

**Wild Fictions: Narratives of Nature and the Politics of Forests.**

by Amitav Ghosh

If there is anything distinctive about human beings, as a species, it consists, I believe, in our capacity to experience the world through stories. What then are the tales that animate the struggle over the environment that is now being waged all over the world, but most significantly in Asia and Africa? Here is one such: as with all the stories that follow, the point of reference lies in one of the most important battlegrounds in the current conflict over the meaning and definition of Nature - the Indian subcontinent.

The story, said to have been a favourite of Mahatma Gandhi's<sup>i</sup>, is called *The Indian Hut* and this is how it begins: 'Some thirty years ago, a group of English scholars formed a society in London with the purpose of advancing the sciences and furthering the happiness of mankind by seeking knowledge in different parts of the world.'<sup>ii</sup> There were twenty such scholars, and in order to better direct their inquiries, the Royal Society gave each of them a book containing 3,500 urgent and important queries. The most learned of these savants knew Hindi as well as Hebrew and Arabic and he set off in the direction of India, 'the cradle of all the arts and all the sciences'.<sup>iii</sup> After three years of travel, he came finally to Benares, 'the Athens of India'<sup>iv</sup>, where he spoke with many a learned Brahmin and amassed an immense collection of manuscripts. He was about to head back with this rich cargo of knowledge, when it occurred to him that despite having spoken with Jewish rabbis, Protestant ministers, French Academicians, Turkish mullahs, Parsee elders, Hindu pandits and so on, he had not succeeded in clarifying even one of the 3,500 questions he had set out with. On the contrary he had succeeded only in multiplying the doubts that surrounded each of them. It came to his notice then that the most learned of the pandits of India was to be found not in Banaras but in the temple of Jagannath in Orissa. The eager scholar set off at once for Calcutta, where the directors of the East India Company provided a palanquin and bearers to escort him to the great temple. Travelling southwards, the scholar decided that he would not trouble the learned pandit with trivial matters and would limit his inquiries to three questions of the most pressing significance. By the time he was shown into the temple's inner sactum, he had settled upon the three queries that seemed to him to outweigh all others in significance: By what means was truth to be known? Where was the truth to be sought? And was it necessary always to reveal the truth to mankind?

The pandit had ready answers for all three queries. All truth was in the Vedas, he said, and could only be sought by means of the Brahmins, who alone possessed the secret of the language of truth. As for revealing truth to mankind, why, said the pandit, prudence called for it to be hidden from most, while duty dicated that it be always made known to Brahmins.

These answers so dismayed the Englishman that he cried out in outrage: 'So the truth must always be made known to the Brahmins, who won't communicate it to anyone! The truth then, is that that the brahmins are unjust...'

There resulted a great uproar at the end of which the scholar was evicted from the temple and found himself heading back to Calcutta in an even greater state of dejection

than before. On the way, while passing through a forest, he and his party were overtaken by a cyclone, blowing in from the sea. They pressed ahead, with the wind and rain raging around them, until at last they caught sight of a small hut that was protected from the elements by hills, rocks, and trees. The relieved scholar was of a mind to head towards the hut, but he could not persuade his entourage to accompany him. The hut belonged to Parayas, they said, members of one of the lowest castes of India, and they would not set foot in it.

'Then go where you want,' retorted the scholar. 'To me all the castes of India are the same.' So saying he went into the hut and was warmly welcomed by the occupants, a man of gentle countenance and his wife. As the thunder raged outside, the scholar spoke at length with his host and soon discovered him to be a man of far greater intelligence and good sense than any of the savants and pandits he had met on his travels. How had this simple man acquired such wisdom? At length, unable to contain himself, he inquired of his host where his temple lay.

'Everywhere,' responded the Paraya, 'nature is my temple.'<sup>v</sup>

'And from what book,' the scholar persisted, 'have you learnt your principles?'

'None but nature,' answered the Paraya, 'I don't know of any other.'

'Ah! That is indeed a great book,' said the Englishman, 'but who taught you to read it?'

'Misfortune,' answered the Paraya, 'being from a caste that has an infamous reputation in this country, I was not able to be an Indian. Thus I made myself a man; rejected by society, I took refuge in nature.'

And as for the issue of whether the truth should at all be revealed to a world which so often rewarded honesty with persecution, the answer was: 'The truth should be told only to those with a simple heart.'

This, in short, is the narrative of 'The Indian Hut', a story published in 1791, by a Frenchman who had never set foot in India. The writer was Jacques-henri Bernardin de Saint-Pierre (1737-1814), a novelist, naturalist and philosopher who was both a friend and disciple of Jean-Jacques Rousseau.<sup>vi</sup>

In the course of a varied and interesting life, Saint-Pierre accumulated many disappointments until the publication of his massive, multi-volume work, **Studies of Nature** which achieved an immediate and resounding success. Saint-Beuve was to say of him later that he had done for tropical nature what Rousseau had done for the Alps. Saint-Pierre's unabashedly romantic and immensely popular novel, **Paul et Virginie**, was to earn the admiration of Alexander von Humboldt as well as Napoleon Bonaparte, who is said to have read it over and again in St. Helena. No doubt the novel's themes of rejection, retreat and withdrawal held as much resonance for Napoleon as the novel's island setting, which was Mauritius, where Saint-Pierre had resided in 1768. Saint-Pierre's stay there was to produce what may well be his most lasting work, the Dutch-published travelogue, **Voyage à l'Isle de France**.<sup>vii</sup> While living on that island, Saint-Pierre joined the circle that surrounded Pierre Poivre, a French naturalist and administrator who had travelled extensively in Asia.<sup>viii</sup> As is well known, the unique ecosystem of Mauritius had been seriously depleted by the first Dutch settlers.<sup>ix</sup> By the early-18<sup>th</sup> century the dodo had already been extirminated and the forests denuded. Recognizing the fragility of the island's natural environment, Pierre Poivre enacted a series of environmental measures, based upon his knowledge of the traditional

forestry practices in China, India, Indonesia, and the Dutch settlement on the Cape. Although short-lived, these measures, have been adjudged to be some of the earliest state interventions motivated by ecological concerns.<sup>x</sup> Thus it could be said of Bernardin de Saint-Pierre that he assisted at the birth of ecology and environmental activism as we know it today: it is in this sense too that he shared in the authorship of a vision of Nature whose influence was to be felt far beyond his time. Along with his much-admired mentor, Rousseau, Saint-Pierre was both a creator and a disseminator of the romantic vision that was to so powerfully influence perceptions of nature not just in Europe, but around the world: in time Kings, Presidents and citizens were to fall equally under its sway. That Romanticism played an important part in the creation of the first national parks in the United States has been well documented; no less well documented is the fact that American parks like Yosemite served as models for the colonial administrators who created the earliest parks in Africa and Asia. Saint-Pierre's 'Indian Hut' is therefore no ordinary story: it has played a part in shaping and forming real ecosystems, including those of the country in which it is nominally set.

