

## ANTHROZOOLOGY RESEARCH ON THE RELATIONSHIP BETWEEN ELEPHANTS AND BUDDHIST JATAKA STORIES

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### ARTICLE INFO

#### Research Article

#### Keywords

Anthrozoology, Buddhism,  
Elephants, Jataka-Stories,

#### Received:

2021-01-19

#### Revised:

2021-05-31

#### Accepted:

2021-06-23

### ABSTRACT

During the early Vedic-Period elephants were not much embraced as a symbol of royalty and records were scarce. By the time of the Late-Vedic period, elephants were trending on royal usage. As Gautama Buddha's existence range from 560 BC-480BC, the Buddhism related elephants records can be one of the oldest archives on captive elephants. In this research the relationship between elephants and Jataka stories was studied. The resource for this research was obtained from six volumes that came under Cambridge publication, by the editorship Prof.E.B Cowell of the Cambridge University. From 547 Jataka stories about 126 stories were detected to have some sort of relationship with elephants. Some significant data was able to yield during the cause of the research. One such example comes from Kulāvaka-Jataka, in which it mentions the practice of capital punishment by trampling from an elephant. So far the oldest elephant-punishment practice comes from the Classical period in which the Romans, Carthaginians and Macedonians did those. But considering the facts that first utilization of elephant for labor by ancient Mediterranean in 331 BC and Buddha's existence from 5th-4th century BC the Kulāvaka-Jataka record is probably one of the oldest or perhaps the oldest "capital punishment by elephant" evidence in history. What is presented in this paper is just glimpse of a review on such Jataka stories. This work had been compared with other historical records for better understanding.

## Introduction

The linkage between Buddhism and elephants could be division into three categories. First category is before 560BC (as Lord Buddha is recorded to be born during 560 BC) and it refers to elephant-related incarnations of Gautama Buddha. The second category would be between 560BC and 480BC (Buddha passing away). This would include all the teachings Buddha had used the elephant as a metaphor and the relationship the Buddha had with elephants, etc. The third category would be the combination of country's respect to elephants and Buddhism which made the link between Buddhism and elephants stronger.<sup>1</sup> This paper is based upon the first category.

The earliest evidence on captive elephants comes from the Indus Valley civilization (2500-1900BCE). As in those times there have been carved seals that depict elephants with cloths flung over their backs indicating they were tame. But it took until the late Vedic-Period (1000-500BCE) for elephant to become a prominent figure in culture.<sup>2</sup> As Gautama Buddha's existence range from 560 BC-480BC, studying the culture related to elephants and Buddhism can give us the early insight on interaction between man and elephant. Also it can help us to understand the ideology what the society on those days had about elephants.

The Buddha's previous incarnations-events are documented in ancient Pāli Canons. Those events are known as Jataka stories. Buddha's past life can be in a form of a divine, human or an animal. Each story has its' preface called *paccuppannavatthu* and it is the present situation (during presence of Buddha); which relates the particular circumstances in the Buddha's life which led him to tell the incarnation-story and thus reveal some event in the long series of his previous existences as a *Bodhisatta* (being destined to attain Buddha-ship). At the end there is always given a short summary, where the Buddha identifies the different individuals in the story in their present births at the time of his discourse.<sup>3</sup>

## Evaluation and Methodology

In 1880 Prof. Rhys Davids of the University of London, first commenced a translation of the Jataka stories to English. But other engagements obliged him to discontinue the work. Again in late 1800s a project was undertaken to translate 547 Jataka stories, with the influence of few scholars. Editorship for this work was done by Prof. E.B Cowell of the Cambridge University. By over a decade, the task was completed with six volumes that came under Cambridge publication. The Vol.I was translated by Lord Robert Chalmers of Oxford. The Vol.II, Vol.IV and Vol.VI by Dr.W.H.D. Rouse from University of Cambridge. Vol.III by two scholars by name Mr.H.T. Francis (Under-Librarian of the University Library at Cambridge) and Mr.R.A. Neil (Fellow and assistant-tutor of Pembroke College). Vol.V by Mr.H.T. Francis.

