

**DEVELOPMENT OF ANCIENT INDIA WAS STRONGLY INFLUENCED
BY THE PERSIAN EMPIRE**

**ANAND M. SHARAN
PROFESSOR
DEPARTMENT OF MECHANICAL ENGINEERING
MEMORIAL UNIVERSITY OF
NEWFOUNDLAND, ST JOHN'S,
NEWFOUNDLAND, CANADA A1B 3X5**

E-MAIL: asharan@mun.ca

August 20, 2017

ABSTRACT

In this work, the ancient histories of India and Persia are studied with the objective of development of kingdoms in each country. It is found that it was the Persian rule which introduced many concepts such as buildings and network of roads first. The same applies to the introduction of common currency. It shows that progressive rulers in those days could govern vastly diverse subjects.

KEYWORDS: Roads, and highways; Common currency; Buildings and architecture; Inns and postal systems including planting of trees for shade for travelers

1. INTRIDUCTION – ANCIENT INDIA

One can review the ancient history of India by looking at Table 1. This table starts with the Indus Valley days and then goes up to the Pala Dynasty which existed between the 7th to 12th Century AD. It shows the rise of Janapads (small kingdoms) as number 5 when the second major rise in urbanization took place in India after the Indus Valley days. This rise in urbanization was parallel to the Persian Empire more or less as we will see later on this this work [1-5]. Here in India, a number of small kingdoms grew across the Indian subcontinent. By 500 BC, sixteen "republics" or janapads had been established, namely; Kasi, Kosala, Anga, Magadha, Vajji (or Vriji), Malla, Chedi, Vatsa (or Vamsa), Kuru, Panchala, Matsya, Surasena, Assaka, Avanti, Gandhara, and Kamboja.

2. NANDA AND MAURYAN EMPIRES

However, unlike Persian Empire which was started by Cyrus I in 559 BC, the India's first empire was started in Magadh by Nandas in 345 BC much later than in Persia (Fig. 1). The Persian Empire started much later after the Babylonian and other empires such as Assyrian in Mesopotamia.

After the Nanda Empire as shown in Fig. 1, began the Maurya Empire by Chandragupta Maurya (number 8 in this table). He expanded the kingdom within India and also to Afghanistan. Here, he defeated Seleucus I (Alexander's general) and annexed large part west of Indus including modern Afghanistan.

The Maurya Empire existed between 322 BC and 187 BC. Originating from the kingdom of Magadha in the Indo-Gangetic Plain in the eastern side of the Indian subcontinent. The empire had its capital at Pataliputra (modern Patna). The empire extended over 5 million square kilometers' (1.9 million square miles) at its zenith under Asoka (Fig. 1).

Chandragupta Maurya raised an army and with the assistance of Chanakya overthrew the Nanda Empire in 322 BC. He expanded his power

westwards across central and western India, taking advantage of the disruptions caused by the withdrawal westward of Alexander the Great's armies. By 316 BC he conquered over the satraps left by Alexander. Chandragupta then defeated the invasion led by Seleucus I, a Macedonian general from Alexander's army thereby gaining additional territory west of the Indus River. Seleucus I ruled from Babylon where Alexander had died.

Alexander's forces had burnt Persepolis after defeating Darius III. The map of Persian Empire is shown in Fig. 3. It extended over vast areas of the known world then. As a matter of fact, Alexander essentially conquered the Persian ruled areas and did not extend beyond into the Nanda Empire. Alexander while conquering Persia used the roads built by the Persian Empire. Thus, it was the Persians who had built a system of roads in their vast territory.

If one reads into the world history of that time, it is not clearly emphasized that the Persian Empire had very strong influence on the development of India and this is the specific contribution of this work where the exchange of ideas between India, Persia, and Greece are discussed.

If we see the post Indus Valley development, it is Persia which developed first and then India just like the industrial revolution which started in England first and it was followed into Europe later on.

Diplomatic relations between Chandragupta and Seleucus I were established and several Greeks, such as the historian Megasthenes, Deimakos and Dionysius lived at the Mauryan court at Pataliputra, which is modern Patna shown in Fig. 3 located on the bank of the river Ganga.

Megasthenes in his diary describes Pataliputra. He says that this city had a wooden wall nine miles long and a mile and a half wide surrounded, with 470 towers and a moat that was 900 feet wide. Megasthenes also described Chandragupta's lavish palaces as built of wood. Nothing remains of the palace except fragments of highly polished columns [4]... The Mauryan Palace in Pataliputra and the monument columns everywhere in India were built to imitate

the Darius I's palace at Persepolis which had 100 columns [5]. Figs 5, and 6 respectively show the remains of Chandragupta's hall and, the famous hall at Athens built on acropolis in 378 BC. Thus, it is Darius I's hall started by Darius I and completed by his son Xerxes I which inspired the halls built at Pataliputra and Athens later on.

