

The Anthropocene and the Indian philosophies: some perspectives

Paulo Nuno Martins*

Keywords: Anthropocene, Indian philosophies, Sustainable development goals (SDG).

Abstract

The Anthropocene is a term used to describe the latest geological period in Earth's history, when human activities have begun to have a global impact on Earth life. In this regard, some contemporary Indian philosophers have defended that human beings need to become self-awareness of their personal choices, if they want to build a sustainable future for next generations, as described in “Sustainable Development Goals” (SDG) of the United Nations.

1. Introduction

Our planet Earth has a history of about 4.5 billion years, but civilization as we know it today, there is only 8000 years old. In this regard, William Ruddiman [1] suggests that the origin of the Anthropocene (from Greek words *anthropo*(human) and *ceno* (new)) or "Early Anthropocene" began approximately 8000 years ago when the human beings have spread across several continents, developing agriculture and animal husbandry. This period is usually referred to as the Holocene by geologists [2]. During this period, human populations began to increase, by which many of the impact processes that are taking place at present on Earth were already happening during this period, although on a much smaller scale. Later, in the 18th century, with the Industrial Revolution and, in the 19th century, with the burning of coal, oil and natural gas use, enormous progress emerged in mankind, but the root of the Anthropocene problem worsened.

*Interuniversity Center for, History of Science and Technology, New University of Lisbon, Campus of Caparica, Building VII, Floor 2, 2829-516 Caparica, Portugal

In fact, the excessive use of natural resources, such as drinking water [3], fossil fuels, which are finite, raised many issues that need to be addressed, particularly because it is foreseen an increase of the world population in the coming decades.

To study this issue, a group of scientists founded a group called *Future Earth*[4] in order to find solutions that might lead to long-term sustainability of the Earth life. Moreover, the Anthropocene has raised several questions (not just technical issues), such as species extinction (such as, the human), climate change which have required several skills in the social sciences and humanities, particularly in philosophy.

In this sense, the Indian philosophies [5] that address some topics related to “self-awareness”, “responsibility in personal choice”, among others, might be very useful in order to find a transdisciplinary approach (scientific and humanistic) to the Anthropocene theme [6], [7].

2. The Anthropocene and the Indian philosophies: some perspectives

In historical terms, it was the biologist Eugene Stoermer who started using the term Anthropocene, although it was the chemist Paul Crutzen that popularized it. Stoermer wrote: «*I started to use the term Anthropocene, in early 1980, but I never formalized it until to be contacted by Paul*» [8]. In fact, the term was first used, in scientific terms, in a publication written by Crutzen and Stoermer[9].

In scientific terms, the Anthropocene seeks to describe the deep changes that the planet Earth displays currently due to human impact on it. Indeed, most experts agree that human activities have accelerated the rate of extinction of several species. For example, the algae biomass and phytoplankton has decreased substantially in the oceans of the Earth [10]. Moreover, a decline in the diversity of fauna on the planet, which lived in the forests and pastures that were used for commercial purposes, has also been occurred in the Anthropocene period [11]. In fact, huge areas of different plant species have been degraded to plantations of one or a few species of plants, due to its great economic value to the developed countries [12]. In this regard, the destruction of forests, along with the increased level of CO₂ concentration, has

contributed to global warming which has contributed to deep changes in the biological processes that take place on Earth [13].

In philosophical terms, the Anthropocene has raised some questions about the “purpose” of mankind on Earth. In fact, the concept of the Anthropocene, in addition to a growing interest by scientific community, has also received particular attention by the humanistic community, such as philosophers. In this regard, I should mention some perspectives of contemporary Indian philosophers who have defended new approaches to the problems that Anthropocene has raised and need to be solved by human beings themselves. For example, the Indian philosopher Jiddu Krisnamurti [14] argued that the human being has a central role in the Earth's evolution, both for good and for evil, particularly at the scientific and technological level. Indeed, the internet has allowed the globalization of several human races (which is good), but the Hiroshima nuclear bomb destroyed thousands of humans in a matter of seconds (which was bad). Thus, Krisnamurti in conversation with Bohm defended the urgent need of the human being to become self-awareness of their personal choices (for example, through meditation) if they want to build a sustainable future for next generations.

