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Shifting Paradigms in Indian Numismatics: Retrospect and Prospect

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The word 'numismatic', which comes from the Latin 'numisma' (i.e. currency), denotes 'the study of coins' according to its origin. Nonetheless, numismatics is an interdisciplinary field that includes economics, history, art, and archeology, among other subjects. Coin analysis sheds light on a society's history in a number of areas, including trade, culture, political systems, and contact with other civilizations. The history of numismatics in India seems to have its roots in the late eighteenth and early nineteenth centuries, when historians, particularly British civil servants in Bengal, began to recognize the significance of coins as primary sources for understanding India's history (Shankar 1998). These early efforts involved collecting information and artefacts related to coins, especially those from ancient civilizations like Rome. The first mention of numismatics in India appeared in the second volume of *Asiatic Researches* in 1790, where Roman coins and medals were discussed (Tiwari 1961, 21). But it wasn't until the early nineteenth century that the systematic and structured study of ancient Indian coinage really took off. As historians and academics studied coins in greater detail, it became more evident that they contained a multitude of historical information. This led to debates and discussions about establishing dedicated institutions or departments focused on numismatics, often under the umbrella of organizations like the Archaeological Survey of India (ASI). In order to facilitate a more thorough comprehension of India's past, these groups sought to systematize the gathering, recording, and examination of coinage discovered at archeological sites. Additionally, groups and individual researchers arose with the express purpose of developing frameworks for historical inquiry based on numismatic data. The methods and strategies used to decipher coins and their relevance in larger historical contexts were influenced by these endeavours.

The use of coins as historical source material dates back to Kalhana, who claimed to have used numismatic evidence in the writing of his *Rajatarangini* (*Rajatarangini* 1995, 23). However, the study of coins gained significant prominence in the modern era, largely due to the interest shown by European Indologists and historians. This interest led to more systematic and scholarly approaches to numismatics, contributing to our understanding of various historical periods and civilizations (Lallanji 2010, 159–75).

One of the notable figures in this context is Alexander Cunningham (Cunningham 1891; 1894). He was a British archaeologist and numismatist who made significant contributions to the study of ancient Indian coins. His works, such as *Coins of Ancient India: From the Earliest Times Down to the Seventh Century A.D.* and *Coins of Mediaeval India*, published towards the end of the nineteenth century, provided foundational knowledge and methodologies for numismatic researchers. The main goal of Cunningham's work was to correctly decode and assign coins to the appropriate issuing authorities. Because coins frequently contained inscriptions, symbols, and other information that could provide insight into the kings, dynasties, and historical periods in which they were struck, this method was essential for establishing the historical context. His work on coin classification and analysis prepared the way for later numismatist generations.

With the publication of several catalogues and articles during the first half of the twentieth

century, it's remarkable to observe how numismatic studies progressed. We now have an improved understanding of ancient Indian coins and their historical relevance because of the work of researchers like V.A. Smith, John Allan, and C.J. Brown.

V.A. Smith's (Smith 1906) *Catalogue of Coins in the Indian Museum, Part I* (1906) stands as an important contribution, providing a comprehensive description of ancient Indian coins. This work, which offered a methodical way to arrange and describe coins, probably set the standard for later cataloging initiatives. The field was further enhanced by John Allan's (Allan 1914) *Catalogue of the Coins of the Gupta Dynasties and Sasanka King of Gauda* (1914), which focused on the Gupta dynasties and provided comprehensive information about the coins from that time period. More thorough examination and comprehension of particular dynasties and their coins were made possible by this type of specialization. The practice of specialist cataloging was maintained by C.J. Brown's (Brown 1920) *Catalogue of Coins from the Gupta, Maukhari and Other Dynasties Found in the Provincial Museum at Lucknow* (1920), which expanded the body of knowledge by covering several dynasties and geographical areas.

These catalogues played an essential part in recording the weight and other physical characteristics of coins as well as the images and inscriptions they contained. Understanding the historical background, cultural significance, and economic elements of these coins requires an understanding of this information. These catalogues gave academics a plethora of textual and visual material by including pictures, descriptions, and the coins' histories or motifs. By making it easier to identify, categorize, and understand coins, these resources let researchers learn more about ancient India's cultures, rulers, and historical occurrences.