The name of the currency during this empire was called Panas just like Darius I had.

Chandragupta's grandson Emperor Asoka (who had converted to Buddhism) convened the Third Buddhist Council at this city. Asoka defeated king of Kalinga, modern Odisha, where he was deeply affected in the battle by the bloodshed and adopted Buddhism. He sent Buddhist missionaries all over the known world then.

Asoka had constructed highways where there were inns all along the highway for travelers to rest and had planting of trees for shade for travelers. He had introduced the postal system within India. He had rock inscriptions as a message to his people and edicts in one or more languages including Aramaic in Afghanistan which was ruled by Greeks earlier.

Asoka sent Buddhist missionaries to modern Kashmir and Afghanistan, Syria, Persia, Egypt, Greece, Italy and Turkey.

3. PERSIAN EMPIRE [6-11]

Persian Empire existed between 550 BC to 330 BC (see Table 2). Their empire extended between Greece to Indus in India (see Fig. 4). Cyrus invaded India in 533 BC when India was divided amongst various small kingdoms.

Cyrus II of Persia commonly known as Cyrus the Great was the founder of the Achaemenid Empire. Under his rule, he conquered most of Southwest Asia and much of Central Asia and the Caucasus. Cyrus the Great created the largest empire in the world at that time. Under his successors, the empire eventually stretched at its maximum extent from parts of the Balkans in Eastern Europe in the west to the Indus Valley in the east.

Cyrus the Great administered the empire through satraps. What is sometimes referred to as the Edict of Restoration (actually there are two edicts) described in the Bible as being made by Cyrus the Great. It has left a lasting legacy on the Jewish religion. This is because of his policies in Babylonia, he is referred to by the Jewish Bible as a Messiah.

Cyrus the Great is also well recognized for honoring human rights, and military strategy.

Darius divided the empire into provinces called satrapies just like Cyrus. He connected the empire by roads and had a common currency throughout. The Persians invented the concept of the mail which was delivered from one end of the empire to the other.

After the failed military expedition to Greece, Xerxes returned to Persia and oversaw the completion of the many construction projects left incomplete by his father Darius I - at Susa and Persepolis. He oversaw the building of the Gate of All Nations and the Hall of a Hundred Columns at Persepolis, which were the largest and most imposing structures of the palace. He oversaw the completion of the Apadana, the Palace of Darius and the Treasury, all started by Darius. He also built his own palace which was twice the size of his father's. He also maintained the Royal Road built by his father and completed the Susa Gate and built a palace at Susa.

He maintained the roadways throughout the empire, especially the Royal Road by which messages were carried. He also introduced the modern-day postal system

The Persian rulers had a university located at Takshashila (Taxila) in India where Panini, the famous Sanskrit grammarian taught [12]. Famous grammarian Panini (520 BC -460 BC) was born in Shalatula (near Attock). He taught at the Takshashila University. Since Takshashila was close to the Silk Road as well as had access to all the places within India through Uttara path, and Dakshina paths (Northern and Southern Roads) as shown in Fig. 3, many Indians attended the Takshashila University. It can also be seen that both Panini and Pythagoras were contemporaries [13]. It is believed that the Brahmi script originated at Takshashila and was used by Panini. Later on it

spread to rest of India and Sri Lanka. Similarly, Pythagoras Theorem originated in India and was passed on to Persia and Greece by Pythagoras [13]. Pythagoras was contemporary of Panini and it is documented that he lived in Egypt and Babylon.

4. CONCLUSIONS

In this work, the ancient history of India was reviewed first and then that of the Persian Empire. It was seen that the developments in India such as famous hall at Pataliputra or the roads in the country with inns along - were built in Persia first. Likewise, the postal system, edicts and messages on rocks were introduced in Persia first. Similarly, the use of one currency in the kingdom was first introduced in Persia.

Opening of the Taxila University in the Persian held area helped pave way for the introduction of Brahmi script in India. On the other hand, Pythagoras carried the concept of his theorem to Greece from India.

The concept of republics based on City States was common between Greece as well as Vaishali in India.

