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# From inequality to sustainability

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This article outlines six ways in which large income and wealth differences – both within and between countries – reduce the chances that our societies will respond adequately to the environmental crisis. We believe sustainability requires changes that are much more profound than simply transitioning from fossil fuels to renewable energy resources. The current burden humanity imposes on the planet is about 1.75 times what its natural systems can withstand, so we need to recognise the numerous other repercussions of our activities. Having overshot the Earth's carrying capacity by so much, we now face a wide range of problems, including the degradation of soils, species loss, plastics waste, rising sea levels, water shortages, deforestation, pollution, new diseases and dramatic price fluctuations in key commodities. And, because of anthropogenic climate change, we will also have to cope with repeated emergencies and disruptions to our lives caused by fires, storms, flooding, droughts and heatwaves.

The scale of inequality not only has profound effects on how we negotiate these difficulties. It also sets necessary conditions on what a sustainable society should look like, and, above all, on whether we are willing to make the changes required to get there.

For the sake of clarity, by "inequality" we mean the material inequalities of income and wealth that divide the rich from the poor, both within and between societies. These inequalities are foundational.

## The footprint of the rich

There are, of course, huge differences between rich and poor in carbon dioxide ($CO_2$) emissions. A 2020 report from the United Nations Environment Programme estimated that the emissions share of the 10% richest, highest-emitting, individuals is 36%–49% of the global total, while that of the poorest, lowest-emitting 50% of the world's population is 7%–15% of the total. Or, to put it another way, the average emissions of someone in the richest 10% of the world's population are probably around 20 times the average of someone in the poorest 50%. An Oxfam report put it even more starkly. It said that the total $CO_2$ emissions of the world's richest 1% were more than double the emissions of the poorest half of humanity. Such inequality exists even within a single high-income country. Oxfam and the Stockholm Environment Institute estimate that each person in the richest 1% of the UK population is responsible for 11 times the $CO_2$ emissions of someone in the poorest half of the population.

## Public support for the transition

It is understandable why emission-reduction policies that ignore these vast inequalities are unlikely to gain widespread support and may meet with strong opposition. Shortly after the Paris Agreement was reached in 2015 – the historic deal to reduce greenhouse gas emissions – Emmanuel Macron, president of France, proposed a small increase in fuel taxes to encourage fuel economy and the use of more economical vehicles. But before the measures had even been implemented, they were met with vehement public opposition. Using social media, demonstrations were organised by an apparently leaderless *Gilets jaunes* (Yellow vests) movement. Over many months, every weekend was marked by rioting and blocked roads in hundreds of places across France, hundreds of people were arrested, cars were set alight and buildings ransacked. Even after violent protests, opinion polls suggested that over 70% of the French population supported the demonstrators. In the face of this opposition, President Macron gave in and cancelled the fuel tax rise.

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The speed and scale of change that our societies and economies require to halt the climate crisis and reach sustainability should not be underestimated. It is at least as great as the mobilisation and redirection of production in the countries involved at the beginning of the Second World War. In the UK, that involved radical policies to ensure that people saw the burden of war as fairly shared.

Richard Titmuss was commissioned to write the volume on social policy in the British Government's official *History of the Second World War* (1950). He was also the founder of social policy as an academic discipline, and the first professor of social administration and social policy at the London School of Economics and Political Science. In his essay "War and Social Policy", Titmuss said the government recognised "the cooperation of the masses was ... essential [to the war effort], [and so] inequalities had to be reduced and the pyramid of social stratification ... [had to be] flattened" (Titmuss, 1958, p.86). The war was therefore marked by far-reaching policies designed to make people feel that the burden of war was fairly shared. Income differences were rapidly reduced by taxation, essential goods were subsidised, luxuries were taxed and rationing was introduced for food and clothing. Even royalty (including the present queen at her wedding in 1947) wore "austerity" clothing. This was how a wartime government went about winning public participation and support for the war effort. There is little doubt that these policies created a sense of unity, of pulling together and of support for the war effort. They are indicative of the approach needed now if we are to respond adequately to the environmental crisis.

