General Introduction to Environmental Humanities in India
The Ecocritical Discourse in Hindu Literature

Stefano Beggiora
Università Ca' Foscari Venezia, Italia

Abstract   The article offers a general overview of the ecological debate and Environmental Humanities in India. After an introduction on the legacy of Gandhian ecological thought and contemporary literature, the essay focuses on the most discussed themes of the Indian classical tradition, with particular references to sacred texts (Vedas, Puranas, the epics). The sum of this knowledge is placed on the recursive perspective of Indian time: as *yugas* change, new structures of social life arise, reformulating society and its environment in a more holistic and sustainable way. This would be possible without ever denying the responsibility we all have in maintaining that personal empathy towards the environment that is reflected in Indian classical texts.

Keywords   Environmental Humanities. India. South Asia. Forest. Environmentalism. Indian literature. Anthropocene.

Summary   1 The Background of the Ecological Debate in India. – 2 From Banyan to Blue Antelope: The Mythical Hindu Ritual Universe. – 3 The Enigma of the Khāṇḍava Forest and Animal Empathy. – 4 Is Kali-yuga the Anthropocene? – 5 Conclusions: A Recursive Fire.

1   The Background of the Ecological Debate in India

In terms of eco-critical debate and more generally in Environmental Humanities, the Indian Subcontinent has been a very lively scenario in recent decades. Various perspectives ranging through the fields of the so-called environmental literature, environmental philosophy, environmental history, science and technology studies, and environmental anthropology are evident here too from the emergence of all the intrinsic critical aspects of the Anthropocene: hence the concerns for climate change, emissions of greenhouse gases, global pollution or, more generally, any imbalance in the ecological field caused by crossing that thin shadow line constituting an irreversible exploitation of the territory. In this sense, India is particularly interesting since it is a young nation, in full economic, industrial and infrastructural development, but which is placed in a strategic position in the Asian quadrant both in geopolitical terms and for the immense size of its resources – largely untapped yet.

In reality, a certain ecological discourse is well known from the years leading up to independence. A certain part of India considers its ecologism today the fruit of Gandhian economic thought. Mahātmā Gandhi (1869-1948) is certainly known for his *satyāgraha* campaigns, non-collaborationism and socio-economic self-sufficiency, which aimed to put the British imperial economic system in check, also through the boycott of English and foreign products. This system however was a kind of global economy for the Commonwealth in colonial times. But behind this there was a substantial awareness that the industrial revolution, technological progress (European in this case), had contributed to the subjugation of poorer countries in this sense. The Gandhian ideal was therefore essentially based on the observation of the socio-economic equilibrium of the village, hoping for a possible return to that. The Indian village had always been a sort of paradigm of the real Indian social fabric, with exceptions of course, but at least it was so for what concerns the agricultural hinterland (Fisher 2018, 135 ff.; Shinn 2000, 236). In the village, a gradually disappearing reality indeed in the late colonial period, there was a delicate balance of subsistence, a division of labour, the enhancement – if not the centrality – of the female role, an equilibrium with the surrounding environment. The colonial Raj would therefore have uprooted this ancient asset of values, replacing it with the introduction of monocultures, control over raw materials, exploitation of resources, army implementation, and the imposition of public finance through a pachydermic bureaucracy. But above all from this perspective, emphasising industrial development, the paradox is that man's work would have been turned into labour, while the women's work, fundamental in the economic structure of the village, was devalued, as it could not be monetised. It is also interesting to note that

the return to a village economy advocated by the Mahātmā was not shared by everyone in India, especially in a period in which Indian politicians, writers, intellectuals read in technological progress, and in particular in the development of heavy industry, the way to development, modernity and social well-being. What for many remains a utopian vision, a sort of decadent Gandhian romanticism, however at the dawn of independence it becomes part of the so-called 'four pillars' of Indian economic thought.[1] It is also true that apparently, among the various disciplines, in the 1950s the modernist vision took over, inspired by the Soviet model of the first prime minister Jawaharlal Nehru (1889-1964). But it should also be considered that various ideals of financial management that at the dawn of independence were sketched at an embryonic level, sooner or later, in the following decades will be largely re-evaluated and integrated into the new routes of Indian economic policy (Boillot 2009). It must also be clarified that that return, advocated by Gandhi, to the idyllic dimension of the village basically consisted in imagining a society that was all in all simple but aware that its subsistence would be based on consumer goods and therefore on agriculture in the first place. Based on this premise, the principle that today is defined as sustainability, or more generally as sustainable economy, based on the resources of the territory, is developed. However Gandhi would seem not to have had time to articulate a complete philosophy in this sense, due to the major events resulting from the political transition at the end of the Second World War and above all because of his own murder. But the work of a lifetime, in the ecological sense of the term, would have been collected by Joseph Chelladurai Kumarappa (1892-1960) an activist, faithful collaborator of the Mahātmā, who was considered the custodian of his economic thought, as well as the one who contributed to articulate and expand the doctrine of non-violence (which we will discuss below) and the environmentalism of his master. Considering that child depends on the mother like the human being depends on subsistence agriculture, he developed that concept of 'maternal principle' that was based on general principles such as far-sightedness, care for others and respect for Nature (Kumarappa 1951).[2] The discourse is interesting since it forms the basis of suc-

---

[1]   At the time of Independence Gandhi's vision was opposed to that of Nehru inspired to a certain extent by the Soviet model and protectionism. In addition to these, there was a communist model looking at the countryside with a perspective not so far from the Maoist China, and the fourth proposal consisted of the famous Bombay plan, which in short can be defined as a capitalist model inspired by eight great Indian industrialists.

[2]   The classic example is the Chipko movement of the 1970s against deforestation in today's Uttarakhand region. The village protest culminated in the predominance of female participation, so much so that women hugging trees have become the symbol of the ecological movement of those years (Guha 2000).

cessive environmental movements in India, but also of a large part of Indian ecological feminism.

