

**CRAFTS PRODUCTION AND STATUS OF CRAFTSMEN
IN THE GUPTA PERIOD (c. A. D. 300-600)**

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D E C L A R A T I O N

This is to certify that the dissertation entitled,
'CRAFTS-PRODUCTION AND STATUS OF CRAFTSMEN IN THE
GUPTA PERIOD (CIRCA A.D. 300-600)', submitted by ALOK
KUMAR is in partial fulfilment of requirements of
the Degree of Master of Philosophy, has not been
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A C K N O W L E D G E M E N T

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(ALOK KUMAR)

ABBREVIATIONS

ASR : Archaeological Survey of India Annual Report

CII : Corpus Inscriptionum Indicarum

EI : Epigraphia Indica

GOS : Gaekwad Oriented Series, Baroda

IA : Indian Antiquity

IHQ : Indian Historical Quarterly

IHR : Indian Historical Review

JBBRAS : Journal of Bombay Branch of Royal Asiatic Society

JESHC : Journal of Economic and Social History of Orient (leiden).

PROC. IHC : Proceeding of Indian History Congress.

SAI : Sudras in Ancient India.

SBE : Sacred Books of East.

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CHAPTER I

INTRODUCTION

The objective of the present thesis is to analyse the state of crafts production and the status of craftsmen in the period which corresponds to the rule of the Guptas in North India (C.A.D. 300-600). However, before we present a detailed scheme and a rationale for our proposed theme of enquiry, it is imperative to define craftsmen and mention terms from our literary sources which may correspond to the definition. By craftsmen we mean those skilled workers who transform or modify objects by manual means, with or without mechanical aid or tools in order to cater to the needs of various aspects of human life, social, economic, religious aesthetic, etc. So, blacksmiths, carpenters, potters, leather-workers, bamboo-workers, goldsmiths, weavers, dyers, etc. come within the purview of craftsmen. We do not include washermen, barbers, cooks, etc. into our study, for their work falls within the category of service occupation and does not have impact on the over-all economic life of the people. One common term occurring in our literary sources for craftsmen is Silpin.¹ This word is used in our literary sources to refer to persons skilled in various manual arts and crafts, ceremonial rites, artistic works and so on. The other term mentioned in our literary sources for various categories of craftsmen is Kāru.² This term more closely

1 Misra, R.N., Ancient Artists and Art Activities, Indian Institute of Advanced Study, Simla, 1975, p.2.

2 Manusmṛti, Ed. by Ganganath Jha, Pub. by Asiatic Society of Bengal, Calcutta, 1932, X.99, X.100, Amarakosa of Amarsimha ed. with notes and Hindi Commentary by pt. Hargovinda Sastri, 2.10.1.

corresponds to our definition of craftsmen. We have also the term Kulika,³ sporadically mentioned in literary and epigraphic sources to stand for craftsmen.

Crafts and craftsmen have so far figured somewhat marginally in the secondary works written from varied perspectives on our period. It is only in recent years that some occasional research articles, by taking up cases studies of historical evolution of particular groups of craftsmen, have attempted to examine their standing as social groups in different stages of social formation.

At the outset of the survey of the secondary works, we mention such types of works in which references to various categories of crafts and craftsmen, particularly in literary sources, have been compiled. Some of these works also touch upon the social organization of crafts-production, particularly by referring to the organization of guilds. Among such works mention may be made of corporate life of Ancient India.⁴ This work, perhaps the

3) Amarakośa: op.cit, 2.10.5, Damodarpur Copper Plate Inscriptions of Kumargupta I and Budhagupta, EI.XI, p.130f, 133f, 138f, 142f.

4) Majumdar, R.C., Corporate life in Ancient India, Calcutta, 1969.

earliest to deal with the problem, focuses on the guilds of craftsmen as a major institution for manufacturing goods, serving as a bank and regulating the conduct of its members. This monograph covers a vast span of time and has the primary objective of countering the arguments of colonial administrator-historians that the people of early India were only concerned about things spiritual, with utter disregard towards socio-economic institutions which could govern their mundane affairs. Secondly, it ignores the vocation-wise detailed study of various crafts. The second work which deserves to be mentioned in this regard is S.K. Maity's Economic Life in Northern India in the Gupta period.⁵ This work utilizes literary, epigraphic and archaeological materials to underline the importance of crafts and craftsmen in our period. But this work concerns itself primarily with compiling evidence for the existence of different categories of craftsmen from literary and other sources. Further, it does not compare the state of crafts-production and status of craftsmen in our period with the preceding period and thus it is impossible to make out from this work how to approach the problem of analysing qualitative and quantitative changes in the production of crafts-items

5) Maity, S.K., Economic life in Northern India, in the Gupta period (C.A.D. 300-550), Motilal Banarasidass, Delhi 1970 (First Edition, the World Press Calcutta, 1957).

and changes in the status of craftsmen over a long span of time. Moreover, this work is confined to northern India and does not utilize the data available from other parts of the sub-continent regarding the state of crafts-production. Methodologically, M.K. Pal's Crafts and Craftsmen in Traditional India,⁶ belongs to the same category. It, however, covers a vast span of time from early Vedic period to the modern times and only peripherally touches upon the various aspects of crafts-production and status of craftsmen. D.R. Das's Economic History of the Deccan⁷ (from 1st to 6th century A.D.) also belongs to the same category. It only provides literary and epigraphic evidence for the existence of various crafts and does not utilize available archaeological data to underline changes through the centuries.

A shift in historical writings on early India was heralded by D.D. Kosambi with whom commenced the trend of

6) Pal, M.K., Crafts and Craftsmen in Traditional India, Kanak Publications, New Delhi, 1978.

7) Das, D.R., Economic History of the Deccan, (from 1st to 6th century A.D.), Munsiram Manoharlal, Delhi 1969.

the study of early Indian History in the light of changing material milieu. This trend, to a extent, is reflected in recent studies on crafts-production and status of craftsmen. Kosambi is An introduction to the Study of Indian History⁸ makes passing comments, on the basis of epigraphic evidences, on the decline of guilds in our period. He contrasts this position with their position till second century A.D. The genesis of this decline he seeks in the absence of commodity production resulting in the concentration of artisans in the villages, which in turn created a situation in which artisans were forced to pick up training within their families. All these changes, according to Kosambi, created grounds for the emergence of various castes on professional basis. These sketchy remarks of Kosambi were carried forward by R.S. Sharma, by comprehensively examining the literary, epigraphic and archaeological evidences of our period in some of this works. In a chapter titled "Peasanthood and religious rights" in his Sudras in Ancient India⁹

8 Kosambi, D.D. An Introduction to the Study of Indian History, Popular Prakashan Bombay, 1st ed. 1956, 2nd revised edition 1975.

9 Sharma, R.S., Sudras in Ancient India, Motilal Banarasi dass, Delhi (1st edition, 1958, 2nd revised ed. 1980).

Sharma notices considerable enhancement in the economic, politico-legal, social and religious status of artisans and craftsmen in our period.

In his Indian Feudalism (C.A.D. 300-1200)¹⁰ he argues on the basis of the epigraphic and literary evidences that by the end of our period (600 A.D.), Indian villages became nearly self-contained with their population consisting of immobile peasantry, artisans and craftsmen, locally reciprocating to the needs of each other. He attributes the genesis of this phenomenon to the decline in commodity production. He further pursues this ideas in his recently published monograph Urban Decay in India (C.A.D. 300-1000)¹¹ in which structural decline in a good number of excavated sites has been cited. However, even in these monographs of Sharma, a detailed item-wise study of crafts, their production and of craftsmen working on different items is lacking. He has not undertaken detailed tabulations of various crafts-items and of their spatial contexts, obviously, because his works, cited

10 Sharma, R.S., Indian Feudalism (C.A.D. 300-1200), Macmillon, Delhi (1st ed. 1965, 2nd edition 1980).

11 Sharma, R.S., Urban Decay in India (C.A.D. 300-1000), Munshiram Manoharlal, Delhi 1987.

above, are more concerned with the general problem of Indian Feudalism rather than with crafts production as such.

Simultaneously, the focus of specific studies on craftsmen has been on individual groups of craftsmen and their changing status as a result of social change. In this category may be included such research articles by V.N. Jha as 'Status of Rathakara in Early Indian History',¹² 'Position and status Bamboo-Workers and basket-makers in Ancient and Early Medieval India',¹³ 'Leather workers in Ancient and early Medieval India',¹⁴ and A.P. Ojha's 'Blacksmiths in Ancient and Early Medieval India'.¹⁵ These articles highlight the different stages of the changing social status of an individual groups of craftsmen through the centuries. These publications, too, do not take into account the production aspects of

12 Jha, V., Proc. IHC (1973), 34th Session, pp. 104-111.

13 ibid, Pro. IHC (1976), pp.230-240.

14 ibid, Pro. IHC (1979), Waltaire.

15 Ojha, A.P., Pro. IHC (1979), Waltaire. pp.159-62.

various crafts and their corresponding impact on the status of craftsmen in different ~~spans~~ of time. Here it would not be out of place to mention some of the studies which analyse the description of 'Kali Age' in Epic and Puranic passages in underlining social crisis in the later third and early fourth century A.D.¹⁶ This crisis is taken to imply that the Vaisyas and Sudras (Peasants, artisans and labourers) either refused to perform production functions or else the Vaisya peasants declined to pay taxes and refused to supply the necessary labour for economic production. The solution of this sharp antagonism was resolved through a new mechanism for surplus extraction, that is, by assigning land revenues directly to priests military chiefs, administrators etc. for their support. This development has been described as a prelude to the situation further aggravated by disruption of foreign trade leading to shrinkage in urban commodity production, emergence of localized village-economy, paucity of coins and ruralization of crafts within the emerging feudal structure.¹⁷

16 Sharma, R.S., SAI, Delhi 1958, pp.176, 213-14, Ancient India, (Delhi 1978), p.109, "The Kali Age, A Period of social crisis", in D.N. Jha ed. Feudal Social Formation in Early India, Delhi, 1987, pp.45-64.

17 Sharma, R.S., Indian Feudalism, pp.53-56.

From the recent and relevant historical writings briefly reviewed above, we can pin-point some of the issues in the light of which we will deal with specific problems within our area of research. The most important issue arises out of the decline of urban centres as a result of the decline in foreign trade which in turn led to a setback in commodity production. This poses a dichotomic conceptual situation which leads to the query: does commodity production relate only to needs of foreign trade and not to the structure of early historical Indian economy in its entirety? Also due to lack of commercial intercourse there emerged self-sufficient village economy and the ruralization of crafts. But do literary and archaeological sources suggest emergence of such a phenomenon? It has also been noticed that in our period considerable advancement took place in the economic, politico-legal, social and religious status of artisans and craftsmen.¹⁸ Are these suggested changes compatible with the hypothesis of decline of crafts-production.

In the light of above-mentioned issues our initial focus would be on an examination of the contemporary

18. Sharma, R.S., SAI, (1980 ed.), p.313.

literary, epigraphic and archaeological sources providing evidence on various crafts items and on craftsmen producing them.

Against the background of the existing theory of urban decay which is considered an outcome of the shrinkage in foreign trade, we propose to examine afresh the extent and nature of change which crafts production may have gone through during the Gupta period. We propose to do this by meticulous tabulation of crafts-items of pre-Gupta and Gupta periods discovered from various archaeological sites. But, for a variety of reasons, only sample sites would be chosen to represent distinct regions of the Indian sub-continent. In the same context, we shall also attempt to examine the state of technology in our period as against the preceding phase wherever possible we shall follow this up finally with a discussion on the changing social and ritual status of craftsmen in our period by trying to compare it with the situation in the preceding period. This is proposed to be done by thoroughly examining the provisions of literary works, particularly *Smr̥ti* and Puranic works. The process of the crystalization of crafts guilds into caste organizations along occupational lines, and its impact on the status of

craftsmen have also to be examined in this context. Religio-legal disabilities imposed in the Dharmasastras on craftsmen have to be analysed in the context of the changing material milieu and the economic condition of the craftsmen inferred from the state of crafts-production in which they were engaged. This will enable us to find out whether all categories of craftsmen should be considered as consisting of one social group or whether one should consider the community of craftsmen too as representing a hierarchical structure.

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SECTION II

Sources which will require to be explored for the present investigation are somewhat inadequate and at the same time varied. The major problem concerning the literary sources is that of dating and although in most cases a wide time-bracket is suggested for dating the individual texts, it is far from certain whether dates can be rigidly fixed as to correspond to a particular century. However, our method would be to go by the general consensus among historians of literature and most literary texts used by us, to go by such consensus, would correspond to the broad timespan, C.A.D. - 300-600.

The major literary sources to be examined for our proposed theme of enquiry are thus: Sudraka's Mr̥chakatikam¹⁹, Visakhadatta's Mudrārāksasam²⁰, Kalidasa's Raghuvamsam²¹, Meghadutam²², Rtusamhāram²³ and Kumārasambhavam²⁴ and the Kamasutra of Vatsyayana. Sudraka's Mr̥chakatikam has been

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- 19 Mr̥chakatikam of Sudraka (ed. and tr.) by M.R. Kale, Motilal Banarasidass, Delhi, 1982.
- 20 Mudraraksasam (ed. and tr.) by V.B. Bedakar, Bombay, 1942
- 21 Devadhar, C.R., works of Kalidasa, Motilal Banarasidass, Delhi, 1966 (First ed.), vol.II.
- 22 *ibid.*
- 23 *ibid.*
- 24 *ibid.*

variously assigned to the period ranging from the 2nd century century B.C. to the 6th century A.D. but it could not have been written before the 4th century A.D.²⁵

Similarly, Visakhadatta's Mudraraksasam can roughly be assigned to the Gupta period.²⁶ The works of Kalidasa have been assigned to the Gupta period.²⁷ The date of the Kamasutra of Vatsayayana can also be assigned to the 3rd-4th century A.D.²⁸ We have also used Chaturbhani,²⁹ a collection of four one act plays, to glean information about our theme of research. These works, on the basis of society reflected in them, the types of men and communities that they deal with, their tone and temper, their lexicographical and stylistic peculiarities, may be placed in the time of Harsa of Kanauj or even that of the later Guptas.³⁰ The Tamil work Silappadhikaram of

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- 25 Dasgupta, S.N., History of Sanskrit Literature (classical period), vol.I, University of Calcutta, 1947, p.240.
- 26 *ibid.*, pp.262-63.
- 27 Banerji, S.C., A Companion to the Sanskrit Literature, Motilal Banarsidass, Delhi, 1971, p.49.
- 28 Keith, A.B., A History of Sanskrit Literature, Oxford University Press, Humphred Milford, 1st ed. 1920, reprinted 1941, p.51, Banerji, S.C., *op.cit.*, p.109.
- 29 Chaturbhani, ed. & Hindi tr. by Agarwal, V.S. & Motichandra, Hindi Granth Ratnakar Karyalaya, Bombay, 1960.
- 30 Dasgupta, S.N., *op.cit.*, p.249.

Ilango Adigal has been utilised to corroborate the information from other sources though it may be the work of much a later period. In fact, views about the date of this epic vary considerably. One view even considers it as belonging to the second quarter of the tenth century A.D.³¹ On the other hand the complete silence of this work with regard to the Pallavas of Kanci is considered as an evidence for second century A.D. as its date.³²

The lexicon Amarakośa and the technical work Brhatasamhitā of Varahamihira are replete with information on our theme of research. The period of Varahamihira's life cannot be placed before the last quarter of the 5th century A.D.³³ The vocabulary of Amarakośa is akin to Sudraka's Mrcchakatikam, Kalidasa's plays, Bharata's Nāṭyaśāstra, Vatsyayana's Kāmasūtra, all of which are placed between the 2nd and the 6th century A.D.³⁴ G.N. Shastri

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- 31 Subramanyam K.N., Silappadhikaram, represented from Tamil Agam Prakashan, Delhi, 1977, p.vii.
- 32 Silappadhikaram, tr. with an introduction and notes by V.R. Ramachandra Dikshitar, Humphrey, Milford, Oxford University Press, 1939, p.9.
- 33 Shastri, A.M. Indian as seen in the Brhatsamhita of Varahamihira, Motilal Banarasi Dass, Delhi, 1969, p.17.
- 34 Bhandarkar, R.G., A Peep into the early History of India, Bombay, 1920, p.45.

thinks that Amarasimha, the author of Amarakosa, probably flourished in the seventh century A.D.³⁵

The Smṛti works of Viṣṇu, Yajñavalkya, Nārada, Brhaspati and Kātyāyana have also to be utilised for our proposed theme of research. P.V. Kane gives following the dates for these smritis: Viṣṇu (A.D. 100-300), Yajñavalkya (A.D. 100-300), Nārada (A.D. 100-400), Brhaspati (A.D.300-500) and Katyayana (A.D.400-600).³⁶ The material collected from these smritis is supplemented by and compared with the Smṛti section of the following Puranas: Viṣṇu, Vāyu, Mārkaṇḍeya, Matsya, Bhaviṣya and Bhāgavata. In these Puranas, the chapters dealing with the duties of the varṇas, on funeral sacrifices and on the social customs in general have been roughly assigned to our period.³⁷ Similarly, the variants in the Śānti parvan and the Anusāsana parvan of the Mahābhārata seem to be more in line with the Smṛti

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- 35 Shastri, G.N., History of Classical Sanskrit Literature, Oxford University Press (2nd ed. 1960), p.157.
- 36 Kane, P.V., History of Dharmasastras, Bhandarkar oriental Research Institute, Pune, 1941, vol.II, pt. I, p.II.
- 37 Hazra, R.C., Puranic Records on Hindu Rites and Customs, Dacca, 1940, pp.174-78.

sections of Puranas.³⁸ We have also gathered information from Manusmṛti, a work assigned to (B.C. 300-A.D.200),³⁹ to underline changes in our period as compared to the preceding phase.

All these Smṛti and Puranic works have been utilized to ascertain the nature of changes that may have taken place in the social and ritual status of craftsmen in our period in contrast with the preceding one.

