



A Critical Intersection Of *The Anthropocene*, The 'Human' And The 'Non-Human'

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Research Question- Can theoretical underpinnings of Anthropocene, in the current context of modernity, diminish the boundaries between human and non-human especially with respect to how we culturally perceive and acknowledge the 'non-human'?

Abstract: The concept of *Anthropocene* is product of a consciousness which is incidental to the vigorous array of data indicating a key transformation in the Earth, recorded as changes to strata, similar to signatures recorded in the geological past, refashioning the relation between 'human' and 'non-human' and in effect intertwining them so that one cannot change without affecting the other. The fact that human activity is emerging as a decisive force in dictating the climatic systems of the planet correlates with the wider implications of the diminishing boundaries between 'human' and 'non-human'. The victims of colonization themselves became colonizers of the 'non-human' under the drive of 'modernity' that radiated from the West. As a consequence, the 'non-human' agency seeks expression that makes the 'human' rethink and reevaluate the arrogation of conscience and will only to itself. The theoretical underpinnings of *Anthropocene*, in the current context of 'modernity', serve to diminish the boundaries between the 'human' and the 'non-human', transforming both how we perceive and acknowledge them.

Introduction

The profoundly admired conceptual foundations of *Anthropocene*, a 'purported' geological epoch bereft of a formal recognition on the coveted Geological Time Scale (GTS), is a powerful tool to provide deep insights into the socio-cultural and philosophical underpinnings of the society. The lessons that underlie the birth of a concept like *Anthropocene* aims to highlight the subjugation of climate systems of the Earth to human activity or to the central role that man assumes post-Industrial Revolution while *Holocene* slowly relegates itself to its deathbed. The anthropocentric culture of 'modernity' has left an indelible footprint on the canvasses of the planet, though contemporary stratigraphic conventions fail to account for its penetration into the non-human Earth. Organizations claiming a birthright over intellectual geological inquiries recognize, though not commemorate, the role of *Anthropocene* as a social and economic project of human awakening when in reality the theoretical underpinnings of *Anthropocene* transcend the 'human', serving to diminish the explicit boundaries between the 'human' and the 'non-human', especially with regards to cultural perception and acknowledgement of the 'non-human' abounding us.

The Birth of the *Anthropocene* through conscience of the ‘Human’

The capabilities of contemporary human civilization to bring about drastic changes in the Earth's climatic systems is an open secret. Historically, humans have consistently failed to acknowledge their collusion in generating a global climate crisis that today manifests itself in the form of a moral dilemma in the minds of the human (Ghosh). Of the earliest hominid tribes, the *Homo sapiens* were the most successful of all; from the Savannahs of Africa, they spread across continents and flourished. Their population sprawled to a staggering 8.2 billion as of today. In fact, the *Great Acceleration* or the second half of 20th Century witnessed a massive population growth. Human fecundity and consequent consumption of the Earth's natural resources has brought about great changes relative to the pre-human planet. Pre-industrial humans, still a long way from developing the contemporary civilization that we know today, nevertheless showed some early signs of accessing the very energy-intensive fossil fuel on which modern civilizations stand. The rapid spread of Western consumption-centric culture in the post-war period of *Great Acceleration* was catalysed by cheap energy and increased international financial co-operation (Williams and Crutzen). The demand for food and energy has been a primary stimulus of environmental change. The invention of the Haber–Bosch Process allowed humans to generate nitrogen for intensifying agriculture when this was previously the characteristic of some nitrifying bacteria. Currently the anthropogenic energy demand is satisfied primarily by finite carbon-based fuels that were derived from solar energy, sometimes termed ‘fossilised sunlight’ (Williams and Crutzen). Furthermore, biofuel productions from crops have increased the prices of grains; this could potentially expose today's humans to global food shortage. The provision of food and energy for the humans over the past 200 years has elicited quick increase in the global concentrations of long-lived greenhouse gases on scales normally associated with 100 000-year climate cycles (Williams and Crutzen). On an alarming note, the ocean and the atmosphere exchange massive quantities of carbon dioxide as part of the global carbon cycle. However, since the Industrial Revolution a significant anthropogenic carbon dioxide flux from fossil fuel usage has been added to the natural flux, leading to the increases in atmospheric mixing ratios (Williams and Crutzen). These discussions help us discern that humankind is emerging out of *Holocene*, into a new planetary era noted by humankind's activities—the *Anthropocene*. Interestingly the notion that humankind has changed the world is not new. Over a century ago, terms such as the *Anthropozoic*, *Psychozoic*, and *Noosphere*, were conceived to denote the idea of humans as agents of global change, though these conscious ideas received short shrift in the geological community, chiefly because it entailed a constant conceptual traffic between *World* (human) history and *Earth* (non-human) history. The fact that the concept of *Anthropocene* was not relegated to footnotes of history underline the dawning realization that human activity was indeed transforming the Earth on a scale comparable to the major events of the past (Crutzen, Steffen and Williams). Of the several “geological terms” that arose in 20th and 21st centuries to appreciate a human driven environmental scene—the *Anthrocene* of Andrew Revkin, the *Homogenocene* of John Curnutt and the *Myxocene* of Daniel Pauly—the term *Anthropocene* was caught on, found to be developed independently by Eugene Stoermer and Paul Crutzen (Crutzen and Stoermer).