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<sup>1</sup> Muthukumarana, Tharindu, *The Life of Last Proboscideans: Elephants*, (Tharindu Muthukumarana, 2017).

<sup>2</sup> Trautmann, Thomas R, *Elephants and Kings*, (2015).

<sup>3</sup> Chalmers R, Cowell Edward Byles, ed, *The Jataka or Stories of the Buddha's Former Births. Vol: I*, (Cambridge: University Press, 1895).

The research for this paper is done relative to those six volumes. Any information related to elephants was detected. Then those were analyzed and relatively assigned for 33 criterions. Those criterions elaborate features of Jataka stories and correlation with elephants. Separately the Jataka stories that *Bodhisatta* was born as in non-human form were also analyzed.

Sources for the six volumes come from divisions of 22 *nipatas* or books. Those divisions are from- **Vol I:** Ekanipāta (Book I); **Vol II:** Dukanipāta (Book II), Tika-Nipāta (Book III); **Vol III:** Catukkantpāta (Book IV), Pancanipāta (Book V), Chanipāta (Book VI), Sattanipāta (Book VII), Attha-Nipāta (Book VIII), Navanipāta (Book IX); **Vol IV:** Dasa-Nipāta (Book X), Ekādasa-Nipāta (Book XI), Dvādasa-Nipāta (Book XII), Terasa-Nipāta (Book XIII), Pakinnaka-Nipāta (Book XIV), Visati-Nipāta (Book XV); **Vol V:** Timsanipāta (Book XVI), Cattālīsanipāta (Book XVII), Paṇṇāsanipāta (Book XVIII), Saṭṭhinipāta (Book XIX), Sattatinipāta (Book XX), Asītinipāta (Book XXI); **Vol VI:** Mahānipāta (Book XXII).

### Data Analysis

From 547 Jataka stories about 126 Jataka stories were detected to have some sort of relationship with elephants. Respectively those values come as-**Vol I:**25 (19.84%), **Vol II:**26 (20.63%),**Vol III:**27 (21.42%), **Vol IV:**23 (18.25%), **Vol V:**17 (13.49%) and **Vol VI:**8 (6.34%). From the *nipatas* those values comes as- Ekanipāta:25 (19.84%)/ Dukanipāta:20 (15.87%), Tika-Nipāta:6 (4.76%)/ Catukkantpāta:7 (5.55%), Pancanipāta:2 (1.58%), Chanipāta:4 (3.17%), Sattanipāta:7 (5.55%), Attha-Nipāta:4 (3.17%), Navanipāta:3 (2.38%), Dasa-Nipāta:3 (2.38%), Ekādasa-Nipāta:5 (3.96%), Dvādasa-Nipāta:2 (1.58%), Terasa-Nipāta:3 (2.38%), Pakinnaka-Nipāta:2 (1.58%), Visati-Nipāta:8 (6.34%)/ Timsanipāta:4 (3.17%), Cattālīsanipāta:3 (2.38%), Paṇṇāsanipāta:1 (0.79%), Saṭṭhinipāta:2 (1.58%), Sattatinipāta:2 (1.58%), Asītinipāta:2 (3.96%)/ Mahānipāta:8 (6.34%).

Throughout the reviewing process of those stories some special features were identified and some of them had mutual relationship with other stories (Refer: Table 1). Out of those features the most common were (i)“Elephant linked with royalty”, (ii)“Using the elephant as a metaphor, example or name”, (iii)“Mentioning of wild elephants”, (iv)“Mention of a mahout, elephant trainer or groomer”, (v)“Mentioning of the *chaturanga sena*”, (vi)“Elephant range in Himalayas”, (vii)“Elephant & warfare”, (viii)“Mention of elephant in *paccuppannavatthu*” and (ix)“Buddha's disciple born as an elephant”.

Another 182 Jataka stories were detected in which the Buddha's incarnation as non-human form. These incarnations were as an animal, divine and legendary or semi divine (Refer: Table 2). From those the highest reincarnations are the ones: (i)“A Divine Incarnation”, (ii)“Monkey”, (iii)“Antelope or Deer”, (iv)“Goose”, (v)“Lion”, (vi)“Parrot”, (vii)“Elephant” and (viii)“Legendary or Semi Divine”.