In fact, even during the British Raj, there are historical episodes in which the British seem to be aware of the importance of Indian ecosystems and above all of the preservation of forests as a resource (Bandopadhyay 2010; Guha 1983). The complex set of laws on the protection of this heritage, however, impacted with a more general reality consisting of exploitation of the social fabric of the territory, land expropriation, land displacement and other aberrations of the period of colonial rule. But even before the long wave of postcolonial environmentalism closer to contemporaneity (Kochar, Khan 2021), some authors had highlighted the ancestral relationship between man and nature on the child-mother model, in particular through the social novel where once again the complexity of the village was the real protagonist of the story. In Hindi literature, for example, I could mention Dhanpat Rai 'Premchand' (1880-1936) with his literary social realism, or Phanishwar Nath 'Renu' (1921-1977) who, through the social novel focused on the village, denounced the conditions of backwardness of the countryside, the relative harsh living conditions, the existential dramas, and the dark side of the caste system. However, the set of festive voices, the dimension of collective participation in a sort of folkloric wealth, the songs, the hymns, and the rites as a whole translated an ancestral consubstantiality of the human community of the village with its surrounding territory (Wesser 2021). Like the baby who does not perceive the difference between his body and that of the mother, in the same way the Indian village boundary can be metonymically understood as the womb of the mother, for which the community has a deep sensory bond, even more than affective.

I cannot say, right now, if Gandhi was referring to authors of his time or if they were inspired by him, probably both aspects are true, however it is important to consider the crucial historical moment in which this debate develops. It is a time of extreme fervour in which intellectuals and social thinkers strive to imagine an ideal future society: it is a time in which any future configuration seems to be possible. With independence, a new nation is born and in the ongoing processes of state making and nation building it is now possible to find an ecological root that will perhaps not be the prerequisite, but at least the background, of a contemporary debate on Environmental Humanities.

Coming back to eco-feminism, about India it is impossible not to mention Vandana Shiva, who is an Indian scholar today renowned in the world for her environmental campaigns, and the many writings on sustainable agriculture and against globalisation (Mies et al. 2014; Shiva 1988). On the other hand, there are many Indian thinkers today who have animated the global debate on environmentalism; these are journalists and activists who fight for the environment and hu-

man rights (Palagummi Sainath, Bulu Imam, Anupam Mishra, Satish Kumar); zoologists and botanists (Valmik Thapar, Saroj Raj Choudhury, Jayanta Bandyopadhyay); successful writers of fiction and non-fiction (Amitav Ghosh, Claude Alvares, Sanjay Singh Yadav, Prerna Singh Bindra, Hemendra Singh Panwar) and many others. But the aim of this article is not to deal with the work of these authors, perhaps already very well known, but rather to explore the recent impetus to the eco-critical analysis of classical Indian literature. A rundown of the relevant elements in this sense in the most ancient Hindu religious tradition and in the epic will therefore be proposed: without presuming to be exhaustive, I will at least try to convey the depth of the lively academic debate on these topics. In particular, I will try to investigate the complex myth of the Khāṇḍava forest, reaching some final conclusions about a possible correspondence between what is now commonly called the Anthropocene and the theory of *yugas* and the end of times in Hindu doctrines.

2 From Banyan to Blue Antelope: The Mythical Hindu Ritual Universe

The ecological element and the sacredness of the territory emerge predominantly from the great harvest of Indian literature. Even before the advent of Buddhism, before the middle of the first millennium BC the ancient kingdoms of *Āryāvarta* had evolved and flourished: these were the territories where the first Arya tribes or the proponents of the spread of the Hindu tradition were presumed to have settled in a post-Vedic period. The sixteen main kingdoms extending in northern India, called *mahājanapadas*, constitute the contours of a territory that is more mythical than determinable from a historiographical point of view, which however is deeply linked to the attributes of its territory and its environmental characteristics (Kapur 2011; Van Horn 2006). This is the theatre of the deeds of the heroes of the epic, but its mapping embodies, in the centuries to come of Indian history, the ancient root of the Hindu tradition or at least its overarching synthesis. The territorial nucleus of the great empires, for example, was compared to a banyan (*Ficus benghalensis*) with strong roots in the more or less large cities that developed in the Gangetic plain, in the sacred places and in the rituals that were performed here. A solid and equally impressive structure articulated through forests, rivers, mountains, as well as the celestial dimension above them in which Hinduism had set its mythical and ritual universe (Ludden 2002, 30-1). In fact, the banyan has those characteristic roots that seem to intertwine infinitely along the trunk and spread out like an umbrella along the branches without interruption:

a clear example of multiplicity or complexity in unity.[3]

This period, late-Vedic according to a literary measure, corresponds with the expansion of sedentary agriculture in the Indo-Gangetic *doab* that spreads across the alluvial plain towards the current region of Bengal. The surplus accumulated by an organised agricultural system gave impetus to an extraordinary urban development;[4] thus the artisan guilds, the mercantile castes were born.

In summary, each region developed its own specific relationship between man and environment related to the characteristics of the territory and the possible relationship of exchange and absorption of pre-existing indigenous cultures and their pantheon. A growing spatial understanding of Indian geography is articulated in this phase and in subsequent sacred texts. They also reflect a society that is slowly adapting to the specificity of the subcontinent's ecosystems by identifying with an ecologically specific region (Fisher 2018, 51-3).