To offset Saint-Pierre's imagined encounter here is a story about a real English scholar and one of his brushes with Nature in India.<sup>xi</sup> The date of the event is July 1850, a mere six decades after the publication of 'The Indian Hut', and its setting is Calcutta – or Kolkata, as it has been known since 1998. The river that flows past the city, the Hugli, is subject to the pressures of the tides, and in the past it often happened that a high tide in the Bay of Bengal would cause it to flood the surrounding countryside. Thus it happened that on a hot July day in 1852, the Hugli flowed over its embankments, swamping the lowlying wetlands that surrounded the city. When the waters receded it came to be seen that a school of gigantic creatures had been deposited in a shallow wetland pond. Word of this event spread rapidly and in a few hours, reached the ears of an Englishman by the name of Edward Blyth who was the then Superintendent of Calcutta's Botanical Gardens. Blyth was a naturalist of distinction and is credited with having anticipated some aspects of the theory of evolution.<sup>xii</sup> He corresponded regularly with Darwin who once described him as: 'a clever, odd, wild fellow who will never do what he could do, from not sticking to one subject.'<sup>xiii</sup> Now, hearing of the gigantic sea-creatures deposited by the tide, Blyth set off immediately for the Salt Lakes – a considerable journey from the Botanical Gardens. He arrived to find some twenty whales floundering in a shallow pond. Their heads were rounded and their bodies were black, with white undersides. The adult males were over fourteen feet in length. The water was too low to keep them fully submerged and their short, sharply-raked dorsal fins were exposed to the sun. The animals were in great distress and their moans could be clearly heard.

A large crowd had gathered but somewhat to Mr. Blyth's surprise they had not killed the whales. He had imagined that the animals would be set upon by the villagers, for their meat and oil. He found instead that many of the villagers had laboured through the night to rescue the creatures, towing them through a channel into the river. Many whales had been saved, Blyth learned, and those that remained were the last of a school of several dozen.<sup>xiv</sup> Blyth chose four of the best specimens, two males and two females, and had them secured to the bank with poles and stout ropes: his intention was to return the next day with the implements necessary for a proper dissection. Before departing, he did everything in his power to make sure that his chosen creatures would not be freed by the local populace.

But a shock awaited him: on returning the next morning, he found that his chosen animals had been cut loose during the night. Now only a few inferior creatures remained in the pond. Not to be thwarted of these, Mr Blyth set upon them at once and quickly reduced them to 'perfect skeletons'. On examining the bones, he decided that he had discovered a yet-unknown creature, *Globicephalus indicus*. But a few years later this identification was disproved, so it turned out in the event, that Mr Blyth had spent two days and much effort to no avail.

The text of Blyth's article makes no mention of the human interactions that resulted in the retrieval of the skeletons. The references from which I have constructed this narrative are consigned to a footnote, but scant as these are, they leave no doubt that the villagers went to some lengths to free the whales. What was it then that prompted these people to exert themselves on behalf of the animals, at the cost of incurring the wrath of an English sahib? The one thing we can be sure of is that their concerns were not the same as those that might have inspired a Saint-Pierre or a whale watcher of today. Possibly the lake in question was a public fishing ground, owned by a family or the whole village. Perhaps the villagers were dismayed at the thought of their common property being colonized by a school of whales; perhaps they imagined that their carefully tended stocks of fish would be rapidly depleted by the gigantic creatures. These reasons would surely have been enough to lend some urgency to their efforts. Yet compelling as these pragmatic reasons might be, I find it hard to believe that they were not allied also to a certain sense of awe, wonder and even compassion at the sight of the distress of these majestic creatures. Is it possible that there was no talk among the villagers of divine visitations, no stories told of signs from the heavens? I cannot believe that there was not. Such emotions might appear to have little in common with an ecological awareness, but if indeed there is, in cultures at large, as well as in works of literature, such a thing as an environmental unconscious, then surely it would consist in an overlapping of the pragmatic and the poetic, a broad acknowledgement of mutual dependence, in which rights, mutual obligations and a sense of wonder are seamlessly merged?

As in Saint-Pierre's story, Blyth's encounter too was probably with Dalits, members of the most disadvantaged castes of India. In both instances the people are unnamed, but there the similarities end: Saint-Pierre's imaginary scholar converses with an individual whereas Blyth finds himself dealing with a collectivity; where Saint-Pierre's Indian is a meditative recluse, worshipping in the temple of nature, the people that Blyth meets are of an eminently workmanlike frame of mind: far from sitting back to ponder the wonder that Nature has delivered at their doorstep, they have set immediately to work. What is more, the real English scholar, unlike Saint-Pierre's imaginary hero, has no interest at all in the natives and their ideas of Nature: to him they are just a nuisance, an impediment in the production of perfect – if misidentified – skeletons. As for the animals, Blyth seems to have had neither the talent nor the inclination for forging any kind of relationship with them. In this he would have been no different from, other eminent naturalists of his period. His famous contemporary, Alfred Russell Wallace once acquired a siamang in Sumatra, and found that the ape would spend hours playing with his Malay helpers while ignoring him. "It took a dislike to me...," Wallace tells us, in his disarming way, "which I tried to get over by feeding it constantly myself. One day, however, it bit me so sharply while giving it food, that

I lost patience and gave it rather a severe beating, which I regretted afterwards, as from that time it disliked me more than ever."<sup>xv</sup>

Despite the differences between Blyth's narrative and Saint-Pierre's there are also many parallels and intersections. Where Saint-Pierre imagines nature as a sacred space and a temple, for Blyth it is a 'field' in all the varied senses of the word: in other words, it is an area that lies beyond the hearth and is uninhabited by design, so that it may be subjected to cultivation – in this instance as an object of study. Where the visions coincide is that in both, Nature is defined by its exemption from contamination by people: it is as it were, the other of society, a province defined by its exclusion of human sociability. Thus did Nature come to be imagined as an Eden too perfect for the fallen progeny of Adam and Eve.

