Early Indian Coins And Currency System
To
My Preceptor,
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Early Indian Coins
and
Currency System

by
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MUNSHIRAM MANOHARLAL, NEW DELHI
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Preface

Early Indian coins and Currency System is mainly prepared for Post-Graduate and research students. The subject itself is very vast; but I have only selected certain aspects of the above-problem just to meet their present requirement.

Some of its sections are already published in J.N.S.J. (Banaras); and many of them were selected for publication by Dr. A.S. Altekar. He wrote a letter to me on 17.8.1959,— "..... I am in due receipt of your four papers on the gold contents of the Medieval dynasties coins, of Śaśāṅka, of the late Imperial Gupta, etc. I am very happy to find that you are proving yourself an enthusiastic recruit in the studies of Numismatic. .... They will appear in January number. (Yours sincerely,—A.S. Altekar).

I have also met with the late lamented Numismatist, Prof. A.S. Altekar, on several occasions. We have hours of discussion on different problems of early Indian coins. In such discussion meetings, once he asked me the different problems associated with “The Chandragupta Kumāradevī type” of gold coins and wanted to know my opinion. In my humble way, I said that I had studied all the above type of coins from the British Museum and from the Indian Museum, Calcutta. From the point of view of gold content they were issued by Chandragupta himself and not by his son, Samudragupta, as studied by Prof. Allan earlier. Like V.A. Smith, Prof. Altekar also holds the above opinion. However, all these discussion meetings very much encouraged me to write this monograph.

The early Indian economics have been more or less dealt with by a number of scholars. Scholars like Drs. Rhys Davids, R. Fick, E.H. Warmington, A.L. Basham, A.N. Bose, Pran Nath, N.C. Bandopadhyaya, U.N. Ghosal, R.C. Majumder, R.K. Mukherji, B.P. Majumder, G.L. Adhya, A.K. Narain, D.R. Das, L. Gopal, P. Niyogi, A. Appadorai and others have added considerably to our knowledge of the economic condition of ancient India. But they have dealt with the currency problem in a general
way. Thus, the need remains almost the same, even after the publication of their monographs. Moreover, certain mathematical studies on early Indian coins have added much to our political and economic findings.

The first chapter traces the background of the Numismatic study and their great value for the study of early Indian history and its great culture. Sometimes, the coins confirm and exemplify history known from other sources; and they also throw light on the branches of history for which no other evidence is available from other sources. For instance, out of 38 kings and 2 queens of the Indo-Greeks known from coins only 2 are mentioned in inscriptions and 7 in literary sources. Similarly, out of about 50 kings of the Śaka-Pahlava dynasty, about a dozen names are familiar with us from other sources. Again, the transition of power from the early Indian rules to the Śakas in Mathura is well illustrated from their coins. The political supremacy of Chandragupta-I over Magadha and its adjoining places is well illustrated from the Chandragupta-Kumārādevī type of gold coins. That Chandragupta-II had conquered the Śaka territory of Western India, is well established by his Śaka type of silver coins. In the same way, the Kashmirian king, Kshemagupta was so much under the influence of his chief queen Diddā that he "became known by the humiliating appellation, Diddā-Kshema" on his coins. Coins also supply us helpful materials for the study of constitutional and administrative history. From a careful study of the Mālava, Yudheya, Arjunāyana coins, we can infer the existence of Republican form of government there.

The second chapter deals with the most, important contribution of coins as a means of exchange. In the primitive barter system there was the problem of finding "two persons whose dispossessible possessions mutually suit each others wants. There may be many persons wanting and many possessing those things wanted, but to allow of an act of barter there must be a double coincidence, which will rarely happen."1 In order to overcome these difficulties and to have a portable and convenient standard, different metals were introduced in the field. Thus, the lump of gold, silver, copper and other metals either in bar or in dust were used as a means of exchange from the earliest times in

1 Francis A. Walker, Money, ch. I, p. 3.
India. And in course of time different stamps or marks were embossed on them by the issuing authorities. Although the subject is very vast and intricate, I have tried my best to throw some helpful light on that subject. Two other chapters discuss the gold content of coins of different dynasties and their political and economic significance, and the metrological study of the gold coins of early India.

Moreover, for the special need of my students I have to add "The culture of the Guptas and the cultural significance of their coins" as an appendix. However, the study of the Indian coins from the above respect is very interesting and fascinating, and my labour will be amply rewarded, if this little monograph is useful to my learned colleagues, students and to my numerous friends.

In course of preparing this monograph I have taken necessary help and suggestions from Prof. A.K. Narain, Dr. Lalani Gopal, Dr. G.L. Adhya, Dr. Sukla Das, Sri Kamal R. Sarkar, and others, I am really grateful to them. Moreover, I would like to express my sincere gratitude and respect to my learned teacher, Dr. D.C. Sircar for his guidance and encouragement. Thanks are also due to the Publications Executive of Munshiram Manoharlal, Delhi for the publication of this work.

For the errors I may have committed, crave the indulgence of my readers and request them to be so good as to draw my attention to them, so that they may be rectified in future. In conclusion, I shall be failing in my duty, if I do not express my sense of gratitude to Sri Ramaranjan Mukherji, Sri Hemanta Kumar Ganguli, Sri Gopikamohan Bhattacharya (Jadavpur University), Sri Subal Chandra Adhikari and Mrs. Binapani Maity, Sri Rabindra Kumar Maity, Sriman Sumit Kumar Maity and Amitava Maity, who have rescued my spirits from running down and have contributed in their own way to the successful completion of this work.

Jadavpur University
Calcutta, 1.3.70

S.K. Maity
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Ins. —Inscription.
Jat. —Jātaka.
J.N.S.I. —Journal of the Numismatic Society of India.
Kām (or Kāman) —Kāmandakiya Nitisāra.
Kām Sū. —Kāmāsūtra of Vātsyāyana.
Kum. —Kumārasambhava of Kālidāsa.
Legge. —Travels of Fa-hsien.
Mal. —Mālavikāgnimitram of Kālidāsa.
Matsya. —Matsya Purāṇa.
Mbh. —Mahābhārata.
Medhā. —Medhātithi.
Meg. —Megadūta of Kālidāsa.
Megas. —Megasthenes.
Mudra. —Mudrārākṣhasa Viśākhadatta.
Mṛchchha. —Mṛchchhakāṭika of Śūdraka.
Nār. —Nārada—Smṛiti.
Num. Chron —Numismatic Chronicle.
Peri. —Periplus of the Erythrean Sea.
Pl. —Plate.
P.T.S. —Pali Text Society.
Raghu. —Raghuvānśa of Kālidāsa
Rājt. —Rājatarāṅgiṇī.
Ritu. —Ritusamhāra of Kālidāsa.
R.V. —Rig. Veda.
Śak. —Abhijñāna Śakuntalam of Kālidāsa.
S.B.E. —Sacred Book of the East.
Śuk. —Sukraniti-Sāra.
Tran. —Translation.
Vas —Vasishṭha Dharmasūtra.
Yāj. —Yājñavalkya-Smṛiti.
CHAPTER I

Ancient Indian Coins and Indological Studies

India has the oldest continuous cultural traditions in the world. The earliest Indian had passed through the three stages of development—Old Stone Age (Palaeolithic Age); New Stone Age (Neolithic Age) and the Age of Metals. The Indus valley people were metal-using people. They had highly developed urban culture and were quite advanced in material civilization. The Indus culture came to an end most probably due to Aryan invasion. Unfortunately, there were no spokesmen of that great culture—spokesmen comparable to Herodotus, Thucydides, Polibius, Livy and Tacitus.

Glimpses of it we can have from literature. We can have some ideas of the socio-economic life, cultural life, nature of administration, the wars and conquests from the Vedas, Epics, Purāṇas and from other works. There are good many biographical works which furnish us the useful information of the past. The most important historical work in Sanskrit is the Rāja-tarangini of Kalhana. Of course it is no less a poetical narrative than a matter-of-fact chronicle. Kalhana, a Kashmirian, had the unique privilege that he was neither a courtier nor a court-poet. So he could stand apart from the sad and dreary state of his country, without illusion and with a sense of dispassion and resignation. He does not soar high in the clouds of romance and legend and when he comes nearer to his own time he attains a standard of accuracy and vividness. "The Kashmiris" he says, "are fair, false and fickle". His expression is simple and elegant and he narrates facts in an easy-flowing manner.

Greater historical importance should be attached to the early Indian epigraphic records. They throw a flood of light upon the life and culture of the people of that period. They are mostly inscribed on the copper plates or on stone-tablets. They generally offer information about personages and events of ancient India, about which nothing is known from any other
source. Only in some cases we have recorded traditions about such subjects, the details of which can be compared with epigraphic information.

The greatness of the Maurya king, Asoka is revealed to us from his numerous inscriptions on rocks and pillars. For instance, “all men are my children; the people of unconquered territories lying beyond the borders of my dominions should expect from me only happiness and no misery; all religious sects should live harmoniously in all parts of my dominion; people should learn and respect the fundamentals of one another’s Dharma among men of all sects”, are the unique examples in Indian epigraphs.\(^1\) Similarly, the founder of the Gupta dynasty, Mahārāja Gupta or Śrī Gupta and his son, Mahārāja Gaṅgotrakacha are known only from the genealogical tables given in a number of inscriptions. The Gupta records do not mention anything beyond their names and titles. All India campaigns of great Samudragupta and his other political achievements are known to us only from his Allahabad pillar inscription and not from any other source. In the same way, the Tirumalai rock inscription of the 11th century A.D. records that the mighty Chola King Rājendrādeva I had “turned the Bay of Bengal into a Chola lake”. His royal navy is simply known to have conquered several islands in the Indian ocean as well as in Malaya-Asia. There are, thus, thousands of examples in our ancient epigraphs, having great historical value.

Equal importance is attached to early Indian coins; and numismatics, as a science of coins is recognised as a great source of ancient history. The scope of numismatic study is very wide. It covers the materials of which coins are made and the sources of such materials. It includes the forms which coins take from the point of view of weight, design and technique of manufacture. It studies the organisation and control of their production and circulation by the state or by some other authority, including such questions, as the size and frequency of issues and the monetary and the metallic values attached to each type of coin. In other words the coins are connected with the political, administrative, social, economic, religious and cultural life of the day. They also confirm and exemplify

\(^1\) R.E, VII: XII; XV; XVI; (Select Ins. Vol. I.)
history known from other sources. Moreover, they throw light on branches of history for which no other evidence is available from other sources.

The circulation of coins, however, need not always be confined to the dominion of the issuing sovereign power. Coins may travel far beyond the borders of such dominions under curious circumstances. Their geographical distribution may often indicate either political conquest or also commercial relation but sometimes it indicates nothing more than the wide popularity of a coin series. Coins may also travel with pilgrims to religious places.

(A) Political History:

The famous statement of Cāṇakya that he turned 8,000 coins into 80,000 in order to raise an army to liberate Magadha may well be substantiated by the discoveries of silver-coated punch-marked coins. The uniformity and all-India circulation of punch-marked coins are also instructive.

That a new power was born in Bactria is well illustrated by the coins bearing the name of Antiochus II but having the bust and type of Diodotus, soon to be followed by coins of Diodotus himself, from which the name of Antiochus II also vanished in the final stage. That a Demetrius was the first among the Indo-Greeks to encroach upon North-Western India is illustrated by certain bilingual coins, both of silver and copper. The large variety and wide distribution of the coins of Menander give the undoubted impression that he was the most powerful king of the Yavanas. The new discovery of a single Attic tetradrachm of Menander is sufficient to confirm the testimony of Plutarch that he controlled parts of North Afganistan. That Strato ruled for about sixty years with a possible break and that he was a minor under the regency of the Queen Mother Agathocleia and that of Strato alone showing him at various ages ranging from that of an immature youth to that of an old man with sunken cheeks and toothless jaws. The discovery of single hoard in Qunduz has disproved the hitherto accepted theory that Heliokles was the last Indo-Greek ruler over areas north of Hindukush. Out of 38 kings and 2 Queens of Indo-Greeks known from coins only 2 are mentioned in inscriptions and 7 in literary sources.
Similarly out of about 50 kings with Śaka Pahlava names—hardly more than a dozen names are known from sources other than coins. That the Scytho-Parthian kings, Vonones, Spalirises, Azes I, Azilises, Azes II and Gondophernes succeeded in this order can be safely referred from their coins alone. The transaction of power from the indigenous rulers to the Śakas of Mathurā is again well illustrated by coins. The coins show that Rājuvula ruled over a much wider area than Mathura, for he imitated coinage other than the local type of his predecessors, there. Moreover, the scarcity of his coins of the local “Lakshmi and Tree” type has been taken to suggest that Rajuvula occupied Mathura only late in his reign. The facts that Śodāsa issued coins only of Mathura type and that his coins have been found with those of his father at Mathura and the adjoining places but not in the Punjab, show that he ruled a much more limited area. The political history of the Śakas of Ujjain, the dynasty of Caṇṭana, lasting for about 300 years, can only be arranged in genealogical and chronological order on the basis of coins. These coins are unique in giving regularly not only the year of issue and the name and title of the issuer but also the name and title of his father. They tell us something more; the struggle for throne as in the case of Jivadāman and Rudrásimha the nephew and uncle, and the usurpation of the throne by an intruder, as in the case of Iśwaradatta Ābhīra.

The history of the Kuśāṇas would be incomplete, if the numismatic testimony to their power and strength was removed. The stratification of coins in archaeological excavations established the convention of placing the Kadphises group of kings before the Kaṇiśka group. The occurrence of an imitation bust of a Roman king and that of a goddess in curled hair approximately fixes the date of the end of Kadphises I’s reign. The name of some later Kuśāṇa kings are preserved only through their coins.

More than 25 kings with names ending in—“Mitra” and issuing a coinage of homogeneous type which circulated from the Eastern Punjab to the boarder of Bihar, who have to be satisfactorily accommodated after the Mauryas, are unknown from sources other than coins except in 2 or 3 cases. Thus there are many such dynasties, often termed local or tribal, who
studded the political stage of Northern India after the fall of the Mauryas and before the rise of the Guptas.

Even the history of Sātavāhanas, about whom the different versions of the Purāṇas give different genealogical and chronological lists of kings, are known from coins alone. The king who was probably the first of the line, and after whom the dynasty was named, Sātavāhana, is known only from coins and not from any other source. The story of the Sātavāhanas' struggles against the Šakas would neither be complete nor precise without the help of their coins. Nahapāna was defeated by Gautamīputra Sātakarnī. It is conclusively known from the evidence of the Jogalthambi hoard containing large number of Nahapāna coins overstruck by Gautamīputra Sātakarnī. The striking of silver coins bearing their heads, by Gautamīputra Sātakarnī, Vāsiṣṭhiputra Sātakarnī and Yajña Śrī Sātakarnī are significant pointers to their associations with the Šaka State, either by conquest or by relationship.

The Chandragupta-Kumārādevī type of gold coins with the reverse legend “Lichchhavayah” may tell us something about the role of the Lichchhavīs in placing the Guptas on the Magadhan throne. There is no historical literature to tell us that. Similarly the Aśwamedha type of gold coins of Samudragupta and his grand-son Kumāragupta I undoubtedly signify their supremacy over Northern India. Moreover, the ‘Kācha’ gold coins if issued by Samudragupta at all, were issued like his Aśwamedha coins towards the end of his reign, when his powers were at their heights. This makes it less probable that they are his, for it is on the face of it unlikely that he would give up his throne-name and revert to a popular name when at the height of his power. It can, thus, be conjectured that the Kācha coins were not issued by Samudragupta but by an usurper.¹

The confusion created by the evidence of the Bhitari seal and Bhitari pillar inscription and the Sarnath Image inscription seems to have been satisfactorily resolved by the convincing theory of distinguishing two Kumāraguptas after Skandagupta on the basis of their coinage. The conquest of the Šaka territory by Chandragupta II and its date and the tradition of Vikramāditya are elucidated by those silver coins of Chandragupta II which imitate those of the Šakas and by the sudden

¹ S.K. Maity, Eco. Life... Appendix III.
stoppage of Śaka coins after the year 397 A.D. The political instability of the Gupta power in the later phase of their history is reflected in the fluctuation of the metrology and metallurgy of their coins.

The Kashmir coinage, which offers an almost unique example of a coin-type remaining unchanged for nearly twelve centuries, has two breaks, when king Harṣadeva made two innovations by introducing “elephant” and the “horseman” types copied from the coins of Karṇāṭa and from the money of the Sāhī kings of Kabul respectively. But for this numismatic testimony we might have doubted Kalhana’s statement in this connection. Similarly, the coins bearing the legend “Di-kṣema-gupta” remind us of another statement of Kalhana, that the king Kṣemagupta was so much under the influence of his queen Diddā that he “became known by the humiliating appellation Diddā-kṣema”. But perhaps more useful for Kashmir history is the discovery of Pratāpāditya coins in places such as Banda and Vārānasi in Uttar Pradesh and the existence of the name Yaśovarman on some coins of Kashmir series. These discoveries may well be utilized for studying the struggle for supremacy between Lalitāditya Muktāpīḍa-Pratāpāditya and Yaśovarman of Kanauj. Also useful are the coins with the curious legend “Śrī-Ja-Pratāpa” which may be attributed either to Jajja, the usurping brother-in-law of Jayāpīḍa or to Jayāpīḍa himself.

Even the last phase of the early Indian history before the Mohammedan period has left its imprint on coinage. The coins of Mahmud of Ghazni struck at Lahore bear the Sanskrit legend “Avyaktam eka Muhammad avatāra Nṛpati Mahamuda” (king Mahmud who is the incarnation of Muhammad, the Eternal) and a circular legend “Ayam ṭankam Mahmūdpura ghatite Hijiriyena samvati 418” (This taṅka (was issued) at Mahmudpur in the Hijra year 418).

There are two coins which make the beginning of Mohammedan rule in India. One is the coin where on the obverse we find Horseman with lance to right and the name “Śrī-Pṛthvīrāja” whereas on the reverse is a “recumbent bull” and the name “Śrī Mahamad Sāmi”. The other coin is of “Lakshmi” type copied from the coins of Govindacandra but bearing the name of “Śrī Mohamad bin Sām” alone, as if to make the final transfer of power.
(B) Constitutional and Administrative history:

The early Indian coins have also proved to be of great use so far as the constitutional and administrative history are concerned. The most notable feature of the ancient administrative history is the existence of the republican form of government side by side with the monarchical system. The collective sovereignty of such republics was denoted by such terms as Gaṇa, Nigama, and Janapada. The existence of all these forms of government has been testified to by coins. It is generally accepted that coin legends such as “Yaudheyaganasyajayah” (victory of the Yaudheya republic) “Mālavānam-jayah” or “Mālavaganasyajayah” (victory of the Mālavas or of the Mālava republic) and similarly, the legends on the coins of Ārjunāyaṇas, Vṛṣṇīs, and others, confirm the existence of a republican constitution in some parts and some periods of ancient India. Whatever may be the exact significance of the word ‘gaṇa’ the fact remains that the coins of the Yaudheyas, Mālavas, Ārjunāyaṇas, etc. undoubtedly indicate that sovereignty and prerogative to issue coins were vested not in one person but in many. Moreover, there are the Nigama coins, coins of Taxila, which bear such names as Dojaka, Tālimata, Atakaṭakā, etc. It has been suggested that they are coins struck by cities or townships, perhaps indicating that some sort of civic autonomy was known in North Western India as in the case of the small-city states of Asia Minor.

The coins of the Śaka Pahlava kings enable us to reconstruct the basic pattern of their administration. A brother or a son or sometimes a brother’s son could be associated with the reigning king in running the higher administration. Vonones was associated with his two brothers Spalyris and Spalirises and on the death of the former with his son Spalagadames. High state officers or military governors like the Strategos Aspavaranman could also sometimes be associated in the administration of the kingdom as is clear from the coins of Azes II and Gondophernes. The Śaka coins of Ujjain, again, show the invariable practice of a son acting as a Kṣatrapa during the rule of his father as Mahākṣatrapa and then succeeding him as a Mahākṣatrapa and taking his son in turn as a Kṣatrapa.

Again, the Chandragupta-Kumārādevī type of gold coins of Chandragupta I of the Imperial Gupta dynasty raises questions
of constitutional significance. Was Kumāradevī a reigning queen as Queen Mary II of England who ruled jointly with William III and whose coinage bore the names and effigies of both sovereigns? But is it possible to explain in the same way the Kashmir coins where the legend reads “Di-Kṣemagupta” standing for Diddā and Kṣemagupta? If not, could the prerogative to issue coins be so lightly treated as to allow a queen’s name to appear simply because the king was infatuated by her beauty? The question is complicated by the fact that later on Diddā struck coins in her name alone.

(C) Historical Geography:

If we turn to historical geography we find that numismatics throws much light on it. Regarding the location of the Yaudheyas, an important tribe in North Western India having a republican government of longstanding tradition and career, the relevant literary evidence is indefinite and unsatisfactory. It is only from the find-spots of these coins that the location of the Yaudheyas has been fixed as between the rivers Sutlej and Yamuna. Numismatics, again, has enabled Sir A. Cunningham to identify the Yaudheyas with the Johiyas settled along both the banks of Sutlej. The migration of the Mālavas provide another case to show how epigraphy fails and numismatics succeed in locating the residence of an important tribe of North Western India. It is certain that the Mālavas originally lived in the Punjab and can be identified with the Malloi of the classical writers of Alexander’s time. They, then, migrated to Central India. But our epigraphic sources fail to determine any intermediate regions between the Punjab and Central India where the Mālavas might have settled down in course of their migration. Coins, however, prove conclusively that they settled for a time in the South East parts of the present day Jaipur State. The migration of another people, the Sibois, from the Punjab to the Madhyamika, near Chitorgarh in Rajputana can also be shown only from the evidence of the coin finds.

(D) Religious History:

Coins also furnish important data so far as the religious history is concerned. History of religion has two aspects viz. socio-religious and mytho-religious. In the socio-religious
The history of ancient India the most important fact is the adoption of Hindu religion by and absorption into Hindu society of the foreign tribes which poured into India from time to time. Along with the epigraphic source numismatics establishes important facts and tendencies in this regard. They not only embraced Hinduism or Buddhism but also they adopted Hindu names. In the coins of Gondophrernes and Wema Kadphises, Śiva appears in his full form with his associates. Again, the coins of the Kushāna kings succeeding Kadphises II bear testimony to the eclectic religion of the ruling house. Their coins contained Greek, Iranian, and Hindu divinities who, all together, formed an eclectic pantheon worshipped by the Kushāna rulers with equal devotion and patronisation. In Kaṇiṣka’s coins Buddha figures prominently which corroborates the evidence of Kaṇiṣka’s conversion into Buddhism in the later period of his life. Śiva appears on the coins of Kaṇiṣka, Huviska, and Vāsudeva and also on those of the Scytho-Sassanian rulers who succeeded the Kushāna rulers. Other deities worshipped by the later Kuśānas were Skanda, Kumāra, Visākha and Mahāśeṇa. The coins also prove that Mihirkula, the Hūṇa invader, worshipped the bull-emblem of Śiva. Coins, however, further show how the foreign rulers settled in North-West and Western region and adopted Hindu names. Among the Kuśānas Vāsudeva was one. But among the Kṣhatrapa rulers of Western India twenty-five out of twenty-seven adopted Hindu names. Some of them are Rudradāman, Rudrasen, Rudrasiṃha, Jayadāman, and so on.