### Discussion

In those Jataka stories the names of the elephants comes as Damsel-Face, Añjana-Vasabho (Black-Bull), Dhanapāla, Bhaddavatikā, Somadatta, Chaddanta, Cullasubhaddā, Mahāsubhaddā and Paccaya. From them the names, Bhaddavatikā, Cullasubhaddā and

Mahāsubhaddā are names of female elephants. However in modern-day Sri Lanka, none of the mentioned names given to any captive elephant though certain names from Pali chronicles texts are given. As for an example in the latest captive elephant census in 2019 there were 7 elephants by the name Kandula and according to Mahāvamsa “Kandula” is the name of King Dutugemunu’s royal elephant. Apart from that the most common name in that census with value of 17 was “Raja” which means king or royal in Pali Sanskrit.<sup>4</sup>

Elephants been categorized for various caste was a known culture in Sanskrit texts through ancient Asia. Various cultures had various methodologies on categorizing elephants on to their caste depending on their morphology, ability, scent, emotions, and locality attributes. In Sri Lankan ancient elephant-lore, there were 10 castes that were known. They were divided into high and lower castes. Those castes were Kalavaka, Gangeye, Pandara, Thambe, Pingala, Gandha, Mangala, Hema, Uposatha and.<sup>5</sup> The highest was Chaddanta and the other high castes were Mangala, Hema, Uposatha. Some traits of such culture were also recognizable in Jataka stories. From them very few give details on detectable attributes. As for example in the Cetiya-Jataka mentions on witnessing a white royal elephant prostrate, touching the earth in seven places and the footnotes in that volume claims that seven body parts to be the tusks, trunk, four legs. But in the Sri Lankan caste system the Chaddanta caste claims seven body parts to be the trunk, penis, tail and four legs. In the Kālīṅga-Bodhi-Jātaka mentions an appearance of elephants that is known to be precious and they belong to the Uposatha stock. A similar incident is known in the Mahāsudassana-Jātaka, where a royal elephant named Uposatha known to be a celestial white elephant and to have a sevenfold strength.<sup>6</sup> But in the work of Lord Robert Chalmers, though the Mahāsudassana-Jātaka is present yet the story of the “Uposatha royal elephant” is not mentioned. So unfortunately as a result it is not in the purview of this research and is not included in this data analysis. In elsewhere the name of that elephant was known as “Sabbath”.<sup>7</sup>

Another significant story is the Chaddanta-Jataka in which it describes a celestial white elephant named Chaddanta that dwelt near a lake also called Chaddanta in Himalayas. The name “Chaddanta” is the same name of the highest elephant-caste in Lankan elephant-lore. However in that particular Jataka story usually it is known that the elephant Chaddanta was a six-tusked elephant (Malalasekera;1961). But in the work of Mr.H.T. Francis the elephant Chaddanta is describe as a tusker with tusks of fifteen cubits in circumference, thirty cubits long and emitting six-colored rays. The etymology of the word Chaddanta may had derived from the meaning “six-tusked” (Peris;2001). According to the Mahavamsa, king Dutugemunu’s royal elephant Kandula was also considered as an elephant from Chaddanta caste. But in anywhere it is not mentioned that Kandula possess six tusks. According to modern day science, throughout the entire Proboscideans evolutionary history, the maximum amount of elongated-incisors which some possessed were four. Those were the two incisors by each from the maxilla and mandible. But there is a rare record of an elephant with seven tusks. This was a tusker from West Africa and was shot by a hunter in early 1950s. In the left premaxillary alveolar socket there were five tusks

<sup>4</sup> Muthukumarana, Tharindu, *Captive Elephants Census in Sri Lanka (2018-2019)*, (2019).

<sup>5</sup> Deraniyagala, Paulus Edward Pieris, “Some extinct elephants, their relatives and the two living species,” (1955).

<sup>6</sup> Walshe, Maurice O’Connell, *Thus have I heard: the long discourses of the Buddha; Dīgha Nikāya*, (Wisdom Publications, 1987).