Let us return for a moment to Blyth. What if, on discovering his school of stranded whales, he had indeed paused to ask the villagers for an account of their actions, as Saint-Pierre's scholar might have done?<sup>xvi</sup> The answer I suspect, would not have been recorded – by either Blyth or Saint-Pierre himself - for it would probably have taken a very different form from the pithy aphorisms that Saint-Pierre accorded to his reclusive sage. Most likely the villagers would have responded by telling a story – a fabulous tale that both Saint-Pierre and Blyth would have dismissed as a characteristically extravagant native fantasy, having nothing whatever to do with Nature.

Here is a story of the kind they might have heard. It comes from a region that is very close to Kolkata, the vast mangrove forest known as the Sundarbans – a wilderness which, in Blyth's day, as in Saint-Pierre's, extended to the very threshold of the city. Of the four million people who live in the Indian part of the Sundarbans today, the majority are Dalit and many are Muslim. Everywhere in this region a figure known as Bon Bibi – 'the Lady of the Forest' - is held in veneration, and as with many deities in India, her worship centres around the recitation of a verse narrative. But the first of the many surprises of the legend of Bon Bibi is that it begins neither in the Himalayas nor on the banks of the Ganges, but in the Arabian city of Medina, one of the holiest places in Islam.

In this city, the legend goes, there lived a pious Muslim, a childless Sufi *faqir* called Ibrahim. Through the intercession of the Archangel Gabriel, Ibrahim came finally to be blessed with twin children, Bon Bibi and her brother, Shah Jongoli. On coming of age, the twins were told by the Archangel Gabriel that they had been chosen for a divine mission: they were to travel from Arabia to 'the country of eighteen tides' – *athhero bhatir desh* - in order to make it fit for human habitation. Thus charged, Bon Bibi and Shah Jongoli journeyed to the mangrove forest dressed in the simple robes of Sufi mendicants.

The jungles of 'the country of eighteen tides' were then the realm of Dokkhin Rai, a powerful demon king, who held sway over every being that lived in the forest – every animal as well as every ghoul, ghost and malevolent spirit. Towards mankind he harboured a hatred that was coupled with insatiable desires; he had a limitless craving for the pleasures of human flesh, and when overcome by desire he would take the form of a tiger in order to hunt human beings.

Powerful as he was, Dokkhin Rai proved to be no match for Bon Bibi and her brother, who quickly defeated the demonic hordes. Merciful in victory, Bon Bibi spared the demon's life but forbade him ever again to indulge his taste for human flesh. Following on her triumph, Bon Bibi surveyed the Sundarbans and declared a certain number of them to be open for human settlement. The rest she allotted to Dokkhin Rai, ordaining that these

remain wilderness to be ruled over by the demon king. Thus was order brought to the land of eighteen tides: by the creation of a balance between the wilderness ruled by the tiger demon, and the areas of human settlement, which were Bon Bibi's own domain.

But this equitable dispensation was soon to be disturbed by human greed. On the edges of the tide country there lived a man called Dhona who had put together a fleet of seven ships in the hope of making a fortune in the mangrove forest. Just before setting sail, Dhona discovered that his crew was short of a man, and finding no one else at hand, he inveigled a boy into joining the fleet. This lad was known as Dukhey – 'sorrowful' – a name that was nothing if not apt, for he had long been cursed with misfortune: he had lost his father as a child and now lived in great poverty with his old and ailing mother. In parting from her only son, the old woman gave him a word of advice: were he ever to find himself in trouble, he should remember to take the name of Bon Bibi; she was sure to come to his aid.

So the expedition set off and wound its way down the rivers of the tide country until at last it came to a promising island by the name of Kedokhali. But when Dhona and his men went into the forest strange things began to happen: they were given tantalizing glimpses of plump hives hanging from branches of mangrove, but every time they approached, the hives seemed to disappear only to reappear again at a distance. That this was the work of Dokkhin Rai was revealed that night, when the demon showed himself to Dhona in a dream and proposed a pact in which they would each provide for the satisfaction of the others' desires. The sight of the boy Dukhey had reawakened the demon's longing for human flesh; if Dhona would but surrender the boy, he could have wealth beyond imagining; the forest would yield as much as could be carried on his boats and more.

Seized by greed, Dhona agreed to the bargain and the demon was quick to keep his word. At his orders the bees themselves loaded Dhona's boats with a great cargo of wax and honey. When the vessels were full and could carry no more, Dhona summoned Dukhey and told him to go ashore to fetch some firewood. Suspecting a ruse, Dukhey pleaded with his captain, but to no avail, for Dhona had chosen his course. Alone and disconsolate, the boy went into the forest to collect an armful of firewood. On his return he found his misgivings confirmed: the ships were gone. It was in that moment of abandonment, as he stood alone on the riverbank, that he caught a glimpse of an enormous body covered with shimmering stripes of black and gold. The animal was none other than Dokkhin Rai, in a tiger's guise. The creature shook the earth with a roar and launched on its charge. At the sight of that immense body and those vast jowls, flapping in the wind, like sails, mortal terror seized Dukhey's soul. Just before he fell to the ground unconscious, he recalled his mother's parting words, and called out: 'O mother of mercy, Bon Bibi, save me, come to my side.'

Bon Bibi was far away, but she crossed the waters the instant she heard the cry. Taking the boy's unconscious body into her lap she dealt a terrible chastisement to the demon, sending him fleeing back into the forest. Then, transporting Dukhey to her home, she nursed him back to health. When it was time for him to return, she sent him back to his mother on a gigantic crocodile that was loaded with a great treasure trove of wax and honey. Thus was greed punished and balance restored, between the wilderness and the domain of human beings.

This story, almost unknown outside the Sundarbans, saturates the lived experience of those who inhabit the mangrove forest. Travelling theatre companies go from village to village, staging passion-like re-enactments of the legend; the verse narrative is recited every time

the worship of Bon Bibi is celebrated. Although these rituals are Hindu in form, they begin always with the Muslim invocation 'Bismillah'. In a region where several hundred people are annually killed by predators, no local person will ever venture into the forest without invoking the protection of Bon Bibi. But Bon Bibi's indulgence is not easily granted, it must be earned by the observance of certain rules that derive from the parables contained in the legend. Take for instance the belief that the wild parts of the forest are the domain of Dokkhin Rai: the corollary of this is the idea that to leave signs of human penetration is to invite retribution from the demon. So powerful is this prohibition that villagers will not urinate, defecate or spit while collecting honey or firewood. And let there be no doubt that the fear of the demon's wrath is far more effective than secular anti-littering laws - for in the order of preventive sanctions, a municipal fine can scarcely be counted the equal of the prospect of death by agency of storms and floods, tigers and crocodiles.