The evolution of gods and goddesses along with different religious practices can be studied from the coins. Thus from a careful study of the Gupta coins, we come to know that Viṣṇu and Lakṣmī were the most favourite god and goddess worshipped by many Gupta rulers. For instance, Samudragupta issued only gold coins and on the reverse of the Standard, Archer, Battle-axe and the Lyrist type of his gold coins, the goddess Lakṣmī is seated on the throne or on a lotus. Similarly on the Archer, Couch, Chchhatra, Horseman, Standard, Chakra-Vikrama gold coins of Chandragupta II and on the Elephant-rider, Archer, Swordsman, Horseman, and Lion-slayer types of gold coins of Kumāragupta I, the same goddess is on throne or on a lotus. Their able successor Skandagupta also followed
the same technique on his coins.

Next to Lakṣmī, Viṣṇu finds prominence on the Gupta coins. The most important among them are Chakra-Vikrama type of gold coins of Chandragupta II. On the obverse design of them Lord Viṣṇu offers Prasāda (sweets) to Chandragupta II. Moreover, the effigies of Garuḍa can also be seen from the silver and copper issues of Chandragupta II and Kumāragupta I. The Garuḍa standard (dhvajā) is seen in many of the coins of Samudragupta, Chandragupta II, Kumāragupta I and Skandagupta.

The goddess Ambikā or Durgā was also popular. The effigies of Ambikā or Durgā seated on a Lion is also seen from the gold coins of Chandragupta-Kumāradevī type of Chandragupta I, the Lion-slayer coins of Chandragupta II and a few of the copper coins of Kumāragupta I.

The “Kumāra” is the nick-name of Kārtikeya, and it is also the name of one of the Gupta kings. That was why, Kārtikeya was the most favourite deity of Kumāragupta I. On one of the reverses of the peacock type of coins, Kārtikeya is seen riding on his peacock. Again, on the obverse of some coins the king is feeding a peacock from a branch of fruit. But on the Horseman, Tiger-slayer, Elephant-rider, Lion-slayer types of gold coins of Kumāragupta I, Lakṣmī is feeding fruits to peacock instead of the king himself, on the reverse. On some of the silver coins of Kumāragupta I the same emblem of Kārtikeya is also represented. Moreover, the goddess, Gaṅgā is also seen along with her Makara on the Tiger-type of the gold coins of Samudragupta. The Gupta rulers were Brahmāṇical Hindus worshipping different Hindu gods and goddesses.

From a closer examination of coins we are familiar with some of the rituals and ceremonies in ancient India. On the Aśwamedha type of gold coins of Samudragupta and Kumāragupta I a horse is standing before a sacrificial post (Yūpa) with the word “Śrī (or Siddham)”. On the reverse design of the coins the chief queen is holding a “Chowrie (or chāmara)” over her right shoulder and on the left field there is a sacrificial post.

The marriage ceremony of Kumāradevī and Chandragupta I is also represented by the Chandragupta-Kumāradevī type of gold coins. On the obverse of the coins Chandragupta I is offering a marriage ring to his queen. On the obverse of the
Chakra-Vikrama coins of Chandragupta II, the king receives “Prasāda” (sweets) from Viṣṇu. The legends like Paramabhāgabata, Śrī Mahendra, Kumāra, etc. on the coins also testify to the religious affinity of the Gupta emperors.

The study of coins also proves itself useful in the sphere of the mytho-religious history in two important respects. Firstly, Śiva was worshipped as a deity and not in its linga form by the Parthian and Kuśāṇa rulers, for on their coins Śiva appears with his bull and tiger-skin as a God, and the linga form of Śiva was as yet a distinct development. From the coins of Śaśāṅka, king of Bengal, it is also established that till his death Śiva worship was retained in its original form. And secondly, the four gods connected with Śiva in the coins of the Kuśāṇa rulers, Skanda, Kumāra, Visūkha and Mahāsena were so long believed to have been but various representations of Kārtikeya. There is the evidence of Amarkoṣa and such literature. But coins now prove conclusively that they were independent deities worshipped both by Indians and foreigners of those days and though they had similarity with Kārtikeya, they were never identical with him.

(E) Economic Theory:

Large number of coins in gold, silver, copper and in other metals have been found from different parts of India. They are the most important source so far as the economic history of India is concerned. Only in the Gupta period sixteen hoards of coins have been discovered. From the Gupta inscriptions we know that by spending only 2, 3 or 4 dīnāras one could purchase one Kulyavāpa of land, which amounted to a large area. By depositing 10 and 12 dīnāras (suvarṇas) benefactors expected to maintain an alms-house as long as the sun, the moon and the stars endured out of the interest of the sum only. All these references undoubtedly show that the gold coins (Suvarṇas or dīnāras) had a very high purchasing power.

The purchasing power of silver coins was equally high, for we know from the Baigram copper plate that 16 silver pieces were equal to 1 piece of gold. Thus, the gold and silver coins were used for bigger transactions such as purchase of land, donations, foreign trade, etc. The cheaper metallic coins like copper, lead and also cowries evidently served the smaller need.
(F) Art and Culture:

The artistic value of the earliest silver and copper punch marked coins is negligible. They are tribal in origin and primitive in conception. Their shapes are irregular, the execution rude and the punches are irregularly impressed. In one tribal coin the palm-tree motif is real and beautiful. But the Bactrian and Scytho-Parthian coins open a new chapter in artistic conception. Their chaste and elegant execution, their refined workmanship and their general design are in the best of Hellenic tradition. Most of the human figures are finely executed. The Indo-Parthian coins are rather clumsy in execution and crowded in design. In execution and design the Kušāṇa coins are much more elegant and refined than the Indo-Parthians.

The silver coins of Western Kṣatrapas are also neat, regular and are very elegantly executed. Andhra coins, though at times irregular in shape and heavy in design are essentially indigenous in character. Their figure devices and symbols have some local flavour and tribal in conception.

The splendid gold coinage of the Guptas with its many types and varieties are the finest examples of Indian art. Slight traces of Hellenic influence can be noticed from the effigies of the kings on almost all of the Gupta gold coins. Just like the Kušāṇas and Indo-Greeks, everywhere the king wears a close-fitting cap, coat and trousers. But in Indian manner they have ear-rings, necklace, ring, armlet, etc. along with other Indian objects such as Garuḍa standard, peacock, so on. The figure of the queens of the “Chandragupta-Kumāradevī”, the Aśwa-medha coins of Samudragupta and Kumāragupta I and the different figures of goddesses on coins are purely Indian in origin and style. They are in loose robe, ear-rings, necklace, armlets, etc.

In most of the Gupta gold coins the king is exhibited with masculine figures with arms and ammunitions which are the predominant signs of ancient life and culture. On some coins they are about to kill a tiger, lion, rhinoceros and others. Only in some types of coins, such as Chandragupta-Kumarādevī Lyrist type of coins of Skandagupta, Chakra-Vikrama coins of

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1 Smith, C.C.I.M., Pl. XIX, Fig. 17.
Chandragupta II, Peacock coins of Kumāragupta I, the king has appeared before us in the most sober and fashionable colour. Again, the high-sounding title used by the kings on their coins also reflect the power and magnificence of the Gupta sovereigns to a certain extent. Moreover, their gold coins also reflect the cultural life of the age. For instance, Samudragupta and Kumāragupta I are playing on lyre on the Lyrist types of coins.

From the above analysis it can be said that the early Indian coins play a great part in helping us to read and understand the early Indian history. It was, thus, recognised as a primary source as early as the 12th century by Kalhana, the chronicler of Kashmir. However, there is a great future of numismatic studies in India. Large hoards of coins are also accumulated in different museums and many of them are not yet classified and catalogued. Indian and foreign scholars are taking greater interest for their study and the Numismatic Society of India is also doing its best for their proper use.
CHAPTER II

Currency and Exchange in Ancient India

In the Palaeolithic period the basis of subsistence was hunting and food-gathering; and the small groups of families or tribes used to domesticate animals for food and for other purposes. They were primarily the hunting-pastors and their relationship with other tribes was mainly hostile. They thus required no means of exchange for their daily life.

But in course of time the primitive society had developed a great deal and the political and economic relationship among different groups of people, tribe, had gradually cropped up. They, thus, required means of exchange in their economic undertaking and the earliest means of exchange was confined to barter. Again, from the barter of goods we come to next stage of economic relation, when certain commodities of general value were used as standard media of exchange. At one stage cow and foodgrains were the earliest and commonest of these. These media, of course, varied according to the class of society where it was circulated. For instance, horses suited better among the military class. Hides of animals killed were the most suitable media for the nomadic and hunting tribes. Domestic animals like the cow were the appropriate measure of value for pastoral tribes like the Ābhīras. Perhaps, the heaviest money ever used was the stone money of the island of Yap in the South Pacific and the lightest, the feather money of the New Hebrides¹. For centuries salt money circulated among the natives of Ethiopia without being supplanted by gold or silver coins of the traders with whom they came in contact. Again, in Homer we find the use of oxen as standards of value². In the laws of Rome, fines were assessed in terms of oxen. The cow was the standard of value in Rome, and thus came the word Pecunia (meaning cattle in Latin) to mean money. The Frisians used to pay tributes to the Romans in

¹ Encyclopedia Britannica, Vol. XV.
² Gardiner, Ancient Greek Coinage.
hides of bulls. But later on, they demanded bigger hides which led to war between the two nations.\(^1\)

But the use of the above standard of value gave rise to numerous difficulties. In the case of cow or oxen variations in size or quality must give rise to difference of value which varied with age, size or milk-producing capacity of the animals. Thus in the Aitareya Brahmana, a cow of one year old and immaculate was accepted as a standard price for purchases of a certain quantity of Soma.\(^2\) But the want of coincidence was a great handicap in the fulfilment of social needs. There was another difficulty as regards the measures of value, how much of one commodity was to be exchanged for a quantity of another commodity. An elaborate table of ratios between different commodities to be exchanged would be needed. Sometimes there is the difficulty of dividing some goods such as a cow, a coat, a hat, etc. When they are cut into pieces in the process of sub-division, they lose their entire value.

Thus, the need of money comes not only from the fact of trade, but also to overcome the above difficulties. Moreover, in the barter system there is the problem of finding "two persons whose dispossessable possessions mutually suit each others' want. There may be many persons wanting and many possessing those things wanted, but to allow of an act of barter there must be a double coincidence, which will rarely happen"\(^3\). It is however true that "a store of corn, a bag of gold dust, a carcass of meat may be portioned out and more or less may be given away in exchange for what is wanted. But the tailor may have a coat ready to exchange but it must exceed, in value, the bread which he wishes to get from the baker or meat from the butcher".\(^4\)

In order to remove the above difficulties and to have a portable and convenient standard, different metals were introduced in the field. Thus, the lump of gold, silver and copper either in bar or in dust were used as the media of exchange. And in course of time different stamps or marks were impressed on them by the issuing authorities. In Greece the oldest coins were

\(^1\) Del Mar, *History of Coinage*, Ch. I.
\(^2\) *Ait. Br.* p. 59, Martin Haug's Trans.
\(^3\) Francis A. Walkar, *Money*, Ch. I., p. 3.
stamped with the figures of animals. Similarly the figures of cow or of other animals were imposed on gold and silver coins in ancient Egypt.

*Indus Valley Period:*

The Indus Valley people had developed a highly civilized urban life. Agriculture, animal-husbandry and industry were quite developed. Next to these activities, came trade. "Apart from overland caravans, which may be assumed the long coast-line and arterial rivers, now known to have been contained within the Indus territories are consistent with an appreciable domestic and internal trafficking by water. Archaeology and Geology show that imports included gold from Southern India or Afghanistan, copper from Rajasthan or Afghanistan, turquoise from Iran, and a jadi-like fuchsite probably from Southern India. Links with Mesopotemia may be noted and may be extended to include Indus pottery and inlays from Akkadian levels (c. 2300 B.C.) at Tel Asmar".¹

"Sumerian and Akkadian cuneiform documents refer to a land called Dilmun or Telmun, which was regarded as an other-worldly paradise, a place 'where the sun rises' and therefore, somewhere to the east of Sumer, it was also a substantial source of material goods. Thus, ships of Dilmun brought timber to Ur-Nanshe of Lagash about 2,450 B.C. and the great Sargon about a century later records that shipping from Dilmun, Magan, and Meluhha docked in his new capital Agade (The site of Agade has not been identified though M.E.L. Mallowan has suggested the neighbourhood of Babylon). Other documents show that in the twentieth century B.C. seafarers were bringing to Ur in Southern Mesopotemia, gold, silver, copper, lumps of lapis lazuli, stone beads, ivory combs, and ornaments and inlays, eye-paint, wood, and perhaps pearls (fish-eyes). Dilmun has commonly been identified with the island of Bahrein, which must, if so, have been a re-victualling and middleman station rather than a source. A.L. Oppenheim regards Meluhha as the Indus Valley and its civilization, S.N. Kramer prefers to identify Dilmun itself with the land of Indus. But in one way or other the texts would appear to include

references to an organised trade between Sumeria and the Indus Valley before and after 2000 B.C.\textsuperscript{1}

Lothal has produced one of those strange circular seals of steatite which are mainly reminiscent of Indus seals but was seemingly at home in the north-western half of the Persian Gulf (Baherin, Failaka, Southern Mesopotemia) about 1900 B.C. and have so been named specifically "Persian Gulf seals" (They are neither wholly Indian nor Sumerian in design). More recently a fresh examination of the Makran coast, on the northern flank of the Arabian Sea, has produced contributory evidence. By and large, therefore, an appreciable commerce may be postulated between the civilization of the Tigris-Euphrates and that of the Indus.\textsuperscript{2}

As Prof. Francis A. Walker points out "the need of money comes from the fact of trade. Trade in the beginning assumes the form of direct exchange. Commodity for commodity, what we call Truck or Bartar. But trade cannot proceed far without serious obstacle to direct exchange."\textsuperscript{3} This point is also further stressed by Prof. Jevons in his famous work, Money and the Mechanism of Exchange.\textsuperscript{4} Such was also the case with the Indus Valley people.

More than sixty sites have been discovered in and around the Indus Valley. Harappā in the Montgomery district in the West Punjab and Mohenjodāro in the Larkana district of Sind are the biggest and the most prosperous. The economic condition of the people was sound. Only a fertile land producing sufficient food for the people, a land having inland (both land and water) communication to facilitate trade and commerce, could give rise to such civilized cities. They must have used certain media of exchange in their foreign trade and in other economic transactions. Along with the monetary system the barter system was perhaps in existence.

More than 1200 seals\textsuperscript{5} have been found only at Mohenjodāro and many hundreds have been discovered from other cities.

\textsuperscript{1} Ibid.

\textsuperscript{2} Sir Mortimer Wheeler, Civilization of the Indus Valley and Beyond, pp. 64-67.

\textsuperscript{3} Money, p. 1-2.

\textsuperscript{4} Money and Mechanism of Exchange, p. 3.

\textsuperscript{5} Civilization of Indus Valley, p. 40.
They might have been used as a media of exchange or in connection with some other economic transactions. Quite a large number of baked clay triangles ("votive cakes") have been discovered frequently from drains\(^1\) and they were perhaps used as means of exchange; the basis of this hypothesis being the use of stone money by some ancient people was not uncommon.\(^2\) Moreover, the lump of gold, silver and copper either in bars or dusts, perhaps served their monetary functions. It is quite in the fitness of things that such a great civilization could not develop without a money economy.

\textit{Vedic and Post-Vedic Period}:

"Many competent authorities led by Sir Mortimer Wheeler, now believes that Harappā was overthrown by the Aryans".\(^3\) In course of time the Aryans gradually occupied the whole of the Punjab and ultimately conquered the greater part of northern India.

The Aryans followed a mixed pastoral and agricultural economy in which cattle played a predominant part. The former prays for increase of cattle, the warrior accepts cattle as booty, the sacrificial priest is rewarded for his services with cattle. Cattle assumed the nature of currency and values were reckoned sometimes in terms of cattle\(^4\). A man's wealth was sometimes reckoned in terms of the number of cattle he possessed.

They lived in villages and lived in a community. They also carried on trade and commerce to meet their daily necessaries of life. Barter, the oldest means of exchange was perhaps the usual method of trade, but gold, silver or copper coins were also in use. For instances, Niška was originally a gold necklace. A number of square or round gold pieces were strung together into a necklace and were worn by both men and women. But an isolated piece of fixed weight and standard was afterwards used as coins. In the opinion of Prof. Macdonell and Keith,

\(^{1}\textit{Ibid.}, pp. 25. (According to Wheeler "used for toilet purpóses". But such a hard substance cannot be used for toilet purposes).\)

\(^{2}\)As f.n. 1.

\(^{3}\)A.L. Basham, \textit{The Wonder that was India}, p. 28.

\(^{4}\)\textit{Ibid.}, p. 35.
Niška originally denoted as "a gold ornament worn on the neck" as is shown by the epithet "Niška-griva," "having a gold ornament on the neck." Moreover, the monetary use of Niškas is also referred to in the Rg Veda, a singer celebrates the receipt of a hundred Niškas and a hundred steeds. The use of Niškas as means of exchange could be found in other Vedas. A Rṣi praises king Bibhindu for giving him forty thousand coins on one occasion and eight thousand on another. Again, Sage Kakṣivān praises his patron Bhāvayavya of Sindhu country for the gift of "one hundred kine in addition to one hundred Niškas as a reward for his services. The god Rudra is described by Grītmadā as wearing a neck-ornament of Niškas. The goddess Uṣā is invoked to take away the evils of bad dreams from those who wear Niškas. Similarly, in many passages of Atharva Veda, the term Niškas is used. In another place the gift of one hundred Niškas of gold is referred to. There are many references to the use of Niškas as jewellery and coins in the later Vedic literature. The Aiteraya Brāhmaṇa describes a man bearing a necklace of Niškas. A Vṛitys is described as wearing a silver Niška in the Pañcaviṃśa Brāhmaṇa. Similarly, in the Jātakas they are known as Nikkhas (Niškas).

Besides Niškas, the Manā is also recorded in the Vedic literature. In the Rgveda: "Oh Indra, bring us jewels, cattle, horses, and Manās of gold." Prof. Macdonald and Keith explain it as "the desirable object." There are also silver coins

1. R.V., (ii) 33, 10 VIII 47, 15.
2. Ibid., V, 19. 3.
3. Ibid., I. 126.2.
7. R.V., II 33, 10.
8. R.V., VIII 47, 15. also R.V. V. 19.3.
11. VIII-22—"Niška Kanṭha".
13. IV 460; VI 246, also in Pāṇini V 1.20; I-30; 2.119.
14. VIII 78.2 “Saca manā hiranyayā” I, 17.2; IV 32.; X, 6.3.
15. Vedic Index, ii, 129.
and silver Niśka in the same period. The silver coins called "rayis" are also in vogue in the Vedic age.\textsuperscript{1}

Perhaps, the lumps of gold (hiranya-piṇḍa) also serves the same purpose. Garga extols the gifts of Prastoka and Divodāsa to him. Among other things he speaks of ten purses and ten lumps of gold along with ten horses and some other objects.\textsuperscript{2}

Here, the terms Kośa and Hiranyeapinḍa are quite significant. The Kośa may indicate purses full of gold or silver and Hiranyeapinḍa expresses the lump of gold. Numerous references from our literature lead us to infer that gold and silver pieces of definite weight and standard were used by the people as media of exchange. Thus, it is not proper to accept the views of Keneddy and Smith who state that "introduction into India of the use of coins that is to say, metallic pieces of definite weight authenticated as currency by marks recognised as a guarantee of value, may be ascribed with much probability to the 7th century B.C., when foreign maritime trade seems to have been begun."\textsuperscript{3}

But foreign maritime trade starts as early as the Indus Valley and the earliest Kārṣāpaṇa and other punch marked coins have no evidence of foreign influence. It is also time that the Vedic Aryans have, in course of time, developed a fairly advanced standard of socio-economic life, with abundance of gold, silver and copper and have made monetary transactions through loans and debts on interest and foreign trade and gifts. Different metallic coins (or their dusts or on lumps) serve these needs. Prof. Wilson further states that "the Hindus had coined money before the days of Alexander."\textsuperscript{4}

We have no evidence of the weight of the Niśkas from our Vedic literature, but their weight standard is recorded in the Smṛitis and in the work of Arthaśāstra and they seem to have preserved the old tradition. Thus, the weight of Niśka as stated by Viṣṇu, Yājñavalkya and Manu was equal to four Suvarṇa\textsuperscript{5} and the Suvarṇa was equal to \((80 \times 4) = 320\) Kṛṣṇalas.

Besides Niśka and Manā, other metallic coins, such as Kṛṣṇala and Śatamāna of gold and silver refers to a gold

\textsuperscript{1} R.V., V, 33.6.
\textsuperscript{2} R.V., VI, 47, 22-23.
\textsuperscript{3} Imperial Gazetteer, II, 135.
\textsuperscript{4} The Rgvedic Text . . . . Trans. by him.
\textsuperscript{5} Manu, VIII, 135; Viṣṇu, IV, 10.
currency and exchange in ancient india

Kṛṣṇala (Hiranya-Kṛṣṇala). In another text one Kṛṣṇala is given as a gift to the participants of a race. Moreover, gold and silver Śatamāna weighing 100 Ratis or 180 grains and its sub-divisions are used as media of exchange. The denominations of Śatamāna are Ardha-Śatamāna (or half Śatamān = 50 Ratis or 90 grains). Pāda-Śatamāna (or one-fourth Śatamāna = 25 Ratis or 45 grains) and Pādārdha-Śatamāna (also called Ṣaṇa or one eight Śatamāna = 12½ Ratis or 22½ grains). The economic use of Śatamāna is referred to in the early Indian literature, such as Satapatha Brāhmaṇa, Taittīrya Brāhmaṇa, Vājasaneyī Samhitā. Later authorities like Pāṇini, Manu and Yaśnavalkya have also duly recognised the economic importance of the Śatamānas and other coins.

The system of barter existed along with the metallic coins in the age of the epics. In the Rāmāyaṇa it is known as niśkraya. Sometimes, the price of a particular cow is referred to in terms of money. Viśwāmitra offered to barter a hundred thousand cows in exchange for the gifted cow of Vaśiṣṭha. Moreover, in such agricultural society the cows have great economic importance. For instance, along with ten lakhs of cows king Daśaratha, gives gold and silver to his priests. Again, at the time of his Putreṣṭi-Yajña he gave gold and cows to the sacrificial priest. The Dakshinā or the sacrificial fee invariably included hundred and thousand of cows. The boy Śunaḥśepa was purchased

1 XI. 4.
2 Taitt. Br., I. 3.6.7; also recorded in Taitt. Saṁhitā, II. 3.2.1; Maitrāyani Saṁ., ii. 2. 2.
4 Śat. Br., V. 4.3.24 & 26; V. 55: XII. 7.2.13; XIII. 2.3.2.
5 Tai. Br., I, 7.6.2. 1.2.7.3.
6 Vāj. San., III. 2.6.3; II. 3.11.5.
7 Pāṇini, V. 1.27.
8 Manu, VIII, 135-138.
11 Rām., I. 53.9.
12 Rām., I. 14, 50-51.
13 Rām., I.14, 48-49.
14 Rām., IV.5.4.
from his parents in exchange of a hundred thousand cows. Thus in view of the pastoral-agricultural pattern of the society and the abundance of the cattle-wealth and the economic importance of cattle, the cow in some cases was accepted as the standard of value.

