

CHAPTER-IV

_C_H_R_O_N_O_L_O_G_Y_

In the absence of any C.14 dates from the excavated sites it is difficult to attempt a precise chronology of the prehistoric cultures of the region. The job is made all the more hazardous as most of the sites of the region remain unexcavated and the excavations, where-ever conducted, are generally of limited nature. Any conclusions drawn on this evidence are, therefore, bound to remain tentative. Our prime objective here is to build up a relative sequence of cultures in the region based on stratigraphy and typology of the excavated sites. An attempt will then be made to cross date the sequence with the help of absolute dates obtained for ^{the} corresponding phases at other prehistoric sites in the country.

The relative sequence of cultures in the region is provided by the excavations at three selected sites viz Siswal (No.18), Mitathal (No.59) and Daulatpur (No.57). The 1.25 meter thick habitational deposit overlying yellow alluvium forming the natural soil at Siswal falls into two sub-periods viz. Siswal A (early Siswal) and Siswal B (Late Siswal), on the basis of stratigraphy and typology. Siswal A is characterised by the classical Kalibangan I ware also called the Sothi ware¹, distinguished by the typical six Fabrics viz. A-F, bichrome painting with black and white designs and incised troughs.

Siswal B is marked by the evolved Kalibangan I ware distinguished by the austerity of painted designs and shapes, manufacture and absence of the use of white pigment as noticed in Chapter III.

The Mitathal excavation yielded a 4.30 meter thick cultural debris overlying the natural soil on Mitathal-1 mound, falling into two periods, viz., Mitathal I and II, with no break inbetween. Period II which was also encountered on Mitathal-2 mound, is subdivided into two phases viz. Mitathal IIA and IIB on stratigraphical and typological grounds. Mitathal Period I is characterised by Siswal B ware, while Period II is distinguished by the Harappa culture. Among the sub-periods, Mitathal IIA represents a mature Harappa culture too well known to be described here. Mitathal IIB is distinguished by the Late Harappa culture corresponding to Lothal B², Rangpur IIB and IIC³, Alamgirpur⁴, Baragaon⁵ etc. representing a phase of decline as noted in chapter III and marked evolution, rather devolution, in the pottery types.

The habitational deposits at Daulatpur fall into four periods with gaps between Periods I and II and III and IV. Daulatpur I is characterised by Mitathal IIB ware (Late Harappa ware), while Daulatpur II is distinguished by the Painted Grey Ware. The succeeding periods being historical do not concern us here.

The above three excavations have thus yielded sequences which partly overlap and thus help forging links and reconstructing a relative sequence of prehistoric cultures

for the region. Siswal B corresponds to Mitathal I on typological grounds, both yielding an evolved Kalibangan I (Sothi) ware.⁶ This correlation is cross checked by the association of a limited number of Harappan sherds in both the assemblages. Thus the Siswal sequence is carried forward at Mitathal. The limited Harappan contacts in Siswal B and the stratigraphical evidence of this being superimposed by the Harappa culture in Mitathal IIA prove beyond doubt the existence of a true pre-Harappan horizon in Siswal A and the transitional phase in Siswal B in our region. The Mitathal IIB, attesting the stratigraphic evidence of the survival of Harappa culture in our region, corresponds to Daulatpur I on typological grounds⁷ and the sequence is further carried forward to the historical period, though not without a break between Daulatpur I and II. Thus the above excavations have helped in reconstructing the following relative sequence of the prehistoric cultures in the region (Fig. 2):

<u>Period of Sequence</u>	<u>Cultures</u>
Daulatpur II	Painted Grey Ware Culture
Gap	-
Mitathal IIB(Daulatpur I)	Late Harappa Culture
Mitathal IIA	Harappa Culture
Siswal B(Mitathal I)	Late Siswal Culture
Siswal A (Early Siswal)	Kalibangan I Culture.

The above sequence in the region can be synchronised with the absolute chronology of the known cultures at various sites in other parts of the country. It has already been noticed

that Siswal A bears close affinities with Kalibangan I culture as it contains all the six Fabrics (A to F), the use of the white pigment in addition to black in painting and incised decoration on the interior of the trough, the characteristic features of the ceramic industry known to us from the latter site. But the comparative dearth of white designs, the absence of naturalistic painted designs such as the birds, plants, moustaches, flower and the Trisula or horns and the incised designs including oval and floral designs, the over all individualistic features of the painted patterns, the preference for a wide mouthed carinated lota and the absence of the stone blades, if not due to the extremely limited work at the site, may indicate a poorer cultural repertoire of Siswal A than that of Kalibangan I and might suggest a slightly later beginning for the former specially when the course of diffusion of pre-Harappan cultures is from west to east. Although Siswal A unmistakably falls in the Kalibangan zone of the pre-Harappa culture, it does possess certain typological and decorative parallels in the ceramic industry, with Kot Diji I specially in the late levels as noticed in Chapter V. On the basis of C.14 dates from the site the beginning of Kalibangan I has been rightly placed about C.2400 B.C. by D.P. Aggrawal.⁸ But its later limit may be placed around C.2100 B.C. as required by the C.14 dates obtained for the early levels of Harappa Period at Kalibangan.⁹ (Samples TF-160, 607, 163, 608, 145). In view of the above discussions Siswal A may be reasonably dated around C.2300-2100 B.C. Such a date would also be in consonance with that of Kot Diji.¹⁰ On archaeological grounds also a deposit of 1.25 meters can be ^{reasonably} assigned a period of two hundred years.