But this is merely an incidental injunction: the most important of the beliefs that relate to Bon Bibi have to do with the regulation of human need. Indeed the Bon Bibi legend is, at bottom, a parable about the destructiveness of human greed: its fundamental teaching is that in the relationship between the forest and the sown there can be no balance, except by placing limits on human need. For Bon Bibi's devotees, the parables translate into a belief that the forest must never be entered except in circumstances of demonstrable need. In other words, to go into the forest while there is still food in the larder, is to invite one's own death. The force of this prohibition is such as to extend backwards and forwards in time, so that of a man who has been killed it will often be said, 'there was a pot of rice still to be cooked in his house: he had no need to go when he did.' And conversely a man who goes a-foresting in the full knowledge of having left food behind at home, will be dogged by the guilty awareness of his transgression so that his steps will be slowed and his senses dulled, and in the event that an attack does indeed take place he will be all the more vulnerable.

As with the stories of Bernardin de Saint-Pierre, the Bon Bibi legend uses the power of fiction to create and define a relationship between human beings and the natural world. Nowhere does a term equivalent to 'Nature' figure in the legend of Bon Bibi, yet nowhere is its consciousness absent; although ecological concerns are never named, the story is profoundly informed by that awareness which the literary critic Larry Buell has termed 'the environmental unconscious' – a phrase that is all the more useful, in my view, because it does not invoke the cultural and linguistic freightage of the word 'Nature'.<sup>xvii</sup>

Although the Bon Bibi legend is singular in its details, it is not of course unique in its vision of the relationship between human beings and the natural world: similar conceptions of balance, reverence and the limitation of greed are to be found in many other places.<sup>xviii</sup> The question of what impact these belief systems have upon the environment is not easily resolved: while it is by no means the case that indigenous peoples are always good custodians of the environment, neither is it true that their practices are always destructive. Today it is widely accepted that many such groups have indeed played an important part in the preservation and maintenance of forests and ecosystems. In the 19<sup>th</sup> century however, the generally accepted view among academically trained European foresters was that the presence of people was always a threat and never an asset to forests: it was thought that where woodlands survived it was despite rather than because of the people who lived in and around them. These ideas, propagated by the highly-regarded German school of scientific forestry, exerted their influence on the Indian subcontinent through the Forest Departments

of the British Raj, which were manned at the highest levels by Germans. These officials were trained to believe that it was everywhere their duty to rescue woodlands from 'backward' local populations, a grouping that did not exclude the peasantry of Europe.<sup>xix</sup> But the colonial context gave the foresters' efforts an extra edge of missionary zeal and the administrative structures of the Raj endowed them with powers far in excess of those they would have wielded at home. Many of these officials believed themselves to be surrounded by 'environmentally profligate natives' and thought it their duty to thwart the predatory hordes; their efforts were silently abetted by India's nationalist elite, which was mainly urban and had little interest in the plight of forest dwellers.

Today the institutional successor to the colonial Forest Department controls some 20% of India's land surface – a realm that would be the envy of many an Emperor. Although the Department has now been subsumed under the Ministry of Forests and Environment, it continues to wield a near-imperial authority over its vast dominions. The doctrine of Nature's exclusivity has allowed it to pull a curtain of secrecy around India's forests, behind which corruption and exploitation flourish to the point where, in the Sundarbans, it is commonly said that between a *dakat* (bandit) and a forest guard, people are well advised to put their trust in the criminal.

When urban middle class people visit India's forests they have little conception that their experience of the wilderness is not unlike that of spectators at a play: rarely if ever are they provided a glimpse of the stage machinery that produces the conditions of their viewership. They are in this sense, partners in the production of a wild fiction: it is their willing suspension of disbelief that makes the administrative exclusivity of forests possible.

Those who are trapped in the fantasy of the pristine forest – that is to say the people who inhabit the woodlands – have almost no means of either voicing their grievances or telling their own stories of the wilderness. Such is the atmosphere of repression and secrecy in India's wilds that even influential outsiders risk retaliation if they bear witness to what they see. Just recently an eminent tiger biologist whose research suggested that officials were inflating their tiger population statistics, had his equipment seized and was taken to court on an unrelated charge<sup>xx</sup>. In another instance, the Forest Department is said to have filed 13 suits of criminal trespass against conservationists who collected data on an environmentally harmful mining project in the Kudremukh National Park in Karnataka. This is what relatively privileged outsiders face in dealing with the rulers of India's forests: as for the realities that confront the people who live under this regime, they are perhaps best depicted in such harrowing works as Gopinath Mohanty's **Paraja**, and the novels of Mahasweta Devi.

In short, the people who live in India's forests have had to contend, since colonial times, with a pattern of governance that tends to criminalize their beliefs and practices.<sup>xxi</sup> Ironically, the era of decolonization, with its growing awareness of environmental issues, has made their situation even more precarious by providing an overarching ideology to sanction their dispossession.<sup>xxii</sup> As Ramachandra Guha, the pioneering environmental historian has pointed out, the consequences of this exclusivist approach have been harmful not just for the 'ecosystem people' but also for the very environment it sought to protect.

As an illustration here is another real life story, set in one of the most picturesque corners of the Indian sub-continent: the Hunza valley of northern Pakistan, a high-elevation oasis overlooked by the majestic Karakorum mountains. The population of the valley consisted of a diverse mosaic of peoples, most of whom made their living partly by farming

and partly by grazing their sheep and yaks on alpine summer pastures.<sup>xxiii</sup> To this remote fastness, there came, in 1974, Dr. George B. Schaller, an eminent zoologist. After a brief visit Dr. Schaller decided that 'northeastern Hunza would make a perfect national park', since it was 'scenically spectacular' and contained some rare wildlife, most notably the Marco Polo sheep. The fact that local people used some of the upland meadows for grazing was, Dr. Schaller, acknowledged, a problem since 'for by definition a national park should be free of such disturbances.'

