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Inscriptions Incised on Harappan Ivory/Bone Rods and Their Parallels among Other Types of Inscribed Objects

Asko Parpola

Heidi J. Miller read an interesting paper on “Incised Ivory Rods from Dales’ 1964-65 Excavation at Mohenjo-daro” at the 22nd international conference held by the European Association for South Asian Archaeology and Art in Stockholm 30 June to 4 July 2014. Prompted by her wondering if their inscriptions could throw any further light on the function and meaning of this type of artefacts, I have written the present paper.

Most of the inscriptions incised on the Harappan ivory rods published in *Corpus of Indus Seals and Inscriptions* (CISI) can be read with fair certainty, although some signs—especially no. 272 in my sign list (Parpola 1994, 70-78 fig. 5.1) that will be quoted throughout this paper—have peculiar variant forms (not recorded in the said sign list). In the attached chart (Fig. 1), 26 different texts (six of which are each attested on two separate ivory rods) have been transcribed with the standard shapes of the Indus signs and not as they appear on the rods (for the actual shapes, consult the photos in CISI), and in the standard direction of writing, in which the texts are read from right to left (cf. Parpola 1994, 64-67; 2015, 274-275). Six texts are not included in the chart, because I cannot offer reliable readings even though some of their signs can be recognized with certainty (M-1652, M-2100, M-2101, M-2105, M-2114 and M-2115). Also included (as no. 26) is one rod excavated at Mohenjo-daro by George F. Dales (exc. no. MD-580) but omitted in CISI vol. 2; Heidi Miller has kindly sent me a photograph, which will be published in CISI vol. 3.2.

It is instructive to compare these inscriptions with the inscriptions attested on other types of Harappan objects. There are significant parallels among the moulded or incised ‘sacrificial tablets’ from Harappa and Mohenjo-daro, which may have been given as receipts or amulets to people who have given offerings to priests of a given deity, possibly mentioned in the tablet (cf. Parpola 1994, 107-110). Thus, the text no. 14 (M-2097) has numerous exact counterparts among the incised tablets of Harappa (e.g. H-311 to H-318), the reverse sides of these tablets having the signs VII, VIII or VIIIH probably meaning ‘two/three/four pots (of offerings)’. (Text no. 13 [M-2098] is identical to no. 14, except that it is preceded by the sign no. 9, which often begins sign sequences, but otherwise never this particular one.) The incised tablets H-352, H-353 and H-354 shaped as triangular prisms have on one side the text identical to the rod text no. 14, on another side the text VIII, and on the third side the ‘dots-in-circle’, a motif that occurs on many ivory rods and which originally seems to have symbolized the sun (cf. Parpola 2013, 40-43) and which therefore may have been used on the rods in a calendrical sense (e.g., ‘day’). The sign sequence VII (‘two pots’) occurs on the reverse sides of the tablets H-943 and H-944, the obverse sides of which provide exact parallels to the text no. 11 (M-2092) containing a rare sequence of signs. The text no. 25 (H-2570) seems to record just ‘four pots (of offerings)’, or ‘five pots’, if the small stroke on the right is intentional. The ‘pot’ sign (perhaps accompanied by one or two other signs, which are indistinct) appears also on one side of the text no. 19 (H-1016), which on the other side has the solitary sign no. 241. This sign has a fairly high frequency, but a solitary occurrence can be cited from one edge of the unfinished seal M-1233 (without any iconographic motif), where it occurs on other sides as well. Possibly relevant is its occurrence after the sign no. 341 in a two-sign text on some moulded tablets from Harappa (H-796, reverse: UII; H-1125; cf. also H-1987).

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Text no. 12 (M-2104) closely resembles the text on the obverse of the moulded tablets M-478, M-480 and M-1425, where the text is accompanied by a picture of a kneeling worshipper, who extends a pot of offerings (similar in shape to the Indus sign no. 296, shaped U or V). The text of these tablets begins with UIII 'four pots', that of the rod with UIII 'three pots'. The tablet text continues with the signs nos. 15 ('man between two long vertical strokes') and 107 ('comb'), the rod with the signs nos. 15 and 1 ('man carrying two pots with a carrying yoke'). It is characteristic of the ivory rod texts that many of them end with the comb-like sign no. 107, which I have been suspecting to denote 'woman' or to add a feminine marker. Though it is comb-like in the standardized shape and is called 'comb' in the sequel, the shape found on ivory/bone rod texts and the incised tablets is probably more original and rather suggests that 'wing with feathers' may have been depicted. The sequence of signs nos. 15 and 1 is attested as the sole text of the two unicorn seals H-543 and H-544, while it begins the text in the unicorn seal M-715 and ends the text in several seals, such as M-896 and M-915.