5. REFERENCES

1. Asoka, <https://en.wikipedia.org/wiki/Ashoka>
2. Chandragupta Maurya , https://en.wikipedia.org/wiki/Chandragupta_Maurya
3. Maurya Empire, https://en.wikipedia.org/wiki/Maurya_Empire
4. Megasthenes , <https://en.wikipedia.org/wiki/Megasthene>
5. Ancient Pataliputra: Dr. D. B. Spooner's Recent Excavations at Its site and the Question of the Influence of Ancient Persia upon Ind7
http://crossasia-repository.ub.uni-heidelberg.de/3331/1/Modi_Ancient%20Pataliputra.pdf
- 6 Persian Empire, http://www.softschools.com/timelines/persian_empire_timeline/160/
- 7 A Thousand Years of the Persian Book: Writing Systems and Scripts , <http://www.loc.gov/exhibits/thousand-years-of-the-persian-book/writing-systems-and-scripts.htm>

8. Cyrus, https://en.wikipedia.org/wiki/Cyrus_the_Great
9. Ruins of the Apadana, Persepolis,
https://en.wikipedia.org/wiki/Persepolis#/media/File:Apadana_palace_persopolis.JPG
10. Darius I, https://en.wikipedia.org/wiki/Darius_I
- , 11 Xerxes I, https://en.wikipedia.org/wiki/Xerxes_I
- 12 Origin of Brahmi and Timeline of Other Indian Scripts,
http://www.engr.mun.ca/~asharan/BRAHMI/BRAHMI_V4.pdf
13. On Tracing the Origin of Pythagoras Theorem,
http://www.engr.mun.ca/~asharan/BRAHMI/BRAHMI_V4.pdf

TABLE 1: IMPORTANT DATES / PERIODS OF ANCIENT INDIAN HISTORY

| NUMBER | CULTURE | PERIOD (BC) |
|---------------|--|---|
| 1 | Intermediate Harappan | 2300 - 1900 |
| 2 | Late Harappan | 1900 – 1400 |
| 3 | Post Harappan | 1400 - 1100 |
| 4 | Iron Age | 1100 |
| 5 | Gautam Buddha | 563-483 |
| 6 | Beginning of Urban History of India –Beginning of 16 Janpads | Bimbisara's Period in Magadh 558 – 491 |
| 7 | Nanda Dynasty | 345 – 321 |
| 8 | Chandragupta Maurya | 321–298 |
| 9 | Asoka | 269 - 232 |
| 10 | Kanishka | 78 AD |
| | Pala Dynasty | 7th – 12th Century AD |

TABLE 2: THE ACHAEMENID EMPIRE

| NO | NAME |
|-----------|---|
| 1 | Cyrus the Great, 559BC - 530BC |
| 2 | Kambiz II, 530BC - 522BC |
| 3 | Darius I the Great, 522BC - 486BC |
| 4 | Xerxes I (Khashyar), 486BC - 465BC |
| 5 | Artaxerxes I , 465BC - 425BC |
| 6 | Xerxes II, 425BC - 424BC (45 days) |
| 7 | Darius II, 423BC - 404BC |
| 8 | Artaxerxes II, 404BC - 359BC |
| 9 | Artaxerxes III, 359BC - 339BC |
| 10 | Arses, 338BC - 336BC |
| 11 | Darius III, 336BC - 330BC |



FIG. 1 THE NANDA EMPIRE

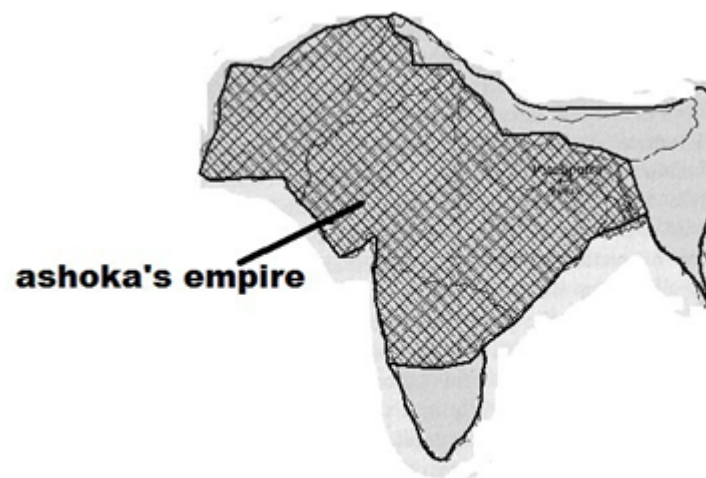


FIG. 2 ASHOKA'S EMPIRE



FIG. 3 THE UTTARA AND DAKSHINA PATHS



FIG. 4 PERSIAN EMPIRE



**FIG. 5 REMAINS OF MAURYAN PILLAR AT
PATALIPUTRA (COURTESY B. L. DAS)**



FIG. 6 THE PARTHENON AT ATHENS