An intermediate course can be steered by focusing upon simple measures that, we believe, transcend the division between the economic and the social as tools for exploring social change. The concept of 'social distance' concerns how social preferences and choices shape patterns of behaviour that are realised through measurable structures of social interaction between social categories. A measure of 'social distance' should tell us how socially close or distant are different measurable categories. Social distance is usually measured through recording the volume and

frequency of social interactions between the holders of different social positions – for instance, if it is very common for people with ‘degrees’ to be friends with people with ‘diplomas’, those categories have a low social distance; if it is very rare, they would be socially distant.

In trying to explore claims of dramatic social change or growing social inequality, evidence on social distance should be particularly compelling. This is partly because we know that structures of social distance are heavily aligned to structures of social inequality (i.e. people tend to have less social distance from people in similar situations to them in terms of social inequality). Additionally, analysis of social distance is appealing since it should reflect the influence of social choices and preferences. Through these qualities, it can be argued that measures of social distance will be particularly interesting tools through which to explore social changes in contemporary societies.

Below we summarise an array of evidence about social change in social distance structures that we have compiled through the secondary analysis of social survey datasets. After describing the data resources on which it is premised, we present summary results that assess trends in social distance inequalities over the period 1970-2012. Our view from the analysis of social distance involving consequential social inequalities is that there is very little evidence to support portrayals of dramatic social change - whether they be alarmist or celebratory – and we argue instead that alternative theories are required to account for the ‘tolerated social reproduction’ that seems, empirically, to be the dominant pattern.

## **2. Data and methods**

Our analyses below proceed using data on the social characteristics of cohabiting heterosexual couples. We use predominantly two sources of data: harmonised international census datasets provided by IPUMS-I (Minnesota Population Center 2011); and Labour Force Survey and closely comparable social survey datasets from selected countries (e.g. ONS 2013, 2007; ESS2010). In each case, we construct information about ‘pairs’ of two people (i.e. the male and female partner) and their socio-economic and socio-demographic characteristics (e.g. their occupations, educational qualifications, ethnicity, religion, age, etc).

It may not be intuitively convincing that the concept of social distance between social categories is adequately explored through empirical data concerning heterosexual couples. There is some research to suggest that evidence on social distance that is obtained from heterosexual couples will be comparable to evidence from the analysis of homosexual couples (e.g. Alderson et al. 2010).

More importantly to the concept of social distance, there have been a wide range of studies that suggest that the key findings from analyses of social distance conducted upon data on cohabiting couples will be consistent with those from the analysis of social distance between other social connections, such as friends or more distant family (e.g. Prandy 1990; Prandy and Lambert 2003; Chan 2010). It may not be immediately obvious that this is so, but if we accept the premise that the same structures of inequality are revealed through social distance analysis of connections of cohabitation as of other social connections, we can take advantage of the immense pragmatic convenience that data on marriage and cohabitation is dramatically more readily accessible over a wider range of societies and time periods.

The social distance structures that we explore are based upon analysis of the social interaction patterns revealed between various categorical measures (of occupation, education, ethnicity and religion). In the analysis of ethnicity and religion, this information is only available for a few countries and we use different measures in different contexts. However, for the analysis of measures of occupation and of education, we use widely-used cross-nationally standardised schemes. The schemes we use are described and defended in methodological reviews (e.g. Hoffmeyer-Zlotnik and Warner 2014). Whilst cross-national standards risk 'ironing over' interesting social differences that are specific to a particular country or time period, the evidence from comparative analyses is that the relative loss of information is usually small (e.g. Lambert et al. 2008).

We conducted a number of sensitivity analyses on whether data about social distance patterns and trends would be different if different variable operationalisations (i.e. different categorical schemes) were used. Figure 1 shows the results from some analyses for the UK. It suggests that the level of detail at which educational qualifications, and age, are recorded will not greatly influence the characterisation of social distance trends: the education association increases slightly regardless of different permutations in these measures.

[FIGURE 1 ABOUT HERE]

The characterisation of the 'level of' social distance through relevant social statistics is highly debateable. Many social science analyses have focussed on commonly used correlation and association statistics that capture the 'absolute' level of association between pairs. However we can also distinguish two other exploratory approaches. In general, our preferred characterisations come from assessments of association levels that use a dimensionally oriented summary technique. In our analysis, we often first conduct a correspondence analysis of the male-female category association, then identify the main dimensional structure, then lastly we use summary statistics such as correlations or mean differences in terms of the allocated scores. This has the attraction of allowing the category positions to vary over time or between countries. Additionally, some recent studies advocate model based approaches which assess the net mismatch between actual social connection patterns and those that might occur in a randomly distributed social structure (cf. Smith et al. 2014).