Siswal B has to be dated by extrapolation as such an intermediate phase in the Kalibangan Zone has been revealed for the first time Distinguished by an evolved typology, the absence of the use of white pigment as the additional colour in pottery painting and the Harappan contacts, the sub-period may be dated later than C.2100 B.C. the upper limit of Kalibangan I. The average deposit of 0.75 meter of Mitathal I can be reasonably assigned a century to accumulate on archaeological grounds thus placing the upper limit of the sub-period around C.2000 B.C. which would also mark the beginning of Mitathal IIA also.

Mitathal IIA is characterised by the mature traditions of Harappa culture for its twin mounds, well laid mud brick houses cubical chert weight, ribbon flake blade, steatite and faience beads and bangle, and beads of other semi-precious stones like agate, carnelian, jasper etc., terracotta toy carts, wheeled toys and triangular cakes and the plain utilitarian pottery including goblet, beaker, perforated jar, dish and dish on stand etc. But a little less prolific character of Mitathal IIA for the absence of seals and sealings and long carnelian beads, chert blades, cubical weights, and the absence of saucepan handle, 'S' shaped painted vases, storage jars with flanged rim in ceramic industry would suggest it to be younger contemporary of the mature Harappa culture of Kalibangan II.

The extensive use of mud brick structures, staggered streets, the absence of any elaborate drainage and the associa-

tion of the Late Siswal elements in Mitathal IIA suggests its close relationship with the Harappa culture of Kalibangan zone.¹¹ The lower limit of the Harappa culture at Kalibangan may be reasonably placed around C.2100 B.C. on the basis of C.14 dates vide TF.25 and TF.153.¹² The upper limit has been rightly placed around C.1700 B.C. on the evidence of TF.142, TF.152, TF.149 and TF.143 by D.P. Agrawal though a few show scatter.¹³ If Mitathal IIA represents a slightly late mature stage of Harappa culture it could be placed between C.2000 - 1700 B.C. The 2.65 meter thick average deposit of Mitathal IIA could perhaps be assigned a period of three centuries also on archaeological grounds.

The lower limit for the Harappa culture in the basin may, however, go a little earlier and perhaps as early as at Kalibangan i.e. C.2100 B.C. ^{at Rakhigarhi} The impressive site of Rakhigarhi near Jind in the Drisadvati Valley yielded during surface explorations a terracotta seal, number of chert blades, terracotta animal figurines and the black on red ware including goblet, beaker, saucepan handle, perforated jar, tall dish on stand with or without drum and storage jar with flanged or recurved rim and painted designs such as the Pipal leaf so typical of the mature Harappa culture.

The Mitathal IIB marks a decline in the material prosperity of the Harappa culture and an evolution in pottery forms corresponding to those in Lothal B, Rangpur¹⁴IIB and IIC, Rojdi IB, Alamgirpur I, Baragaon etc. is noticed. The absence of such a phase at Kalibangan makes Mitathal IIB posterior to Kalibangan II, dated between C.2100-1700 B.C. on the basis of

C.14 dates. In Gujarat the C.14 dates¹⁵ from Lothal and Rojdi place the end of the Late Harappa culture in that region about C.1750 B.C. and, therefore, there seems a chronological and not chronological correspondence between Mitathal IIB and Lothal B or Rojdi IB etc.

An interesting evidence for cross dating this phase is provided by a copper Parasu found from the upper levels of Mitathal IIB.¹⁶ The tool type bears close affinities to the one found from Kurdi in Nagaur District of Rajasthan.¹⁷ At Kurdi the tool was associated with several other copper objects including a channel spouted bowl simulating similar bowls of the Malwa ware from Navdatoli Phase III.¹⁸ The Malwa culture at Navdatoli has been dated between C.1700 and 1400 B.C. by C.14 method.¹⁹ It would be reasonable to place the upper limit of Mitathal IIB around C.1500 B.C. on the basis of the above evidence. A period of two centuries for an average deposit of 1.65 meter, would also be justified on archaeological grounds. Such a limit for Mitathal IIB will also afford sufficient time for its further survival in a degenerate stage of o.c.p. in the Ganga Yamuna Doab before it could be replaced by the P.G.Ware culture towards the close of the 2nd millennium²⁰ B.C. Thus the prehistoric cultures of region may be assigned the following chronology:

- Siswal A (Kalibangan I Culture) - C.2300-2100 B.C.
- Siswal B (Late Siswal Culture) - C.2100-2000 B.C.
- Mitathal IIA(Harappa Culture) - C.2000-1700 B.C.
- Mitathal IIB(Late Harappa Culture) C.1700-1500 B.C.