Previously, however, the Hindu tradition boasts the knowledge of a complex cosmology: the earth is like a disk, with the sacred mount Meru in the centre and four continents surrounded by oceans that extend along the four cardinal points. This is the mythical continent of *Jambudvīpa* that, from sacred texts, filters into indigenous folklore and cosmogonies of various places in mainland India and the Himalayas. This idea regarding the structure of the Subcontinent ends up conforming as a single bounded geographical entity in which the concept of the development of Indian space takes place in particular through animal and vegetable forms. The importance of the mountain in recalling the centre of the world should be mentioned: the Meru has a clear axial symbolism; the mountain communicates with the three-worlds but is itself covered, inhabited by all kinds of humans and non-humans, trees, animals, divinities, spirits and demons. Furthermore, the cavern, intended as a natural underground chamber in a mountain, hillside or cliff, is characterised by a strong religious symbolism. The cave, like a womb of mother earth, is a prelude to a metaphorical journey of death or katabasis and rebirth from the bowels of the earth. In a spiritual sense this symbolism is transposed into each of the thousands of temples dotting the geography of India, which with their rising towers (*śikharas*) recall the sacred mountains that nevertheless contain the *sanctum* (*garbhagṛha*, lit. womb; interior [containing/within – foetus/embryo] - room) within them (Kramrisch 1976, 169-71).

---

3 It is no coincidence that this tree was chosen as the logo of the VHP, the Vishva Hindu Parishad (Universal Hindu Council), an Indian right-wing Hindu organisation based on Hindu nationalism

4 Scholars define it as second urbanisation since the first phase is commonly understood as that of the Indus Valley civilisation: the relationship with the environment and ecology of this civilisation is extremely interesting but goes beyond the present overview of Hindu literature.

Moreover *Jambudvīpa* is literally the land (*dvīpa*) of the *jambu* or rose apple tree (*Syzygium cumini*) here evidently a symbol of sweetness and abundance due to its juicy fruits. At the same time, the richness of the *Āryāvarta* is evidenced by the large number of wild animals, called *mṛga*, a term that often in subsequent literature refers to the cervids[5] or the Indian black-buck antelope (*Antilope cervicapra*). Although in India there is a tendency to backdate these conceptions to the mists of time, as these are notions considered relevant to the religious tradition, it must be observed that the Vedas and the very first Sanskrit literature do not mention the *Jambudvīpa* (Ray 2017, 352) nor mention is made of it even in the systematisation of the Sanskrit grammar of Pāṇini (about VI-IV century BC). It appears rather in the Buddhist canons and in the Arthaśāstra (Olivelle 2013, 462) and then widely in the Puranic literature. However, it is still plausible that a reminiscence of a once agro-pastoral civilisation reverberates through the positive perception of an ancestral wealth of a hunting and gathering territory. And for reasons of space I need to stop here in the awareness that Buddhist environmental ethics and the related understanding of ecosystems is a truly complex issue from an exegetical point of view (Deleanu 2000; Sahni 2008). The same goes for the first Hindu cosmologies. In summary, however, it seems interesting to observe that the concept of the antithetical principles of the domesticated and the wild (or tamed/untamed) so discussed in anthropology (Lévi-Strauss 1962; Descola 2005) can also be found in a nutshell in ancient literature. The ancient Indians divided the land into village (*grāma*) and wilderness (*araṇya*). By analogy, humans and non-humans who lived in these two areas could be defined as domesticated (*paśu*) and wild (*mṛga*). This sort of line geographically demarcating beings and their environment unfolds a very complex normative categorisation of relationships, interactions, social hierarchies and dietary norms that see prey and predators, carnivores and herbivores, courtyard and forest animals opposing each other. A great abundance of references can be traced from the cosmogonies of the Vedic hymn of the *Puruṣasūkta* (Ṛgveda 10.90) to the tales of the *Pañcatantra*, of which the oldest redactions date back to the first centuries AD (Olivelle 2011, 385).

Yet between the wild and the domesticated there is not only opposition but also a certain correspondence, some elements of the former fall into the latter and vice versa. The village, the city, the sacred place (see the Sanskrit *kṣetra* 'field'), when it exhausts its sacredness,

---

[5] It is commonly the *sambar* (*Rusa unicolor*), for antelope there is also the Sanskrit *eṇa*. The well-known sacredness of the bull/cow, an ancestral legacy of Indian religiosity, is juxtaposed by the wild counterpart of this animal, namely the *nilgau* (*Boselaphus tragocamelus*) whose sighting is still a good omen and a sign of a healthy territory today.

recursively return to draw it from the depths of the forest. The images of the gods, the sacredness of the relics, the updating of doctrinal issues seem to somehow reside in the ancestral nature of the woods surrounding the human dimension (Thapar 2001). In fact, if the ancient inhabitants of India classified the woodlands by dividing marshes (*anūpa*), unhealthy and unstable places not suitable for the construction of settlements, from dry scrub forest (*jāṅgala*), which could be cleaned to make room for villages and crops, there was also the concept of a sacred, ancestral and inviolable forestland (*āraṇya*) that symbolised the purity of the territory. The Indian jungle is therefore a dark, mysterious place, potentially dangerous due to the presence of predators and evil spirits, but only for the layman, the profane uninitiated, who cannot interpret its sacredness:

> Forest were also sites of sacred power, where religious explorers in the optional third *ashrama*[6] renounced society to form an Ashram ('sylvan hermitage or retreat') and experiment with powerful but potentially dangerous ideas and practices. There, thinkers and philosophers considered the nature of *ātman* ('self') and relationship with Brahman (the Universe as an undifferentiated unity), producing the Sanskrit: *Āraṇyakas* ('forest books') *Upaniṣads* ('esoteric books'). These texts, which most scholars date c. 900-500 BCE., later were labeled 'Vedanta' or the end, culmination, or the goal of the *Vedanta* ('the end, culmination, or goal of the Vedas'). (Fisher 2018, 55)

But it is in the *Rāmāyaṇa* indeed, one of the two most famous epics of Indian literature, that it is possible to find perhaps the oldest treatise on botany of the Subcontinent (Lee 2000). The dating of the poem's original core is still unknown: some scholars are inclined to place it between the 7th and the 4th centuries BCE, while its completion is ascribed to no later than the 3rd century CE; however, the saga of Rāma and companions boasts countless versions and regional reinterpretations (Richman 1991).

