

NATURE PRESERVATION: A STUDY ON ASOKAN ROCK EDICTS I, II, AND JUNAGARH INSCRIPTIONS, GIRNAR, GUJARAT

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ABSTRACT: The rock inscription is the oldest document of Indian Epigraphy. The inscription is the word or letter written or carved into something. It's an ancient written document. The inscription is the archaeological manuscript of the palaeo-geo-political phenomenon. The study covers the three north Indian inscriptions: the rock edicts of Asoka I, II, and the Junagarh inscription. India's first written document is the Asokan rock edicts (I and II), which are found on Girnar Hill, Gujarat. Ancient India was famous for nature-based spirituality, which continues to spread globally. The Animist model of environmentalism is ancient, and the modern world has embraced it. The rock edicts of Asoka (I and II) argue in favour of protecting the threatened species. The Asokan rock Edicts and Junagarh inscriptions resonate the perception of nature preservation.

I. Introduction

The rock inscription is the oldest document of Indian Epigraphy. The inscription is the archaeological record of the paleogeopolitical phenomenon and preserves perceptions of the past. The Indian inscription has manifold dimensions: in script, language, and contents. Inscriptions are written records carved on stones, pillars, or cave walls. India's first written document is the Asokan rock edicts (I and II), which are found on Girnar Hill, Gujarat (Prinsep & Prinsep, 1858). The study aims to cover three north Indian inscriptions: the rock edicts of Asoka I and II, and the Junagarh inscription of Rudradaman, on Girnar Hill, Gujarat. It includes a detailed analysis of the contents and ecological aspects of inscriptions. These are all found on Girnar Hill, Gujarat. The language, script, and contents of inscriptions are unique. Therefore, at an initial stage, photocopies of the above-mentioned inscriptions have been collected, the language and alphabet have been identified, word-by-word meanings have been derived from the literature by James Prinsep, Romila Thapar, and R. Mookerji, and the ecological aspects have been discussed. Inscription is the writing engraved on an object. These objects include rocks, metallic plates, earthen bases (terracotta), pillars, wood, ivory, pot so on. The Perso-Arabic scripts are the main attribute of Indian inscription (Prinsep & Prinsep, 1858), though certain indigenous scripts have been used (Olivelle, 1996). The inscription is a written expression. Indian inscriptions have been categorized into two: the first is engraved on behalf of the ruling authority (power politics), and the second is engraved on behalf of a private individual or organization. The largest number of inscriptions falls into the second category, which includes political and religious establishments such as royal edicts, achievement (prasasti), grants in favour of individuals, and religious institutions (Daniels & William, 1996).

II. Script and Language of Inscriptions

The Girnar hill is the manuscript center of Indian Epigraphy. More than a dozen inscriptions were found on Girnar Hill, Gujarat (Daniels & William, 1996). The inscription on the Girnar hill uses two languages: Prakrit and Sanskrit, and the scripts are similar (Brahmi). Indian writing history stands on two pillars: the Brahmi and the Kharoshti scripts. The oldest datable

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records related to Indian script are the rock edicts and pillar inscriptions of the Mauryan era (3rd BC). A lot of evidence indicates that the Brahmi script was most likely created during the reign of Asoka (3rd BC) (Daniels & William, 1996). The arrangement of the Brahmi script developed into an angular pattern, a horizontally symmetrical script (Prinsep & Prinsep, 1858). The early form of the Brahmi script lacked certain sounds (a few vowels), and a few of those sounds (vowels) are more common in Sanskrit. Most of the Brahmi (Asokan Brahmi) script perfectly matched the sound and vocabulary of the Prakrit dialect (Indo-Aryan language group) (Smith et al., 2016). The history of the Indo-Aryan language is divided into three periods: Old Indo-Aryan (a period of spoken dialects), Middle Indo-Aryan (Pali and Prakrit), and Neo-Indo-Aryan (contemporary Indian languages). The language of the rock edict (Asokan rock edict) is Prakrit. The term Prakrit is derived from Prakriti (nature), and, according to Sankhya philosophy, Prakrit means the original element, not an artificial one (Thapar, 2011). The looser meaning of Prakrit is ordinary, vulgar, and provincial. The common notion that the Prakrit (Indo-Aryan) dialect is derived from classical Sanskrit is not grammatically justified. A simile helps to find the truth about the Prakrit dialect. Tagore's songs are written in Bengali and the Bengali script. But that lyrical Bengali is not identical to colloquial or dialectical Bengali. An example depicts reality.