## Sharing or making a bigger cake?

Another important reason for a change in attitudes to inequality comes from the way the crisis has changed our understanding of the context in which economic systems operate. Until the 18th century, economic systems were usually seen as working within a set of fixed boundaries. These were largely determined by the limit that the amount of agricultural land imposed on the number of mouths that could be fed. The problem of distribution was then seen as a problem of shares in a relatively inflexible supply. And within that setting, greed was bad: the more one person consumed, the less there would be for others. But during the 18th century, under the influence of thinkers such as Adam Smith, and to a lesser extent Bernard Mandeville before him, this picture changed. People began to regard the economic system as capable of growth and the amount that could be produced as capable of increase. This new setting made it possible to argue that, rather than being harmful to others, greed, consumption and the love of luxury benefited others because they generated income and acted as a spur to production that would raise living standards for everyone.

In *An Essay on the Principle of Population*, published in 1798, Thomas Malthus's contribution to this debate was to shift the focus from luxury consumption to the threat he believed came from the growth of population. As a result of these worries about how population growth might exceed the food supply, the first census of population in England and Wales was held in 1801. But as the Industrial Revolution got underway in Britain from the late 18th century onwards, production seemed to be less and less restricted by the limited supply of land (Wilkinson, 1973). Increasingly, a society's productive capacity was seen as unconstrained. Rather than being seen as taking more than their share, the consumption of the rich was instead seen as benefiting the poor by providing jobs and incomes. People concerned with inequality were told repeatedly across the decades that the real issue was not how to divide the national cake, but how to make it bigger. Indeed, Henry Wallich, a professor of economics at Yale University and, from 1974–1986, a governor of the Federal Reserve in the United States, believed that economic growth made large income differences tolerable and said "growth is a substitute for equality of income" (Wallich, 1972).

Now, however, the environmental crisis has once again made us appreciate the severe constraints on the productive system. Constraints that, rather than simply limiting further expansion, require us to make major reductions in the impact of economic systems on the natural world. Inevitably our attention focuses on the greater damage inflicted by the much larger environmental footprints of the rich compared with the poor.

## Reducing status competition and consumerism

Excessive spending by the rich also intensifies the environmental crisis through processes of social emulation. Research shows that there are powerful "demonstration effects" of high consumption on the aspirations of people more widely. Unlike income, desires do trickle down. Several studies have shown that people who live in societies with bigger income differences between rich and poor spend more on status goods (Walasek & Brown, 2015 & 2015). They are more likely to shop for designer clothing and to buy more expensive cars. Bigger inequalities make class and status more important and strengthen the belief that some people are worth much more than others. Across all income groups, people in more unequal societies feel more anxiety about status and how others judge their status (Layte & Whelan, 2014).

Essentially then, inequality increases what might be called the "pressure to consume". Money becomes more important because it is through what we buy, particularly our more visible purchases, that we try to present a positive impression to others. Because inequality increases the importance of class and status, self-presentation matters more, and people follow a process of "self-enhancement": instead of being modest about their achievements and abilities, they flaunt and exaggerate them (Loughnan et al., 2011). As a result, debt and bankruptcies are higher in more unequal societies as people try to maintain appearances of affluence and respectability (Frank, 2013).

As well as being clear at the individual level, these effects are also seen across whole societies. For example, after controlling for business cycle effects, it has been shown that as inequality changes over time, so does aggregate household debt (Iacoviello, 2008).

The evidence strongly confirms Thorstein Veblen's theory of "conspicuous consumption", outlined in his 1899 book *The Theory of the Leisure Class*. Veblen described the practice of buying goods primarily to give an impression of status and wealth rather than simply to serve practical or aesthetic needs. Today a modification is that these effects seem to be strongest not among the super-rich who are assured of their status and wealth, but among those in the rest of society who feel more status insecurity. Indeed, a review of studies of the psychological characteristics of people with particularly strong materialist values and most addicted to shopping, concluded that they were particularly vulnerable to status insecurities (Dittmar et al., 2013 & 2014). We see then how inequality, by increasing status competition and status insecurity, spurs consumerism, making sustainability harder to attain.