Prior to Independence, coin research mostly concentrated on coin collection, cataloguing, and decipherment; nevertheless, attempts were made to look at a variety of features, such as weight, depiction, and so forth. As was natural in the beginning, European numismatists were primarily engaged in coin collecting to satisfy their recreational needs. The beginning of publication of the Numismatic Supplement to the *Journal of the Asiatic Society of Bengal* (*JASB*) in 1906 (Narain n.d.), and the establishment of the Numismatic Society of India (NSI) at Allahabad in 1910, as a result of the efforts of Nelson Wright, G.P. Taylor, Richard Burn, R.B. Whitehead, and others, are two other significant activities that occurred during the first decade of the twentieth century that led to the study of coins on a large scale. In 1938, the NSI decided to launch the *Journal of the Numismatic Society of India* (*JNSI*). In addition to being one of the most reliable numismatic journals, this journal soon became the main vehicle for the imaginative the NSI and its journal, and with his passing in 1960, a period of numismatic study came to an end.

The study of numismatics in India has advanced significantly in the last few decades since independence. The quality and sophistication of research in this subject have improved and now covers a wide range of topics. Coins can now be described by numismatics using more than just their physical attributes - such as metal, standard, fabric, style, and kind - as well as fundamental historical information like issuance and issuer. Instead, the emphasis has shifted to the study of type-motifs in order to determine their exact historical meaning. Numerous numismatics-related publications have been published under a variety of titles as the research landscape has grown, and many of these have made their way into the *JNSI*, considered a prestigious publication in the field.

Scholars have sought to extract nuanced historical insights from numismatic evidence. For instance, the discussion around type-motifs like 'Triton catching dolphin' and 'Dolphin twined round anchor' on coins associated with Hippostratus and Nicias, respectively (Bopearachchi 1991),

presents a case where these motifs could be interpreted as representing the resistance offered by the Indo-Greek rulers (Yavanas) against the Scythians (Sakas) in the western Punjab region. These motifs are suggested to symbolize battles on both land and river, implying a historical narrative. However, it's important to note that such interpretations can sometimes be speculative and open to different viewpoints.

More compelling examples are also discussed, such as the reverse type on certain silver tetradrachms of Eucratides featuring the Dioscuri charging with spears while riding galloping horses (Holt 1981, 17). This type-motif is proposed to signify the warlike nature and successful military endeavours of the Indo-Greek ruler Eukratides. Similarly, the 'ship coin' of Sri-Pulumavi is seen as an indicator of the maritime and commercial activities during the reign of the Satavahana ruler Sri-Pulumavi.

These observations, drawn from numismatic data, can contribute significantly to historical narratives and fall within Class I for historical writing. However, it's important to acknowledge that while these interpretations provide valuable insights, they can also involve an element of speculation. Numismatics continues to be a dynamic and evolving field where careful analysis of numismatic evidence contributes to our understanding of history; but, at the same time, it is crucial to approach interpretations with a degree of caution and consideration for alternative viewpoints.

In Class II of numismatic investigations, a categorization can be made for studies that primarily focus on the analysis of coin types and legends. These investigations delve into the lineage and historical context of rulers and dynasties through the careful examination of the symbols, inscriptions, and motifs present on coins. Two notable examples within this category are the research efforts involving the Indo-Greek ruler Strato II Philopator and a possible Saka leader associated with Gondophares.

1. Indo-Greek Ruler Strato II Philopator: Rapson's work in the *Corolla Numismatica* (Rapson 1906) exemplifies the type of investigation falling within this category. Rapson undertook the task of tracing the lineal descent of the Indo-Greek ruler Strato II Philopator using numismatic evidence. By analyzing the coin types and legends present on the coins attributed to Strato II, Rapson aimed to establish a genealogical connection and understand the historical lineage of this ruler. This type of investigation involves meticulously examining the iconography, inscriptions, and other elements on coins to draw conclusions about historical relationships.
2. Saka Strategos of Gondophares: In a similar vein, the research conducted by R.B. Whitehead (Whitehead 1947, 28–51), as presented in the *Numismatic Chronicle* (1944 and 1950), offers another example. Whitehead's investigation revolves around a possible Saka leader who may have held the position of a strategos under the rule of Gondophares. Through the analysis of coin types, inscriptions, and legends, Whitehead attempted to reconstruct the historical context and potential relationships within the Saka leadership during the reign of Gondophares.

