

COMMENT

INCOME Inequality is cyclical, if your data cover many centuries **p.479**



PUBLIC HEALTH Two books distil lessons from the Ebola epidemic **p.484**

ECOLOGY Wildlife monitoring needs a gameplay concept like *Pokémon Go* **p.488**

OBITUARY Nobel-winning particle physicist James Cronin, remembered **p.489**

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In many societies, the gap between the richest and poorest recalls disparities last seen a century ago.

End class wars

Mike Savage calls on sociologists to resolve their differences over definitions of social class to allow better analyses of inequality.

Global economic divisions have become so stark in the past decade that they have transformed the research agenda. Thomas Piketty's *Capital in the Twenty-First Century* (Harvard Univ. Press, 2014) has had a profound influence, with more than 1.5 million copies sold. Piketty showed that in many rich nations, the balance of accumulated wealth compared with the national income is returning to disparities that were last seen more than 100 years ago. He argues that we are seeing the revival of a 'patrimonial class'.

These economic shifts pose challenges for understanding how social classes are

changing more broadly. Economist Branko Milanovic (see page 479) points to the rise of a global plutocracy, the decline of the middle classes in developed nations such as the United States and in Europe, and the growing global middle classes, especially in Asia.

There is intense public interest in these changes. In our work with the BBC on the Great British Class Survey¹, we controversially defined seven 'new' classes, ranging



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from an 'elite' to a 'precariat'. A staggering 9 million people clicked on the BBC's online 'class calculator' to find out which one they might be in (go.nature.com/2ccvwcw).

The shifts — especially the wealthy elites pulling away from the majority of middle- and low-income earners — seem to be shaping world events. There is strong anti-elite feeling across developed nations. In this year's US presidential race, for instance, Bernie Sanders and Donald Trump positioned themselves as Washington 'outsiders'. In England and Wales, the geography of the Brexit referendum told a similar story. Areas with high proportions of wealthy, ▶

► educated and well-connected senior professionals and managers voted disproportionately to remain in the European Union. The economically disadvantaged and culturally and socially cut off, mostly in older industrial areas outside southeast England, voted to leave the EU (see ‘Divided by connections’).

These developments demand a better understanding of how social class operates today, and how it relates to other factors such as gender, race and ethnicity. Thus, many universities and funders are investing in this area. For instance, the London School of Economics and Political Science’s (LSE) International Inequalities Institute, which I co-direct, received £64.4 million (US\$86 million) in June to train leaders to combat inequality. This grant, from the private foundation Atlantic Philanthropies, is the largest in the history of the LSE. We are working with partners in the ‘global south’, notably the University of Cape Town’s Graduate School of Development Policy and Practice and the Centre for Social Conflict and Cohesion Studies in Chile.

There is also a multidisciplinary programme on inequality and social policy at Harvard University in Cambridge, Massachusetts, as well as the Stanford Center on Poverty and Inequality in California; the Institute for Inequality and Democracy at the University of California, Los Angeles; and the Center for the Study of Inequality at Cornell University in Ithaca, New York (also supported by Atlantic Philanthropies funding). Other notable programmes include the Centre for Opportunity and Equality at the Organisation for Economic Co-operation and Development.

But to make progress, sociologists must resolve their current entrenched differences about how social class should be conceptualized and measured. To understand the nature of this dispute, we must first go back in time.

DEFINING CLASS

The study of social class began in the nineteenth century. When the (largely British) scholars of the Industrial Revolution launched investigations of poverty and inequality, it was with strong moral overtones. They assumed that professionals and gentlemen were more respectable and worthy than poorer people, who they deemed responsible for their own misfortunes.

Accordingly, in a pioneering study, Liverpool ship owner Charles Booth defined the poorest streets of 1880s London as “vicious and semi-criminal”. He categorized people into seven classes on the basis of where they lived and the households’ economic position (as judged by school officers, policemen and the like). Booth defined the poorest as having “the life of savages, with vicissitudes of extreme hardship and their only luxury is drink”; he saw the lower middle as a “hardworking sober, energetic class”. The upper-middles he defined as a “servant keeping class”. Echoes of these stigmatizing judgements remain powerful today — as evidenced by narratives around ‘benefit scroungers’ and ‘white trash’².

