

Thoughts about the use of the term 'Anthropocene'

An exchange of letters between Ron Burnett and Jan Visser

Vancouver, 19 July 2018

Dear Jan,

This letter is in lieu of the article that you had requested. I would like to raise some issues in a more informal setting and perhaps this will prove to be useful for your discussions. Let me know if it fits your purpose.

Anthropocene

Over the course of the last month, I have read many of the major pieces written about the concept of the Anthropocene and am struck by the following:

Why are we using a geological marker as a way of historically differentiating between different periods of human history? This issue was brought home to me by the work of Dipesh Chakrabarty and in particular his article entitled: Anthropocene Time, published in *History and Theory* 57, no 1 (March 2018), 5-52. The question is important because geology as a discipline may not provide the best metaphors for understanding climate change.

Given the urgency, nature and politics of climate change and the need to organize broadly across many fronts and in many countries, does this scientific model of geological change help us understand and work towards the political solutions that we need?

The scale of geological time has preoccupied analysts and historians and scientists, including Paul Crutzen who coined the term 'Anthropocene,' because they are trying to signal the enormity of the changes that humans have generated, including fundamentally altering the nature of the climate in all of its complexity. But, scale is the issue.

If geological time is millions of years and human time is counted in the thousands and modernity in centuries, then how can the markers of geological/historical change be evaluated? There are countless articles by humanists who debate when the mess we now find ourselves in started. But, beyond the fact that we need to understand the history of the processes that we have set in motion, how does this research help to solve what is an immediate need?

While it is absolutely true that humans are in the process of destroying this wonderful planet, does the Anthropocene as a concept do anything more than name, admittedly with some degree of intensity, the consequences of human actions?

Over the last two years in particular but going back to 2000 at a minimum, there has been continual debate about when the Anthropocene started. Does this matter? The facts surrounding climate change have been articulated in hundreds of reports and articles and scientifically proven. An argument could be made that we need to understand the history of climate change and this makes sense to me. Further arguments could be made that giving meaning to the term will help accelerate the urgency of additional analysis and efforts to find solutions. It is also important to contextualize climate change as a historical phenomenon.

But, we are dealing with cultural and political issues that need to be communicated quickly and effectively. Do these debates enable communication and learning or further obscure the causes of climate change?

In an article of great importance to which Paul Crutzen contributed, entitled: *The Anthropocene: conceptual and historical perspectives* in *Phil. Trans. R. Soc A* (2011) **369**, 842-867, by Will Steffen, Jacques Grinevald, Paul Crutzen and John McNeill, an assertion is made that the Anthropocene started around 1800 with the advent of the Industrial Revolution. The authors correctly describe the enormous impact humans have had on the climate of the earth. However, they then make the assertion that humans have become a 'geological force' (843) of such enormity that "it rivals some of the great forces of Nature in its impact on the functioning of the Earth system." (843) (The authors use capitals)

Either they have misunderstood or don't know what the term naturalization means in cultural studies, communications studies and anthropology. To naturalize is to create an ahistorical model that makes whatever process being described inevitable. They are inadvertently or deliberately closing the debate. They are painting a picture that precludes political action, scientific research or cultural change from intervening and being successful in stopping or slowing what is happening to the planet.

Paradoxically, Crutzen in particular repeatedly expresses the hope for change, but real, substantial and long-term change cannot be achieved unless humans feel capable of envisioning the outcomes to their engagement with change. The environmental movement made this mistake in the late twentieth century when it described the impact of climate change in apocalyptic terms. Al Gore, notwithstanding the brilliance of the films he made, continued this tradition of fear-mongering, which paradoxically leads to disempowerment because when a problem is too big, people naturally see no solutions to it.

When the comment is made that humans have entered a new geological epoch which they have produced are we not doing the opposite to what we intended? If geology were being used as a metaphor, then I would continue to be concerned, but a little less worried about the conflation of science, outcomes and cultural understanding. To talk in this way, is actually to make it appear as if everything we are experiencing around the climate is governed by a predictable outcome (which is why some scientists are talking about colonizing other planets).

Most of geological time was not influenced by humans, which is why to some degree, the word nature is used to describe processes and outcomes that seem to have no author. This is perhaps the centre of the challenge I have with the use and discussion of the Anthropocene. The conceptual framing around the Anthropocene is looking for the authors of climate change and while we know many of the actors and many of the causes, we also know many of the answers and solutions. There are no mysteries here about what humans have done and are doing and what needs to be done in response.

Given this knowledge, why have humans done so little to slow the acceleration of climate change?

The Anthropocene, if we are to use it all, must be treated as a cultural term or model that will explain the scientific reasoning behind the climate changes we are presently experiencing. It must be used as a means to an end, as a tool of communications and not as an ontologically inevitable outcome to human blindness.