Another Indian philosopher, Sri Aurobindo Ghose [15] also claimed that technological development must be accompanied by a spiritual development of the human being, in order to become "Egoless". Then, the Anthropocene might be seen as a reflection of the inner change that human beings need to undergo in order to build a sustainable future for all living beings on Earth. Moreover, the Indian philosopher Dada Lekraj (known as Brahma Baba) [16] also defended the need for human beings to develop the values of solidarity, particularly in the use of the natural resources available in Nature (which are finite) in order to achieve a global improvement of all human beings (and not only part of the world population- the so-called developed countries) and of all the living beings that inhabit on the Earth. In this regard, the Indian philosopher Narendranath Datta (known as Swami Vivekananda) [17] argued that the service to God could be accomplished through altruistic service to other human beings on Earth. Thus, even for those who have a religious vocation (such as priests, nuns, monks) do not need to be exclusively "enclosed" in a convent to "find" God for He manifests Himself through each of the creatures that live in Earth. One example is Mother Teresa of Calcutta (naturalized as an Indian citizen) who through her work of service to the poor met Christ in her life.

Furthermore, the Indian philosopher Mukunda Lal Ghosh (known as Paramahansa Yogananda) [18] advocated that peace on Earth and well-being among all peoples and nations was imperative for a sustainable future of planet Earth. In this sense, each people with their particular culture (religion, language, customs) should respect and help the culture of other different peoples, since each human being has a particular role to play in the Divine Plan for the Earth (Unity in multiplicity). One example is Mata Amritanandamayi or Ammachi (an Indian woman) who helps the victims of natural disasters (cyclones, tsunamis, earthquakes) whatever the country of origin. In this regard, Bhagavan Sri Ramana Maharshi [19] who influenced many of the philosophers referred to above, taught that the spiritual instructions to uplift the people from suffering depends “on customs and cultural roots (read “temperament”) and spiritual maturity of the individual. There can be no mass instruction”. He claimed that Fate and Freewill are ever existent. He taught that to “change” destiny (the result of past actions) it is necessary to cultivate good "karma" (in Sanskrit "action") and deep "bhakti" (in Sanskrit "devotion"). These two practices together led to the true "path of spiritual wisdom" (in Sanskrit "jnana") and natural happiness.

3. Conclusions

The emergence of the Anthropocene, as a new geological period on Earth, shows us that the current changes on Earth made by mankind are very evident [20]. This view is shared by several scientists who believe that the first phase of the Anthropocene (from 1800 to 1950) corresponded to the Industrial Era, while the second phase (from 1950 to 2015), called the «Great Acceleration» [21], was characterized by an increase in human population, with an exacerbation of social inequality, among different human cultures. We are at the beginning of the third phase of the Anthropocene (since 2015) in which humanity is confronted with the need to make great choices (individual and collective), so as to build a sustainable future for next generations. As suggested by Indian philosophers, the Anthropocene could be a period of great opportunity in the history of mankind, since human beings wish to use science and technology as a tool for the collective good of all the several species that inhabit the Earth. For example, maintain and preserve the forest (such as Amazonia) as a primary source of oxygen for the planet Earth. Try to use clean energy, such as wind or solar power as an alternative

to the use of fossils fuels. This was proposed in the "Paris Agreement" [22], in 2015, under the United Nations Framework Convention on Climate Change (acronym UNFCCC), which regulates the measures to reduce CO₂ emissions from 2020, and has a main objective of being "a historical turning point" in the goal to reduce global warming. This agreement came following the "Stockholm conference", in 1972, the "Montreal Protocol", in 1987, the "Rio de Janeiro Protocol", in 1992, and the "Kyoto Protocol" in 1997. This Agreement has led to the suggestion that only through a real effort on changing personal values of the mankind, the future of the Earth can be sustainable [23]. With these concerns in mind [24], the United Nations established the so-called «Sustainable Development Goals (SDG)» [25], consisting of a set of 17 goals, agreed by the 193-member countries of the United Nations, and with a term of realization until 31st December 2030.