From the mid-twentieth century, sociologists sought to strip out these moral dimensions and provide a more objective, exact and precise definition of class — one which could be accurately measured regardless of one’s perspective. From the 1940s to the 1960s, predominantly US researchers developed scales of ‘socio-economic status’ that typically combined measures of income, education and occupational prestige. Duncan’s Socio-Economic Index of 1960, for example, tracked the proportion of people who thought that particular jobs had ‘good’ or ‘excellent’

“A pioneering study defined the poorest streets of 1880s London as ‘vicious and semi-criminal’.”

prestige. It linked these to the percentages of men in the occupation who completed high school or went further, and who reported above a certain income.

By contrast, British researchers from the same period developed a perspective that has become powerful everywhere. They argued that social class should be assessed in just one way: according to a person’s occupation. This approach dated back to 1913, and placed people in one of six classes according to the ‘skill’ of their job. It led to a differentiation between skilled non-manual occupations and skilled manual occupations. It was a very British way of thinking about class.

WORK LIFE

In 1980, British sociologist John Goldthorpe unveiled a more refined version of this occupational approach, in his pioneering studies of UK social mobility³. He found the older model unsatisfactory because the definition of skill was often opaque, and took no account of whether people were self-employed or employees, or whether they supervised others. His new model (see ‘Classifying class’) was embraced by the UK Office of National Statistics in the late 1990s. It has been elaborated internationally, notably through the European Socio-economic Classification⁴.

Goldthorpe differentiated between a waged working class and a salaried ‘service’ class. The self-employed, skilled technicians and supervisors he deemed intermediate. Labourers on a contract — bus drivers, coal miners or factory workers, say — are those paid discrete wages for their work. By contrast, Goldthorpe classed doctors, lawyers, senior managers and academics as having a more diffuse relationship with their employers, receiving prospective rewards (such as incremental salaries and pension entitlements) to acknowledge that the work they do cannot be easily demarcated and regulated. Confusingly, he called this a ‘service relationship’ — not to be muddled with actual servants, or people working in the services (such as retail or health), many of whom are employed on labour contracts.

Goldthorpe’s work was pioneering because of its use of representative national surveys, which became much more common in Britain, as in other parts of the developed world, from the later 1950s. By construing class as one variable — the nature of one’s job — it is possible to use it to track social mobility, and to measure its influence on characteristics such as health or mortality. It can also, in theory, be differentiated from the effect of other variables such as income, education, ethnicity or gender. This approach has been shown to be robust (at least in Britain, where it is most widely