The original narration of the mythical events is attributed to the poet Valmīki who, with his elegant stanzas, his refined and erudite style, has managed to intertwine together, through the admirable

---

[6] Here Fisher clearly refers to the *āśramas*, or the four stages of man's life, which everyone is presumed to go through according to a *dharmic* perspective of existence. After the status of student (*brahmacarya*) and that of head of the family (*grihasta*), the third is the *vanaprasta* or the one who retires to live in the forest (the last is the *saṁnyasin* or renouncer, who ritually prepares himself for *post mortem*). Each of these stages has its own importance compared to the others, but the third presupposes the separation of bonds and duties towards the family and society, preferring a life of asceticism and introspection that is the culmination of the experience of a life lived to the fullest.

deeds of the heroes, a treatise on geography, a saga in which today many scholars distinguish historical elements and finally a delicate account of forest ecosystems. The forest is in fact the constant background of the plot and above all has a variable feature that seems to influence the inclinations and moods of the characters, as if there was a sort of human / non-human-plant empathy (Rangarajan 2009). Depending on whether this is an idyllic, pleasant or rather harsh, wild place, inhabited by saints, ascetics, animals or demons, the forest has characteristics that are well suited to the human soul: calm (*śānta*), sweet (*madhura*), angry (*raudra*) or fearful (*vībhatsa*).

The various forests acquire different names depending on the events that take place there. To give some examples: *Citrakūṭa* is the retreat place of Rāma during exile; *Daṇḍakāraṇya* is also a forest, abode of demons, in which Rāma traveled together with his relatives visiting the hermitages of sages; *Pañcavaṭī* is the place of exile where his consort Sītā was kidnapped; *Laṅkā* is the evergreen lush forest where she was taken and the *Aśoka Vāṭikā* (sorrow-less garden) is the place separated from the palace of the demon Rāvaṇa where she lived during her captivity. Here Hanuman came to see her bringing the message of comfort heralding the coming of the saviours, but he is also linked to the forest of *Kiṣkindhā*, where he met Rāma for the first time, near Lake Pampā, and to the sacred forest of Mount Dronagiri to which Hanuman flew in search of the miraculous Sanjīvanī herb.[7] Also interesting is the process of geographic localization of these mythical places that are gradually structured in the real geography of the Subcontinent (Sinha 1999). From the island of Sri Lanka to the Himalayas, along the sacred rivers a universe comes to life made of lilies, lotuses, vines, known and other mysterious herbs, aquatic plants, shrubs, edible and inedible fruits in a catalogue that reaches little beyond under two hundred names not yet all precisely identified. This abundance develops in different types of ecosystems that we could mainly define as tropical (dry or moist) deciduous forest, to which, however, are added evergreen jungles and Himalayan alpine landscapes in which the forest is as 'found in heaven': a clear allusion to an ecosystem that it is a metaphor for a journey of spiritual transcendence.

---

7 While these names are located in the forests, and seem to influence their characteristics, they are not the names of the forests themselves, except *Daṇḍakāraṇya*.

3   The Enigma of the Khāṇḍava Forest and Animal Empathy

The poem of the *Mahābhārata* with its nearly one hundred thousand verses (*śloka*) can be considered the largest epic work ever composed in the history of mankind. Even those who are not accustomed to indological matter, the saga of Kṛṣṇa, *avatāra* of the god Viṣṇu, and his fellow Pāṇḍavas, among the main characters of the poem, is certainly known. The matter is rather dense since around the primitive core, which most scholars are inclined to date around the fourth century BC, an immense amount of heterogeneous, narrative and doctrinal elements have been gradually added in the following centuries. Even from the point of view of a new eco-critical exegesis, the ecological material, the references to the environment and to the territory, surrounding the main narrative plot about the great war fought between two branches (Kauravas and Pāṇḍavas) of the king Bharata's descent, are so varied and numerous that a single article could not even constitute mere cataloguing (Narayan 2001).

In this wealth of literary elements, however, there is an episode that has recently become a central theme of difficult interpretation in Environmental Humanities in India, in particular because it represents a dramatic event whose symbolism is still difficult to explain. This is the fire of the Khāṇḍava Forest, an ancient, lush, ancestral place running along the banks of the Yamuna River. In the epic it is said that Kṛṣṇa himself, together with Arjuna, one of the heroes, would have burned it, carrying out a great massacre of trees, vegetation and killing every form of life living in the forest (*Mahābhārata*, *Ādiparvan*, chapters 214-25). The region was identified by Indian scholars as more or less coinciding with the Delhi area, which is considered to have been built in the same place as Indraprastha, the capital of the Pāṇḍavas. So if the destruction of the forest could be read as an extreme sacrifice, terrible but necessary, for the construction of the future capital, the whole episode could be interpreted as a founding myth. As mentioned above, the theme of the domestication of the territory, the comparison between the domesticated and the wild is quite common in anthropology; it is reflected in many founding myths of the oral cycles of the indigenous peoples of India. Even in the Islamic world, particularly in the Mughal era, this motif is one of the most recurring ones in literature or in the marvellous medieval miniatures. The emperor is often portrayed at the head of his army or on horseback on an elephant while wading rushing rivers or in large hunts where the natural element seems to be the main subject depicted. These views symbolise the domestication of a wild territory, but also translate the political metaphor about the extension of imperial prominence and authority in an indomitable region. So in the *Mahābhārata*, the conquest of a territory, which theoretically in the literary tradition has its roots in the foundation of the ancient

kingdoms of India (*mahājanapadas*), would be transposed into the epic description of the forest fire. This is the prerogative of a transformation of a wild and uncontrolled environment into an agro/pastoral land, which is in turn a prerequisite for urbanisation dynamics.