In addition to literary texts, the other category of written documents that we have used is epigraphic. Unlike literary texts, inscriptions in almost all cases can be precisely dated. They can also be located in particular geographical contexts. We have examined numerous inscriptions belonging to our period to supplement the information collected from literary sources. However, most of them are from North India. Although we have gone through all the inscriptions of the Gupta period edited and compiled in Corpus Inscriptionum Indicarum,⁴⁰ vol.III, and edited in the

38 Sharma, R.S., SAI, op.cit. (1980 ed), p.246.

39 Kane, P.V., op.cit., vol.II, part I, p.11.

40 Fleet, J.F., Corpus Inscriptionum Indicarum vol.III, 'Inscription of the Early Gupta Kings and their succession Indological Book House, Varanasi, 1970 (reprinted), Revised by D.R. Bhandarkar, Archaeological Survey of India, New Delhi, 1981.

different volumes of the Epigraphia Indica, only few of them are useful for our present theme of enquiry. These inscriptions, which mostly record land grants to Brahmanas, military chiefs to temples also refer to artisans and craftsmen in different contexts. So, we can supplement the information gleaned from literary sources about the existence of various categories of craftsmen in our period. Besides, references to particular groups of craftsmen making donations to temples which are recorded in some inscriptions, would indicate their standing in society. In some cases the head of the crafts-guild⁴¹ is referred to as a member of the city council, which too is suggestive of his and his groups status in society.

For our present research theme archaeological source-material had also to be tapped, though, in view of the vastness of the data available, a choice had to be made in the beginning regarding the data to be explored. The crafts-items excavated from different sites distributed in the various parts, of the sub-continent, provide the most authentic, objective and precise information for the problem to be dealt with in our research. Information regarding various crafts-items in our literary sources is very often vague,

41 CII, vol.III (revised ed. p.286. Damodarpur copper-plate Inscription of Kumargupta I the year 124), p.290. (Damodarpur copper-plate inscription of Kumargupta I, the year 128), p.362 (Damodarpur copper-plate inscriptions of Visnugupta, the year 224.

imprecise and exaggerated. Besides, it cannot be used for assessing qualitative and quantitative changes that a particular crafts item went through over centuries. On the contrary, a meticulous examination of archaeological data would help us form at least a general impression regarding the changing state of crafts-production in terms of volume and quality, by tabulating and computing the crafts items of two phases and making a comparison between them. Also in most cases we can know the state of technology of different crafts in a particular phase. For various seasons, we have only selected sample sites representing different geographical zones of the Indian sub-continent. Only such sites have been chosen as have yielded a substantial quantity of artifacts from the strata of both Gupta period and of preceding phase, so that by way of comparing the data from these two phases certain trends in crafts-production can be noticed.

Following are the selected archaeological sites from different geographical zones of Indian sub-continent :

i. North India : Taxila⁴² & Ahichahatra.⁴³

42 Marshall, J. Taxila, An Illustrated Account of Archaeological Excavation, Cambridge Univ. Press, 3 volumes.

43 Ancient India, no.1, Jan. 1946, pp.49f; Ancient India, no.4, pp.126f.

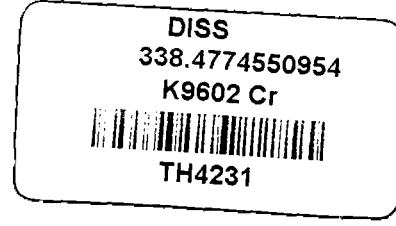
- ii. Middle Gangetic Plain : Kosambi,⁴⁴ Rajghat,⁴⁵
Pataliputra⁴⁶ and Vaisali⁴⁷.
- iii. Central and Western India : Bhokardan,⁴⁸ Paunar,⁴⁹
Devnimore,⁵⁰ Brahmapuri.⁵¹
- iv. Eastern Deccan : Yaleswaram⁵² & Salihundam.⁵³

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- 44 Sharma, G.R., The Excavation at Kosambi, (1957-59),
University of Allahabad, 1960.
- 45 Narain, A.K. & Roy, T.N., Excavations at Rajghat,
(1957-58 & 1960-65), part.I to IV, Varanasi, 1976-78.
- 46 Altekar, A.S. & Mishra, V., Report on Kumrhar Excavation,
(1955-57), K.P. Jayaswal Institute, Patna, 1959.
- 47 Deva, Krishna & Mishra, V., Vaisali Excavations 1950,
Published by Vaisali Sangh, Vaisali (Bihar), 1961,
Sinha, B.P. & Roy, S.R., published by directorate of
Archaeology and Museum Bihar, Patna, 1969.
- 48 Deo, S.B. & Gupta, R.S. Excavations at Bhokardan, Nagpur,
Aurangabad, 1974.
- 49 Deo, S.B. & Dhawalikar, M.K., Excavations at Paunar,
Nagpur Univ. Nagpur, 1967.
- 50 Mehta, R.N. & Chowdhary, S.N., Excavation at Devnimore,
(1960-63), M.S. University, Baroda, 1966.
- 51 Sankalia, H.D. & Dikshit, M.G., Excavation at Brahmapuri
(Kolhapur, 1945-46, Deccan College, Poona, 1952).
- 52 Khan, A.W., A Monograph on Yaleswaram, published by Govt.
of Andhra Pradesh, Hyderabad, 1963.
- 53 Subramanyam, R., Salihundam, A Buddhist site in Andhra
Pradesh, Hyderabad, 1964.

The sites chosen are thus distributed over almost all the major regions of the sub-continent and will suggest the state of crafts production, or at least the crafts-items were circulated, during pre-Gupta and Gupta periods. At all the sites both cultural phases are present and since detailed reports are available on all of them, an impressionistic, if not wholly satisfactory, comparison between the two phases is possible.

CHAPTER II

CRAFTS ITEMS



Literary, archaeological and epigraphic sources which can be assigned to the period between C.A.D. 300 and 600 and makes us familiar with various categories of crafts and craftsmen during this period. According to the nature of the basic raw materials which were transformed into crafts items, we have grouped crafts-production into two broad categories : (i) Non-metallic and (ii) Metallic. However, we would be required to further classify crafts-production under different sub-groups as the nature of raw materials even within these two broad categories varies widely.

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Non-Metallic Crafts

(i) Pottery : As we begin our enquiry with non-metallic crafts-items, the most important product which attracts our attention, in terms of satisfying the needs of various sections of society of our period, is pottery. Though contemporary literary and epigraphic sources refer to the craft of pottery making and to potters only very rarely, archaeological evidence is the testimony of its wide prevalence during this period. The Amarakośa¹ mentions two names for potters (Kumbhakāra & Kulāla). The Brahatsamhitā refers to the words (Cākrika², Cākraçarā³, Ghatakāra⁴) for potters. We have also evidence of potter's wheel, suggested by such terms

1 Amarakośa, edited with notes and the Maniprabha Hindi commentary by Pt. Hargovinda Sastri, the Chowkhamba Sanskrit series office, Varanasi, 1968, 2.10.6.

2 Brhatsamhita of Varahamihira with English translation and notes by Pt. Bhaskara V. Subramanya Sastri, Bangalore, 1947, X.9.

3 ibid. X.12.

4 ibid. XV.1



as Cakra on which different types of vessels and pots were thrown.⁵ The Br̥hatsamhitā also mentions painted pots (Citrabhāṇḍāni).⁶ The word mentioned for earthen vessel in the Br̥hatsamhitā is (Bhāṇḍa).⁷ For pot the word mentioned is Kumbha.⁸ The Silappadikaram⁹ also refers to potters.

Archaeological excavations have yielded numerous specimens of pots, terracotta figures, seals and beads from different sites representing different regions of the Indian sub-continent. We classify them as (i) House-hold utensils (ii) Terracotta figurines, (iii) clay seals and beads. The sample excavated sites from different zones bear witness to how the potters craft functioned in our period. They have yielded earthen utensils of varied utilities and shapes. What follows is a survey, undertaken region-wise, of the major pottery types which excavations have yielded. In the subsequent chapter the excavated material would be taken up for comparative assessment.

Northern Region:

To begin with the northern part of the Indian sub-continent, the Sirsukh¹⁰ site of Taxila which has been assigned to the period (2nd/3rd century A.D. to 5th century A.D.), yielded a handled jug

5 ibid, X.12.

6 ibid, X.10.

7 ibid, LXXXVII.12.

8 ibid, LXIL.24.

9 Silappadikaram, tr. with an introduction & notes by V.R. Ramachandra Dikshitar, Humphrey, Milford, Oxford, 1939, p.111.

10 Marshall, Sir John, Taxila: An illustrated Account of Archaeological Excavation, Cambridge Univ. Press, 1951, vol.I, Chap.8, p.217.

of fine sandy red clay with thick red wash. Also several vessels, including a cup, a bowl, a lamp and four miniature vases have been reported. Stratum III (C.A.D. 350-750) at Ahichchatra¹¹ has yielded common bowls, common jars, jars with bottle necks, Handi and cooking vessels.

Middle Gangetic Plain:

From period IV (C.A.D. 300-700) at Rajghat,¹² handled vases, lids of various types, carinated cooking Handis and a large number of miniature pots have been unearthed. Period IV at Kumrahar¹³ (C.A.D. 300-450) has yielded basins, vases, bowls, lids and a spouted sprinklers. The period IV of Vaisali excavations¹⁴ (C.A.D. 300-600) provides evidence of bowls, vases storage jars and decorated sherds in good numbers.

Central and Western India:

From period II (C.A.D. 300 onwards) at Bhokardan¹⁵ in the Aurangabad district of Maharashtra, we have evidence of earthen vessels such as Pantis, basins, lids, Kujas, storage jars, miniature pots, etc. Devnimori¹⁶ (3rd to 5th century A.D.) in

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- 11 Ghosh, A. & Panigrahi, K.C., 'The Pottery of Ahichchatra', Ancient India, no.1, Jan. 1946, p.49.
- 12 Narain, A.K. & Roy, T.N., (Henceforth Narain & Roy), Excavation at Rajghat (1953-57, 1960-65), part.I, p.64.
- 13 Altekar, A.S. & Mishra, V. (Henceforth Altekar and Mishra), Report on Kumrahar Excavation (1951-55), K.P. Jaiswal Institute, Patna, 1959, pp.59-76.
- 14 Deva, Krishna and Mishra, V. (henceforth Deva and Mishra), Vaishali Excavations 1950, Published by Vaishali Sangh Vaishali (Bihar), 1961, pp.33-48.
- 15 Deo, S.B. & Gupte, R.S. (henceforth Deo and Gupte), Excavation at Bhokardan, Nagpur University, 1974, p.82f.
- 16 Mehta, R.N. and Chowdhary, S.N., (Henceforth Mehta and Chowdhary), Excavation at Devnimori (1960-63), M.S. University, Baroda, 1966, p.696.

north-eastern part of Gujarat provided evidence of a good number of earthen utensils which include bowls (plain and spouted), large jars, Handi, Kunda, globular small pots and large pots. Apart from these, three sherds of amphorae have also been discovered from this site.¹⁷ This well-levigated light cream ware, however, is the well-known Roman import in India.¹⁸ A dabber (Pindlo), used by the potter,¹⁹ of granite was also obtained from this site. The period III (A.D. 3rd to 8th century) at Paunar²⁰ has yielded a wide range of ceramic items. These include short and high-necked jars, carinated Handis, Kundis and storage jars. At Brahmapuri (Kolhapur)²¹ layers 5 and 6, assignable to period 4th to 9th century A.D. have yielded dishes, platters and cups in great abundance.

Eastern Deccan:

From the late phase (4th-5th century A.D. to 7-8th century A.D.) at Salihundam in Andhra Pradesh the findings include dishes, bowls, lid-cum-dishes, carinated vases, miniature pots, sprinklers, spots^u and troughs.²²

(ii) Terracotta:

Besides pottery, the potters' craft also included production of terracottas, which in India were of high antiquity.

17 ibid, p.76.

18 ibid.

19 ibid, p.89.

20 Deo, S.B. & Dhawalikar, M.K. (henceforth Deo & Dhawalikar), Excavation at Paunar, Nagpur University, Nagpur, 1967, pp.49-51.

21 Sankalia, H.D. & Dikshit, M.G. (henceforth Sankalia & Dikshit, The Excavation at Brahmapuri (Kolhapur), 1945-46, Deccan College, Poona, 1952, p.58f.

22 Subramanyam, R., Salihundam, A Buddhist site in Andhra Pradesh, Hyderabad, 1964, p.68.

Objects and artifacts in terracotta were intended chiefly for domestic use, for household decoration as childrens toys and for popular religious and magical purposes. We offer below a region-wise survey of terracotta finds from the archaeological strata which have been assigned to our period of study.

Northern Region:

From stratum III (C.A.D. 350-750) at Ahichchatra,²³ we have a considerable number of images of gods and goddesses, of men, women and animals. A female figurine with a child has also been reported. Eleven fragmentary plaques from our period represent Surya or Sun-God.²⁴ A good number of figurines represent miscellaneous deities such as Narasimha, Kubera, Karttikeya, Naga, Ganesa and Parvati.²⁵ They are from the strata III & II which correspond to the period A.D. 350-850. Images of the goddess Durga²⁶ subduing the Mahisha- Demon first makes her appearance in Stratum IIIC,, corresponding to the period A.D. 450-550. Clay figurines representing Naigameśa, both male and female, occur at Ahichchatra in strata IIIb and IIIa which have been roughly assigned to period A.D. 550-750. Its special feature is a goat-like animal face and long dangling ears having either pierced holes or slit marks. Below a hooked nose the mouth is indicated by a deep-cut slit.

23 Agrawala, V.S., 'Terracotta from Ahichchatra', Ancient India, no.4, p.126.

24 Ibid, p.128.

25 'ibid, p.130.

26 ibid, p.133.

A very considerable group of terracotta figurines,²⁷ all from the stratum III assigned to period (C.A.D. 350-750) represent men and women conforming to a set art style. They are remarkable for the great variety of hair-styles. A small group of females heads shows the head covered by a veil. An interesting group of terracottas²⁸ from stratum IIIb (550-650 A.D.) at Ahichchatra represents a female figure with a child in her arms.

We have also terracottas from Ahichchatra representing horse²⁹ and elephant-riders. Produced out of double-moulds, they are found in the middle level of stratum IIIb assigned to the period A.D. 550-650. Also figurines³⁰ with foreign ethnic features occur in strata IIIa and IIIc at this site. Hollow, round plaques,³¹ one of them with reliefs of elephants in different poses, are other finds from the same stratum of this site.

Middle Gangetic Plain:

Period IV (C.A.D. 300-700) at Rajaghat yielded terracotta discs,³² pottery discs,³³ seats³⁴ or stools, dagger³⁵ with hilt,

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- 27 ibid, p.137.
 28 ibid, p.146.
 29 ibid, p.152.
 30 ibid, p.155.
 31 ibid, p.161.
 32 Narain & Roy, op.cit, part.III, p.55.
 33 ibid, p.58.
 34 ibid, p.60.
 35 ibid.

toy cart-frames,³⁶ lids,³⁷ dabbers,³⁸ gamesmen,³⁹ balls,⁴⁰ pestles,⁴¹ miniature offering lamps,⁴² ear-ornaments,⁴³ skin-rubber,⁴⁴ stoppers⁴⁵ and cones.⁴⁶ A terracotta mould, possibly for making plaques, also occurs at this site from the level of period IV (C.A.D. 300-700).⁴⁷

A large number of terracotta figurines have been unearthed from the level of the period IV (C.A.D. 300-450) at Kumrhar. They include figurines of deities like visnu, Ganesa, etc. along with figurines of the Buddha.⁴⁸ Apart from this we have Naigameśa figurines,⁴⁹ figurines of male and female worshippers,⁵⁰ terracotta animals,⁵¹ terracotta cones,⁵² skin rubbers.⁵³ In our period at Vaishali, apart from Naigameśa,⁵⁴ we have some miscellaneous figurines, such as busts of male figurine and head of human figurines.⁵⁵ We have also animal figurines of elephant or other animals.⁵⁶ Terracotta wheels are also reported from this period.⁵⁷

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- 36 Ibid, p.61.
 37 ibid, p.63.
 38 ibid, p.63.
 39 ibid, p.69.
 40 ibid, p.65.
 41 ibid, p.66.
 42 ibid, p.66.
 43 ibid, p.67.
 44 ibid, p.69.
 45 ibid, p.70.
 46 ibid:
 47 ibid, p.63.
 48 Altekar & Mishra, op.cit, p.108.
 49 ibid, p.109.
 50 ibid, p.111.
 51 ibid, p.119.
 52 ibid, p.125.
 53 ibid, p.126.
 54 Deva & Mishra, op.cit, p.53.
 55 ibid, pp.53-54.
 56 ibid, pp.55-56.
 57 ibid, p.57.

Central and Western India :

Terracotta figures from period III (3rd to 8th century A.D) in Paunur comprise horses, elephants, bulls and a monkey - like figure.⁵⁸ Terracottas from period II (300 A.D. onwards) at Bhokardan are represented by male and female figurines,⁵⁹ toys or animal figurines,⁶⁰ ear ornaments,⁶¹ bangles,⁶² rings,⁶³ miniature pots, bowls and lids,⁶⁴ gamesmen,⁶⁵ pottery discs,⁶⁶ menbles,⁶⁷ or small balls, wheels,⁶⁸ skin rubbers,⁶⁹ votive tanks⁷⁰ and crucibles.⁷¹ Terracotta objects coming from our period in Devnimori⁷² (3rd to 5th century A.D.) consist of beads, votive, tanks, animal figurines, discs, flesh-rubbers etc.

Eastern Deccan :

A variety of terracotta objects were recovered from Sali-hundam⁷³ which are of the late phase (4th-5th to 7th-8th century A.D.). They include mainly human and animal figurines, plaques, seals, discs, spools, and tiles besides a few moulded bricks and finials.

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- 58) Deo & Dhawalikar, op.cit. p.90.
 59) Deo & Gupta, op.cit. p.147
 60) ibid. p. 151-53.
 61) ibid. p.159
 62) ibid. p.159.
 63) ibid. p.160.
 64) ibid.
 65) ibid. p.161.
 66) ibid. p.163
 67) ibid. p.164.
 68) ibid.
 69) ibid. p.165
 70) ibid. p.166
 71) ibid.
 72) Mehta & Chowdhary, op.cit. p.91.
 73) Subramanyam, R., op.cit. p. 100f.

