European Commission

JRC CONFERENCE AND WORKSHOP REPORT

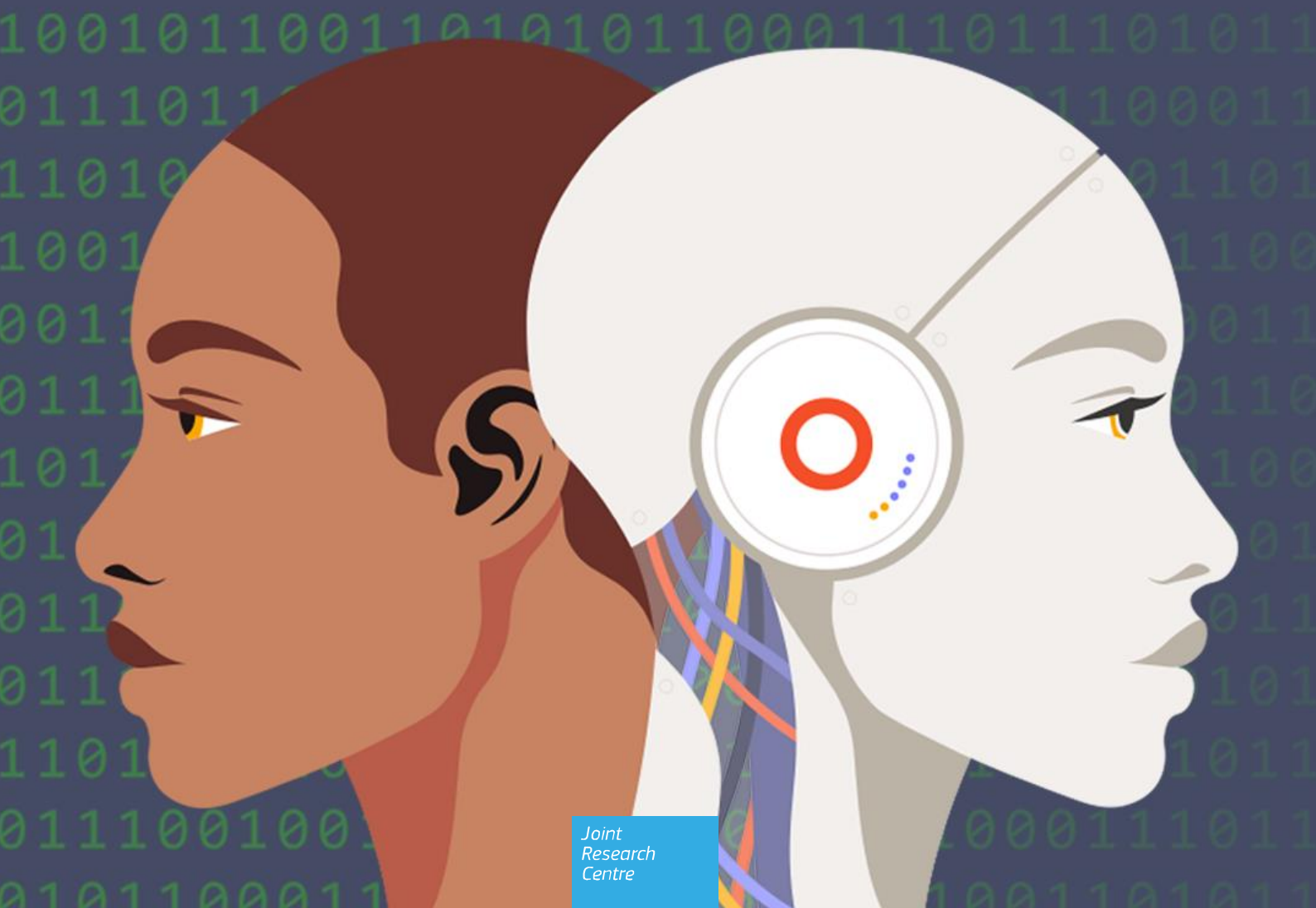
Seminar Series

2021-2022

Highlights

DIGCLASS

Social Classes in the Digital Age



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Abstract

This document summarises the highlights of the Seminar Series of the Social Classes in the Digital Age (DIGCLASS) Project held between October 2021 and June 2022. The DIGCLASS seminar series is expected to facilitate the exchange of cutting-edge ideas and debates between social science academics from research institutions worldwide, policy-makers and a general audience. The topics of the seminars are interdisciplinary including social inequality and stratification, labour economics, political economy, and political behaviour.

Acknowledgements

This project has been funded through the JRC Centre for Advanced Studies and the project Social Classes in the Digital Age (DIGCLASS). The contents and figures presented in this summary belong to the speakers and authors of the seminars and related research.

Authors

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The DIGCLASS Project

The *DIGCLASS* project was born out of the increasing concern in Europe about the implications of the digital revolution for social inequalities and democratic processes. The objective is to provide a better understanding of how digital technologies alter the mechanisms that generate inequalities in the distribution of resources and life chances, which is crucial for social policies to respond to the challenges of the digital revolution.

DIGCLASS is hosted in the Centre for Advanced Studies (CAS) of the Joint Research Centre (JRC) at the European Commission. The JRC is the Commission's Directorate-General for science and knowledge production. It informs and supports EU policies with independent research throughout the whole policy cycle.

The CAS aims to enhance the JRC's capabilities to better understand and address the complex and long-term scientific and societal challenges that are currently facing the EU. The CAS is a strategic JRC programme under the Scientific Development unit and collaborates closely with other units within the JRC, in this case the unit on Human Capital & Employment.

Seminar Series

The DIGCLASS seminar series is expected to facilitate the exchange of cutting-edge ideas and debates between JRC researchers and social science academics from research institutions worldwide. With the DIGCLASS seminar series, we want to push this discussion beyond the boundaries of the JRC community by attracting external scholars, policy-makers and a general audience.

Areas of interest:

- ✓ Social inequality
- ✓ Social stratification
- ✓ Labour economics
- ✓ Political economy
- ✓ Political behaviour

2021-2022 Programme

1. October 26th, 2021
   Oscar Smallenbroek - Sciences Po
   The measurement of socioeconomic position

2. November 30th, 2021
   Macarena Ares - UAB
   Intergenerational social mobility and vote

3. December 21st, 2021
   Kathryn Paige Harden - The University of Texas
   Genotyping technologies and social inequality

4. January 25th, 2022
   Markus Gangl - Goethe University Frankfurt
   Rising income inequality and polarisation

5. March 29th, 2022
   Javier Polavieja - Carlos III University
   Ethnic and Racial discrimination in employment

6. April 26th, 2022
   Per Engzell - University of Oxford
   Intergenerational persistence of income

7. May 31st, 2022
   Alexander Kuo - University of Oxford
   Technological change and political preferences

8. June 28th, 2022
   Klarita Gërxhani - European University Institute
   Gender and social status ranking

Acknowledgements

The CAS team would like to thank the speakers for their collaboration and contributions, as well as the Scientific Development unit for the support provided for the organization of the seminar series. We also thank the speakers for allowing us to print selected materials from their talks.