*Rupsaagore dub diyechiaruparatonaashakori,
Ghaateghaateghurbonaarbhhaasiyeaamarjirno tori.
Samoyjeno hoy re eardheukhaawa sab chukiye debar,
Sudhaiebartoliyegiyeamarhoyerabomori.
Je gaankaanejaaynashona se gaanjethainityobaaje
Praanerbinaniyeaaboseiatolersabhamaajhe.
Chirodinersurtibnedhesheshgaaanetaarkaannaknede
Nirabjinitnaaharpaayenirabobinadibodhori.* (All about Rabindra Sangeet 2023)

I dive down into the depths of the ocean of forms, hoping to gain the perfect pearl of the formless. No more sailing from harbor to harbor with this weather-beaten boat. The days are long passed when my sport was to be tossed on waves. And now I am eager to die into the deathless. Into the audience hall by the fathomless abyss where swells up the music of toneless strings, I shall take this harp of my life. I shall tune it to the notes of forever, and when it has sobbed out its last utterance, lay down my silent harp at the feet of the silent. - Translated by Rabindranath Tagore (All about Rabindra Sangeet 2023).

The lines are purely Bengali, but they are not dialectical or colloquial; rather, they are a culturally modified version of Bengali. Similarly, the verbal tradition of Vedic Sanskrit was a modified version of the Madhyadesa language. Sanskrit means modified and cultured. Therefore, the Sanskrit language was the heritage of Vedic learned persons and a vocal and lyrical tradition. The method of notating lyrics developed later. The lyrical language has never been the dialect. The lyrical Vedic Sanskrit was not the language of mass. Therefore, it is not properly justified that Prakrit is derived from Sanskrit. The Souraseni, a middle Prakrit derived from the old Indo-Aryan dialect of Madhyadesa, and classical Sanskrit is based on it. The Asokan rock edicts are a combination of Brahmi Script and Prakrit language, and they are the ancient evidence of Indian writing history. The Junagarh Inscription is the inscription of the Brahmi script (Asokan Brahmi) and the Sanskrit language. The description of the Junagarh inscription depicts an association with the Indo-Greek culture (Woolner, 1986).

III. Geographical location

The inscriptions are found on Girnar Hill, Gujarat. The inscription site was first described by Colonel Tod in 1822 (Mookerji, 1962). It was discovered by accident, and the area was under a densely forested tract. Girnar Hill (21° 29' 41'' N and 70° 30' 20'' E) is the massif of the Kathiwar plateau, western India (Bose, 1973). It's an extension of the Deccan volcanic province and covers a wide range of basic magma zones (Bose, 1973). The Girnar laccolith is

intrusive and basaltic. Girnar Hill lies on the western edge of the Satpura range, and it is part of the Purana (pre-Cambrian) formation. It's a rigid and comparatively stable landmass. The gabbro-diorite-lamprophyric rock-nepheline syenite is a very common rock association of Girnar Hill. Girnar Hill is part of the Indian shield, and the formation is associated with the Deccan lava flow and fissure eruptions (Bose, 1973). The location was free from oceanic hazards, volcanic activity, and extreme climatic events, such as floods and drought. The Girnar hill is an uplifted weathered basaltic dome. The rock edicts I and II are found in the foothills of Girnar Hill. The Girnar hill was selected for inscription due to its location, geological setting, and a rigid, smooth basaltic domal landform.