However, this transition seems to be anything but painless and its reading is very complex. In fact, the epic tells us in minute detail of the great suffering and terror experienced by all the creatures of the forest. Not only are trees set on fire, but aquatic, land and air animals will also die by the thousands. It is no coincidence that reference is made to the boiling water of the lakes and the darkening of the skies. It would almost seem that there is an intentional reference to the three worlds:[8] a catastrophe that leaves (almost) no survivors. Even Indra, lord of lightning and storms, king of the uranic dimension and of all the gods (*devas*), moved with pity, tries to save the forest and its beings by pouring torrential rains into it. Agni, the god of fire in India, is in trouble and therefore equips Arjuna and Kṛṣṇa with magical weapons capable of incinerating the surrounding environment, in order to complete this immense sacrifice. But the power play staged in the epic indicates a non-linear path. In fact, the heroes, having completed the tragic work, are seized with remorse for the suffering occurred and for having caused so many deaths.

The theme of remorse seems to be the key to the correct interpretation of the myth. In fact, the heroes were approaching the Khāṇḍava Forest not in order to destroy it, but this need arises after meeting Agni, disguised as a Brahmin. This afflicted Brahmin, at the end of his strength, meets the heroes and asks them for help in appeasing his hunger: at this juncture Arjuna and Kṛṣṇa solemnly promise to help him. Only later does the Brahmin reveal himself to be Agni, the Fire, claiming to have such a great hunger that it cannot be extinguished except by swallowing the entire forest and its inhabitants. According to some scholars (Sharma 2018) this could be a later interpolation and, moreover, there are miscellaneous references to forests on fire in Sanskrit literature. But here it is as if the author could not on the one hand accept the merciless massacre of the creatures of the forest and, on the other hand, he could not even accept that this was done by heroes. The episode of Agni's disguise justifies the heroes' final remorse. They do not carry out the massacre by their own will, but because their rank imposes the sacredness and respect for the

---

8   There is an explicit reference to the Nāgas, who are understood as indigenous peoples of the forest (there are still indigenous nations in the Indian Northeast that claim this same name). However, in Indian mythology the *nāgas* (lit. snakes) are half-ophidic and half-human beings, divine or semi-divine, inhabiting the Pātālas or a chthonic netherworld. The nature of these beings is subtle, so from an ontological perspective the destruction of the forest seems to involve humans, non-humans (plants and animals) and other than humans (deities, spirits or subtle beings).

vows made to a Brahmin. Here, then, the burning of the Khāṇḍava Forest assumes a universal value: it is a cosmic sacrifice for the rebirth of the city, but it is also a sort of inevitable event due to a karmic chain of events. Destiny is more than anything else responsible for an act, of which the heroes are only the means.

On a mythical level, the episode in question is inserted onto the wider panorama of the advent of the Aryan populations in northern India. The themes of war, of destruction and finally of the subjugation of the territory are re-proposed and fade more and more in the various episodes of the conflict. And it is interesting that this process goes through a kind of horror and suffering involving every aspect of the territory and what it contains. The next step involves a process of normalisation, a reestablishment of equilibrium that, however, is not free from remorse, as if this were the prerogative of a new ethical and moral value. The state of suffering in Sanskrit terms is defined *śoka*, a word that translates a state of pain understood in its multiple meanings, obviously including physical and mental. It will therefore be clear how the shadow line separating the suffering caused by an act of violence, and the remorse that may ensue from it, in literature can be very subtle.

In Indian doctrines – and here it is correct to take Jainism and Buddhism into consideration – it is *śoka*, understood as a mixture of suffering and remorse, that underlies the concept of non-violence, or *ahiṃsā*. In Indian history the first striking example of this, and probably the most banal, is that of the emperor Aśoka (literally *a-śoka* 'without suffering') who, according to his famous edict on the rock of Dauli, affirmed that, after having massacred the people of the kingdom of Kaliṅga, he would have been seized with deep remorse and would have therefore embraced *ahiṃsā*, or non-violence, by converting to Buddhism. This is an element returning in a differently complex way in the history of Indian philosophy: there are several thinkers who draw on this theme and rework it as a way of spiritual redemption (Thapar 2009). Another classic example is Mahātmā Gandhi and his followers, as I mentioned above. For the moment, however, it is enough for me to offer the reader a reflection on the theme of *ahiṃsā*, not only as a non-violent attitude, but also as a feeling of compassion (Van Horn 2006, 24).

Going back to the epic, it is possible to give infinite examples of this. In the *incipit* of the *Rāmāyaṇa* (*Bālakāṇḍa*, sarga 2), the Sanskrit epic attributed to the poet Valmīki, there is a key event in which the author witnesses the unnecessary killing, by the hand of a hunter, of the male specimen of a pair of birds intent on mating. The female, it is said, raised a poignant cry of pain at the sight of her companion fallen to the ground and covered in blood. Upon seeing this injustice, the wise Valmīki would have cursed the hunter for eternity for interrupting the poor animal's passion. The two birds, called *krauñcas*, have been identified with the noble Indian Sarus crane (*Antigone*

antigone), a clear metaphor for the protagonists of the epic (Sītā and Rāma) who will be separated because of the events narrated below (Leslie 1998). Erotic passion is a *rasa* (lit. juice, essence), that is, a profound emotion characteristic of the canons of aesthetics in Indian art: here a clear allusion to a spiritual way of salvation. These issues have long been discussed in the literature, but today there seems to be a greater emphasis on the compassion that Valmīki exhibits towards animals (Hammer 2009). A fairly intelligible undercurrent element of this episode clearly indicates that personal empathy with wild animals in general is virtuous. This is the same concept found in the Khāṇḍava forest fire. The numerous references in large part of the Hindu sacred scriptures of man-animal, god-animal metamorphosis or even of sages and seers disguised as animals suggest first of all at least that the non-human animal world shares human emotions. At the same time, the attitude of early Buddhism in the exploration of animal behaviour is equally interesting: in the Pāli Canon it is customary to start such a discussion by emphasising the fundamental importance of friendship (*mettā*) and compassion (*karuṇā*) towards animals (Deleanu 2000, 83). This is extremely interesting because it shows us that the theme of multispecies relations, much discussed today in Environmental Humanities and anthropology, can also be investigated effectively through the lens of ecocriticism in Hindu literature.