The proposal took the fancy of Zulfikar Ali Bhutto, the then Prime Minister of Pakistan, who declared that 'it must become the world's famous Park... This is an iron directive'. Thus, in 1975, was born the Khunjerab National Park. Since it was listed as a 'category two' national park, which involves the banning of all human activity, the machinery was set in motion for the exclusion of all human activity from this area. At one stroke, the way of life of the people of the valley was criminalized, despite evidence that there was no basis for the assumption of competition between wildlife and domestic animals. But the people who lived in the valley knew they could not survive without their grazing rights and they decided they had no option but to resist: a local man is quoted as having said, "First they can kill us, then they can come and make a national park." There were lawsuits, followed by demonstrations and organized incursions into the forbidden areas. In the climate of protest and public anger, poaching and illegal hunting flourished, often with the collusion of government officials. The net result was that the Park perpetrated exactly the effect it was intended to prevent: the extermination of the Marco Polo sheep, the numbers of which dropped from an estimated three hundred in 1975 to one hundred in 1980. The last confirmed sighting was in 1986 when twenty-eight sheep were spotted. If there is any upside to this story, it is that the government was eventually able to work out a more stable and equitable situation by negotiating with the villagers and giving them a stake in the Park. Currently there is a dual management system in force in the Park and this arrangement has been judged by an expert to be 'the best possible way of safeguarding local resources'.

Today in India, the conflict between differing views of nature has been brought to crisis by two interconnected developments. One of these consists of a sudden public awakening to the disastrous failure of India's flagship conservation effort, Project Tiger.<sup>xxiv</sup> Although the scale of Project Tiger is vastly larger than that of the Khunjerab National Park, the two initiatives have had eerily similar careers. They were launched at almost exactly the same time, with support from the highest political quarters and massive funding from international agencies. Today, thirty years later, after the expenditure of enormous sums of money and the displacement of a great number of people, it has suddenly been discovered that the population of tigers in the Project's showcase reserves has diminished catastrophically: indeed the species may have been wiped out in some of the best known forest areas. The one place where tigers have held their own is in the Sundarbans, where, despite an inordinate number of animal-related fatalities, people still display a general willingness to co-exist with the species –for which much more is surely due to the Bon Bibi legend than to any governmental Project.<sup>xxv</sup>

The second major development in the present conflict is a recent legislative initiative, the Forest Rights Act, which seeks to restore a few of the rights that forest dwellers have lost in the one hundred fifty years since the first British edicts concerning India's woodlands.<sup>xxvi</sup> The rights in question are pitifully modest: the Act would confer ownership, up to a maximum of 2.5 hectares per family, of land that is already occupied. The land at

issue adds up to just 2% of all forest land of which none is currently under tree cover.<sup>xxvii</sup> Moreover, the Act would forbid hunting while also imposing responsibility for protection, conservation and regeneration on those who receive rights. In other words the Act represents a minimal effort towards the restoration of the forest-dwellers' stake in the well-being of the place where they live. The measure is also a belated recognition that the denial of these rights has led to an exponential growth in poaching and illegal timber felling, while also creating conditions for a spreading Maoist insurgency.

Modest as these proposals are, the Act has been furiously opposed by a coalition of interests that has taken shelter behind the flag of environmentalism. The public face of this group is a parliamentary body that calls itself 'Tiger and Wilderness Watch'.<sup>xxviii</sup> Almost to a man the half-dozen or so legislators in this group belong to erstwhile princely families.<sup>xxix</sup> Along with the entrenched forest bureaucracy, this group has turned the Forest Rights Bill into an issue where the state must choose between 'tigers and tribals'.<sup>xxx</sup> Inasmuch as they have confronted the failure of Project Tiger, they blame it not on the plan's conception but its implementation: inadequate personnel, the lack of high-tech equipment, even the allegedly advanced age of forest guards. Their proposals for the rectification of the situation are, in effect, of a para-military nature. Never mind that this minatory approach to conservation has largely been abandoned even by the Western wildlife groups that once championed it; never mind that the rationality of a single-species approach to preservation is increasingly under question the world over.<sup>xxxi</sup> Indeed issues of rationality and effectiveness have been largely abandoned and instead there is an increasing invocation of the 'sacredness' of forests in the Indian tradition. Needless to add, such a view is anything but traditional: in the Bon Bibi legend for instance, sacredness is not invested in the forest itself, but in the deity who maintains a balance between the forest and the sown. The actual derivation of the sacredness that exclusivists attach to forests is rather from the ideas of such Romantics as Bernardin de Saint-Pierre – none of whom had ever had to make a living from the woods. There could be no more effective demonstration of the extraordinary power that fiction has in shaping our ideas of Nature: it is as if Saint-Pierre's imaginary Indian recluse had been raised from the dead to haunt the real India of today.

Not only will this approach fail, it may well lead to precisely the kind of environmental catastrophe it is intended to prevent. For let us be frank in acknowledging the dirty little secret that underlies the exclusivist approach to conservation: it assumes the existence of populations that are too poor, and too disempowered to adequately articulate their own interests. But while political disempowerment may have been more the rule than the exception in the Asia and Africa of the '60s, '70s and '80s, it would be a mistake to imagine that this will continue forever. Soon refugees displaced by forest reserves will learn to organize; they will form vote blocs and elect representatives who will make it their business to overturn the legislation that created the reserves. When these refugees return to their ancestral villages they will not look upon the forest as their forbears did; two generations of displacement will have made them angry and embittered. Quite conceivably they will return to the forest not in order to make it their home, but precisely to despoil it. Fortunately this is not yet the case and a measure like the Forest Rights Act will go a long way to prevent such an outcome.