## Economic growth and wellbeing

Unless and until economic growth becomes carbon neutral and does not exceed other planetary boundaries, it is inconsistent with cutting carbon emissions and will worsen the problem of overshooting the Earth's resilience. But it is not simply a matter of whether growth adds to environmental problems; it is also a question of whether it improves wellbeing. Here we cannot go on ignoring the widespread evidence that although continued growth adds to wellbeing in poorer countries, it no longer does so in rich countries. Among high-income countries, further economic growth no longer drives improvements in health, wellbeing, happiness or life satisfaction (Easterlin, 2015; Kubiszewski et al., 2013). This contrasts sharply with the experience of low-income countries where life expectancy, happiness and wellbeing all increase rapidly during the earlier stages of development. Some of the rich countries are almost twice as rich per capita as others but there is no sign that they enjoy better health or wellbeing (Wilkinson & Pickett, 2018). Indeed, one analysis suggests that even when looking at rates of economic growth per capita over periods between 10 and 40 years, there is little or no sign of a relationship with health as measured by death rates (Cutler et al., 2006).

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There are then very good reasons why governments are being encouraged to abandon economic growth as a policy objective and to concentrate instead on maximising human wellbeing (Costanza et al., 2018; Fioramonti et al., 2022). The difficulty, however, is that it is extremely unlikely that economic growth can simply be switched off. Its roots go much deeper than government policy alone. Economic historians have shown that significant growth rates predate – perhaps by as much as two centuries – any government interventions to raise metrics such as gross domestic product (Broadberry et al., 2015). And even with the benefit of modern economics, few governments achieve the growth rates they desire.

The weakness of government policy either to increase or decrease growth is a consequence of the fact that most drivers and obstacles to growth are beyond their control. The most fundamental drivers of growth are, on the one side, the near universal desire among people –

"consumers" – for higher incomes, and on the other, the desire among businesses for higher sales and profits.

The obstacles to growth, for their part, are the myriad of practical difficulties involved in change: all the material and financial difficulties in innovation, expansion, investment, sourcing supplies, reorganisation, lack of knowledge and skills, marketing and so on.

## Inequality and social cohesion

The implication is that effective opposition to economic growth will almost certainly mean reducing the strength of the desire for higher incomes. We have, however, already seen that inequality, by increasing the power of class, status and status insecurities, increases what we called "the pressure to consume" – status consumption, the desire to shop and have new things, and debt (Wilkinson & Pickett, 2018). To transform our economic mindset we need a clearer understanding that happiness and wellbeing are better served by good social relationships than by higher consumption.

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Numerous studies of the determinants of happiness have pointed to the importance of the quality of social relationships, number of friends and whether or not people are involved in local community life (Demir et al., 2013; Dunbar, 2018; Taniguchi, 2015). Health too has been found to be powerfully affected by social relationships (Hart et al., 2018; Leung et al., 2013). Friendship is highly protective of health – physical as much as mental health (Barbalat & Franck, 2020). A meta-analysis of 148 studies, covering over 300,000 people, concluded that whether people have good social connections or are more isolated makes at least as much difference to longevity as whether or not they smoke (Holt-Lunstad et al., 2010). The explanation for these effects seems to be chronic stress (Wilkinson & Pickett, 2018). People who are less socially at ease with others, less confident, and more worried about what others think of them tend to find social gatherings stressful and so become more socially isolated.

The damaging effects of inequality on these health-benefitting social relationships is clear. First, more unequal societies tend to have weaker community life (Collins & Guidry, 2018; Fehr et al., 2020; Layte, 2012). People in these societies are less likely to be involved in local groups of different kinds; they have fewer social interactions or close friendships. Second, a number of other studies show that people in more unequal societies are less likely to trust others. Third, they are also less willing to help each other – the elderly or people with disabilities (Paskov & Dewilde, 2012). Fourth, large experiments (in 355 cities across 40 countries) have shown that where there is more inequality people are less likely to return lost purses or wallets (Du et al., 2021). Fifth, many studies have shown that societies with higher levels of inequality give rise to much more violence – as measured by homicide rates (Contreras et al., 2015; Elgar & Aitken, 2011; Yapp & Pickett, 2019).