1 Session

October 26th, 2021

The Measurement of Socio-economic Position

Speaker

Oscar Smallenbroek, Sciences Po

Recorded Session

https://webcast.ec.europa.eu/the-measurement-of-socioeconomic-position-2021-10-26

References

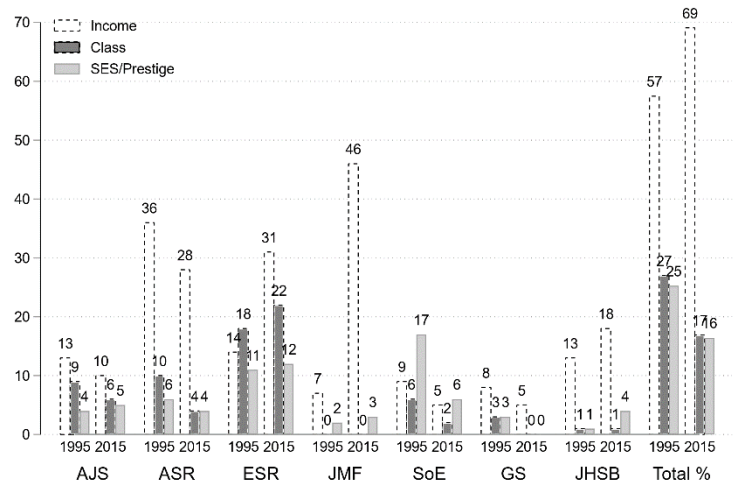
*Smallenbroek, O., Hertel, F. R., and Barone, C. (2021). "Measuring Class Hierarchies in Postindustrial Societies: A criterion and construct validation of EGP and ESEC across 31 countries." *SocArXiv*. May 29. https://doi.org/10.31235/osf.io/gwt8b

*Barone, C., Hertel, F., and Smallenbroek, O. (2022). The rise of income and the demise of class and social status? A systematic review of measures of socio-economic position in stratification research. Research in Social Stratification and Mobility. https://doi.org/10.1016/j.rssm.2022.100678

SOCIAL CLASS IN SOCIOLOGICAL RESEARCH

How empirical research measures social position is of great consequence for the understanding of different aspects of the stratification order and affects the conclusions about the causes and consequences of social inequalities. The authors survey research on stratification published in 2015-2019 in top-cited sociology journals to quantify the prevalence of three approaches towards social position: income, class and social status measures. To study trends in researcher's measurement decisions over time, they carry out a comparison with published articles in the same journals from the period 1995-1999. In both periods, income measures dominate in sociology journals and are gaining ground vis-à-vis class and status measures over time (see Figure 1 above). The latter increasingly strive in research on

Figure 1. Frequency of use of stratification measures in top-cited journals in 1995-1999 compared to 2015-2019



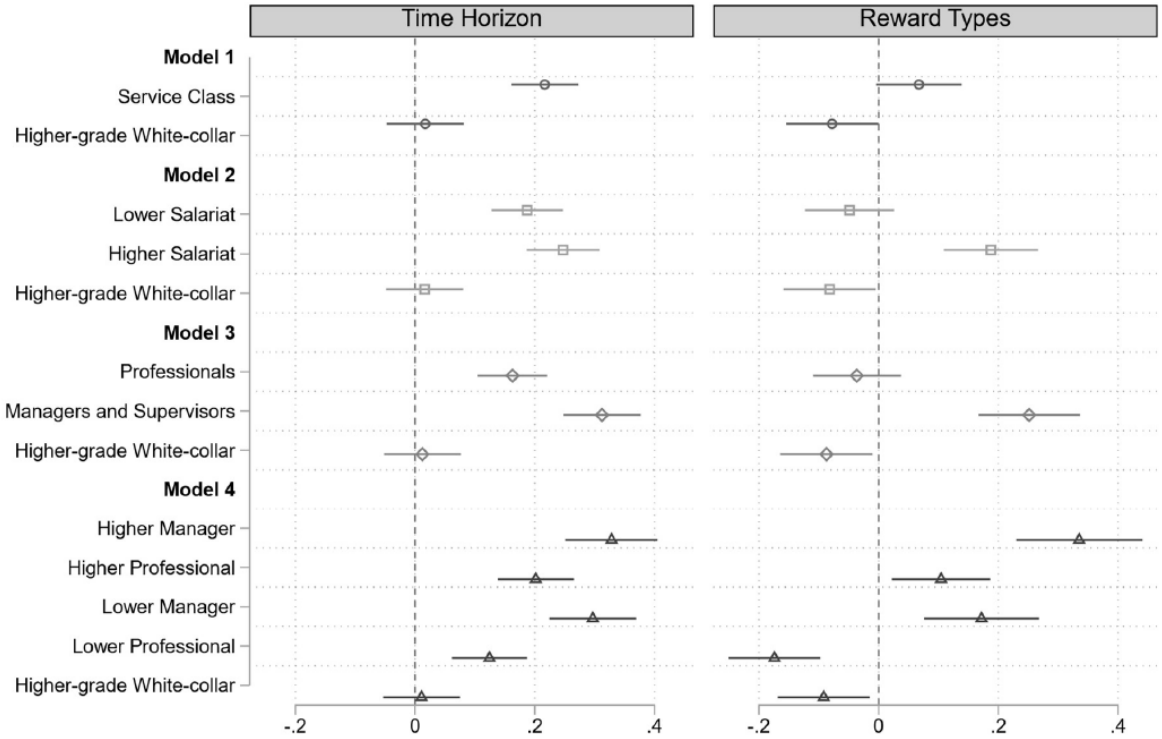
intergenerational inequalities but are less frequently used in other research areas. They also find that, within specialised class analysis, EGP-like schemas (see appendix's page 21 for details on abbreviations from now on) are largely prevalent and have gained a paradigmatic status of a "one-size-fits-all" measure. They argue that these trends are worrisome for social stratification research because there is a close link between measurement and conceptualisation of stratification and our ability to capture social inequalities.

VALIDITY OF MAINSTREAM SOCIAL CLASS SCHEMAS

In social stratification research, the most frequently used social class schemes are based on employment relations (EGP and ESeC). These schemes have been propelled to paradigms for research on social mobility and educational inequalities and applied in cross-national research for both genders.

Using the European Working Conditions Survey, the authors examine their criterion (measurement) and construct (prediction) validity across 31 countries and by gender. They investigate whether classes are well-delineated by the theoretically assumed dimensions of employment relations (time horizon and reward types) and assess how several

Figure 2. Class coefficients and their 95% confidence intervals for alternative specifications of higher classes and higher-grade white-collar intermediate positions



Note: Weighted data for 31 countries from EWCS 2010 & 2015. Four independently estimated regressions with alternative categorizations of the salariat. Reference category: higher-grade blue-collar workers. Sample sizes N(Time) = 55,447 (ESEC) / 55,444 (EGP) and N(Payment) = 59,884 (ESEC) / 59,880(EGP).

measures of occupational advantage (income, permanent contract, autonomy) differ across classes. They find broad similarity in the criterion validity of EGP and ESeC across genders and countries, as well as satisfactory levels of construct validity. However, the salariat classes are too heterogeneous and their boundaries with the intermediate classes are blurred (see Figure 2 above). To improve the measurement of social class, the authors propose to differentiate managerial and professional occupations within the lower and higher salariat respectively. They show that implementing these distinctions in ESeC and EGP improves their criterion validity and allows better identifying privileged positions.

CLASS SCHEMES: PREDICTIVE POWER OF LIFE CHANCES

They compare the construct validity of EGP with that of several other class schemas and the micro classes. They thus assess the explanatory power of different macro-, meso- and micro-level approaches to class analysis considering a variety of outcomes (e.g., educational attainment, voting, values). Highly detailed schema (particularly micro-classes) do best in terms of model fit for virtually all outcomes. They also contrast class approaches to income and socio-economic measures to assess whether an integrative approach combining these approaches improves the explanatory power of measures of social position. They conclude that income alone is not a good measure of socio-economic position compared to using class or indexes (by themselves).

IMPLICATIONS FOR DIGCLASS

- ✓ Mainstream class schemes (EGP/ESeC) have a satisfactory validity across EU countries and gender, but women's reward types are not well-captured.
- ✓ The criterion validity of these class schemes has not been tested over time or in comparison to alternative explanations such as technological change.
- ✓ These schemes do not accurately account for heterogeneity in employment relations and life chances at the top and bottom of the class structure.
- ✓ Despite the observed declining use of class in empirical research, income alone is not a good measure to account for intergenerational inequality.

2 Session

November 30th, 2021

Intergenerational Social Mobility and Vote

Speaker

Macarena Ares, Autonomous University of Barcelona (UAB)

Recorded Session

https://webcast.ec.europa.eu/intergenerational-mobility-and-vote-2021-11-30

References

*Ares, Macarena and van Ditmars, M. M. (2021). Intergenerational social mobility, political socialization and support for the left under post-industrial realignment. Forthcoming in the *British Journal of Political Science*.