IV. Girnar Hill and First People

The alkaline domal landscape was the habitat area of the ethnic groups of Maldhari, Bhil, and Dubla (Lai, 2005). Among the Maldhari tribe, ethno-veterinary knowledge was a widely accepted phenomenon (Chapple, 1993). The primitive religious beliefs and rituals were sometimes governed by animism. They believed in the existence of supernatural power in a few indigenous species. The Bhil and Dubla used peacock feathers as ornaments on their crowns. Entire ethnic groups believed in animism, and it was an early belief of the 'primitive' evolutionary stage (Ray, 2004), and it referred to belief in souls and spirits rather than life forces (Bose, 1973). The Girnar hill area has been a rich biodiversity zone since the beginning. It's the zone of the Asian lion habitat. The dry deciduous forest was the ancient habitat of Asian lions, peacocks, rain deer, and antelopes.

V. Asokan Rock Edict (RE 1) and Preservation of Endangered Animals

The rock edicts of the Mughal king Asoka were found on Girnar Hill, Junagarh, Gujarat. There were 14 rock edicts (Mankas, Jadeja, and Chavda 2007), and among them, the two oldest display environmental phenomena. James Prinsep (1837) deciphered the ancient inscription of Girnar (Arhem & Sprenger, 2016). In chronological order, the first and second rock edicts are the earliest examples of Indian inscriptions with complete sentences. According to Prinsep, the inscription's tentative date was 268 BC. The rock edicts I and II are written documents and constitute one of the most galvanizing examples of writing as a transformative ancient ideology of ecology.

VI. Rock Edict I: Contents of Rock Edict I as follows

Prohibits animal slaughter, bans festive gatherings, and killings of animals. Only two peacocks and one deer were killed in Asoka's kitchen. He wished to discontinue the practice of killing two peacocks and one deer (Sircar, 1975).

The rock edict mentioned two species to restrict hunting even for the demand of royal cuisine. During medieval India, peacocks and antelopes were the delicacies of a royal cousin (The Edicts of King Ashoka 2023). According to recent research, peacock meat (amino acids in peacock meat were quantitatively analyzed) contains high protein and low fat (compared with common domestic animals and fowl meat), making it ideal for human intake, with low energy, low fat, and low cholesterol (Descola, 2013). Therefore, peacock meat has high nutritional and medicinal value (Yang, Zuo, & Li, 2011). In ancient and medieval India, the peacock was highly valued as a source of protein. Despite that, the first rock edict depicted the restriction on peacock hunting. The Peacock is the symbol of unity to a few Indian First Peoples. The Vedic culture was famous for its medicinal, herbal, and Ayurvedic products. The Rabari, Sabar, Khand, Kheria, and Mina tribes used to practice an ancient method for preparing Ayurvedic medicine from various parts of the peacock (Sircar, 1975). *Mayūrapuccha Bhasma* (Calx of peacock feather) is an Ayurveda animal product prepared from peacock feathers by employing two different methods as mentioned in

Siddhayogasaṅgraha and *Bhaiṣajyasamhitā* (Hultsch, 1914). It is mainly indicated in vomiting, cough, and respiratory disorders, and peacock feathers, legs, and fat are being used.

The peacock plays a vital role in mythology, architecture, craft, and cult. Peacock is omnivorous and an important attribute of the food web. The Gaddi tribe (Himachal Pradesh) used peacock feathers as an ornament during the traditional circle dance. The Santhal, Debla, and Ahir communities still practice customs related to peacock feathers. Among the aboriginals of western India (Gujarat and Rajasthan), namely the Gaddi, Rakas, and Banjara people, peacocks are used as totems. The Debla, Ahir, and Santhal used feathers of peacocks to decorate the head of the male member, and it's a symbol of tribute to peacocks. The Vedic literature repeatedly mentions the cow, buffalo, pig, and goat, but the name peacock is absent. The Vedic literature does not mention a single word about the peacock, which had been a symbol of the ethnic religion of the first people (Wuerthner, 2014). The nomads are not aware of the domestication of a peacock. Therefore, the peacock was a valuable resource for the ethnic people, and the peacock as a totem fostered strong bonds to integrate the diverse Indian aboriginal groups. The first Asokan Rock Edict, as well as the first Indian Inscription (in Prakrit and Asokan Brahmi Script), clearly instructed against peacock hunting. The second species is the antelope. Hunting was a legal pastime in ancient and medieval India. In the sedentary agricultural society, livestock were the dominant economic activity, and animal rearing and care were common practices. Species such as antelopes and peacocks are important parts of the food web, and all have medicinal value. But those species are not domesticated by the cultivators. Due to legal approval, a threat came upon those species. Sanskrit literature (especially after the 3rd BC) often described hunting, but the name of the antelope is not found in Vedic literature except in the Brihadaranyaka Upanisad (Hultsch, 1914).