III Stone-Cutter's Craft :

Work in stone involved skills of masons, stone-cutters and sculptors. The sculptural findings of our period are many and in addition to the fact this was the period when the famous Sarnath school prospered and excavations of caves at Ajanta continued, a number of religious complexes of the period reveal the high skill with which stone as a material for the craftsman was handled . The Amarakośa mentions two terms for tools used by the sculptors for breaking and shaping the stone-pieces (Tanka, Pāsānadārana).⁷⁴ Some of the more outstanding specimens from our period include the image of Ganga from Besanagar, the well-known sculptures from Devagarh, the standing and seated Buddha figures of Sarnath. Sivalingas from Khoh and Uclahara,⁷⁵ an Avalokitesvara figure from Sarnath, a standing figure of Buddha from Mathura and a detached colossal Buddha image preserved in the Mathura museum are some other excellent specimens revealing a high level of skill of stone-carving in the Gupta period.⁷⁶ From Vaisali⁷⁷ we have a figure of the Buddha, seated in Padmāsana on a pedestal adorned with a Cakra. The excavation at Devnimori⁷⁸ has also yielded fragments of images

74 Amarakośa, 2.10.34.

75 Agarwala, V.S. : Gupta Art (A History of Indian Art in Gupta Period), Prithvi Prakasan Varanasi, 1977, p.24.

76 *ibid.* p.27.

77 Sinha, B.P. & Roy, S.R. *op.cit.* p.201.

78 Mehta, R.N. & Chowdhary, S.N. *op.cit.* pp.87-89.

of the Buddha. Paunar⁷⁹ and Bhokardan⁸⁰ also provide evidence of sculptural activities in the form of stone plaques. A torso of the Buddha is also reported from the level of our period at Salihundam.⁸¹

Among utilitarian items, made of stone in our period, we have Konora and Thatwa, used by the potters to thin out the clay walls of the vessels, from Sirsukh (Taxila),⁸² sandstone crossbars, a sandstone wheel and a fragment of a small stone pot from Kumrahar,⁸³ potter's supporting Pindlo (Dabber), mullers, hammer stones, dishes, discs and upper and lower parts of rotary querns with horizontal perforation for handle from Devnimori,⁸⁴ querns, mullers and rotary querns from Paunar,⁸⁵ rotary querns, skin-rubbers and dabbers, mullers, mortar, tools for professional use like a sharpener, bead polisher, stone-balls and stone cakes of doubtful use from Bhokardan,⁸⁶ querns with mullers, upright railings, cross-bars with lotus designs, Harmikas and inscribed slabs from Salihundam.⁸⁷

(iv) Glass:

Literary and archaeological evidence reveals the existence of crafts associated with manufacturing of glass items. The

79 Deo, S.B. & Dhawalikar, M.K., op.cit, p.108.

80 Deo, S.B. & Gupta, op.cit, pp.201-3.

81 Subramanyam, R., op.cit, p.108.

82 Marshal, J., op.cit, vol.II, p.502.

83 Altekar, A.S. & Mishra, V.K., op.cit, p.137.

84 Mehta, R.N. & Choudhary, S.N., op.cit, pp.87-89.

85 Deo, S.B. & Dhawalikar, M.K., op.cit, p.108.

86 Deo, S.B. & Gupta, R.S., op.cit, pp.27-29.

87 Subramanyam, R., op.cit, p.108.

Amarakosa uses two names for glass (Kāca and Ḳsāra).⁸⁸ In the Br̥hatsamhitā too, we get evidence of glass (Kāca).⁸⁹

Varahamihira has mentioned glass along with other articles as as a commodity for trade and commerce.⁹⁰ In a book on the science of jewels, Ratnapariksā the Buddhist scholar Buddhabhatta has made a reference to glass among several gems and jewels.⁹¹ The Br̥hatsamhitā also alludes to the making of mirrors, possibly made of glass. The statement that solar rays, reflected on a mirror kept outside, illuminate the interior of the house (Ksapayanti Darpanodaranihitā iva mandirsyāntah)⁹² possibly refers to a mirror, made of glass, having the polish of mercury. This can further be substantiated by the reference of the Amarakosa⁹³ to mercury having four names (Capala, Rasa, Sūta and Pārada) mentioned in sequence along with glass. In Sudraka's Padmaprābhrtikam⁹⁴ we find description of mirrors which had got tarnished in the rainy season and were being wiped up (दुर्दिनदोषान्निवृत्ताः संप्रभृज्यन्ते दर्पणाः). This further alludes to the manufacturing of glass - mirrors since only glass-mirror can be cleaned by wiping. In Padatādikatakam⁹⁵ of Shyamilakavi the word for looking glass is (Ātmadarsā and

88 Amarakosa, 2.9.99.

89 Br̥hatsamhitā, ch.87, S23, Ch.48, S.8.

90 Br̥hatsamhitā, XLII.8, 10.

91 Ratnapariksa of Buddhabhatta, Verses, 46-47, 192-92, 165-66, 205-208. Cited in Ancient Glass and India by S.N.Sen & Mamta Chowdhary, Indian National Science Academy, New Delhi, 1985.

92 Br̥hatsamhitā, ch.IV, S.2.

93 Amarakosa, 2.9.99.

94 Chaturbhani, p.68.

95 ibid, p.256.

Darpana). The Amarakosa also provides evidence of several glass articles like Singhanam (a glass vessel), Śikyakāca (glass cup) and Kācasthāli (glass-dish).⁹⁶ For looking glass we have also references in the Raghuvamśa,⁹⁷ Kumārasambhava,⁹⁸ and Rtusamharam⁹⁹ of Kalidasa.

Archaeological excavations too reveal that glass was used to fashion objects of different varieties and that it was distributed widely throughout the sub-continent. This will be evident from a select survey of archaeological findings presented below.

The Gangetic Plains:

In the Gangetic valley, at Rajghat, period III attributed to Circa second to fourth century A.D. is reported have yielded beads of glass.¹⁰⁰ At Vaisali, two glass beads are associated with period IV dated 200-600 A.D. in 1950 excavations.¹⁰¹ The 1961-62 excavation has also yielded bangles of glass from the same period.¹⁰²

Central and Western India:

In Central India, at Maheshwar,¹⁰³ period VI is attributed

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- 96 Amarakosa, II.9.98, 2.10.30, III.3.28.
 97 Raghuvamśa, XII.37, XVII.26, XVIII.28.
 98 Kumarasambhava, VII.26, VIII.11.
 99 Rtusamharam, IV.13.
 100 Indian Archaeology: A review (henceforth IAR), for 1957-58, p.50.
 101 Deva, Krishna & Mishra, V., op.cit, p.62.
 102 I.A.R., 1961-62, p.7.
 103 Sankalia, H.D., Subarao, & Deo, S.B., The Excavation at Maheshwar and Navdatoli, 1952-53, pp.26, 186.

to 100-500 A.D. Eight glass beads were associated with this phase. The illustrated specimens are of white transparent glass, a pale moss green colour and of a greyish-black glass with whitish specks.¹⁰⁴ At Eran, beads of glass make their appearance in period III when Red polished were came to be used at that site,¹⁰⁵ but glass was quite abundant in the succeeding phase.¹⁰⁶ The period covered by these phases would correspond to circa 250-500 A.D.

In Western India, at Devnimori, a few fragments of glass were recovered from an earthen vessel in the Stupa.¹⁰⁷ These comprised fragments of the neck of a bottle of deep blue colour, probably with copper as the colouring agent.

The vihara at Devnimori has yielded a fragment of a fine petal-shaped flat glass, partially devitrified and having a very rough surface. The third fragment consisted of the rim of a bowl, of clear transparent glass, cut on the wheel to give it a slightly oblique profile.¹⁰⁹ The finds have been dated with the help of Ksatrapa coins, dated 203-378 A.D. and certain issues of Maitraka Bhattaraka (circa 380-405 A.D.).

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- 104 *ibid*, fig.102, nos. 28, 29 and 36.
 105 I.A.R., 1960-61, p.18.
 106 *ibid*, 1961-62, p.20.
 107 Mehta and Choudhary, *op.cit*, Plate XXIX.
 108 *ibid*, pp.103-9.
 109 *ibid*, p.104.

At the Ksatrapa-Gupta town of Amreli,¹¹⁰ in Kathiawar, three objects of glass were found. These include the loop-handle of a bowl or a cup, of opaque white glass, and fragments of rims of two bowls. One of them is sub-triangular in shape, made from pinkish glass. Another one belonging to the Gupta period is of dull white opaque colour.

At Prabhas Patan our period is represented by period V, which is said to have yielded Ksatrapa and Gupta coins,¹¹¹ This site has yielded one bangle and ten beads of glass.¹¹²

From Brahmanabad in Sind, comes a rather unusual specimen of a complete glass bowl.¹¹³ This bowl has a globular belly with vertical ribbings all over the body and a short neck having an out-turned rim. The bowl is attributed to about 400 A.D. From the late and post Satavahana period (300-800 A.D.) at Brahmapuri excavation we have evidence of glass slag and a number of unfinished beads of glass in various stages of manufacture.¹¹⁴ Bangles, rings and other articles of glass were

110 Rao, S.R. Excavation at Amreli, Special Number, Bulletin of the Museum and Picture Gallery, Baroda, vol. IXVIII (1966), pp.80-81.

111 I.A.R. for 1956-57, p.17.

112 Cited in M.G. Dikshit's History of Glass, University of Bombay, 1969, p.60.

113 Archaeological Survey of India, Annual Report (Henceforth A.S.R.) 1908-09, p.82.

114 Sankalia & Dikshit, op.cit. p.98.

also manufactured along side the beads.¹¹⁵ It indicates with certainly that glass was actually worked at those site.¹¹⁶ The occurrence of glass bangles in particular and other objects made of glass also confirms the existence of the craft of making glass-items in our period at this site. The objects of glass from Paunar consist of monochrome bangles, vessels, rings, and earornaments.¹¹⁷

Glass objects from period II (300 A.D. onwards) at Bhokardan include mostly bangles.¹¹⁸ From the top horizon of the level of the preceeding period IB (1st century B.C. to 2nd-3rd century A.D.) at this site we have fragmentary rims of glass-pots.¹¹⁹ We have also a good amount of glass slag and vitrified glass fragments from the level assigned to our period. This implies local manufacturing of glass at this site in our period.¹²⁰

(v) Textiles :

The production of textiles in our period is attested by references to the fabrics and their material in the literary sources. Besides, there is ample material in the form of sculptures from Saranath, Deogarh, Gwalior, Mandor, etc. and the

115 *ibid.*

116 *ibid.*

117 Deo & Dhawalikar, *op.cit.* p.103-8.

118 Deo & Gupte, *op.cit.* p.197.

119 *ibid.* p.201.

120 *ibid.*

Ajanta paintings, especially of the cave XVII. These, together with the sculptures and terracottas, give us a tolerably good idea of Indian costumes and textile materials roughly from the end of the 3rd century to the end of the seventh century A.D. ¹²¹

Two names Ghantāravā, Śanapuspikā are mentioned for Śana (hemp) in Amarakośa. ¹²² Another variety of hemp called Bhaṅgā from which modern Bhāṅga has been derived is mentioned in this lexicon. ¹²³ Though in modern times it is known mainly as the source of an intoxicant, in ancient India the fibre from the stern of the plant was actually utilised for making cloths. ¹²⁴ The linseed plant was also utilised for its fibres. ¹²⁵ This is mentioned in Amara-kośa with three synonyms, Ksumā, Umā and Ataśī. ¹²⁶ The categorical mention of Ksaumā as cloth made of bark ¹²⁷ Vālkam Ksaumādi, removes the confusion of regarding the possibility of its being silk.

121 Motichandra, The History of Indian costumes from the 3rd to the end of the 7th century A.D., Journal of Indian Society of Oriental Art, vol.XII, 1944.

122 Amarakosa, 2.4.107.

123 *ibid.* 2.9.20.

124 Gopal, L. 'Textile in Ancient India', Journal of Economic and Social History of Orient, vol.IV, (1960), pp.54-55.

125 *ibid.* p.58.

126 Amarakosa, 2.9.20.

127 *ibid.* 2.6.111.

Apart from these sources of fabrics, another variety of cloth mentioned profusely in the literature of our period is Dukūla.¹²⁸ Although the Amarakośa identified Dukūla with Ksaumā,¹²⁹ Lalanji Gopal convincingly argues, on the basis of references from other sources, that these were two distinct types of cloths, and not the finer or coarser varieties of the same type of cloth.¹³⁰ The Brhatsamhita refers to a fresh white Dukūla cloth (Daukūlyet Navena).¹³¹

A sloka in the Brhatsamhita suggests that cotton was the chief fabric for garments.¹³² The Amarakośa lists three names for cotton cloths,¹³³ (Kārpāsam, Phālam and Vādaram). For cotton two names occur Picu and Tūla.^{133a} The Brhatsamhita's predictions¹³⁴ relating to the effect of rains and of astronomical conjunctions on cotton crop indicate that cotton (Kārpāsam) was an important item of cultivation. In one context, the text also refers to a pair of cotton cloths (Kārpāsika Vastra Yugam).¹³⁵

128 Raghuvamśam, VIII. 24, VII. 18-10 Rtusamharam II.26

129 Amarakośa, 2.6.113.

130 Gopal, L. op.cit. pp.58-59.

131 Brhatsamhitā, LXXII.1

132 ibid. XLIV. 15.

133 Amarakośa, 2.6.111. 133a Ibid. 2.9.106.

134 Brhatsamhita, V.75, XL.3, X.14, and XXIX.5.

135 ibid. III.72.

In the Amarakośa we have certain terms connected with weaving Vemā and Vāyadanda for dressing the thread,¹³⁶ Sūtram and Tantu for thread,¹³⁷ Vāni and Vyūti¹³⁸ for weaving Trasara and Sūtra-vestana for rolling the thread. For weavers, the literary sources of our period use three synonyms Tantuvāya,¹³⁹ Kuvinda,¹⁴⁰ Kaulika.¹⁴¹ We also find in Amarakośa, a long list of various items of cloths.¹⁴² Bed covers, pillow-case, curtains are known as Nicola and Pracchada Pata. For the dresses worn below the belt such as trousers, Dhoti, sari etc. terms mentioned in it are: Antariyam, Upasañvyānam, Paridhānam, and Adhoañśukam. Terms for blouse are Cola and Kūrpāsak. Quilt is known to it as Nīsāra. It also refers to words Ardhorukam and Candātakam to stand for skirt. Vitanam, ulloca, were the names of the cloth used for covering the ceiling. Pratisīrā and Javanikā are the two synonyms for tent.

The Amarakośa also gives words denoting the measurement of cloth.¹⁴³ The cloth ends or hems are known as Daśā and Vastyā^a the length as Daiśābhyam, Āyāma and Āroha and the breath as Parināha and Viśālatā. The various stages in the wear and tear of the cloth after constant use have been expressed by several words.¹⁴⁴ Old worn-out clothes are mentioned as Pataccaram, Jirnavastram while damaged and dirty clothes have been termed as Nattaka and Karpata.

136 Amarakośa, 2.10.28.

137 ibid.

138 ibid.

139 Amarakośa, 2.10.6.

140 ibid.

141 Brhatsaṃhita, IIXC.20.

142 Amarakośa, 2.6.116-20.

143 ibid., 2.6.114.

144 ibid. 2.6.115.

The Amarakośa also describes the various stages in the manufacture of cloth right from the operation in the loom to the finishing and calendering stages.¹⁴⁵ For the cloth fresh from the loom the following words have been used : Anāhatam (uncalendered), Nispravāni (fresh from the loom), Tantrakam (woven on the loom). After the cloth was bleached it was known as Udgamaniyam.

The textile crafts also included the production of silken cloths (Kauśeya,¹⁴⁶ Patrorna¹⁴⁷). The Amarakośa explains silken cloths (Kauśeya) as made from cocoons of worms (Krmiśoṭtham).¹⁴⁸ The Brhatsamhitā also provides evidence of fine silk (Kauśeya Patta) and bleached silk (Patraurnika).¹⁴⁹ It also refers to red silken cloth (Rakta Patta).¹⁵⁰ The Padmaprabhrtakam¹⁵¹ and Ubhayasārikā,¹⁵² included in the Caturbhāni, refer to soft silken cloths (Pelavāmsuka). In Padatadikatakam¹⁵³ we come across another variety of silken cloth called Maramara Kauśeya.

Other varieties of cloths were prepared from wool and fur. The Amarakosa refers to cloths prepared from the wool and fur of

145 *ibid.* 2.6.112.

146 *ibid.* 2.6.111.

147 *ibid.* 2.6.113.

148 *ibid.* 2.6.111.

149 Brhatsamhitā, XVI.30.

150 *ibid.* LXXXVII. 19.

151 Chaturbhāni, p.78.

152 *ibid.* p.122.

153 *ibid.* p.229.

sheep-like animals (Mrga) which was spun into woollen threads.¹⁵⁴ They are called Rankavam & Mrgaromajam. Two names are mentioned for blanket : Rallaka and Kambala.¹⁵⁵ Clothes made of sheep wool and goats hair are also mentioned in the Brhatsamhitā.¹⁵⁶ It categorically says that the value of sheep is determined by the amount of wool they yield.¹⁵⁷

Tailoring and Dyeing :

Certain ancillary crafts such as tailoring and dyeing grew out of textile production. The Amarakośa refers to the practice of sewing (Sevanam, Sivanam & Syūti).¹⁵⁸ It also mentions a name for needle (Suci)¹⁵⁹ The Brhatsamhitā refers to the craft of the tailors (Sucika).¹⁶⁰ A tailor was known to Amarakośa by two synonyms (Tunnavāya and Saucika).¹⁶¹

Dyeing is also known from the literary sources of our period. The Brhatsamhitā provides evidence for yellow silken garments (Pitāmbara).¹⁶²

154 Amarakośa, 2.6.111.

155 *ibid.* 2.6.116.

156 Brhatsamhitā, XII.2

157 *ibid.* XXVI.

158 Amarakośa, 3.2.5

159 *ibid.* 3.5.8.

160 Brhatsamhitā, X.9.

161 Amarakośa, 2.10.6.

162 Brhatsamhitā, XXIV.18.

Blue garments (Nila-Vastra),¹⁶³ red garment (Raktapaṭṭa)¹⁶⁴ and clothes of varied colours (Citra Vastrāṇi).¹⁶⁵ The Padatādita-katakam also mentions red cloths (Raktāmsukam).¹⁶⁶ For dyers, the terms occurring in the Amarakośa are Rangajīva and Citrakara.¹⁶⁷

(vi) Leather Crafts :

The use of products made from leather as the raw material for different purposes was known at that time. In the Amarakośa the general term for a leather-worker and the specific term for a shoe-maker.¹⁶⁸ (Pādūkrta and Carmakāra) are mentioned together with some of his tools and leather products, namely, knife (Āra, Carmapravedikā),¹⁶⁹ shoes (Paḍukā, Paḍū and Upānāt),¹⁷⁰ leather fan (Dhuvitram)¹⁷¹ and leather bottle for all (Kutupa, Kutu, Snehapātram).¹⁷² The Brhatsamhitā¹⁷³ refers to hides and other leathern articles (Carmamaya).