SOCIAL MOBILITY, GENERATIONS AND VOTING PATTERNS

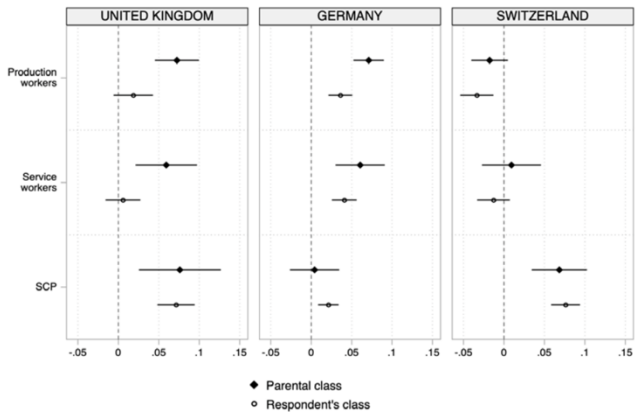
This study investigates how class of origin and specific patterns of intergenerational social mobility impact left-wing party support among new and old core left-wing constituencies, in the context of post-industrial electoral realignment and occupational transformation. Many individuals originally from working class backgrounds (traditional left constituencies) have a different (post-industrial) class location than their parents. The authors investigate the remaining legacy of political socialisation in class of origin using panel data from the United Kingdom (UK), Germany, and Switzerland.

The findings suggest enduring effects of production worker roots, that are weaker for younger generations and in more realigned contexts. Part of the contemporary middle-class left-wing support is a legacy of industrial class-party alignments. Moreover, they do not observe the development of such a legacy among new left-wing constituencies. The findings imply that exclusively considering respondents' destination class underestimates the relevance of political socialisation in class of origin, thereby overestimating electoral realignment.

CLASS OF ORIGIN AND LEFT-WING PARTY SUPPORT

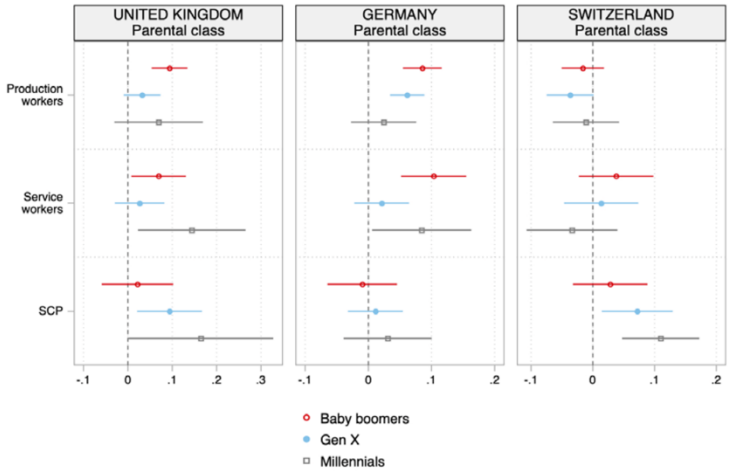
The results indicate that–net of respondents' own class–parental class of origin predicts significant differences in left-wing support (Figure 1). In the UK and Germany, the authors find clear evidence of the legacy of roots in the production working class. Having a working-class background increases the likelihood of voting for the left by over 5 percent (compared to 'old' middle class background). In Switzerland, no evidence of an earlier industrial alignment is observed, since it is only the offspring of socio-cultural professionals, but not of production workers, who are more likely to vote for the left than the 'old' middle class offspring. In the UK, this newer legacy of the socio-cultural professionals is also observed. Overall, the results indicate that parental class of origin is, indeed, strongly related to party leaning to a similar or even larger extent than respondents' own class.

Figure 1. AMEs (reference category: OMC) of left-wing support by parental and respondent's class (net of each other), 2008-2018/9



Source: Authors' calculation using BHPS/UKHLS 2008-2019 (N= 6,301), G-SOEP 2008-2018 (N= 13,167), SHP 2008-2019 (N = 6,157). Estimations are based on the RE regression models displayed in SM, table S1. Control variables included: full-/parttime work, civil status, gender, age, (DE: East/West Germany in 1989).

Figure 2. AMEs (reference category: OMC) of left-wing support by parental class (net of respondent's class), by generations, 2008-2018/9.



Source: Authors' calculation using BHPS/UKHLS 2008-2019 (N= 5,967), G-SOEP 2008-2018 (N= 12,957), SHP 2008-2019 (N = 5,952). Estimations are based on the RE regression models displayed in SM, table S2. Control variables included: full-/parttime work, civil status, gender, age, (DE: East/West Germany in 1989).

PARENTAL CLASS AND PARTY SUPPORT ACROSS GENERATIONS

In the UK and Germany, Baby boomers socialised in a production working class compared to 'old' middle class are more likely to support left-wing parties (by about 10%), but this association fades and becomes statistically insignificant for Millennials (Figure 2). A similar pattern, in the opposite direction, is found for socio-cultural professionals' offspring in Switzerland and the UK. Here, the coefficients for having such a background (compared to 'old' middle class) are indicative of this legacy being built more recently. While for Baby boomers this is not related to higher support for the left, it is for Generation X and Millennials. For some of the classes and countries no such clear trends come about. While the authors might have expected service workers to become more important for left-wing socialisation in younger generations, there is no clear evidence for such trend. In Switzerland, even among Baby boomers, socialisation in the production working class is not linked to higher left-wing support, which indicates that this class has not been a core electorate of the left for a long time. Again, against the expectation about Germany, there is no left-wing imprint among younger offspring generations of socio-cultural professionals.

IMPLICATIONS FOR CLASS VOTING

These results have relevant implications for current analyses of class voting, especially in what concerns support for the left. Even if certain classes, like the manufacturing working class, are in numerical decline, these are still electorally relevant through the intergenerational transmission of values and preferences to their offspring, and a remaining identification with the class of origin. But this influence is decreasing at later stages of post-industrialisation (as captured by country- and generational differences).

By neglecting the relevance of early political socialisation, current accounts of post-industrial politics may be overestimating the pace at which social transformations alter current politics. Even in post-industrial economies, findings suggest a legacy of earlier patterns of conflict, persisting through the socialisation of younger generations. Moreover, looking towards the future, the newer left-wing legacy of post-industrial classes (such as socio-cultural professions) is not equally lasting after individuals move to a different class location.

IMPLICATIONS FOR DIGCLASS

- ✓ Parental class of origin (net of respondent's class) is a significant predictor of party preferences.
- ✓ Specifically, parental origin in the manufacturing working class is a significant predictor of left-wing support. However, this industrial legacy seems to weaken at later stages of post-industrial realignment.
- ✓ Early socialisation has an impact on party preferences, even when individuals experience intergenerational social mobility. This is, however, becoming increasingly uncommon with educational upgrading.
- ✓ Class of origin must thus be included in subsequent analysis of voting behaviour as a variable independent of the respondent's class.

3 Session

December 21st, 2021

Genotyping Technologies and Social Inequality

Speaker

Kathryn Paige Harden, University of Texas at Austin

Recorded Session

https://webcast.ec.europa.eu/genotyping-technologies-and-social-inequality-2021-12-21

References

*Harden, K. P. (2021). The Genetic Lottery: Why DNA Matters for Social Equality. Princeton University Press.

THE CONTEMPORARY STUDY OF GENETIC MATERIAL

The book has stirred stimulating and though-provoking debates among social scientists interested in the study of equality and social policy, and has promoted an interesting dialogue between behavioural genetics and the social sciences. For the explanation of some outcomes (phenotypes) there are more genes involved than for others, but generally speaking most processes are indeed very complex. The role of genes can only be regarded as probabilistic rather than deterministic. Even for a highly heritable and easily mensurable phenotype such as height, there is not a single gene that completely explains how tall an individual is and the genes involved do not completely determine the final outcome.

Contemporary analyses of genes entail the collection of large samples of genetic material and the large-scale inductive search of correlations between genes and a specific phenotype. Findings from the analyses performed allow identifying genes that are empirically associated with a particular trait but, similarly to the social sciences, there is still ample scope to progress on the understanding of the mechanisms at work.