We need new ways of thinking about cultural cognition. We need to understand how to read into and understand the resistance to science and evidential thinking. We also need to recognize that geology as a discipline may not serve that purpose. In fact, what we are missing is scientific reasoning used in a cultural context with enough explanatory power to envision solutions and enough commitment to realize them. Evidential thinking and ensuing actions only work when people see the outcomes to the claims being made. It seems to me to be irrelevant whether we have entered an age of extinction in anthropocenic terms, since by definition we won't be around to see it.

Sincerely,

Ron Burnett

Lienden, 20 July 2018

Dear Ron,

Thank you so much for this thoughtful and valuable contribution.

As you raised the issue of 'fit,' it is well possible that the fit with the Villanova dialogue is not ideal. In fact, I can't at this stage predict about any of the multiple contributions, including my own, what its fit will be. We have to see. I think, though, that there is enough in your 'letter' that makes it well worth to include it among the other 'Thoughts about Learning and Thinking in the Anthropocene.' At this stage

we are obviously in an exploratory mode. In the tradition of brainstorming, all contributions are welcome and considered of equal potential value.

Like you, I also have questions regarding the concept 'Anthropocene.' My concerns have less to do with the suggestion that it is a geological epoch (I don't think it is and the International Union of Geological Sciences has so far rejected this idea as well), but more with the almost exclusive focus that it generates among most users of the term on climatic change. The world system, in my view, is not only defined geologically and atmospherically, but also, for instance, ecologically; biologically, particularly as regards biodiversity and the planetary microbiota; economically; culturally; ethically, and in terms of governance. No doubt, more dimensions can be identified regarding how anthropogenic action impacts vital conditions for sustained intelligent life on planet Earth. Crutzen perhaps popularized the term, but he wasn't the first one to use it and thinking about anthropogenic influence is much older. I already read books about it in the 1950s.

While I agree with you that we need "political solutions," we should not forget that, if things run the right way, politics is made by the people who elect their representatives. And people have the ability to change, usually in co-evolution with cultural change. I thus think we should look at those change processes, in particular at conditions we may together create in our communities and societies that set such change processes in motion and then further facilitate them. How we organize our schools, and the broader context of the learning landscape that lifelong learners navigate, is part of the conditions we should look at.

That said, I hasten to add that the learning landscape should be conceived as far more comprehensive than the landscape of 'things educational.' As the woman who yesterday sold me 2 kg of homegrown cherries from the fertile region between the big rivers that run through the low lands where I currently am remarked: "It's advertising that causes us to misbehave." Indeed, the culture of advertising prompts us to lose the habit of mind that is called 'critical thinking.' It explains why it has become so easy to sway an election simply by spreading trolls through the internet. While Trump and Tsar Putin are problems, the bigger problem are the masses of people who undergird their power, willingly or unwillingly. I'm afraid that in the US it's some 50% of the population that falls into the category of the 'willing.'

My own vision regarding the 'nature vs. culture' issue is that it is an unhelpful distinction. It inherently positions us outside nature whereas we are part of it. Among the many things that must change for human life to sustain now that we have the capacity to eliminate the conditions for its existence is that we must regain harmony. It's the destruction of harmony, as sanctioned by many of the major religions, that has led to the false belief that we are the masters in the natural environment of which we are part.

What do you think?

Warm regards,

Jan Visser

Vancouver, 20 July 2018

Jan

Thanks for the long 'letter.'

You are right about Crutzen, but I was dealing with the 'modern' reappearance of the term in a context of crisis.

The fundamental argument for me centres on the role of scholars who seek debates and terminology that actually misses the point and works against their better interests and stated goals.

The crisis of climate has now reached a level of urgency that we need Communications and Cultural and Political models and actions that will trigger awareness and change. I see the notion of periodization as a distraction from the larger challenge of learning. But I also think that scholars from many disciplines are not taking the risky step of speaking out in public and spending time in real political work to make change happen.

I agree nature vs culture is not helpful, but I was not suggesting that it was. Rather, it is the absence of cultural analysis and absence of knowledge of how to develop models of communications around issues of essential concern that really bothers me. None of the people attending Villanova with you have expertise in these areas. They are all great and the pieces are terrific, but the reality is that we need a completely new "educational" approach that centres on what and how the generation now in their thirties sees the world and how we can be of help to making change happen.

Anyway, thanks again,

love

Ron

Lienden, 20 July 2018

Thanks so much, Ron. While I regret that, through force of circumstance, you will not be able to attend and participate in the Villanova dialogue, I hope that our exchange of thoughts will be helpful to those of us who can and others who, for various reasons, are unable to join as well. You are not alone in being a 'contributor *in absentia*.'

I agree that none of us has the expertise to solve the problems of the Anthropocene and that the voice of those in their thirties is only weakly represented (one 'contributor *in absentia*,' though, is in her twenties, and that may help. It's worth more serious analysis to find out why so many young people can't find funding for making their contributions and how this can be changed.

The complexity of the problems itself requires multiple cross-generational transdisciplinary inputs. We will need to keep this in mind as the work continues.

Much love,

Jan