

INDIA: SILVER PUNCHMARKED AND ASSOCIATED COINAGES

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The silver coinages of India, from their origin to the termination of the issue of punchmarked silver, are the subject of this monograph. As the coins bear no recognisable inscriptions or dates, assignment to particular areas or periods can only be made by a correlation of the literary and archaeological records, together with a careful study of the coins themselves. Modern research has established a chronological framework but a detailed chronology is not yet available. The general abundance of punchmarked coins, or "Karshapanas", widens their appeal to students and collectors alike.

Historical Summary

Early Sanskrit and Buddhist texts tell of the existence of sixteen Janapadas, or political units, in Northern India during the 7th century B.C. They were populated by people of long-standing occupation together with invaders ("Aryans") who had infiltrated from outside India during the previous thousand years.

Some of these Janapadas may have been responsible for local short-lived issues of silver with a single large bold mark (coin no. 1) which are known, in different forms, from areas as widely separated as Kabul, Sultanpur near Poona, Bombay and Lucknow.

The Janapadas in the more recently-invaded Gangetic plains - notably Kosala and Magadha (see map) - developed radical monarchic systems of government requiring the peasant farmer to yield a land-tax, which he could only do by trading his own food surplus. At the same time they initiated "empire-seeking" policies involving the creation of large armies and the conquest of neighbouring states. These and other social conditions precipitated the development of a silver punchmarked coinage first in Kosala and shortly afterwards in Magadha (coins 3 - 6).

Shortly before 530 B.C., in Gandhara (northwest India, see map), the Persian King Cyrus the Great made a brief raid, and in the next generation Gandhara was made a province of the Achaemenid (Persian) Empire, which then stretched from the Aegean Sea to India. Thus by 500 B.C, northwest India had been exposed to the idea of silver coinage through contact with the Achaemenid siglos and other Mediterranean currency. The existence of a separate local currency - bent-bars or wheel-mark coins - in Gandhara in the late 6th-5th centuries may have resulted from this contact (coin no. 2).

Whereas the Gandharan and single bold-mark Janapada coinages were of limited duration, the Gangetic states of Kosala and Magadha set the pattern of silver coinage which was to last for 400 years. Actually Kosala's coinage was short-lived, as the whole state was annexed by the Magadhan emperor Ajatashatru: (491 - 459 B.C.), and thereafter the punchmarked coinage is solely the product of the Magadhan



Empire and its successor the Mauryan Empire, and their semi-autonomous dependencies. Different ancient texts give conflicting lists of the kings of Magadha after Ajatashatru, and their dates are based on the death of the Buddha which is given variously as 544 B.C. and 483 B.C. Numismatically the latter is more acceptable. The occurrence of overstruck coins (e.g. coin no. 9) suggests at least two violent changes in the Magadhan successions. The 5th and 4th centuries saw the continued territorial and commercial expansion of Magadha with a corresponding increase in coinage output. This is verified by the Sanskrit work, "Arthashastra" ("Science of material gain") prepared towards the end of the 4th century B.C. It is surely the most amazing economic document of the ancient world, disclosing a highly-organised society employing an army of civil servants whose methods were ruthlessly practical. It confirms the existence of "guilds" or associations of craftsmen, who may have been responsible for stamping the numerous small reverse marks on Magadhan coins (coins 7 - 13). Similar test-marks occur on relatively modern Indian rupees.

The wealthy Nanda dynasty (c. 364 - 321 B.C.) introduced, in addition to the small marks, a new series of reverse marks comprising miniature replicas of obverse marks, occurring on an average of one in three coins of the period, (coin 12). Shortly before the downfall of the Nandas, Alexander the Great's army invaded the Punjab where punchmarked coins circulated, but did not venture within the Magadhan Empire itself. This event, accorded so much importance in history, actually had no direct effect on the Indian coinage.

Of the succeeding Mauryan dynasty, either Chandragupta (c. 321 - 297 B.C.) or his son Bindusara (c. 297 - 273 B.C.) initiated yet another change on the reverse of the coinage. The small "test" marks and "miniature" marks were abolished and in their place was stamped a single bold mark, often identical to one of the obverse marks. This change seems to have taken about a generation to accomplish throughout the Empire. Chandragupta and Bindusara continued to expand their empire by conquest until it stretched from Kabul to the mouth of the Ganges and from Nepal to Madras (see map). Bindusara's successor, Ashoka (c. 273 - 232 B.C.) was one of the most enlightened rulers of all time. He erected a series of edicts on rocks and pillars throughout the empire, which sometimes bear symbols also found on coins, thus helping their attribution to Ashoka. However, shortly after Ashoka's death the empire began falling apart, and little is known of the half-dozen or so Mauryans who succeeded him. The existence of semi-independent cities within the empire at the height of Mauryan administration is verified by a few groups of "irregular" coins (coins 24 and 25); after Ashoka it seems that many more territories declared their independence. The issue of punchmarked coins dwindled, but exactly when it ceased altogether is uncertain, some scholars believing that the Sungas (successors of the Mauryans c. 184 B.C.) continued to issue them. Owing to the chemical process of decuprification, later Mauryan silver coins occasionally appear to be made entirely of copper. These should not be confused with the larger copper punchmarked coins of the independent states, which are not covered in this monograph.