Both of these examples highlight the significance of numismatic investigations centered on coin types and legends. These studies contribute to historical narratives by utilizing numismatic evidence to unveil details about rulers, dynasties, relationships, and historical events. This type of research involves a deep understanding of the symbolism and historical context behind the visual elements present on coins, enabling scholars to create narratives and hypotheses based on the numismatic data available to them.

In due order, studies of monograms, symbols, mintmarks, or any other artistic themes distinctive to dynasties, locales, or cities also evolve and may be classified as falling under Class III. The best example of its kind is Allan's research on the symbols found on ancient indigenous coins, which may be found in the British Museum's catalogue of 'Ancient Indian Coins' or in Altekar's study of Gupta coins from the Bayana Hoard (Altekar 1954; Allan 1914). Whitehead meticulously catalogued the Indo-Greek and Indo-Scythian monograms found on coins, and Cunningham and Von Sallet studied them in a learned manner This form of inquiry is best exemplified by a critical analysis of the self-styled Soter Megas symbol, which first appeared in the *JNSI* in 1968 (Macdowell 1968, 28–48). It is unquestionably a fascinating contribution that needs to be carefully examined. However, it is important to note that no mint and monogram have been discovered by a numismatist at this time. This category also lends itself to extremely speculative research.

In the last quarter of the twentieth century, Indian numismatics experienced remarkable progress, with scholars taking innovative approaches that don't fit neatly into the previously mentioned three classes of numismatic research. These approaches have opened up new avenues of investigation, highlighting the evolving nature of the field.

Four distinct avenues of inquiry have emerged as a result of these scholarly endeavours:

1. Comprehensive Study of Deities on Coinage: Scholars have ventured into studying coins from a different perspective by comprehensively analyzing the deities depicted on coinage. This involves investigating the symbolism, iconography, and cultural contexts of divine figures portrayed on ancient coins. The iconographic study of deities contributes to understanding religious practices, cultural beliefs, and artistic influences of the time.
2. Foreign Influence on Coins: Another avenue of research focuses on exploring the influence of foreign cultures on the naming conventions of coins. This involves investigating how names and titles on coins reflect external cultural interactions and influences. Such research sheds light on historical connections and cross-cultural exchanges.

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3. Gravity Flavour' of Antique Coins: The term 'gravity flavour' suggests a focus on the intrinsic weight and physical characteristics of ancient coins. Scholars may study the metallurgical composition, standardization, and variations in weight of coins to uncover details about minting techniques, economic systems, and trade practices of the past.
4. Numismatic Data Digitization: The digital age has brought about the digitization of numismatic data. This avenue involves the use of technology to create databases, catalogues, and digital repositories of coin-related information. This not only facilitates access to information for scholars and enthusiasts but also allows for the analysis of large datasets for patterns and trends (Upadhyay and Bishwas 2025).

These new avenues of investigation represent a departure from the traditional classifications of numismatic research. They showcase the evolving nature of the field and its ability to adapt to changing research methodologies and technological advancements (Ganguly, n.d.).

It's important to acknowledge that with these novel approaches come challenges and potential contentions, especially in areas like iconographic study where interpretations can vary. As the field continues to evolve, the collaboration of scholars, interdisciplinary insights, and ongoing critical evaluation will contribute to the growth and refinement of these new avenues of numismatic research.

