

# Climate Change: Does Anthropocene science blame all humanity?

Thursday 4 June 2015, by [ANGUS Ian](#) (Date first published: 31 May 2015).

**he charge that Anthropocene scholars blame all of humanity for the actions of a small minority simply doesn't hold water. Ecosocialists need to be positive contributors to Anthropocene discussions, not critics sniping from the sidelines.**

According to Earth System scientists, the Earth has entered a new geological epoch that will be less stable and less hospitable to human life. Because the change is driven by human activity, the proposed name for the new epoch is Anthropocene – from the Greek anthropos, human being.

Recently, some critics have charged that the “Anthropocene narrative” blames humanity as a whole for these changes, ignoring major differences in the nature and extent of environmental change caused by different groups of people. Such concerns are understandable, but overstated – to a considerable degree, they seem to reflect preconceptions about what the Anthropocene concept might mean, rather than serious engagement with the work of the scientists who have defined it.

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It is no secret that some green theorists blame environmental problems on human beings as such. Our species has been labelled a plague, a virus, and a cancer; we've been compared to a swarm of locusts, voraciously consuming everything we see; we're told that people are nature's enemy, so only radical population reduction can prevent disaster. As Murray Bookchin wrote, Malthusian greens blame environmental crises on “a vague species called humanity – as though people of color were equatable with whites, women with men, the Third World with the First, the poor with the rich, and the exploited with their exploiters.” [\[1\]](#)

Given the strength of “blame people” views among some greens, it not surprising that some writers have reacted with suspicion to an epoch named for the anthropos.

Keiran Suckling of the Center for Biological Diversity objects that the name identifies the cause of change as “humanity as a whole, rather than the identifiable power structures most responsible for the geological Anthropocene traces.” [\[2\]](#)

Marxist historian Andreas Malm believes that those who use the word Anthropocene are attributing environmental degradation to “humans acting out their innate predispositions ... [that] some universal trait of the species must be driving the geological epoch that is its own” – and this “lets capitalism off the hook.” [\[3\]](#)

Australian environmentalist Jeremy Baskin warns that “the Anthropocene label tends to universalize and normalize a small portion of humanity as ‘the human of the Anthropocene’. ... Impacts which have been driven by (and largely for the benefit of) a minority are attributed to all of humanity.” [\[4\]](#)

It isn't surprising that such concerns have been raised, nor is it surprising that critics can find

passages that support a people are the problem position: scientists are no more immune to mistaken social views than anyone else.

But what really strikes me is how little support for actual Malthusian policies can be found in scientific literature about the Anthropocene. Population growth is included as one element of the Great Acceleration, which it obviously is, but it isn't identified as the main problem, nor is population reduction promoted as the sine qua non of any effective response to global change. It's noteworthy that population is not one of the nine planetary boundaries that Anthropocene scientists have identified as critical for preventing catastrophic change in the new epoch. [5]

There may be some hardcore Malthusians among Anthropocene scholars, but if so, they have not revealed their views in the scientific discussions to date.

In fact, scientists in the forefront of the Anthropocene project have repeatedly rejected any "all humans are to blame" narrative. The critics seem unaware of passages such as these, in the most authoritative book on the Anthropocene, *Global Change and the Earth System*. [6]

*"An emphasis on the population variable can have the effect of blaming the victims (as in high fertility rates among economically marginal households in the tropical world) for consequences such as tropical deforestation and famine-malnutrition. In fact, modern famine and malnutrition are more closely related to issues of food entitlements and endowments than to population growth."* (p. 96)

*"Population pressure and poverty have often been cited as the primary causes of tropical deforestation. However, a careful analysis of a large number of case studies across the tropics suggests that a more complex array of drivers including market and policy failures and terms of trade and debt are likely influences on the patterns and trajectories of land-use change in the tropics. As noted in one extensive review of the literature, forests fall because it is profitable to someone or some group."* (p. 102)

*"One quarter of the world's population remains in severe poverty. Inequality has been increasing in many countries and between countries and the interactions between poverty and the environment are of local, regional and global significance."* (p. 140)

*"In a world in which the disparity between the wealthy and the poor, both within and between countries, is growing, equity issues are important in any consideration of global environmental management."* (p. 305)

Nor do the critics mention these passages, from a peer-reviewed article that was co-authored by sixteen of the most prominent scientists in Anthropocene studies. [7]

*"The post-2000 increase in growth rates of some non-OECD economies (e.g., China and India) is evident, but the OECD countries still accounted for about 75% of the world's economic activity. On the other hand, the non-OECD countries continue to dominate the trend in population growth. Comparing these two trends demonstrates that consumption in the OECD countries, rather than population growth in the rest of the world, has been the more important driver of change during the Great Acceleration."*

**"The world's wealthy countries account for 80% of the cumulative emissions of CO<sub>2</sub> since 1751; cumulative emissions are important for climate given the long lifetime of CO<sub>2</sub> in the atmosphere. The world's poorest countries with a combined population of about 800 million, have contributed less than 1% of the cumulative emissions."**

Despite such clear statements, the they-blame-all-people accusations have continued. But now there

is a direct response from scientists associated with the International Geosphere-Biosphere Program (IGBP), the global research organization that first defined and named the Anthropocene. Rather than arguing about what was said or not said in past reports and articles, they have taken the high road, by extending their previous work to focus directly on the equity issue.