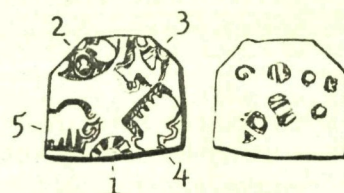
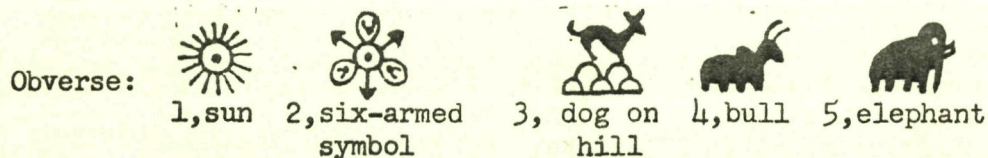
Typical punchmarked coins

"Regular" punchmarked coins - the vast majority - bear five separately punched symbols on the obverse, though this may not be apparent due to overlapping or weak striking. These symbols were punched at one and the same time by the issuing authority, and the coins were issued probably from a number of mints throughout the empire. The obverse symbols are referred to in the order of frequency with which they occur. The first mark (sun) occurs on all regular coins; the second (six-armed symbol) occurs on all but its form varies in detail. The third mark occurs less frequently than the fourth; the fourth less frequently than the fifth. In total, nearly 300 obverse marks are known, in about 470 combinations. The meaning of the symbols is still unexplained and gives scope for much conjecture, but there is some evidence to suggest that the first two marks represent royal authority, and one of the others denotes the mint. Other possible meanings are a date, a mint official, or some religious concept. The trend to associate many symbols with Buddhism has passed.

Uncirculated coins should weigh between 51 and 54 grains, but there is a greater variance with Mauryan coins. There is no significant difference between circular and rectangular coins, both types occurring throughout the "regular" series. It is suggested that the rectangular ones were cut from metal sheets and trimmed to the correct weight, and that periodically the trimmings were remelted into globules from which the circular coins were struck. The following examples are typical and particularly common.

A Typical Magadhan coin (Nanda Dynasty)

Large thin flan, fine silver.

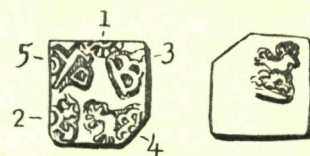
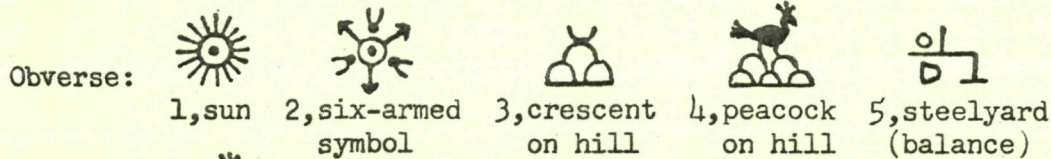



Reverse: seven small marks.

Note: Up to twenty small marks may occur on well-circulated Magadhan coins, but since these marks are not "official" and often illegible, classification is difficult and probably of no chronological value.

A Typical Mauryan coin (King Bindusara)

Small thick flan, debased silver.



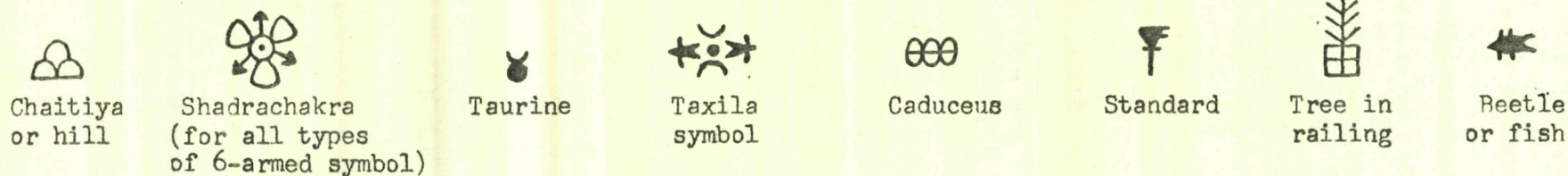
Reverse:  Peacock on hill. The presence of a single bold mark, sometimes accompanied by one or two other marks, characterises the later regular Mauryan coins.