Side by side with the barter system, metallic currency was also in vogue. Niśka was the commonest coin of that period. On one occasion the king of Kekaya had given 2000 gold Niśka to Bharata. In the Uttarakāṇḍa, Rāma orders Lakšmana to remunerate Kuśa and Lava with 18000 golds apparently Niśkas for their musical performance. Rāma presented 1000 Niśkas to Suyajña. These were definitely gold coins. In the epic the word Niśka signifies a necklace, because the necklace is sometimes consisted of many Niśkas (or coins). The practice of stringing together some coins into a necklace is not uncommon even in India to-day. It was also, named as Suvarṇa and ten crores of them were distributed by Daśaratha to the ṛtviks (conducting priests). Not only gold coins but also silver coins were used as means of exchange. Rajatas were silver coins and forty crores of these were given to the priests. Copper (Tāmra) coins were perhaps in use.

Pre-Maurya to Post-Maurya Period:

The barter system continued to exist even in the pre-Maurya period. A vagrant buys a meal from a forester with his gold pin. There are many other instances of direct exchange of goods. But the use of money was also there. Money used to indicate prices of commodities and measure the value of fees, pensions, fines, loans, hoarded wealth or savings as well as of income and expenditure.

The Buddhist texts use the term Kahāpana (Kārshāpana) for a coin. They are familiar with its varieties called Nikkha (Niśka) and Suvarṇa of gold, silver, bronze and copper pieces called Kāmsa, Pāda, Māsaka, Kākanīka, Kārshāpana, etc. But their value varied with time and place. They had many
denominations. For instance, we find it stated in the Vinaya that at the time of Bindusāra (or Ajātaśatru) at Rājagriha 5 Māṣakas were equivalent to one Pāda.¹

One of the most remarkable features of the period is the introduction of a regular system of coinage in business transactions. Inspite of the fact that the age-old system of barter had not altogether passed away but gradually coins were introduced as media of exchange. Moreover, the gold and silver dust were also used. Herodotus tells us that Darius received 360 talents in gold dust as the annual tribute from his Indian province.² Thus in the sixth century B.C. the dust or ingots of gold and other metals served the purpose of currency. Side by side with them regular or circular flat pieces cut from a hammered sheet of metal and clipped to the proper weight were used as coins. One or more devices (or symbols) were marked on them by punches; they are called punch-marked coins. Many thousands of punch-marked coins have come to light in different parts of India.

But the dates of issue of the Punch-marked coins are highly controversial. In the opinion of Prof. A.L. Basham “uninscribed punch-marked coins were minted from the 6th century B.C. onwards and were in circulation for many centuries”.³ Moreover, from the careful study of the symbols, such as, the sun, mountains, trees, branches of trees, human figure, rabbit, dogs, scorpion, snake, etc., it can be suggested that the punch-marked coins were issued even earlier than 6th century B.C. when the most primitive Indians happened to worship the sun, mountain, trees, spirits, animals, snakes and the like. The primitive form of religious practices and superstitions are focussed in the Vedic and post-Vedic literature.

In this context it is interesting to note that Prof. Allan, Rapson and others have tried to trace the foreign influence on early Indian Punch-marked coins for the following considerations: Some early Persian coins, largely sigloi of Darius were in circulation in the Punjab as early as c. 500-331 B.C.⁴ Some of the sigloi bear counter-marks similar to Indian punch-marks

¹ Vīna., III. 45.
² Hdt., III. 94.
³ The Wonder that was India, p. 504.
⁴ Rapson, Indian Coins, p. 3.
and some bear characters in Brähmi and Kharoṣṭhī. Thus, at one time the Persian sigloi and punch-marked coins were in circulation simultaneously. A copper coin of Alexander is roughly square in shape with the legend A\(\sqrt{E}\)AN\(\triangle POY\).\(^1\) From Bhir Mound at Taxila, Sir J. Marshall have discovered two silver tetradrachms of Alexander\(^2\) and they are found from the level as dated to the third or fourth century B.C. This has been dated to c. 317 B.C. They are all found together with the punch-marked silver coins and bent-bar Indian coins and Persian siglos. Again, in their opinion the Greek coins with the Athenian owl symbol have influenced the coins of Northern and Western India in the fourth century B.C. They, thus, suggested the foreign influence on punch-marked coins. But the origin of the punch-marked coins are much earlier and primitive in type.

Durgaprasad\(^3\) and D.D. Kosambi\(^4\) have thoroughly studied several thousand punch-marked coins. Some silver coins which are found in the earliest layers at Taxila weighed 100 ratis each (=180 grains). They cannot be considered as the double Persian sigloi, for the Persian sigloi weighed not more than 36.45 grains and a double weighed 72.9 grains. They are indigenous coins of India and perhaps the same as the Śatamānas of our Sanskrit texts.

By way of discussion Allan further suggests that the fabulous wealth of the Nandas might have helped them to issue coins on large scale\(^5\) and they were minted in regular series by the Nanda government. For instance, the sun, and the six-armed symbol are quite regular and they may be the symbols of a king and treasury officials, such as, Lakṣhṇā-dhyaksha (Mint master) and Rupadarśaka of Kauṭilya. The variation of the symbol on the reverse is explained by its being the symbol of a district or local ruler and the five symbols on the obverse represent five controlling organisations possibly identical with the six administrative Boards as stated by Megasthenes and, five of them are most important from

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1 Rapson, p. 4.
4 *Introduction to the Study of Indian History*, pp. 163-175.
5 *Cat. of Indian Coins*, Class I, Gr. I, p. lxxxi.
administrative point of view. Again, the coins having counter marks are the earlier issues re-struck by the Mauryas. Moreover, Walsh\(^1\) suggests that the symbols on the punch-marked coins are continuous of the seal designs from Mohenjo-daro. Kosambi further suggests that the sun symbol is the symbol of sovereignty like the Šaḍarachakra. The crescent on arches is a Mauryan symbol and is associated with Šaḍarachakra. In his opinion symbol is associated with a dynasty and the symbol with human figures and without the chakra indicate coins of the tribal oligarchies. Again, the symbol of three ovals and a tangent is an Ašokan one which occurs very often, signifying a long reign. It is also sometimes found on the coins of Bindusāra, and the peacock on arches perhaps originates from the totem of peacock associated with the Mauryas. Again, in the opinion of Foucher, the elephant and the bull on coins explain the relation of the Mauryas with the religion of Lord Buddha.\(^2\) The tree-in-railing also represents the Sambodhi and the arches undoubtedly signify the Buddhistic conception of Stūpa.\(^3\)

Thus, in that period the coins were extensively used as a medium of exchange which is supported by the evidence of the Arthaśāstra.\(^4\) It mentions two main types of coins, such as paṇa (silver coin) with its denomination of 1, ½, ¼, and ⅛. The other is copper coin called māsaka with the same denominations and the quarter piece is known as Kākanī. Along with them, gold coins are also stated in the Arthaśāstra but they are rarely used. But the greater transactions were made through the silver paṇa.\(^5\) The high officials received their salaries in paṇa. The minister, the priest, the collector-general, the chief-constable, the officer-in-charge of the city, the superintendent of law or commerce, the superintendent of manufacturers, the members of the council of ministers, the superintendent of country parts and boundaries, spies (some), village servants; (military officials) the commander of the army, the commander, chiefs (elephant, horses, chariots, infantry) trained soldiers and others received salaries annually at the rate of 48000, 48000, 24000, 12000, 12000, 12000, 12000, 12000,

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\(^1\) Archaeological Survey of India, Memoirs No. 59, p. 20.
\(^2\) Beginnings of Buddhist Art., p. 20.
\(^3\) Ibid.
\(^4\) Arth., 11.12.
\(^5\) Arth., 11.5.
12000, 1000, 500, 48000, 24000, 8000, 8000, 8000, 8000, 8000, 5000 respectively in pañā.¹

The punch-marked coins were perhaps available mainly in silver and copper, but they are rare in gold. It also appears from Arthaśāstra that there was a well-organised mint and their officers used to supervise carefully the contents of the coins and to guard against the possibility of counterfeiting.² Judging by the descriptions and remarks concerning commercial transactions, fines, revenue, etc. it can be suggested that money was handled with experience in that period and a money economy was a familiar idea.

**Indo-Greek Period**:

The earlier Greek kings minted coins according to the Attic standard, based on the drachm of 67.2 grains and the obol (1/6 drachm) of 11.2 grains. Silver coinage of this type ranges from hemiobols to the very large double decadrachms struck by a king Amyntas. It is found from Afganistan. After their southward expansion the Greeks adopted a reduced weight with silver coins of 152 and 38 grains. Their gold coins are very rare.

The greatness and popularity of Minander are attested not only by the overwhelming predominance of his coins over those of other Indo-Greek kings, but also by the survival of his name in tradition. He was undoubtedly the greatest of the Indo-Greek rulers of India. He must have ruled his empire for long time, for he appears in his coins as a young man as well as a middle-aged man. His large number of coins signify both the size of his kingdom and its flourishing commerce. By way of commercial transactions the large number of coins of Minander and Apollodotus are found at Barygaza and it was their commercial success that led the Western Kṣatrapas to imitate them. It is also interesting to note that tetradrachms are comparatively abundant³ and they are

¹ For the detailed account of the salary of the different civilian and military officials—vide *Mauryan Public Finance* by M.H. Gopal, pp. 167, 171, 195.
² *Arth*, 11. 5. 12.
commoner than drachms. Tarn conjectures, that this presupposes an increased trade with the Western World.¹

There exists a very large 20 stater piece of Eucratides and rare staters of a few other kings. Similarly the double-decadrachm of Hermaeus has been found and with the end of his reign ended the story of 200 years in which there reigned 39 kings and 2 queens. Moreover, we get an impression of hostile relationship, confusion, and civil war. The Yavanas seem to have been their own worst enemies² until the Śakas, the Pahlavas and the Yuch-chih (Kuśāṇas) finally overthrew them in different region at different times. And these successors, like the Śakas, and the Pahlavas and Kuśāṇas issued coins which followed the reduced Indo-Greek standard.

*Kuśāṇa Period:*

The first imperial ruling house to issue gold coins regularly in early India was the Kuśāṇas. Their issues continued for a few generations from the time of Vima Kadphises.³ This is significant evidence of the economic condition of the country of that time from various standpoints.

Again, the Roman coins, whether of gold or of any other metal found in Northern India are very few, compared to those found in the south. This is so because of the difference in the nature of foreign trade, conducted in these two regions. Possibly in the South, goods from the western world were brought for local consumption, but in the north it was mainly a transit trade, a trade that passed through the Kuśāṇa realm. The participants in this trade were of diverse nationalities; there was not much possibility of the coins of any particular country flowing into the Kuśāṇa treasury as custom charges or otherwise. Most probably these charges were paid also in bullion and in merchandise itself. From a classical source we also know that there was exchange of commodities between Northern India and Egypt obviously on the basis of barter.⁴ All these points indicate that possibly Roman durei did not enter the northern part of the country in considerable numbers.

¹ Ibid.
² Whitehead, N.C., 1923, p. 308.
³ Rapson, Indian Coins, p. 17.
⁴ Philostatus, Apollonius of Tyana, Bk. III. 35.
Thus the Kuśāṇas had to look for alternative sources of gold.

From the coins of Hermaeus and Kadphises I it is found that the currency of the Kuśāṇas was influenced by the Indo-Greeks.1 Moreover, no silver coins of the Kuśāṇas have been found. But the Indo-Greek and Śaka silver currency, owing to its profuse issue was so well known and so readily accepted in the Kuśāṇa realm, that it was considered unnecessary to issue further coins in this metal.2 But a large portion of this silver currency was extremely debased. This was probably one of the reasons behind the Kuśāṇas issuing gold coins. The average weight of Kuśāṇa gold coins issued from the times of Vima Kadphises to that of Vāsudeva I was 123.2 grains.3 This is much below the Attic standard of 134.4 grains, which was followed by the Greeks in Bactria and India with little variation.4 Of the Indo-Greeks, Menander was, perhaps, the last to issue gold coins.5 Between him and Vim Kadphises, there is a long gap, when no fresh gold coin was issued in Bactria and North Western India.6

The close similarity between the gold coins of the two empires may also be due to a technical reason. By the earlier part of the Christian era, Greek artisans were spread throughout the Mediterranean region and Western Asia, including the Oxus valley and North-Western India. The arts and crafts of both Rome and Parthia owed much to Greek workmanship.7 Alexandria was one of the most famous centres of the skilful Greek artisans of that time. Numismatists hold that the Alexandrian patterns of coins partly agree with the Roman variety and that Alexandrian engravers probably visited Kuśāṇa courts with their pattern books. It may be that these artisans from Alexandria helped the mints of both Roman and Kuśāṇa empires. Double dināra, dināra and quarter dināra were the usual denominations of Kuśāṇa gold coins. A few half-

1 C.H.I., (Vol. 1, Ancient India.), p. 561.
3 Ibid., p. 20.
4 B.M.C., India, Greek and Scythian Kings of Bactria, p. lxvii-lxix.
6 B.M.C., India, Greek and Scythian Kings of Bactria, p. liii. Rapson, Indian Coins, p. 17.
7 Cambridge Ant. Hist., IX. p. 591; Ghirshman, Iran, p. 268; Rostovtzeff, Rome, p. 190.
dīnāras minted by Huviṣka have also been found. But after Vāsudeva I, the Kuśāṇa gold coins became gradually debased and their style and fabric gradually deteriorated. This happened mainly on account of political disintegration during the later phase of Kuśāṇa Rule.

It is stated by Periplus that the Greek and the Śaka silver coins were in circulation. In these circumstances when two sets of coins, one of gold and the other of silver, though initially issued by different government were existing side by side a fixed relation in coinage of these two metals had to be maintained. The Kuśāṇa perhaps somehow or other adjusted the weight standard of their dīnāras to the silver coins current in their realm according to the contemporary ratio between gold and silver. The small transactions were generally met with, the barter system and by the Kuśāṇa coppers. Their copper coins were large and they were of 26 to 28 māsas (240 to 260 grains).

Pre-Gupta to Gupta Period:

A large number of silver and copper coins of varied weight, standard, and fabric were issued by the different kings, tribes and cities of Northern Southern India,—immediately preceding and following the beginning of the Christian era. For instance, the Śatavāhanas of the Deccan minted lead and potin (base silver) coins. The Śakas of Gujrat, Malwa, and Western Deccan had started a new series of silver coins with remarkable quality and quantity.

We are very fortunate in having a very large number of gold coins of the period together with a considerable quantity of silver and copper coins. So far Indologists have studied Gupta coins mainly for the sake of political history. But their value for the study of economic life should not be ignored.

One of the functions of money is that it serves as a store of value. Gold, silver, copper, etc. are selected as the suitable materials as because they are less perishable than any other commodity. They can also be easily stored without any loss of their metallic value.

1 Rapson, Indian Coins, p. 18.
2 Peri., p. 47.
3 Cunningham, op. cit. p. 23.
In ancient India the accepted mode of storing wealth (when banking system was very crude and under-developed) was hoarding.\(^1\) As many as sixteen hoards of Gupta coins\(^2\) have so far been discovered from different parts of the Empire. There may be other hoards of coins yet to be discovered while the metallic contents of others, already discovered, were melted down by the finders, unnoticed by the Government agencies.\(^3\) Even the Board of Directors of the East India Company melted down some valuable coins of Kālighat hoard "in a mercenary fit,"\(^4\) while about 285 coins of the Bayana hoard were melted down by the illiterate villagers.\(^5\) We are, however, fortunate that Bharatpur state authorities managed to get hold of the remainder of the hoard, comprising 1821 gold coins. Although Government and society have changed after the lapse of so many centuries, the metallic value of these coins has not been lost even today. The total value of the coins of this hoard is about 12 lakhs of rupees in present Indian currency. The object of hoarding was certainly to meet the future emergencies like famines, draught, war, etc. Thus, the Gupta coins fully satisfy the criterion of money as a store of wealth.

Money also serves as a standard of value, or the stable transactions to meet the wants of everyday life. In its turn the standard of value of money depends upon the uniform standard of weight of the metal which is quite essential in every currency system. The Gupta coins meet this requirement.

The earliest Gupta coins follow the standard of their late Kuṣāṇa prototypes\(^6\) and the weights of Samudragupta's coins

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2. Allan—pp. cxxiv-cxxxi and Altekar pp. i-x.
3. I have heard from my late grandmother that certain villagers became very rich from this kind of buried treasure. I have also seen old mounds in many villages in Midnapur district (West Bengal) which show clear signs of having been excavated, presumably in search of buried treasure.
5. Altekar, p. ii and f.n.2.
6. The weights of modern coins are very accurately adjusted by Governments. But, as Altekar has pointed out, we cannot blame only the Guptas for their variation of weights in their coins. It was rather the common practice in ancient times. The Greek coins found in ancient India vary in their weights. Thus the weights of the silver coins of Demetrius vary from 55 to 61 grains, when the standard weight of these coins was 67.2 grains. Coins
agree well with the weights of the late Kuśāṇa coins of the third century A.D., which generally vary from 118 to 123 grains. Though these weights vary between 4 to 6 grains it appears that these coins could have been struck accurately and that there was probably an average standard defined to be 121 grains. According to Cunningham the earlier Gupta kings follow in their gold issues the Kuśāṇa standard of 123 grains of which about 107 grains were pure gold. This view is supported by the fact that 64 coins of the Kuśāṇa kings (Vima Kadphises, Kaṇiṣka, Huvīṣka) and the earlier issues of Vāsudeva give exactly the same average weight. But the later coins of Vāsudeva show a sharp decline in the ratio of pure gold, by nearly 10 grains. Our own findings show that the Kuśāṇa gold coins contained appreciably more gold than this.¹

But towards the end of the reign of Skandagupta, the gold coins became much heavier, reaching an average of 144 to 146 grains, while the gold contained decreased to about 70 grains.² Cunningham, look it as a serious debasement, but B.P. Sinha³ has shown that Cunningham’s view of serious debasement is incorrect. But certainly the coins of his successors were usually much poorer in quality than those of their predecessors. Some coins of Narasimhagupta and Kumāragupta II (III?) contain as little as 54 grains of gold.

It can however be said that the earlier Gupta coins apparently followed the Kuśāṇa weight-standard and the latter corresponded to the Suvarga standard of Manu, comprising 80 rattis (=144 grains)⁴.

Although the later coins became heavier in weight than those issued by the early kings, the percentage of gold in the coins gradually declined, especially after the later part of the reign of Skandagupta, a natural corollary to the gradual

issued by the Indo-Bactrian rulers vary greatly. Even the gold Roman *durei* of Julius Caesar vary in weight from 120 to 125 grains. But after his death, the weight of *dureus* varies from 114 to 121 grains. *Bayana Hoard*, pp. cxx-cxii.

¹ *Coins of Mediaeval India*, pp. 14-16 and Vide App. III (Eco. Life... S.K.M.) where we correct Cunningham’s figures.
² *Coins of Mediaeval India*, pp. 15-16.
³ *Decline of the Kingdom of Magadha*, p. 61, also Appendix III (f.n. 93).
⁴ *Manu*, VIII. 134.
deterioration of the economic conditions.  

During the prosperous days of Samudragupta and Chandra-
gupta II the state might have easily raised the standard weight
of coins. But they did not do so appreciably, possibly in order
to maintain a balance in the market, which was stabilised by
the Kuśāṇas. But during the adverse days of the Guptas,
Skandagupta and his successors, although they issued heavier
coins, adulterated them greatly, no doubt on account of the
economic stringencies caused by the wars with the Hūṇas and
others, still they continued the process of minting coins and
tried to maintain a uniform standard throughout their
individual reigns.

The large number of surviving gold coins 2106 (about 285
melted down) from the Bayana hoard, 200 from the Kālighat
hoard, some from the Jessore hoard, 200 from the Allahabad
hoard, 13 from the Hooghli hoard, 25 from the Tanda hoard,
40 from the Tekri Debra hoard and many unknown provenance
undoubtedly show that they were minted as a gold currency, and
not as mere commemorative medals. Moreover, the existence
of so many types with their numerous varieties undoubtedly,
supports our conjecture and this may also indicate that they were
probably minted in different parts of the Empire. The Kuśāṇas
and Guptas issued gold coins. But afterwards gold suddenly
disappeared from the currency system but re-appeared only
occasionally when issued by some North Indian dynasties. The
gold coins having very high purchasing power at that time
were not used in ordinary transactions. They were probably
extensively hoarded as precious metal and were melted down
and used as jewellery for the richer sections of the society.
It was perhaps, thought unnecessary to mint gold coins in the
later periods. Why then was there an abundance of gold coins
in the Gupta period? It may seem that Bihar gold mines were
probably worked during this period and, as in the early part of
the Christian era, gold came from outside India, as bullion or
coin, as an article of import. The prosperity of the period

1 App. III (Eco. Life . . . S.K.M.).
2 Fleet, pp. 52.
3 Eco. Life, pp. 99-100.
4 Nat. Hist. XII—41(18). According to Pliny "at the lowest reckoning
one hundred million sesterces (about £800,000) are taken from us every
may have led to a brisk commercial activities. To meet the needs of the time the Kuśānas and Guptas issued regular gold coinage. Such coins were perhaps hoarded for long periods and would change hands occasionally. Thus, it must have remained current in commerce long after the Gupta period. Kings of the later period, a less prosperous period might thus well find it unnecessary to issue a fresh regular gold coinage.

A large number of silver coins have survived for this period. So far as our present knowledge goes, the minting of silver coins was first started by the Guptas during the reign of Chandragupta II, when he extended his conquest to the west by overthrowing the Śaka Satraps of Ujjain towards the end of the 4th century A.D. They were at first struck for these regions and were modelled on the silver coins of the Western Satraps. Their weight and fabric are closely similar to those of the Satrapal coins. His son and successor Kumāragupta I continued the minting of silver coins. But the great number and variety of his silver issues offer a striking contrast to the comparative scarcity of his father’s silver coins. They, thus, supply us, with further proof that the latter can only have been struck for a brief period, before the end of the reign of Chandragupta II and within a limited area.