But inevitability is not the only reason why the environmental movement should welcome a restructuring of rights over India's forests. Experience suggests that people who have a stake in their surroundings – such as the villagers encountered by Blyth – are much

more likely to be concerned about their environment.<sup>xxxii</sup> So far as India's forests are concerned, a loosening of bureaucratic control can only be to the benefit of scientists, researchers and activists, for it will open the country's woodlands to much closer scrutiny than is the case now (and of this there should be no doubt, that the need for oversight and vigilance will not disappear, no matter how the forests are administered). The Forest Rights Bill has other provisions that ought to be welcomed by environmental activists: it proposes for example to vest rights and responsibilities in village councils (*gram sabhas*).<sup>xxxiii</sup> This will mean that local authorities can be made to answer for abuses, as and when they are detected, a great improvement on a situation in which the forest bureaucracy is able to provide cover to its employees. What is more, the research community could also take advantage of this opening to prevent the Forest Department's interference with legitimate and much-needed research. This might go a long way towards correcting the disastrously skewed research priorities of official Indian forestry. The official obsession with tigers, for example, has led to the neglect of other species, such as India's marine mammals: they have not conducted a single survey in the Sundarbans in modern times, and foreign cetologists who have tried to do research in that area have been consistently prevented from entering, with the result that nothing is reliably known about the current state of cetaceans in that area.<sup>xxxiv</sup>

Although the Forest Rights Bill has yet to be passed, it has already had a salutary outcome in that it has brought into the open a conflict that has long been fought as a war of stealth. Encouraging also is the response of the government: to address these issues, the Prime Minister, Dr. Manmohan Singh, has appointed a body called the Tiger Task Force, whose deliberations are sure to have a bearing not just on wildlife but also on the passage of the Forest Rights Act. For the first time in a century and half of forest administration, the composition of this group is such as to give proper representation to those who believe that the rights of people need not be at odds with the preservation of nature.<sup>xxxv</sup>

Saint-Pierre, Rousseau and the Romantics of the 19<sup>th</sup> century have a justly honoured place in the history of environmentalism. To them goes the credit for creating an awareness of the fragility of the natural order in an age of machines. But to confront those very issues in the context of Asia and Africa today, requires not just a re-thinking of policy, but indeed re-imaginings of Nature: I use the plural advisedly, for it seems to me imperative that these imaginings be as varied as the natural world itself and we are fortunate here in possessing a great wealth of stories to point us in other directions. But to recognize this is not, by any means, to call for a re-enchancement of nature in a manner similar to that of the Bon Bibi legend, not just because it would be futile, but also because that view has very serious limitations and failings of its own. There are of course many places in the world where people stigmatize greed, acknowledge the necessity of limiting human needs, and believe in the principle of a balance between human beings and their natural surroundings. Although these ideas may have a wide appeal, their implications are always worked out locally, in relation to the environment specific to the place in question. These systems are therefore necessarily local and while they may be able to create a balance between the elements particular to their context, they are profoundly vulnerable (like eco-systems themselves) to disruption from the outside. Thus for example, in the Sundarbans, with the introduction of commercial fisheries, great value has come to be placed on the microscopic spawn of prawns. As a result fishermen have begun to trawl the waters with nets of very fine mesh.

This means that the waters are being sieved in ways that are likely to have devastating effects on all aquatic life. That the Bon Bibi legend is silent on this matter is a sign of its limitations in the contemporary context.<sup>xxxvi</sup>

But there is another, and possibly deeper limitation to this conception of balance in the legend: it is a contract drawn up and signed by a single party, and it provides for no mechanism through which to interpret the needs of the other protagonists. In this scheme of things the forest has no means of articulating its interests.

It is this gap that is filled by the natural sciences, in particular the varied disciplines of natural history: they direct a gaze of concentrated interpretive scrutiny towards the curtain of signs that is called 'data'. Natural history is, in this sense, the indispensable science of interpretation that allows the environment to speak back to us. Although it is by no means the only knowledge system to apply interpretive methods to the natural world, it is certainly the only one that is capable of universal application. But the strengths of these sciences are also their limitations, for their procedures and methods can succeed only so long as they refuse to acknowledge or address questions of meaning and intention. The seriousness of this limitation does not become obvious until we consider the field of public policy. The conditions of scientific inquiry being such as to require a radical separation between the inquirer and the field of study, it is surely no coincidence that the scientific experts' responses to conservation challenges so often consists of attempts to recreate these conditions on the ground – primarily through the expulsion of people. It is as though they were seeking to incarnate the conditions of a laboratory within inhabited landscapes, an endeavour that can only be futile and in the end, self-defeating.

In short, the limitation of the sciences in relation to the natural world is that they cannot address its single most important determinant, which is human action and subjectivity. These last are properly and necessarily the domain of politics. But the limitation of political action, in turn, is that it cannot generate the imaginative resources that are necessary to a re-thinking of the human relationship with nature. And yet new policies will be impossible without such a re-thinking.

The relationship between human beings and their surroundings constitutes as vast a spectrum of experience as the human mind is capable of conceiving - it ranges from a fisherman's knowledge of a river's rapids, to Saint Francis of Assisi's meditations; from a child's wonder at the sight of a butterfly to public outrage at an oil-spill. The very vastness of this spectrum of experience points us to the reason why the human relationship with nature is so profoundly formed by fictional imaginings of it, no matter whether it be the stories of a writer like Bernardin de Saint-Pierre, a legend such as that of Bon Bibi or a novel like Herman Melville's incomparable, **Moby Dick**. It is my belief that only fiction can provide a canvas broad enough to address this relationship in all its dimensions; only in fiction can a reconciliation be effected between Bon Bibi and Saint-Pierre's recluse, between the quest of a scientist determined to prevent the disappearance of a species and the needs of a fisherman who must hunt in order to live. It follows then that if nature is to be re-imagined in such a way as to restore the human presence within it – not as predator but partner – then this too must first be told as a story. In India we are fortunate in that our literary traditions, powerfully influenced though it is by the West, have never wholly succumbed to the romantic imagining of Nature as a 'pristine', uninhabited temple. Such writers as Sivarama Karanth, Gopinath Mohanty and Mahasweta Devi have always been profoundly aware of the predicament of those who live in India's forests. That a meaningful debate on

this issue is possible at all in today's India is due in no small part to their fictional explorations of this territory. In placing **The Hungry Tide**, my own novel about the Sundarbans, squarely within domain of an environment that is peopled, inhabited and continually enriched by history, I am glad to acknowledge my debt to this other way of envisioning our relationship with the world around us.  
Amitav Ghosh

---

<sup>i</sup> See, Jason Wilson's *Introduction* to Bernardin de Saint-Pierre's **Journey to Mauritius**, Interlink Books, New York, 2003, p. 11.

<sup>ii</sup> Cf: *La Chaumière Indienne* in **ŒUVRES CHOISIES DE BERNARDIN DE SAINT-PIERRE, CONTENANT PAUL ET VIRGINIE, LA CHAUMIÈRE INDIENNE, LE CAFÉ DE SURATE, VOYAGE EN SILÈSIE, A L'ÎLE DE FRANCE, L'ARCADIE, DE LA NATURE DE LA MORALE, VŒUX D'UN SOLITAIRE**, Librairie de Firmin Didot Frères, Paris, 1843. The passages in quotation marks are my translations, from the above edition.