The text no. 4 (M-1651 and M-2106) has an exact counterpart on one side of the rare large type of tablet from Mohenjo-daro (M-483, M-484, M-2030: in these tablets the other side has another rather long text); it also occurs on one of the three sides of the prismatic moulded tablet M-492, where the two other sides depict buffalo-spearing, and two bison bulls opposing each other besides a two-sign inscription (the two fighting bisons and the same two-sign inscription constitute the face of the stamp seal M-1367, which represents a very unusual type).

This text no. 4 begins with one of the 'fish' signs, no. 72, which also begins the text no. 5 (M-2107 and M-2108). Excepting this initial sign, the remaining part of the text no. 5 has an exact counterpart in the moulded tablet H-1151 from Harappa, the reverse side of which depicts a sacred tree, as well as in the moulded tablet H-875, which on its other side parallels the final four signs of the rod text no. 1. Without the final comb-like sign no. 107, the text of these two moulded tablets occurs on many incised tablets, the reverse sides of which have VIII (e.g. H-326, H-924 and H-925). In these tablet parallels we observe the variation between the presence and absence of the comb-like sign no. 107 at the end. This sign no. 107 uniquely ends the text no. 7 (M-2109 and M-2111), while without this sign no. 107 the remaining part of the text no. 7 occurs on several incised tablets from Harappa: H-938, H-939, H-1284 and H-2145 have VIII on the reverse (the text of both