<sup>7</sup> Bhikkhu Sujato, *Long Discourses: A Translation of Dīgha Nikāya*, (2018).

emerging and in right socket two were emerging. It is also significant to note that the skull had only two alveolar sockets and from these sockets there is more than one projection of tusks (Hamilton;1992). However up to today there is no mtDNA haplotypes evidence suggests that a population of species from family Elephantidae possessed six tusks.

There are also some similarities in the story of Kandula in Mahavamsa or Rajavaliya and the story of the Vessantara-Jataka. In the Vessantara-Jataka it says on the same day when prince Vessantara was born *a female flying elephant brought a young one, esteemed to be of lucky omen, white all over, and left it in the royal stables. Because this creature came to supply a need of the Great Being, they named it Paccaya.* In Mahavamsa it mentions that when prince Dutugemunu was born *an elephant of the six-tusked race brought his young one hither and left him here and went his way. When fisherman named Kandula saw him standing in the jungle on the shore opposite the watering place, he straightway told the king. The king sent his (elephant) trainers to bring the young elephant and he reared him. He was named Kandula as he had been found by Kandula.* In the Rajavaliya the gender of the parent is female. In those documentations the Sanskrit-concept of celestial elephant is well highlighted. Apart from the Vessantara- Jataka, the Dummedha-Jataka, Mahā-Ummagga-Jataka and Chaddanta-Jataka also have described about celestial elephants. In the work of Dr. Deraniyagala<sup>8</sup> doesn't mention about Chaddanta caste having any ability to fly through air. But in the Sanskrit texts of Gajasastra or Matangalila describes certain mythological elephants that had wings and flew through air. They mentions about divine elephants known as dig-gajas that had wings and categorize the rest into three main castes known as Bhadra (best), Manda (second) and Meriga (inferior). The Bhadra caste was known to have wings initially but later lost them. However in the Jataka-stories elephants possessing "wings" are not known though there are to known to be celestial elephants. Another significant notice is that caste Meriga, which name itself may be a derivation of the Pali or Sanskrit word "mrga" which means the deer. Elephant in the Meriga caste are known to be slimmer than other two castes and this can relate to morphology attributes of a deer. During the 19<sup>th</sup> century Southern Indian elephant-caste system categorized elephants to three castes by names such as Koomeriah (thorough-bred), Dwāsala (hybrid of Koomeriah and Meerga) and Meerga (third-rates).<sup>9</sup> But in the analyzed Jataka-stories, the Gajasastra/Matangalila or Southern Indian elephant-castes doesn't get featured on them.

In the Jataka-stories the prominence of the Himalayan elephant is remarkable. The Arthasāstra describes eight forests where elephants dwells and categorize them to qualities. These places were called *gaja-vanas* but those were not precise in terms of elephant habitats on those days. However the eastern stripe in Himalayan ranges were known as Prācyā and western range known as Pāncanada. The elephant only in the Prācyā forest is known to be extremely good while the Pāncanada is known to inferior. A hypothesis proposition for western dwellers to be better than the eastern dwellers could a result of the ideology shared in Jataka-stories; just like classifying Chaddanta caste to be better. That reason is clearer since Buddhism and Arthasāstra both originated from the Magadha kingdom (6<sup>th</sup> century BCE- 8<sup>th</sup> Century CE).

Some of the Jataka-stories have post-Vedic period features and one of the fine example is the *chaturanga sena*. Word *chaturanga sena* means four-legged army and the four refers to

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<sup>8</sup> Ibid.

<sup>9</sup> Sanderson, George P., *Thirteen years among the wild beasts of India*, (Osler Press, 2007).



elephants, horses, chariots and infantry. During the earliest Vedic time instead of four-forces there were three-forces and in which the elephant was excluded. During the eastward expansion of the Vedic Aryans, from the Indus valley into the valley of the Ganga the three-force became four-forces as the elephant was included. Later during the Classical period the chariot was excluded making the composition of forces down to three again. This feature is found in the Nalinikā-Jataka, where the army only consists of elephants, horses and footmen. The exact time period when chariot got eliminated is not known but many of non-chariot army comes from the records of “Anno Domini”.<sup>10</sup> Though the exact time period is not known yet the Nalinikā-Jataka origination comes “Before Christ” and it can be one of the earliest record of excluded-chariot-army. Another post-Vedic example is the presence of God Indra’s elephant Erawan. During the Vedic period Indra used to ride a chariot but during the post-Vedic time it was replaced by an elephant named Erawan, also called Airavata.