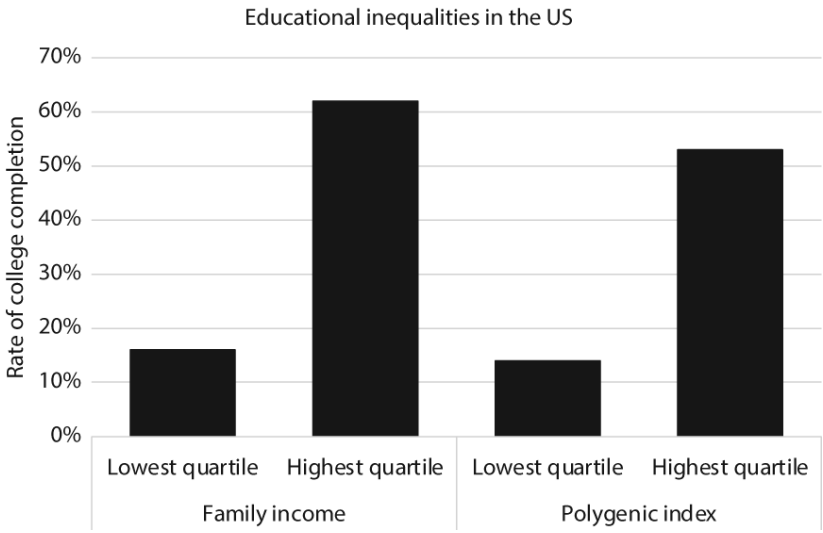
WHY A GENETIC LOTTERY?

Each combination of maternal and paternal DNA could produce more than seventy billion (seventy trillion, in the American notation) genetically unique babies. There is such an enormous accumulation of many random events behind genetic endowment that having certain genes can actually only be regarded as the result of a lottery.

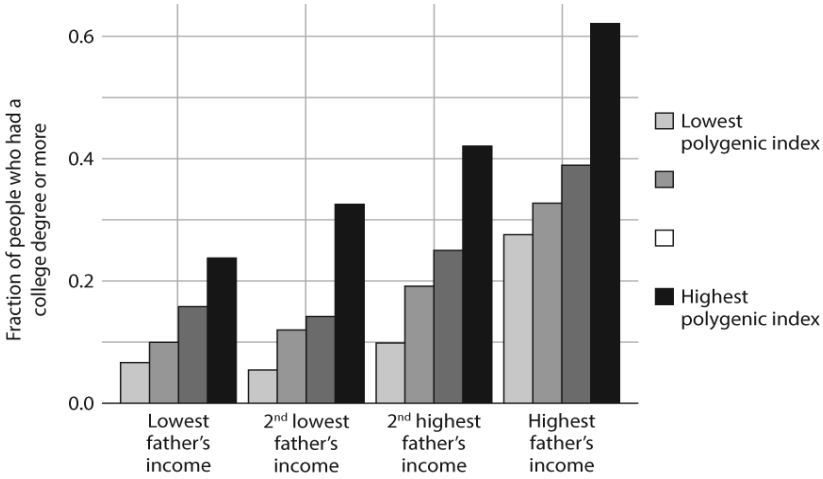
In sociological analysis, there is a longstanding tradition considering the family in which individuals are born as a lottery too, that is, a circumstance that is beyond the control of individuals and over which they cannot exert any control.

THE EXPLANATORY ROLE OF GENES VIS-À-VIS THE SOCIAL ENVIRONMENT

Rigorous empirical analyses measuring the weight of social background (parental education, income or social class) on educational attainment—that is, how far in the educational system children go on—suggest that a substantial amount of the variance in the latter are accounted for by the former. For the US, children in the top quartile of the income



Source: Publicly available from Princeton University Press (Harden 2021).



Source: Publicly available from Princeton University Press (Harden 2021).

distribution have at least 4 times higher college completion rates than those at the bottom income quartile. This outcome is therefore partly driven by the socioeconomic position of families and the resources of various kinds that they own and can mobilise to support their children as a consequence.

When a similar accounting exercise is conducted with genes as an explanatory factor, the results are strikingly similar. Again, children with polygenic scores more favourable to education have college graduation rates approximately four times higher than those at the bottom end in the distribution (and thus less lucky in the genetic lottery affecting educational outcomes). Different rates of college completion across family income levels and polygenic scores are shown above.

Interestingly, the influence of both types of processes, the biological and the social, can reinforce each other. There are genes involved in children's educational success, and resourceful parents can and do reinforce these initial, genetically influenced differences by stimulating those more genetically gifted. In the case, again, of college graduation rates of White individuals in the US, children with lower polygenic indices (PGI) but whose parents had high income levels ended up, on average, graduating more than poor children with the highest polygenic scores.

The genetic and social influence do interact with each other and can lead to cumulative advantages and disadvantages over the life course. The traditional view within the social sciences trying to portrait the genetic material and the social influence as antithetic—the nature vs. nurture debates—is therefore no longer a fruitful or justifiable approach.

Even though genetic samples have become more numerous and larger over time, they are still subject to several biases. The samples comprise white persons with a European ancestry; other origins do not have an appropriate representation.

INTERVENTIONS TO MITIGATE GENETICALLY-LED SOCIAL INEQUALITY

In the social sciences, the unequal consecution of valuable resources that is due to individuals coming from families with more or less resources is viewed as unfair. Differences because of an unequal degree of luck in the genetic lottery should be considered similarly unfair. Appropriate interventions to mitigate the adverse consequences of both an unlucky parental socioeconomic position and/or an unlucky genetic endowment should be devised. Interventions which simultaneously are (a) straightforward to implement, (b) particularly beneficial for those more in need–whether because of their genetic or social endowments–, (c) scalable, and (d) whose benefits do not weaken over time, are, however, not easy to devise.

IMPLICATIONS FOR DIGCLASS

- ✓ If individuals are affected by both a genetic and a social lottery, theoretical and empirical accounts of what valuable resources people get in contemporary societies should consider both types of processes.
- ✓ The collection of genetic material for large samples has become cheaper and easier, which allows social scientists including this in their data collection plans and opens up new fruitful avenues for truly interdisciplinary research.
- ✓ Social policy interventions, whether traditional or more innovative, should take into account the perspectives and findings of this blooming discipline to design and implement egalitarian-oriented measures. variable independent of the respondent's class.

4 Session

January 25th, 2022

Rising income inequality and polarisation

Speaker

Markus Gangl, Goethe University Frankfurt

Recorded Session

https://webcast.ec.europa.eu/rising-income-inequality-and-polarisation-in-the-eu-2022-01-25

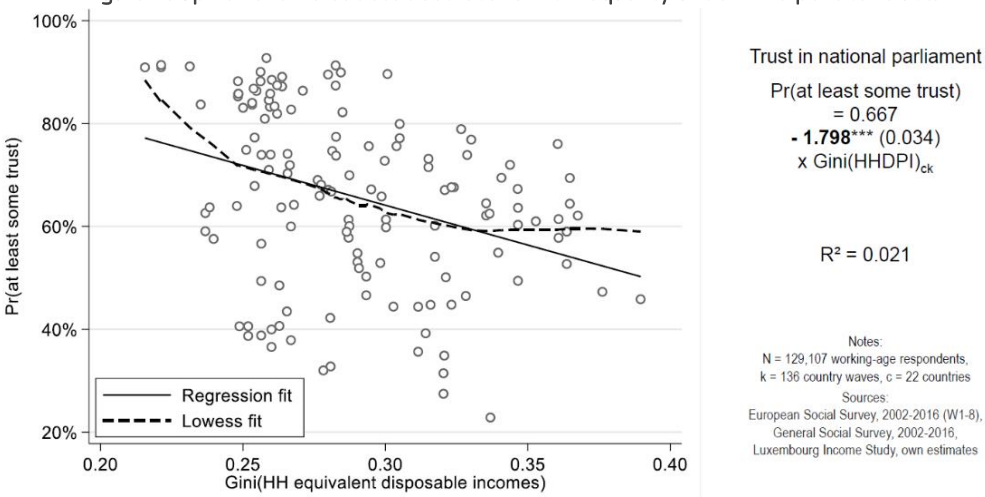
References

*Simon Bienstman, Svenja Hense, and Markus Gangl Goethe (2022). Explaining the "Democratic Malaise" in Unequal Societies: Inequality, External Efficacy and Political Trust. POLAR Working Paper #2. https://polarprojectorg.files.wordpress.com/2022/06/polar_wp2_v220304.pdf

RISING INEQUALITY AS A POLITICAL PROBLEM

To many citizens and political observers alike, it is self-evident that inequality is corrosive to society. Indeed, anyone interested may readily turn to acclaimed popular treatises like Wilkinson/Pickett's "The Spirit Level" to learn that economic inequality is correlated with a whole plethora of social ills, and that the authors attribute this correlation to a pathological degree of status competition in unequal societies. In this seminar, the author argued that a Spirit-Level-type relationship also applies in the case of citizens' trust in democratic institutions, carrying out a series of empirical analyses that use survey data from the European Social Survey and the General Social Survey to probe deeper for its analytical interpretation. According to the speaker, rising economic inequality does mildly depress political trust, yet in a way that is not primarily motivated by status anxiety but is instead consistent with a standard trust-as-evaluation model where mitigating economic inequality is one element (but perhaps not even a dominant one) in the political preferences of left-leaning citizens.