CATALOGUE OF COINS

A selection of the more common, interesting or important types.

Terminology for the symbols varies. Some of the names in use for the commoner symbols are listed below.

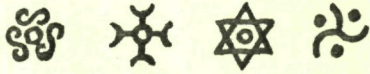



1 ? EARLY JANAPADA ISSUES

No	DESIGNATION	DATE	WEIGHT (grains)	SHAPE	OBVERSE	REVERSE	NOTES
1	Single mark types	6th century BC or before	varies 25 - 180	round	One large bold mark (geometric design, animal, etc.) Occasionally with added small marks.	Blank or with anvil marks or several small marks	Extremely rare
2	Wheel-mark or bent-bar type of Gandhara	c. 5th cent. BC.	175	oblong bar	 Occasionally with small marks	Blank	Rare
Quarters and eighths of type 2 exist as round coins with only one mark							












2 KINGDOM OF KOSALA

No	DESIGNATION	DATE	DYNASTY/ RULER	Wt.	SHAPE	OBVERSE	REVERSE	NOTES
3	Saucer type	? early 6th century BC.		78	oval, reverse concave	2 pairs of bold marks several small marks	numerous small marks	Extremely rare
4	Saucer type	? a little later		42	round, reverse concave	 4 marks; 1st and 2nd constant, others vary	several marks	Extremely rare
5	"Paila" type	later 6th cent. BC	Matanga/ Pasenadi ?	42	rectangular	 4 marks; 1st constant, others vary	several small marks	Very rare

3 EMPIRE OF MAGADHA

Coins 7 to 22 are regular 5-mark coins, of average weight 51 - 54 grains, shape rectangular, irregular, or round. Dates are based on the assumption that the Buddha died in 483 BC, but all dates are approximate and attributions to rulers are hypothetical. A selection of alternative third marks which are also known to occur with the first two described in the type, enables all common types to be identified. A list of alternative fourth and fifth marks is given below.

No	DATE	DYNASTY	RULER	OBVERSE MARKS					ALTERNATIVE THIRD MARKS	REVERSE	NOTES	
				1	2	3	4	5				
6	c.544-491		?Bimbisara			(details not available)					4-mark type known from Bhabhua hoard, unpubd.	
7	c.491-459		?Ajata-shatru								several small marks	"Golakhpur" type Very rare



MAGADHAN EMPIRE continued.







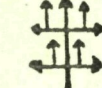
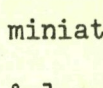






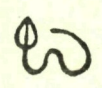
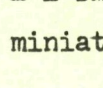





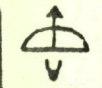

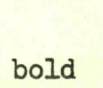





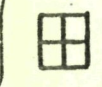

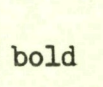






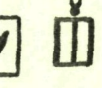
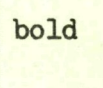








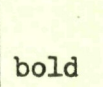








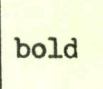
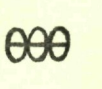







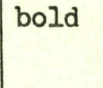
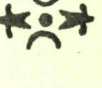






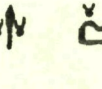
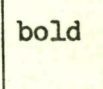
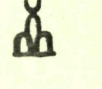

No.	DATE	DYNASTY	RULER	O B V E R S E M A R K S					ALTERNATIVE THIRD MARKS	REVERSE	NOTES		
				1	2	3	4	5					
8	c.459-411		successors of Ajata-shatru									numerous small marks	Rare
9	c.411-393	Siśunaga	?Siśunaga									5 obverse marks of an older period; small marks both sides	Rare "Double Obverse" type
10	c.393-mid 4th cent.	"	successors of Siśunaga									numerous small marks	Scarce
11	mid 4th c. -c.321	Nanda	uncertain						} third mark probably always incorporates hill-symbol e.g.			several small marks	Quite common
12	"	"	uncertain									miniature 808 and several small marks	miniature obverse marks begin to appear on some reverses
13	"	"	?Mahapadma									several small marks	Quite common

Some other 4th and 5th marks seen on Magadhan coins:















4 MAURYAN EMPIRE





No.	DATE	RULER (all Mauryan)	O B V E R S E M A R K S					ALTERNATIVE 3RD, 4TH, 5TH Mks.	REVERSE	NOTES		
			1	2	3	4	5					
14	c.321-297	?Chandragupta								miniature 	common	
15	"	"								miniature 	common	
16	c.321-273	Chandragupta or Bindusara								bold 	common. Known with small, miniature or bold reverse marks. quite common	
17	"	"								bold 		
18	c.273-232	Ashoka									bold 	very common. Note the similarity to coin 14. 3rd mark remains constant from the time of Ashoka. common
19	"	"									bold 	
20	"	"									bold 	
21	after 232	?successors of Ashoka									bold 	?common
22	"	"									bold 	?common
23	(Mauryan period)			Single symbol; several varieties occur						Blank	"Mashaka" or fractional coin. Various weights from about 1 to 5 grains	



5 SEMI-AUTONOMOUS MAURYAN CITIES

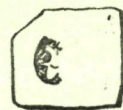
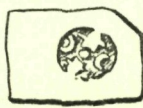
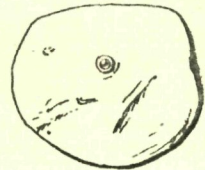
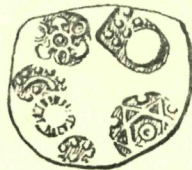
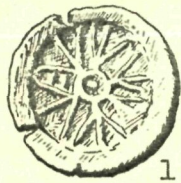
No.	DATE	RULER	OBSERVE MARKS					REVERSE	NOTES
			1	2	3	4	5		
24	?297-273	?under Bindusara				-	-	bold 	quite common
25	later	?under Ashoka						bold  often degraded in form	rare. ?City of Taxila

6 ? POST-MAURYAN PERIOD

26	?2nd cent. BC	? Sunga dynasty				degraded or illegible	degraded 	rare. Base metal, small flans and indistinct symbols.
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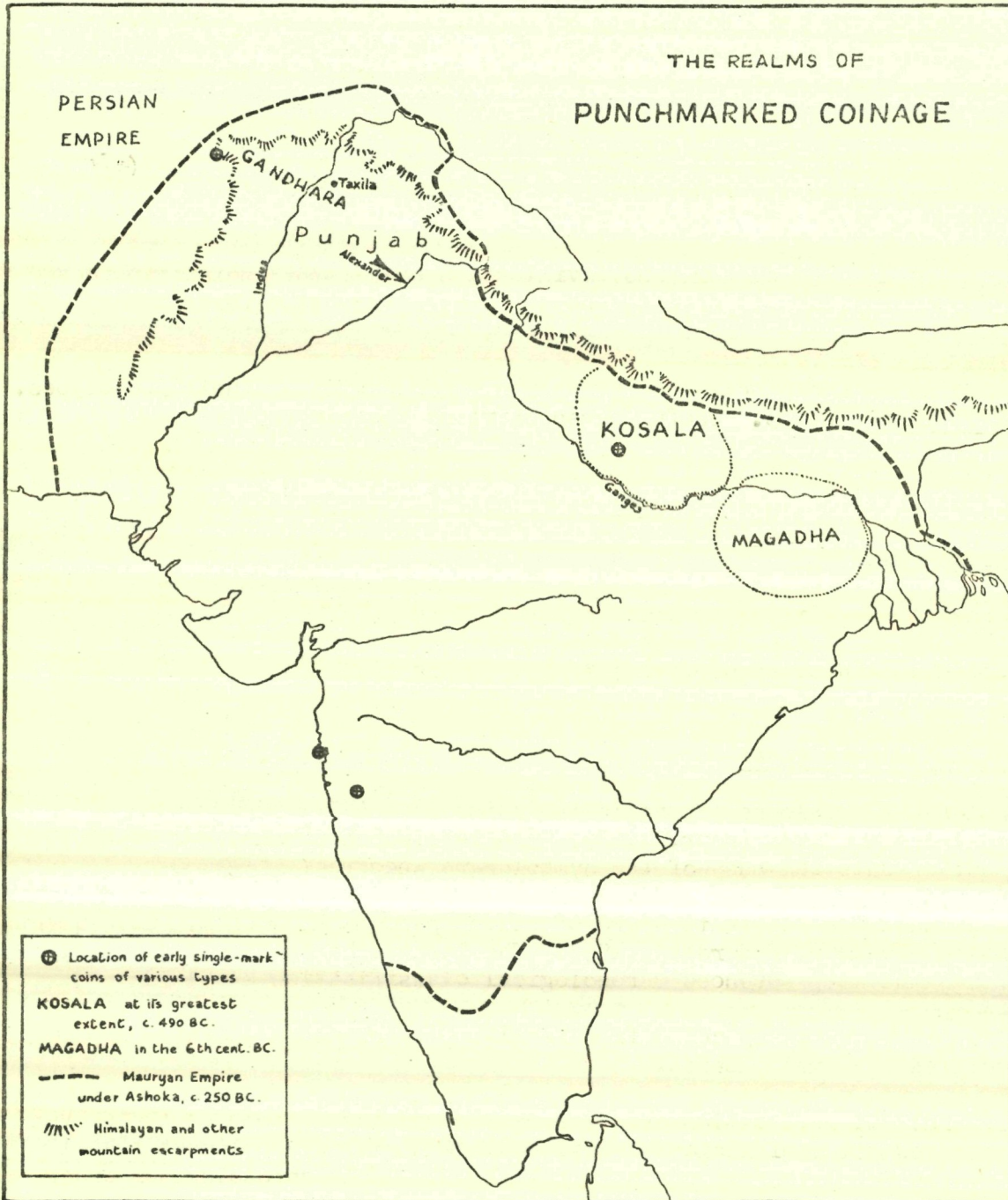
PUNCHMARKED COINS: ILLUSTRATIONS