In ancient Asian culture elephants always had an association with water and rain. It was known the royal elephant has the power to bring rain to the kingdom whenever necessary. This association is also elaborate in the Kurudhamma-Jataka and the Vessantara-Jataka. Both those stories have similar scenarios; in which the both stories describe when the kingdom of Kālinga suffered a serious drought that resulted in famine. The Bodhisatta-king from another kingdom decided to gift the royal elephant to the Kālinga kingdom for the plea made by the people of Kālinga. In the Kurudhamma-Jataka the Bodhisatta-king is from Kuru Kingdom and in Vessantara-Jataka from Sivi Kingdom.

It is also highlighting how some elephant-related professions were intricate on Jataka-stories. Such were those as mahouts, groomers, elephant-trainers, elephant-physician and valuer (a person who is assigned to the king, that value elephants, horses, jewels, gold, etc). This shows that there was a cooperate division related to elephants in the royal house. Even in the Pali-Linguistics wordology the references for those professions has its’ own variety. The elephant-driver is called *hatthāroha*, elephant-keeper: *hatthigopaka*, elephant tamer: *hatthācariya* or *hatthidamaka*. The presence of an elephant-physician shows the knowledge of medicating an elephant existed even on those days. Mentioning of the elephant-lore indicates that it was a wealth of knowledge that was regarded as distinctive subject. According to the known Jataka-stories this kind of a subject was education of royals, chaplains and elephant-trainers. In the Samgāmāvacara-Jataka and Upāhana-Jātaka indicates certain features of existence on elephant-trainers tribalism. This means descendants from those groups will also become elephant-trainers by learning the elephant-lore from their ancestors. In the Susīma-Jataka, it explains a story of organizing a traditional elephant-festival. Such festival should be conduct by the royal chaplain who has ancestral responsibility to perform the task. Unfortunately the chaplain dies and the challenge falls to his son. The son should know the three Vedas and the elephant-lore. As a result he travels to Takkasilā (which known to be an ancient education centre) to learn them.

It noteworthy to mention that there wasn’t much human-elephant conflict related events on those stories. The only Jataka-story that describes a least related scenario is the Dadhi-Vāhana-Jataka, in which an anchorite dwelling in a forest asks Sakka for a solution for elephants

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<sup>10</sup> Trautmann, Thomas R. *Elephants and Kings*, (2015).

annoying him when they pass by near his hut. Then Sakka offers the anchorite a drum and claims to him that *“If you beat upon this side-your enemies will run away but if you strike the other side they will become your firm friends and will encompass you with an army in fourfold array”*.

Most of the time elephants were reared by the royalty but there are few exceptions. From those detected six exceptions, about three of them mentions anchorite/Brahmin/ ascetic that residing in forest rearing an elephant. The other three describe events of gifting an elephant for non-royalty. From the mentioned the Indasamānagotta-Jataka and Mittāmita-Jataka both have a similar story where the elephant ultimately end up in killing its owner. Throughout ancient history when it comes to captive elephants most of them were males. But in the Dalhadhamma-Jataka it explains of a King owning a female royal elephant. In that the *paccuppannavatthu* explains a similar story where a female elephant named Bhaddavatikā informs to the Buddha that the King used to treat her very well when she was young but after she aged the king abandoned her. Then the Buddha convinces the king to replace the treatment what she initially got. Afterwards the Buddha says to the Brethren about a similar story, how in his past life he convince the king to replace the royal treatment which an aged female elephant lost.

When it comes to elephant-behavior cues, the mentioning of elephants lifting their tails due to apprehension or anxiousness is an enthralling indication. This is a precise elaboration of an elephant behavior, which is mention in the Alīnacitta-Jataka and Samgāmāvacara-Jataka.