These 17 goals of the SDG are: 1) End poverty; 2) End hunger; 3) Ensure healthy lives for all at all ages; 4) Ensure inclusive and quality education; 5) Achieve gender equality; 6) Ensure clean water and sanitation; 7) Ensure clean energy; 8) Promote decent work and economic growth; 9) Promote industrialization, innovation and resilient infrastructure; 10) Reduce inequalities among countries; 11) Develop sustainable cities and communities; 12) Ensure responsible consumption and production; 13) Action to combat climate change; 14) Conserve marine resources; 15) Conserve terrestrial ecosystems; 16) Promote peaceful and inclusive societies; 17) Revitalize the Global Partnerships for sustainable Development.

References

- [1] Ruddiman W.F. 2013. The Anthropocene. *The Annual Review of Earth and Planetary Sciences*, 41(1): 45-68.
- [2] Kirch P.V. 2005. The Holocene record. *Annual Review of Environment and Resources*, 30 (1): 409-440. 2005.
- [3] Douglas I., Hodgson R., Lawson N. 2002. Industry, environment and health through 200 years in Manchester. *Ecological Economics*, 41(2): 235-255.
- [4] Available at: <http://www.futureearth.org>.
- [5] Dasgupta S. 1997. *A History of Indian Philosophy*. Motilal Banarsidass. Volume I.

- [6] Toivanen T., Kummaa K., Majava A. et al. 2017. The many Anthropocenes: A transdisciplinary challenge for the Anthropocene research. *The Anthropocene Review*, 4(3): 183-198.
- [7] Rowland S. 2017. Against Anthropocene: Transdisciplinary and Dionysus in JunguianEcocriticism. *Revue Internationale de Philosophie*, 282 (4): 401-414.
- [8] Steffen W., Grinevald J., Crutzen P., McNeil J. 2011. The Anthropocene: conceptual and historical perspectives. *Phil. Trans. R. Soc. A.*, 369(1): 234-237.
- [9] Crutzen P.J., Stoermer E.F. 2000. The «Anthropocene». *Global Change Newsletter*, 41(1): 17-18.
- [10] Bradbury R. 2012. A World without Coral Reefs. *The New York Times*, 22 July.
- [11] Samways M. 1999. Translocating fauna to foreign lands: here comes the Homogenocene. *Journal of Insect Conservation*, 3(2): 65-66.
- [12] Steffen W., Grinevald J., Crutzen P., McNeill J. 2011. The Anthropocene: Conceptual and Historical perspectives. *Philosophical Transactions of the Royal Society*, 369(1938): 842-867.
- [13] Revkin A.C. 1992. *Global Warming: Understanding the Forecast*. Abbeville Press.
- [14] Krisnamurti J., Bohm D. 1986. *The Future of Humanity: A conversation*. Harpercollins.
- [15] Aurobindo S. 2005. *The Life Divine*. Sri Aurobindo Ashram Press.
- [16] Jagdish B.K. 1984. *A brief biography of Brahma Baba*. Brahma Kumaris World Spiritual University.
- [17] Vivekananda S. 2012. *Speeches and Writings of Swami Vivekananda: a comprehensive collection*. Forgotten Books.
- [18] Yogananda P. 1946. *Autobiography of a Yogi*. Philosophical Library.
- [19] Osborne A. 2006. *Ramana Maharshi and the path of Self-knowledge*. Sri Ramanasramam.
- [20] Zalasiewicz J., Williams M., Steffen W., Crutzen P. 2010. Response to «The Anthropocene force us to reconsider adaptationist models of human-environment interactions». *Environmental Science Technology*, 44(16): 1002-1008.
- [21] Steffen W., Broadgate W., Deutsch L. et al. 2015. The Trajectory of the Anthropocene: The Great Acceleration. *The Anthropocene Review*, 2(1): 81-98.
- [22] Available at: <https://unfccc.int/resource/docs/2015/cop21/eng/109.pdf>.

[23] Steffen W., CrutzenP., McNeill J. 2007. The Anthropocene: Are Humans Now Overwhelming the Great Forces of Nature. *Ambio*, 36(8): 614-621.

[24] Tickell C. 2011. Societal Responses to the Anthropocene. *Philosophical Transactions of the Royal Society*, 369(1): 45-55.

[25] Available at: <https://sustainabledevelopment.un.org> or
<https://unstats.un.org/sdgs>.