

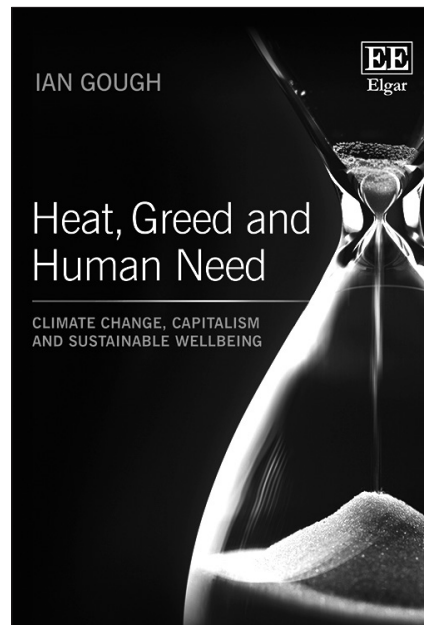
# Ian Gough: Heat, Greed and Human Need: Climate Change, Capitalism and Sustainable Wellbeing

Reviewed by Anna Braam

Ian Gough's *Heat, Greed and Human Need. Climate Change, Capitalism and Sustainable Wellbeing* could not be more relevant or needed in this day and age. As the current Intergovernmental Panel on Climate Change (IPCC) special report on the impacts of global warming of 1.5°C above pre-industrial levels has recently shown, rapid and far-reaching transitions in all aspects of society are required to combat global warming and limit it to 1.5°C (IPCC 2018b: 1). In this book – published in 2017 – Ian Gough presents a pathway towards a three-stage transition that is needed for industrialised countries to keep global warming in line with the planetary boundaries. To showcase the current situation of climate change affecting nature and mankind and how to limit its consequences, Gough pursues an interdisciplinary approach – bringing together economic, ecological, political and social aspects of climate change. This is crucial, as the author concludes that “equity, redistribution and prioritizing human needs [...] are critical climate policies” (13).

The book is 209 pages long (excluding an extensive bibliography and an index) and is presented in two parts. Part 1 first explains the concepts used for Gough's analysis and the global issues faced on a larger scale, starting with the social dimensions of climate change (ch. 1) as well as human needs and sustainable wellbeing (ch. 2). Gough continues by highlighting climate capitalism and the relation between emissions, inequality and “green growth” (ch. 3). Part 1 ends with the interdependency of sustainable wellbeing, necessary emissions and fair burdens (ch 4). Gough argues that social development goals cannot be achieved without overstepping the available carbon space (Steckel et al. 2013).

Part 2 sets out the pathway towards eco-social policy in the rich world, starting with the question of how welfare states may transform into climate mitigation states (ch. 5) and further discussing those options. Gough identifies making production more eco-effi-



cient (“green growth”) as the first approach in facing the climate challenge in affluent countries (ch. 6). The second approach includes changing patterns of consumption (ch. 7). The third and most far-reaching approach begins from the argument that even a combination of the first and second approach – improving eco-efficiency (such as the decarbonisation of production) and decarbonising consumption – will not cut greenhouse gases quickly enough to limit global warming (ch. 8). The third approach therefore argues for post-growth: a reduction of absolute consumption levels “so as to move to a steady state” (171). The author concludes that these three strategies could form a three-stage transition from the present day to a future of equitable and sustainable wellbeing.

## Heat – The threat of climate change

Climate change means the cooling and warming of the Earth over a long time period, caused by natural or human influences. The climate has been constantly changing for the last hundreds of thousands of years, e.g. through solar or volcanic activity, and changes in the Earth's atmosphere and biosphere. But the global warming we are facing right now clearly is human-made, caused by a high concentration of carbon dioxide in the Earth's atmosphere, which accelerates the greenhouse effect. Before industrialisation in the 19<sup>th</sup> century, the concentration of carbon dioxide in the atmosphere was never above 280 parts per million (ppm). Latest measurements carried out by the Mauna Loa Observatory in October show a current CO<sub>2</sub> concentration level of 406 ppm, with CO<sub>2</sub> levels continuously rising over the last 150 years. The amount of greenhouse gases in the atmosphere clearly correlates with the steady warming of the Earth (Lane 2018: 1-4). From the beginning of industrialisation to today, the average global temperature has risen by 1°C, mainly caused by human activities such as burning fossil fuels, agriculture and land clearing.