24

25







B I B L I O G R A P H Y

JNSI: Journal of the Numismatic Society of India

JASB: Journal of the Asiatic Society of Bengal

Historical

1. A.S. Altekar: The origin and early history of coinage in India. JNSI 15 (1953) p. 1. A review of earlier opinions and of the literary evidence.
2. D.D. Kosambi: The culture and civilisation of ancient India. Routledge and Kegan Paul, 1965. An outstanding work giving due reference to coinage.
3. A.N. Lahiri: The punchmarked coins and the question of their prototypes. JNSI 30 (1968) p. 13. Useful perspective on the earliest coins.
4. D. Prasad: Observations on different types of silver punchmarked coins, their periods and locale. JASB Numismatic Supplement No. XLVII (1937) p. 51. One of the earliest attempts to relate the coins with history; still useful.
5. T. Ganapati Sastri (ed): Arthashastra. Mysore, 1958.
6. R. Thapar: A history of India, Vol. I. Penguin, 1966.

Works containing catalogues

7. J. Allan: A catalogue of the Indian coins in the British Museum: Ancient India. 1936 (repr. 1967). The section on punchmarked coins is now out-of-date and many of the symbols are incorrectly drawn.
8. P.L. Gupta: The Amaravati hoard of silver punchmarked coins. Government of Andhra Pradesh, Hyderabad, 1963. The largest hoard ever published; contains the most advanced chronological classification available.
9. P.L. Gupta: The early coins from Kerala. Government of Kerala, 1966. Classifies two small hoards.
10. D. Prasad: Classification and significance of the symbols on the silver punchmarked coins of Ancient India. JASB Numismatic Supplement XLV (1934) p. 5. The 32 plates include a catalogue in roughly chronological order.
11. E.H.C. Walsh: Punchmarked coins from Taxila. Archaeological Survey of India, Memoir 59, 1939. Catalogues two important hoards but abounds in errors and inconsistencies; corrected by Gupta in JNSI 11 (1950) p. 114.



Special topics

12. V.S. Agrawala: A further note on the Raupya-Mashaka series. JNSI 16 (1954) p. 14. A survey of the fractional Mauryan issues.
13. P.L. Gupta: A new hoard of silver punchmarked coins from Taxila. JNSI 13 (1952) p. 53. Includes some very late coins.
14. P.L. Gupta: Bibliography of hoards of punchmarked coins of Ancient India. Numismatic Society of India, Notes and Monographs No. 2, 1955.
15. D.D. Kosambi: On the study and metrology of the silver punchmarked coins. New Indian Antiquary IV (1941 - 2) pp 1 and 49. Introduces statistical approach..
16. D.D. Kosambi: The chronological order of punchmarked coins III: The Paila hoard. Journal of the Bombay Branch of the Royal Asiatic Society 27 (1952) p. 261. Applies the statistical method to Kosalan coinage.
17. Sir J. Marshall: Taxila (3 vols). Cambridge, 1951. Contains major sections on the coins excavated including two punchmarked hoards.
18. E.H.C. Walsh: A note on the six silver punchmarked coins described by Babu Sri Nath Sah. JNSI 5 (1943) p. 13. Describes very early Kosalan coinage.

**NOTE**

The attribution and chronology of some of the coins described in this paper is tentative and further evidence may be needed to establish them with certainty.

September 1971