163 ibid. LXXXVI.79.

164 ibid. LXXXVII.19.

165 ibid. LXXXVII.15.

166 Chaturbhāni, p.246.

167 Amarakośa, 2.10.7.

168 Amarakośa, 2.10.7.

169 ibid. 2.10.34.

170 ibid. 2.10.30.

171 ibid. 2.7.23.

172 ibid. 2.9.33.

173 Brhatsamhitā, LXXXVII.8.

(vii) Ivory items:

The technique of ivory carving and fashioning luxury items was well-developed by now. The raw-material was collected from living and dead elephants. According to the Brhatsamhitā the value of elephants was determined by their tusks (Dantaih-Nāgah).¹⁷⁴ Ivory was then manufactured into luxury articles for richer households. In the Kāmasūtra, we come across a lute hanging from a peg made of the tooth of an elephant (Nāgadantavāsakta).¹⁷⁵ Kalidasa also refers to seats of ivory (Gajadantāsanam).¹⁷⁶ For ivory the term which occurs in the Amarakośa is Viśānam.¹⁷⁷ The Silappadikaram informs us about the instruments for ivory-cutting.¹⁷⁸ The Amarakośa, also mentions dolls made of ivory (Pañcālikā and Putrikā).¹⁷⁹ The elephant tusk (Gajadanta) was highly commanded for use in construction of couches.¹⁸⁰ The only ivory piece, hitherto known, which could be tentatively ascribed to the Gupta period, is a figure of Hanuman formerly in the collection of Mr. Nasli M. Heeramaneck and now in the collection of the Seattle Art Museum.¹⁸¹ Also the acquisition of four Gupta ivories by the

174 Brhatsamhita, XXVI.8.

175 Kamasutra, Chap.1, IV. p.112.

176 Raghuvamsam, XVII.21.

177 Amarakosa, 3.3.56.

178 Silappadikaram, p.206.

179 Amarakosa, 2.10.89.

180 Brhatsamhita, Chap. 79.

181 Motichandra, 'Ancient Indian Ivories', Bulleting of the Prince of Wales Museum of W. India, no.6, 1957-59, p.37.

Prince of Wales museum, Bombay is of great importance for the history of ivory carving in India.¹⁸²

(viii) Oil-Pressing:

Oil pressing was another important craft of our period. It was an essential technology related to domestic and ritual functions. Oil was produced different varieties of seeds;¹⁸³ (Sarsapa), (Tantubha), (Kadambaka), Sesame¹⁸⁴ (Tilapeja), (Tilapinja), Linseed¹⁸⁵ (Atasī, Umā, Ksumā), black mustard¹⁸⁶ (Ksava, Ksutābhijanana), (Rājika), (Kṛṣṇikā), (Āsurī). The use of ingudi oil for lighting lamps,¹⁸⁷ curing boils¹⁸⁸ and for hair¹⁸⁹ is referred to in Kalidasa.

The Indor C.P. inscription of Skandagupta¹⁹⁰ mentions that in the city of Indragupta, there was a famous guild of oilmen whose head was Jivanta. In the Brhatsamhitā too we come across a reference to oil pressers¹⁹¹ (Tailika).

182 ibid,

183 Amarakosa, 2.9.17.

184 ibid, 2.9.19.

185 ibid, 2.9.20.

186 ibid, 2.9.19.

187 Raghuvamśam, XIV.81.

188 Devadher, C.R., Abhiñjana-Sakuntalam, vol.II, act.IV.

189 ibid, Act. II.8.

190 CII, vol.III (Revised), pp.

191 Brhatsamhitā, 10.5.9; XVI.32.

(ix) Carpentry:

The Contemporary literary sources bear testimony to the craft of wood-carving or carpentry in our period. Five synonyms are given for carpenter in the Amarakōśa (Taksā, Vardhaki, Tvastā, Rathakāra, Kasthatata).¹⁹² Mention of the term Rathakāra suggests that Chariot-makers (Rathakāra) were one among various groups of carpenters having expertise in the making of different items of woods exclusively. We come across in the Brhatsamhitā, reference to chariots having eight wheels.¹⁹³ The Amarakōśa gives two names for each village carpenter (Grāmadhinakā and Grāmatakṣa) and an independent carpenter (Kautatakṣa and Andhinakā). We are also informed about the tools of carpenters such as working bench,¹⁹⁴ (Udvan), chisel¹⁹⁵ (Vrksadani, Vrksavedi) and saw¹⁹⁶ (Krakaca and Karapatram). The Brhatsamhitā¹⁹⁷ refers to the carriage-makers (Yānakārā) which most likely was the work of a particular section of carpenters. We have also exclusive reference to carpenters (Vardhaki, Taksā) in it.¹⁹⁸ In Mudrārākṣasa Chanakya is seen mobilising all the carpenters of Pataliputra to prepare the palace and city-gates for Chandragupta on the occasion of his coronation.¹⁹⁹ A socketed

192 Amarakosa, 2.10.9.

193 Brhatsamhitā, Adh.43.S-7.

194 Amarakosa,

195 ibid,

196 ibid,

197 Brahatsamhitā, VI.17.

198 ibid, XLII.12, 19, 22, 29: LX-28, LXXXVII. 20,24.

199 Marshall, op.cit, vol.III, pp.551-52.

edge-head with bent, wryneck blade to facilitate the trimming of wood surface is reported from Jaulian site of Taxila (dated 5th C.A.D.).

The Br̥ghatsamhitā has some information on ship (Pota)²⁰⁰ and boat (Nau),²⁰¹ manufacturing of which appears to have been a flourishing craft in our period, for it was used both in internal and external trade. Besides, in transportation and warfare its utility was immense in those days. The references to the various types of cots and coaches²⁰² is also suggestive of the varied use of the carpenters craft in our period.

The Gunaighar inscription²⁰³ of Vainyagupta dated A.D. 507 points to the presence of carpenters in villages by way of demarcating the plot of a carpenter (Vardhaki ksetram). We have also evidence of carpentry in Silāppadikaram which describes the shop of a carpenter in a market.²⁰⁴ It also refers to boats.²⁰⁵

Bamboo-Workers and Basket-Makers:

Like timber, bamboos and canes were used for the making of household items such as furniture, baskets etc. The manufacture of furniture from canes and reeds was included by Vatsyayana in

200 Br̥ghatsamhitā, Adh. 48.Sl.12.

201 ibid, Adh.IV, Sl.8.

202 ibid, Adh.79, Sl.620-28.

203 Sircar, D.C., Select Inscriptions bearing on Indian History of Civilization, vol.I, Univ. of Calcutta, p.343.

204 Silappadikaram, pp.110-11.

205 ibid, p.136.

the list of sixty-four arts.²⁰⁶ It also mentions the making of carpets (Pāttikā Vetravān Vikalpā)²⁰⁷ and cushions for reclining (Saṣṭana Arcanam).²⁰⁸ In Kalidasa's work, too, we have evidence of cane chair (Vetrāsana).²⁰⁹ The Amarakosa mentions baskets hanging with the bamboo pole which were used for carrying goods from one place to another.²¹⁰ The Brhatsamhita²¹¹ refers to the winnowing basket (Sūrpa). In Silappadikaram we have reference to the palm-leaf basket,²¹² straw-granary,²¹³ winnowing fan,²¹⁴ and basket of straw.²¹⁵ In Sudraka's Padmaparābhrtakam, too we have evidence of winnowing fan, made of palm-leaves (Talavṛntam).²¹⁶

METALLIC CRAFTS

The technology of preparing metals from ores and fashioning different items of metals as also the use of alloys in required proportions had long been known in India. The sources of the Gupta period contain abundant references to items made out of different types of metals and to professions of different categories of metal workers. Adequate evidence on iron and on blacksmiths is available in the literary and archaeological sources of our period. The Amarakosa mentions seven names for

206 Kamasutra, pt.1, Chap.3, 15.

207 ibid, 3.

208 ibid.

209 Kumarasambhava, VI, 53.

210 Amarakosa, 2.10.30.

211 Brhatsamhita, Chap.VL.63, Chap. LXII.3.

212 Silappadikaram, p.161.

213 ibid,


214 ibid, p.167.

215 ibid, p.218.

216 Chaturbhani, p.14 & p.38.

iron (Lohā, Śastrakam, Ayas, Asmasāra, Pindam, Tikṣnam and Kālāyasam).²¹⁷ Two names Vyokāra, Lohakāraka, are mentioned for blacksmith.²¹⁸ Weapons, utensils or plough-share made from iron are known to the Amarakośa as Kuśi.²¹⁹ From Brahatsamhitā, we know about iron-vessel (Lohe pātre).²²⁰ Iron dust (Lohecūrne),²²¹ smell of iron (Lohagandhikā)²²² and iron weapon (Lohamaye Śastram)²²³ We also come to know about different household implements and utensils such as knife (Ksura),²²⁴ razor (Ksurpra),²²⁵ frying pan (Katāha),²²⁶ spades (Khanitram),²²⁷ sickles (Dātram, Lavitram),²²⁸ ploughshare (Niriśam, Kutakam, Phāla), Krsaka)²²⁹ and chain (Śrnkhalam, Anduka, Nigada).²³⁰ The Silāppadikaram²³¹ refers to a curved knife used for cutting green vegetables. Darvī is a term, mentioned in Brahatsamhitā, for spoon or ladle.²³² Possibilities of these utensils being made from iron can be substantiated by their occurrence in archaeological findings (which we will mention subsequently).

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- 217 Amarakosa, 2.9.98.
 218 ibid, 2.10.6.
 219 ibid, 2.9.99.
 220 Brahatsamhita, LXXVII.2.
 221 ibid,
 222 ibid, LIV.108.
 223 ibid, LIII.60.
 224 Amarakosa, 3.5.20.
 225 ibid,
 226 ibid, 3.521.
 227 ibid, 2.9.12.
 228 ibid, 2.9.13.
 229 ibid.
 230 Amarakosa, 28.41, Raghuvamsam, V.72.
 231 Silappadikaram, p.220.
 232 Brahtasamhita, VL.63.

We have in Amarakośa and in other literary sources evidence of weapons used in war. These include Sword (Khadga),²³³ Wheel (Cakra),²³⁴ axe (Paraśu),²³⁵ lance (Tomara),²³⁶ spike (Śakti),²³⁷ spear ²³⁸ and javelin.²³⁹ From Raghuvamśam we learn about helmet made of iron (Sirastrāna).²⁴⁰

In the Allahabad pillar inscription, it is reported that Samundragupta's body was marked by wounds, caused by the blow of battle-axes (Paraśu), spears (Śanku), pikes (Śakti), barbed darts (Prasa), swords (Asci), lance (Tomara), javelins (Bhindapāla), iron arrows (Narachā), and many other weapons.²⁴¹ The Brhatsamhitā informs us about iron weapons used for killing (शस्त्रमृत्युबन्धोन्नेन अयोद्यातं घातं).²⁴²

Literary texts of our period also refer to different types of tools, manufactured by iron-smiths for other craftsmen. We have mentioned some of these in the context of the description of other categories of crafts production. Apart from these, there are references to steel hammer known as Ayoghana.²⁴³ The Padatādikatakam, describes the sounds of hammering, coming from the shops of blacksmiths. Here also we come across references to iron-tools. (स्वरः स्नानुस्वारः परिपतति कम्भार-कुरुते । धृतं शरवे शस्त्रं रस्मति तुरगरवासपिरने)²⁴⁴ We have also mention of a butcher's shop where

233 Brhatsamhitā, L.I.II; Amarakośa, I.I.28; Chaturbhāni, p.15; Silappadikaram, p.91.

234 Brhatsamhitā, LXVIII.47.

235 ibid.

236 ibid. LXVIII.47

237 ibid.

238 Silappadikaram, p.148, 1944, 172; Brahatsamhitā, LXVIII.47

239 Silappadikaram, p.91.

240 Raghuvamśam, IV.64.

241 Fleet; Inscriptions of the early Gupta kings and their successors, (CII), vol.III, Indological Book House, Varanasi, India, 1970, pp. 6-7.

242 Brhatsamhitā, LIII.102.

243 Raghuvamśam, IV.33. 244. Chaturbhāni, p.167.

knives are suspended with walls.²⁴⁵ The Silappadikaram also mentions instruments for cutting ivory.²⁴⁶ We also find evidence of furnaces, and different items made from iron such as hooks, chains, iron arms, sharp poles, bundles of arrows, nails, needless and other implements.²⁴⁷

The Amarakosa, also refers to an image made of iron (Sthunā, Surmi, Ayahpratima).²⁴⁸ The literary sources of our period have abundant evidence relating to the use of bellows used by iron-smiths and other smiths. In the Amarakosa²⁴⁹ two terms occur for it : Bhastrā, Carmaprasevikā. In the Silāppadikaram,²⁵⁰ we find a simile depicting ladies breathing as heavily as bellows owing to their separation from their dear lords.

Archaeological findings from the sample sites representing different geographical regions of the sub-continent also testify the existence of crafts of iron-smiths throughout India in our period.

245 ibid., 167.

246 Silappadikaram, p.200.

247 ibid., 218.

248 Amarakosa, 2.10.35.

249 ibid. 2.10.33.

250 Silappadikaram, p.108.

Northern Region:

From different excavated sites of Taxila the iron artifacts include: (a) household utensils²⁵¹ like frying pan or Kavncha for making sweetmeat from Sirsukh (4th-5th century A.D.) and a bowl from Dharmarajika (5th century A.D.). Other household items²⁵² like bells from Dharmarajika and Jaulian (5th century A.D.), locks from Pippala (5th century A.D.) and an axle of spinning wheels from Mohra Maradu (5th century A.D.), (c) Weapons²⁵³ like Javelin from Mohra Maradu (5th century A.D.), spear head from Jaulian (5th century A.D.), spear-butt from Mohra Maradu (5th century A.D.), and arrow heads from Kunala manastry (500 A.D.). (d) tools - (i) a socketed adze-head with bent wryneck blade used by the carpenters for trimming the wood surface²⁵⁴ from Jaulian (5th century A.D.), (ii) knife or dagger²⁵⁵ from Mohra Maradu (5th century A.D.), (iii) tweezers²⁵⁶ from Giri (5th century A.D.), i.e. Miscellaneous items like door bosses²⁵⁷ from Jaulian and Dharmarajika (5th century A.D.), hooks²⁵⁸ from Mohra Maradu and Jaulian (5th century A.D.), clamps²⁵⁹ from Mohra Maradu and Jaulian (5th century A.D.), staples²⁶⁰ from sirkap and Dharmarajika (5th century A.D.), hinges²⁶¹ from Mohra Maradu and Jaulian (5th century A.D.), needles from **Giri (5th century A.D.)**.

251 Marshall, op.cit., vol.II, p.540.

252 ibid. 543-44.

253 ibid. 544-45.

254 ibid. 51-2.

255 ibid. p.554.

256 ibid. pp. 554-55-

257 ibid. pp.556-57.

258 ibid.

259 ibid. p.557.

260 ibid.

261 ibid. p.558

262 ibid. pp.558-59.

These sites have also yielded agricultural implements which include a spade²⁶³ from Jaulian (5th century A.D.), a sickle²⁶⁴ from Giri (5th century A.D.), and spuds²⁶⁵ (from Dharmarajika and Kunala manasteries).

Middle Gangetic Plains:

From sub-periods IV.21 to IV.24 (C.A.D. 235-585) at Kausambi²⁶⁶ iron objects comprise of arrow-heads and knives. Iron objects unearthed from periods IV and V (C.A.D. 300-600) at Kumrahar are in fragmentary and corroded state and their forms are unrecognisable.²⁶⁷ At Vaisali the iron objects discovered from the level of period IV (300-600 A.D.) include daggers, nails and sickles.²⁶⁸

Central and Western Region:

Iron objects from Devnimori (3rd to 5th century A.D.) include nails, arrow-heads, a spear head, knives, daggers, rings, a sickle, a chisel, a pick, a frying-trowel (Tavetha), scissors, a door chain and a hook, besides a dozen objects of indeterminate use.²⁶⁹

²⁶³ ~~ibid.~~ pp.559-60.

²⁶⁴ ~~ibid.~~ pp.560-61.

²⁶⁵ ~~ibid.~~, pp.559-60.

²⁶⁶ Sharma, G.R., op.cit., pp.45-56.

²⁶⁷ Altekar, A.S. & Mishra, V.K., op.cit. p.140.

²⁶⁸ Sihra, B.P. & Roy, S.R., op.cit., pp.199-200.

²⁶⁹ Mehta & Chowdhary, op.cit., pp.96-103.

A sizable number of iron-objects was recovered from period II (300 A.D. onwards) at Bhokardan. These are: a pan, a small pot, pairs of tongs, ladles, nails, chisels, a sickle, choppters, knives, a spike, arrow-heads, clamps and rivets.²⁷⁰

Eastern Deccan:

The late phase (4th-5th to 7th-8th century A.D.) at Salihundam yielded iron objects like nails, sickle, axe, nail, door hook.²⁷¹

Second to iron, working in copper, brass and bronze was perhaps the most important metal craft of our period. In Amarakosa, only the coppersmith is mentioned, along with the blacksmith and the goldsmith.²⁷² Six synonyms are mentioned for copper in Amarakosa (Tāmrakam, Sulbam, Mlechamukham, Dvyastam, Varīstam, Udumbaram).²⁷³ Amarakosa also refers to coppersmiths (Saulbika and Tāmrakuta).²⁷⁴ We also get evidence of brass in the text, (Rīti, Ārkuṭ).²⁷⁵ Mention of tin (Trapu, Piccatam, Raṅgam, Vaṅgam)²⁷⁶ can be taken to be suggestive of the production of bronze-items. The Silāppadikaram also refers to workers in copper and bronze²⁷⁷ and also to cauldrons smelting copper.²⁷⁸ The Padatādikatakam, included in the Chaturbhāni, also provides²⁷⁹ reference to the working in copper (कारस्य कट्टरविरुतानीव कुरुते). The Brhatsamhitā in one context, refers to heated copper (Tapta Tāmram).²⁸⁰

- 270 Deo and Gupte, op.cit., p.21.
 271 Subramanyam, op.cit., pp.112-13.
 272 Amarakosa, 2.10.8.
 273 ibid. 2.9.97.
 274 ibid. 2.10.9.
 275 ibid. 2.9.97.
 276 ibid. 2.9.105-6
 277 Silappadikaram, p.206.
 278 ibid., p.217.
 279. Chaturbhani, p.166.
 280. Brhatsamhitā, VI.13.