Figure 1: Spirit Level reloaded: does economic inequality undermine political trust?

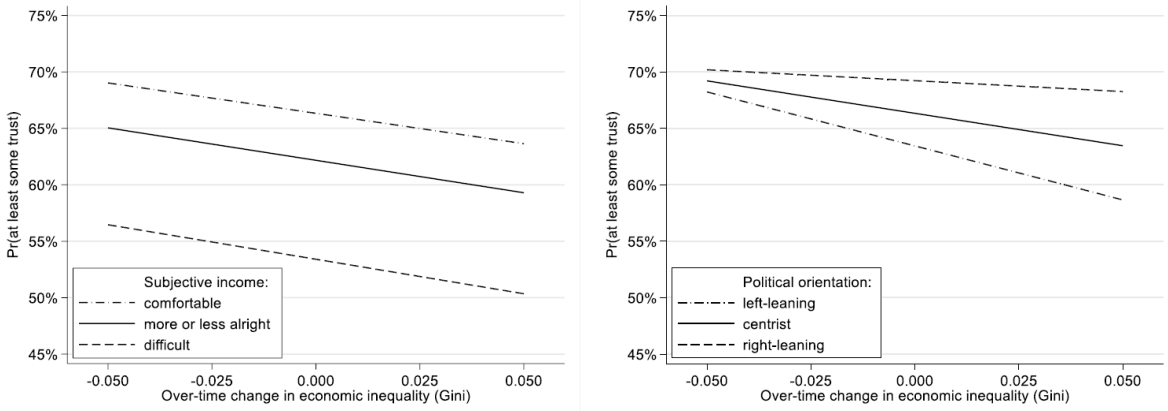


INEQUALITY AND TRUST: THE NATURE OF THE ASSOCIATION

The association between rising inequality and trust is not without problems. The apparent association is reduced by at least two thirds when straightforward controls such as sociodemographic factors are introduced. Also, other economic factors such as the growth of unemployment have a stronger impact on political trust than rising inequality.

Still, the relationship is significant and statistically robust, and it has obvious political relevance. But why does rising inequality erode political trust? Wilkinson and Pickett emphasise status anxiety as the mechanism linking rising inequality and a whole range of negative social outcomes. But rising inequality does not necessarily produce more instability of social positions, so it is unclear why it should produce status anxiety. Also, political trust tends to be more driven by ideology than by socio-economic position.

Figure 2: Inequality and democratic trust: a question of status or political goals?



Notes: Dependent variable is composite index of respondents' trust in political institution; predictive margins based on HLPM-RE specification.

HOW DOES GROWING INEQUALITY AFFECT POLITICAL TRUST?

Although socioeconomic position is linked to political trust (those with a better socio-economic position tend to have higher levels of trust in institutions), the impact of rising inequality on democratic trust is not driven by socio-economic situation but by ideology. As can be seen in Figure 2 above, rising inequality levels lead to similar declines in trust of people with different positions, but not people with different political ideologies. Whereas right-leaning citizens seem to be largely unaffected by the rising levels of inequality in their political trust, left-leaning citizens have been strongly affected.

A LONGER-TERM PERSPECTIVE

All of the previous findings refer to the post-2000 period. A longer-term perspective (see Figure 3) uncovers some surprising differences in the relationship between changes in inequality and political trust. In the period that goes between 1980 and 2000, rising inequality levels had a much stronger effect on political trust than in the most recent period. Perhaps even more interesting, changes in public redistribution had a very large effect on democratic trust (even larger than inequality or unemployment), whereas public redistribution seems to have become an almost irrelevant determinant of democratic trust since 2000. And changes in unemployment, which since 2000 have strongly affected political trust, were much less important in the two previous decades.

Figure 3: Rising inequality and political trust in the long run

	1980-2000	1980-2010	1980-2019	1991-2010	1991-2019	2001-2019
Gini (market income)	-0.888*** (0.157)	-1.545*** (0.092)	-0.844*** (0.072)	-0.910*** (0.128)	-0.384*** (0.086)	-0.350** (0.115)
Public redistribution	2.493*** (0.340)	2.045*** (0.147)	1.023*** (0.104)	0.653*** (0.178)	0.129 (0.001)	-1.211*** (0.149)
Unemployment rate	-0.551*** (0.092)	-0.782*** (0.042)	-1.126*** (0.030)	-0.784*** (0.048)	-1.140*** (0.033)	-0.904*** (0.039)
Period effects	yes	yes	yes	yes	yes	yes
Survey FE	yes	yes	yes	yes	yes	yes
Country FE	yes	yes	yes	yes	yes	yes
N respondents	103,080	301,405	488,148	258,962	445,705	385,068
N ctry-cohorts	197	234	264	213	243	222
N countries	31	32	32	32	32	32

Notes: Dependent variable is a binary measure of trust in the national parliament, FE-LPM regression specification; working-age respondents only, respondent-level controls: gender, birth cohort (FE), age, education; cluster-corrected standard errors in parantheses, statistical significance levels at †p<.10 , *p<.05, **p<.01, and ***p<.001.

Sources: Harmonized PPDB datafile (European Social Survey, 2002-2018; European/World Values Survey 1981-2018; General Social Survey 1980-2018), SWIID, WDI, own estimates

IMPLICATIONS FOR DIGCLASS

- ✓ Rising inequality levels are eroding trust in democratic institutions.
- ✓ The role played by socio-economic position and class in this trend is still unclear. It seems that the effect of inequality on trust is mediated by ideology.
- ✓ In the last 20 years, the nature of the association between inequality and political trust has changed, becoming weaker.

5 Session

March 29th, 2022

Ethnic and Racial Discrimination in Employment

Speaker

Javier Polavieja, Carlos III University

Recorded Session

https://webcast.ec.europa.eu/ethnic-and-racial-discrimination-in-employment

References

*Lancee, B, et al. (2019). The GEMM study: A cross-national harmonized field experiment on labour market discrimination -Technical report.

*D-lab: https://www.d-labsite.com/

DISCRIMINATION AND INEQUALITY

Ethnic discrimination is a major issue for societies that favour equality. Unfair treatment and unequal opportunities are not only problematic in terms of fairness; they might also contribute to a double standard citizenship and thus exacerbate ethnic stratification. There are growing concerns about the detrimental effects that experiences of discrimination have for the integration and radicalisation of ethnic minorities. Consequently, discrimination undermines the fundaments of a cohesive society. Existing field experimental research unequivocally shows the existence of ethnic discrimination in the labour market. Compared to the majority population, ethnic minorities have substantially lower chances to find employment. Furthermore, there is considerable variation in discrimination rates across countries.