II

The study of hoards is another way to learn about the past through numismatic evidence (Majumdar 1961). A hoard is an accumulation of coins left behind as savings, booty, or treasure that were typically purposefully hidden by the original owners. These are sometimes discovered in buried containers such as copper or clay pots. They range in size from a few copper pieces left in a hole to over 2,000 gold coins, the original size of the famous Bayana Hoard. A numismatist may value a trove for producing new coin kinds: the Bayana trove produced previously unseen types of Gupta gold coins. However, the fundamental fact of its presence does not really matter whether a coin-type, errant private item, or hoard turns up in the bazar. A hoard may also reveal information regarding the types and percentages of coins that were used, as well as their real uses. Therefore, before using a hoard's evidence, its character must be established. It is usually advisable to use the contents of many hoards from the same period to determine the nature of the most widely used currency. However, it is unfortunate that a majority of the time, hoards are polluted by being despoiled or, worse yet, selectively despoiled, before they reach the hands of scientific researchers.

Scholars such as Irfan Habib and Bhaskar Chattopadhyaya have attempted to map the locations where coin hoards were discovered (Habib 2010). In this process, most stray or minor findings were excluded. According to these scholars, this method helps identify the circulation zone of coins. For instance, hoard evidence suggests that a Kushana coin circulated across northern India, except for Gujarat and the southern and western parts of Malwa. Notably, hoards found east of Mathura and Harsinghpur in the Doab, extending south and east, contained predominantly copper coins, with no traces of Kushana gold coinage. Researchers have also sought to explain the absence of gold coins in this region.

Similar studies have been conducted for other historical periods, but drawing conclusions about territorial expansion solely based on hoard discoveries remains challenging. The absence of Roman coins in Gujarat, for example, has been cited as numismatic evidence suggesting that the region was not part of Indo-Roman trade networks.

Another intriguing find is the Gupta coin hoard discovered in Ethiopia (Goyal 2010).This discovery raises questions about the Guptas' interactions with the region and whether it indicates a loss of trade connections. Notably, this remains the only known Gupta hoard found outside India. However, many interpretations of such findings are speculative and lack corroborating evidence from the same historical period.

III

In addition, numismatic evidence was utilised in social studies in general and the Indian social structure in particular (Chatterjee 2010). Despite social improvement, it is thought that the barter system persisted despite the circulation of metallic coinage. Scholars have debated that the first coins were coined by merchants. When the state's grip on the economy loosened, guild merchants saw an opportunity to circulate their own coinage. This is, without a doubt, a critical question in the study of society. Although it is difficult to attribute the original authorship of the currency to the mercantile class or the ruling authority based on the uninscribed punch-marked coins, the inscribed coins of a later period strongly suggest that even after the State began to wield the authority of minting coins, the mercantile community continued to enjoy the authority of issuing their own coinage. The *sreshthis* and *sarthavahas* appear to have had a recognized place in Indian society that the ruling elite could not easily reject (Bandyopadhyay 1976). Another facet of society that

numismatic sources attempt to comprehend is the Indianization of foreign rulers. Furthermore, the process of assimilating foreign elements into the Indian population is a social phenomenon that can be studied via the lens of numismatics.

The circulation of money has increased the importance of determining the social status of various classes. It demonstrates that the mercantile and priestly elite received the lion's share of the country's riches. In terms of social classes, the ruling class, the Kshatriyas, relied on revenue collection, whilst the merchant class, the Vaishya, was involved in business (Singh 1976). Brahmanas accepted donations, whereas Shudras promoted the products of their crafts and enterprises. Certain studies have been conducted using numismatic evidence to better understand various aspects of society. However, it is important to recognize that society is a broader phenomenon.