Of nine critical Earth-system processes, each with their own safe

boundaries – climate change, the rate of biodiversity loss, the nitrogen and phosphorus cycles, the stratospheric ozone, ocean acidity, global freshwater supplies, agricultural land availability, atmospheric aerosol loading, and chemical pollution – the first three processes, including climate change, have already exceeded their safe boundaries (Rockström et al. 2009). Gough solely concentrates on the critical process of climate change and highlights its social dimension, following the consensus that “climate change is a ‘threat multiplier’, posing the most immediate, serious and intractable threat to human wellbeing in today’s world” (19). To illustrate this relationship, Gough refers to Kate Raworth’s concept of a lifebelt or doughnut, which depicts the interaction between planetary boundaries and human wellbeing. The nine planetary boundaries make up the outer circle and the social foundations of human wellbeing form the inner boundary (Raworth 2012: 5, 12). Those foundations of human wellbeing such as food, health and education, draw on the Sustainable Development Goals formally accepted by the United Nations General Assembly in 2015.

Among the threats to human wellbeing caused by climate change is the undermining of global food security. Temperate regions will face negative impacts on wheat, rice and maize production. Water resources will decrease and fisheries will be threatened by a redistribution of marine species and a reduction in biodiversity. Changes in temperatures and weather systems will also lead to health issues through heatwaves and fires. Because of changing disease vectors and crop patterns, food- and water-borne diseases will have more impact, especially in developing countries. In urban areas people and ecosystems are likely to suffer from the consequences of heat stress, flooding, air pollution, droughts and water scarcity. Rural areas will face these same problems, as well as changes in agricultural incomes and water access, while those communities with limited access to land and modern agriculture are expected to be most negatively affected (25).

### **Human Need – Sustainable wellbeing as guiding principle**

In order to identify sustainable wellbeing, Ian Gough refers to universal human needs. For the author, the satisfaction of human needs – as opposed to wants – marks the only viable measure for negotiating trade-offs between climate change and human wellbeing. The most basic human needs include social participation, health and autonomy. Intermediate needs are water and nutrition, shelter and energy, a non-threatening environment and work practices, security in childhood, physical and economic security, education, healthcare and significant primary relationships. Those needs are found to be firstly *objective* and secondly *plural* as they cannot be added up or summarised in a single unit of account. A third theoretical feature of needs is the fact that they are *non-substitutable*, meaning that we cannot trade one need for another. Fourth, human needs are *satiabile*: The amount of intermediate needs required to e.g. achieve a given level of health diminishes as their quantity grows. As climate change will progressively impose issues of intergenerational equity, it is of importance to understand needs as *cross-generational*. It is safe to say that there will be people in the future whose basic needs will be the same as ours. And the sixth theoretical feature of needs, in contrast to preferences, is their *sound ethical grounding*: needs come with associated claims of justice, they imply ethical obligations on individuals and social institutions (45-47). Therefore, human needs – regardless if present or future ones – trump present (and future) consumer preferences and wants.

### **Greed – Capitalism and the threat of “business as usual”**

Rather than neoclassical economics, Gough uses political economy as a framework to showcase the interlinkages between economy, climate change and human needs and sees capitalism as the global system driving said relationship. In political economy, governments are seen as central institutions which reflect and shape the distribution of power and resources. Capitalism is portrayed as a system with certain key features, the first being the production of commodities for profit with limitless circulation. Second, capitalism is characterised by the private ownership of the means of production or capital. Furthermore, there is a class of people without property of their own who sell their labour-power for wages. Concerning the latter two features, a system of law recognising legal rights over many kinds of asset has developed as another fundamental element of capitalism.

As the capitalist system has spread over time and space and has steadily driven technological progress, endless economic growth has become a necessary corollary of capitalism. Herein lies the coevolution of capitalism and fossil hydrocarbons: the process of accumulation has been fed through fossil fuels since the late 18<sup>th</sup> century, first by burning coal and later additionally by oil and gas. Following Newell and Paterson, Gough states “the fundamental driver of global warming has been a combination of fossil-based industrialization and global capitalism – carboniferous capitalism” (8).