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C¹⁴ Dates of Pre-Harappan and Harappa Cultures
after D.P. Agrawal

S i t e	C ¹⁴ Dates based on $\frac{1}{2}$ = 5730 yrs. Years B.C.		
Kot Diji	P-196,	2600	± 145
	P-179,	2330	± 155
	P-180,	2250	± 140
	P-195,	2100	± 140

Mohenjodaro	P-1177,	2155	± 65
	P-1179,	2085	± 65
	P-1180,	1995	± 65
	P-1176,	1965	± 60
	P-1178A,	1965	± 60
	P-1182A,	1865	± 65
	TF-75,	1755	± 115

Kalibangan Period I	TF-240,	1765	± 115
	TF-155,	2370	± 120
	TF-157,	2290	± 120
	TF-241,	2255	± 95
	TF-162,	2105	± 105
	TF-161,	2095	± 105
	TF-165,	1965	± 105
	TF-156,	1900	± 110
	TF-154,	1820	± 115

S i t e	C ¹⁴ Dates based on $\frac{1}{2}$ = 5730 yrs Year B.C.		
Kalibangan Period-II	TF-160,	2230	± 105
	TF-607,	2090	± 125
	TF-163,	2080	± 105
	TF-608,	2075	± 110
	TF-145,	2060	± 105
	TF-147,	2030	± 105
	TF-151,	1960	± 105
	TF-139,	1930	± 105
	TF-141,	1860	± 115
	TF-142,	1790	± 105
	TF-152,	1770	± 90
	P -481,	2050	± 75
	TF- 25,	2090	± 115
	TF-153,	2075	± 110
	TF-605,	1975	± 110
	TF-150,	1900	± 105
	TF-149,	1830	± 145
	TF-143,	1665	± 110
	TF-244,	1390	± 95
	TF-138,	1215	± 105

Lothal	TF-136,	2080	± 135
	TF-135,	1555	± 130
	TF-133,	1895	± 115
	TF- 22,	2010	± 115
	TF- 27,	2000	± 115
	TF- 26,	2000	± 125

Site	C^{14} Dates based on $t = 5730$ yrs. Years B.C.	
Lothal	TF-29	1895 \pm 115
	TF-23	1865 \pm 110
	TF-19	1800 \pm 140

Rajdi	TF-200	1970 \pm 115
	TF-199	1745 \pm 105

CHAPTER-IV

1. Ghosh, A., The Indus Civilisation : its origins, authors, extent and Chronology, Indian Prehistory : 1964(Poona,1965), pp.113-56.
2. Rao, S.R., Ceramics, of the Indus Valley in Gujarat(2500 B.C.-800B.C.), MARU, XIV, 3, pp.18-27.
Excavation at Lothal, Lalit Kala, 3-4, (1956-57), pp.82-89.
3. Rao, S.R., Excavation at Rangpur and other Explorations in Gujarat, AI, Nos.18&19, (1962 and 1963), pp.5-207.
4. IA, 1958-59, pp.50-55.
5. IA, 1963-64, pp.56-57; Deshpande, M.N., Comments on Ghosh A, Op.Cit., in Indian Prehistory (1965), pp.113-56.
6. Suraj Bhan, Siswal : A Pre-Harappan Site in the Drisadvati Valley, Puratattva, No.5, Appendix D, (1972), pp.44-46;
Comments on o.c.p., Puratattva, No.5, 1971-72, pp.16-21;
the Sequence and Spread of Prehistoric Cultures in the Upper Sarasvati Basin, Paper read in the International Conference at Bombay, March 1972.
7. Suraj Bhan, ibid., 1972.
8. Aggrawal, D.P., An Integrated Study of the Copper-Bronze Technology in the Light of Chronological and Ecological Factors, 1968 (Cyclostyled), pp.116-118.
9. Aggrawal, D.P., ibid., Table 1.
10. Aggrawal, D.P., ibid., pp.116-118, Table 1.
11. Lal, B.B. and Thapar, B.K., Excavation at Kalibangan; New Light on the Indus Civilisation, Cultural Forum 34, July 1967, pp.78-96; IA, 1961-62, pp.38-44 and 1962-63, pp.20-31.
12. Aggrawal, D.P., Op.Cit., pp.118-120, Table 1.
13. Aggrawal, D.P., Op.Cit., pp.118-120, Table 1.
14. IA, 1957-58, pp.18-20; cf. Rao, S.R., Op.Cit., (1962-63), pp.5207.
15. Aggrawal, D.P., Op.Cit., 1968, Table 1.
16. Suraj Bhan, The Excavations at Mitathal (Hissar). 1968, Journal of Haryana Studies, Vol,I, No.1(1969), pp.1-15.
17. IA, 1960-61, Pl.LXXVIIIB.
18. Sankalia, H.D.; Subbarao, B. and Deo, S.B., The Excavations at Maheshwar and Navdatoli, (1958)
19. Aggrawal, D.P., Op.Cit., 1968, p.120, Table 3.
20. Although the Carbon 14 Dates for the P.G.Ware Culture mostly fall in the 1st millennium B.C. and the only early date from Atranjikhera is not being relied by scholars, the P.G.W.sites in the Sarasvati Valley are likely to be earlier than those of the Ganga-Yamuna Doab, so far dated by C.14.