IV

The value of coins in economic history is becoming more widely recognized. Coins serve as a measure of economic activity, and facilitate not just trade and commerce but also a wide range of social and political activities (Gopal 1965; Tripathi 1971). According to Upendra Thakur (Thakur 1961; 1972), the internal worth of a coin has more to do with economic history than the observable features of coins, as the observable features of coins are not very relevant for economic history. The study of the weight standard and the metallic composition of coins can yield useful data for economic history. Several researches have been conducted in the economic field, with the study of early mediaeval coinage being the most important. R.S. Sharma (Sharma 1976; Sharma 1965, 1–8) discusses the hypothesis of urban deterioration and the lack of currencies in the early medieval period in his article on the disappearance of coinage, particularly gold coins. In the last quarter of the twentieth century, his idea gained popularity and endorsement from a number of scholars. However, under the guidance of B.D. Chattopadhyay (Gopal n.d; Chattopadhyay 1994), this idea was challenged and a counter-argument was created. According to this viewpoint, there was no shortage of coinage throughout the period, as cans were used as a means of commerce in every corner of India. This group also presented various facts to counter Sharma's and others' viewpoints (Bhatia 2017). We can also observe the contentious outcomes provided by numismatic evidence here. Furthermore, it can be stated that the primary role of coins is as a medium of exchange. This is an important part of economic history in terms of numismatics. In this area, we need more targeted and purposeful probing. We would like to have a more precise understanding of the value of coins and their purchasing power in order to build a notion of pricing, salaries and wages, and living standards in various periods and areas. However, an examination of a coin's metallic composition will give us an estimate of its true metallic value. However, we have no way of determining its true worth during its period of circulation. Numismatists believe that scientific analysis of coins can supply us with information such as the identification of mines that supplied raw material. However, this part of the numismatic studies remains untapped.

V

Our museums play an important role in the field of numismatic research since they are the primary depositories of coins of any numismatic value that come from treasure troves, acquisitions, or bequests. However, rather than providing study facilities for students and serious collectors, many of our museums are nothing more than coin dumping grounds or safe deposit boxes. Nobody disputes

the issue of security in coin rooms, and indeed, norms and regulations governing the viewing of coins by outsiders should be strictly enforced. However, in the interest of security, scholars should not be denied the opportunity to study coins, nor should red tape be allowed to make such studies almost impossible.

Today, very few museums plan to publish catalogues of various currency series that they may own. Even reprinting out-of-print catalogues is not being considered. Many of our museums also have significant disadvantages. What about published catalogues? Many of them lack systematic and detailed coin acquisition registers. As a result, curators in charge of the numismatic areas are frequently unable to assist researchers in displaying specific coins that they may have. This dreadful state of affairs frequently results in the loss of priceless coins from the museum's cabinets. All museums are expected to keep a complete acquisition registry with descriptions, measurements, and weights of individual coins. In addition to descriptions, the record should include authenticated copies of photos of all important, rare, and precious coins. Consider the State Museum Lucknow's (SML) coin collection, which was came about through the acquisition of coins obtained through treasure-trove findings under the Treasure Trove Act of 1878. Between 1882 and 1980, 1,145 coin hoards were reported from Uttar Pradesh, which equates to around eleven hoards each year or one hoard per month. The acquisition of a hoard is a standard administrative procedure, but the examination, analysis, report, and disposal of the hoard might take a longtime. In 1980, A.K. Srivastava (Srivastava 1980) published *Coin Hoards of Uttar Pradesh*, a complete list of the coins in the state. However, no precise documentation or images of the dispersed or returned coins are retained in the SML, resulting in the loss of an important piece of monetary history to posterity. Over 100,000 antiquities are housed at this museum, including 40,824 coins, 258 medals, and 518 seals. As is evident from this breakdown, coins are the most common antiquity in the museum. This is the case in many Indian museums where a thorough examination of currency is still required.

VI

In today's world, numismatic research has become multi-faceted, making it extremely complicated and challenging. Recent difficulties include:

a. Gold coins, like precious figures of stone or metal, are being smuggled out of the country.
b. While genuine gold coins and even rare silver coins have been smuggled out of the country, fabricated gold and silver pieces are slowly infiltrating museums and private collections, maybe undiscovered.
c. Forgery is also a challenge that is generally of two kinds: (i) hand-made and (ii) machine made.

We have no reliable evidence of the second type of forgery in ancient times. Though it is evident that forgers were active in ancient times, like their modern counterparts, and prepared fake coins, which has now created a problem for modern numismatists. A.S. Altekar was the first numismatist to discuss the question of forgery in modern times. He rightly pointed out that in modern times, coin dealers have prepared moulds from the genuine coins from which they forge their duplicates.