CLASSIFYING CLASS

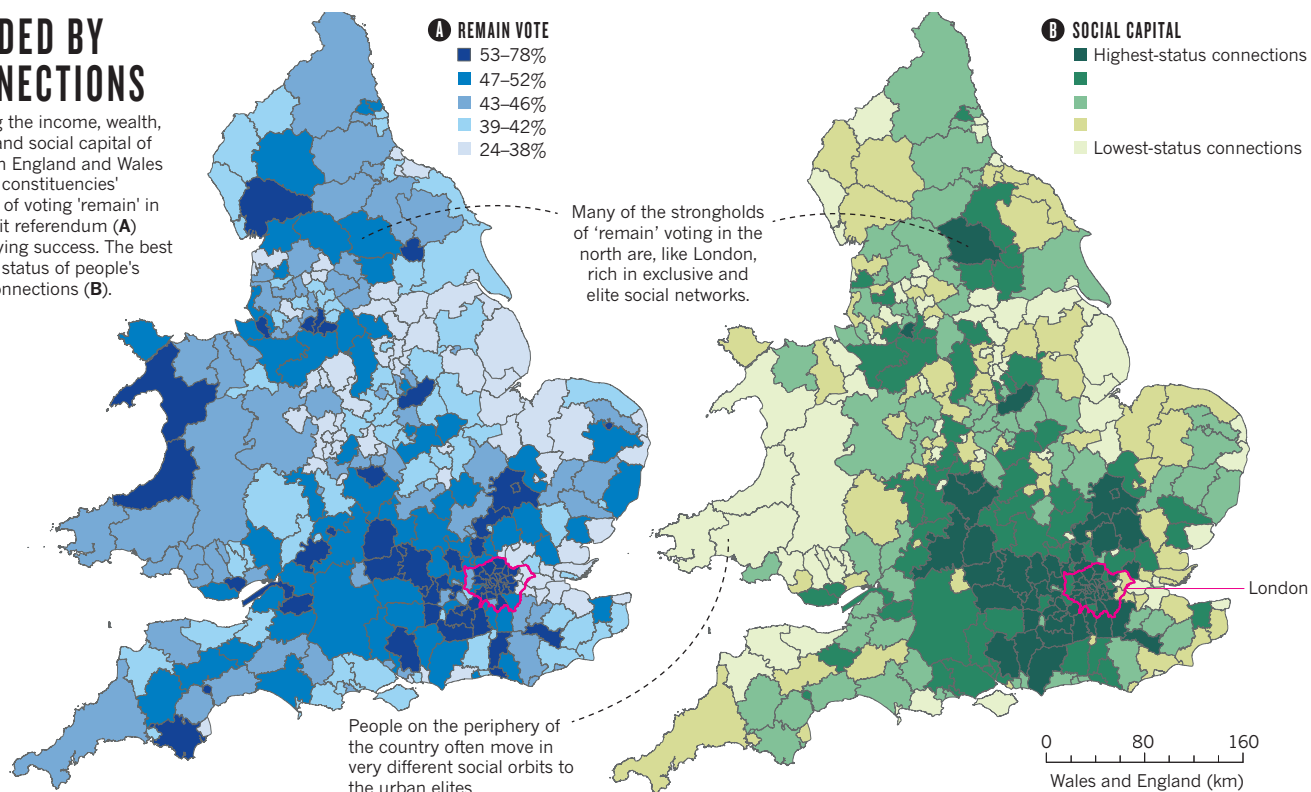
John Goldthorpe refined social class categories by looking at how workers interacted with their employers.

Class	Denomination	Form of regulation of employment
I	Higher-grade professionals, administrators and managers	Service relationship
II	Lower-grade professionals, administrators and managers, and higher-degree technicians	Service relationship (modified)
IIIa	Higher-grade routine non-manual employees	Mixed
IIIb	Lower-grade routine non-manual employees	Labour contract (modified)
IVabc	Small proprietors and employers, and self-employed workers	Not applicable
V	Lower-grade technicians and supervisors of manual workers	Mixed
VI	Skilled manual workers	Labour contract (modified)
VIIa	Non-skilled manual workers (other than in agriculture)	Labour contract
VIIb	Agricultural workers	Labour contract

SOURCE: REF. 3

DIVIDED BY CONNECTIONS

Mapping the income, wealth, culture and social capital of people in England and Wales predicts constituencies' patterns of voting 'remain' in the Brexit referendum (A) with varying success. The best fit is the status of people's social connections (B).



SOURCE: N. CUNNINGHAM/UNIV. DURHAM

used) for predicting employment relations — including earnings, the provision of fringe benefits such as pension entitlements, the risks of unemployment and control over work scheduling (see ref. 5).

Goldthorpe's model has proved highly effective in comparative research. Previously, nations had different ways of classifying occupations into larger social groups. Goldthorpe's schema enabled researchers to measure differences in social mobility across different countries, especially those that have comparable survey questions on employment. Thus, Goldthorpe and Robert Erikson⁶ were able to rebut popular views that there is more social mobility in the United States than in European countries, and to demonstrate that social mobility was often higher in Eastern European nations that had undergone socialist transformation. This has been very important work.