4 Is Kali-yuga the Anthropocene?

The concept of time in India is fundamentally based on the concept of *yuga*, which is one of the four eras composing the ages of man. These are inserted in larger units of measurement called *manvantara* and *kalpa*, which constitute the expression of the complete cosmic cycle, of evolution and involution of the universe. This chronological characteristic of Hinduism is however common, perhaps only with some minimal differences, also to other South Asian traditions: the vision of time is therefore not linear, as it is often conceived in the modern West, but curvilinear. In this curve, or rather a spiral section, the four eras of man gradually come together according to a dynamic development. As is well known, these four *yugas*, called Satya, Tretā, Dvāpara and Kali-yuga, very closely recall the four classical Hesiod ages, that is the age of gold, silver, bronze (to which it is associated the heroic age for continuity) and iron. An interesting fact is that, in both Greek and Indian conceptions, humanity seems to face a sort of progressive spiritual decay as well as its own ability to achieve the self-realisation. The idea, therefore, of a descending curvilinear parabola seems to be perhaps the best geometric transposition (*Mānava Dharmaśāstra*, I, 80. See Olivelle, 2004).

We will therefore observe that according to the general traditional doctrine, during the Satya-yuga, the men of the golden age were considered the embodiment of perfection, so much so that it is said that they knew neither old age nor death. As angelic beings, they lived according to nature, having direct, equal contacts with the gods.

In the second period, known as Tretā-yuga, the prevailing idea is that this already perfect humanity enters a period of decline. Knowledge and perfection decrease, since what could only apparently be considered the seed of evil enters the costume of men: violence, imbalance, chaos. These elements, marking the beginning of a decline, are still under the full control of superior beings who are able to some extent to alleviate this first imbalance of the cycle and its relative humanity. Incidentally, these beings are the *cakravartins*, universal rulers or emperors of the world – a concept borrowed albeit with some different nuances also in Buddhism and Jainism – who through their knowledge and their ritual abilities are able to defend humanity from this cycle of decadence and equally lead it towards a path of self-realisation.

The Dvāpara-yuga, or the third age, is undoubtedly very interesting for the purpose of our study, since the above-mentioned violence reaches a point of maturity and is unleashed in the world. This change is a sea change: humanity until that moment was represented by beings of great spiritual capacity, of great intellectual talent, with an extremely balanced, long, peaceful life, but this period ends precisely with that terrifying episode narrated in the *Mahābhārata*, in which substantially the caste of the warriors – the 'race' of the heroes, to use a Greek term – enters into conflict with itself and determines its own disappearance, by self-extermination.

But the darkest period in India is considered the fourth and last, the Kali-yuga, or the subsequent age of iron or the current humanity. In fact, our age is described as gloomy: an era in which not only violence is rampant, but in which ignorance, stupidity, the abandonment of all that is sacred would determine a tragic overturning of customs and values. According to Indian thought, the period in which we live is therefore the one in which the history of humanity enters a perverse curve of decay and regression. In other words, since this is the last of the four ages in which humanity has developed its possibilities, the Kali-yuga represents the final segment of this cycle. As in a kind of free fall, time is imagined accelerating, rapidly degenerating; the customs are corrupted with great rapidity, reaching a climax coinciding with the final dissolution (*mahāpralaya*): what in the West would coincide with an *eschaton*, or the End of Times.

In Environmental Humanities there is a certain emphasis in noting that the succession of cosmic eras, the very fact that they are in a certain sense linked (and one the presupposition of the other in the long period of progressive manifestation), is well expressed from the

metaphor of the growing or climbing plant: it develops all its arboreal possibilities until it reaches its maximum development and then decays. A first phase of growth, from the bud to the stem, requiring an upward movement, towards the sun, can ideally be compared to a golden age: slow, almost eternal in its manifestation. The next phase is similar: the plant or tree continues to widen its fronds even though it no longer develops in height. Finally, when the plant no longer has the strength to remain erect, it decays until it withers. But this is not the last of the phases: a final one follows, in which the leaf, the branch, the plant itself, now withered and dead, detach and collapse to the ground. Attracted by the earth's gravity, the plant falls plummeting to the ground in the blink of an eye; so slow did its development in the golden phase seem, so sudden is its fall into the dark phase.

The animal world also offers a very strong metaphor for this concept through the so-called 'Bull of Dharma'. The standing Bull with its four limbs is considered a symbol of *dharma*, that is, natural law, justice, balance, morality. The four limbs represent the four *yugas*. The Bull standing firmly on all fours is said to transmit the *dharma*, which is followed in its full sense without any absolute violation. The beast however is imagined progressively losing a leg for each era,[9] emphasising how the *dharma* is bound to falter as the End of Times approaches (*Mānava Dharmaśāstra*, I, 81-2).