Copper-bronze objects from the Sirsukh and other sites of Taxila, which correspond to our period, include bangles, ear-rings, bell, chain, lamp, bowls and hairpins and spoon.²⁸¹ We have also a statuette of copper in relief depicting Maitreya Buddha seated cross-legged on pedestal and a solid bronze relief of the Buddha in the Dhyāna Mudra.²⁸² From Kumrahar personal ornaments of copper and bronze such as bangles, ear-rings, ear pendants are reported from the level of the period IV and V (C.A.D. 300-600).²⁸³ Apart from antimony rods, ear pendants, finger rings and bells have come out from period III (C.A.D. 300-600) at Vaisali.²⁸⁴ Copper objects from period III (3rd to 8th century A.D.) at Paunar include bangles, and rattles.²⁸⁵ Copper was used mostly for coins in Devnimori in our period (3rd-5th century A.D.). The other objects discovered from this site are fragments of bangles.²⁸⁶ At Bhokardan various objects of copper have been discovered from period II (300 A.D. onwards). These are: bangles, rings, anklets, antimony rods, ear ornaments, rattles, fishhooks and other objects.²⁸⁷ Moreover, the copper image of the Buddha found at Sultanganj and now kept in Birmingham Museum is a major example of the technical quality of coppercasting in those days and is suggestive of the existence of copper foundaries in our period.²⁸⁸ The bronze Buddha, now in the Boston Museum, and the image of Brahma in the Karachi Museum are also remarkable specimens of a

281 Marshall, J., op.cit., vol.II, pp.575-60.

282 ibid., vol.II, p.606.

283 Altekar, & Mishra, op.cit., p.130.

284 Sinha, B.P. & Roy, S.K., op.cit., pp.197-99.

285 Deo and Dhawalikar, op.cit., p.

286 Mehta & Chowdhary, op.cit., p.93.

287 Deo & Gupte, op.cit., p.22.

288 Agarwal, V.S., The Heritage of Indian art, publication division of Information & Broadcasting, 1964., p.30.

289
 bronze casting, representing this period. The other bronze specimens include images of Jivanta Swami and mother of Rishabhanatha of about 550 A.D.²⁹⁰ Jaina bronzes at Valabhi are also assigned to our period.²⁹¹

JEWELLERY:

Manufacturing of jewellery which involved working in gold, silver and precious stones was carried out by the goldsmiths. The literary sources of our period do not suggest division of work among more than one category of craftsmen. We do not, for example, have any reference to a separate category of silversmiths in our literary or lexical works. In the Mrcchakatikam, it is the goldsmiths who have been mentioned consulting among themselves regarding the various kinds of jewels.²⁹² In the Silāppadikaram too the manufacturer of the golden anklet, which was studded with precious gems, was a goldsmith.²⁹³

The goldsmiths made use of balance (Narācī, Esanikā)²⁹⁴ and touchstones (Sāna, Nikāṣa, Kasa)²⁹⁵ for weighing and testing the quality and quantity of stones and metals. Vraścana and Patraparāśu are the two terms which were used for the instrument for cutting gold and silver.²⁹⁶ Melting pot for gold and silver

289 *ibid.*

290 *ibid.*

291 *ibid.*

292 Mrcchakatikam of Sudraka, ed. & tr. by M.R. Kale, Motilal Banarásidas, Delhi 1982, Act. IV, p.165.

293 Silappadikaram, p.77, 112.

294 Amarakosa, 2.10.32.

295 *ibid.*

296 *ibid.*

was known as Taijasavartani and Mūsa.²⁹⁷ We have also evidence of the scissors used for cutting gold and silver (Krpāni, Kartari).²⁹⁸

The Brhatsamhitā²⁹⁹ gives the names of different materials which were shaped into beads: Diamond (Vajra), Sapphire (Indranil), emerald (Marakata), agate (Kekatar), Ruby (Padmarāga), Bloodstone (Rudhirākhyā), lapis-lazuli (Vaidurya), Amethyst (Pulaka), Quartz (Rāgamani), crystal (Sphatic), Opal (Gomeda), Conch (Sankha), Azwe-stone (Mahānil), Topaz (Pushparāgakhyā), Pearl (Muktā) and Coral (Pravāla). According to it, one category of gems was constituted by those which were obtained from the sea (Ratnaisca Sagara-Bhavai).³⁰⁰ It also refers to a necklace, made of pearl (Hāramani).³⁰¹ In the Kamasutra of Vatsyayana,³⁰² testing and valuing of precious stones etc. (Ruparatnaparipksa) and knowledge of precious stones etc. (Manirāga Karanjanam) including in the list of sixty four arts. Varāhamihir in his Brhatsamhitā has also dealt exhaustively with the quality, quantity and prices of different classes of diamonds, pearls and rubies.³⁰³ The Amarakosa mentions four names for emerald Gārutmatam, Marakatam, Asmagarbha, Hārinmani.³⁰⁴ two names for pearl (Mauktikam, Muktā),³⁰⁵ two names for coral (Vidrum, Pravāl).³⁰⁶ Ruby, Pearl, Berul, Opal, Coral, etc. are also included among the nine jewels in the Amarakosa.³⁰⁷ In Mrcchakatikam,³⁰⁸ we come across goldsmiths

297 ibid

298 ibid.

299 Brhatsamhita, chapt. 79.

300 ibid., chap. XII.2.

301 ibid., chap. XI.10.

302 Kamasutra of Vatsyayana tr. by D.G. Sastri, Banaras, 1929. part. I, chapt. 3.15.

303 Varahamihir, op.cit., chapt. LXXX-LXXXIII.

304 Amarakosa, 2.9.92.

305 ibid. 19.

306 ibid. 2.9.93.

307 ibid — Z

308 Mrcchakatikam of Sudraka, ed. & tr. by M.R. Kale, Motilal (cont.)

consluting among themselves regarding various kinds of jewels, such as lapis-lazuli (Vaidurya), pearls (Mauktika), corals (Pravāla), Topaz (Pushparāga), Sapphires (Indranila), Catseyes (Karketaraka), Rubbies (Padmarāga), Emerald (Marakata) etc. Rubbies were set in gold, golden ornaments were manufactured, pearl ornaments were strung on thread of red-silk, lapis lazuli were ground on whetting stones; these are some of the descriptions of processes involved in making jewellery items.³⁰⁹ The Amarakosa, refers to chisel, used in perforating these gems. Two words mentioned for it Asphotāni and Vedhānika.³¹⁰ We have reference to a prominent jeweller, named Visnudasa who was living in the city of Kusumpura.³¹¹ In the same work, we have Chandanadasa who is mentioned as the head of the guild of jewellers of Pataliputra. The Padmaprabhrtakam mentions necklace made of gems and pearls (Manimuktahār).³¹² It also depicts young female attendants and even common citizens adorned with jewellery of precious stones. The Silappadikaram is also replete with references to ornaments studded with precious stones.³¹³ It mentions a broad street with residences of those who polished shells and the conches were worn as ornaments.³¹⁴

We have evidence of occurrence of beads used in making jewellery of various kinds, from various excavated sites. The

308 (contd..) Banarasidas, Delhi, 1982, Act.IV, p.165.

309 ibid.

310 Amarakosa, 2.10.33.

311 Mudraraksasa of Visakhadatta (ed. & tr.) by V.B. Bedakar Bombay 1942, Act. II., p.56.

312 Chaturbhani, p.114.

313 Silappadikaram, pp.77, 112, 126, 224.

314 ibid., p.112.

CHAPTER - III

STATE OF CRAFTS PRODUCTION IN THE GUPTA PERIOD : AN ARCHAEO- LOGICAL ASSESSMENT

In this chapter we propose to undertake an analysis of the state of crafts production in the Gupta period, using only archaeological material yielded by excavated levels which archaeologists assign to the Gupta period. This implies that the Gupta period material will be compared, although briefly, with material from the preceding period, keeping in view both the criteria of quality and quantity. However, we admit that we have limited this investigation only to such items as are of regular occurrence in the early historical archaeological contexts.

Northern India :

Gupta period pottery from stratum III (350-750 A.D.) at Ahichchatra is reported to come from four phases of occupation : a, b, c and d. The alphabets correspond to four distinct phases of occupation from the latest to the earliest in stratum III. The ceramics of the two earlier phases (c and d) form a family group with the stratum IV corresponding to the period between C.A.D. 100 and A.D. 350. The d stage was virtually identical with the earlier stratum. So far as pottery types are concerned there is strong affinity between stratum III (C.A.D. 350-750) and stratum IV (C.A.D. 100-350) Bowls, miniature jars, bottle-necked jars are common examples in both the strata.¹

1) Ghosh, A. and Panigarhi, K.C., op.cit., pp.46-9.

The whole of stratum IV (C.A.D. 100-350) and the d stage of stratum III (C.A.D. 350-450) are marked by conspicuous absence of mould-made vessels while the later three stages (c, b & a) of stratum III (450-750 A.D.) are the most fruitful ones in terms of mould technique.² Again we have in the last three phases of stratum III (C.A.D. 450-750) occurrence of a large number of painted sherds but mould-made decorated vessels appear only in the last two stages of occupation of stratum III (C.A.D. 550-750) and show a distinct refinement in pelting and decoration from stage IIIb (C.A.D. 450-550).³

Multiplicity in forms and designs of terracottas from stratum III (A.D. 350 to 750) as compared with the material from stratum IV (A.D. 100 to 350) is registered at Ahichchatra. Figurines of many new deities which were unknown to stratum IV (A.D. 100 to 350) owe their genesis in stratum III (A.D. 350-740).⁴ Images of gods and goddesses such as Visnu, Surya, Ganesa, Kārtikeya, Kubera, Narasimha, Mahisasuramardini, etc. appeared for the first time in stratum III and continued upto stratum I (A.D. 850 to 1100).⁵

Middle Gangetic Plain :

Typologically, the ceramic wares at Rajghat in period IV (C.A.D. 300-700) are generally not different from the preceding

2 *ibid.*

3 *ibid.*, p.50.

4 See chap. II, pp.

5 Ancient India, no.4, pp.126ff.

period III (C.A.D. 100-300) as the Redware, the singular pottery type of the period III (A.D. 100-300), continued to dominate the scene in period IV.⁶ We have also from the strata of our period a few blackish grey sherds which were the result of the rejuvenation of the technology of firing under reducing condition. This feature was noteworthy, as the practice of producing utensils under reducing conditions which slowly died in period II (3rd - 2nd century B.C.) and totally disappeared in period III (100-300 A.D.), appears to have been revived in period IV⁷ (C.A.D. 300-700).

The pottery from the level of period IV (300-700 A.D.) at Rajghat was invariably wheel-made. The application of lustrous red slip which was confined only to the long-necked vessels in period III (A.D. 100-300) was applied for the first time to other vessels in period IV (A.D. 300-700).⁸ The study of pottery as a whole reveals slight improvement over the preceding industry in shaping and surface treatment. The pottery-types of the preceding period such as handled vases, lids with vase-shaped central depression, lids with cylindrical knob, knobbed lids, dishes and carinated cooking handis continued, although with slightly modified forms. Decoration on the carination point of the cooking Handis is noticed for the first time in period IV (A.D. 300-700). The incidence of miniature pots is more in this period than in the preceding one.⁹

6 Narain and Roy, op.cit, p.63.

7 *ibid.*

8 *ibid*, p.64.

9 *ibid.*

Although the yield of decorated sherds in period IV is less in number, the design executed in each mode of decoration showed further improvement, as compared to period III.¹⁰ Even the thumb-tip and cord designs showed further development.¹¹

Considerable progress is also seen in the art of clay-modelling. The animal figurines of the period III (100-300 A.D.) appear to be crude when compared to the finely executed figurines of period IV (300-700 A.D.). The modelling technique of making figurines is a new feature in period V at Rajghat.¹²

From Kumrahar, most of the pottery items such as basins, bases, bowls, dishes, lids, etc. are reported from periods I to IV (150 B.C. - 450 A.D.)¹³ but the basins from the level of our period are not as good in workmanship as those of the earlier periods. The vases from all the periods are made of clay mixed with mica.

Most of the terracotta objects from Kumrahar are made from moulds. Period-wise, we find that the total output of the periods III & IV (C.A.D. 100-450) is by far the largest.¹⁴ An interesting group of terracottas, known as NAIGMESA figurines, are antecedent to their counterpart in Ahichchatra, and they all, except two, belong to period IV (C.A.D. 300-450).¹⁵ We have also a number of

10 *ibid.*, p.100.

11 *ibid.*, p.101.

12 *ibid.* p.29.

13 Altekar, A.S. & Mishra, V., *op.cit.*, p.59.

14 *ibid.*, p.108.

15 *ibid.*, p.109.

figurines of deities like VISHNU, GANESA etc. from period IV. Besides, we come across terracotta animals,¹⁶ terracotta cones,¹⁷ skin rubbers¹⁸ and other minor antiquities¹⁹ in good numbers. Majority of these belong to our period.

There is a basic difference between the ceramic industry of period IV (C.A.D. 300-600) and that of the preceding period (A.D. 100-300) in Vaisali. More decorations on the sherds are seen during our period, but the fabric had deteriorated. The polished bright wash or red slip was replaced by another red slip which produced a weaker effect.²⁰

Central and Western India :

The excavation at Brahmapuri in Western India yielded several pottery forms which appeared in the preceding Sātavāhana period and continued throughout the post Sātavāhana period assignable to 4th to 9th century A.D. Several new forms which owe their inception to this period developed more conspicuously in the succeeding period.²¹ There are several individual types of this period which do not occur at either any of the preceding or any subsequent phases of the site.²²

16 *ibid.*, p.119

17 *ibid.*, p.125.

18 *ibid.*, p.126.

19 *ibid.*, p.130.

20 Deva, Krishna & Mishra, V.K., *op.cit.*, p.18.

21 Sankalia, H.D. & Dikshit, M.K., *op.cit.*, pp.57-58.

22 *ibid.*, p.58.

One of the outstanding features of the pottery of this period at Brahmapuri is the wide range and variety of forms. Both in fabric and in finish they offer a pleasing contrast to the rough and coarse wares of the subsequent periods. Several vessels of this period were baked through the inverted firing process.²³ Vessels with a secondary ridge near the shoulders with a reapplied coating at the base seem to have been introduced in the post Sātavāhana period.²⁴ Tall-necked jars became more and more predominant and were developed from Sātavāhana pottery of the preceding period.²⁵ A qualitative and quantitative analysis of beaded ware shows its probable origin in the Sātavāhana period and a maturity in the subsequent period (a period of somewhere between 4th and 9th century A.D.).²⁶

The pottery from period III (3rd to 8th century A.D.) at Paunar in Vidarbha is the largest in bulk among all the periods of occupation at this site.²⁷ Apart from other fabrics which were continuities from the preceding period, the ware with red wash appeared for the first time in period III (3rd to 8th century A.D.). The burnished tan ware is better represented in our period than in the earlier ones.²⁸

23 *ibid.*

24 *ibid.*

25 *ibid.*

26 *ibid.*, p.59.

27 Deo, S.B. & Dhavalikar, M.K. *op.cit.*, p.49.

28 *ibid.*, p.51.

The ceramic characteristics of period II (300 A.D. onwards) at Bhokardan represented continuities from the earlier phase. All the fabrics and shapes recorded in period Ib (I century B.C. to 2nd/3rd century A.D.) are repeated here. Pans, basins, domical cones, stands, etc. noticed in the horizons of period Ib, were still the dominant types. Wares, such as the Kaolin, decorated and red-polished, are well represented.²⁹ "Ware with highly burnished Indian red slip" is a new ware introduced in period II and is not met with in the period Ib.³⁰ In addition to the earlier technique, period II is marked by the application of two more techniques in the making of decorated pottery. These are techniques of stamping a design and painting in dull black over highly burnished red-slipped surface.³¹

Terracotta objects from Bhokardan are quantitatively better represented in period II (A.D. 300 onwards) than in the preceding one (period Ib). Terracotta figurines representing male, female and cult goddess, whether single-moulded, double-moulded or hand made, are almost equitably distributed in period II and the period Ib.³² Also the change of technique which is visible in the making of double-moulded figurines of period Ib are represented in period II in the same quantum.³³

29 Deo, S.B. & Gupte, R.S., op.cit., p.106.

30 *ibid.*, p.111.

31 *ibid.*

32 *ibid.*, pp.144-47.

33 *ibid.*, p.146.

The singular stratified terracotta plaque belongs to period II.³⁴ Two ageless figurines are also reported from period II only.³⁵ The occurrence of a large number of toys from period II proves that the output in this period was more varied and higher than of the preceding one.³⁶

Toys-specimens	Period Ib (I century B.C. to 2nd/ 3rd century A.D.)	Period II (A.D. 300 onwards)
Bull	5	16
Bear	-	1
Elephant	4	1
Horse	3	2
Bird-like figures	2	5
Total	14	25

The figurines made from Kaolin are better represented in our period than in the preceding one (4:1).³⁷

The period-wise distribution of ear-ornaments of terracotta shows that our period had an edge over the preceding one. One hundred and nineteen ear-ornaments belong to our period compared to eighty from the preceding period.³⁸

34 *ibid*, p.148.

35 *ibid*,

36 *ibid*, pp.150-3.

37 *ibid*.

38 *ibid*.

Similarly, out of 122 terracotta bangles recovered, seventy seven are from our period while 39 come from the preceding period.³⁹ Each period, the preceding as well as ours, is represented by two terracotta rings.⁴⁰

The following CHART shows period-wise distribution of other terracotta objects.⁴¹

	Period I (I century B.C. to 2nd/ 3rd Centuries A.D.)	Period II (A.D. 300 onwards)
1. Miniature pots, bowls and lids	12	13
2. Gamesman	24	12
3. Pottery dishes	16	21
4. Menbles	9	13
5. Wheels	13	5
6. Skin rubbers	6	3
7. Crucibles	6	6
8. Votive-tanks	6	9
Total	92	82

The groups of pottery from the late phase (4th/5th century to 7th/8th century A.D.) which also overlapped the preceding

39. *ibid*, p.159.
 40. *ibid*, p.160.
 41. *ibid*, pp.160-6.