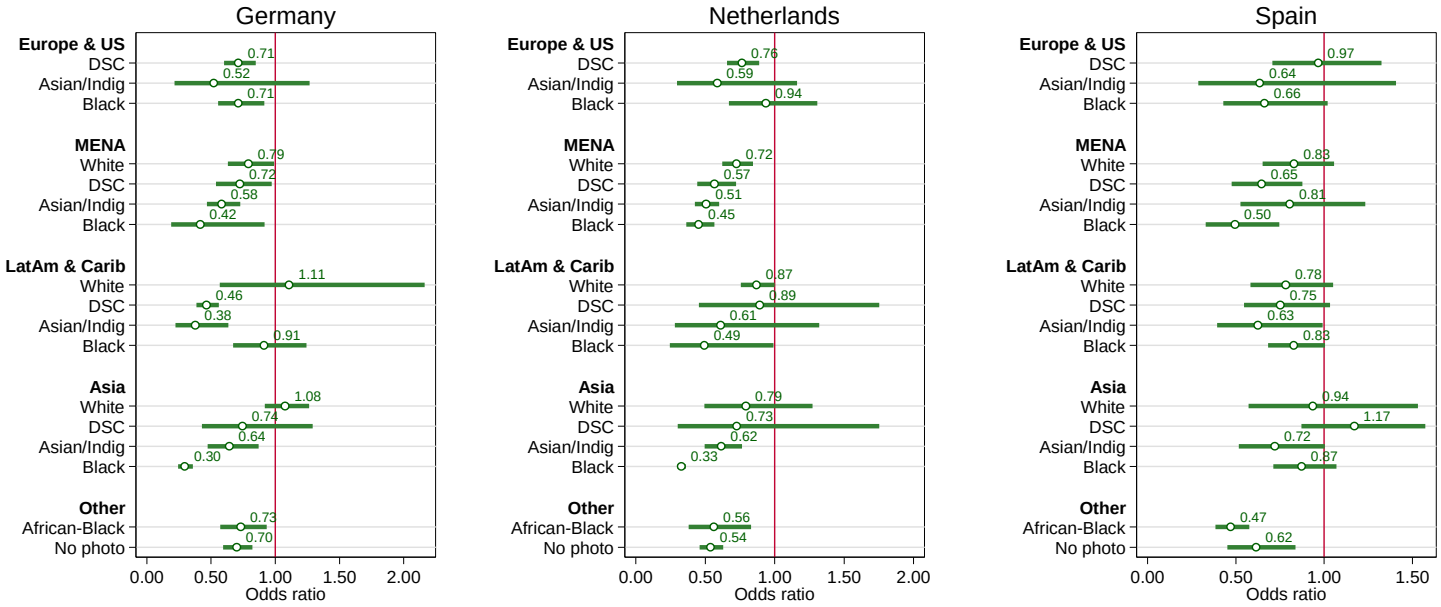
Yet, differences in the ethnic groups chosen, occupations considered, and experimental design devised of previous studies preclude any direct comparison of discrimination rates across contexts. Furthermore, most explanations of discrimination in Europe focus on culture and religion, but prejudice expressed as a cultural clash could hide appearance-based racial prejudice.

THE FIRST EUROPEAN LARGE-SCALE COMPARATIVE FIELD EXPERIMENT IN HIRING

Using a harmonised methodology, Polavieja's team sent 12,900 fictitious résumés to real vacancies in Germany, the Netherlands (NL) and Spain, randomly varying applicants' ethnic ancestry (signalled foremost by ethnic names) and applicants' racial appearance (signalled using applicants' photographs). They examine average differences in call-back rates across four phenotypic groups and for applicants coming from four regions of ancestry (see Figure 1 below) to test two models of racial discrimination: the independent racial appearance effects model and the appearance-ethnicity intersection model.

Figure 1. Ethnic ancestry and racial appearance profiles or treatments

Figure 2. Racial appearance and ethnicity effects by country on call-back rates in comparison with European & US White



This harmonised design enables (1) to identify appearance-based racial discrimination; and (2) a direct test of whether discrimination is stronger in specific national contexts, contributing to our understanding of the role of national institutions in mitigating or exacerbating discrimination.

DISCRIMINATION IN EUROPE

- ✓ There is racial discrimination in the three countries studied (Germany, Spain, the NL).
- ✓ In the NL and Germany, phenotype seems to have independent effects on employers' callback. Discrimination against black applicants of Middle East and North African (MENA) ancestry is particularly severe in these countries, where black applicants of MENA descent have **117 % lower odds** (Callback (CB) ≈38%) to receive a callback than European ancestry Whites (CB≈56%).
- ✓ In Spain, particular combinations of phenotype-ancestry yield the largest discrimination. Discrimination against black applicants of MENA and sub-Saharan ancestry is severe in Spain as both groups have **100 % lower odds** (CB≈8%) to receive a callback when compared to white applicants of European ancestry (CB≈16%).
- ✓ Overall, appearance-based racial discrimination seems significantly lower in Spain.
- ✓ If all applicants of MENA ancestry had Eurocentric (i.e., 'white') features, discrimination levels against this group would be reduced in all three countries.

HOW DOES RACIAL DISCRIMINATION IN EUROPE COMPARE WITH THE US?

- ✓ Average discrimination estimates against all black applicants are lower in Europe than in the US. However, in Europe, discrimination for black MENA and African ancestry applicants is comparable to or even larger than discrimination against African Americans in the US.

IMPLICATIONS FOR DIGCLASS

- ✓ Ethnic and racial discrimination are crucial sources of inequality in increasingly diverse European societies.
- ✓ More research is needed to investigate whether AI tools to pool candidates might reproduce the observed levels of ethnic discrimination in European labour markets.
- ✓ Experimental methods can be useful to study discrimination dynamics in education and health.

6 Session

April 26th, 2022

Intergenerational persistence of income

Speaker

Per Engzell, Univeristy of Oxford

Recorded Session

https://webcast.ec.europa.eu/intergenerational-persistence-of-income

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INTERGENERATIONAL INCOME MOBILITY ESTIMATES ARE STRONGLY DEPENDENT ON MODELLING CHOICES

This paper investigates intergenerational income mobility in Sweden and focuses in particular on how estimates are affected by scholar's modelling choices. Rising inequalities in rich countries have led to concerns that the economic ladder is getting harder to climb. It is well established that intergenerational income mobility is lower in countries with high inequality, but research on trends in mobility finds conflicting results. Motivated by this uncertainty, the authors ask: How important are choices of specification for levels and trends in intergenerational income associations? They use Swedish data on cohorts born 1958–1977 and their parents. Varying how, when and for whom income is measured, they estimate 1,658,880 different associations (82,944 specifications across 20 cohorts). The results reveal that model choice is an under recognised source of variation in intergenerational mobility research. In particular, Figure 2 shows the distribution of levels and trends across the four measures we study: the rank correlation, linear correlation, log-linear correlation, and elasticity. On average, linear and rank correlations are about twice as high as the log-linear correlation or elasticity (Figure 2, left panel). The elasticity has extremely long tails on either side: While 90% of the elasticities lie between 0 and 0.17, the overall range is from –0.19 to 0.41. The other parameters have smaller ranges but the variation is still substantial, moving from weak negative correlations to correlations of around 0.2-0.3.

WHAT EXPLAINS THE VARIATION?

Which modelling components are most influential for estimating levels and trends of intergenerational income mobility? The most important factors are child age (at which mobility is measured), parent sex, parent income type, and parent age. The inclusion or exclusion of zeros matters for log-based measures but not much otherwise, while the number of observations of income seems relatively unimportant.

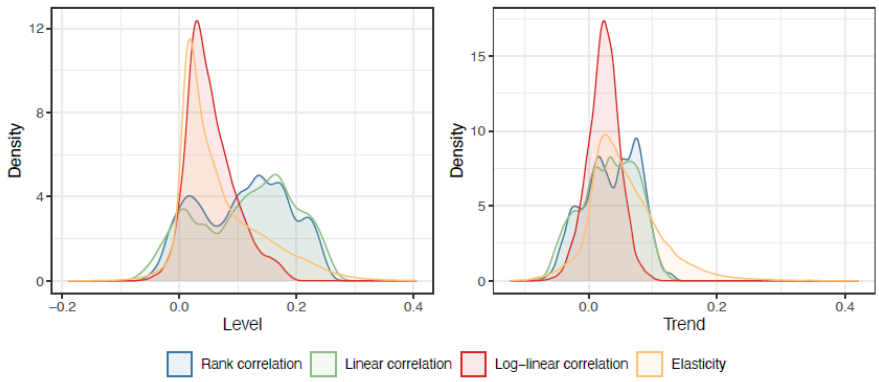

Figure 2. Levels and trends in intergenerational associations.