In addition, there are numerous unanswered concerns and problems about India's early indigenous currencies. The nature and age of so-called 'numismatic phrases', which appear in different ancient literary writings, are the most mysterious. We must first determine the metal and metrology of the actual coins. We must also establish their purchasing power and the extent to which

they are used in society. We also need to know who was responsible for issuing them. The existence of coins must also be determined. What about *nishkas*, *palas*, and *satamanas*? Were they, in fact, coins in any sense? If that's the case, what were their respective metals and metrology? Our understanding of the silver concerns known as *dharanas*, *puranas*, *karshapanas*, or *kahapanas* is likewise limited. We must also consider the relationship between these terms. Were they interchangeable? What metal did the *panas*, mentioned in the *Arthasastra*, consist of? If they were silver coins, as some scholars believe, their purchase power must have been substantial in those days. So how could an ordinary individual pay for anything? We must also determine how different authorities determined the theoretical weight of a specific numismatic unit. Where did the silver punch-marked coins come from? Were they from the same region of the country's mines or from separate regions? Were they imported and,if so, where did they come from? The answers to these questions may explain the coin's distribution direction as well as the nature and extent of internal and external interactions. Indians had recognized the value of and used gold since the time of Harappan. There are numerous references to gold and gold ornamentation in Vedic, Buddhist, and subsequent literature. But why are the first gold coins found only in the first and second centuries AD, when the Kushanas are said to have established their grasp on India? Why are there so few gold coins in the post-Gupta period? Is it because gold was so scarce in India at the time? What was the origin of the gold? To minimize confusion in the market economy, coins of the given dynasty must adhere to a basic weight standard. It has also been shown that coins from the same series have a minor weight fluctuation.

Finally, it can be said that there is a considerable amount of numismatic evidence accessible to scholars, but no definitive outcome has been achieved. Scholars have interpreted the sources in a variety of ways, leading to contentious findings in historical literature. Numismatists/scholars have advocated writing a comprehensive history of numismatic studies, but the scholarly world is still waiting. It is also true that across the centuries, the fact provided by numismatic evidence has been incomparable to other types of proof. This results in monotonous writing. Numismatic sources are still used appropriately to grasp the continuity of the content and to grow culturally. Cultural studies have recently emerged in the sector, although more research is needed. The situation worsened when scholars realized that whatever idea we have formed of our ancient historical past, notably of India, is based on only 10 per cent of the total accessible coin hoards. This means that 90 per cent of the coins are still under-researched, which has a great impact on the study of history. It is also true that proper research relies on the individual numismatist's competence. Numismatists must be devoid of all biases, and it is vital to have a thorough understanding of relevant scripts, ancient geography, and other pertinent information relating to political, economic, and social conditions. A good understanding of the language in which the record is written is also required for satisfactory decipherment and interpretation. Coin legends are typically faded and fragmentary. The scarcity of well-rounded epigraphists and numismatists in India is undoubtedly attributable to the nature of the subject at hand. Numismatists usually conduct this decipherment with the use of magnifying glasses. Traditional methods, particularly for the external examination of interpreting any coin, are quite labourious and limited in nature, requiring a high level of professionalism because there is always the possibility of human error. As a result, the final decipherment results, provided by old manual procedures, are not always universally accepted among historians. Also, it must be kept in mind that

if there is a possibility of receiving a new type or variety of coin, this limits the scope of whatever traditional cataloguing has been done thus far. When examining coins using manual/traditional methods, the researcher/scholar(s) may not necessarily pay attention to every feature of the coins. Another option for resolving certain challenges is digitization.

India's numismatic studies must be recognized on the international level. The field shouldn't be restricted to a select group of elite universities, and scholars should contribute to the advancement of this field of study. Coins have been unearthed in unexpected places, such as while tilling soil or excavating a well. Most of these, unfortunately, have been lost or ruined in some way. Unless a diligent numismatic organization exists, there is a risk that valuable source material for historical, cultural, political, or economic studies will be lost or misplaced. It has been noted that Indian coins aid in historical verification but not in its correction, and when they do, it is not significant.

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