Middle phase (I century A.D. to 3rd/4th century A.D.) at Salihundam do not reveal any marked change when compared to that of the former phase, rather ceramic industry seem to show degeneration in some respects.⁴² It lacks sophistication which distinctly is revealed from the soot stained exteriors of the sherds.⁴³ The rouletted ware, abundantly found in Middle phase, totally disappeared in late phase.⁴⁴ Terracotta objects, from Salihundam came from all the three phases and objects like ear-ornaments and gamesmen have come out from late phase only.⁴⁵

Iron Objects:

The incidence of iron objects representing both the strata assigned to our period and the preceding period at the different excavated sites of Taxila betrays similarity in the manufacture of the items of varied utilities. This can be taken to be suggestive of the fact that manufacture of iron objects did not die out in our period. The following is a chart which attempts to indicate the incidence of important iron objects indispensable for daily life. These objects occur both at the Saka-Kuṣāṇa city of Sirkap and at other sites having strata assignable to our period.

42 Subramaniam, R., op.cit, p.35.

43 *ibid.*

44 *ibid*, p.67.

45 *ibid*, pp.100-5.

Object	Sirkap Strata II & III (Late Saka - and early Kusāna period) . . .	Sirsukh and monastic sites (Late Kusāna and Gupta period). . .
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HOUSEHOLD OBJECTS

1. Bowl	3	1 Dharmarājikā (5th century A.D.)
2. Frying pan	-	1 Sirsukh (4th/5th century A.D.)
3. Bells	5	2 one each from Dharmarajikā and Jaulian (5th century A.D.)
4. Locks, Keys & Lock plates	3	1 from Pippala
5. Axle of spinning	-	1 from Mohra Maradu (5th century A.D.)

ARMS AND ARMOURS

6. Javelin	2	1 from Mohra Maradu (5th century A.D.)
7. Spearhead	1	1 (from Jaulian (5th century A.D.)
8. Spearbutt	-	1 from Mohra Maradu (5th century A.D.)
9. Arrowhead	3	3 from Kunala monastery (5th century A.D.)

CARPENTERS' OR BLACKSMITHS' TOOLS

10. Adzes	2	1 from Jaulian (5th century A.D.)
11. Knife	4	1 from Mohra Maradu (5th century A.D.)
12. Tweezers	1	1 from Giri (5th century)
13. Clamps	2	2 one each from Mohra Mara- du and Jaulian (5th century A.D.).

14. Staples	1	3	one from Sirkap and two from Dharmarajikā (5th century A.D.)
15. Hinges	1	3	from Mohra Maradu and Jaulian (5th century A.D.)
16. Nails, door bosses & Hooks	1 nail & 3 door	8	door bosses & hooks from Jaulian and Dharmarajikā (5th century A.D.).
17. Chains	1	2	from Kunala and Jaulian (5th century A.D.).

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18. Spuds	4	2	one each from Dharmarajikā & Kunala (5th century A.D.).
19. Spades	1	1	from Jaulian (5th century A.D.).
20. Sickles	2	1	from Giri (5th century A.D.).

Middle Gangetic Plain:

From Kausambi the number of iron arrow-heads reported from different strata is 370. These have been put into eleven categories. The first four categories (A, B, C & D) are much more numerous and constitute seventy-five per cent of the total number of arrow heads - 85, 84, 76 & 38 respectively. Their occurrence begins in cultural period III (605 B.C. to 45 B.C.) and continues upto the end of the occupation of this site in cultural period IV (45 B.C. to A.D. 580)⁴⁶. The next four types (E, F, G & H), though not so numerous, follow the pattern

of occurrence of first four⁴⁷ categories.

The Kumrahar excavations have yielded iron objects from all the levels⁴⁸ but due to corrosion their types are unidentifiable. The majority of iron objects from Vaisali, which include, dagger, nail, bangle and sickle, belong to period IV⁴⁹ (A.D. 300-600).

Central and Western India:

A periodwise study of finds from Bhokardan shows that our period is almost on par with the preceding period in terms of the occurrence of various types of iron objects.⁵⁰ The following is a chart showing periodwise occurrence of iron objects at Bhokardan.

CHART SHOWING THE DISTRIBUTION OF IRON OBJECTS

Object	Period Ia (C.2nd-3rd century B.C.)	Period Ib (1st cen- tury B.C. to 2nd/3rd century A.D.)	Period II (A.D.300 onwards)	Total
1. Pan	-	-	1	1
2. Small Pot	-	-	1	1
3. Pairs of Tongs	-	1	1	2
4. Ladles	-	3	-	3

..contd

47 *ibid.*

48 Altekar, A.S. & Mishra, V.K., *op.cit*, p.140.

49 Sinha, B.P., & Roy, S.R., *op.cit*, pp.199-200.

50 Deo, S.B. & Gupte, R.S., *op.cit.*, p.179.

5. Dish	-	1	1	2
6. Shovels	2	-	-	2
7. Bowls	-	2	-	2
8. Nailparers	1	2	3	6
9. Chisels	3	5	2	10
10. Sickles	1	3	1	5
11. Choppers	-	2	-	2
12. Knives	-	4	3	7
13. Knives (small)	-	1	1	2
14. Spikes	-	1	1	2
15. Arrowheads	4	2	7	13
16. Clamps	4	13	6	23
17. Rivetts	-	-	2	2
18. Nails	9	23	33	65
19. Miscellaneous	-	7	2	9
20. Fragments (Unidentified)	11	35	31	77
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TOTAL	33	107	95	235
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The Paunar excavations show that the incidence of iron became high from the period IIb (1st century B.C. to 2nd/3rd century A.D.) and which continued with improved pace in period III (3rd to 8th century A.D.).⁵¹ The following chart shows the periodwise occurrence of iron objects from this site:

51 Deo, S.B. & Dhawalikar, M.K., op.cit, p.92.

Objects	Period IIa	Period IIb (1st century B.C. to 2nd/ 3rd century A.D.)	Period III (3rd century to 8th cen- tury A.D.)	Period IV	Total
Nails	3	5	18	2	28
Blade fragments	3	3	5	1	12
Chisels	1	-	2	-	3
Sickles	2	-	2	-	4
Arrowhead	-	1	-	-	1
Spearhead	-	1	-	-	1
Rings	2	-	3	-	5
Bangle	-	1	-	-	1
Hooks	-	1	-	1	2
Clamps	-	1	-	-	1
Unidentified	1	-	-	-	1
Total	12	15	31	5	

BEADSNorthern India:

Beads which were one of the most important ingredients for making finished jewellery items are represented by fifty seven specimens at the Sirsukh⁵² of Taxila which is assignable to our period. Although numerically this number stands nowhere near the total of 4,734⁵³ beads recovered from the late Saka and early Kusāna level of Sirkap site at Taxila, a tally of the beads of some of the important materials found at both the sites is suggestive of their continued manufacture up to our period.

Material	Sirkap (Late Saka and early Kusāna period)	Sirsukh
Agate	111	7
Carnelian	215	11
Jasper	20	2
Lapis Lazuli	28	3
Crystal Quartz	91	2
Shell	1,144	18
Faience	198	5
Glass (colourless)	2,769	5
Glass (blue)	203	1
Glass (black & red)	22	1

Note: This chart does not include beads reported from monasteries which have yielded a good number of objects belonging to our period.

52 Marshall, op.cit, vol.I, p.220.

53 ibid, vol.II, p.734.

Middle Gangetic Plain:

Rajghat yielded 2472 beads. The following periodwise comparison of beads shows that beads production suffered slight quantitative decline in our period.⁵⁴

Material	Period III (1st century to 3rd century A.D.)	Period IV (3rd to 7th century A.D.)
Agate	30	14
Amethyst	3	1
Bone	3	4
Carnelian	25	9
Chalcedony	9	5
Chert	17	12
Coral	3	4
Crystal	8	8
Faience	35	7
Glass	56	59
Ivory	4	1
Jasper	3	1
Lapis-Lazuli	7	9
Paste	-	1
Quartz	3	2
Shell	387	357
Total	603	496

54. Narain, A.K. & Roy, T.N., op.cit., part.III, p.21.

Numerical decrease in the occurrence of beads is also visible at Kumrahar in the first half of our period which further gets pushed down in the second half (period IV to period V).⁵⁵

Materials	Period I	Period II	Period III (100 A.D. to 300 A.D)	Period IV (300 A.D. to 450 A.D)	Period V (450 A.D. to 600 A.D.)	Total
Agate		2	5	4	2	13
Amethyst		1				1
Carnelian		1	1	1	3	6
Chalcedony		-	5	1	1	7
Crystal (Quartz)			11	3	2	16
Copper		1	1			2
Glass			13	11	2	26
Granite (Stones)			1			1
Jasper		1				1
Light stone		3	1			4
Soap stone			2			2
Stone			1	1		2
Opal			1		1	2
Plasma		7	43	22	11	83

The Vaisali excavations yielded a total of ninety-three beads distributed period-wise as follows:⁵⁶

Material)	Period II (C.100 B.C. to 100 A.D.)	Period III (C.100-300 A.D.)	Period IV (C.300- 600)
Faience	8	1	
Glass	8	2	2
Soap Stone			1
Terracotta	10	12	17
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	18	15	19

In an another published report of Vaisali excavation⁵⁷ a total of one thousand four hundred and twelve beads of diverse materials from the different levels of the site has been reported. Of these, only 251 representative specimens have been illustrated; others being duplicates are not included in the illustrations.

56 Krishna Deva, op.cit., p.61.

57 Sinha, B.P. & Roy, S.R., op.cit., p.172.

The following is the periodwise distribution of beads from the second round of Vaisali excavations.⁵⁸

Material	Period III (100-300 A.D.)	Period IV (300-600 A.D.)
Amethyst	8	4
Carnelian	14	9
Crystal	21	12
Agate	17	7
Jasper	14	4
Chalcedony	4	3
Steatite	-	3
Chert	4	2

Central and Western India:

One hundred and seventeen beads representing 13 materials have been collected from different stratified deposits of Paunar. The pattern of their period-wise distribution is illustrated in the following chart:⁵⁹

58 *ibid*, pp.172-291.

59 Deo, S.B. & Dhawalikar, *op.cit*, p.77.

Materials	Periods				SURFACE	TOTAL
	IIa	IIb ⁺	III [*]	IV		
Agate	-	-	2	-	5	7
Calcite	-	-	1	-	-	1
Carnelian	-	-	1	1	16	18
Chalcedony					8	8
Coral	1					1
Crystal			1		1	2
Garnet			1		1	2
Glass	1	1	10	8	11	31
Jasper					2	2
Lapis Lazuli					1	1
Marble		1	1			2
Shell			4	4	3	11
Terracotta	1	3	16	4	1	25
	3	5	37	17	55	117

+ (1st Century B.C. to 2nd-3rd century A.D.)

* (3rd A.D. to 8th century A.D.).

The above chart shows that bead-making activity started in period IIa (3rd century B.C. to 1st century B.C.) but gathered maximum momentum in period III (3rd century A.D. to 8th century A.D.) as the largest collection belongs to the horizons of this period. There is a decline not only in the number of beads but also in the range of material in subsequent period IV (10th-11th

century to 15th century A.D.). Moreover, a study of the bead-collection from Pauniar shows that it was possibly a bead-making site in period III (3rd century A.D. to 8th century A.D.). During this period it received from outside bead-making material like lapis-lazuli and coral.⁶⁰

Bead-manufacturing crafts seems to have attained climax in the period Ib assigned to 1st century B.C. to 2nd/3rd century A.D. at Bhokardan in terms of technological perfection achieved by the craftsmen.⁶¹ This is testified by the find of two moulds,* for bead-making and of possibly a bead polisher. However, a period-wise comparison between period Ib (1st century B.C. to 2nd/3rd century A.D.) and period II (C.A.D. 300 onwards) of occurrence of beads shows that this craft did not receive a setback in period II.⁶² The numerical distribution of beads made of different materials is shown in the following table:

Materials	Period Ib (1st century B.C. to 2nd/3rd century A.D.)	Period II (3rd century onwards)
Agate	8	20
Carnelian	20	21
Amethyst		1
Crystal	13	26
Faience		4
Lapis Lazuli	2	1
Shell	109	191

* Both the moulds are made of soapstone. However, one is broken. Both are rectangular. The intact-one has channels for excess drainout and shallow-channels for lift up. These moulds were meant for terracotta and possibly metal beads.

60 *ibid*, p.85.

61 Deo and Gupte, *op.cit.*, p.140.

62 *ibid*, pp.125-27.

The yield of beads at Salihundam is not much. Altogether fiftyfive beads were recovered from different phases (late phase (4th - 5th to 7th - 8th century A.D.) - 18, middle phase (1st to 3rd/4th century A.D. - 26, Early phase - 2nd - 3rd century B.C. to 1st century A.D.) - 7 unstratified - 4. Materials used are Crystal, Quartz and Terracotta. A solitary specimen of a crystal bead and two quartz beads significantly came from the late phase. The majority of the beads (53) are of terracotta and they appear in large proportions in the late phase.⁶³

Copper

Northern Region :

A great variety of ornaments and household utensils, unearthed from late Saka and early Kusana stratum of Sirkap, were copies of Gree Roman originals. In contrast with them the copper and bronze objects recovered from Sirsukh and Buddhist monasteries such as Mohra: ~~Maradu~~, Jaulian, Kunāla etc. which have stratum corresponding to the Gupta period are almost exclusively Indian in character.⁶⁴

The following chart compares some of the important copper objects found from the level assigned to the preceding period at Sirkap and to those of our period at Sirsukh and at other monasteries.⁶⁵

63 Subramaniyam, R., op.cit., p.97.

64 Marshall, op.cit, vol.II, pp.574-75.

65 ibid., pp.375-606.

OBJECTS	LATE SAKA AND EARLY KUSANA PERIOD AT SIRKAP (1ST CENTURY A.D.)	SIRSUKH AND MONA- STERIC SITES (LATE KUSANA AND GUPTA PERIOD)
Bangles, bracelets and armlets	7	2 one each from Mohra Marden and Kunala (5th cen- tury A.D.).
Ear rings	1	1 from Kunala mona- stry (5th century A.D.).
Bowls	8	6 all from Dharma- rājikā, dated on the basis of Gupta Brahmi letters inscribed on them.
Spoons	8	2 one each from Mohra Maradu and Jaulian (5th century A.D.).
Chains	2	1 from Jaulian (5th century A.D.).
Finals or Votive Stupas	1	2 from Jaulian (5th century A.D.).

Middle Gangetic Plain :

Three antimony rods of copper are reported from the preceding period III (A.D. 100-300) while five specimens belong to period IV and V (A.D. 300-600) at Kumrahar (Patna).⁶⁶ Both the preceding period and our period have yielded one amulet of copper each from this site.⁶⁷ Further, antimony rods of copper of various shapes and designs are reported in the largest number from the

66 Altekar, op.cit., p.135.

67 ibid., p.136.

levels of period IV (A.D. 300-600) followed by the finds at the preceding period III (A.D. 100-300) at Vaisali.⁶⁸ Two finger rings, one each from the preceding and our period, and four bells of copper, two each from the preceding and our period, have turned out from Vaisali.⁶⁹ Other copper objects such as bangles, rings of copper wires, hooks and nail-pare~~ns~~ have been reported from both the preceding period and our period in almost equal numbers.⁷⁰ However, one specimen each of bowl and ear-pendant of copper belong to the preceding and our period respectively.⁷¹

Central and Western India :

At Paunar, the largest number of copper objects are reported from the strata assignable to our period.

This is shown in the following chart.⁷²

OBJECTS	PERIOD				TOTAL
	IIa	IIb*	III ⁺	IV [@]	
Finger rings		4			4
Bangles	1	1	7		9
Leg ornaments				3	3
Antimony rods	1				1
Rattle			1		1
Rod			1		1

* Period IIb - 1st century B.C. to 2/3rd century A.D.

+ Period III - Between 3rd century A.D. & 8th century A.D.

@ Period IV - 10th-11th century A.D. to 15th century A.D.

⁶⁸ Sinha, B.P. & Roy, S.R. op.cit. pp.145-96.

⁶⁹ ibid., p.199.

⁷⁰ ibid., p.197.

⁷¹ ibid.

⁷² Deo, S.B. & Dhawalikar, M.K., op.cit., p.96.

Also the copper objects reported to be of period II from Bhokardan are the largest in number. The following is a chart showing period-wise occurrence of copper objects from this site.⁷³

COPPER OBJECTS FROM BHOKARDAN

OBJECTS	PERIOD			UNSTRATIFIED	TOTAL
	Ia (1st Century B.C to 2/3rd century A.D.)	Ib	II (A.D. 300 onwards)		
Bangles		3	6		9
Rings		7	3	1	11
Anklet			1		1
Antimony Rods	1	3	5		9
Ear Ornaments	1	7	4		12
Jingling Bells or Rattles		3	1	1	5
Small pots		3		1	4
Fish Hooks		3	1	1	5
Tooth cum ear pick			1		1
Bells		2			2
Unidentified specimens	2	21	31		54
	4	50	55	4	113

Period Ib - 1st C-B-C to 2nd-3rd C.A.D.

Period II - 3rd C.A.D. onwards.

73 Deo, S.B. & Gupte, R.S., op.cit., p.180.

Stone Objects :

Numerically our period is poorly represented by stone objects at Taxila⁷⁴ in the northern part of the Indian sub-continent. However, occurrence of some of the objects which were extremely necessary for day to day life is suggestive of their continued manufacture in our period. We have, from the level of our period at Taxila, grinding mills,⁷⁵ lamps⁷⁶ and potters Konoras and Thatwas. The stone objects from Paunar in Vidarbha are confined to our period only.⁷⁷ Our period was not much inferior in terms of the manufacturing of stone objects used for daily domestic life at Bhokardan⁷⁸ in Western India. This can be shown by the following chart. :

PARTICULARS	PERIOD			UNSTRATIFIED	TOTAL
	I	Ib (1st-3rd-4th century AD)	II (A.D. 300 onwards)		
Legged Querns		6	5	7	18
Saddle Querns		3	2	4	9
Mullers	1	22	13	37	73
Rotary Querns		1	3	5	9
Mortar			1		1
Dabbers	1	3	3		7
Sharpeners		4	3	2	9
Skinrubbers		11			11
Bead-polishers		1		1	2
Rubber stone					
Or cakes		1	2		3
Stone bells		4	1		5

74 Marshall, J., op.cit., vol.II, p.482.

75 ibid., p.488.