BLUNT INSTRUMENT

For all its elegance, Goldthorpe's approach has faced mounting criticism in recent years, of four kinds. First, because it focuses on employment as the key measure of class, it is less useful in those parts of the world — notably in the global south — where people are less likely to be engaged in the formal labour market and often work at home instead (see, for example, ref. 7). Similarly, people who are retired, disabled or unemployed cannot be placed in the model. And women are not served equally by its focus on formal paid work.

Second, the model lumps together people in large occupational classes. Doctors or lawyers are not treated separately, for instance. US sociologists Kim Weeden and David Grusky argue for a 'microclass' methodology, which distinguishes between different occupations. This offers a better handle on the generation of inequalities and better predicts Americans' consumption practices, and political attitudes in the past decade, compared to the 1970s⁸.

Third, economists have shown that the key dimensions of income and wealth inequality that have come to the fore in recent decades do not map strongly onto these big occupational classes. This is especially the case where the incomes of the top 10% of earners — and even more, the top 1% — have pulled away from the rest. (Some economists, including Piketty, prefer to think of social classes as broad income groups instead.)

Finally, Goldthorpe's model of class has not proved effective in explaining key social outcomes. For instance, political attitudes and actions are only weakly correlated with job type. Until the 1980s, there was a strong tendency — in Europe and elsewhere — for those in manual occupations to support left and socialist movements, whereas salaried workers usually voted for more conservative or established parties. This pattern is now much less clear. Even Goldthorpe concedes that his measures do not predict consumption patterns such as newspaper readership or leisure interests.

CAPITAL GAINS

Since the late 1990s, an alternative approach to class has become increasingly attractive to sociologists seeking to understand how class and inequality intersect. This 'capitals, assets and resources' (CARs) perspective is influenced by the French sociologist, Pierre Bourdieu. In his book *Distinction* (Routledge, 1984), he sees class as an emergent property of different 'capitals' — these allow people to accumulate resources over time so that their relative advantages over others rise.

For Bourdieu, there were three capitals: economic, cultural and social. He saw cultural activities as being similar to income and wealth, in that they can be used to generate advantages. He pointed to the way in which children who are exposed to the theatre or museums, say, become familiar with abstract ideas and perform well in the educational system. They parlay their cultural capital into educational attainment and better jobs. Social capital is the phenomenon by which those with privileged networks get ahead. In part, this is the 'old school tie' system of internships for gilded youth, but it also captures the way in which people with wider social ties — through their faith, unions or hobbies, for instance — can gain advantages. The three capitals have strong synergies.

The CARs perspective can readily categorize people who don't have formal jobs, including the retired, carers (who are often women) and children. It is able to use survey or other data to map anyone's economic, social and cultural capital. It

recognizes that the nature of cultural capital varies between contexts (see ref. 9).

In places where the rich are also culturally engaged and well connected, they form a strong and distinctive social class. In the book *Social Class in the 21st Century* (Penguin, 2015), I and others argue that this happens today with the very wealthy, who have exclusive social circles and enjoy similar pursuits, often from attending the same elite universities. London and other major cities are becoming key venues for this elite formation.

By contrast, the 'precariat' score lowest in nearly every category — they lack cash, access to culture and connections (see 'Wheels of fortune'). Another class, which we call emerging service workers, has much social and cultural capital, but less money. These are the educated young who are unable to gain footholds in today's competitive labour market. Our model does not find a neat line between middle and working classes; instead, it is attuned to polarization, which seems intuitively powerful in many areas of the world.

The CARs approach shows that class divisions are not necessarily reduced by investing in education. Those families with the most economic and cultural capital are best placed

to ensure that their children gain access to the most august institutions, given that entry is competitive and that those with most advantages will tend to do best. It is therefore a challenging, even pessimistic view, of current trends. This model is based only on UK data. It needs to be finessed in other countries to take account of their unique situations.