In Figure 2 below, we provide sensitivity analysis across the range of these measures; our interpretation is, in general, that different statistical summaries of social distance levels also do not vastly perturb the overall view about trends in social distance levels.

[FIGURE 2 ABOUT HERE]

### 3. Results

An important marker of dramatic social change could be evidence of a fundamental re-ordering of the structure of social inequality over time (or between countries). ‘Social interaction distance’ analysis is widely used to assess the underlying order of social inequality by extracting the first empirical dimension of the social interaction structure involving socio-economic categories (e.g. Stewart et al. 1980; Prandy and Lambert 2003; Chan 2010). Previous work has illustrated the overwhelming stability in occupational orders of inequality as revealed through social distance analysis (e.g. Prandy and Jones 2001; Chan 2010; Griffiths and Lambert 2012). Figure 3 shows that the same patterns hold for occupational inequalities, and, to a lesser extent, to educational categories over time using data from a range of countries. The importance of this finding is twofold: social distance structures suggest stability, not change, in social orders of inequality; educational inequalities, however, experience some decline in their steepness in most countries through time, suggesting that educational social distances may experience aggregate trends driven by this important change that is of a structurally important - but arguably not socially important - character.

[FIGURE 3 ABOUT HERE]

Figure 4 summarises statistical evidence for contemporary Britain on social distance between educational and occupational categories over time. The story of a ‘Britain pulling apart’ would be revealed by increasing associations between categories: people with similar circumstances would be increasingly tightly bound in their social connections. The evidence on homogamy is not consistent with a ‘Britain pulling apart’; instead it supports a pattern of little change in social distance and social interactions, albeit tempered by a slight increase in educational homogamy (which might be due to the impact of educational expansion).

[FIGURE 4 ABOUT HERE]

Figure 5 extends the evaluation of change in social distance levels to trends across different countries. The Figure seems again to clearly reject patterns of dramatic recent social change. The picture might be consistent with one of trendless fluctuation, though given the variations in patterns from country to country, it is also consistent in general with patterns of slight decline in social distance over time.

[FIGURE 5 ABOUT HERE]

#### **4. Conclusion**

Our results join those of a wide empirical literature which refutes claims about dramatic recent social polarisation in the UK and beyond. Social distance patterns are broadly stable over time, but, if there is evidence of change, it is likely to be in the direction of increasing social heterogeneity (i.e. the decline, not the increase, of polarisation).

A good descriptor for the evidence that emerges from social distance analysis of social trends is that of 'tolerated social reproduction'. The data suggests a society with high and stable levels of aggregate social stability over time, featuring moderate but not excessive inter-generational social reproduction. These patterns of social reproduction are 'tolerated' because they are sustained by social interaction preferences and choices: by 'choosing' social interaction patterns with people from similar circumstances, individuals from both more and less advantaged circumstances could be portrayed as 'complicit' in the reproduction of inequality. However, this complicity may well not be maleficent: it seems to lead to societies that, over time, become slightly less unequal and slightly more heterogeneous; it also seems, in general, to be the preference of people regardless of their circumstances, and homophilous patterns seem often to be associated with more positive individual outcomes than are heterogamous ones (e.g. Brynin et al. 2008).

