EDITORIAL

Anthropology and Anthropocene

Prologue

Anthropology is still preoccupied with the geological periods Pleistocene and Holocene. With Pleistocene, because great climatic changes leading to human evolution took place in this period, the ice ages, and pluvial periods, and in the Holocene that was around 7-11,000 years ago, the modern climate began. That's the story as written in the textbooks. Now this story seems to be behind the times.

A brief history

Paul J. Crutzen, a Dutch meteorologist and atmospheric chemist who was awarded Nobel Prize with Mario Molina and Frank Sherwood Rowland in Chemistry in 1995 for their work on atmospheric chemistry and specifically for his efforts in studying the formation and decomposition of atmospheric ozone. In addition to studying the ozone layer and climate change, he popularized the term 'Anthropocene' to describe a proposed new epoch in the Quaternary period when human actions have a drastic effect on the Earth. In an article in *Nature* Crutzen emphatically stated:

For the past three centuries, the effects of humans on the global environment have escalated. Because of these anthropogenic emissions of carbon dioxide, global climate may depart significantly from natural behaviour for many millennia to come. It seems appropriate to assign the term 'Anthropocene' to the present, in many ways human-dominated, geological epoch, supplementing the Holocene — the warm period of the past 10–12 millennia. The Anthropocene could be said to have started in the latter part of the eighteenth century, when analyses of air trapped in polar ice showed the beginning of growing global concentrations of carbon dioxide and methane(Crutzen, 2002:23).

Just two years before the publication of the *Nature* article Crutzen with Eugene F. Stoermer published another article in which they have considered the growing impacts of human

activities on earth and atmosphere and proposed to use the term 'Anthropocene' for the current geological epoch(Crutzen and Stoermer 2000:17).

The latest update on Anthropocene showed that the coining of the term is still plagued with controversy. After 15 years of involvement with a complicated technical process and out of 12 members of a subgroup named International Commission on Stratigraphy voted that the 'Anthropocene' is not a new epoch, which started some 11, 700 years before present. Only four members voted in favour of the term while some members questioned whether the ICS rules were adhered to during the voting process or not. A *Nature* editorial published in March 2024 perceptively concluded:

Measurement matters. It is needed not least so that the world is confident that the Anthropocene's start date and marker are grounded in the broadest consensus of scholarly knowledge. Geologists must quickly resolve their disagreements. At the same time, there is little doubt that the world is in an Anthropocene, as understood by researchers who use the term, and that course correction is needed (Nature 2024:466).

Ideology or science?

Along with measurement, the very coining of the term Anthropocene has also been questioned and even viewed as a myth (Malm, 2016). It is not humanity at large but the capitalists who should be held responsible for the crisis. Some critics also suggested the term 'Capitalocene' rather than 'Anthropocene' (Arons, 2020:35-40). For the critics, the term Anthropocene represents an ideology rather than a scientific concept since it masked global, regional and local inequalities. Thus Andreas Malm and Alf Hornborg in their article 'The geology of mankind? A critique of the Anthropocene narrative' published in *The Anthropocene Review* were emphatic:

If global warming is the outcome of the knowledge of how to light a fire, or some other property of the human species acquired in some distant stage of its evolution, how can we even imagine a dismantling of the fossil economy? Or: 'the Anthropocene' might be a useful concept and narrative for polar bears and amphibians and birds who want to know what species is wreaking such havoc on their habitats, but alas, they lack the capacity to scrutinise and stand up to human actions. Within the human kingdom, on the other hand, species-thinking on climate change is conducive to mystification and political paralysis. It cannot serve as a basis for challenging the vested interests of business-as-usual (Malm and Hornborg 2014:67).

Historian Dipesh Chakrabarty's intervention seems to be relevant here. In his article Chakrabarty argued that with the coming of the Anthropocene (and he assumed the science of

climate change to be right) the classical disciplinary boundary between the natural and social sciences (history included) collapsed. The collapse is not imaginary, it's real.

I quote Chakrabarty:

Biological agents, geological agents—two different names with very different consequences..... Humans are biological agents, both collectively and as individuals.... But we can become geological agents only historically and collectively, that is, when we have reached..... numbers and invented technologies that are on a scale large enough to have an impact on the planet itself (Chakrabarty 2009:2006-07).

About nine years later Chakrabarty delivered the seventh *History and Theory* lecture, and he continued:

The Anthropocene, in one telling, is a story about humans. But it is also, in another telling, a story of which humans are only parts, even small parts, and not always in charge. How to inhabit this second Anthropocene so as to bring the geological into human modes of dwelling are questions that remain (Chakrabarty, 2018:29).

The entry of anthropology

Under this scenario the anthropologists entered the arena of Anthropocene via studies on climate change and the scenario is changing and the time has come to think of Anthropology and Anthropocene NOT Anthropocene and Anthropology!

As early as 2015 Amelia Moore, a Ph.D. in Sociocultural Anthropology from the University of California Berkeley wrote an article in the prestigious *Journal of the Royal Anthropological Institute* that Anthropocene is not only a new label 'given by earth scientists to the current epoch of unprecedented anthropogenic planetary change' but it is also a 'political label' designed to call attention to this change and evolving notions of agency and responsibility in contemporary life(Moore, 2015:27-46).

In an article entitled 'Contribution of anthropology to the study of climate change' published in *Nature*, 12 authors summarized:

Anthropology's in-depth fieldwork methodology, long engagement in questions of society–environment interactions and broad, holistic view of society yields valuable insights into the science, impacts and policy of climate change. Yet the discipline's voice in climate change debates has remained a relatively marginal one until now (Barnes *et.al.*, 2013:541).

The authors without mentioning the term 'Anthropocene' in the aforementioned article identified 'three key ways' about how anthropological research can enrich the current understandings on climate change. For the anthropologists it is the societal dynamics, which is no less important than climate change itself:

Societal dynamics, as drivers of change, always interact with, and often outweigh, climate change — an issue that needs recognition for the success of public policies (Ibid).

The question is how does the discipline of Anthropology look at Anthropocene in the context of the impact of *Homo sapiens sapiens* on our earth? An article published in the authoritative *Annual Review of Anthropology* in 2020 outlined how the concept of Anthropocene has produced contradictory yet promising paths for anthropology to an expanding horizon of interdisciplinary collaborative research:

It may be better to think of the Anthropocene not as a historical epoch defined by geologists but as a problem that is pulling anthropologists into new forms of noticing and analysis and into experiments and collaborations beyond anthropology(Mathews, 2020: 77).

The article, however, missed one important paper by Chris Hann published in *European Journal* of Social Theory in 2016 entitled "The Anthropocene and anthropology: micro and macro perspectives" in which Hann after recognizing 'the lack of consensus on Anthropocene' tried to comprehend the social preconditions of Anthropocene in a holistic fashion. He followed Jack Goody and traced how the urban revolutions of the Bronze Age united Eurasia through the diffusion of new forms of economy, polity and cosmology. Hann insisted that anthropologists should collaborate with archaeologists and global historians to grasp the *social preconditions* for the emergence of the Anthropocene (Hann, 2016:183-196 and also see Goody, 1996 and 2006).

The penultimate section in the *Ann. Review of Anthropology* article entitled 'Recent Anthropocene ethnographies' is quite interesting. This section enumerated a good number of ethnographies around Anthropocene published during the first two decades of the 21st century (Ibid: 74-76). Whether Anthropocene is a geological epoch or not, the fact remains that it is going to involve anthropologists into new forms of thinking and experiments in the future. Sooner the better.

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