Critics of CARs take issue with its concepts and methodology, arguing that conflating class with cultural and social dimensions leads to imprecision¹⁰. They worry that income can fluctuate considerably and be difficult to measure: do we look at households or individuals? Do we include benefits and pension savings? Furthermore, people often state their occupation more accurately than they do their income.

Some critics counter that culture is of minor or secondary importance. Numerous sociologists have examined the rise of 'the cultural omnivore' who grazes on Mozart, *Big Brother*, Bollywood films and the Los Angeles Lakers basketball team. This is a much more pluralist vision than Bourdieu's, which many critics feel is distinctly French in its veneration of the highbrow and intellectual¹¹.

Differences between these approaches to

class are not just academic. They affect how governments address growing inequalities. For the occupational approach, divisions are baked into the structure of employment. Proponents argue that investing in education

“Both camps are concerned with the injustices of inequality.”

by itself will not address underlying class inequalities. Restructuring of the economy and employment relationships has to be central.

Those supporting CARs wish to disrupt the accumulation of different capitals. Piketty's call for a 1% annual wealth tax is a well-known example. Housing, inheritance and citizenship policies are important, as is enabling people from disadvantaged backgrounds to access higher education, and forging new social ties for the marginalized.

CLASS WARS

Why are sociologists at loggerheads over these different approaches to defining class? There are several reasons. To some extent, it is tribal: different research communities have their allegiances. Established sociologists feel that the late-twentieth-century approaches have been tested and refined over many years. Employment categories are particularly beloved of researchers who focus on standard quantitative analyses of nationally representative sample surveys, such as Britain's famous birth-cohort studies.

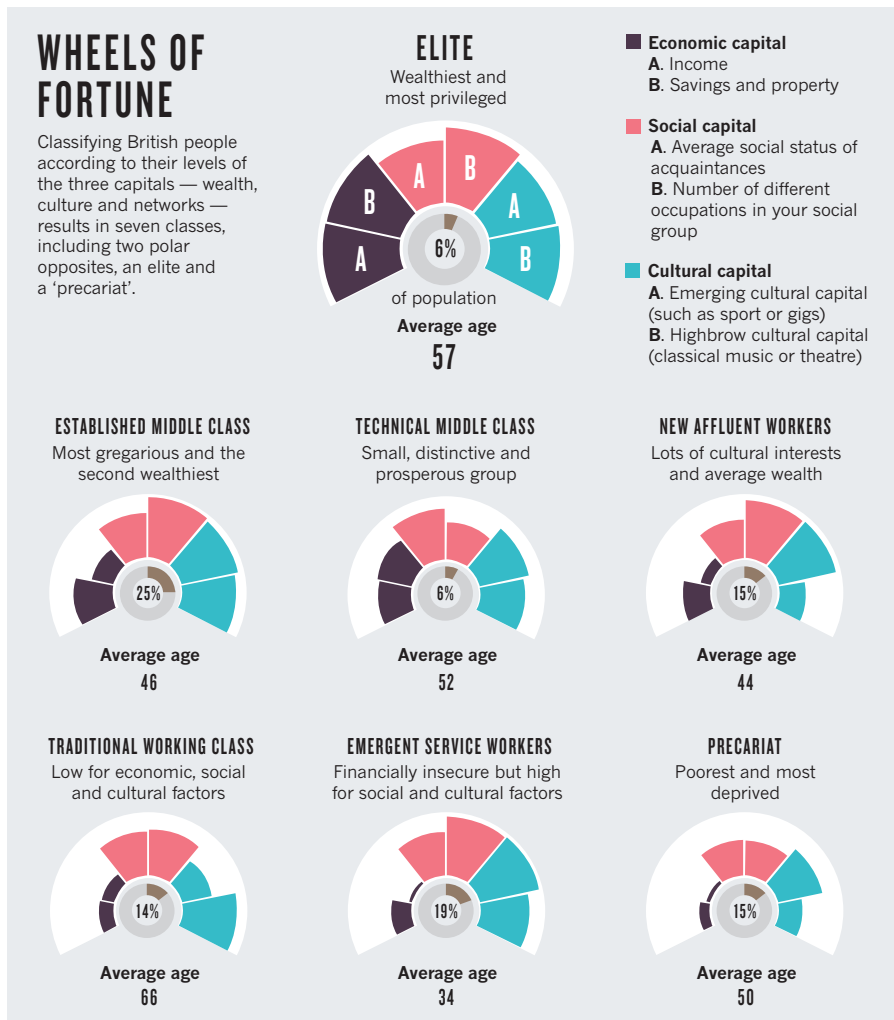
CARs are popular with younger, more heterodox sociologists, especially those trained in qualitative methods such as ethnography or case studies. These newer researchers are more attracted to data sets such as non-representative web surveys. There are also different theoretical styles. The occupational class school prefers formal models that might be predictive, whereas CARs researchers are more concerned with descriptive accounts.