Kumāragupta I minted two main types of silver coins: (a) one for his Western provinces and (b) the other for the Central provinces of the Gupta empire. We have five different classes with several varieties of silver coins of Kumāragupta I.3

The existence of a large series (Class V) of silver-plated coins of Kumāragupta I with a copper core offers an interesting problem.4 Smith has dealt with this problem in detail and has concluded, “that the copper coins of Kumāragupta I and Skandagupta which resemble in device and legend the silver coins of those kings, were for the most part a real copper coinage and merely forgeries of the silver coinage. Some copper coins coated with silver were issued in accordance with the year by India, the Seres and Arabia.” Cunningham’s Coins of Ancient India, p. 50; Periplus, pp. 36-160.

1 Allan, pp. Ixxxvi-Ixxvii.
2 Allan, pp. xcii-xcviii.
3 Ibid., pp. xcvi-xcvii.
precedent set by Nahapāṇa and many others sovereigns but these should be regarded as a debased portion of the silver currency. It is not reasonable, I think, to suppose that all the numerous coins of Kumāragupta and Skandagupta were originally silver-coated.” He has further explained, “In my view the silver-plated coins are a debased issue of the silver coinage probably struck during a period of financial pressure and the coins which show no signs of plating are not imitations of the silver coinage. I regard them as genuine copper coinage ...” This suggestion of Vincent Smith is, however, mostly in connection with the Western variety of Kumāragupta I, known also as the Valabhī type, of which a good number of coins have been found. If this be the case, this issue might be due to the Hūṇa menace, which is referred to in the Bhitari inscription of Skandagupta. It is very unlikely that these coins are forged since they exist in considerable quantity.

A distinction can also be made between a bonafide copper coinage of this type and similar silver-plated coins. It is possible, as Allan thinks that “all the coins were originally silver-plated—perhaps merely washed with silver—and intended to pass as silver” currency. It is now difficult to suggest anything quite conclusively unless new materials are available on this subject. These coins have only been found around the site of ancient Valabhi and their issue was probably limited to that area, when it was cut off from the empire by the Hūṇa invasions.

Among the later Gupta emperors only Skandagupta and Buddhagupta continued the silver coinage—similar coins of the peacock variety were also issued by the Hūṇas, the Maukharis and the Pushyabhūtis.

Thus, from the analysis of numerous types and large numbers of silver coins it can be safely concluded that the silver coins were minted side by side with gold by Chandragupta II and his successors for the regular currency of their empire. During the reign of Chandragupta II silver coins were minted only for his newly conquered Śaka territories in order to meet the local need;

1 Fleet, p. 52. Allan p. xcvii; cf. Roman coins of the second half of the third century A.D.
and from the time of his son and successor Kumāragupta I silver coins were introduced in the central provinces of the Gupta empire.\(^1\) His son and successors Skandagupta had two main classes of silver coins.\(^2\) Budhagupta ruling about A.D. 475-95 also continued the silver currency.\(^3\)

In addition to the gold and silver coins, we have copper coins in the Gupta period. R.D. Banerjee\(^4\) has referred to two copper coins of Samudragupta purchased by a private collector. But unfortunately these coins are untraced. Moreover six copper coins found near Bhilsā, are attributed to Rāmagupta by P. L. Gupta.\(^5\) But Altekar and A. K. Narain attributes only two of them to Rāmagupta.\(^6\) However, Dr. Narain is not very definite about the identity of the problematic Rāmagupta of the Imperial Guptas. Majumder suggests that he might be a local ruler by the name of Rāmagupta.\(^7\) According to Mr. Gupta, the type, fabric and metrology correspond exactly with the coins of Chandragupta II.

But we have a large number of copper coins from the reign of Chandragupta II.\(^8\) Nine types are distinguished, and his copper coinage shows a greater originality in its type than the silver, and appears to owe little to any preceding copper coinage. But the copper coins of his son and successor Kumāragupta I are extremely rare. According to Allan and V. A. Smith, the only copper coin, that can be attributed to Kumāragupta I, is in the Bodleian Library.\(^9\) This was collected in 1848 and nearly a century elapsed before a second specimen of a copper coin of Kumāragupta I was collected by Ajit Ghosh.\(^10\)

But it is obvious that these two represent a definite issue of copper currency. There might have been other copper coins

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1 Allan p. xcv.
2 Allan—p.c.
4 *The Age of Imperial Guptas*, p. 214.
6 Ibid.
7 *Classical Age*, p. 17 f.n.
8 Allan pp. lxxxvii-lxxxviii.
which are still undiscovered. Copper coins are not often hoarded owing to their cheapness, and they were probably melted down for other purposes, for copper was in great demand for copper posts, etc.\(^1\) Moreover, copper coins are much more liable to corrosion than those of gold and silver.

Thus, side by side with gold and silver, copper coins were also used as a regular currency at least in the problematic reign of Rāmagupta, and in those of Chandragupta II and Kumāragupta I; and as it was a very useful medium for daily transactions. The copper currency may be expected to have continued even after Kumāragupta I. Although we have no copper coins of the later Gupta kings, it may be the fact that the copper coins of Rāmagupta, Chandragupta II and Kumāragupta I were handed down from generation to generation, for it must be remembered that coinage circulated much more slowly than at the present day, and hence the life of a coin as currency was much longer.

The wide distribution of 16 hoards\(^2\) so far discovered in the different parts of the Gupta empire undoubtedly show that these coins formed the regular currency system of the Gupta period. To strengthen our argument we may refer to Nārada and Brīhaspati, who gave lists of different denominations of currency as follows:

According to Nārada:\(^3\)

\[
\begin{align*}
4 \text{kākanī} &= 1 \text{māsa} \text{ or } 1 \text{pala} (1 \text{paṇa}) \\
20 \text{māsas} &\text{ or } 20 \text{paṇas} \\
1 \text{kārṣāpāṇa} &= 1 \text{andikā} \\
4 \text{kārṣāpāṇa} &\text{ or } 4 \text{andikā} \\
&= 1 \text{dhānaka}
\end{align*}
\]

\(^1\) E. Thomas, The Ancient Indian Weights p. 53. The copper coins may be melted down "for the construction of domestic utensils" by all classes.


\(^3\) Nār. Appendix 56-60 (Sec. on Punishmēni).
12 dhānaka
or
48 kārsapānas of silver
\}
= 1 suvarṇa (dīnāra)

According to Brihaspati :¹
1 kārṣika or kārsapāna copper = 1 paṇa of copper or
1 añḍikā
4 kārsapāna or añḍikā = 1 dhānaka
12 dhānaka or 48 kārsapāna = 1 Suvarṇa (dīnāra)
4 suvarṇa (dīnāra) = 1 niśka

According to Manu :²
5 kṛiṣṇalas = 1 māśa
16 māśa = 1 suvarṇa
4 suvarṇa = 1 pala or niśka
10 palas (or niśka) = 1 dharāṇa

We, thus, see that the money table of Nārada and Brihaspati are almost the same, with slight variation in names. We also note that they agree on the ratio between gold and silver.

According to the Gupta currency system, one silver coin was almost 58 grains and one suvarṇa or dīnāra about 123 or 124 grains (with some variation towards the end of this period). Both Brihaspati and Nārada agree that \((58 \times 48) = 2,784\) grains of silver are equal to 124 grains of gold. Thus 1 (one) grain of gold is equal in value to \(22\frac{7}{16}\) or about \(22\frac{1}{2}\) grains of silver, which seems to us an exceptionally high ratio.

But from the Baigram copper plate³ we have a quite different ratio, for 16 rūpakas are equal to 1 dīnāra. The later Śṛiti writer, Śukra, states that the value of gold is sixteen times that of silver and the value of silver is almost eighty times that of copper.⁴ But in the Gupta period: \(16 \times 58 = 928\) grains of silver = 124 grains of gold. Therefore, 1 grain of gold = 8 grains of silver (approximately). If this be the case, the silver Kārsapāna of Nārada and Brihaspati is not the same as the rūpaka of the inscription, but is much smaller than the latter. Thus the tables of

¹ Bri., viii 9-10.
² Manu, viii—134-135. N.B. Dīnāra is mentioned by Bṛi and Nār, as synonymus with Suvarṇa but not by Manu; possibly the term was not known in Manu's time. But we see that the relation between the "Suvarṇa" and "niśka" in Manu and Brihaspati are the same.
³ E.I., xxi. pp. 81-82.
⁴ Suk., IV. ii—181-182.
Nārada and Bṛhaspati hardly correspond to the actual weights and denominations of the Gupta coinage. Rapson also states that the "simple weight-systems given in the law books do not afford as satisfactory explanation of the weights of ancient Indian coins in general."

In fact the tables given in the most of the Smrītis except Śukra cannot be wholly related to any known system of Indian currency. It thus seems that the Smrīti writers are not thinking in terms of coinage, but rather of goldsmith's weights. It is a well-known fact that the names of many coins all over the world correspond to those of weights even when the relationship has completely altered (e.g. the English pound).

So far as the exchange value of money was concerned, by spending 2, 3 or 4 dināras one could purchase one Kulyavāpa of land, which amounted to a large area. Moreover, by depositing 10 and 12 dināras benefactors expected to maintain an almshouse as long as the sun, the moon and the stars endured, out of the interest of the sum. On two occasions 25 dināras and 16 dināras were endowed permanently, for feeding bhikṣus and lighting lamps in the temples. All these references undoubtedly show that the dināras had a very high purchasing power and were not likely to be used in small transactions. Gold, in fact, was a much more valuable metal than it later became.

The purchasing power of silver coins was also quite high, for we know from the Bāigrama copper plate that 16 silver pieces were equal to 1 piece of gold. So the silver coins were probably not suitable for day-to-day domestic transactions. The gold and silver coins were used for larger transaction such as the purchasing of land, making donations, etc. There must have been some cheaper metal for currency in order to facilitate the transactions in daily life. Copper currency evidently served this need. It will not be unnatural to conjecture that tribal and punch-marked coins, along with copper coins of Kuśāṇas and the Indo-Greeks and the Greco-Roman coins supplemented the Gupta currency and satisfied the needs of the people in their everyday life. However, any scarcity of small coins or change that there may

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1 Rapson, _Andhra Coins_. p. cl, xxxi.
2 Appendix II (_Eco. Life_); vide—Land Sale pp. 47-52 (_Eco. Life_).
3 _Eco. Life_, p. 159; Fleet pp. 29 and 260.
have been, did not create inconvenience to the people, for ordinary daily transactions were probably made by cowries. But the cowries cannot have served as a state currency, for they were available in large quantities from the seas of India and state control over them was hardly possible. They merely served as "the local and popular" exchange.

It also seems certain that the barter system existed side by side with currency. Even in the field of foreign trade barter was possibly widely prevalent, for, except the Greco-Roman coins from South India, we have no evidence of the presence of foreign coins of our period in India and vice-versa. So it is very difficult to agree with Dr. Rhys Davids who holds that "the old system of traffic by barter had entirely passed away never to return."

The numismatic history of the Guptas does not establish absolutely conclusive proof as to the originator of the Gupta currency system. The founder of the dynasty, Śrīgupta or Gupta and his son Ghāṭotkacha are known only from the genealogical tables recorded in the inscriptions and from a single reference by I-Tsing. The son of Ghaṭotkacha, Chandragupta I seems to be the first great monarch of his time, for he first assumed the title of Mahārājādhirāja instead of the simple Mahārāja of his predecessors. This undoubtedly indicates that from his reign the Guptas came to the political forefront. Moreover, it is generally accepted that the Gupta era began from his time; and in the opinion of some Indologists, the gold currency was first introduced by him and was continued by his successors.

In the numismatic series of the Guptas, there is a particular type of coins which bears the effigies of Chandragupta I and his Lichchhavi queen Kumāradevī with their names on the obverse, and a goddess seated on a lion with the legend Lichchhavayah on the reverse. At first these coins were attributed to Chandragupta I.

1 Legge, pp. 43—Cowries were very often used in the villages during the life-time of my great grand-father. I have seen many of them in the box treasured by my late grand-mother. My maternal aunt, very anxious of her own child purchased me by spending only 14 cowries immediately after my birth from my mother. It was, of course, a superstitious belief current in that area.
2 Eco. Life (S.K.M.) pp. 139-140.
3 Buddhist India, p. 100.
Thus, his marriage with Kumāradevi of the powerful Lichchhavi family is generally believed to have been an act of great political importance for the Guptas. It is also evident from the pride with which it is recorded that his marriage marked an epoch in the fortunes of the Gupta family. V. Smith, who first studied the Gupta coins systematically, believed that these coins were issued by Chandragupta I in their joint name. This opinion was in vogue until Allan refuted it on purely numismatic grounds and attributed the coins to Samudragupta. According to him, Samudragupta issued these coins to commemorate the marriage, which had such far-reaching consequences to the fortunes of his family. This opinion based on strong numismatic evidence is accepted by many scholars. After sometime Altekar has challenged the view of Allan and has tried to re-establish the old proposition of Vincent Smith. Moreover, from the study of their gold content it can also be suggested that Chandragupta-Kumāradevi type of gold coins were issued by Chandragupta I himself and not by Samudragupta.

Post-Gupta Period:

The Gupta period envisaged a well-planned currency system based on the Kuśāṇa practice which tried to eradicate the barter system. Quite a large variety of coins were issued by different Gupta emperors.

Although the highly organised currency system of the Gupta period is lacking, during the period under review, i.e. Post-Gupta period a few striking features are easily noticed. First, unlike the Gupta currency which was used throughout the vast empire, political disintegration of the post-Gupta period led different independent rulers to issue their own currency generally restricted in their circulation within their respective kingdoms. Consequently the coins issued, varied from place to place. Thus the Gupta coins recovered from various hoards like Bayana, Kali-ghat, Jessore, Allahabad and others reveal that coins of uniform standard circulated throughout the empire. But during the 6th

2 Bayana hoard pp. xli-lii.
and 7th centuries the rulers of Kashmir,\(^1\) Thaneswar,\(^2\) Bengal\(^3\) and others issued their own coins for circulation within their respective dominions.

Secondly, there was a tendency to imitate the Gupta coins, though the Gupta standard could hardly be attained. The 7th century witnessed the issue of a number of coins which were generally known as the imitation-Gupta coins.\(^4\) They were debased and crude coins struck in imitation of the Gupta coinage. Two of these coins bear the names of the kings. One is depicted as Sudhanya,\(^5\) while the other is identified by Allan as Pṛthuviśa.\(^6\) The latter one was much more debased and crude in form and execution. It has been generally assumed that these were the last gold coins circulated in Bengal till the period, when gold coins went out of circulation in Bengal.\(^7\)

Another remarkable feature is that the day-to-day transaction of the common people was performed with the help of cowries—although gold and silver coins were utilised for transactions of greater magnitude. Hiuen-Tsang in the 7th century A.D. noticed that in commercial transactions the use of gold and silver coins were well-prevalent.\(^8\) This is further corroborated by the references of gold coins in the inscriptions which were used in land transactions. For example, the two grants of the time of Dharmāditya record that the donors of the plots of Vāṭabhoga and Vasudevavāmin purchased the plots of land according to established rate of 4 dināras per Kulyavāpa.\(^9\) A number of gold coins discovered from different sites also strengthen the fact. Bāṇa in his Kādamvari states that on the name giving ceremony of Chandrāpīḍa, king Tādāpīḍa bestowed to the Brāhmaṇas cows and gold coins by the crore,\(^10\) which though exaggerated indirectly help us to have a glimpse of the currency

\(^1\) Early History and Culture of Kashmir, S.C. Ray, p. 118; Archaeological Survey of India, 1913-14, pp. 50-51.
\(^3\) Allan, pp. 147-151.
\(^5\) Ibid., xix pp. 60-61.
\(^6\) Allan (N.C.)—Fifth Series XIV. p. 7.
\(^8\) Watters, I, p. 178.
\(^9\) I.A., xxxix pp. 193-216.
\(^10\) Kād. (Kale) p. 103.
system during the sixth and seventh centuries.

A number of gold coins belonging to the sixth and seventh centuries A.D. has been unearthed in different regions of Northern India. Dr. Hoernle has discovered a gold coin which he attributed to the king Harśavardhana, as it bears the legend Harṣadeva in the obverse\(^1\)—Harṣavardhana was sometimes referred to as Harṣadeva in the inscriptions.\(^2\) In Bengal, some of the Archer type of gold coins of Jayanāga have been found.\(^3\) The gold coins of Śaśāṅka and Samācārdeva of Bengal have also been found.\(^4\) From the point of purity of metal, an unique coin of Śaśāṅka is even purer than that of the late Imperial Guptas.\(^5\) But at the same time there were some very debased coins issued by Śaśāṅka himself. B.P. Sinha,\(^6\) thus states, “We examined some of the coins of Śaśāṅka in the British Museum which are more debased than those of Jayanāga. Some of the coins of Śaśāṅka are so thoroughly debased that they are actually of copper with a plating of silver and had a thin wash of gold over it and must have circulated as gold coins.” It reveals that though coins were often heavy to keep the usual standard weight, they were debased and the gold content was very poor and gold-washed-silver-plated copper coins of Śaśāṅka were no doubt issued merely to retain the usual standard in the market. He did not, however, issue any silver coin.\(^7\) But silver coins were still in circulation in other parts of India. Richard Burn has attributed a number of silver coins to king Prabhākaravardhana and Harṣavardhana.\(^8\) The legend bearing the title Pratāpasīla and Śilāditya leads to make such conjecture. Bāna informs us that Prabhākaravardhana was known as Pratāpaśīla,\(^9\) while Harṣa has been referred to as Śilāditya by the Chinese pilgrim, Hiuen-Tsang.\(^10\) Pravarasena of Kashmir in the sixth century struck not

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2 I.A., XIII pp.\(^73\), 79 (Apsad stone ins.).
3 Allan pt. c.v.
4 Allan pp. 149-150, pl. cv.
5 Allan pp. 148 pl. xxiv.
6 B.P. Sinha, Decline of the Kingdom of Magadha. Appendix I.b.
7 Hist. of Bengal, I p. 666.
10 Watters, I, p. 343.
only gold but also silver coins.\(^1\) Even the Kārkotā ruler of Kashmir issued coins of mixed metals containing gold, silver and copper known as electrum.\(^2\)

Side by side with gold and silver coins, copper currency was circulated. In Kashmir Toromāna’s copper coins were discovered.\(^3\) M.A. Stein further believes that “Toromāna’s coins were struck, not only by the king who bore his name, but by a succession of rulers after him.”\(^4\) A group of copper coins are known as Puri-Kuṣāṇa coins which are current in Orissa for a long period, for they had great resemblance with the Imperial Kuṣāṇa coinage.\(^5\)

Along with coins, the cowries were in vogue in small transactions. As it is noticed by the Chinese pilgrim Fa-Hien even in the Gupta age, they were also in use.\(^6\) Hiuen-Tsang observed that like gold and silver coins, cowries and small pearls were also the media of exchange in India.\(^7\) This is also noticed by Kalhana in his Rājatarāṅgini.\(^8\)

Lastly, the continuation of the age-old barter system during this period draws attention. Hiuen-Tsang confirms this, when he states that barter for merchandise was known in India during the seventh century A.D.\(^9\)

**Early Mediaeval Period:**

The tradition of minting coins of gold, silver and copper was maintained by many ruling families of the Northern and Southern India. Coins made of billon—a kind of base-metal and is an alloy of silver with copper, tin or the like,\(^10\) were of common use. Cowrie shells and barter system were in existence along with the metallic coins. However, these metallic coins are the poorer substitute for the earlier coins. They betray divergences in weight, standard and metallic value. The weight of

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coins might vary in accordance with the change in the relative market value of the metal. Moreover, many unscrupulous and dishonest people tried to clip off metal bits from the gold and silver pieces. It is, thus, extremely difficult for us to ascertain their real weight and standard value. Apparently for easier transactions, smaller coins like \(\frac{1}{4}\); \(\frac{1}{6}\); \(\frac{1}{8}\) and \(\frac{1}{2}\) of different coins were in circulation while the issues of higher denominations such as \(1\frac{3}{4}\); \(1\frac{1}{2}\); 2; \(2\frac{1}{2}\) etc. of the original were also not rare.

Unfortunately, no coins have been found issued by the Pālas and Senas of Eastern India. It appears that the cowries along with the old coins in the market discouraged the ruling authorities to issue fresh coins in their name. Moreover, there might have sharp decline in trade with the foreign countries which required transactions in coins. But the copper plate inscriptions of the Senas show that the amount of land revenue was assessed in Kapardaka-Purāṇa.\(^1\) The kapardaka is a cowrie, whereas Purāṇa is the same as the silver Kārṣāpana. The Kapardaka-Purāṇa would therefore signify a Purāṇa calculated in cowries. 80 cowries are considered to be equal to one Pana or copper Kārṣāpana, 16 Pana or 1,280 cowries were regarded as equivalent to one Purāṇa or silver-kārṣāpana (otherwise called Cūrṇī etc.). Of course, this rate was liable to variation from place to place and from age to age.

The rulers like Kalacuri, Gāhaḍavāla, Candellas, Cāhamānas etc. of Northern India in the early mediaeval period minted coins in different metals. Gāngeyadeva Vikramāditya (c. 1015—41 A.D.), the Kalacuri ruler of Dāhala struck gold coins with the Imperial Gupta device of seated Lakshmi. It was then imitated by the Cāndella rulers of Jecakabhukti. Again, the Cāhamāna silver coins retained the old style of a bull and a horseman. It was a close copy of the Śāhī currency and was in circulation for long time in North-Western India. The Turkish Muslim invaders of Northern India at first adopted this device on their coins.

A good number of copper coins were issued by the early mediaeval rulers of Kashmir. King Harṣa (1089—1111 A.D.) issued gold and silver coins. He accepted elephant head on the coins. In the opinion of Kalhana this coin-type was imported from the Kāṇṭāta region.

\(^{1}\) E.I. 14 and 21.
The early Cālukyas of the South India very probably issued a thick gold pieces with the boar symbol. Some of them are cup-shaped and are known as Padma-ṭañka. Moreover, the gold coins current in South India in the mediaeval period were generally known as Varāha, for they had boar symbol on them. They were also known as gold-Gadyāṇa and are of 48 ratis in weight. It is often recorded as Pon or Hon (Skt-Suvarṇa) in Kannada; Niṣka in Sanskrit inscriptions and Kalaṅju or Māḍai in Tamil literature. This Māḍai (Skt. Māṣa) is written in the Telegu Oriya inscriptions as Māḍa, Māḍa, Māḍha, or Māḍhā and their weight is about 40 ratis. There were also Gadyāṇas and Māḍais made of silver. The European scholars called Varāha as Pagodi, Pagode, or Pagoda. It is derived from the Sanskrit Bhagavatī (the mother-goddess) as is suggested by the symbols of gods, goddesses, or temples on the coins. A group of small gold coins popularly known as Paṇam (English Fanam) were current in the Tamil speaking region of South India. They were of 5 to 6 grains in weight. They are undoubtedly the same as the Accu and Gulikā coins as recorded in the Tamil literature. The Eastern Gaṅga rulers of Orissa appears to have issued this type of coins. Moreover the gold and silver Kalaṅju along with small copper Kāṣu were in circulation in South India.