<sup>iii</sup> 'le berceau de tous les arts et de toutes les sciences.' Ibid, p. 128.

<sup>iv</sup> 'Athènes des Indes', p. 129.

<sup>v</sup> 'Partout, répondit le paria: ma pagode, c'est la nature', ibid p. 143

<sup>vi</sup> Saint-Pierre's love of nature is said to have revealed itself very early in his life. The story goes that as a child, his first response to the Cathedral of Rouen was to cry: "My God, they're flying so high!" He had not seen the spires at all, only the blackbirds that were nesting on them. The works of man made no impression on him, Saint-Beuve tells us; he had eyes only for Nature.

<sup>vii</sup> **The Voyage** was first translated and published in English in 1775, as **A Voyage to the Island of Mauritius**. The references here are to the 2003 edition edited by Jason Wilson and published under the title, **Journey to Mauritius**, Interlink Books, New York, 2003.

<sup>viii</sup> For an account of Saint-Pierre's complex relationship with Poivre, see Jason Wilson's Introduction to Bernardin de Saint-Pierre's **Journey to Mauritius**, Interlink Books, New York, 2003, p. 7-8.

<sup>ix</sup> For a comprehensive account, see Moree, P.J.: **A Concise History of Dutch Mauritius 1598-1710: A Fruitful and Healthy Land**, Kegan Paul, London, 1998.

<sup>x</sup> Cf. Grove, Richard H.: **Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860**, CUP, Cambridge, 1995, Ch. 5 *Protecting The Climate Of Paradise: Pierre Poivre And The Conservation Of Mauritius Under The Ancien Régime*. "The island ... became the central motif of a new discourse about nature which we can safely characterise as environmentalist rather than simply conservationist. This insular discourse became so strong in the Romantic tradition that it allows us to trace many of the central features of early Western environmentalism back to the pattern established by the French on Mauritius... Indeed one could even say that environmentalism was, to a great extent, born out of a marriage between physiocracy and the mid-18th century French obsession with the island as the speculative and Utopian location of ... idyllic societies." [235]

<sup>xi</sup> My narrative of this event is based on Blyth's account in his 1859 article, *On the Great Rorqual of the Indian Ocean, with Notices of other Cetals, and of the Syrenia or marine Pachyderms*, **Journal of the Asiatic Society of Bengal**, vol. 28, 1-5, pp. 481-498. See particularly the footnotes on pp. 482, 483 & 490-1. See also Blyth's report on the carcass of a young Globicephalus that was 'killed in the Hugly near Serampore' **Journal of the Asiatic Society** Vol. XXI 1852. p358 and also, Anderson, John, 1878, **Anatomical and Zoological Researches comprising an account of the zoological results of the two expeditions to Western Yunnan in 1868 & 1875**, Bernard Quaritch, London, p. 369.

<sup>xii</sup> Cf. Eiseley, Loren. **Darwin and the Mysterious Mr. X. E. P.** Dutton. New York, 1979.

<sup>xiii</sup> **The Correspondence of Charles Darwin**. Volume 4: 1847-1850. Cambridge University Press. To J. D. Hooker, 10th May 1848: "Did you see Mr. Blyth in Calcutta; he would be a capital man to tell you what is known about Indian zoology, at least in the Vertebrata; he is a very clever, odd, wild fellow who will never do, what he could do, from not sticking to any one subject. By the way, if you should seem him at any time, try not to forget to remember me very kindly to him: I liked all I

saw of him ---" (Page 139.) I am grateful to John Matthew for bringing this exchange to my notice.

<sup>xiv</sup> Blyth implies in his article that the villages ('natives') had set only the dead animals adrift, but the text suggests that they had applied themselves to also freeing the live animals.

<sup>xv</sup> Alfred Russell Wallace, **The Malay Archipelago**, pp. 97-8.

<sup>xvi</sup> At least one of Blyth's contemporary fellow-naturalists, Alfred Russell Wallace, might well have asked such a question.

---

<sup>xvii</sup> Buell defines the concept as a ‘residual capacity (of individual humans, authors, texts, readers, communities) to awake to fuller apprehension of physical environment and one’s interdependence with it’, in his book, **Writing for an Endangered World: Literature, Culture and Environment in the US and Beyond**, Belknap Press, Harvard, 2001, p. 22.

<sup>xviii</sup> There is now an extensive literature on this subject. For other accounts of some similar belief systems see **Asian Perceptions of Nature: A Critical Approach**, ed. Ole Bruun & Arne Kalland, Curzon Press, 1995, Arne Kalland, **Nature Across Cultures: Views of Nature and Environment in Non-Western Cultures**, Kluwer Academic Publishers, Dordrecht & Boston, 2003 & Anna Tsing, **In the Realm of the Diamond Queen: Marginality in an Out-of-the-Way Place**, Princeton, Princeton University Press, 1993.

<sup>xix</sup> Cf. Ravi Rajan, *Imperial Environmentalism or Environmental Imperialism? European Forestry, Colonial Foresters and the Agendas of Forest Management in British India 1800-1900*, [pp. 324- 371], in Grove, Richard H. & Vinita Damodaran, Satpal Sangwan: **Nature and the Orient: The Environmental History of South and Southeast Asia**, Oxford University Press, Delhi, 1998. Rajan writes: ‘A critical element of the attitude of colonial foresters to local populations was the perception that their claims were illegitimate because of their ostensible scientific and technological backwardness...’ [359] But he points out that this tendency began in Europe long before it came to colonial India. See also *Production, Dessication and Forest Management in the Central Provinces 1850-1930* by Mahesh Rangarajan [ pp. 575 – 589] in the same volume.

<sup>xx</sup> This case and the one that follows are described in *That Hunted Feeling*, by Pramila N. Phatarphekar, **Outlook**, July 11, 2005, Vol XLV, No. 27.