Their reply addresses what are called the Great Acceleration graphs, first published by the IGBP in 2004. They show twelve socio-economic trends and twelve Earth System trends, from 1750 to 2000. All show gradual growth, then rapid acceleration after 1950. Those iconic graphs have played a critical role in convincing most of the scientists involved that the new geological epoch began in the mid-twentieth century.

Updated versions of those graphs, extending the data to 2010, have now been published in a peer-reviewed journal, *The Anthropocene Review*. The lead author is Will Steffen, the former director of the IGBP who was lead author of the 2004 report in which the graphs first appeared. [8]

No one will be surprised that the updated graphs show further acceleration of the socio-economic and Earth System trends, and no sign of the “decoupling of emissions from either energy use or economic growth” that ecomodernists and other anti-greens like to promise. Much of the article is devoted to reviewing the indicators – how they are defined, what has changed since the previous study, how the graphs relate to debates about dating the Anthropocene, and so on.

But for our discussion, what stands out is the authors’ thoughtful consideration of the fact that the original graphs displayed global totals, and “did not attempt to deconstruct the socio-economic graphs into countries or groups of countries.” They note that this approach has “prompted some sharp criticism from social scientists and humanities scholars” on the grounds that “strong equity issues are masked by considering global aggregates only.”

True Malthusians would have defended their previous approach: as Simon Butler and I showed in *Too Many People?*, globally aggregated numbers that conceal significant regional, gender, national and class differences are the bedrock of populationism’s debating arsenal, and partisans will not abandon them. [9]

Instead, Steffen and his associates have accepted the criticism of the graphs as legitimate, and have gone to substantial effort to separate the socio-economic indicators into three groups: the rich OECD countries, the emerging (BRICS) nations, and the rest of the world. In addition to publishing current versions of the original aggregated graphs, they have added ten graphs that display the socio-economic indicators for the three groups of countries separately. (There was insufficient data for the other two indicators.)

In a section headed “Deconstructing the socio-economic trends: The equity issue,” they draw conclusions from the dis-aggregated graphs.

*“In 2010 the OECD countries accounted for 74% of global GDP but only 18% of the global population. Insofar as the imprint on the Earth System scales with consumption, most of the human imprint on the Earth System is coming from the OECD world. This points to the profound scale of global inequality, which distorts the distribution of the benefits of the Great Acceleration and confounds efforts to deal with its impacts on the Earth System. ...*

*“The Great Acceleration has, until very recently, been almost entirely driven by a small fraction of the human population, those in developed countries.”*

As we’ve seen, similar points have been made in previous reports and articles, but they have now been given much more prominence – moved to center stage, as it were. Steffen and his associates

have clearly shown that they understand the importance of including global inequality as a key factor in any discussion of the causes and effects of Earth's transition to the Great Transition. The claim that Anthropocene scholars in general blame all of humanity for the actions of a small minority simply doesn't hold water.

Of course, ecosocialists would take the dis-aggregation farther, breaking out inequalities not just between but within countries, stressing the fact that one percent of the population owns half of the world's wealth and that inequality is growing at unprecedented rates. An ecosocialist analysis of the Great Acceleration will build on the decisive issues of class and power that are shaping the Anthropocene and will ultimately determine humanity's future.

To be effective, we have to raise that perspective as positive contributors to the Anthropocene discussions, not as critics sniping from the sidelines. Only in that way can we move towards an analysis that combines contemporary Earth System Science with ecological Marxism in the world-saving synthesis that is so desperately needed.

**Ian Angus**

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**P.S.**

\* Climate and Capitalism. May 31, 2015:

<http://climateandcapitalism.com/2015/05/31/does-anthropocene-science-blame-all-humanity/>

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## **Footnotes**

[1] Murray Bookchin. "Social Ecology versus Deep Ecology." (1987) Anarchy Archives.

[2] Kieran Suckling. "Against the Anthropocene." Immanence, July 2014.

[3] Andreas Malm. "The Anthropocene Myth." Jacobin, March 20, 2015.

[4] Jeremy Baskin. The ideology of the Anthropocene? Melbourne Sustainable Society Institute, 2014.

[5] "Planetary Boundaries 2.0 - new and improved." Stockholm Resilience Centre, 2015.

[6] Will Steffen et al., Global Change and the Earth System: A Planet under Pressure. International Geosphere-Biosphere Program, 2004. A pdf of this important book can be downloaded free.

[7] Will Steffen et al. "The Anthropocene: From global change to planetary stewardship." Ambio, November 2011.

[8] Will Steffen et al. "The trajectory of the Anthropocene: The Great Acceleration." The

Anthropocene Review, March 2015. 81-98.

[9] Ian Angus and Simon Butler. Too Many People? Population, Immigration, and the Environmental Crisis. Haymarket Books, 2011  
(<http://www.haymarketbooks.org/pb/Too-Many-People>). See in particular chapter 3, "Dissecting those 'overpopulation' numbers."