The Imperial Cola coins have three symbols viz. fish, bow and tiger. It is also suggested that the tiger, fish and bow were the national emblems of the Colas, Pāṇḍyas and Keralas respectively and the coins with the above symbols testify the Cola occupation of the Pāṇḍya and the Kerala kingdoms. On certain silver coins of the Cola ruler, Rājarāja I (985—1016 A.D.) the deformed bust of the king was there and his name was inscribed in Nāgarī script. After the annexation of Northern Ceylon to the Cola kingdom by Rājarāja, he introduced his coins in Ceylon and the later Ceylonese coins were highly influenced by them.

The Pāṇḍya rulers issued several gold coins of the fish-type. Several silver pieces of a king called Vira-Kerala were issued with the legend in Nāgarī characters. Moreover, the Eastern Cālukya kings issued boar-type of coins. Some gold coins of Cālukya Chandravarmen I (999—1011 A.D.) and Rājarāja I (985—1016 A.D.) have been discovered in the Chediwa island on the Arakan coast.

The Later Western Cālukya rulers also issued coins with lions
and temple symbols. King Permādi Vikramāditya II (1076—1127 A.D.) was a contemporary of king Harṣa of Kashmir. According to Kalhaṇa elephant-type coins of Vikramāditya VI were imported by Harṣa of Kashmir. Moreover, the Gojapati Pagoda of the later Cālukya rulers of Karnāṭa are also referred to in Rājatarāṅginī. Sometimes ago a few copper pieces of king Prataparudra I (1163—95 A.D.) of the Kākatiya dynasty of Warrangal have been discovered. They have Nandināgarī legend and no symbols. In accordance with the existing coin styles in South India, some of the rulers of Vijayanagara issued coins in gold.

**Other Medium of Exchange:**

Along with the metallic currency, gold ornaments, gold leaves, etc., were used as means of exchange. They were, perhaps, required to meet the emergencies, in one such occasion in Kashmir, a bracelet was required to meet the cost of provisions and food. It also indicates the scarcity of coins in that area. Similarly food-grains mainly rice was used most extensively as a medium of exchange. A Khāri of rice (dhānya-khāri) was frequently used for this purpose. It was offered even in payment of salaries, rent, interest and fines. Salaries of government servants were sometimes paid in Khāris of rice as equivalents to dīnāras. Thus, A. Stein is of opinion that sometimes rice constituted a sort of subsidiary currency in Kashmir where the "relative value of cash amounts mentioned can be judged on the basis of the standard furnished by the prices of grain in different times." The foodgrains (rice, wheat, barley, etc.) might have been current as a medium of exchange in other parts of India, as well. In our numerous epigraphic records, the payment of revenue in kind i.e. in grains, is frequently recorded. Of course in those areas different metallic coins were also in use.

Another means of exchange was the cowries. It is also noticed by the foreign travellers and writers, Chau-Ju-Kau states

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2. Rājat. VII 1621.
that the people of T’ien-Chu (India) used cowries as a medium of exchange.\(^1\) It is narrated in the Tabaqât-i-Nâsirî when the Muslim invaders first came to Bengal, they found the people of Bengal using cowries.\(^2\) Ibn Batuta also records that the people of Bengal used cowries as money and purchased them from their inhabitants of the Maldives.\(^3\) All doubts on the subject are set at rest by the discovery of large number of cowries along with coins in some hoards. At Sohepur in Orissa 25,000 cowries were discovered along with 27 Kalachuri coins.\(^4\) Again, from Bhaundri village in Lucknow 54 silver coins of a Pratîhâra ruler along with 9,834 cowries have been discovered.\(^5\) Thus, in the opinion of Agarwala, the cowries were commonly used by the people, where, perhaps, copper coins of small denominations were rare. Just like other coins, the market value of cowries fluctuated in accordance with their demand and supply in the market.\(^6\) Again the table below will suggest the relative value of cowries in the market:

\[
\begin{align*}
20 \text{ cowries} & = 1 \text{kâki}ni \\
4 \text{kâki}nis & = 1 \text{copper pa}ña \\
16 \text{ pa}ñas & = 1 \text{silver dramma}
\end{align*}
\]

Thus, \(20 \times 4 \times 16 = 1280\) cowries were equal in value to a silver dramma and 16 pañas. Moreover, the monetary value of coins differed under changed conditions.\(^7\) According to Kalhana,\(^8\) in the reign of Bhikshachandra (1120—1121 A.D.) the old money (dînâra) was being withdrawn from circulation. The new coins were introduced which was twenty per cent more than that of the old dînâra. Thus, one hundred such dînâras were equivalent in value to eighty of the new money. Similarly in the Kankar copper-plate Pamparâjadeva (dated in the Kalachuri samvat of 965—66)\(^9\) it is recorded that the revenue of a land-grant was payable at first at 130 in former coins and 140, afterwards

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\(^1\) P. 111.  
\(^2\) (Tr.) p. 556.  
\(^3\) K.A.N. Sastri, *Foreign Notices*, p. 122.  
\(^4\) *J.N.S.I.*, XIII pp. 92 ff.  
\(^5\) *J.U.P.H.S.* XIX p. 85; *J.N.S.* I X pp. 28 ff.  
\(^6\) *J.N.S.I.* VII pp. 82 ff.  
\(^8\) Râjat VIII 883.  
\(^9\) *E.I.*, IX p. 166 and 169 n. 3.
issued in the new reign. But there is no information as regards: the change of the metal content or the weight of the new coins.

**Barter System:**

Our analysis will be incomplete, if we do not discuss the barter system in the above economic structure. The barter system played a considerable part in the economy of ancient India. But its predominance was felt more in the rural areas. We have the reference of the barter system in the Sanskrit texts, covering most transactions in the villages.¹ In the opinion of Medhätithi² the merchants and traders also sometimes found it convenient to resort to barter. He explains that merchandise (pañya) is the substance (dravya) that is sold for money, or is exchanged for some other substance. In some other Sanskrit texts we find that the merchants visiting distant parts of the country are exchanging their own merchandise with wares of those regions.³ Even the mathematical texts like Lilāvati and Gaṇitasāraśāṅkraha, states⁴ the rule for determining the value in the case of a barter.

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¹ *Vaijayanti*, p. 123, l.12; p. 128, l. 141.
² *On Manu*, V 127.
⁴ *Lilā*, p. 35 (No. 85); *Gaṇita*, IV 37-38.
CHAPTER III

Gold Content and its Significance


The gold coins of the Kushāṇas, the Kushāṇa Chiefs and the Sassanians offer very interesting side-light on the contemporary economic and political life. For this purpose we have thoroughly studied all the gold coins of the Indian Museum, Calcutta. But unfortunately we have had to reject some of them which are attached with a ring or which have a hole inside.¹ The number of the coins utilised in this paper does not agree with the total number as shown in V. A. Smith’s Catalogue of coins in the Indian Museum Vol. 1 since a few of the coins mentioned in the Catalogue are now missing from the Museum. In testing the coins we obtained the valuable help of Mr. Bose and Miss Khatun of the Coin Department, Indian Museum, Calcutta. Thus, a careful study of 99 coins of the Kushāṇas and others have been given below in the hope that they will throw fresh light on some of the problems of Kushāṇa history and the period of history that followed the Kushāṇas.

From the point of view of gold content we may group our coins in the following categories:—

GROUP A

IMPERIAL KUSHĀNAS

1. Kadphises II .......................... 119 grains
2. Kanishka I .......................... 117.5 ”
3. Huvishka (=? I. Gr. A) ............ 115.3 ”
4. Huvishka (=? II. Gr. B) .......... 110.7 ”
5. Vāsudeva (=? I) .................... 102.5 to 108.8 ”

¹ Smith, IMC. I. p. 68-92.
6. Vāṣu (=? II Vāsudeva Kushāṇa) 100·4 grains
7. Kaneshko (=? Kanishka II) 98·00 ,,  

GROUP B
KUSHĀṆA CHIEFS

1. Chhu 93·00 grains
2. Peyasa ,, 91·5 ,,  
3. Sayatha ,, 89 ,,  
4. Saṇa ,, 86·6 ,,  
5. Sita ,, 84·4 ,,  
6. Bhadra ,, 79·5 ,,  
7. Bacharṇa ,, 79·2 ,,  
8. Pāsaka ,, 29·2 ,,  

GROUP C
LITTLE KUSHĀṆAS

1. Kṛitavīrya 76·7 grains
2. Viśva ,, 75·5 ,,  
3. Not assignable ,, 71·4 ,,  
4. Sarvayaśa ,, 61·00 ,,  

GROUP D
KUSHĀṆO-SASSANIANS

1. Sassanians 107·9 grains

It can be very well suggested that the coins of the kings listed above were minted in the same chronological order as given above on the principle of Gresham’s Law. Of course, regarding the Sassanians, their gold coins are even purer than Vāsudeva of the Imperial Kushāṇa dynasty. But in this connection another economic implication should be profitably remembered, i.e. with the decline of the political fortunes of a dynasty the gold content of its coinage declined. Such is the case with the Kushāṇas and the Guptas.¹

GOLD CONTENT AND ITS SIGNIFICANCE

With the exception of the Kushāṇa chief Pāsaka (Table II) the average content of the gold of the Kushāṇa chiefs are higher than the economically depressed Little Kushāṇas. Both these groups of coins are economically much inferior to that of the early Gupta kings.¹

Kadphises I did not issue gold coins. His son and successor Kadphises II introduced gold currency along with other metallic coins. We have also to note that the average gold content of his coins are very high. Among them number 2 of IMC contains 100% gold. From the point of view of purity the coins of Kanishaka I are less by 1½ grains to that of his immediate predecessor Kadphises II. Thus, following the principles of Gre-sham’s Law we can very well suggest that the Kanishka group of kings succeeded the Kadphises group.

Our analysis of the coins leads to the classification of the coins of Huvishka in two groups (A & B) which may suggest the existence of two Huvishkas as pointed out by A.L. Basham.² But from the point of view of design and fabric we cannot group them so rigidly.

We have no gold coins of Vāsishka at our disposal. This may, however, point to the short rule of Vāsishka. Our study of the coins also points out the existence of 2 Vāsudevas (I and II) and 2 Kanishkas (I & II).

The Political history of the Kushāṇas after Vāsudeva I is very difficult to follow. The most important among them are perhaps Kanishka II and Vāsu or Vāsudeva II. The former is known to us from the Ārā inscription and from his coins and the latter is known mainly from his gold coins. Vāsu or Vasudeva II may be identical with the Yueh-Chih king Po—t’iao of the Chinese annals. He sent political mission to the Chinese king in A.D. 230 ³

That the Kushāṇa chiefs who had perhaps ruled under the

¹ Ibid.
² B. S. O. A. S. (1957) 77-85. [F.W. Thomas was perhaps the first to make this suggestion in JRAS, 1952, pp. 108 ff. Allan was supposed to be working on the possibility of classifying two Huvishkas in the coins. I am also of the same opinion and expect to present shortly a classification of the coins of Huvishka into two groups attributable to Huvishka I and II respectively—AKN.]
³ Age of Imperial Unity, p. 151.
sway of the Imperial Kushānas, had enjoyed peace and prosperity under them is also reflected from their gold coins. But after the passing away of the great Kushānas, the Little Kushānas, for sometime, somehow or other maintained their existence in the Punjab and Afghanistan.

They were ultimately defeated by the powerful Śakas and Sassanians. This political turmoil has some reflection on the debased gold coins of the Little Kushānas (Table II). On the other hand from this study of coins we can also notice the affluence of the rising power of the Sassanians.
TABLE 1

Laboratory report of the Kushāṇa, Kushāṇa Chief and the Sassanian gold coins from the Indian Museum, Calcutta.

<table>
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**SUNDARY-CHIEFS**

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LITTLE-KUSHĀNA

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GOLD CONTENT AND ITS SIGNIFICANCE

TABLE II

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GOLD CONTENT AND ITS SIGNIFICANCE

THE GOLD CONTENT OF GUPTA COINS

The gold content of Gupta coins has so far been investigated only by Cunningham (Table II.b) and Sinha (Table I. c.). In comparing their results we found some serious discrepancies. So we thought it advisable to study the gold content of the coins of the earlier Gupta Kings. In testing the coins we had the invaluable assistance of Mr. S. K. Guha, B. Sc., Post-graduate research student, Birkbeck College, University of London, who weighed each coin both in air and water with great care. We have weighed almost all the gold coins of Chandragupta I and Samudragupta in the British Museum, with the exception of a few worn pieces; and for comparative study we have also weighed eight Archer-type coins of Candragupta II and nine Archer-type of his son and successor Kumāragupta I. Thus, a careful study of 77 coins of the early Gupta kings has fully convinced us that Cunningham’s analysis is incorrect.

We have prepared an exhaustive table of early Gupta coins, and also of eleven coins of the late Kuṣāṇa king, Vāsudeva in order to understand the former properly. From the Table II.a we may draw some very interesting conclusions. Our analysis of Candragupta-Kumāradevī coins in Table I.a agrees with Dr. Walker’s report (Table I. b) on some of these coins, while on others the two analyses differ by only a few grains. These variations may be due to the fact that his assistant weighed the coins in water by means of a fine iron wire, which is not very flexible and suitable, instead of by fine cotton thread used by us at the time of taking the weights. So there is only a slight difference between the two sets of results obtained by Dr. Walker and ourselves. The air weights of the coins numbers 4 and 7 in the B. M. C. are not correct, for there is no loss of weight in water. In view of the discrepancy of weight in these two coins, we do not depend on the B. M. C. for air weight: It may thus be the fact that there is some discrepancy also in the B. M. C. in the case of the Candragupta-Kumāradevī coins. In any case, either Cunningham’s coins are entirely different from ours, or errors crept into his investigations. So we ignore his findings and concentrate our attention on our own analysis.

From the point of view of pure gold content we may group our coins in five categories:—
EARLY INDIAN COINS AND THE CURRENCY SYSTEM

(I) Vāsudeva coins .......................... 118 grains
(II) The Chandragupta-Kumāradevi coins 109 grains
(III) The Archer, Tiger and Lyrist coins of Samudragupta ................................... 104-105 grains
(IV) The Standard, battle-axe, Kācha, and Aśvamedha coins of Samudragupta and Archer coins of Chandragupta II ................................................. 98-99 grains
(V) The Archer coins of Kumāragupta ................................................................. 92 grains

It can be tentatively suggested that they were issued in the same order on the principle of Gresham's Law. This points to the fact that the "Chandragupta-Kumāradevi" coins, as Altekar has believed, were issued by Chandragupta I himself and not by Samudragupta. Moreover, the "Kācha" coins, if issued by Samudragupta at all, were issued, like his Aśvamedha coins, towards the end of his reign, when his power was at its highest. This made it less probable that they are his, for it is on the face of it unlikely that he would give up his throne-name and revert to a popular name when at the height of his power. It can thus be conjectured that the Kācha coins were not issued by Samudragupta, but by an usurper.

TABLE I (a)

Laboratory report on some of the Gupta gold coins from the British Museum, London as tested by Mr. S. K. Guha and the author.

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<th>B. M. Catalogue Number</th>
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<th>Percentage of pure gold</th>
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<td>190</td>
<td>14·4</td>
<td>74·7</td>
</tr>
<tr>
<td>S.N.</td>
<td>King</td>
<td>Type</td>
<td>B.M. Cat. No.</td>
<td>sp. gr.</td>
<td>percentage of pure gold</td>
</tr>
<tr>
<td>------</td>
<td>---------------------</td>
<td>------</td>
<td>---------------</td>
<td>---------</td>
<td>------------------------</td>
</tr>
<tr>
<td>70</td>
<td>Kumāragupta I</td>
<td>Archer</td>
<td>192</td>
<td>14.2</td>
<td>73.6</td>
</tr>
<tr>
<td>71</td>
<td>&quot;</td>
<td>&quot;</td>
<td>193</td>
<td>14.3</td>
<td>74.2</td>
</tr>
<tr>
<td>72</td>
<td>&quot;</td>
<td>&quot;</td>
<td>194</td>
<td>15.3</td>
<td>79.5</td>
</tr>
<tr>
<td>73</td>
<td>&quot;</td>
<td>&quot;</td>
<td>195</td>
<td>15.4</td>
<td>80.0</td>
</tr>
<tr>
<td>74</td>
<td>&quot;</td>
<td>&quot;</td>
<td>196</td>
<td>14.5</td>
<td>75.1</td>
</tr>
<tr>
<td>75</td>
<td>&quot;</td>
<td>&quot;</td>
<td>197</td>
<td>14.2</td>
<td>73.6</td>
</tr>
<tr>
<td>76</td>
<td>&quot;</td>
<td>&quot;</td>
<td>198</td>
<td>13.4</td>
<td>69.6</td>
</tr>
<tr>
<td>77</td>
<td>&quot;</td>
<td>&quot;</td>
<td>199</td>
<td>14.8</td>
<td>76.7</td>
</tr>
</tbody>
</table>
TABLE I (b)


Report by Dr. Walker, Keeper of Coins and Medals, British Museum, London on some of the Gupta coins of ancient India, as tested by the Museum Laboratory staff:

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>Name of the King</th>
<th>Type</th>
<th>B.M. catalogue Number</th>
<th>Specific gravity of the coins (Sp. G. of pure gold= 19.32)</th>
<th>P/c of pure gold (to the nearest in whole number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Samudragupta</td>
<td>Standard type</td>
<td>1</td>
<td>16.77</td>
<td>87%</td>
</tr>
<tr>
<td>2</td>
<td>,,</td>
<td>,,</td>
<td>2</td>
<td>16.58</td>
<td>86%</td>
</tr>
<tr>
<td>3</td>
<td>,,</td>
<td>Kāca type</td>
<td>41</td>
<td>15.86</td>
<td>82%</td>
</tr>
<tr>
<td>4</td>
<td>,,</td>
<td>,,</td>
<td>42</td>
<td>15.88</td>
<td>82%</td>
</tr>
<tr>
<td>5</td>
<td>,,</td>
<td>,,</td>
<td>43</td>
<td>15.63</td>
<td>81%</td>
</tr>
<tr>
<td>6</td>
<td>,,</td>
<td>,,</td>
<td>44</td>
<td>15.99</td>
<td>83%</td>
</tr>
<tr>
<td></td>
<td>Chandragupta</td>
<td>Kumāradevī type</td>
<td>23</td>
<td>15.81</td>
<td>82%</td>
</tr>
<tr>
<td>7</td>
<td>,,</td>
<td>,,</td>
<td>24</td>
<td>17.5</td>
<td>91%</td>
</tr>
<tr>
<td>8</td>
<td>,,</td>
<td>,,</td>
<td>25</td>
<td>17.5</td>
<td>91%</td>
</tr>
<tr>
<td>9</td>
<td>,,</td>
<td>,,</td>
<td>26</td>
<td>15.96</td>
<td>83%</td>
</tr>
<tr>
<td>10</td>
<td>,,</td>
<td>,,</td>
<td>27</td>
<td>17.71</td>
<td>92%</td>
</tr>
<tr>
<td>11</td>
<td>,,</td>
<td>,,</td>
<td>28</td>
<td>17.45</td>
<td>90%</td>
</tr>
<tr>
<td>12</td>
<td>Samudragupta</td>
<td>Archer type</td>
<td>19</td>
<td>17.28</td>
<td>89%</td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serial No.</td>
<td>Name of the King</td>
<td>Type</td>
<td>B.M. catalogue Number</td>
<td>Specific gravity of the coins (Sp. G. of pure gold = 19.32)</td>
<td>P/c of pure gold (to the nearest in whole number)</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------</td>
<td>---------------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>14</td>
<td>Samudragupta</td>
<td>Lyrist type:—</td>
<td>50</td>
<td>17.23</td>
<td>89%</td>
</tr>
<tr>
<td>15</td>
<td>Chandragupta II</td>
<td>Archer</td>
<td>63</td>
<td>16.1</td>
<td>83%</td>
</tr>
<tr>
<td>16</td>
<td>&quot;</td>
<td>&quot;</td>
<td>83</td>
<td>15.45</td>
<td>80%</td>
</tr>
<tr>
<td>17</td>
<td>Kumāragupta I</td>
<td>Archer</td>
<td>190</td>
<td>14.28</td>
<td>74%</td>
</tr>
</tbody>
</table>

Sd/- John Walker

Keeper


TABLE I (c)

Laboratory report of certain later Gupta coins as given by Dr. Allan¹.