<sup>xxi</sup> Ramachandra Guha and Madhav Gadgil have been pioneers in the critique of exclusivist governmental forest management in India and more generally, of what might be called ‘forest fundamentalism’. This essay is indebted particularly to the following works: Ramachandra Guha & Juan Martinez-Allier, **Varieties of Environmentalism**, Earthscan Publishers, London, 1997; Madhav Gadgil & Ramachandra Guha, **Ecology and Equity: The Use and Abuse of Nature in Contemporary India**, Penguin, New Delhi 1995. For another valuable critique see Smitu Kothari & Pramod Parajuli, *No Nature without social justice: A Plea for Cultural and Ecological Pluralism in India*, in **Global Ecology: A New Arena of Political Conflict**, ed. Wolfgang Sachs, 224-41, London, Zed, 1993. The recently published collection, **Nature in the Global South: Environmental Projects in South and South-East Asia**, (ed. Paul Greenough and Anna L. Tsing, Orient Longman, Hyderabad, 2003) also contains several important contributions to this subject.

<sup>xxii</sup> India’s Forest Conservation Act of 1980, significantly augmented the powers of Forest Department officials, and the aborted Forest Bill of 1982 would have increased these further still, granting them rights to arrest without trial and so on. But the Bill was vigorously resisted by activist groups and the government was forced to drop it (see Ramachandra Guha, **The Unquiet Woods**, OUP, New Delhi, 1989, p. 212).

<sup>xxiii</sup> My account of the Khunjerab Park’s founding and history is based upon Are Knudsen’s analysis in his article *State Intervention and Community Protest: Nature Conservation in Hunza, North Pakistan*, in **Asian Perceptions of Nature: A Critical Approach**, ed. Ole Bruun & Arne Kalland, Curzon Press.

<sup>xxiii</sup> *Ibid.*, 108.

<sup>xxiv</sup> The interested reader is referred to Paul Greenough’s excellent summation of the early history of Project Tiger in his article, *Pathogens, Pugmarks and Political ‘Emergency’: The 1970s South Asian Debate on Nature*, in **Nature in the Global South: Environmental Projects in South and South-East Asia**, ed. Paul Greenough and Anna L. Tsing, Orient Longman, Hyderabad, 2003.

<sup>xxv</sup> In a recent article (**Hindustan Times**, June 16, 2005) Ramachandra Guha has ascribed the relative success of the Sundarbans project to the implementation of Joint Management techniques. However, in my experience, the Forest Dept.’s presence weighs no less heavily on the lives of people in the Sundarbans than anywhere else.

<sup>xxvi</sup> The full title of the measure is “Scheduled Tribes and Forest Dwellers (Recognition of Forest Rights) Bill.” The Bill was announced on Feb 1, 2005. See the **Hindustan Times**, Feb 2, 2005.

<sup>xxvii</sup> The figures cited in this paragraph are quoted by the economist Mihir Shah, in his article *Governance Reform for India’s Forests*, published in **The Hindu** [May 20, 2005].

<sup>xxviii</sup> Reported in the **Indian Express** of April 29, 2005.

<sup>xxix</sup> A report by C.K.Chandramohan describes this group as a ‘vested lobby of ex-maharajahs and an influential section of present-day wildlife planners, most of whom are former hunters themselves.’ The report also states: ‘This coterie of ex-hunters set off a media hype about the decreasing number of tigers the moment they knew that this bill was to be placed in Parliament’ [**Indian Express**, May 8, 2005]. Another writer describes the controversy in the following terms: “Tigers versus Tribals: this is how the debate on the (Forest Rights Bill) ...has been framed.” **Indian Express**, June 20, 2005.

<sup>xxx</sup> It has been alleged in the Press that the sudden breaking of the ‘news’ of the decline in the tiger population is ‘a planned attempt by a lobby comprising senior forest officers to scuttle’ the Forest Rights Bill [**Hindustan Times**, May 4,

---

2005]. Or as, another writer puts it: “Tigers versus Tribals: this is how the debate on the ... (Forest Rights Bill) has been framed.” **Indian Express**, June 20, 2005.

<sup>xxx</sup> For an account of the failure of exclusivist conservation policies in Africa, and their subsequent revision, see Raymond Bonner's, **At the Hand of Man: Peril and Hope for Africa's Wildlife**, Knopf, New York, 1993.

<sup>xxxii</sup> For a general appraisal of Joint Forest Management in India see, Mark Poffenberger, **Village Voices, Forest Choices: Joint Forest Management in India**, Oxford University Press, New Delhi, 1996.

<sup>xxxiii</sup> Cf. Mihir Shah, *op. cit.*

<sup>xxxiv</sup> A Forest Dept official in West Bengal has announced that there is going to be a survey of 'endangered dolphins' in the Sundarbans. The problem however is that the Forest Department, having long neglected this field, does not currently possess the expertise to conduct such a survey. In any case the Forest Department has a long history of producing questionable statistics. See Greenough, *op.cit.*, 212-15.

<sup>xxxv</sup> Ms. Sunita Narain, who heads the Task Force has been refreshingly frank in her appraisal of the failure of Project Tiger. A newspaper report quotes her as saying that the greatest threat to tigers is the 'increasing hostility of local communities who share the tiger's habitat because of years of mismanagement and conservation policies that exclude people from protected areas' [**The Hindu**, May 20, 2005]. The same report credits the Task Force with recommending the 'involvement of local communities in the protection of tigers.' Another member for the Force, Madhav Gadgil, has long been a critic of exclusionary approaches to environmental management. The other two members of the force, ValmEEK Thapar and H.S.Panwar, are well known advocates of authoritarian, para-military methods of conservation. Although the Task Force is reported to be deadlocked at present (Jay Mazoomdar, *PM's tiger task force pulls tribal rabbit out of hat*, **Indian Express**, 30/7/2005), the very fact of a public debate on the issue can only be beneficial.

<sup>xxxvi</sup> Thus Piers Vitebsky writes, in discussing the collapse of traditional religion among the Sora, "Local knowledge, however mythological the idiom in which it is cast, is at the same time intensely practical. It is a form of action by the intellect on the environment and gives to its knowers the conviction of commanding a certain area of experience. This remains 'knowledge' for as long as it continues to satisfy that conviction. Yet under certain circumstances experience itself can move away from the certainty of knowledge, defy it, slip out of its grasp. An entire system of knowledge or parts of it, become ineffectual in the face of reality." *A Farewell to Ancestors: Deforestation and the Changing Spiritual Environment of the Sora*, in **Nature and the orient : the environmental history of South and Southeast Asia**, edited by Richard H. Grove, Vinita Damodaran, Satpal Sangwan.. Delhi ; New York : Oxford University Press, 1998, p.981-2.