Global capitalism has led to global inequity: while industrialised countries of the global North,<sup>1</sup> both historically and in the present, contribute disproportionately to global greenhouse gas emissions through fossil fuel use with only limited vulnerability to the effects of the resulting climate change, developing countries of the global South, mostly African and Island states, are most vulnerable to climate change but have contributed little to its genesis. As Althor et al. state, climate change inequity strongly correlates with economic output (2016: 1).

### **The Three-Stage Transition: Green growth, recomposing consumption, post-growth**

Gough’s motivation to outline a three-stage transition process springs from the following circumstances: the global distribution of income is such that the richest 1% of the world have more than the bottom half of the world population,<sup>2</sup> while the consumption-based emissions of these groups are nearly on the same level. On top of the already-existing inequality around the world, global growth in incomes has been highly inequitable for the last 30 years. If we want to eradicate poverty – the first of the Sustainable Development Goals – we cannot rely on the business-as-usual model. In line with Woodward and Simms (2006), Gough argues that “all strategies to eliminate global poverty are untenable unless the poor get a bigger slice of the whole cake – and the cake cannot continue to expand because of global constraints on emissions” (79). Gough concludes that either new forms of redistribution or a shift to an alternative economic pathway is required.

The first stage to an alternative, needs-based economy is “green growth”, which forms the centerpiece of the Paris Agreement (through national approaches, called the Nationally Determined Contributions, NDCs) and marks the only current politically viable strategy for a low-carbon economy. Green growth is a strate-

gy relying on long-term economic benefits flowing from emission mitigation and environmental protection in general (69f.). There are two problems within the green growth strategy: first, even if all countries stayed in line with their NDC the overall emission cuts would still lead to a global warming of around 3.1°C compared to pre-industrial levels (Climate Action Tracker 2018). And secondly, the climate mitigation referred to in the Paris Climate Accord includes unproven technologies like carbon capture and storage (CCS) and the usage of bioenergy – with uncertain social and environmental consequences. Green growth therefore can only be seen as a stepping stone towards a political economy based on needs, sufficiency and redistribution (2).

While green growth prioritises the eco-efficiency of production, it ignores the essential links between patterns of consumption and greenhouse gas emissions. Challenging the ideas of prosperity and consumer sovereignty by advocating cuts in high-carbon luxury consumption is the key of the second stage proposed by Gough. Eco-social policies would include regulating advertising, taxing high-carbon luxuries, rationing carbon at the household level and nationalising certain high-carbon services. On the social level, a capitalist economy restructuring consumption will need to develop three characteristics. The first is *reflexivity*, meaning the ability of a structure, process or set of ideas to change itself in response to reflection on its performance. This would also allow for future generations to develop their own ideas and structures, not bound by the past. The second is a *commitment to prevention*, which would give governments the mandate to pursue preventive economic policies such as the substantial restructuring of financial markets and some nationalisation of investment (196–209). Lastly, the *integration of local and national agency* would allow not only for top-down processes but also for kinds of bottom-up agency – therefore empowering local campaigns and proactive action.

Gough believes that changing patterns consumption would take us a step further towards sustainable wellbeing, but it would still not limit global warming fast enough. The author therefore demands a more radical step: the third and last transition stage would be “post-growth”. The reduction of paid work time and thus absolute levels of incomes, consumption and emissions might be the most realistic policy to achieve a degree of negative growth or degrowth in the richest countries. Moving beyond growth to a steady-state economy goes against the main characteristic of capitalism, but it would erase the dilemma between the capitalist imperative to accumulate and the limits that nature sets. Eco-social policies in this transition stage would also include the expansion of collective ownership of wealth and capital, starting with energy supply – thus dismantling a further defining feature of capitalism: the private ownership of production.

### Critical appraisal

Although post-growth is still considered a highly radical demand, Gough is not afraid to postulate a transition pathway beyond the capitalistic system. With sustainable wellbeing as his guiding principle and an eco-social political economy perspective, Gough proposes a credible transformation process, especially for rich countries, which could actually lead to meeting the 1.5°C limit of global warming and a sustainable future for all.

### Notes

1 The global North is defined as the rich world: capitalist states with OECD membership and the status of Annex I countries of the United Nations Framework Convention on Climate Change (UNFCCC) (Gough 2017: 107).

2 A recent Oxfam study shows that in 2017 82% of worldwide generated wealth went to the richest 1%, while the poorest half saw no increase at all (Oxfam 2018: 2).

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