Note: The figure shows the distribution of estimated levels and trends in intergenerational income associations for Swedish cohorts of men and women born 1958–1977 and their parents, by parameter of association. All combinations of parent and child sex. Descriptive statistics appear in Appendix Table A1–A4.

THE ROLE OF GENDER AND TRENDS IN MOBILITY

The most consistent contributor to trends is the advancement of women in the labour market, which leads to increased persistence in women's earnings and the family income of both men and women (see Figure 6). While the father/sons' correlations remain fairly stable across cohorts (no trend or increased mobility), the income persistence in income mobility involving mothers or daughters increased over time. Hence, changes in the trend are driven by increases in female earnings.

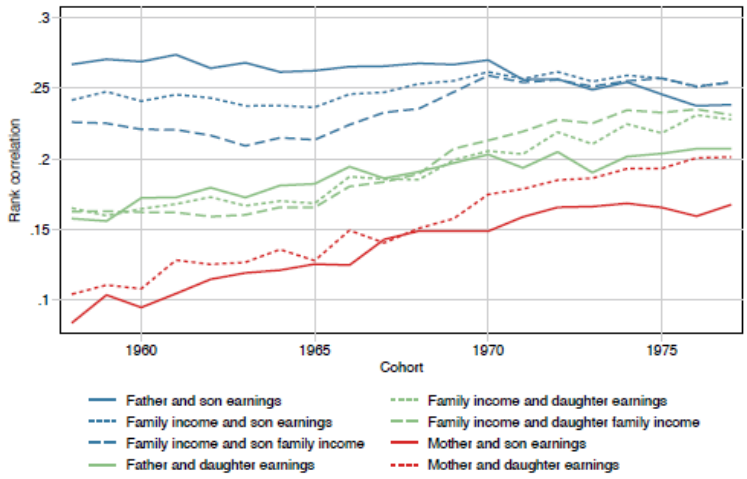

Figure 6. Intergenerational rank correlation by sex and income type.

Note: The figure shows trends in the intergenerational rank correlation for selected specifications. Income/earnings measured as 5-year averages over parent ages 48–52 and child ages 38–42. Zero values are excluded. Parent family income is defined as the household income of the father.

The fact that rising associations are driven almost exclusively by women's incomes is important in light of the increasing use of household income in intergenerational research. The results show that rising intergenerational persistence can be a result of something most would see as desirable—gender equalisation in the labour market—but given the "Great Gatsby" (GGC) prior of many researchers, this trend could easily be interpreted as a downside of growing income inequality. This potentially counter-intuitive effect of gender equality can also taint country comparisons of mobility.

The striking patterns for women throughout the analyses, and their spill over effects on associations involving men, suggest that the literature needs to go from merely acknowledging gender to placing it centre stage. For too long, gender has been treated as a nuisance variable in intergenerational literature. Women are now, at different rates in different settings, realising their potential in the labour market, and a crucial insight is that this will affect not only women themselves, but also the men that they share families and labour markets with. This is a force powerful enough to be the main driver of trends and differences across countries, and therefore it cannot be ignored.

IMPACT FOR FUTURE RESEARCH

The large variation uncovered means that researcher degrees of freedom can give rise to varying conclusions. While model robustness is a very real challenge in this field, it is a challenge that we can rise to in productive ways. The chase of the "best specification" is futile, but there is no stable target: If different measures of economic resources proxy for different underlying factors, they *de facto* speak to different questions and cannot be treated as interchangeable. Instead, by asking more precise questions, what now seems to be a jumble of numbers can be changed into informative patterns.

IMPLICATIONS FOR DIGCLASS

- ✓ Estimates of income mobility (and possibly other crucial concepts in stratification research) are greatly conditioned by modelling choices. This calls for caution when interpreting the results of empirical contributions in this field.
- ✓ Dynamics are, in this specific setting but probably more widely, very different for men and women. This suggests that interactions with gender are to be conducted systematically.
- ✓ Income mobility has declined in part because of the advancement of women in the labour market. These types of trade-offs are likely to take place often in stratification research dealing with societal trends over time.

7 Session

May 31st, 2022

Gender, Risks, and Policy Preferences

Speaker

Alexander Kuo, University of Oxford

Recorded Session

https://webcast.ec.europa.eu/technological-change-and-political-preferences

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*Jane Gingrich and Alexander Kuo, Gender, Technological Risk, and Political Preferences In: Digitalization and the Welfare State. Edited by Marius R. Busemeyer, Achim Kemmerling, Paul Marx, and Kees van Kersbergen, Oxford University Press. © Oxford University Press (2022). DOI: 10.1093/oso/9780192848369.003.0009

FROM GENDER-SPECIFIC OCCUPATIONAL RISK TO POLICY PREFERENCES

Do women's different occupational risk translate into different policy preferences? Previous work by Iversen and Rosenbluth (2006, 2010) raised the issue of how the intersection of labour market and household risk may drive policy preferences.

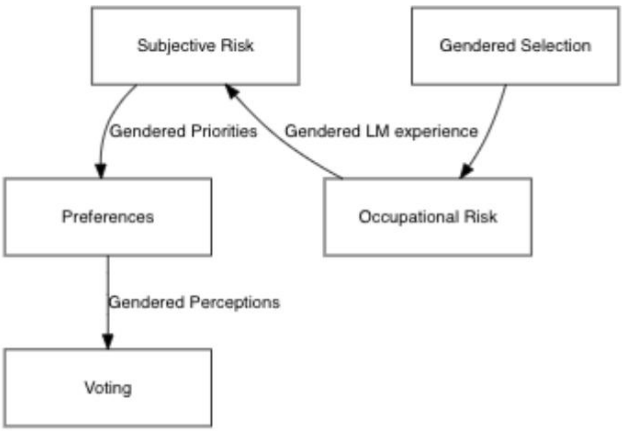
This ongoing project by Gingrich and Kuo aims to distinguish the different types of gendered occupational risks—that is, broadly related to women's experience inside and at the margins of employment. In this chapter, they provide a theory of 'political economy of risk' and propose the elements to measure the causal chain through household surveys.

WOMEN'S LABOUR MARKET EXPERIENCE

The empirical literature shows that women experience several hurdles in the labour market, which can be summarised in three main categories. First, there is gendered occupational selection: women tend to choose different jobs (or sometimes have little choice at all) because of gender norms, pressures to reconcile work and motherhood or other caring responsibilities. The second is gender-based employment discrimination at the workplace, which withholds opportunities for career advancement from women and may also lead them to leave employment. The third factor is a gender-influence "flexibility penalty" in compensation. Some high-paying career paths tend to penalise flexible working conditions and prioritise long working hours as a means of advancement. As a result, the employment opportunities that offer better work-time balance pay comparatively less, and this disproportionally affects women.

TOWARDS A POLITICAL ECONOMY OF RISK

As the authors note, the literature suggests that there are theoretical reasons to expect gender-divisions in preferences. These divisions are responsive to institutional, household, and occupational experiences, and they may lead to different forms of policy prioritisation. However, there are also several unanswered questions in the literature as to (a) the *conditional* effect of gender on different forms of occupational and non-occupational risks, (b) how these *translate* into specific policy preferences to address these risks.



They develop the causal chain common in the political economy of risk, which holds that: *features of jobs* determine *occupation-specific skills or tasks*, which in turn result in different *risk perceptions*. These different perceptions translate into *policy demands*, which should manifest into distinct *voting* patterns. The gender dimension of this causal chain involves recognising that women have both different *occupation-specific* risks and *non-occupation-specific* gendered risks.

GENDERED EMPLOYMENT RISKS?

The chapter formalises the different employment-related risks that women may face, on average, compared to men, and that there are trade-offs between them: what they call 'flexibility risks' and 'interruption risks' often increase other types of risks in terms of insecure contract structures or fewer advancement opportunities and corresponding lower long-run incomes. The authors hypothesise that these trade-offs are often gendered, meaning that women and men make choose to systematically select into different types of occupational risk trajectories.