In short, greater inequality gradually weakens people's involvement with each other. People become less public-spirited and an easy give-and-take reciprocity gives way to apprehension and a lack of trust towards others. In societies with the largest inequalities, for example in South Africa and parts of Mexico, these processes have gone a stage further: there, people are afraid of others. They don't feel safe on the streets and don't go out in the evening. They feel it necessary to put bars on their windows and doors, with security cameras outside and razor wire and electric fences round their yards.

This picture of the progressive breakdown of social relations that accompanies growing inequality is further confirmed by data on the proportion of a society's workforce involved in "guard labour", including occupations such as security staff, police and prison officers. The higher the level of income inequality, the higher the proportion of the population in occupations like these that involve protecting people from others (Jayadev & Bowles, 2006). Inequality thereby destroys the quality of social relations that are a crucial determinant of wellbeing.

## Pulling together – or apart?

Lastly, given that the average global temperature is likely to see a rise of well above 1.5 degrees – perhaps twice that – we might suffer on multiple fronts. Not only more life-threatening fires, storms, flooding, droughts and heatwaves, but also more international conflict over things like access to water, famines, much bigger flows of refugees, increasingly volatile prices for foodstuffs and other key commodities, and probably more frequent pandemics. Much will then depend on how we respond to these problems and to each other's difficulties. Here the

## Inequality's effects in summary

In short, greater equality is essential to a world facing the consequences of overshoot and the climate crisis for the following reasons:

1. Because it is clear that there are **planetary limits to economic growth**, we can no longer behave as if economic growth was a substitute for a more equitable distribution of these resources among the global population of nearly 8 billion.
2. The move towards sustainability will meet with **widespread opposition** unless people feel that the inevitable burdens of change, and of the policies necessary to drive it forward, are fairly shared.
3. **The environmental footprint of the rich is so large** that it has to be reduced not only for the sake of justice, but as an essential part of bringing the environmental crisis under control.
4. **Consumerism is a major threat to sustainability**, but it can be reduced by lowering the inequality that intensifies status competition and increases the desire for personal wealth.
5. **Greater equality is a central determinant** of both health and social wellbeing. It is therefore crucial that government policy prioritises wellbeing over economic growth.
6. Greater equality leads people to be **more cooperative and mutually supportive**. It will make us more willing to pull together and provide mutual support as we face environmental emergencies and disasters.

biggest issue is whether we pull together, helping each other out cooperatively, or whether it is everyone for themselves. Will we support people in need, knowing they would do the same for us, or do we fight for what we can get while treating others as rivals for essential resources? This is not simply a matter of the nature of personal relationships, it is also a matter of whether a society has the ethos that makes people more willing to vote for forms of public insurance and good-quality emergency services. But whether it is at the level of individuals or what can be provided publicly, public-spiritedness and the ethos of mutual support are seriously damaged by great inequality.

If we are to create a sustainable society, capable of preventing the environmental crises becoming uncontrollable and eventually destroying civilisation, much greater equality must be a central feature of that society. Otherwise, the chances of getting to where we need to be are vanishingly small. Greater equality provides a key to the necessary social, political and psychological conditions for progress. But how much more equality is needed? In some societies the gap between the richest and poorest 20% is twice as big as it is in others, and the data suggest that the health and social benefits of greater equality continue to accrue even within the most equal societies such as the Scandinavian countries (Wilkinson & Pickett, 2010). Those societies still have substantial inequalities with strong class systems, but there is no modern evidence to tell us what the results of greater equality would be. It is perhaps worth noting, however, that the predominantly highly egalitarian hunter-gatherer societies of our pre-history do seem to have had a very different attitude to the accumulation of property and they avoided over-hunting or over-gathering for at least 100,000 years. Reports from social anthropologists suggest that these societies were effective in keeping desires for self-aggrandisement and acquisitiveness in check – partly, no doubt, because equality largely removes the desire to emulate people of higher status (Sahlins, 2003).