## Bibliography

- Bauman, Z. (2001). *The Individualised Society*. Cambridge: Polity.
- Brynin, M., Longhi, S., & Martinez Perez, A. (2008). The Social Significance of Homogamy. In M. Brynin & J. Ermisch (Eds.), *Changing Relationships*. London: Routledge.
- Chan, T. W. (Ed.). (2010). *Social Status and Cultural Consumption*. Cambridge: Cambridge University Press.
- Clark, G. (2014). *The Son Also Rises: Surnames and the History of Social Mobility*. Princeton: Princeton University Press.
- Erikson, R., & Goldthorpe, J. H. (1992). *The Constant Flux: A study of class mobility in industrial societies*. Oxford: Clarendon Press.
- ESS Round 5: European Social Survey Round 5 Data (2010). Data file edition 3.0. Norwegian Social Science Data Services, Norway – Data Archive and distributor of ESS data
- Griffiths, D., & Lambert, P. S. (2012). Dimensions and Boundaries: Comparative Analysis of Occupational Structures Using Social Network and Social Interaction Distance Analysis. *Sociological Research Online*, 17(2), 5.
- Marks, G. N. (2014). *Education, Social Background and Cognitive Ability*. London: Routledge.
- Minnesota Population Center. (2011). *Integrated Public Use Microdata Series, International: Version 6.1 [Machine readable database]*. Minneapolis: University of Minnesota, and <https://international.ipums.org/> (accessed 1 July 2011).
- Office for National Statistics (Social and Vital Statistics Division). (2007). *General Household Survey, Time Series Dataset, 1972-2004 [computer file]*. Colchester, Essex: UK Data Archive [distributor], SN: 5664, July 2007.
- Office for National Statistics. Social Survey Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, *Quarterly Labour Force Survey, January - March, 2013* [computer file]. Colchester, Essex: UK Data Archive [distributor], May 2013. SN: 7277 , <http://dx.doi.org/10.5255/UKDA-SN-7277-1> [and citations at UK Data Service
- Prandy, K., & Jones, F. L. (2001). An international comparative analysis of marriage patterns and social stratification. *International Journal of Sociology and Social Policy*, 21, 165-183.
- Prandy, K., & Lambert, P. S. (2003). Marriage, Social Distance and the Social Space: An alternative derivation and validation of the Cambridge Scale. *Sociology*, 37(3), 397-411.

Smith, J. A., McPherson, M., & Smith-Lovin, L. (2014). Social distance in the United States: Sex, Race, Religion, Age and Education homophily among confidants, 1985 to 2004. *American Sociological Review*, DOI:10.1177/0003122414531776.

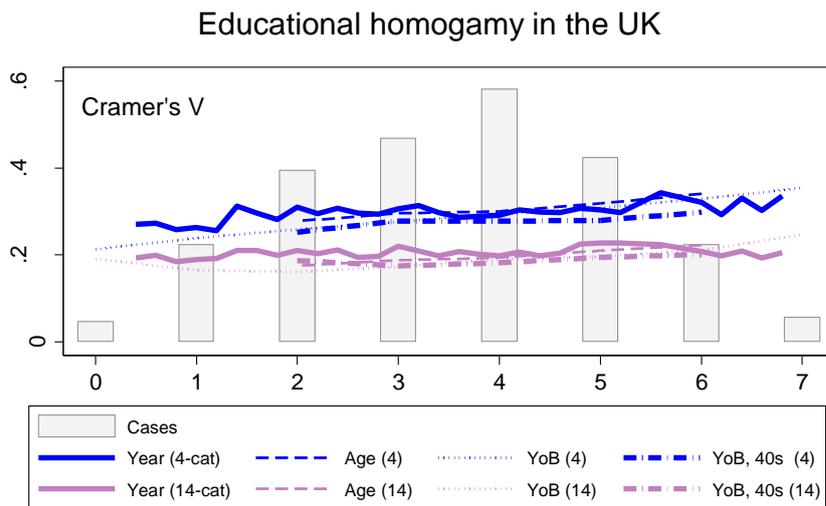
Stewart, A., Prandy, K., & Blackburn, R. M. (1980). *Social Stratification and Occupations*. London: MacMillan.

Therborn, G. (2013). *The Killing Fields of Inequality*. Cambridge: Polity Press.

Winlow, S., & Hall, S. (2013). *Rethinking Social Exclusion: The End of the Social?* London: Sage.

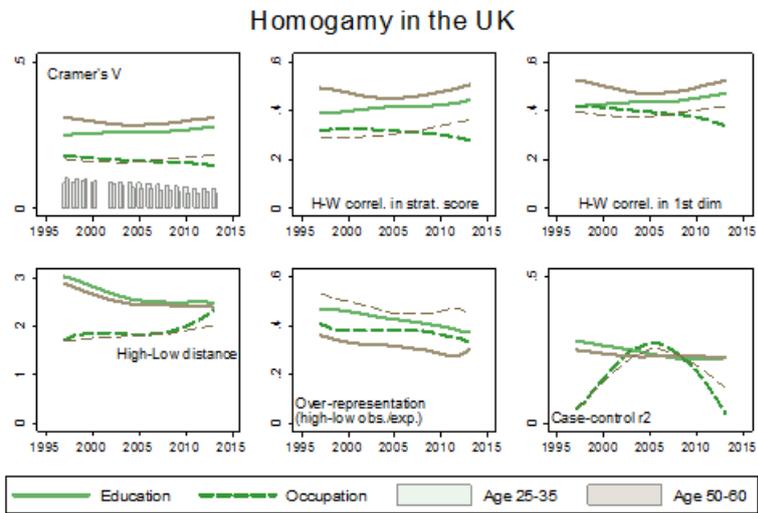
**Figures referred to in the text**

Figure 1.