Implications of the *Anthropocene* for the ‘Human’ and the ‘Non-Human’

Anthropogenic impacts on the non-human are documented in changing climatic systems of the planet, which is a reemphasis on the central role of mankind in geology which will remain a major force for many millennia (Crutzen and Stoermer). Scholars today are grappling with the challenges posed by climate change and global warming during the *Anthropocene*, and that experience may provide fresh perspectives for reconsidering how scholars can tell the history of mankind's domination over its non-human neighbours. In *The Great Derangement*, Amitav Ghosh, a scholar himself, discusses a similar alienation by the Eurocentric approaches of global warming of the Asia's centrality to climate crisis (Ghosh), perhaps mirroring a ‘non-human’ Asia's subjugation to a ‘human’ Europe. Ghosh wittily employs the prism of coloniality and capitalism to view the *Anthropocene*. The purported ‘modernity’ of colonizers has made the climate crisis a product of a cultural crisis (Ghosh). Whether it be fascination of

vehicles and appliances or replacement of forests to create green lawns nurturing a vine with desalinated water; these represent the fundamental problem in the culture, both inherently present and imposed upon, linked with wider histories of imperialism. This critically underlines how historical ignorance of human of the non-human is a result of former being drawn into modes of concealment that prevent them from recognizing the realities of their own plight (Ghosh). To evaluate the fundamental underpinnings of the *Anthropocene*, it would be found to have had two lives: a scientific life involving measurements and debates among qualified scientists, and a more popular life as a moral-political issue (Chakroborty). The *Anthropocene* was seen mainly as a measure of human impact, eventually causing the impact that ushered in a new period in the planet's history, the focus remained on the strength and its wielder. This highlights that this fundamental moral-political issue must manifest itself in some form; it does that in thinning the boundaries between the 'human' and the 'non-human'. Such thinning is facilitated by the *recognition* of the 'non-human' around us which is triggered by the inherent uncanniness of and the menace wreaked by such 'non-human' entities (Ghosh). The proximity to such non-human interlocutors features in Ghosh's concern surrounding the 'non-human', which share the "will, thought and consciousness" (Ghosh) of the 'human'. Indeed, the boundaries that demarcate are made vague, blurry and ambiguous by the very fact how such will and consciousness could effectively translate and even restrict the human agency; the alarm that is raised in this context of translation is the sheer demonstration of the 'non-human' agency. Fascinatingly, such 'recognition' of agency is coincidental with the birth of the common consciousness in the form of the *Anthropocene*.

The 'Human' and 'Non-Human' of the *Anthropocene* in *The Great Derangement*

It is the moral side of the Anthropocene debate- the pertinent questions of responsibility- that compels us to translate ideas deeply rooted in the *Earth* history to the language of *World* history (Chakroborty). Perhaps what shapes our perception and acknowledgement of the 'non-human' is embedded in, as Chakroborty argues, humans as a geophysical force. Going further, historian Jason Moore argues that the *Anthropocene* narrative indicates that the origins of the modern world lie in England (Moore). This potentially underlines how the *Anthropocene*'s metaphorical undertones could effectively trigger normative and ethical thinking (Chakroborty). Amitav Ghosh develops a metaphorical understanding of the *Anthropocene* to put forward the cultural perception, communication and reception of the 'non-human' around us. Ghosh's narrative in *The Great Derangement* stresses on the intervention of Earth to revise the values and thoughts that arrogates all agency to the 'human' while denying all of it to the 'non-human' (Ghosh). Amitav Ghosh hinges no words in expressing his disillusionment with *Cartesian Dualism* which propagates ideas on similar lines. Despite being a work of literary criticism, *The Great Derangement* attempts to supplant individual preferences with a sense of collectiveness, modelling the acknowledgement of the climate crisis as a predicament the 'human' is faced with. Carefully sculpting the diabolical traits of modernity, Ghosh envisages "time" as a "jealous deity" in the context of its determination of traits of "modernity" (Ghosh), that is on a relentless march of destroying man's kinship with the 'non-human'. In the decline of the intimacy between literature and sciences, Ghosh views it as a testimony to the suppression of the 'non-human' agency. Ghosh makes it clear that to dwell any further into the earth's reassertion of 'non-human' agency, one must investigate into the place of the 'non-human' in modern novel. The thickening lines of demarcation drawn by the idea of 'modernity' is reflected in widening gaps between science fiction and culture. Harboring a distaste for the ideals of Eurocentric ideas of 'modernity', Ghosh recognizes Asia's centrality to the climate crisis. Intriguingly, the concept of the *Anthropocene* serves to not let us escape from the moral pull of world history, especially in a world system created by the European empires (Chakroborty). The *Anthropocene* is often interpreted as an "impact of the meeting of Old and New World human populations" (Lewis and Maslin), which we call as 'imperialism'. The consequence of such a meet was an awareness of the uncanny effects of climate change as 'humans' embraced 'modernity', that drew literature and arts into "modes of concealment" (Ghosh). Such a conceptualization of the *Anthropocene* accurately serves to describe a picture of the 'human' made to *recognize*, despite an already existing awareness, the 'non-human'. The Asian centrality to global warming is reflected in the 'non-human' interventions in areas like the Bengal

Delta, the Irrawaddy, the Mekong and the Indus delta; rising ocean levels and storms have displaced millions of people over a very short course of history. Floods in Bihar and warming of the regions where rivers that sustain Tibet and China origin are manifestations of idea of the *Anthropocene*.

Conclusion

The above discussions demonstrate that imperialism and colonialism, with their roots embedded in Eurocentric ideas of 'modernity' and a conscious denial of agency to 'non-human' had a cumulative effect on birth of a phenomenon in the form of the *Anthropocene*. The climate crisis, which lies at the heart of these discussions. The ignorance of 'human' of the 'non-human' has resulted in the latter reasserting itself, leading to a renewed awareness of the elements of agency and consciousness which transcend the 'human', and diminish the boundaries between 'human' and 'non-human'.

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