In the Brihadaranyaka Upanisad, the antelope is not included among the species. It is mentioned as a simile to the satisfied mood of a hunter to the womanly gesture of an antelope. The ancient cave painting at Bhimbhetka depicts an antelope hunt. Therefore, the Asokan 1st Rock Edict mentioned the names of two species to restrict hunting, but this was not due to Vedic cultural influences; these two Indian species were under threat from indiscriminate hunting and had medicinal properties. Two species, the peacock and the antelope, are native to the Indian subcontinent. Both species inhabited grassy plains and thinly forested areas with semi-arid types of climates. Hunting was a popular festival among the Aryan people during the Mughal era. The rock edict depicts the totem's lineage, and the peacock (Mour in Hindi) was the totem of the Mouryan empires. The agrarian and livestock-based Indian society never preyed on animals associated with agriculture and livestock, such as cows, buffalo, goats, camels, and lambs. Among the remaining available food species, peacocks and antelope were the most common. Therefore, these two non-agrarian species faced the obvious threat of legally approved hunting. The rock edict also reflects the widespread propagation of Asokan *ahimsa* and eco-animism. It makes people aware of their connection to the environment. Therefore, the Asokan rock (I) exemplifies environmental awareness (species preservation) and is also related to the sentiments of Indian aboriginals.

VII. Asokan Rock Edict (RE II), Social Forestry and Veterinary Care

Rock edict II states that King Piyadasi made provision for two types of medical treatment: for humans and for animals. Wherever medical herbs suitable for humans or animals are not available, they have had them imported. Along roads, they have had wells dug and trees planted for the benefit of humans and animals (The Edicts of King Ashoka 2023). The Atharva Veda is a body of literature that addresses medico-religious matters. All are related to human beings, and veterinary and livestock animal care are absent there. The Asokan rock edict II is a written document in which the royal power instructs on the care of all animals and encourages the social forestry programme and medicinal plantations. The origin of Ayurveda is credited to the Vedic learned personnel, and it has a long and ancient heritage. The Charaka

Samhita and Susruta Samhita were literary examples of Vedic Ayurveda. The compilation of the Charaka Samhita and Susruta Samhita occurred in the 2nd to 1st BC, though they were based on oral tradition from the beginning. But those pieces of literature cover the phyto-medicine aspects only (for the human being), but are silent about veterinary medicine. The Asokan rock edict II is the first written document about veterinary care and medicinal plantation. Nowadays, roadside plantations and social forestry are an integral part of the community development programme (Rao, 1968), and the Gandhian philosophy of economic growth and community development goes hand in hand with the plantation and the afforestation programme (Shakya, 2016). The social benefits, thus generated, and the additional resources created may serve as stepping stones toward self-sufficiency. The roadside plantation programme was never mentioned in any Vedic literature. Rock edict II embodies a foresighted approach to environmental awareness in ancient India.

VIII. Junagarh Inscription and Earthen Reservoir

The Indian forts are the primitive urban unit. The Junagarh fort of Gujarat is one of the ancient urban units. The history of the fort is recorded in the Junagarh Stone Inscription. The stony inscription states that, in the foothill zone of Girnar Hill, a beautiful reservoir was built in 350 BC (Chandragupta I) in semi-arid conditions to store surface runoff. The reservoir was damaged by a natural calamity and repaired by King Rudradamana (150 BC) (Thapar, 2011). The inscription is in Sanskrit, and the script is Brahmi. The reservoir was an artificial, earthen structure intended to supply the fort with fresh water. The fact reveals that using the natural hill slope and using earthen material to store freshwater (without hampering the groundwater table) is a very ancient practice in India.