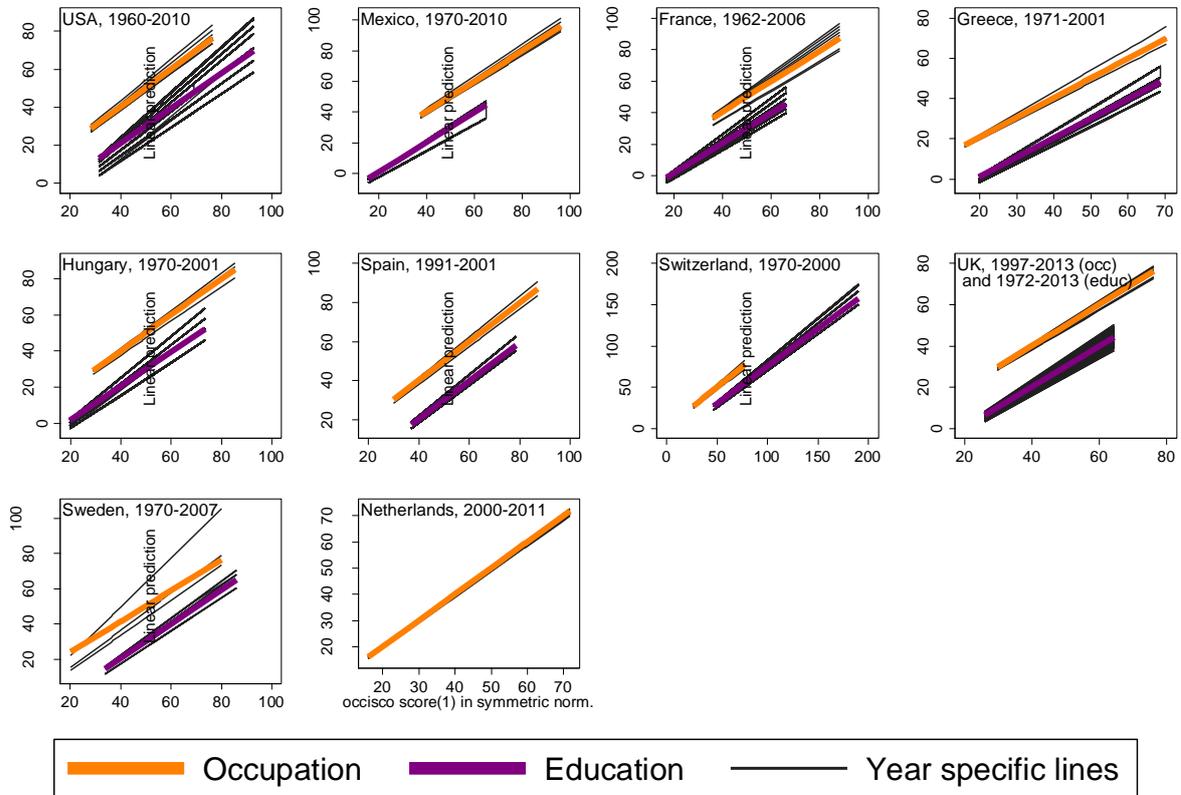
Source: Pooled GHS time series, 1974-2004. Horizontal axis refers to different time metrics by line. Metrics refer to: Years since 1970/5; age in decades-1; birth cohort (year of birth since 1900). Lines show statistics when education is coded into 4 or 14-category versions, and for different measures of time (year, age, year of birth, and year of birth for adults in their 40s).

Figure 2



Source: Pooled LFS, 1997-2013, cohabiting couples. Horizontal axis refers to time point of observation. 'Lower' lines plotted (local linear smoo). Colours indicate age cohort within time period (age of husband).  $N = 5k$  couples per time period.