## Reducing inequality

How then can inequality be reduced? In previous research we found that greater equality had similar health and social benefits, regardless of whether countries had smaller differences in “market incomes” or instead used taxes and benefits to redistribute incomes (Wilkinson & Pickett, 2010). However, because we now need very large reductions in inequality, it would be a mistake not to use both methods. Tax avoidance has to be stopped and tax havens, used by multinational corporations and the super-rich to hide money beyond the reach of tax authorities, have to be closed. Only then can taxation be made as progressive as it once was, and the rich will no longer be able to pay a lower tax rate than the poor.

Trade unions, plus the wider labour movement and its political representation, **had a major influence on modifying inequality** through the 20th century (Gustafsson & Johansson, 1999). Evidence for this comes from the close cross-sectional and longitudinal associations between trade union strength – as measured by the proportion of the workforce in trade unions – and levels of income inequality. As these forces strengthened, inequality in many countries diminished from the 1930s until the late 1970s, but from around 1980 onwards trade unions and the labour movement weakened and inequality increased – eventually to levels last seen in the 1920s.

Since the turn of the century, the continuing loss of heavy industries and the growth of the service sector – at least in high-income countries – make it unlikely that trade unions will ever regain their former strength. In this situation we need additional sources of democratic pressure capable of exerting a powerful restraining influence on inequality. Forms of economic democracy are an obvious solution. Crucially, they should involve employee representation on company boards as well as incentives for creating employee-owned companies and cooperatives. Many high-income countries already have legislation for employee representation on company boards and remuneration committees. This is often only token representation. Ideally, legislation should facilitate an increase in the proportion of employee representatives on boards over time. Evaluations of more democratic systems of company governance suggest that they reduce income differences and increase productivity, along with many other benefits.

Running into millions of dollars, the top incomes in the financial sector and among the CEOs of large corporations, are most often justified by suggesting that these pay rates reflect the productivity of their recipients and the rarity of their talent. However, an important study of more than 400 of the largest publicly listed companies in the United States found that shareholder returns over a 10-year period were substantially lower among the companies where CEOs were paid more than the median for those companies, compared with those paid below the median (Marshall & Lee, 2016).

## Obstacles to greater equality

So far, governments in high-income countries have failed to make substantial reductions in income differences. There are perhaps three main explanations for this. The first is that the rich have strengthened their influence on governments and have used that influence very effectively to protect their interests. This will remain a threat to democracy until there are effective policies to prevent big corporations and so-called "high-net-worth individuals" making major donations and payments to politicians and political parties. Constraints are also needed on lobbying activities.

The second major obstacle to effective policies to reduce income differences is the belief that the social hierarchy is an expression of innate natural differences in ability. Historically, societies have always promoted myths to legitimise this belief. History is full of attempts to justify inequality, class and caste differences. Plato suggested that people's position in the social hierarchy, from slaves upwards, depended on whether their souls were brass, silver or gold. Similarly, a person's rank in a caste system is often regarded as a reflection of their behaviour in previous lives. And monarchs of course believed – and insisted on their subjects believing – that they had a God-given right to rule.

The theory of evolution inevitably gave rise to ideologies based on a belief in the genetic superiority of higher social classes, leading to eugenic ideas that it was important to breed from the "superior" rather than the "inferior". The current widespread view that the social class hierarchy is a meritocracy, resulting from genetic differences in IQ, is uncomfortably similar.

These are nothing more than modernised versions of the debased earlier attempts to justify systems of privilege, dominance, subordination and inequality. That is not to say that people do not have differences in ability. But instead of innate differences in ability determining social position, the more important direction of causality runs in the opposite direction – from social position to difference in ability. The idea that there is a single gene for intelligence – that you either have or haven't got – is a failed research programme (Ho, 2013; Nisbett et al., 2012; Richardson, 2017). There are hundreds, perhaps thousands, of genes affecting different aspects of ability – how musical you are, whether you learn foreign languages more easily, how you take to mathematics, your literary aptitude, your social awareness, your artistic talents, your spatial awareness, whether you are a good gymnast or footballer, and many, many, more. But the effects of each are very small. Much more important is your education and training.