After Stockholm (1972), the consideration shifted to the reality of having uniform laws across the country for the preservation of flora and fauna. The Water (Prevention & Control of Pollution) Act, 1974, was the first enactment by the Parliament and the first step towards freshwater conservation (Dam & Tewary, 2005). The solid rock foundation and the natural slope of the Girnar area were favorable for the construction of an artificial reservoir. Nowadays, the Gravity Dam is the most widely used method for constructing a reservoir. It's based on concrete and cement construction, and it is the most stable type of construction (Mridha & Maity, 2014). It prevents dam failure. The Sudarsana Lake was constructed on the slope of Girnar Hill (surface elevation), with the foundation resting on a hard basaltic formation. One narrow canal originated from the reservoir along the natural slope. The artificially constructed lake (Sudarsana Lake) was an example of ancient Indian foresight in construction practices, and it's also an example of a modern gravity dam. That was the prudent step to create surface water storage across the entire hill-slope watershed.

IX. Ecology, Animism, and Ancient Rock Edicts

The doctrine of early Indian Inscription (Asokan doctrine of inscription) includes the principles of social and ecological harmony (Kumar, 2015). It is historically established that Buddhism marks the beginning of concern for animal welfare. The Buddhist creed of non-violence and the Asokan edicts are ethical evidence of non-violence (Saravanamuthu, 2006). The Asokan rock edicts echo the Buddhist ideology that animals and humans are part of the same chain and the same universal flux. The Junagarh inscription mentions Rudradama, a member of the Sakas, a Scythian ethnic group (Hornborg, 2016). After the decline of the Maurya Empire, northwest India was repeatedly attacked by invaders from Central and West Asia. The Sakas, or Scythians, were a group of Iranian nomadic pastoral tribes. Rudradaman also belonged to the western Kshatriya dynasty. They patronized Hellenic culture, which was influenced by Buddhism. The world is currently considering neo-animism, which is based on environmentalism and the philosophy of nature. The world is currently developing policies and strategies to sustainably manage freshwater (a natural resource),

mitigate freshwater demand, and preserve it for the future (Mridha & Maity, 2014). Asokan rock edicts I and II, and the Junagarh inscription, depict core ideas of nature preservation.

X. Result

The rock edicts of Asoka (I and II) argue in favour of protecting the threatened species. The peacock and antelope are the symbols of endangered species. These are the Indic species, and they have a close association with the Indian first people as totems and religious symbols. It's also supported by animism and by the Buddhist doctrine of nonviolence. The deliberate destruction of animal life is prohibited by the rules. Buddhism sought to harmonize the principles of nonaggression and the preservation of life, taking into account the human need to consume animal and plant life. The neo-environmentalists Peter Kareiva, Mark Lynas, Bjorn Lomborg (Chapple, 1993), and Emma Marris are in favour of conservation. These ancient inscriptions are the first written documents of monarchical responsiveness toward ecology (Kingsnorth, 2013).

XI. Conclusion

The three inscriptions depicted different kinds of facts: the prohibition on hunting threatened species, a medicinal plantation, a social forestry programme, and animal care and water conservation by the earthen structure. These four facts are the core of biodiversity preservation. Earth and nature-based spirituality is proliferating globally. The animist model of environmentalism was accepted in the ancient and modern worlds. The Asokan rock Edicts and Junagarh inscription resonate with the philosophy of nature.