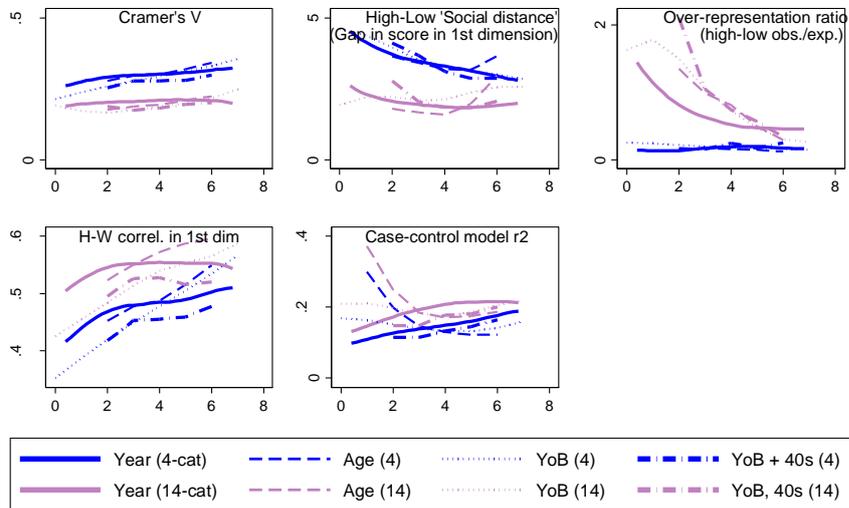
Figure 3



Data for cohabiting m-f couples from IPUMS-I, or from national Labour Force Surveys (UK, NL) or census (SE)

Figure 4

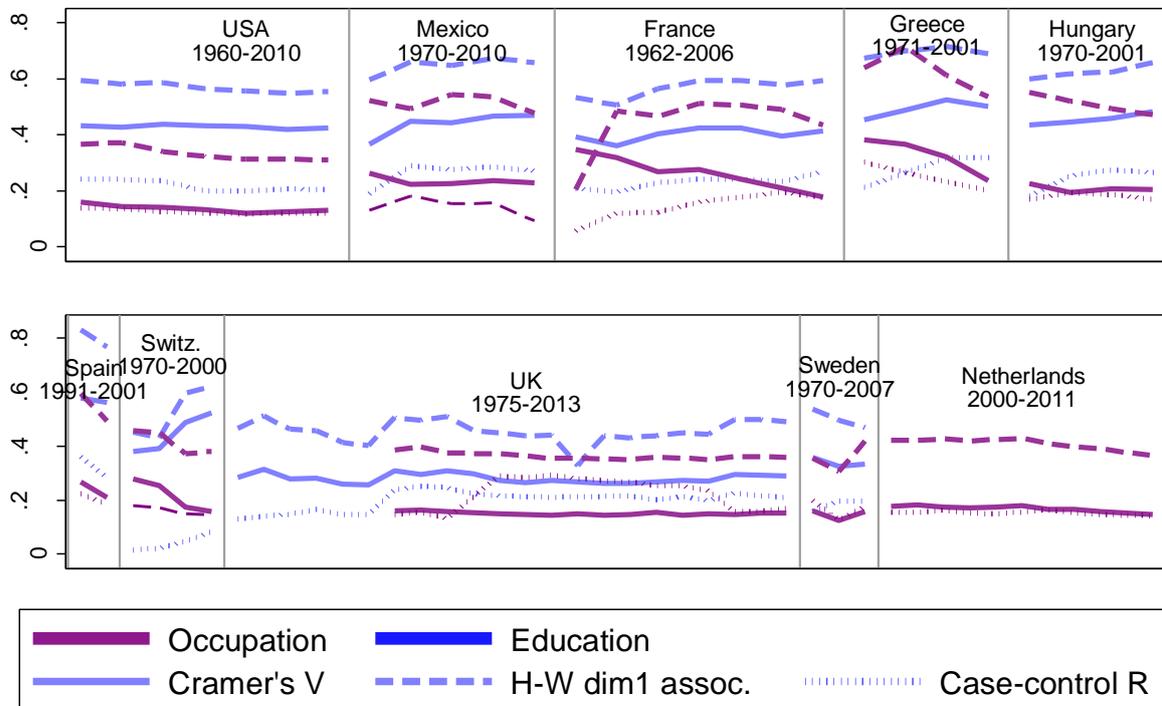
### Educational homogamy in the UK



Source: Pooled GHS time series, 1974-2004. Horizontal axis refers to different time metrics by line. Metrics refer to: Years since 1970/5; age in decades-1; birth cohort (year of birth since 1900). Lines show statistics when education is coded into 4 or 14-category versions, and for different measures of time (year, age, year of birth, and year of birth for adults in their 40s). Lines smoothed with local linear smoothing (lowess)

Figure 5

### International trends in social distance



Analysis based on husband-wife associations from IPUMS-I or LFS data.  
 Statistics are ego-alter Cramer's V, Ego-Alt dim1 association, or case-control R.