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>King</th>
<th>Coin type</th>
<th>B.M.C. number</th>
<th>sp. gr.</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Skandgupta</td>
<td>Archer</td>
<td>428</td>
<td>15.3</td>
<td>78%</td>
</tr>
<tr>
<td>2</td>
<td>„„</td>
<td>„„</td>
<td>417</td>
<td>Not stated</td>
<td>74%</td>
</tr>
<tr>
<td>3</td>
<td>„„</td>
<td>„„</td>
<td>418</td>
<td>„„</td>
<td>74%</td>
</tr>
<tr>
<td>4</td>
<td>„„</td>
<td>„„</td>
<td>419</td>
<td>„„</td>
<td>67%</td>
</tr>
<tr>
<td>5</td>
<td>„„</td>
<td>King and Lakshmi</td>
<td>422</td>
<td>„„</td>
<td>67%</td>
</tr>
<tr>
<td>6</td>
<td>„„</td>
<td>„„</td>
<td>423</td>
<td>„„</td>
<td>72%</td>
</tr>
<tr>
<td>7</td>
<td>„„</td>
<td>Archer type</td>
<td>426</td>
<td>„„</td>
<td>79%</td>
</tr>
<tr>
<td>8</td>
<td>„„</td>
<td>„„</td>
<td>427</td>
<td>„„</td>
<td>76%</td>
</tr>
<tr>
<td>9</td>
<td>„„</td>
<td>„„</td>
<td>428</td>
<td>„„</td>
<td>79%</td>
</tr>
<tr>
<td>10</td>
<td>Kumāragupta II Karmaditya</td>
<td>Archer</td>
<td>571</td>
<td>15.38</td>
<td>79%</td>
</tr>
<tr>
<td>11</td>
<td>Purugupta</td>
<td>Archer</td>
<td>550</td>
<td>15.06</td>
<td>77%</td>
</tr>
<tr>
<td>12</td>
<td>„„ (Dr. Hoey) Archer type</td>
<td>...</td>
<td></td>
<td>...</td>
<td>70%</td>
</tr>
<tr>
<td>13</td>
<td>Prakāśāditya</td>
<td>Horseman</td>
<td>552</td>
<td>15.0</td>
<td>77%</td>
</tr>
<tr>
<td>14</td>
<td>Narasimhagupta Archer type</td>
<td>560</td>
<td>14.1</td>
<td>71%</td>
<td></td>
</tr>
</tbody>
</table>

¹ Sinha’s Appendix I a, b, c.
<table>
<thead>
<tr>
<th>Serial No.</th>
<th>King</th>
<th>Coin type</th>
<th>B.M.C number</th>
<th>sp. gr.</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Narasimha-gupta</td>
<td>Archer</td>
<td>565</td>
<td>12.29</td>
<td>54%</td>
</tr>
<tr>
<td>16</td>
<td>Vainyagupta</td>
<td>Archer</td>
<td>589</td>
<td>14.54</td>
<td>73%</td>
</tr>
<tr>
<td>17</td>
<td>Kumāra-gupta II (?, III)</td>
<td>Archer</td>
<td>576</td>
<td>12.26</td>
<td>54%</td>
</tr>
</tbody>
</table>
TABLE II (a)

Abstract of table I (a), showing pure gold content of coins

<table>
<thead>
<tr>
<th>Serial No.</th>
<th>King</th>
<th>Coin Type</th>
<th>Average weight in air (grains)</th>
<th>Average Percentage of pure gold</th>
<th>Average Content of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Samudragupta</td>
<td>Standard</td>
<td>116</td>
<td>83.5</td>
<td>98</td>
</tr>
<tr>
<td>2</td>
<td>&quot;</td>
<td>Archer</td>
<td>118</td>
<td>88.8</td>
<td>104</td>
</tr>
<tr>
<td>3</td>
<td>(Samudragupta)</td>
<td>Chandra-gupta</td>
<td>118</td>
<td>91.9</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>Chandragupta I</td>
<td>Kumāra-devī</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Samudragupta</td>
<td>Battle-axe</td>
<td>118</td>
<td>82.8</td>
<td>98</td>
</tr>
<tr>
<td>5</td>
<td>&quot;</td>
<td>Kācha</td>
<td>116</td>
<td>83.8</td>
<td>98</td>
</tr>
<tr>
<td>6</td>
<td>&quot;</td>
<td>Tiger*</td>
<td>118</td>
<td>89.3</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>(weight of only one coin out of two in B.M.C.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>&quot;</td>
<td>Lyrist</td>
<td>118</td>
<td>87.7</td>
<td>104</td>
</tr>
<tr>
<td>8</td>
<td>&quot;</td>
<td>Aśvamedha</td>
<td>118</td>
<td>82.7</td>
<td>98</td>
</tr>
<tr>
<td>9</td>
<td>Chandragupta II</td>
<td>Archer</td>
<td>118</td>
<td>84.6</td>
<td>99</td>
</tr>
<tr>
<td>10</td>
<td>Kumāragupta I</td>
<td>Archer</td>
<td>122</td>
<td>75.2</td>
<td>92</td>
</tr>
</tbody>
</table>
GOLD CONTENT AND ITS SIGNIFICANCE

TABLE II (b)

Reports of tests of some of the Kushâna and Gupta gold coins as given by Cunningham¹

<table>
<thead>
<tr>
<th>Number of the coins examined</th>
<th>Name of King</th>
<th>Total weight of the coin</th>
<th>Pure gold content</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ Kushâna Coins ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Wema Kadphises</td>
<td>123.0</td>
<td>112.75</td>
<td>92%</td>
</tr>
<tr>
<td>11</td>
<td>Kaṇiṣṭha</td>
<td>123.0</td>
<td>112.75</td>
<td>92%</td>
</tr>
<tr>
<td>25</td>
<td>Huvîṣka</td>
<td>123.0</td>
<td>112.75</td>
<td>92%</td>
</tr>
<tr>
<td>21</td>
<td>Vâsudeva</td>
<td>123.0</td>
<td>112.95</td>
<td>84%</td>
</tr>
<tr>
<td>[ Gupta Coins ]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Kâcha</td>
<td>123.0</td>
<td>102.5</td>
<td>83%</td>
</tr>
<tr>
<td>12</td>
<td>Chandragupta I</td>
<td>123.0</td>
<td>107.6</td>
<td>87%</td>
</tr>
<tr>
<td>50</td>
<td>Samudragupta</td>
<td>123.0</td>
<td>107.6</td>
<td>87%</td>
</tr>
<tr>
<td>40</td>
<td>Chandragupta II</td>
<td>123.0</td>
<td>107.6</td>
<td>87%</td>
</tr>
<tr>
<td>47</td>
<td>Kumâragupta I</td>
<td>123.0</td>
<td>107.6</td>
<td>87%</td>
</tr>
<tr>
<td>48 (a)</td>
<td>Skandagupta</td>
<td>124.6</td>
<td>108.4</td>
<td>87%</td>
</tr>
<tr>
<td>9 (b)</td>
<td>His heavier coins</td>
<td>140.0</td>
<td>73.0</td>
<td>52%</td>
</tr>
<tr>
<td>4</td>
<td>Narasimhagupta</td>
<td>146.0</td>
<td>73.0</td>
<td>50%</td>
</tr>
<tr>
<td>2</td>
<td>Kumâragupta II</td>
<td>148</td>
<td>66.5</td>
<td>45%</td>
</tr>
<tr>
<td>2</td>
<td>Viṣṇugupta</td>
<td>149</td>
<td>66.5</td>
<td>45%</td>
</tr>
</tbody>
</table>

¹ Cunningham’s Coins of Mediaeval India, p. 16.
TABLE III (a)

Laboratory reports on some of the gold coins of Vāsudeva (or Bazodeo) of the Kuśāṇa dynasty from the British Museum, London, as tested by Mr. S.K. Gupta and the author:—

<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Name of the King</th>
<th>B.M. Catalogue Number</th>
<th>Specific gravity</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vāsudeva (Bazodeo)</td>
<td>1</td>
<td>18·9</td>
<td>98·0</td>
</tr>
<tr>
<td>2</td>
<td>&quot;</td>
<td>2</td>
<td>19·3</td>
<td>100·0</td>
</tr>
<tr>
<td>3</td>
<td>&quot;</td>
<td>6</td>
<td>19·1</td>
<td>99·0</td>
</tr>
<tr>
<td>4</td>
<td>&quot;</td>
<td>7</td>
<td>18·8</td>
<td>97·5</td>
</tr>
<tr>
<td>5</td>
<td>&quot;</td>
<td>8</td>
<td>17·1</td>
<td>88·8</td>
</tr>
<tr>
<td>6</td>
<td>&quot;</td>
<td>9</td>
<td>17·5</td>
<td>90·7</td>
</tr>
<tr>
<td>7</td>
<td>&quot;</td>
<td>10</td>
<td>18·9</td>
<td>98·0</td>
</tr>
<tr>
<td>8</td>
<td>&quot;</td>
<td>11</td>
<td>19·0</td>
<td>98·5</td>
</tr>
<tr>
<td>9</td>
<td>&quot;</td>
<td>15</td>
<td>18·7</td>
<td>97·0</td>
</tr>
<tr>
<td>10</td>
<td>&quot;</td>
<td>19</td>
<td>16·0</td>
<td>83·0</td>
</tr>
<tr>
<td>11</td>
<td>&quot;</td>
<td>20</td>
<td>17·7</td>
<td>91·7</td>
</tr>
</tbody>
</table>

TABLE III (b)

Abstract of table III, showing pure gold content of coins of Vāsudeva

<table>
<thead>
<tr>
<th>Total Number of Coins</th>
<th>Name of the king</th>
<th>Average weight in air (grains)</th>
<th>Average Percentage of pure gold</th>
<th>Average Content of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Vāsudeva (or Bazodeo)</td>
<td>124</td>
<td>94·7</td>
<td>118</td>
</tr>
</tbody>
</table>
GOLD CONTENT AND ITS SIGNIFICANCE

THE GOLD CONTENT OF THE LATER IMPERIAL GUPTA COINS

The present paper is a continuation of my two earlier papers on the same subject.¹ Now we have examined 9 gold coins of the later Imperial Guptan kings from the Indian Museum, Calcutta. J. Allan and B.P. Sinha have also tested some of their coins from the British Museum, London.² A slight difference in weight can be noticed between the two sets of coins. But their coins are very inferior in style and execution to those of the earlier.³

From the point of view of pure gold content, we can classify them into five categories:

1. Narasiṃhagupta 104.8
2. Kumāragupta II 100.8
3. Uncertain, (Nara: reading doubtful) 95.0
4. Vishṇu (probably Vishṇugupta) 92.4
5. Kumāragupta (III ?) 77.1

It can be tentatively suggested that these coin-types were probably minted in the same order on the principle of Gresham’s Law. From the present study of these gold coins, we can very well conjecture that there were two Kumāraguptas after the death of Skandagupta. Thus, the problem created by the Sarnath inscription, and the Bhitari and Nalanda seals of the Kumāraguptas seems to have been partly solved by this study.

Vishṇu is undoubtedly Vishṇugupta of the Imperial Guptan dynasty, for our findings correspond with that of Sinha.

Our coin has been attributed to “The uncertain Nara” by V.A. Smith. He is generally identified with Narasiṃhagupta Bālāditya. From our present study, we also agree with V.A. Smith, although the gold content is poorer than that of Narasiṃhagupta Bālāditya of IMC. The reason probably is that these coins were issued by him, when the country was very much affected by the Hūṇa menace.

¹ JNSI, XVIII, Pt. II (1956); XX, Pt. II (1958).
² The Decline of the Kingdom of Magadha, p. 425.
³ Smith, IMC, I, i, p. 98.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the king</th>
<th>Coin-type</th>
<th>IMC No.</th>
<th>Specific gravity of the coins (Sp. gr. of pure gold = 19.32)</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Narasimha-gupta</td>
<td>Archer type</td>
<td>1</td>
<td>15.20</td>
<td>78.7</td>
</tr>
<tr>
<td>2</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td>4</td>
<td>13.80</td>
<td>71.5</td>
</tr>
<tr>
<td>3</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td>5</td>
<td>12.52</td>
<td>65.0</td>
</tr>
<tr>
<td>4</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td>6</td>
<td>14.21</td>
<td>73.6</td>
</tr>
<tr>
<td>5</td>
<td>Uncertain (Nara : reading doubtful)</td>
<td>&quot;&quot;</td>
<td>1</td>
<td>12.35</td>
<td>64.0</td>
</tr>
<tr>
<td>6</td>
<td>Kumāra-gupta II</td>
<td>Archer Type</td>
<td>1</td>
<td>15.00</td>
<td>70.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group A</td>
</tr>
<tr>
<td>7</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td>2</td>
<td>9.83</td>
<td>50.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Group B</td>
</tr>
<tr>
<td>8</td>
<td>Vishṇu (probably Vishṇu-gupta)</td>
<td>&quot;&quot;</td>
<td>1</td>
<td>11.52</td>
<td>59.7</td>
</tr>
<tr>
<td>9</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
<td>2</td>
<td>12.29</td>
<td>63.6</td>
</tr>
</tbody>
</table>
**Abstract of Table, showing pure gold content of the coins.**

<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>Name of the king</th>
<th>Coin Type</th>
<th>Average weight in air (grains)</th>
<th>Average percentage of pure gold</th>
<th>Average Remarks of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Narasimha-gupta</td>
<td>Archer Type</td>
<td>144.57</td>
<td>72.48</td>
<td>104.8</td>
</tr>
<tr>
<td>2</td>
<td>Uncertain</td>
<td></td>
<td>148.2</td>
<td>64.00</td>
<td>95.0* *Because it is a single coin.</td>
</tr>
<tr>
<td></td>
<td>(Nara : reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>doubtful)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Kumāra-gupta II</td>
<td></td>
<td>147.0</td>
<td>70.50</td>
<td>100.1 Group A</td>
</tr>
<tr>
<td>4</td>
<td>Kumāra-gupta (III ?)</td>
<td></td>
<td>151.4</td>
<td>50.90</td>
<td>77.1 Group B</td>
</tr>
<tr>
<td>5</td>
<td>Vishnu (probably</td>
<td></td>
<td>149.45</td>
<td>61.65</td>
<td>92.4</td>
</tr>
<tr>
<td></td>
<td>Vishnu-gupta)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
THE GOLD CONTENT OF THE COINS OF ŚAṢĀṆKA.

While Prabhākara Vardhana of Thāneśwar was trying to establish a big power in northern India, Śaṣāṅka, the king of Gauḍa was rising in the East. His capital was at Karṇasuvaraṇa in Murshidabad district. For about a quarter of a century (A.D. 603-619), he held sway over parts of Bengal, Bihar\(^1\) and Orissa\(^2\).

Śaṣāṅka has left behind him his splendid gold coins. Like those of the early Imperial Guptas, his coins contain a very good percentage of gold, suggesting the economic prosperity of his kingdom.

**TABLE**

*Laboratory report of Śaṣāṅka's gold coins from the Indian Museum, Calcutta*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Coin-type</th>
<th>IMC No.</th>
<th>Specific gravity of the coins (Sp. gr. of pure gold = 19.32)</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bull type</td>
<td>1</td>
<td>14.40</td>
<td>74.6</td>
</tr>
<tr>
<td>2</td>
<td>&quot;</td>
<td>2.3*</td>
<td></td>
<td>*have been exchanged</td>
</tr>
<tr>
<td>3</td>
<td>&quot;</td>
<td>4</td>
<td>10.12</td>
<td>52.3</td>
</tr>
<tr>
<td>4</td>
<td>&quot;</td>
<td>5</td>
<td>14.12</td>
<td>73.4</td>
</tr>
<tr>
<td>5</td>
<td>&quot;</td>
<td>6</td>
<td>13.71</td>
<td>71.2</td>
</tr>
<tr>
<td>6</td>
<td>&quot;</td>
<td>7</td>
<td>13.40</td>
<td>69.5</td>
</tr>
<tr>
<td>6</td>
<td>&quot;</td>
<td>8</td>
<td>11.77</td>
<td>61.3</td>
</tr>
</tbody>
</table>

\(^1\) *JRASB (Letters), XI, p. 3. (Two Midnapur pls.).*

\(^2\) The Doobi plates and *Si-yu-ki* (Watters, ii, p. 92); *History of Bengal* (Majumdar), p. 60.
Abstract of Table, showing pure gold content of the coins.

<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>Name of the king</th>
<th>Coin-type</th>
<th>Average weight in air (grains)</th>
<th>Average percentage of pure gold</th>
<th>Average content of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Šašāńka</td>
<td>Bull type</td>
<td>139.2</td>
<td>67.0</td>
<td>93.2</td>
</tr>
</tbody>
</table>
THE GOLD CONTENT OF THE COINS OF THE TOMARA AND GĀHAḌAVĀLA DYNASTIES OF NORTHERN INDIA

The Tomaras are recognised as one of the 36 Rajput clans of India.¹ Their political supremacy centred round Delhi and Ajmer, and their settlement in Delhi had taken place at about ninth century A.D. They at first ruled under the Pratihāras; and at last they were defeated by the Chāhamānas of Śākambhari.²

Cunningham³ has given the names of the five kings of this dynasty as follows:

1. Sallakshaṇapāla-deva (c. A.D. 978-1009)
2. Ajayapāla-deva (c. A.D. 1003-19)
3. Kumārapāla-deva (c. A.D. 1019-49)
5. Mahīpāla-deva (c. A.D. 1103-1128)

The above names were collected from their coin legends. They issued the “bull and horseman” or the “seated goddess” type of coins. This note is concerned only with some of the gold coins of Kumārapāla-deva. His coin-types are very much similar to those of Gāṅgeyadeva of the Kalachuri dynasty; and the coins are smaller than the standard Gupta gold coins. Like other mediæval Hindu coins, the Tomara coins are greatly alloyed with silver.⁴

The Gāhaḍavāla dynasty came to power in Kanauj at about the eleventh century A.D. Chandradeva or Chandrarāja was the first great king of this dynasty. He was succeeded by Madanachandra who ruled from about A.D. 1100 to 1104.⁵ Madanachandra was succeeded by his son Govindachandra. A good number of inscriptions of the latter’s reign have been discovered from the different parts of his empire. He ruled from A.D. 1114 to 1154, and his kingdom extended roughly to Banaras, Fatehpur, and Kanpur districts on the south, Kanauj on the west, Gonda and Gorakhpur districts on the north, and Dinapur in Patna district on the east. From his epigraphic records, we also.

¹ Ray, *Dynastic History*, p. 1145.
² Ibid.
³ *CMJ* (Cunningham), p. 85; *CCIM* (Smith), p. 259-60.
⁴ Vide my papers on the subject in *JNSI*.
⁵ Majumdar, *Struggle for Empire*, p. 51.
know that he had struggled with the Pālas, Senas, Gaṅgas, Kākatiyas, Chālukyas, Chandellas, Chaulukyas, the Muslims and the Karnāṭakas of Mīthilā.¹ He issued gold and copper coins.

We have tested four gold coins of Govindachandra. They have very small percentage of gold and are mainly alloyed with silver. Some of them are so poor in gold content that we have to reject them for our present purpose. In style and execution, his coins also have very close similarity with those of Gāṅgeya-deva of the Kalachuri dynasty.

**TABLE I**

*Laboratory report of the Tomara gold coins from the Indian Museum, Calcutta (of Ajmer and Delhi)*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the king</th>
<th>Coin-type</th>
<th>IMC No.</th>
<th>Specific gravity of the coins</th>
<th>Percentage of pure gold</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kumāra-pāla-deva (c.A.D.1019-1049)</td>
<td>Seated goddess type</td>
<td>1</td>
<td>16.25</td>
<td>83.4</td>
<td>(i) They are smaller than the standard Gupta gold coins.</td>
</tr>
<tr>
<td>2</td>
<td>, ,</td>
<td>, ,</td>
<td>2</td>
<td>15.00</td>
<td>77.6</td>
<td>(ii) They are mostly alloyed with silver.</td>
</tr>
</tbody>
</table>

Abstract of Table I, showing pure gold content of the coins

<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>King</th>
<th>Coin-type</th>
<th>Average weight in air (grains)</th>
<th>Average percentage of pure gold</th>
<th>Average content of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kumārapāla</td>
<td>Seated goddess type</td>
<td>62.2</td>
<td>80.50</td>
<td>50.0</td>
</tr>
</tbody>
</table>
TABLE II

*Laboratory report of the Gāhaḍavāla gold coins from the Indian Museum, Calcutta*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the king</th>
<th>Coin-type</th>
<th>IMC No.</th>
<th>Specific gravity of the coins</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Govinda-chandra</td>
<td>Seated Goddess type</td>
<td>1</td>
<td>10·50</td>
<td>54·5</td>
</tr>
<tr>
<td>2</td>
<td>”</td>
<td>”</td>
<td>2</td>
<td>11·80</td>
<td>61·5</td>
</tr>
<tr>
<td>3</td>
<td>”</td>
<td>”</td>
<td>3</td>
<td>13·68</td>
<td>70·9</td>
</tr>
<tr>
<td>4</td>
<td>”</td>
<td>”</td>
<td>4</td>
<td>11·72</td>
<td>60·8</td>
</tr>
</tbody>
</table>

Abstract of Table II, showing pure gold content of the coins

<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>King</th>
<th>Coin-type</th>
<th>Average weight in air (grains)</th>
<th>Average percentage of pure gold</th>
<th>Average content of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Govinda-chandra</td>
<td>Seated goddess type</td>
<td>61·4</td>
<td>62·00</td>
<td>38·0</td>
</tr>
</tbody>
</table>
THE GOLD CONTENT OF THE COINS OF THE KALACHURI DYNASTIES OF CENTRAL INDIA

Our present purpose is to discuss some of the gold coins of the Kalachuris. Kalachuris, also known as Haihayas or Chedis, were an ancient Rajput race. Sometimes, they were referred to as the kings of Dāhala-manḍāla. Their capital was at Tripuri, about six miles west of Jabalpur in Madhya Pradesh. The earliest known king of this dynasty was Kokkalla I. At about eleventh century A.D., Gāngeyadeva and Lakshmīkarna considerably extended their power over central and northern India.

Among them, Gāngeyadeva issued some gold, silver and copper coins. The design and fabric of his coins are very simple. The obverse is wholly covered with his own name, in characters not very much different from modern Nāgarī. On the reverse, a goddess (Pārvatī or Lakshmi) is seated cross-legged. His coins are found in all denominations, viz., one dramma, half dramma and quarter dramma.

No coins of the successors of Gāngeyadeva have been found so far. The reason perhaps is that Gāngeyadeva minted quite a good number of coins and they were further increased by some other coins accumulated by his able successor Lakshmīkarna from the countries he conquered. Thus, their successors probably did not need to issue new coins. It should, however, be noted here that a group of eight coins of Gāngeyadeva has been found in the village Isurpur, Tehsil Rehli of the Saugor district. They considerably differ in fabric from the old coins of Gāngeyadeva. They are thick and are half an inch in diameter. It has, therefore, been suggested that they were issued by Lakshmīkarna, the son and successor of Gāngeyadeva.

A study of mediaeval Indian coins reveals that coin-type of Gāngeyadeva was imitated by the Chandellas and many other Hindu dynasties of northern and central India. As regards the gold content, his coins can be compared to those of the later Imperial Guptas. They were greatly alloyed with silver. Some

1 *EI. I,* p. 264 (Bilhari Ins.); *II,* p. 306 (Banaras Ins.); *XIX,* p. 78 (Amoda Ins.); *Ray, Dynastic History,* II, p. 738.
3 My papers on the similar subject in *JNSI.*
of them are so poor in gold content that we have to reject them for our present purpose.¹

The Kalachuris of Tuṁmāṇa also claimed descent from Kokkala I of the Tripuri branch. They ruled over the country of Dakshiṇa-Kośala from Tuṁmāṇa as the capital.²

There were as many as twelve kings in this dynasty. Here, we are only concerned with the gold coins of Prithvideva (? II), Jajalladeva (? II), and Ratnadeva (? III). They ruled from A.D. 1141 to A.D. 1182. In fabric and design, these coins have very close similarity with those of Gāṅgeyadeva. But they contain very poor percentage of gold and are heavily alloyed with silver.