76 ibid., pp.500-501.

77 Deo, S.B. & Dhawalikar, M.M., op.cit., p.108.

78 Deo, S.B. & Gupte, R.S., op.cit., p.180.

Glass:

Non-publication of the archaeological data from the excavated sites is a very serious handicap in our assessment of the state of the manufacture of glass-items in Gupta period. However, a comparison between the crafts items belonging to the horizons of preceding and of our period at different excavated sites can help us comprehend the state of the manufacture of glass items in the Gupta period as against the preceding phase.

Middle Gangetic Plain:

Period IV (3rd to 7th century A.D.) at Rajghat⁷⁹ does not appear to be inferior in the manufacture of glass-beads. This period has yielded 59 glass beads as against 56 from the horizon of period III (C.A.D. 100-300).

The manufacture of glass beads seems to be receding after period III (C.A.D.100-300) at Kumrahar. Out of total 26 beads recovered from the Kumrahar Excavations, 13 belong to Period III (C.A.D.100-300), 11 to period IV (C.A.D.300-450) and 2 to period V (C.A.D.450-600).⁸⁰ However, at Vaisali, the manufacture of glass beads does not indicate a downward trend. Each of period III (C.A.D.-100-300) and period IV (C.A.D.300-600) is represented by 2 glass beads.⁸¹

79 Narain and Ray, part III, p.21.

80 Altekar and Mishra, op.cit, p.132.

81 Krishna Deva and Mishra, op.cit, p.61.

Central and Western India:

The manufacture of glass-beads appears to have received tremendous boost in period III (3rd century A.D. to 8th century A.D.) at Faunar of total 31 glass-beads discovered from this site, period III claims 10 while only 2 came from the horizon of period IIb (1st century B.C. to 2nd-3rd century A.D.).⁸² At this site the manufacture of glass-beads started in preceding period IIb but picked up maximum momentum in period III as the succeeding period IV (10th-11th century A.D. to 15th century A.D.) has yielded less number of glass-beads (only 8). Also the manufacture of monochrome glass bangles began in period III only at this site.⁸³ These are of varied colours: opaque black, turquoise blue, opaque yellowish-green and sea-green specimens of all these colours have been discovered only from the horizons assigned to period III (3rd to 8th century A.D.) and period IV (11th-12th to 15th century A.D.).⁸⁴

The post Satavahana horizon assignable to the period A.D. 300-800 at Brahmapuri (Kolhapur) has yielded glass slag and a number of unfinished beads of various stages of manufacture.⁸⁵ This suggests the manufacture of glass items at this site in the Gupta period.

82 Deo and Dhawalikar, op.cit, p.77.

83 Ibid., pp.103-108.

84 ibid.

85 Sankalia and Diksit, op.cit, p.98.

Majority of glass antiquity at Bhokardan belong to period II (A.D. 300 onwards).^{86/6} These comprised mostly bangles having three categories - monochrome, bio-chrome and poly-chrome. Of 222 monochrome glass bangles, most of these came from the horizon of period II while only a few belong to period Ib. (1st century B.C. to 2nd/3rd century A.D.). Colours employed on them show quite a range such as black, violet, yellow, sap-green, blue, purple and white. The black and violet glass bangles were most abundant in the late phase of period II. 290 pieces, 241 belong to period II while only 46 to period Ib.^{88/7}

A good amount of glass slag and vitrified glass fragments were found in the horizon of period II. This testify the manufacture of glass at this site in the Gupta period.^{88/8}

The above comparative assessment between the glass-items representing the horizons of Gupta period and ^{of} preceding period at the excavated sites from the different geographical zones of Indian sub-continent, does not show any downward trend in the manufacture of glass items. So, we would like to have the liberty to differ with the conclusion derived by M.G. Dikshit that in the Gupta-Vakata period glass industry in India had declined to such an extent that glass was not valued and was little cared for.^{89/}

86 *ibid*, Dev and Joshi, *op.cit*, p.197.

87 *ibid*, p.198.

88 *ibid*, p.201.

89 Diksit, M.G. History of Glass, University of Bombay, 1960, pp.59 & 63.

Summing Up :

Since the archaeological sites which we have selectively chosen for our theme of enquiry have been excavated vertically, they do not present a comprehensive or fully dependable data about the crafts items manufactured in our period. Secondly, a higher incidence of various crafts items from the levels assigned to our period may not necessarily reflect an increase in their production in our period. However, if we rely on the present data available from the excavation reports of various sample sites representing different geographical zones of the Indian sub-continent, the use of various craft items does not appear to have declined either qualitatively or quantitatively in our period as compared to the preceding one. There would, of course, be a few exceptions to this generalization. For example, the yields of beads from the Gupta phase from the sample sites suggest a downward trend, while studies on other items appear to provide a different pattern.

In terms of typology, technology, fabric and finish a comparison between the craft of pottery making in the preceding period and that in our period reveals an overall improvement in our period. Barring Kumrahar, Vaisali and Salihundam which show inferior workmanship in some respects in the making of pottery, all the other chosen sites show technological improvement in our period. Our period at Rajghat is marked by the rejuvenation after a break of five hundred years, of the technology of firing of pottery under reducing condition which resulted in the production of blackish grey sherds. Also decoration on the carination-point

of the cooking Handis is noticed for the first time in our period at Rajghat. Vessels with a secondary ridge near the shoulders with a reapplied coating at the base seem to have been introduced for the first time in our period at Brahmapuri. At Paunar, the ware with red wash appeared for the first time in our period. The above mentioned examples of technological improvement in the making of pottery indicate greater specialization in this craft. Irons & copper objects recovered from the levels assigned to the Gupta period at different sites outnumber the metal objects found in the preceding period. In terms of typology, the metal objects from both the preceding period and our period show remarkable homogeneity.

All the items made of stone for day-to-day necessity are represented in both the preceding period and in our period. Also the manufacture of glass item does not appear to have received setback in our period. Numerical decrease in the occurrence of beads in our period as compared to the preceding period at various sample sites, except at Bhokardan, indicates the decline of the craft of bead-making in our period. However, whatever the quantity of beads found in the Gupta period, it seems that when beads were made even in smaller quantity, the range of materials used for bead-making remained the same.

When we examine the literary evidences of our period we notice that the social and ritual status of all groups of craftsmen in our period did not undergo any decline. On the other hand, the trend in many cases seems to have been the opposite. If the strengthening of guild organizations and the crystallization of different occupational groups into castes are linked up with the

improved social and ritual status of craftsmen in the matter of Srāddha rites, audio-access to scriptures and achieving salvation through Dāna, it becomes clear that there was a substantial improvement in the social status of at least some categories of craftsmen in our period. To an examination of this literary evidence we turn in the next chapter.

CHAPTER IV

THE SOCIAL AND RITUAL STATUS OF CRAFTSMEN

The literary sources, some of which may pertain to the pre-Gupta period but most of which belong to our period of study, such as the Smṛti and Puranic works, the Amarakośa and the works of Sudraka, Kalidasa etc. provide only a few references bearing on the social and ritual status of specific groups of craftsmen. However, impressions drawn from such references are suggestive of the social and ritual status of craftsmen as a whole.

To begin with the Smṛti works of the preceding period, Manu ordains that a Brahmana who works as a mechanic (Kāru) will be treated by a judge like a Sūdra.¹ At another place he maintains: 'A Sūdra being unable to find service with the twice-born and threatened with the loss of his wife and sons (through hunger), may maintain himself by following crafts-occupation (Kārukarma)'.² Again we have Manu with a slightly different stand when he allows the Sūdra without any precondition to follow the artisanal occupations and various crafts (Kārukarmāni Śilpāni Vividhāni Ca),³ since by way of doing so he can also stick to his primary assigned duty of serving the twice-born. This injunction of Manu is mentioned just after the verse in which he advises manufacture of crafts only as a last resort for the Sūdras. Even if one overlooks the possibility of interpolations in a later period, one can infer from the last verse certain compulsions which forced Manu to accept

1 > Manusmṛti, vol. II, Chap. VIII, p.102.

2 ibid, X.99.

3 ibid, X.100.

crafts occupation as one of the normal occupations for the Sūdras. According to his earlier provisions crafts-occupation appears to have been followed by persons who were outside the pale of Brahmanical social order. This is evident from some of the provisions which regard some categories of craftsmen such as leather workers, bamboo-workers, etc. as mixed castes and directed them to live outside the village near a burial ground, on mountain groves (करावरो निषादेतु, अर्मकारः प्रसूयते, वदेदिकादन्ध-
मेदे बहिग्रामे प्रतिश्रयो ॥⁴ चाण्डालात्पाण्डुः शोपकस्त्वक्सारं व्यवहान
आहिण्डिको निषादेन वदेदामेव जायते..... ॥⁵ चेत्यद्भुमश्मशानेषु शैलेषु
पवनेषु च ॥)⁶
Their social status, in these verses, appears to have been on par with to that of the candāla or the outcastes.⁷

But the Smṛti and Purānic works of our period are generally indicative of enhanced social status of craftsmen as compared to that of their counterparts in the preceding period. We have only Yājñavalkya almost echoing the ordains of Manu by maintaining that the service of the twice-born is the prime duty of the Sūdras. If he is unable to support himself and his family by this, he may resort to different types of crafts (Śilpaiḥ).⁸ But the Viṣṇusmṛti explicitly and unconditionally allows the Sūdras to pursue all

4) ibid, X.36.

5) ibid, X.37.

6) ibid, X.50.

7) ibid, X.36, 37 & 50.

8) Yājñavalkya Smṛti, ed. and Hindi tr. by Dr. Umesh Chandra Pandey, Chaukhamba Sanskrit Service, Varanasi, 1967, I.129.

branches of crafts (Sūdrasya Sarva Śilpāni).⁹ The VisṇuPurāṇa also clearly ordains that attendance upon the three regenerate castes is the province of the Śūdra, and by that he is to subsist, but he can also subsist by the profit of trade or by the earnings of crafts-occupations.¹⁰ The Mārkaṇḍeya Purāṇa makes a distinction between the Dharma (duty) and means of livelihood of the Śūdras. The service of the twice-born is mentioned as Dharma of the Śūdras, and the crafts-occupations as the means of livelihood (दानंयज्ञोऽथ शूद्राणां - द्विजातीनां त्रिधा मया । व्याख्यातः शूद्रधर्मोऽपि , जीविका कारुकर्मजा ।).¹¹

Thus, we see that in contrast with the preceding period when the crafts occupations were held low in estimation and even the lowest rung of the Brahmanical social order, the Śūdras, were allowed by Manu to follow them only in times of distress, in our period crafts-occupations became the normal occupation of the Śūdras and they were not held in contempt. It is also clear from the above references that the social or ritual status of some craftsmen came to correspond to the social status of the Śūdra Varna in our period. This was denied to them in most of the cases in the period preceding ours. The inclusion of the long list of various categories of craftsmen, known as Kārus or Śilpīs in the Śūdra-Varga of the Amarakośa¹² also testified to this fact. At the same time the exclusion of various categories

9 Visṇusmṛti in Smṛti Saṁdārtha, Nag Publishers, Delhi, 1988, vol.I, Chap.II, p.407.

10 The VisṇuPurāṇa, English tr. with illustration by H.H. Wilson and enlarged and arranged by Nag Saran Singh, Nag Publishers, Delhi, 1980, vol.I, Book III, Ch. VIII, s32.

11 Markandeya Purāṇam, Hindi tr. and illustrated by Dr.Satyavata Singh, Institute for Puranic and Vedic Studies and Research, Naimisharanya, Sitapur, 1984, Ch.28.S.7 (p.354).

12 Amarakośa, 2.10.5.

of craftsmen, except the Rāthakāra, from the list of the Saṁkīrṇa jāti¹³ (the progeny through the pratiloma-marriages) in the same Śūdra Varga of Amarakośa, suggests that craftsmen as a whole had superior position within the fold of the Śūdra Varna. The list of craftsmen mentioned in the Amarakosa¹⁴ includes garland-makers (Mālākāra, malikā), potters (Kumbhakāra, Kulāla), weavers (Tantuvāya, Kuvinda), tailor (Tunnavāya, Saucika), dyer (Raṅgajīva, Citrakara), leather-workers (Pādukṛta, Carmakāra), blacksmith (Vyokāra, Lohakāraka), goldsmith (Nāḍindhamma, Svarṇakāra, Kalādo, Rukmakāraka), coppersmith (Sāulvika, Tāmrakuttaka), Carpenter (Vardhaki, Rathakāra, Kāsthataṭ). Although terms for basket-makers or puppet-makers are not mentioned in any of the vargas of Amarakośa, the allusion of the various types of baskets (Pettakā)¹⁵ and puppets of different materials (Pañcalikās)¹⁶ in the Śūdravarga¹⁷ indicates that there must have been basket-makers and puppet-makers, who had the same social status as other craftsmen. The term Pratimānam (Sculpture)¹⁸ and Pratikṛti (painting)¹⁹ etc. are also mentioned in the same Śūdra Varga and could thus be occupations followed by the Śūdras.

13 ibid, 2.10.1-4.

14 ibid, 2.10.5-9.

15 ibid, 2.10.29.

16 ibid, 2.10.28.

17 Chapters named after the four Varnas i.e. Brahmana, Ksatriya, Vaisya and Sudra, follow a general pattern of dealing with subject-matters which are related to the assigned duties of the respective Varna.

18 Amarakosa, 2.10.35.

19 ibid.

We have also references in some of the Purānas suggesting that in our period the people of Vaiśya Varna were giving up their own traditional occupations and switching over to crafts-occupations. The Viṣṇu Purāna in the same context regards the Śūdras as fortunate and further states that the Vaiśyas would leave agriculture and commerce and take to the occupations of the Śūdras, i.e. servitude or the practice of mechanical arts as petty artisans (Kārukarmopajīvina).²⁰ The Skanda Purāna says that after giving up trade and commerce they would become oilmen (tailakarakā).²¹ The Amarakośa also assigns a new duty Seva or Śvavṛtti (servitude) to the Vaiśyas apart from the traditional three duties, Kṛsi (agriculture), Paśupālayam (cattle-breeding) and Vānījyam (trade).²² The literal meaning of Śvavṛtti is the life of a dog (to which servitude is often likened),²³ but here it can be taken as all those works which were the assigned duties of the Śūdras, the lowest rung of the Brahmanical social scale. The copper plate inscription of Skanda Gupta from Indōr (Uttar Pradesh) mentions that the chief of the guild of oilmen was a Kṣatriya named Jivanta.²⁴ All these references tend to suggest that by the end of our period a section of Vaiśyas and Kṣatriya varnas due to the social-economic compulsions of the time, started taking to crafts-occupations which must have led to the elevation in the social status of craftsmen as a whole.

20 The Viṣṇu Puran, op.cit, vol.I.36.6.

21 The SkandaMaha Purana, arranged by Nag Saran Singh, Nag Publishers, Delhi, 1982, 3.2.39.291.

22 Amarakosa, 2.9.2.

23 Apte, V.S., The Practical Sanskrit-English Dictionary, Part. III, Prasad Prakashan, Poona, 1959, p.1580.

24 CII (Revised), vol.III, pp.310-11.

We have some inscriptional evidence suggesting that during our period, at least in Bihar and Bengal, the wealthy artisans were given representation in the Adhsthānādhikarāna, the city council of a Visaya (district). In the Visaya of Kotivarsa, the Adhsthānādhikarāna was composed of four representatives of merchants, scribes and craftsmen, i.e. Nagara Sresthin, Sārthavāha, Prathama-Kulika, and the Prathamakāyastha).²⁵ This is mentioned in four copper plate inscriptions, two each of Kumara Gupta I (dated A.D. 443 and 447) and Buddhagupta (the first is undated and the second one is of A.D. 543). All the four inscriptions are from Damodarpur (Northern part of Bangladesh). The Kalaikuri copper plate inscriptions (dated A.D. 439) also mentions the Kulika Bhima as a member of the Vīthi (Board of Administrations). At Basarh (Vaishali) in North Bihar numerous clay seals, of the Gupta period of merchants and craftsmen have been discovered which also refer to the existence of Adhsthānādhikarāna.²⁶ It is also to be noted that the merchants and craftsmen mentioned in these clay seals are only Sresthin - Sārthavāha and Kulikas, which correspond perfectly with the case in the Kotivarsa. We also find on the Basarh clay seals the names of Hari and Ugrasimha as Prathamakulika, i.e. the leader of the Kulikas. We have also evidence of the existence of Adhsthānādhikarāna in Gaya and Nalanda in Central Bihar.²⁷

25 See references in Introduction, p. 97.

26 Acta Asiatica, vol.43, the Tohogakhai, 1982, p.34.

27 ibid.

On the basis of the ~~above~~ mentioned evidence, we can say that craftsmen, at least of certain levels, in our period, were socially important enough to be given representation in Adhīsthānādhikarāṇa together with the merchants and administrative officials like Kāyasthas on an equal footing.

In our period we notice various categories of craftsmen being transformed into different caste-groups along occupational lines. Amarakośa uses the term Śrenīśajātibhiḥ²⁸ (crafts-guilds consisting of members from the same caste). We have also Vatsyayana recommending means of earning one's livelihood according to one's birth.²⁹ Interestingly enough, Vatsyayana does not mention Vaiśya or Sūdra Varna in his social schema,³⁰ which may also be taken to be suggestive of the formation of certain occupational castes in our period. Their social and ritual status would have been in between the social and ritual status of the Vaiśya and Sūdra Varnas and they were governed by their own laws and customs with little intervention from the state. This can ~~further be~~ illustrated by references in some of the law books which suggest that the state attached more importance to laws and customs of the local guilds in our period than in the preceding one. In this regard Kautilya and Manu simply advised the king to take into consideration the laws and customs prevalent in the guilds while administering justice. The Arthasāstra says that the king's

28 Amarakosa, 2.10.4.

29 Chakladhar, H.C., Social life in Ancient India (Based on Vatsyayana Kamasutra, Cosmo Pub. Delhi, 1984, (first pub. 1929)).