You can have all the genes in the world for mathematics, but what determines whether you are going to be a capable mathematician – or as unprepared as people in preliterate societies – is whether you have been taught advanced mathematics (Wilkinson & Pickett, 2018).

The third major obstacle to policies to reduce inequality is the idea we discussed earlier, that the economic system needs the rich to provide jobs and incomes for the rest of the population. This is why countries still try to attract the wealthy. For example, over the last decade or two there has been an influx of ultra-wealthy individuals to London from all over the world, many concerned with security and wanting to keep their money safe – money that often originated in corruption. Their presence has, however, led various commentators to argue that it would be a costly economic mistake to pass tax legislation that would result in these people leaving the country. Rather than seeing the harm the super-wealthy do to the planet and society – from the effects of inequality and the distortion of the housing market onwards – we have been encouraged to believe that their wealth brings valuable benefits to our society; in effect that the greed of the few is good for us all. Even some countries that allow very little immigration make special provisions for granting citizenship to high-net-worth individuals. Despite this, the wider societal costs of inequality are clear, including its corrupting effects – the decline in trust, the weakening of community life, higher rates of violence, and the excessive and anti-democratic political influence of the super-rich (Wilkinson & Pickett, 2010). It is to be hoped that the sanctioning of many Russian oligarchs over the invasion of Ukraine may make governments more willing to consider enforcing higher tax rates on the very wealthy more generally.

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It will take a substantial period of ideological campaigning through social and mass media to weaken these obstacles. We hope that the close links we have outlined between equality and environmental sustainability will bring progressive forces together to work, as never before, towards creating a new and better society. It would be a serious mistake to regard this simply as a political campaign pursued by sectional interests. It is about the survival of future generations and the welfare of us all. Media outlets have an urgent responsibility to inform public opinion on the science both of the climate crisis and of the effects of inequality. In 2018, *Scientific American* produced a special issue entitled “The Science of Inequality”. Its opening sentences read: “High economic inequality negatively impacts nearly every aspect of human wellbeing—as well as the health of the biosphere. Contrary to intuition, it affects the wealthy and the middle classes, not just the poor.” Unless that educational lead is taken up by the mass media more widely, it will continue to be almost impossibly difficult to have the necessary public discussions of what a desirable future would look like and how we can move towards it. Too often people imagine that because inequality is a highly charged political issue, it cannot also be a scientific one. In truth, its political importance and the strength of prejudices around it mean that the scientific evidence of its effects are even more important.

Mass street protests and broadly based political movements, sustained over substantial periods of time, are also essential to overcoming the major political obstacles we face. As movements such as Black Lives Matter, Occupy and Extinction Rebellion all show, demonstrations are important both in bringing issues to public attention and in changing opinion. As a result of each of these movements, opinion polls showed substantial favourable shifts in public opinion, and there is a body of empirical research that shows that non-violent demonstrations are an effective way of shifting public opinion (Klein Teeselink & Melios, 2021; Mazumder, 2018; Pinckney, 2019).

## Conclusion

**The transition to sustainability must involve large reductions in the average human environmental footprint. That will mean making bigger and earlier reductions among those with the largest footprints – both so that people feel that the necessary policy measures are not simply an unjust imposition to be resisted and also because the footprint of the affluent constitutes such a large part of the overall problem. The transition will also require that economic growth is replaced as a policy objective with a greater focus on increasing wellbeing. Prevailing growth is also driven by what now appears to be the almost insatiable human desire for higher incomes and consumption; to change course we need to dramatically reduce inequality. A more equal society has a much better chance of producing the convivial social environment that is consistent with higher levels of wellbeing, but also of decreasing the status competition that intensifies the pressure to consume. And lastly, to survive what climate change is inevitably going to throw at us and prevent a catastrophic social breakdown, we will need the ethos of mutual support and cooperation that flourishes with greater equality.**

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