Indian literature is full of references to the End of Times or to its warning signs that very often coincide with moments of social, political crisis or profound epochal change. To give an example, many myths about the birth of Tantrism, starting from the Indian Middle Ages, support the assumption of a priestly caste that in this dark age is no longer able to convey salvific teachings and therefore the search for other spiritual ways is promoted. These in the history of India bear witness to an attempt at social and religious reform (Padoux 2017, 4 ff.). The advent of Islam in India and the various conflicts caused by the Muslim conquest process were sometimes interpreted from the Hindu perspective as a subversion of order, a fall in values, a sign of the approaching the end of the world. War is generally understood as that fire characterising, through chaos and destruction, the temporal gap of change (*pralaya*). More than water, however present in Hindu myth as a germinating principle after the flood, the forest is precisely that element contrasting with that fire. The forest is again a place of tranquility and a hermitage, the place of asceticism where, conversely, one can draw on the principles of knowledge.

It is however interesting to note that in the Indian tradition the end of each time cycle is in any case determined by the magmatic

---

9 Tretā and Dvāpara in fact also etymologically indicate the numbers 3 and 2 referring to the legs of the cosmic Bull.

element: fire, by analogy to the symbols of the forge and the world of blacksmiths, melts and dissolves each element bringing it back to its primordial stage, in order to reach a subsequent rebirth in a new form in the next cycle. This fire, an instrument of dissolution, is sublimated through various symbolisms. The end of the Dvāpara-yuga, that is the era preceding ours, is characterised indeed by the great conflict of the *Mahābhārata*. The end of Kali-yuga, the current epoch, will be marked by the advent of Kalkin, last *avatāra* of the god Viṣṇu, who – leading its ranks in a sort of final Armageddon – will bring the end of the entire cycle (Beggiora 2014). On another level, it is the *tāṇḍava*, or the dance of the god Śiva in a circle of fire, marking the end of an entire cosmic cycle, which however is in turn the prelude to the next.

It will therefore be quite clear how the serious concern for forest fires, which in turn is one of the main causes of climate change, runs in parallel with the symbolism of the end of the time cycle. The analogy between the Indian myth and the climatic conditions of the planet today are for many a prophecy that comes true or a metaphor fading its symbolic analogy into contingent reality. We should therefore ask ourselves: is the Anthropocene the end of the world? Are global warming, the melting of continental ice, the rising tides perhaps the harbingers of that circle of fire, around Śiva Naṭarāja, announcing the end of time? And is this the illusion, which the Indian world calls *māyā*, experienced through the cyclical phenomenon of death and rebirth?

5 Conclusions: A Recursive Fire

The purpose of this essay is to provide an insight into the major topics discussed in India in contemporary times regarding the ecological and ecocritical perspective. Only for reasons of space, I had to exclude some branches that would also be very important. For example, there are many studies on the perception of the environment and the landscapes in Islamic times: how the sacredness of the Indian territory was understood, how the model of the *chārbāgh* (four gardens) of paradise could be replicated as a model of domestication of the environment according to geometric principles constantly tending to the sublime and perfection. In addition, the whole issue of the indigenous knowledge on the forest of tribal peoples – or the sacredness of the forest that has been handed down orally in the shamanic traditions of often still marginalised populations – is emerging as very topical. However, I have already exhaustively dealt with the latter subject (Beggiora 2020; 2018) and, as regards the Islamic tradition, we refer to another essay in this issue (Zilio-Grandi). At least I hope to have succeeded in rendering the depth of the eco-critical de-

bate in India and in suggesting to the reader a small theoretical map of topics and materials that can be a useful methodological support even in a global ecological debate.

However, there is one last question that I believe it is important to underline. If the forest fire is a metaphor for a sort of 'ecochaos' (Sharma 2018) in which our generation is currently struggling dramatically, is it not true that, according to Indian sacred literature, this crisis is recursive? Had not a similar crisis with the fire of the Khāṇḍava forest already occurred in the previous *yuga*? In my opinion, it would therefore seem that the fire was a recursive element in the history of man, which however tends to recur each time in a more serious and worrying form, as a result of the degeneration of time. According to this interpretation, the environmental drama of the Anthropocene is not a novelty in the history of humanity and it is intriguing to note how the sacred tradition can to a certain extent overlap, without too much contrast, with historical studies on the stages of the evolution and cultural development of *Homo sapiens*, from the Paleolithic to the Industrial Revolution and beyond (Agoramoorthy, Hsu 2011). Is man therefore something detached and opposed to nature or is he fatally linked to it? Will we destroy the planet on which we were born and raised, or will we have the ability to lead it towards new and stable balances? In a reinterpretation of the aftermath and the teachings of the Khāṇḍava Forest, passing through remorse, compassion, empathy, non-violence, the spiritual elevation of a humanity that has already been a protagonist of this, it would seem possible. The answer to how to get out of the Anthropocene is (also) written in ancient Indian literature.

Bibliography

Agoramoorthy, G.; Hsu, M.J. (2011). "Ancient Hindu Scriptures Show the Ways to Mitigate Global Warming through Responsible Action". *Anthropos*, 106(1), 211-16. http://doi.org/10.5771/0257-9774-2011-1-211.

Arun Bandopadhyay (2010). "The Colonial Legacy of Forest Policies in India". *Social Scientist*, 38(1/2), 53-76.

Beggiora, S. (a cura di) (2014). *Pralaya La fine dei tempi nelle tradizioni d'Oriente e d'Occidente*. Aprilia: Novalogos.

Beggiora, S. (2018). "Ecocriticism and Environment. Some Considerations on Adivasis of Odisha". Dattaray, D.; Sharma, S., *Ecocriticism and Environment, Rethinking Literature and Culture*. New Delhi: Primus Books, 159-71.

Beggiora, S. (2020). "Shamanism, Magic, and Indigenous Ontologies: Eco-Critical Perspectives on Environmental Changes in India". Stewart, P.J. et al., *Dealing with Disasters. Perspectives from Eco-Cosmologies*. Cham: Palgrave McMillan, 189-211. http://doi.org/10.1007/978-3-030-56104-8_9.