The ancient practice of capital punishment of execution by trampling from an elephant is also known in the Kulāvaka-Jataka. Usually the oldest elephant-punishment methodology comes from the Classical period in which the Romans, Carthaginians and Macedonians did those. But the first utilization of elephant for labor by ancient Mediterranean was around 331 BC in which Alexander after winning the Battle of Gaugamela; he decides to use war elephants. Taking into consideration of Buddha’s existence from 5<sup>th</sup>-4<sup>th</sup> century BC the Kulāvaka-Jataka record is probably one of the oldest or perhaps the oldest “capital punishment by elephant” evidence in history.

## Conclusion

This work presented in this paper is just a glimpse of a historical documentation. But some Jataka stories show a valuable insight especially on captive elephants. Though an exact time period is not known when these Jataka stories did happened; yet it can be assumed that those may trace to a time frame of 3300/1800 BCE-563 BCE (dates according as from beginning of Indus Valley Civilization & the history of Benares to birth of Buddha). Since Jataka stories belong to post-Vedic period; those can be some of the earliest documentation on elephants on South-Asia. Out of the 13 Asian elephant range countries, about 7 of them have a high proportion of Buddhist. So research and enhancing this kind of work can have positive effect on conserving the Asian elephant.

**Table 1** Criteria detected through analyzing the Jataka stories.

Criterion	Citation (n=)
Bodhisattva born as an elephant	7
Buddha's relation born as an elephant	3
Buddha's disciple born as an elephant	10
Celestial elephant	4
Elephant and warfare	14
Elephant associating with other animals (non-humans)	6
Elephant carcass	6
Elephant categorize for caste	7
Elephant in a dream	1
Elephant in musth or in rut	5
Elephant linked with rain	2
Elephant linked with royalty	66
Elephant more than pair of tusks or emitting six-colored rays	1
Elephant physician or medicating an elephant	6
Elephant range in Himalayas	18
Elephant reared by a non-royal	6
Elephant turn tail cue	2
Gifting of an elephant	7
Hunting elephants by humans	4
Indra's elephant <i>Erawan</i>	3
Least related to human-elephant conflict	1
Mention of a mahout, elephant trainer or groomer	21
Mention of elephant in <i>paccuppannavatthu</i>	11
Mention of elephant-lore	4
Mention of ivory	9
Mention of valuing elephants	2
Mentioning of the <i>chaturanga sena</i>	19
Mentioning of wild elephants	33
Name of the elephant is known	7
Reference to a sculpture of an elephant	4
Trampled to death by an elephant (capital punishment)	1
Using the elephant as a metaphor, example or name	40
White elephant	9
Average	10.27272727



**Table 2 Reincarnation of Buddha according to analyze Jataka stories.**

Reincarnation	As Mentioned in the Volume	n=
A Divine Incarnation	Air-sprite/Deity/Deva/ Divine/Fairy/God/King of Devas or Gods/Kusa-Sprite/Nimb-Tree Sprite/Sakka/Sea-Spirit/Spirit/Tree-Spirit/Tree-Fairy/Tree God	65
Antelope or Deer	Antelope/Deer/Stag	11
Bird (Species unknown)	Bird	6
Bovines	Buffalo/Bull/Ox	6
Rooster or Fowl	Cock/Fowl	2
Crow	Crow	3
Dog	Dog	1
Fish	Fish	4
Horse	Flying Horse/Horse/Sindh Horse	4
Legendary or Semi Divine	Garuda/Singila Bird/Naga	7
Goose	Mallard/Golden Mallard/Goose/Ruddy Goose/Wild Goose	11
Peacock	Golden Peacock/Peacock	3
Frog	Green Frog	1
Hare	Hare	1
Iguana	Iguana	1
Jackal	Jackal	2
Lion	Lion	9
Lizard	Lizard	2
Monkey	Monkey	12
Parrot	Parrot	8
Partridge	Partridge	1
Pigeon	Pigeon	6
Quail	Quail	5
Rat	Rat	2
Serpent	Serpent	1
Vulture	Vulture	5
Wild Sow	Wild Sow	1
Elephant	Elephant	7
Average		6.678571



**Figure 1.** Painting of a white elephant at Sri Jayawardenapura Kotte, Rajamaha Viharaya Temple in Sri Lanka. It depicted the Kattahari Jataka. (Photo: Tharindu Muthukumarana).

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