30 ibid.

accountant must enter in his books the laws, the manners and customs of the castes, families and localities.³¹

According to Manu, the King should enquire into the laws of caste, district, guild and family³² (Śrenīdharmam, Pratipādayet). This shows that in the period preceding ours the king was expected only to respect the laws of the different guilds. But the law-books of our period explicitly direct the king to abide by the laws of the guilds and other local bodies. According to Narada, the king must follow the usages prevalent among the guilds, corporations, troops, etc.³³ Yajñavalkya also betrays the same spirit while instructing the king to abide by the laws of the guilds, corporations etc.,³⁴ (Srenīgrāmovṛttim Pālayet). However, the ordains of Brhaspatismṛti are more categorical in this regard. It lays down that whatever is done by the heads of the guilds towards other people, in accordance with the prescribed regulations, must be approved by the king for they are declared to be the appointed managers of the affairs.³⁵ He also warns that, if the usages of localities, castes and Kulas are not maintained, the people will get discontented and wealth will suffer thereby.³⁶

31 Arthasāstra, II.VII. cited in R.K. Mookerji, Local Government in Ancient India, Oxford Univ. Press, Oxford, 1920 (2nd ed.), 1st ed. (1918), p.127.

32 Manusmṛti, VIII.41.

33 Nārādīya Manusmṛti, ed. by K.S. Shastri, Trivandrum, 1929, X.2, p.114 (पावाण्ड नगमप्राग्वान् गणद्विषु संरक्षते समयं राजा दुर्गे जनपदे तथा ॥).

34 Yajñavalkya Smṛti, II.192.

35 Brhaspatismṛti, Reconstructed by K.V.Rangswami Aiyangar, Baroda Oriental Institute, Baroda, 1941, XVII.17-8. (कुलश्रेणी गणाध्यक्षाः पुर-दुर्गवासिनः । वादिदण्डम परिष्यागं प्रकुयुः पापकारिणाम् ॥ तैकृतं च स्वधर्मेण निग्रहानुग्रहं तृणाम् । तद्वाजोऽध्यनुमन्तव्यं निरुष्याद्यो हिते स्मृताः ॥)

36 ibid, I.126 (p.21).

प्रतिलोम प्रसूतानां तथा दुर्गनिवासिनाम् । देशकुल जाति कुलादीनां ये धर्मास्तत्प्रवर्तिताः ॥)

Thus it seems that the guilds in our period were free to act according to their prescribed customs and the king was bound to accept their decision.³⁷ This was not obligatory for the king in the preceding phase. Besides, they continued their old function of receiving money as deposits, paying interest on them and obviously investing them in their trades, as would appear from the Indor Copper-plate inscription of Skandagupta.³⁸ A. Brāhmaṇa Devavisnū deposited money with the guild of oilmen of the town of Indrapura (Uttar Pradesh). The interest on the money had to be used for the maintenance of a lamp for the temple of Sun-god. Such activities naturally promoted their prosperity, which is evident from the construction and repair of a temple of the Sun by the silk-weavers of Mandsore in Madhya Pradesh in the fifth century A.D.³⁹ So the crystallization of various categories of craftsmen into different castes with a powerful guild organization to protect their economic and social interests must have given at least some categories of craftsmen better footing to assert themselves in the society in our period. This seems to have been somewhat different from the earlier dominant process of assimilation of backward aboriginal tribes, practising different crafts-

37 Majumdar, R.C., op.cit. p.62.

38 CII, vol. III (Revised ed. 1981), pp.311-312.

39 CII. vol. III (Revised ed. 1981).

Occupations, into Brahmanical social hierarchy.⁴⁰ The Manusmṛti mentions some of the craftsmen such as Ayoghava (Carpenter)⁴¹ Dhivana and Kārāvara (leather-workers),⁴² Vena (makers of musical instruments)⁴³ and Pāndusopaka (cane-workers),⁴⁴ as progenies of the mixed castes through the Pratiloma marriages. Also putting them into Varnasamkara (mixed castes) categories, the Brahmanical law givers like Manu had two fold motives : (i) to keep various categories of craftsmen in low social and ritual position to exploit their manual labour, and (ii) to maintain their own superior position in the society.⁴⁵

In spite of the regular formation of different castes along occupational lines, we do not have any direct evidence suggesting that different categories of craftsmen were pushed down to the level of untouchables. From a tabooed section for whose untouchability there is no direct evidence upto the Gupta period, the leather-workers became a distinctly untouchable caste in early medieval period only.⁴⁶ Parasara is the first law giver to place the Carmakāra midway between the Śūdra and the Caṇḍāla. The status of Rathakāra had been oscillating over the centuries from

40 Jha, V., 'Varnasamkara in the Dharmasastras : Theory and Practice', JESHO, vol. XIII (1970), p.287.

41 Manusmṛti, X.95.

42 *ibid.* X.36.49.

43 *ibid.* X.37.49.

44 *Ibid.*

45 Jha, V., 'Status of Rathakaras in Early Indian History', Proceeding of the Indian History Congress, (1973), 34th Session, p.105.

46 Jha, V., 'Leather workers in Ancient and Early Medieval India', Proceeding of the Indian History Congress (Henceforth, IHC), 1979 (Waltair), p.102.

intermediate to low in accordance with the importance of war.⁴⁷ Kautilya mentions the Rathakāra in the list of mixed castes without assigning him any particular origin. He, however, not only provides for the share of a Rathakāra's in inheritance from well-to-do parents, but also designates him a Vaiśya through profession.⁴⁸ The law-giver is, thus, not only keen to emphasize the difference of the Rathakāra from the Candāla but also from those mixed castes which were thought to be of Sūdra level. A firm believer in the policy of territorial expansion through wars, Kautilya could not but put premium on the craft of the Rathakāra.⁴⁹ It was due to the abhorrence against war that most of the Buddhist texts hold Rathakāra among to most thoroughly tabooed sections of the people.⁵⁰ But Manu also does not treat Rathakāra as a mixed caste.⁵¹ But in our period the status of the Rathakāra appears to have declined since not only Yajñavalkya puts him in the category of mixed castes⁵² but Amarakośa also enumerates him among the ten despised castes (sankirnajāti).⁵³

Manu enumerates bamboo-workers (Vena) or cane-workers (Pāndusopaka) among the mixed castes, the offspring of Candāla father and a Vaideha mother.⁵⁴ He nowhere refers to the untouchable status of either the Vena or of the Pāndusopakā and

47 Jha, V., 'Status of Rathakaras, in Early Indian History, op.cit., pp.105-06.

48 *ibid.*

49 *ibid.*

50 *ibid.*

51 *ibid.*

52 Yajñavalkya Smṛti, I.95.

53 Amarakosa, 2.10.4.

54 Manusmṛti, X.37.44.

only directs the Snātaka (Vedic student) to avoid the food of a Vena.⁵⁵ Viṣṇu and Yajñavalkya almost paraphrase the rule of Manu pertaining to such avoidance.⁵⁶ The position and status of bamboo-workers and basket-makers declined in early medieval times⁵⁷ and they definitely became untouchables.⁵⁸ Parasara treats Vanujīvinī (a woman of the bamboo-workers' caste) as an untouchable for all the four varnas (Cāturvarṇya).⁵⁹

There is no trace of degradation of the position of blacksmiths in Panini's Aṣṭādhyāyī and in the Arthasastra of Kautilya.⁶⁰ The sign of degeneration in their social position appears first in the post-Mauryan period, as Patanjali places them in the category of Anirvāsita Sūdras.⁶¹ This shows that they were placed above the Antyas and the Nirvāsita Sūdras. We do not have evidence to show that till the Gupta period untouchability or dining restrictions were imposed on them.⁶²

The study of some of these above mentioned categories of craftsmen reveals that the social and ritual status of various categories of craftsmen remained almost constant till our period as compared to the preceding period. No sign of abhorrence is visible against them. But it should also be kept in mind that

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- 55 Jha, V., 'Position and status of Bamboo-workers and Basket-makers in Ancient and Early Medieval India,' Proc.IHC, (1976), p.234.
- 56 *ibid.*
- 57 *ibid.*
- 58 *ibid.*
- 59 *ibid.*
- 60 Ojha, A.P., 'Blacksmiths in Ancient and Early Medieval India', Proc.IHC (1979), Waltair, p.106.
- 61 *ibid.*
- 62 Ojha, A.P., *op.cit*, p.160.

law-givers had their own preconceptions which would have moulded their views about different categories of craftsmen. So the social status of craftsmen in actual terms can only be ascertained in terms of how the utility of particular groups of craftsmen for different sections of society were viewed by that society. Moreover, the existence of vertical hierarchy within a particular group of craftsmen would also have been one of the determining factors for social status. So, the social status of the blacksmiths, goldsmiths and carpenters would have been higher than the other groups of craftsmen. The blacksmiths not only supplied tools to cultivators, gardeners, carpenters, wood-cutters but also supplied utensils to the households and armed the military.⁶³ In the list of metal workers mentioned in the Amarakośa, the blacksmith figures on the top. The goldsmiths on the other hand mainly satisfied the demand of the rich section of the society and most of them settled in the cities where their manufactures were appreciated and bought. In the Mudrārāksasa,⁶⁴ we are told that Visnudasa was a prominent jeweller in the city of Kusumpura. In Silāppadikaram we come across a state-jeweller who was entrusted with the making of jewellery for the royal family and who was living in the city of Madurai. He is also depicted as richly attired and followed by a retinue of well dressed goldsmiths.⁶⁵

63 Amarakosa, 2.10.35.

64 Mudraraksasa, Act. IV.

65 Subramaniam, K.N. op.cit., pp.103-5.

This undoubtedly indicates that though there were other petty jewellers in the city, the prominent jeweller attached to the royal house enjoyed a higher social status. As regards the carpenters, the Amarakośa mentioned two categories,⁶⁶ those tied down to the village (grāmatakṣa) and those who were independent (Anadhinakā). Obviously, the independent carpenters would have been enjoying a higher social status. Many of the craftsmen are referred to as taxpayers to the state in our period. The Vilavatti grant of Pallava Simhavaraman (A.D. 446), mentions iron-smiths (Loha-Kāraka), leather workers (Carmakāra) and weavers (Tantuvāya) among the import tax-payers.⁶⁷ These craftsmen are mentioned as residents of a village. This suggests that their social and economic status would have been different from their counterparts in towns.

So grouping together various categories of craftsmen and viewing them in the light of injunctions to snātakas by Manu,⁶⁸ Yājñavalkya⁶⁹ and Viṣṇu⁷⁰ appear to be unsatisfactory ways of trying to ascertain the status of craftsmen in society. There must have been hierarchy among various categories of craftsmen and even within particular groups of craftsmen. Craftsmen

66 Amarakośa, 2.10.9.

67 Epigraphia Indica, vol. XXIV, p.298.

68 Manu Smṛti, IV, 211-18.

69 Yājñavalkya Smṛti, 1.63-65.

70 Viṣṇu Smṛti, pp.82-83.

referred to by these law givers in this connections were : blacksmiths, goldsmiths, basket-makers, weavers, washermen and dyers, leather-workers and oil pressers.

To delve further deep into our theme of enquiry we would like to examine some of the provisions mentioned in the Smṛti and Puranic works of the preceding and of our period regarding entitlements to the performance of certain religious and social rites by artisans and craftsmen. They provide another clue for comprehending changes in our period as compared to the preceding one. We may assume that some of the references to the ritual entitlements of the Sūdra Varna could apply to craftsmen as well.

The Śrāddha or the funeral rites, as laid down in the Grhasūtra are, not prescribed for a Sūdra⁷¹ but the texts of our period clearly allow these rites to the Sūdras. He can perform not only ordinary (Sādhāraṇa) Śrāddha but also the extra-ordinary (Vrdhi) Śrāddha in which offerings are made to dead ancestors on special occasions such as the birth of a son, by uttering the formula of Namaḥ instead of Vedic mantras (यद्रोऽपि सामान्यवृद्धिप्राडेऽपि सर्वदा । नमस्कारेण मन्त्रेण कुर्यादभ्यन्तः सदा ॥⁷²). Yājñavalkya also prescribes the Śrāddha rites for the Sūdras.⁷³ The Vāyu Purāna

71 Pandey, R.B., Hindu Saṁskaras ; A Socio-religious study of the Hindu , Vikrama Pub., Banaras, 1949.

72 The Matsyamahāpurānam , tr. and notes in English, arranged by Nag Saran Singh, Nag Pub. Delhi, 1983, pt.I, Ch.17.s.70.

73 Yājñavalkya Smṛti, op.cit., I.121. (भार्यारहितः शुचिभृत्यभर्ता
श्राद्धक्रियापरः । नमस्कारेण मन्त्रेण पञ्चमज्ञान्नं हापयेत् ॥)

also prescribes for Sūdras the Śrāddha rites.⁷⁴

Another important development in the sphere of religion of this period is the emphasis on the Sūdras right of making gifts. Charity is declared to be the best means for a sudra, by performing which he can gain all his ends. (दानं प्रधानं: शुद्धस्यादित्याह भगवानप्रभुः । दानेन सर्वकामान्निरस्य सञ्जायते यतः ॥)⁷⁵ The visnuPurana also allows the Sudras to make gifts,⁷⁶ (दानञ्च दद्याच्छुद्धेः)। According to Mahābhārata, a Sūdra who practises truth and sincerity, honour mantra and Brāhmanas and makes gifts attains heaven and even Brahmanahood in the next birth.⁷⁷ In the Matsya Purāna we have reference to a Saivite prostitute named Lilavati and a Sūdra goldsmith. By virtue of making gifts in previous life the former attained the kingdom of Śiva (Śivamandiram) after death and the later became a paramount sovereign named Dharmamurti.⁷⁸ The Mārkaṇḍeya Purāna also assigns the duties of making gifts (Dāna) to the Sūdras.⁷⁹ In this connection

74. The Vāyu Purāna, tr. and annotated by G.V. Tagore, Motilal Banarasiḍass, Delhi, 1988, II.13.49.

75. The Matsya Purānam, tr. and notes in English, arranged by Saran Singh, Nag Pub. Delhi, 1983, 17.71, p.84.

76. VisnuPurāna, vol.I, Book III, Chapter 8, S.34.

77. Anusāsana Parva, 217, 13-15, cited in SAI, (1958 ed), p.

78. Matsya Purāna, XCII-23-29, p.373.

79. The Mārkaṇḍeya Purānam, trans. & edited by Dr. Satyavrata Singh, Institute for Puranic & Vedic Studies and Research, Naimisharnya, Sitapur, 1984, 28.7, p.354.

it should also kept in mind that we do not have any evidence of Brahmanical law-givers before Yājñavalkya trying to popularize the practice of making gifts,⁸⁰ with the law-books of Brhaspati the doctrine of salvation through gifts reached its zenith.⁸¹

Also in the matter of performance of sacrifices by the Sudras, the texts of our period betray a liberal attitude. In this regard Yājñavalkya says, 'A Sūdra should perform five sacrifices (नमस्कारेण मन्त्रैः षड्यज्ञान् संपश्येत्).⁸² The Visnu Purāna ordains, 'He may offer the sacrifices in which food is presented as well as the obsequial offerings.⁸³ The Vayu Purāna also prescribed the five great sacrifices for the Sudras by omitting the mantras (शुद्धेऽपि प्रकम्पा चर्यते मन्त्रवज्रिताः).⁸⁴ Mārkaṇḍeya Purana enlists sacrifice (yajna) among the three assigned duties (Dharma) of the Sudras (दानं यज्ञोदय शुभ्रवा द्विजातीनां त्रिधा मया).⁸⁵ These provisions of the Puranas are in contrast to the injunctions of manu and Visnu which disqualify the Sudras for Saṁskāras and debar them from performing dharma and Vratas.⁸⁶

80 Hazra, op.cit., p.247.

81 ibid.

82 Yajnavalkyasmṛti, I.121.

83 The Visnu Purāna, I. III. 8.34. (--- पाकयज्ञैश्चैत न पित्र्यादिकञ्च नत्सर्वं शुद्धं कुर्वीत तेन वै).

84 ibid.

85 Mārkaṇḍeya Purāna, 28.7.

86 Manusmṛti, X.126. (न शुद्धे संस्कारमर्हति नास्याधिकारो धर्मोऽस्ति, IV. 30 (न शुद्धाय मति दद्यान्तोऽदिदं न हविष्कृतम्, न चास्योपदिशेद्दुर्म न चास्य व्रतमादिशेत्); Visnusmṛti in Smṛti Samdarbha, vol.III, p.512. (न शुद्धाय मति दद्यात् न चास्योपदिशेद्दुर्म न व्रतम्).

The above - mentioned references are suggestive of the liberal attitude of Brahmanical law-givers towards the Sūdras and by implication to the craftsmen, which was denied to them in the preceding period. But even this freedom could have been enjoyed only by a limited few who had wealth enough to make gifts and perform sacrifices. This contrast with the preceding period can further be illustrated in connection with the access of the Sūdras to the scriptures. Though a Sūdra could not study Vedas, he was not debarred from hearing the Itihāsa (like the Mahābhārata) and the Purāna. The Mahābhārata expressly says that the four varṇas should hear it through a Brahmana as a reader,⁸⁷ (श्रावयेन्मन्त्रो वर्णान्कृत्वा ब्राह्मणमग्रतः).

The Bhagavata Purāna, a text of a later period, says that as the three Vedas cannot be learnt by women, Sūdras and Brāhmanas (who are Brāhmanas only by birth), the sage Vyāsa composed the story of the Bharata out of compassion for them (स्त्रीशूद्र द्विजनबन्धुनां त्रयी न श्रुतिगोचरा इति भारतमारव्यात मुनिना कृपया कृतम् ॥).⁸⁸ These provisions betray a marked departure from Manu's provisions which say that only the dvijāli had the privilege to listen to Manusmṛti.⁸⁹

All these above references suggest an enhanced ritual status of the Sūdras in our period. According to R.S. Sharma, the growth

87 Mahābhārata, 'Santi Parvan, 328.49, cited in P.V. Kane, op.cit. vol.II, Chapter, III, p.155.

88 Bhāgavata I.4.25. cited in P.V. Kane, op.cit. vol.II, Ch.III. p.155.

89 Manusmṛti, II.16.

of a certain reforming ideology, specially the creed of Vaisnavism, secured a large measure of religious equality for the Sudras.⁹⁰ Vaisnavism reached its highest watermark in the Gupta period, where we find numerous epigraphic, numismatic and sculptural records testifying its unparalleled influence not only in Northern India but even in parts of Southern and the Western India. This must have substantially contributed to the boosting up of the ritual status of craftsmen in our period.⁹¹

90 Sharma, R.S. SAI, p.307.

91 Goswami, K.G., 'Vaisnavism', IHQ, XXXI, p.132.

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