References

1. Arhem, K D, and G Sprenger. 2016. *Animism in Southeast Asia*, London: Routledge. doi:<https://doi.org/10.4324/9781315660288>.
2. Bose, M K. 1973. "Petrology and Geomorphology of the Igneous Complex of Mount Girnar, Gujarat, India," *Contributions to Mineralogy and Petrology*, 39 (3): pp. 247-266. doi:[doi:10.1007/bf00383107](https://doi.org/10.1007/bf00383107).
3. Chapple, C K. 1993. *Nonviolence to Animals, Earth and Self in Asian Traditions*, Suny Press. <https://books.google.co.in/books>.
4. Dam, S, and V Tewary. 2005. "Polluting Environment, Polluting Constitution: Is a 'Polluted' Constitution worse than a Polluted Environment?" *Journal of Environmental Law*, 17 (3): 383-393.
5. Daniels, Peter T, and Bright, William. 1996. *World's Writing System*, New York University Press.
6. Descola, P. 2013. *Beyond Nature and Culture*, University of Chicago Press.
7. Hornborg, A C. 2016. *Mi'kmaq Landscapes: From Animism to Sacred Ecology*, London: Routledge.
8. Hultzsch, E. 1914. "The date of Asoka," *The Journal of the Royal Asiatic Society of Great Britain and Ireland*, pp. 943-951. doi:<https://doi.org/10.1017/S0035869X00047419>.
9. Kingsnorth, P. 2013. "Dark Ecology," *Orion Magazine*, pp. 18-29. <https://orionmagazine.org/article/dark-ecology/>.
10. Kumar, S. 2015. "Agenda 21 Section IV and Gandhian Philosophy-A Review," *Uttar Pradesh Journal of Zoology* pp. 169-175. <https://mbimph.com/index.php/UPJOZ/article/view/594/576>.
11. Lai, S. B. 2005. "A Note on Yavana Raja Tushaspa," in *Dialogue Between Cultures: India and Iran*, Anamika Publishers & Distributors (P) Ltd.
12. Mankas, R S, B A Jadeja, and G K Chavda. 2007. "Ethnoveterinary Knowledge System of Maldhari Tribe of Girnar Junagarh District, Gujarat, India." *Plant Archives* 7 (2): pp. 843-845.
13. Mookerji, R. 1962. *Asoka*, Motilal Banarasidass Publishers.
14. Mridha, S, and D Maity. 2014. "Experimental Investigation on Nonlinear Dynamic Response of Concrete Gravity Dam-Reservoir System," *Engineering Structure*, 80: pp. 289-297.
15. Olivelle, Patrick. 1996. *Translation Upanisads: A New Translation by Patrick Olivelle*, translated by Olivelle Patrick, New York: Oxford University Press.

16. Prinsep, J, and H Prinsep. 1858. *Essay on Indian Antiquities: Historic, Numismatic and Palaeographic, of the Late James Prinsep: to which are added his useful tables, illustrative of Indian history, chronology, modern coinages, weights, measures, etc.* Vol. 2.
17. Rao, M S. 1968. *The History of Medicine in India and Burma*, London: Cambridge University Press, pp. 52-61.
18. Ray, H P. 2004. "The Beginnings: the Asian and Merchant in Early Gujarat, Sixth-Eleventh Centuries," *Art Orientalis*, 34: 39-61.
19. Saravanamuthu, K. 2006. "Gandhian-Vedic Paradigm: Theorising Sustainable Development," pp. 510-512, in Hoque. Z. (Ed.), *Methodological Issues in Accounting Research: Theories and Methods*, Spiramus Press.
20. Shakya, A K. 2016. "Medicinal plants: Future Source of New Drugs," *International Journal of Herbal Medicine*, 4 (4): pp. 59-64.
21. Sircar, D C. 1975. *Inscriptions of Asoka*, Publication Division, Ministry of Information and Broadcasting.
22. Smith, M. L., T. W. Gillespie, S Barron, and K Kalra. 2016. "Finding History: the Locational Eography of Asohokan Inscription in the Indian Subcontinent," *Antiquity*, 90 (350): pp. 376-392.
23. Thapar, R. 2011. *Inscription as Historical Writing in Early India: Third Century BC to Sixth Century AD*, The Oxford History of Historical Writing. <http://culturahistorica.org/wp-content/uploads/2020/05/thapar-historical-writing-early-india.pdf>.
24. *The Edicts of King Ashoka*. February. Accessed February. 2023. <https://www.cs.colostate.edu/~malaiya/ashoka>.
25. Woolner, A C. 1986. *Introduction to Prakrit*, Motilal Banarasidas Publication.
26. Wuerthner, G. 2014. *Keeping the Wild: Against the Domestication of Earth*, Island Press.
27. Yang, F Y, H Zuo, and Xu Hong LI. 2011. "Analysis of the Nutritional Value of Peacock Meat," *Amino Acid & Biotic Resources*, 4. http://en.cnki.com.cn/Article_en/CJFDTotal-AJSH201104007.htm.