Can these camps be reconciled? In my view, yes. Partly it is a matter of both sides showing modesty, appreciating what the other has to offer, and extending olive branches. Above all, both camps are concerned with the injustices of inequality and with challenging the advantages of the rich and powerful. It would be a shame if this shared aim was lost in internecine squabbles.

In this spirit of reconciliation, we should note that the two 'sides' use the concept of class in different ways. The occupational approach seeks to define class as a variable, so that its distinctive effects can be noted on life chances, mortality, educational attainment and so forth. It does this job fairly well. The CARs approach is concerned with class as a historical process — identifying the ways that classes form and then shape social change.

It follows that each has its uses. One way of making progress would be to give further

SOURCE: ADAPTED FROM THE BBC NEWS CLASS CALCULATOR



consideration to how occupational classes are associated with cultural, social and economic processes. Here, it is possible to take advantage of new forms of data to explore congruencies and differences in their perspectives. Nationally representative surveys often do not have developed questions on cultural or social capital. And with sample sizes rarely extending beyond 10,000 people, there are often limits to examining outliers and 'microclasses'.

There is a growing interest in using tax records to examine economic inequality. For these there is no need to sample, and analyses of income and occupation can take place on the entire population. Such data has no information on social and cultural capital, but they could perhaps be combined with 'geodemographic data,' collected by market researchers in local neighbourhoods. This has extensive information on consumption and spending. Similarly, Google, Facebook, Amazon and others hold a vast trove of data on communication, connections, consumption, health status and so on.

As a first step, developing interdisciplinary work offers exciting possibilities. Engaging economists, anthropologists and political scientists alongside sociologists is the most likely way of making petty internal disputes look parochial. Social scientists have been slower than natural scientists in moving away from disciplinary identities towards interdisciplinary teams that work on common problems.

The study of our unequal, riven societies can only be tackled if scholars and policymakers from all fields pool their skills. ■

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Child coal-mine workers.

Income inequality is cyclical

Periodic rises and falls in the gap between the rich and poor over centuries indicate that inequality will not grow forever, argues **Branko Milanovic**.

For the past 30 years or so, income inequality has been on the rise across the globe. It has increased in the United States, China, Russia — even in Sweden and Finland, long thought to be paragons of equality.

What's driving this increase? And does the unprecedented dominance of capitalism mean that there are no longer countervailing forces to stop inequality's rise? Or might a self-regulating mechanism eventually reduce it, even in a capitalist world?

To answer these questions, we need both to look at our immediate past and take a longer historical view. Thanks to

archival data on wages and incomes from as far back as the 1200s, we can start to do just that.

First, some terminology. Inequality is frequently confused with poverty, and income elided with wealth or earnings. Throughout this article, I deal with inequality in income. Standard definitions of income do not include capital gains, resulting, for instance, from an increase in property or share value. And income is different from wealth (the sum of all marketable goods currently owned) and from earnings (which include only wages and work-related benefits).

Moreover, inequality is not the same as poverty, a concept that depends on defining a poverty line, below which people with less than a certain amount of income are deemed 'poor'. Poverty ▶



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