Boillot, J.-J. (2009). *L'économie de l'Inde*. Paris: La Découverte. http://doi.org/10.3917/dec.boill.2009.01.

Deleanu, F. (2000). "Buddhist "Ethology" in the Pāli Canon: Between Symbol and Observation". *The Eastern Buddhist*, 2(2), 79-127

Descola, P. (2005). *Par-delà nature et culture*. Paris: Gallimard.

Fisher, M.H. (2018). *An Environmental History of India. From Earliest Times to the Twenty-First Century*. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781316276044.

Guha, R. (2000). *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya*. Berkeley: University of California Press.

Guha, R. (1983). "Forestry in British and Post-British India: A Historical Analysis". *Economic and Political Weekly*, 18(44), 1882-96.

Hammer, N. (2009). "Why Sārus Cranes Epitomize Karuṇarasa in the Rāmāyaṇa". *Journal of the Royal Asiatic Society*, 19(2), 187-211. https://doi.org/10.1017/s1356186308009334.

Kapur, N.S. (ed.) (2011), *Environmental History of Early India: A Reader*. New Delhi: Oxford University Press,

Kumarappa, J.C. (1951). *Gandhian Economic Thought*. Varanasi: Sarva Seva Sangh Prakashan.

Kramrisch, S. (1976). *The Hindu Temple*, vol 1. Delhi: Motilal Banarsidass Publishers.

Lee, D.W. (2000). "A Natural History of the Ramayana". Key, C.; Chapple, M.; Tucker, E., *Hinduism and Ecology The Intersection of Earth, Sky, and Water*. Cambridge: Harvard University Press, 245-68.

Leslie, J. (1998). "A Bird Bereaved: The Identity and Significance of Valmīkī's Krauñca". *Journal of Indian Philosophy*, 26(5), 455-87.

Lévi-Strauss, C. (1962). *La Pensée sauvage*. Paris: Plon.

Ludden, D. (2002). *India and South Asia A Short History*. London: Oneworld Publications.

Mies, M.; Salleh, A.; Shiva, V. [1993] (2014). *Ecofeminism*. London; New York: Zed Books. https://doi.org/10.5040/9781350219786

Narayan, V. (2001). "Water, Wood, and Wisdom: Ecological Perspectives from the Hindu Traditions", in "Religion and Ecology: Can the Climate Change?", 130(4), *Daedalus*, 179-206

Olivelle, P. (ed.) (2004). *Manu's Code of Law. A Critical Edition and Translation of the Mānava Dharmaśāstra*. Oxford: Oxford University Press.

Olivelle, P. (2013). *King, Governance, and Law in Ancient India: Kautilya's Arthasastra*. New Delhi: Oxford University Press. https://doi.org/10.1093/acprof:osobl/9780199891825.001.0001.

Olivelle, P. (2011). "Food for Thought: Dietary Rules and Social Organization in Ancient India". Olivelle, P., *Language, Texts, and Society Explorations in Ancient Indian Culture and Religion*. London: Anthem Press, 365-92. https://doi.org/10.7135/upo9781843318859.018.

Padoux, A. (2017). *The Hindu Tantric World. An Overview*. Chicago; London: University of Chicago Press. https://doi.org/10.7208/chicago/9780226424125.001.0001.

Rangarajan, S. (2009). "Ecological Dimensions of the Ramayana: A Conversation with Paula Richman". *The Trumpeter Journal of Ecosophy*, 25(1), 22-33.

Richman, P. (1991). *Many Ramayanas: The Diversity of a Narrative Tradition in South Asia*. Berkeley; Oxford: University of California Press. https://doi.org/10.1525/9780520911758.

Ray, H. (2017). "From Salsette to Socotra: Islands Across the Seas and Implications to Heritage". Schnepel, B.; Alpers, E.A., *Connectivity in Motion: Is-

land Hubs in the Indian Ocean World. Cham: Springer, 347-67. `https://doi.org/10.1007/978-3-319-59725-6_14`.

Sahni, P. (2008). *Environmental Ethics in Buddhism*. London; New York: Routledge.

Sharma, S. (2018). "Forest Fire and Aftermath. Epic Introspection". Dattaray, D.; Sharma, S., *Ecocriticism and Environment, Rethinking Literature and Culture*. New Delhi: Primus Books, 128-40.

Shinn, L.D. (2000). "The Inner Logic of Gandhian Ecology". Key, C.; Chapple, M.; Tucker, E., *Hinduism and Ecology The Intersection of Earth, Sky, and Water*. Cambridge: Harvard University Press, 213-41.

Shiva, V. (1988). *Staying Alive. Women, Ecology, and Survival in India*. London: Zed Books.

Shubhanku, K.; Anjum, K. (2021). *Environmental Postcolonialism: A Literary Response*. Lanham; London: Rowman & Littlefield.

Sinha, A. (1999). "Landscape and the Ramayana Legend". *Geographical Review of India*, 61(2), 97-111.

Thapar, R. (2009). "Ashoka. A Retrospective". *Economic and Political Weekly*, 44(45), 31-7.

Thapar, R. (2001). "Perceiving the Forest: Early India". *Studies in History*, 17(1), 1-16. `https://doi.org/10.1177/025764300101700101`.

Van Horn, G. (2006). "Hindu Traditions and the Nature: Survey Article". *Worldview*, 10(1), 5-39. `https://doi.org/10.1163/156853506776114474`.

Wessler, H.W. (2021). "The Regional and the Universal: Reading Phanishwarnath Renu's Novel Mailā Āṃcal on the Occasion of his Birth Centenary". *Orientalia Suecana*, 70, 4-11.