**TABLE I**

*Laboratory report of the gold coins of the Kalachuris of Ṣāhala (Tripuri) from the Indian Museum, Calcutta*

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the king</th>
<th>Coin-type</th>
<th>IMC No.</th>
<th>Specific gravity of the coins (Sp. gr. of pure gold = 19.32)</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gāṅgeyadeva</td>
<td>Seated</td>
<td>1</td>
<td>14.48</td>
<td>75.0</td>
</tr>
<tr>
<td></td>
<td>Vikramāditya</td>
<td>goddess</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(c. A.D. 1030-1041)</td>
<td>type</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>„</td>
<td>„</td>
<td>2</td>
<td>16.52</td>
<td>85.6</td>
</tr>
<tr>
<td>3</td>
<td>„</td>
<td>„</td>
<td>3</td>
<td>15.00</td>
<td>77.9</td>
</tr>
<tr>
<td>4</td>
<td>„</td>
<td>„</td>
<td>4</td>
<td>17.50</td>
<td>90.65</td>
</tr>
</tbody>
</table>

¹ Smith, *IMC*, I, Part III.
Abstract of Table I, showing pure gold content of the coins

<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>King</th>
<th>Coin-type</th>
<th>Average weight in air (grains)</th>
<th>Average percentage of pure gold</th>
<th>Average content of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gāṅgeyadeva Vikramādiyā</td>
<td>Seated goddess type</td>
<td>49.6</td>
<td>82.41</td>
<td>41.0</td>
</tr>
</tbody>
</table>
GOLD CONTENT AND ITS SIGNIFICANCE

TABLE II

Laboratory report of the gold coins of the Kalachuris of Trînâṇa from the Indian Museum, Calcutta

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the king</th>
<th>Coin-type</th>
<th>IMC No.</th>
<th>Specific gravity of the coins</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prithvideva (? II)</td>
<td>Rampant lion type</td>
<td>1</td>
<td>16.95</td>
<td>88.0</td>
</tr>
<tr>
<td>2</td>
<td>&quot;</td>
<td>&quot;</td>
<td>5</td>
<td>18.70</td>
<td>97.0</td>
</tr>
<tr>
<td>3</td>
<td>Jajalladeva (? II)</td>
<td>&quot;</td>
<td>1</td>
<td>14.15</td>
<td>73.5</td>
</tr>
<tr>
<td>4</td>
<td>&quot;</td>
<td>&quot;</td>
<td>2</td>
<td>15.15</td>
<td>78.6</td>
</tr>
<tr>
<td>5</td>
<td>&quot;</td>
<td>&quot;</td>
<td>3</td>
<td>16.10</td>
<td>83.5</td>
</tr>
<tr>
<td>6</td>
<td>&quot;</td>
<td>&quot;</td>
<td>4</td>
<td>12.90</td>
<td>67.0</td>
</tr>
<tr>
<td>7</td>
<td>Ratnadeva (? III)</td>
<td>&quot;</td>
<td>1</td>
<td>16.35</td>
<td>84.8</td>
</tr>
</tbody>
</table>

Abstract of Table II, showing pure gold content of the coins

<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>King</th>
<th>Coin-type</th>
<th>Average weight in air (grains)</th>
<th>Average percentage of pure gold</th>
<th>Average content of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Prithvideva (? II)</td>
<td>Rampant lion type</td>
<td>60.0</td>
<td>92.5</td>
<td>55.5</td>
</tr>
<tr>
<td>2</td>
<td>Jajalladeva (? II)</td>
<td>&quot;</td>
<td>58.5</td>
<td>75.30</td>
<td>44.0</td>
</tr>
<tr>
<td>3</td>
<td>Ratnadeva (? III)</td>
<td>&quot;</td>
<td>51.3</td>
<td>84.80</td>
<td>56.8</td>
</tr>
</tbody>
</table>
THE GOLD CONTENT OF THE COINS OF THE CHANDELLA KINGS

The Chandellas ruled for about four hundred years (c. A.D. 950-1308). Their history is closely interwoven with that of the Kalachuris. After the death of Vidyādharā, they were defeated by the Kalachuri king, Gāṅgeyadeva, and even latter's son and successor, Lakshmīkarna, was able to retain his hold over them.

Many of the Chandella kings, perhaps, minted no coins, not even such powerful ones as Dhaṅga and Vidyādharā. Their coinage begins with the reign of Kīrtivarman (c. A.D. 1060—1100) and continues up to that of Viravarman (c. A.D. 1250—1286). It faithfully reflects the vicissitudes of their political history and closely imitates the coinage of Gāṅgeyadeva.

Here we shall discuss the gold content of the coins of the Chandella king, Madanavarman. Like the other Hindu kings of Mediaeval India, he, too, had heavily alloyed his gold coins with silver. Some of them are so poor in gold content that they can properly be treated as silver coins instead of gold.⁸

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the king</th>
<th>Coin-type</th>
<th>IMC No.</th>
<th>Specific gravity of the coins (Sp. gr. of pure gold=19.32)</th>
<th>Percentage of pure gold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Madanavarman</td>
<td>Seated goddess type (c. A.D. 1127-1163)</td>
<td>1</td>
<td>14.50</td>
<td>75.2</td>
</tr>
<tr>
<td>2</td>
<td>„</td>
<td>„</td>
<td>2</td>
<td>14.48</td>
<td>75.0</td>
</tr>
<tr>
<td>3</td>
<td>„</td>
<td>„</td>
<td>3</td>
<td>15.3</td>
<td>79.5</td>
</tr>
</tbody>
</table>

¹ Ray, Dynastic History.
⁸ Smith, IMC, I, Part III.
Abstract of the Table, showing pure gold content of the coins

<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>King</th>
<th>Coin-type</th>
<th>Average weight in air (grains)</th>
<th>Average percentage of pure gold</th>
<th>Average content of pure gold (grains)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Madanavarman</td>
<td>Seated goddess type</td>
<td>46.7</td>
<td>76.5</td>
<td>35.7</td>
</tr>
</tbody>
</table>
CHAPTER IV

Metrological Study of the Gold Coins of Early India

Gold, proverbially the most coveted of all metals, has in the pure state a colour which cannot be imitated by any alloy or combination of other metals. It is untarnishable and remains bright and free from surface films of oxide at all temperatures. For this reason, it was called 'noble metal' by the alchemists of the Middle Ages in Europe.

Pure gold is very soft and malleable; for increasing hardness it is generally alloyed with silver and copper. We have recently examined three types of gold coins: from the British Museum, London; Indian Museum, Calcutta and Singhi Museum, South Calcutta. Some are yellowish in colour, and apparently alloyed with 15 to 35 per cent of silver. Others are reddish and are alloyed with copper. The last type is blackish in complexion which means it is heavily alloyed with silver and copper in disproportionate degrees. A few of the last type are from the Kushāṇa-Gupta period and quite a large number of them belongs to the mediæval Hindu period.

The earlier gold coins are much better in quality and quantity;\(^1\) the later Hindu gold coins are poor in both the respects. But from the point of view of weight also, the gold coin varies to a remarkable degree: from (i) 242 grains (16.10 grams), to (ii) 121 grains (8.30 grams), (iii) 48 grains (3.706 grams), and (iv) 20 grains (1.971 grams) approximately.\(^2\) This undoubtedly indicates that there were four denominations of gold coins. They were also used in the market as one, half, quarter and half-quarter pieces.

Since the purchasing power of gold coins was very high, they

---

\(^1\) Table 1.

\(^2\) Vide, Singhi Museum (South Calcutta) Nos. 1, 2, 8, 9, 10, 11, 18, 50, 52, 53, 54, 55, 61, 74 & 83 (vide Kushāṇa coins); and Indian Museum (Calcutta) No. 10 (Huvishka) etc.
were rarely used in daily transactions. They were also rarely minted in ancient India. Only one gold punch-marked coin is so far known to us. The Indo-Greeks issued a few gold pieces. After that, the Kushānas and the Guptas, issued quite a large number of gold coins. Generally, their coins contain a very good percentage of gold. In the later period, Śaśāṅka, the ruler of Bengal, and some of the mediaeval Hindu kings somehow or other maintained the gold currency system.

The existence of many types with numerous varieties definitely indicates that the gold coins were minted as currency, and not merely as commemorative medals; only because of their high purchasing power, they were not used in popular transactions. They were, probably, largely hoarded as precious metal, and were melted down and used as jewellery for the richer section of the society. Perhaps for this reason, it may have been thought inessential to mint gold coins in the later period. Why then was there an abundance of gold coins in the Kushāna-Gupta period? We know that in the early centuries of the Christian era, gold came from outside India as bullion or as coins as one of the articles of import. We may also conjecture that Bihar gold mines were probably worked out during this period. Prosperity of this period may have led to commercial transactions on a larger scale than was later the case. To meet the needs of the time, the Kushānas and the Guptas issued regular gold coinage. Such coinage was, perhaps, hoarded for long periods, and would change hands only occasionally. This is also quite evident from the manner of deposition of gold coin (Dināras) with the guild banks. Thus, it must have remained current in commerce long after these periods, and the kings of the less prosperous later periods might well have found it unnecessary to issue regular gold coinage.

We have classified our results on the principle of chronology and they are as follows:

3 Vide, Table II. See also my notes in Alt. Comm. Vol., *JNSI*, XXII, pp. 269 ff.
4 Murray, *JRASB*, VI, 1940.
5 Pliny, *Natural History*, XII, 41(18); *Periplus*, pp. 36 and 160.
6 R.C. Majumdar, *Corporate Life in Ancient India*. 
A careful metrological analysis of 200 gold coins of the Kushāṇas, the Kushāṇa chiefs and the Sassanians belonging to the Indian Museum and Sri N.N. Singhi Museum of Calcutta and the British Museum, London provide interesting information.

It can be very well suggested that the coins of the kings listed in Table I of the Appendix given below were minted in the same chronological order as given on the principle of Gresham’s Law. Of course, regarding the Sassanians, their gold coins are even purer than Vāsudeva of the Imperial Kushāṇa dynasty. The Sassanians had issued them, when they had established themselves properly over Persia and in some parts of north-western India, when the Kushāṇa power in India was gradually falling down.

In this connection another economic implication should be profitably remembered, i.e. with the decline of the political fortunes of a dynasty the gold content of its coinage declined. Such is the case with the Kushāṇas, the Guptas and many others.

With the exception of the Kushāṇa chief Pasaka, the average gold-content of the coins of the Kushāṇa chiefs are higher than that of the economically depressed Little Kushāṇas. But both these groups of coins are economically much inferior to that of the Imperial Kushāṇas and of the early Imperial Guptas.

So far discovered, Kadphises I did not issue any gold coin. His son and successor Kadphises II introduced gold currency along with other metallic coin. Among them number 2 of IMC contains 100 per cent gold. But from the point of view of purity the coins of Kanishka I are less by 1½ grains to that of his immediate predecessor Kadphises II. Thus, following the principles of Gresham’s Law, we can very well suggest that the Kushāṇa group of kings succeeded the Kadphises group.

However, our analysis of the coins leads to the classification of the coins of Huvishka in two groups (A & B) which may suggest the existence of two Huvishkas.¹ But from the point of

¹ *BSOAS* (1957), pp. 77-85 (F.W. Thomas, was perhaps the first to make this suggestion in *JRAS* 1952, p. 108. Allan was supposed to be working on the possibility of classifying Huvishkas from the coins. A.K. Narain is also of the same opinion.)
view of the design and fabric we cannot group them so rigidly.

We have no gold coins of Vāsishka at our disposal. This may, however, point to the short rule of Vāsishka. Our study of the coins also points to the existence of 2 Vāsudevas (I and II) and 2 Kanishkas (I and II).

The most important among those who followed Vāsudeva I are perhaps, Kanishka II and Vāsu or Vāsudeva II. The former is known to us from the Ara inscription and from his coins; and the latter is known mainly from his coins. Vāsu or Vāsudeva II may be identical with the Yūeh-Chih king Po-t'iao of the Chinese annals. He sent political mission to the Chinese king in A.D. 230.¹

That the Kushāna chiefs, who had perhaps ruled under the sway of the Imperial Kushānas, had enjoyed peace and prosperity under them, is also reflected from their gold coins. But after the passing away of the great Kushānas, the Little Kushānas, for sometime, somehow or other maintained their existence in the Punjab and Afghanistan.

Their power was ultimately crushed by the powerful Šakas, Sassanians, and the Hūṇas. This political turmoil has some reflection on the debased gold coins of the Little Kushānas (Class I). On the other hand, from the study of coins we can also notice the affluence of the rising power of the Sassanians.

CLASS II

Similarly we have thoroughly examined 235² gold coins of the Imperial Guptas from the Indian Museum, Calcutta and the British Museum, London (See Table II). So far as the metrology of these coins are concerned, they follow the standard of their late Kushāna prototypes³ and the weights of the coins of Chandragupta I and Samudragupta agree well with the weights of the late Kushāna coins of the third century A.D. They generally vary from 118 to 123 grains. Though the weights vary between 4 to 6 grains, and though there appears to have been very little effort to strike the coins accurately, there was very probably an average standard which may be defined as of 121 grains. But, as Altekar has pointed out, we cannot blame only

¹ The Age of Imperial Unity (Ist. edn.), p. 151.
² S.K. Maity, see page. Infra
³ Cunningham, Coins of the Mediaeval India, pp. 14-15.
the Guptas for the variation of weight in their coins. It was rather a common practice in ancient times. The Greek coins found in ancient India vary in their weights. Thus, the weights of the silver coin of Demetrius vary from 55 to 61 grains, when the standard weight of these coins was 67·2 grains. The coins issued by the Indo-Greek rulers vary greatly. Even the gold Roman aurei of Julius Caesar vary in weight from 120 to 125 grains. But after his death the weight of the aureus varies from 114 to 121 grains.¹

According to Cunningham the earlier Gupta kings follow in their gold issues the Kushāṇa standard of 123 grains, of which about 107 grains are pure gold, for 64 coins of the Kushāṇa kings Vīma Kadphises, Kanishka, Huvishka, and the earlier issues of Vāsudeva give exactly the same average weight. But the later coins of Vāsudeva show a falling off of pure gold by nearly 10 grains.² The fact is, our own findings show, that the Kushāṇa gold coins contained appreciably more gold than this.³

But towards the end of the reign of Skandagupta, the gold coin became much heavier, reaching an average of 144 to 146 grains while the gold content decreased to about 70 grains.⁴ This, according to Cunningham, may be taken as a serious debasement. On the other hand, B.P. Sinha⁵ has shown that Cunningham’s view of serious debasement is incorrect; but certainly the coins of the successors of Skandagupta were usually much poorer in quality than those of their predecessors. Some coins of Narasimhagupta and Kumāragupta II (?III) contain as little as 54 grains of pure gold.

It can, however, be said that the earlier Gupta coins, apparently, followed the Kushāṇa weight standard and the later correspond to the Suvarnā standard of Manu, comprising 80 brattis or 144 grains.⁶

Although the later coins became heavier in weight than those of early kings, the percentage of gold in the coins gradually

¹ A.S. Altekar, Bayana Hoard, pp. cxx-cxxi.
² Ibid., f.n. 15, pp. 14-16.
³ S.K. Maity, Economic Life of Northern India, Appendix III and Chapter, “Currency & Exchange”.
⁴ Ibid., f.n. 15, pp. 14-16.
⁵ Decline of the Kingdom of Magadha, p. 61.
⁶ Manu., VIII, 134.
declined, especially after the later part of the reign of Skandagupta.\(^1\) This was probably due to the bad politico-economic situation created by the invasion of the Hūṇas and the ceaseless trouble over the royal succession after the death of Kumāragupta I.

It is popularly believed that Skandagupta died at about A.D. 467. He was succeeded by Purugupta, son of Kumāragupta I and the chief queen Anantadevi. But the order of succession to the throne of the Imperial Guptas after the death of Purugupta is highly controversial.

On the basis of our analysis\(^2\) the Gupta geneology can be arranged and Chandragupta I, Samudragupta, Kāchagupta (=? Rāmagupta), Chandragupta II, Kumāragupta I, Skandagupta, Purugupta, Narasimhagupta, Kumāragupta II, Kumāragupta (?=III), Vishṇugupta and Vainyagupta. They had issued their gold coins in the same chronological order on the principle of Gresham's Law.

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\(^{1}\) *Economic Life of Northern India*, Appendix III.

\(^{2}\) Table II.
<table>
<thead>
<tr>
<th>Gr. No.</th>
<th>King/Chief</th>
<th>Average weight in air (in grains)</th>
<th>Average Percentage of pure gold</th>
<th>Average content of pure gold (in grains)</th>
<th>Remarks</th>
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<td>1</td>
<td>Kadphises II</td>
<td>121.10</td>
<td>98.50</td>
<td>119.00</td>
<td>Kings and chiefs have been arranged here on the basis of V.A.</td>
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<td>2</td>
<td>Kanishka</td>
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<td>Smith in IMC &amp; BMC. But our order differs on the basis of the Politico-economic implication of these coins (vide elsewhere).</td>
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<td>3</td>
<td>Huvishka (B)</td>
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<td>110.70</td>
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</tr>
<tr>
<td>4</td>
<td>Huvishka (A)</td>
<td>122.60</td>
<td>93.45</td>
<td>115.30</td>
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</tr>
<tr>
<td>5</td>
<td>Vāsudeva Kushāṇa</td>
<td>117.85</td>
<td>95.23</td>
<td>102.50</td>
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</tr>
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<td>6</td>
<td>Vāsu (=? Vāsudeva Kushāṇa)</td>
<td>120.30</td>
<td>83.30</td>
<td>100.40</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Kanishko</td>
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<td>91.15</td>
<td>98.05</td>
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<tr>
<td>8</td>
<td>Vāsudeva (Bazodeo)</td>
<td>124.00</td>
<td>94.70</td>
<td>118.00</td>
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</table>

**KUSHĀṆA CHIEFS**

<p>| 9      | Bhadra              | 119.00                           | 66.86                         | 79.50                                  |                                        |
| 10     | Sayatha              | 120.25                           | 73.91                         | 89.00                                  |                                        |
| 11     | Sita                 | 118.30                           | 71.25                         | 84.40                                  |                                        |
| 12     | Saṇa                 | 119.20                           | 72.60                         | 86.60                                  |                                        |
| 13     | Bacharṇa             | 117.00                           | 67.60                         | 79.25                                  |                                        |
| 14     | Chhu                 | 113.00                           | 82.30                         | 93.00                                  |                                        |</p>
<table>
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<tr>
<th>Gr. No.</th>
<th>King/Chief</th>
<th>Average weight in air (in grains)</th>
<th>Average Percentage of pure gold</th>
<th>Average content of pure gold (in grains)</th>
<th>Remarks</th>
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<td>118.00</td>
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</tr>
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<td>Bull-type</td>
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<td>67.00</td>
<td>93.20</td>
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APPENDIX I

The Culture of the Guptas and the Cultural Significance of their Coins

Before the rise of the Imperial Guptas, India had developed an advanced system of agriculture, industry and trade. The unification of almost the whole of the Gangetic valley by Chandragupta-I and his famous son Samudragupta, and the incorporation of Malwa, Gujrat and Kathiawar by Chandragupta-II ensured a strong and well-organised government for the richest and the most populous regions of India.

The power and prestige of this new empire rose so high by the time of Samudragupta as to secure respect for the imperial authority from local rulers upto India’s natural frontiers in the East, as well as in the West. He did not attempt to extend his empire south of the Vindhyā mountains, but he carried out a successful military raid into the Dakshinapatha (South India). Marching through the jungles of Madhya Pradesh, he reached the coast of Orissa (Kaliṅga) and followed the coast-road as far as Nellore. On his return journey, he received the submission of the kings through whose territory he passed, together with huge sums in the form of tribute, but made no attempt to annex their lands permanently. So great was the fame of Samudragupta, that the kings of far distant Ceylon, and the Śakas and the Kushāṇas of the north west of India, sent ambasudas to him. The annexation of western India by Chandragupta-II¹ was not his only achievement. After the premature death of his son-in-law (Rudrasena-II) for about twenty five years, during the regency of his daughter Prabhāvatīguptā² the Vākāṭaka kingdom came under the influence of Chandragupta-II. He was succeeded by his son, Kumāragupta-I (Cir. A.D. 415-454), who possibly preserved the empire of his forefathers intact. But in the last years of Kumāragupta-I his empire suffered a serious blow from

² Ibid., p. 475.
the Hūnas. During the struggle with the Hūnas, he died, and his son, Skandagupta (Cir. 455-467), assumed power. He defeated the invaders and was able to establish royal power throughout his empire. But after his death the great days of the Guptas were over. Under the relentless attacks of the Hūnas and others the grand fabric of the mighty empire gradually crumbled down. Although the successors of Skandagupta continued to rule their small kingdom, mainly confined to Magadha and Bengal, for a few generations, the local governors ruled almost independently in many parts of the Gupta Empire. However, in the hay-day of the Guptas the people enjoyed peace and prosperity. The Gupta state had received its strength and vitality from the continuous rule of more than two centuries by an able set of rulers. They profitably helped the progress of administration at least in the major part of India. They controlled the whole machinery of the government and had the largest share in the formulation of the policy. They wielded very extensive powers, commanded the army, administered justice, issued rescripts and granted remission of taxes. But they could not be always despots, for many of the laws of the land had a sacred character, being derived from the Vedas and Smritis, and were to a certain extent independent of royal control. Besides these, many of the ordinary secular laws originated from the guilds and corporations and from local customs.

They, however, maintained a hierarchy of administrative set up through the provincial heads. Provincial governors were directly appointed by them and were responsible to them in administrative matters. Through them the kings also influenced the district administration, for the Vishayapatis were again appointed by the Uparikas (governors). But the whole administrative set-up was hanging on the great personality and valour of the great kings like Chandragupta-I, Samudragupta,

2 Political Hist., p. 489-493.
3 Ibid., p. 532-533. B.P. Sinha, Decline of the Kingdom of Magadha, p. 104-105.
4 Political Hist., p. 530-539.
5 S.K. Maity, Eco. Life of N. India in the Gupta Period, p. 188-190.
7 Ibid.
Chandragupta-II, Kumāragupta-I and Skandagupta. After their death the great Gupta empire had gradually vanished into insignificance. Thus, they failed to establish adequate administrative set-up permanently.¹

Most of the Gupta emperors were Brahmanical Hindus, worshipping many gods and goddesses. Vishnu, Lakshmi, Kārtikeya, Indra, Varuṇa, Durgā (Ambikā) and other along with their associates, such as, Garuḍa, Peacock, etc. were worshipped by them.² In spite of that they had maintained a sort of religious catholicity throughout their empire by liberally endowing money and lands to the temples and monasteries, Brāhmaṇas, Buddhists and Jains.³

By that time the formation of society on caste basis was finally fixed. A sharp distinction was made between the three higher classes and the Śūdra.⁴ The former were twice-born (Dvija), one at their natural birth and again at their initiation, when they were invested with the sacred thread. But the Śūdra had no initiation and they had occupied the lowest rank in the ladder.⁵

We also notice the great differences in their duties and their social status. "The Brāhmaṇa is to study and teach, to sacrifice, and to give and receive gifts; the Kṣatriya must protect the people, sacrifice and study; the Vaiśya also sacrifices and studies, but his chief function is to breed cattle, to till the earth, to pursue trade and to lend money; the Śūdra’s duty is only to serve the three higher classes—and it is better to do one’s own duty badly than another’s well. Thus for each man there was a place in society and function to fulfil."⁶

Below the Śūdras there were a lot of so-called untouchables and out-castes in the society. The chief of these groups was the Chaṇḍālas. They had to live outside the city gates or out-skirts of the villages. By the Gupta time they became so strictly untouchable that they were forced to strike a wooden clapper on entering a town, to warn the upper classes of their polluting approach.⁷ Thus, there were many maladies and shortcomings

¹ Ibid.
² R.D. Banerji, Age of the Imperial Guptas, p. 102-129.
³ Ibid.
⁴ Classical Age, (ed. by R.C. Majumdar & A.D. Pusalker).
⁵ R.S. Sharma, Śūdras in Ant. India, p. 249-259.
⁶ A.L. Basham, The Wonder that was India, p. 138.
⁷ Ibid., p. 145.
in the social system of the Guptas.

But from the material and cultural points of view the society was much advanced. We have the valuable account of Fa-hien to the effect that "the people of the Middle Kingdom wore numerous and happy." It was no doubt the central part of the Gupta empire, which progressed materially to a greater extent than did other less fortunate regions.