Overall, women may suffer from greater income volatility in the short run in their labour market experience. On the other hand, however, their occupations may face lower risk of long-run displacement through automation. This assessment relies in part on academic estimates of the long-run risk of automation, including those by Frey & Osborne.

		Specific Skill Investments - Interruption Risks	
		High	**Low**
Compensating Differentials in occupation – flexibility risks	**High**	Law, banking (Manufacturing where firm specific) Higher pay, higher long-run UE risks	Networked self-employment More variable pay, lower long-run UE risks/higher run risks
	Low	Tech work, medicine, pharmacy, manufacturing (where non-firm specific) Stable-lower pay, higher long-run UE risks	Office work, non-routine manual work, public sector work Stable-lower pay, lower long-run UE risks/higher run risks

TESTING HYPOTHESES

The authors articulate several hypotheses that they plan to test through an original household survey:

1. Compared to similar men, women will prioritise in occupation features reducing flexibility penalties over long-run income maximisation; this gap will be more pronounced for women with children, leading them to select of occupations with fewer compensating differentials.
2. Compared to similar men, women will prioritise reducing long-run interruption penalties over short-term job security. This will lead them to select occupations with more general skills.
3. Compared to similar men, women will report higher search costs and frictions regarding occupational choice and upgrading and higher paid opportunities; these effects are amplified in households with children.
4. Compared to similar men, women's perception of overall income and labour market risk will be less linked to occupational task structure.
5. Compared to similar men, women will place less weight on long-run displacement risks in shaping overall risk perceptions.
6. Women with higher search cost frictions/flexibility penalties will be more supportive of redistribution and social programs generally.
7. Women with higher search cost frictions/flexibility penalties will be more supportive of childcare and parental leave and retraining programs, relative to passive income transfer progress.
8. Women will be more supportive of measures equalising household risks than men.

IMPLICATIONS FOR DIGCLASS

✓ Technological change might affect differently the political preferences of men and women given previous compositional differences in occupational segregation and job tasks.

8 Session

June 28th, 2022

Gender and Social Status Ranking

Speaker

Klarita Gërxhani, European University Institute

Recorded Session

https://webcast.ec.europa.eu/gender-and-social-status-ranking

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COMPETITION AND GENDER INEQUALITY

Gender equity and discrimination are increasingly central concerns in the hiring process. However, despite growing women's labour market participation and public concern, sizeable gender inequalities remain in contemporary societies. The persistence of gender inequalities could be related to women entering competitive environments gradually more.

Human beings compete for resources and social status in private life and labour markets. Similarly, many firms and employers rank employees' performance relative to colleagues to allocate promotions and rewards.

This management system ranking employees against each other represents a highly competitive setting. While there is extensive research on the overall efficiency of these appraisal systems, which are supposedly objective and unbiased, little is known about their potential impact on gender inequality and representation in the workplace.

Some people stand out in competitive environments, but others might underperform. Indeed, previous research indicates that women and men do not react equally to competition, so men tend to excel relative to women under rivalry for material resources. These studies explain gender differences in competition's response and labour market outcomes due to different individual preferences and constraints. Nevertheless, this explanation leaves aside rooted gender stereotypes that might be socially constructed in competitive environments.

Furthermore, previous studies focused on competitive environments where men and women compete for scarce material and economic resources. Performance rankings also involve competition for social status, but the implications of social-status ranking for gender inequality are understudied.

EXPERIMENTAL EVIDENCE: NO COMPETITION, NO GENDER GAP

In order to disentangle how social status ranking might impact men and women differently and how performance ranking systems might hinder women's career development, the authors carried out a series of laboratory experiments to manipulate exposure to competition under different environmental conditions.

1. The first experiment introduced a novel design that isolates status ranking from rivalry for resources. Subjects did a time-limited performance task, searching for numbers and adding them up.

There are no gender differences in performance when there is no status ranking. By contrast, when there is a status ranking, men attempt more summations and correctly solve more than women. These differences are large and statistically highly significant. Results suggest increased participation in competitive environments could harm women's labour market success along a hidden channel.

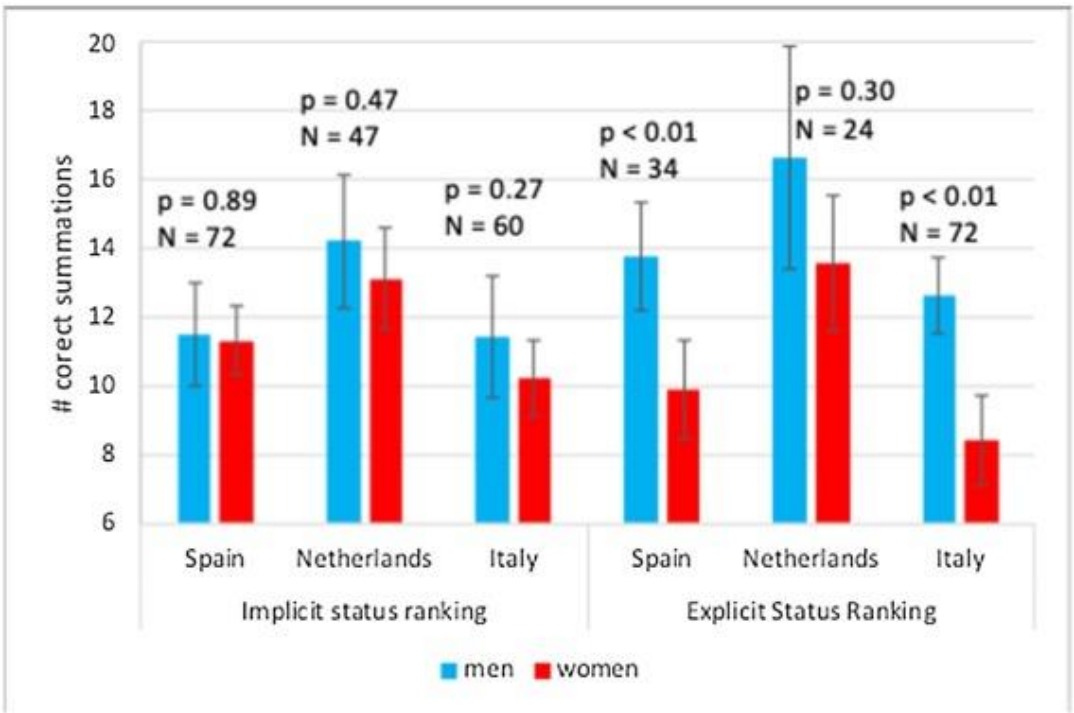

Figure 1. Status Ranking and Performance by Gender (Source: Gërxhani, 2020:6)

2. The second experiment examined the unequal effects of status ranking on problem-solving by gender in three culturally different countries: Spain, Italy, and the Netherlands. Men and women were equally incentivised to perform, not competing for economic resources. In one group of participants, social ranking based on performance was informed to them beforehand (explicit ranking), while participants in the other group were not told anything (implicit ranking).

The experimental results provide evidence that both the type of status ranking and culture matter (see Figure 1 above). When status ranking is explicit, strong gender differences in performance are observed. For example, in more masculine and competitive environments like the Italian and the Spanish, women perform significantly worse than men. Importantly, however, cultural beliefs about gender are not sufficient to drive gender differences when these beliefs are the basis for implicitly inferred status ranking.

IMPLICATIONS FOR DIGCLASS

- ✓ Decision-makers should be aware of men and women equal true abilities and differences in competition's response to provide an equitable work environment.
- ✓ Hiring or promotion might be assessed by absolute performance, not just by relative performance ranking.
- ✓ AI tools to pool candidates in hiring could reproduce the observed levels of gender discrimination in labour markets and reinforce gender stereotypes.
- ✓ Experimental methods are useful to identify discrimination in health and educational systems.

Appendix

List of abbreviations and definitions

CB	Job application Call Back
EGP	Erikson-Goldthorpe-Portocarero class schema
ESeC	European Socio-economic Classification
GGC	Great Gatsby Curve
MENA	Middle East, and North African ancestry
PGI	Polygenic Index
SES	Socio-Economic Status

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