So great was the activity in the field of art, literature and science, that the Gupta age has sometimes been called the Hindu Renaissance and it bears many close affinities to England under the Tudors. In the field of literature Śūdraka, Viśākhadatta and other less well known poets are out-shone by the brilliancy of Kālidāsa, who has been called by Rawlinson, "the Indian Shakespeare." who has shed lustre on the whole of Sanskrit literature. He is unquestionably the first master of Indian poetic style. In the sciences of mathematics and astronomy, the Gupta age was adorned by the famous names of Āryabhaṭṭa and Varāhamihira.

Arts found liberal patrons in the enlightened Gupta monarchs. In the opinion of A.K. Coomarswamy the early Indian art is so to speak a product of Nature characterised by simplicity and naturalism than artistic. But the Gupta art is the flower of an established tradition, a polished and perfected medium like the Sanskrit language. The earlier trends and tendencies are absorbed in the Gupta art. The long and continuous evolution of art in the previous centuries paved the way for the complete efflorescence of the artistic genius of the people in the Classical Age. The Gupta art is the outcome of the classical art of Mathurā and Amarāvatī. Its plasticity is derived from that of Mathurā and elegance from that of Amarāvatī; yet this art belongs to an entirely elevated sphere. The artists of the previous ages were mainly engrossed with the physical phenomena. But the lush sensuality of Amarāvatī and Mathurā underwent a change towards serenity and sublimity in the hands of the Gupta artists.

1 Account of Fa-hien (Eng. Tr.; The Chinese Republic), p. 34-35.
2 *Eco. Life*, p. 188.
3 *Ibid.*, p. 188.
4 *Ibid.*, p. 188.
5 S.K. Dey, *History of Sanskrit Literature, (1st Ed.)*.
6 *Classical Age.*
The human figure is of central importance in Gupta sculpture, while the vegetal patterns have receded to the background. The Gupta artists unlike their predecessors skillfully handled stone like some malleable substance and infused life in the statues.

Though the human figures engrosses the vision of the artists, yet the Gupta figures are adorned with poise and sublimity. The classical sculptor unlike his Kushāṇa predecessor devotes himself to the manifestation of an unearthly beauty of a controlled body and a controlled mind. This sublimity of spirit is best illustrated by the Buddha images of this period.\(^1\)

The purport of these figures is not to impress people with their colossal structure but to manifest Buddha as the very embodiment of love and kindness.

According to E. B. Havell\(^2\) by the time of the Guptas the original Buddhist creed had been profoundly influenced by the Yoga Philosophy. The spirit of Indian thought is symbolised in the conception of Buddha, calm and impassive, his thought free from all worldly desires and passions, his body and mind raised above the physical and intellectual strife. It is the very antithesis of Western ideal, it symbolises the power of the spirit resulting not from intellectual strife, but from Yoga,—union with the Universal Soul.

The Classical art attained its perfection in the seated Buddha at Sārnāth,\(^3\) the standing Buddha at Mathurā,\(^4\) the copper image of Buddha from Sultangunge\(^5\) and others. Especially the Saranath Buddha is incomparable. One is struck with the purity of its lines. It is so human and yet without any earthly trait. The eyes are closed as if penetrating into such a deep beauty as unseen by mortal eyes. The face is not that of an ascetic, nor of a man of wisdom, nor of a handsome lover. It glows with an unfading joyous serenity and spells about the onlooker the charm of a music of a world which knows neither sorrow nor sadness.

The strength and vigour of this art blended with naturalism and refined idealistic touch are reflected in the images of the Avatāras and the divinities of the Purānic pantheon. The landmarks of this art are the Narasimha—Avatāra from

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1 Ibid., p. 104.
2 A Hand Book of Ancient Indian Art.
3 Classical Age.; Age of Imperial Guptas, p. 130-139.
4,5 Ibid., Wonder that was India, p. 346-385; V.S. Agrawal, Gupta Art.
Besnagar, the superb bronze figure of Brahmā from Mirpur Khash and the Sun God from Gwalior. But the puranic master-pieces as they are, the expression of the vigour of this age are the Gwalior Paraśurāma and the Varāha relief in the Udaygiri caves. The whole body of Paraśurāma is endowed with strength and vigour; and the Varāha relief betrays primeval strength.

The soft and pliant body with its smooth and shining texture is the main feature not only of the images of divinities like the Buddhist, Brahmanical and Jain, but also of ordinary men and women. The eyes express various emotions and the Indian aesthetic cannon has a number of similes to express different emotions, i.e., the innocent look of a woman is often compared to with that of a deer. The excellence of artistic design and taste are also noticeable in the rich varieties of gold coins issued by the wealthiest and mightiest Emperors of the age.

In the field of material progress and culture there were also life and spirit. Owing to the tightening up of agricultural economy all the lands were thoroughly organised with the help of departmental machinery, such as the record-keepers (Pustapālas) department and others, and the demand for more cultivable land was gradually felt. Jungles and marshes were reclaimed and gradually brought under the plough. To cover the mounting expenses of the state, taxation became heavy. The advanced condition of agriculture and horticulture is well brought out in the detailed descriptions of Varāhamihira, Kālidāsa and Amara. For the improvement of agriculture the state and individual citizens undertook irrigational schemes; the cow became a sacred animal owing to the agricultural utility.

Pottery, metal work, jewellery, minting of coins, weaving, dyeing, stone-working and ivory work made remarkable progress during this period. The industrial development brought beneficial results not only to society at large but also to the workers themselves. They were gradually recognised in the society and found a valued position in the local government of the day.

1, 5 Ibid.
6 Eco. Life, p. 47-52.
7 Ibid., p. 189.
8 Ibid.
9 Ibid.
The internal trade seems to have been quite flourishing. Although as a result of Persian rivalry and barbarian invasions of the Roman Empire the trade with the West was somewhat restricted,\(^1\) nevertheless, India’s maritime relations with Egypt, Syria, Persia, Arabia, Ceylon, Cambodia, Siam, Sumatra, the Malayan Archipelago and China were very close.\(^2\) The balance of trade was sometimes in India’s favour. Through the channels of trade her cultural expansion into the very heart of south eastern and eastern Asia formed one of the most brilliant episodes of Indian history. The great tradition of Indian influence, extending from Ceylon to Tonking, was of course only merely an endeavour to acquire material wealth. It was also aimed at religious ends. Vishnuism, Sāivaism and Buddhism all sought to take root in new soil.\(^3\)

The prosperous industry and trade produced another beneficial result in the economic life of the country. To facilitate trade and other transactions the Gupta emperor minted gold, silver and copper coins; and for the first time in ancient India, we have such an elaborate system of coinage in different metals.

Individual traders and craftsmen faced with difficulties formed themselves into corporate organisations. We have reference to corporation of farmers, artisans, money-lenders, traders, and for the first time law-givers formulated elaborate rules on corporate life.\(^4\) All these material prosperity required adequate labour. Slavery and forced labour existed side by side with hired labour.

The Gupta age was, no doubt, a period of efficient political administration, and political stability was firmly rooted. It is, thus, natural to conjecture that the fortunate few had their fortunes assured, and formed a distinct class. They comprised the king, princes, administrative officials, high priests, rich industrial and business magnates, etc. But the society as a whole, that is, the poorer working classes, may not be assured to be equally prosperous, for there are numerous references in Varāhamihira to devastating famine, draughts, floods, crop-failures, and many such natural calamities. Moreover, his references to poverty, commercial failure, family ruin, and so on, are so numerous that we must admit that, even at this period, the economic condition of many people was very precarious.\(^5\)

\(^1\)–\(^5\) *Eco. Life*, p. 189-190.
Thus, the Gupta Age may be called the Golden Age in the same sense as the Elizabethan and Victorian. There are times of great material and cultural prosperity with great civic buildings, public undertakings, splendour, opulence and luxury—but only for a limited section of the community. Beneath the façade of outward splendour were the toiling masses on whose efforts the whole edifice depended. To warrant the name of the Golden Age, as we in the twentieth century would now interpret it, far better conditions would be required for the whole of the society, for the peasants, workers, as well as for the lords, and the economic freedom and prosperity for both.

CULTURAL SIGNIFICANCE OF THEIR COINS:

First of all, we must have a very clear idea about the concept of culture of a particular age. It is, perhaps, the man’s ways of life which is reflected through his numerous achievements in the field of politico-administrative set-up, socio-economic life, religion, literature, science, art and architecture. For this purpose, the scope of the numismatic study is very limited here.

The “King and Queen” type\(^1\) of gold coins with the legends “Chandra, Śrī Kumāradevi and Lichchhavayāḥ” may signify the role of the Lichchhavis in placing the Guptas on the Magadhan throne. No other sources would help us to understand the Gupta-Lichchhavī relationship. Further, the political supremacy of Samundragupta and Kumāragupta-I is reflected through their Aṣvamedha type of gold coins.\(^2\)

The Kācha gold coins have created problems in the Gupta history. But from the study of gold content of the Imperial Guptas, it can be conjectured that the Kācha coins were not issued by Samundragupta but by an usurper.\(^3\) As Dr. A.S. Altekar puts it, “Kācha alias Rāmagupta had a short reign; this is quite in keeping with the relative rarity of his coins.”\(^4\)

Chandragupta II’s conquest of the Śaka territory, its date and the Vikramāditya tradition are reflected through the silver coins of Chandragupta II. They are the very close imitation of the Śaka coins.\(^5\) They have the legend of Śrī-Chandragupta-

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\(^1\) *Corpus of Indian Coins*, Vol. IV, p. 32.


\(^3\) *Eco. Life*, Appendix I.

\(^4\) *Corpus of Indian Coins*, Vol. IV, p. 85.

Vikramāditya, and the sudden stoppage of the minting of Śaka silver coins after 397 A.D. further helps us to understand the above problem. During the reign of Chandragupta II the Gupta empire reached the zenith of its extension. Further, “the dominions of Chandragupta-Vikramāditya were well governed.”

The effect of this extension of the western frontier was very great over the inland and maritime trade as well as the culture of Northern India. Moreover, the able and long-lived monarchs of this dynasty coincided with an extra-ordinary out-burst of intellectual activity of all kinds.

As many as twenty one hoards of coins have been discovered from different parts of the Gupta Empire. There may be other hoards of coins still undiscovered, while others may have been already discovered and melted down by the finders and unnoticed by the Government agencies.

From the Gupta inscription we know that by spending only 2, 3 or 4 dīnāras one could purchase one Kulyavāpa of land which amounted to a large area. By depositing only 10 or 12 dināras with a guild benefactors expected to maintain an alms-house as long as the sun, the moon and the stars endured, out of the interest of the sum. All these references undoubtedly show that the gold coins (dīnāras) had a very high purchasing power. They were not likely to be used in small transactions.

The purchasing power of silver coins was also quite high, for we know from the Bagram Copper plate that 16 silver pieces were equal to 1 piece of gold. So the silver coins were probably not suitable for day-to-day domestic transactions. The gold and silver coins were used for larger transactions, such as, purchasing of land, making donations, in foreign trade, etc. Thus, there must have been some cheaper metal for currency in order to facilitate the transactions in daily life. The copper currency and cowries evidently served this need.

The primitive and ancient culture of a people are partly reflected through their religious out-look and their religious history is very much indebted to the science of numismatics

2 Ibid., p. 323-324.
3 Corpus of Indian Coins, Vol. IV, pp. 305-310.
4 Eco. Life, p. 173.
since it enables us to trace the evolution of religious movements. Thus, in course of time, through the evolution of social and cultural life many gods and goddesses had appeared in the religious fold in the Classical Age. Elaborate rituals and ceremonies had also developed and found proper representation in contemporary coins and inscriptions.

The achievements of the Gupta emperors must be remembered for the great reformation of the Hindu society and religion. From a careful study of the inscriptions, coins and seals, we come to know that Vishṇu and Lakṣmī\(^1\) were their favourite god and goddess. Prof. R.D. Banerji, thus, remarks, “they are distinctly Vaishṇavas”.\(^2\) In their large number of inscriptions and coins they assumed the title of ‘Parama-bhāgavata’.\(^3\) They also used Garuḍa seals, Garuḍa standard and Garuḍa in their coins.\(^4\) Garuḍa was the vehicle of Vishṇu; and Lakṣmī was the consort of Vishṇu. Specially, Lakṣmī, the goddess of fortune,\(^5\) with lotus flower in one hand and cornucopiae (the horn of plenty) in another hand, is very commonly visible on the coins from Samudragupta to Vishṇugupta.\(^6\) Thus, Lord Vishṇu was, perhaps, worshipped by the emperors for strength, vitality and energy and his consort was worshipped for wealth and fortune. A circular wheel apparently the Vishṇu Chakra, is also visible in some of their coins.

In the Chakra-Vikram gold coins Vishṇu himself offers three objects (sweetmeats) to Chandragupta-II who was a great devotee of Vishṇu. He also created Garuḍa-dhvaja at the famous tirtha of Vishṇupada somewhere on the Beas in the Punjab.\(^7\) He, thus, claimed to have received direct favour from his favourite deity and for this special favour he became invincible in warfare.

Beside Vishṇu and Lakṣmī, the Emperors also worshipped many other gods and goddesses. The effigy of Ambikā (or

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\(^1\) *Age of the Imperial Guptas*, p. 102; And C.I.C. (IV) and B.M.C., King Queen of *Ch. I*; Standard, Archer, Kācha, Lyrist of Samudragupta; Archer Couch, Chhattrai, Lion-Slayer, Horseman, Standard, Chakravikramai of *Ch. II*; Archer, Swordsman, Horseman, Tiger-slayer, Pratāpa, Elephant-slayer, Chhattrai of *Kum. I*; Archer, King-Lakṣmī, Chhattrai, Horseman of *Skandagupta*; Archer of Narasimhagupta; Archer of Kumāragupta II.

\(^2\) *Age of the Imperial Guptas*, p. 102.

\(^3\) *C.I.C.*, IV and B.M.C.

\(^4\) *C.I.C.*, pp. 32; 110, 187, 213.

\(^5\) *Select Ins.*, p. 283.
Durgā) seated on a lion (or lion-backed couch) is also seen from the gold coins of Chandragupta-Kumāradevī type, Lion-slayer coins of Chandragupta-II, Lion-slayer, and King-Queen type of coins of Kumāragupta-I.¹ She is the same as Siṁharathī ‘Siṁhabāhinī of our Epic and puranic literature. Another female deity worshipped by the Gupta emperor was the Makara-vāhinī Gangā. She is on the obverse of the Tiger-Slayer coins of Samundragupta and Rhinoceros-slayer coins of Kumāragupta-I.² The river goddesses, Gangā and Yamunā, are well known in the Gupta art.³ A fine specimen of it is found from Besnagar and it is now in the Museum of Fine Arts, Boston.

Kumāragupta I was named after Kumāra or Kartīkeya. The Kartīkeya and the peacock types of gold coins were intended to pay special homage to Kartīkeya. In some of his silver coins the peacock (Sikhivāhana), the emblem of the deity, is there.⁴

The rituals and ceremonies, as a part of their refined culture, were expressed through their coins. Apparently after completing his conquests Samudragupta performed the Aśvamedha (Horse) sacrifice which was long in abeyance after the reign of Pushamitra-Sungha.⁵ A special type of Aśvamedha coins were issued by him to commemorate this event and for giving fees (Dakshiṇā) for participating priests and others. The ritualistic injunctions prescribe the distribution of fabulous sums of money on these occasions. This sacrifice is said to have been known as ‘bahusuvarnaka’ from the quantity of gold distributed at it.⁶ It is referred to in the inscription of his successors and from a seal of Samudragupta bearing a horse and the legend ‘Parākrama’ published by Rapson.⁷ But there is no epigraphic reference to the performance of such Aśvamedha sacrifice by Kumāragupta I. His Aśvamedha type of gold coins prove beyond doubt that he had performed at least one sacrifice. The reverse legend is Śrī-aśvamedhamahendra. But his coins are very much inferior to that of his illustrious grand-father.⁸

¹ As F.N. 6 (p. 110).
² Cat. of Gupta Coins (B.M.C.), p. LXXIV.
³ C.I.C., pp. 71, 197.
⁴ C.I.C., p. 178, 203, 228, 257, 279.
⁵ B.M.C., p. XXXI.
⁶ Taittirīya Saṁhitā, IV, 6.4., Kātyāyana Śr. Su, 23.8.
⁸ Corpus of Indian Ins. IV, p. 201; pl. XXIV, 66.
Along with the social development the position of women had greatly improved. They had a fair share of culture and education. Even some of them were very good administrators. For instance, the Vākāṭaka Queen, Prabhāvatīguptā rules the empire for nearly a quarter of a century.¹ The marriage ceremony of Mahārājādhirāja Chandragupta I and Lichchhāvī princess Kumāradevī is also represented by the Chandragupta-Kumārādevī type of gold coins. On the obverse of the coins Chandragupta I is offering an object (i.e. marriage ring) to his queen.² His son Samudragupta was proud of his Lichchhāvī relation (i.e. Lichchhāvī-Dauhitra).³ These give rise to the assumption that the matrimonial relation with the Lichchhāvis materially contributed to the political greatness of the Guptas.

Many of the Gupta monarchs had more than one wife.⁴ But one of them was the Pradhānā-Mahishī (chief-queen) of the emperor and they played a very significant role in religious and social life of the emperor. On the reverse design of the Aśvamedha type of gold coins, Dattādevī (chief queen) is holding a chowrie (chāmara) over her right shoulder and on the left field there is a sacrificial post.⁵ Mahādevī Anantadevī is also seen on the Aśvamedha type of gold coins of Kumāragupta-I.⁶

The peaceful family life is also reflected through their coins. On the reverse design of the king-and-queen-on-couch, the chief-queen receives apparently a Sinduradānī from the hands of Chandragupta II.⁷ This undoubtedly signifies the blessed married life in the Hindu Society.

Kumāragupta I had refined taste for music and flower. On the obverse of the King-And-the-Queen type, Kumāragupta I lovingly presents a bunch of flowers to his queen.⁸ This type of attachment is further revealed through his Lyrist type of coins.⁹ Kumāragupta I was deeply absorbed in playing with his lyre;

¹ The Classical Age.
² B.M.C., p. 8.
³ Allahabad Pil. Ins. (Select Ins., Vol. I) p. 262.
⁴ The Classical Age.
⁵ B.M.C., LXXVI.
⁶ C.I.C., IV, p. 200.
⁷ C.I.C., p. 138.
⁸ Ibid., p. 212.
⁹ Ibid., p. 211.
and his queen listened to his music, sitting by his side with a flower in hand.

Another interesting specimen is the Apratigha type of gold coins of Kumāragupta-I. There are three figures on the coins but their significance is not yet fully solved. Prof. A.S. Altekar has given some tentative suggestions. “The central figure is undoubtedly Kumāragupta, since he is expressly described as such. The lady on the right may be his queen and the soldier on the left his general or crown prince. Both of them are expostulating with him. Can it be that the emperor is contemplating renunciation and that his queen and general or crown prince are trying to dissuade him without success? The folded hands on the chest of the emperor may indicate his inability to accept their arguments. He is firm in his resolution and is, therefore, described on the reverse as Apratigha or invincible.” This may indicate the third stage (Vānaprastha) of Hindu life. It thus expresses the pious wish of renunciation of the world by Kumāragupta-I for attaining liberation (Moksha).

The Gupta coins also reflect the material culture of the emperors. Some of them were interested in instrumental music. Samudragupta is seen on his gold coins playing on lyre (or Vīna). He is in a very ordinary dress and dressed himself upto his waist. One summer evening he was sitting on his palace terrace and spent his rare leisure hours with this favourite hobby. His musical taste is also referred to in his Allahabad pillar inscription. There he has claim to have excelled even Nārada and Thumburu in his musical skill. His grandson also issued the Lyrist type of gold coins. He was dressed upto his waist. Apparently his favourite queen listened to the music of her husband and with ease was smelling a flower. They were in the palace hall with other inmates of the royal household.

Their other pastime was hunting, and a great many hunting scenes were depicted on coins. They attacked the animals from horse-back, elephant and on foot. The Archer type of coins depicts the scene of hunting excursions (mrigayā) with bow and arrow. They were always dressed in the hunting costume. These

2 Ibid., p. 61.
4 C.I.C., IV, p. 211.
scenes are also described by Kālidāsa. The Raghuvamśa beautifully describes the hunting excursion of king Daśaratha. He is on the horse-back with hunting costume and with bow and arrow. The horse is fully caparisoned. Besides tigers, lions, rhinoceroses, the king shot down deers, antelopes, bisons, yaks, and birds. Some coins also express the royal love for birds. The Peacocks type of gold coins of Kumāragupta-I represent the king to feed some fruits to the peacock. Sometimes he points something to the bird.

The refined taste of the emperors is expressed through the fine selection of their furnishings and costumes. There are different varieties of thrones (simhāsana, āsana), bedstead (śayyā), morha (vetrāsana), umbrella (chhatra), fly whisk (chāmara), stools, footstools, spittoon and so on. Their decorative designs speak highly of carpenter's art.

The splendid Gupta coinage with its many types and infinite varieties and its inscription in classical Sanskrit are the finest examples of ancient Indian art. As the specimens of art they are the best and have hardly any parallel in any other numismatic series. A comparison is usually made of Gupta coins with the Indo-Greek and Indo-Scythian coinage. But the latter series represents a tradition of numismatic art that was foreign to India. This foreign tradition was gradually absorbed and assimilated by the Indian mint masters.

However, a slight trace of the Hellenic influence can be traced from the effigies of the kings on almost all of the Gupta gold coins. Just like the Kushānas and the Indo-Greeks every where the king wears a close-fitting cap, coat and trousers. But in Indian manner they have ear-rings, necklace and armlets along with other Indian objects, such as, Garuḍa standard, peacock and so on. But the representation of the queens on the coins of the Chandragupta-Kumāradevi, the Aśvamedha coins of Samundragupta and Kumāragupta-I, the King-And-Queen-on-Couch of Chandragupta-II, the King and Queen, the Lyríst type of Kumāragupta-I are purely Indian in style. The ladies are clad in šārdī, an upper garment, a necklace, ear-rings and armlets. Again, the gods and goddesses of the coins are purely

1 Raghu, IX, pp. 50-61.
2 C.I.C., p. 178, 203.
3-4 C.I.C., and B.M.C.
Indian in spirit and technique.

In most of the Gupta gold coins the king is exhibited with masculine figure and with arms and ammunitions. On some coins they are about to kill a tiger, lion, rhinoceros and so on. Only in a few types of coins, such as, Chandragupta-Kumārādevī, Lyrist coins of Samundragupta and Kumāragupta-I, the Couch, the King-And-Queen-on-Couch, the Chakravikrama coins of Chandragupta-II, the Peacock, the Kārtikeya, the Lyrist, the King and Queen type of Kumāragupta-I, the kings have always appeared in the most sober and fashionable colour.

The high-sounding titles used by the kings on their coins also reflect their power and magnificence to a certain extent. For the first time in the numismatic tradition of India, the coin legends become mostly metrical. They have also high poetical merit. Some of them were, perhaps, composed by the emperors themselves. The usual metres are Upagīti, Pṛithvī, Upajati and Varāṅsthavīla. But the successors of the Imperial Guptas had failed to follow up that high tradition in numismatic culture.
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