1 (M-2087)	𐀀𐀁𐀂𐀃𐀄𐀅𐀆𐀇𐀈𐀉𐀊𐀋𐀌𐀍𐀎𐀏𐀐𐀑𐀒𐀓𐀔𐀕𐀖𐀗𐀘𐀙𐀚𐀛𐀜𐀝𐀞𐀟𐀠𐀡𐀢𐀣𐀤𐀥𐀦𐀧𐀨𐀩𐀪𐀫𐀬𐀭𐀮𐀯𐀰𐀱𐀲𐀳𐀴𐀵𐀶𐀷𐀸𐀹𐀺𐀻𐀼𐀽𐀾𐀿𐁀𐁁𐁂𐁃𐁄𐁅𐁆𐁇𐁈𐁉𐁊𐁋𐁌𐁍𐁎𐁏𐁐𐁑𐁒𐁓𐁔𐁕𐁖𐁗𐁘𐁙𐁚𐁛𐁜𐁝𐁞𐁟𐁠𐁡𐁢𐁣𐁤𐁥𐁦𐁧𐁨𐁩𐁪𐁫𐁬𐁭𐁮𐁯𐁰𐁱𐁲𐁳𐁴𐁵𐁶𐁷𐁸𐁹𐁺𐁻𐁼𐁽𐁾𐁿𐂀𐂁𐂂𐂃𐂄𐂅𐂆𐂇𐂈𐂉𐂊𐂋𐂌𐂍𐂎𐂏𐂐𐂑𐂒𐂓𐂔𐂕𐂖𐂗𐂘𐂙𐂚𐂛𐂜𐂝𐂞𐂟𐂠𐂡𐂢𐂣𐂤𐂥𐂦𐂧𐂨𐂩𐂪𐂫𐂬𐂭𐂮𐂯𐂰𐂱𐂲𐂳𐂴𐂵𐂶𐂷𐂸𐂹𐂺𐂻𐂼𐂽𐂾𐂿𐃀𐃁𐃂𐃃𐃄𐃅𐃆𐃇𐃈𐃉𐃊𐃋𐃌𐃍𐃎𐃏𐃐𐃑𐃒𐃓𐃔𐃕𐃖𐃗𐃘𐃙𐃚𐃛𐃜𐃝𐃞𐃟𐃠𐃡𐃢𐃣𐃤𐃥𐃦𐃧𐃨𐃩𐃪𐃫𐃬𐃭𐃮𐃯𐃰𐃱𐃲𐃳𐃴𐃵𐃶𐃷𐃸𐃹𐃺𐃻𐃼𐃽𐃾𐃿𐄀𐄁𐄂𐄃𐄄𐄅𐄆𐄇𐄈𐄉𐄊𐄋𐄌𐄍𐄎𐄏𐄐𐄑𐄒𐄓𐄔𐄕𐄖𐄗𐄘𐄙𐄚𐄛𐄜𐄝𐄞𐄟𐄠𐄡𐄢𐄣𐄤𐄥𐄦𐄧𐄨𐄩𐄪𐄫𐄬𐄭𐄮𐄯𐄰𐄱𐄲𐄳𐄴𐄵𐄶𐄷𐄸𐄹𐄺𐄻𐄼𐄽𐄾𐄿𐅀𐅁𐅂𐅃𐅄𐅅𐅆𐅇𐅈𐅉𐅊𐅋𐅌𐅍𐅎𐅏𐅐𐅑𐅒𐅓𐅔𐅕𐅖𐅗𐅘𐅙𐅚𐅛𐅜𐅝𐅞𐅟𐅠𐅡𐅢𐅣𐅤𐅥𐅦𐅧𐅨𐅩𐅪𐅫𐅬𐅭𐅮𐅯𐅰𐅱𐅲𐅳𐅴𐅵𐅶𐅷𐅸𐅹𐅺𐅻𐅼𐅽𐅾𐅿𐆀𐆁𐆂𐆃𐆄𐆅𐆆𐆇𐆈𐆉𐆊𐆋𐆌𐆍𐆎𐆏𐆐𐆑𐆒𐆓𐆔𐆕𐆖𐆗𐆘𐆙𐆚𐆛𐆜𐆝𐆞𐆟𐆠𐆡𐆢𐆣𐆤𐆥𐆦𐆧𐆨𐆩𐆪𐆫𐆬𐆭𐆮𐆯𐆰𐆱𐆲𐆳𐆴𐆵𐆶𐆷𐆸𐆹𐆺𐆻𐆼𐆽𐆾𐆿𐇀𐇁𐇂𐇃𐇄𐇅𐇆𐇇𐇈𐇉𐇊𐇋𐇌𐇍𐇎𐇏𐇐𐇑𐇒𐇓𐇔𐇕𐇖𐇗𐇘𐇙𐇚𐇛𐇜𐇝𐇞𐇟𐇠𐇡𐇢𐇣𐇤𐇥𐇦𐇧𐇨𐇩𐇪𐇫𐇬𐇭𐇮𐇯𐇰𐇱𐇲𐇳𐇴𐇵𐇶𐇷𐇸𐇹𐇺𐇻𐇼𐇽𐇾𐇿𐈀𐈁𐈂𐈃𐈄𐈅𐈆𐈇𐈈𐈉𐈊𐈋𐈌𐈍𐈎𐈏𐈐𐈑𐈒𐈓𐈔𐈕𐈖𐈗𐈘𐈙𐈚𐈛𐈜𐈝𐈞𐈟𐈠𐈡𐈢𐈣𐈤𐈥𐈦𐈧𐈨𐈩𐈪𐈫𐈬𐈭𐈮𐈯𐈰𐈱𐈲𐈳𐈴𐈵𐈶𐈷𐈸𐈹𐈺𐈻𐈼𐈽𐈾𐈿𐉀𐉁𐉂𐉃𐉄𐉅𐉆𐉇𐉈𐉉𐉊𐉋𐉌𐉍𐉎𐉏𐉐𐉑𐉒𐉓𐉔𐉕𐉖𐉗𐉘𐉙𐉚𐉛𐉜𐉝𐉞𐉟𐉠𐉡𐉢𐉣𐉤𐉥𐉦𐉧𐉨𐉩𐉪𐉫𐉬𐉭𐉮𐉯𐉰𐉱𐉲𐉳𐉴𐉵𐉶𐉷𐉸𐉹𐉺𐉻𐉼𐉽𐉾𐉿𐊀𐊁𐊂𐊃𐊄𐊅𐊆𐊇𐊈𐊉𐊊𐊋𐊌𐊍𐊎𐊏𐊐𐊑𐊒𐊓𐊔𐊕𐊖𐊗𐊘𐊙𐊚𐊛𐊜𐊝𐊞𐊟𐊠𐊡𐊢𐊣𐊤𐊥𐊦𐊧𐊨𐊩𐊪𐊫𐊬𐊭𐊮𐊯𐊰𐊱𐊲𐊳𐊴𐊵𐊶𐊷𐊸𐊹𐊺𐊻𐊼𐊽𐊾𐊿𐋀𐋁𐋂𐋃𐋄𐋅𐋆𐋇𐋈𐋉𐋊𐋋𐋌𐋍𐋎𐋏𐋐𐋑𐋒𐋓𐋔𐋕𐋖𐋗𐋘𐋙𐋚𐋛𐋜𐋝𐋞𐋟𐋠𐋡𐋢𐋣𐋤𐋥𐋦𐋧𐋨𐋩𐋪𐋫𐋬𐋭𐋮𐋯𐋰𐋱𐋲𐋳𐋴𐋵𐋶𐋷𐋸𐋹𐋺𐋻𐋼𐋽𐋾𐋿𐌀𐌁𐌂𐌃𐌄𐌅𐌆𐌇𐌈𐌉𐌊𐌋𐌌𐌍𐌎𐌏𐌐𐌑𐌒𐌓𐌔𐌕𐌖𐌗𐌘𐌙𐌚𐌛𐌜𐌝𐌞𐌟𐌠𐌡𐌢𐌣𐌤𐌥𐌦𐌧𐌨𐌩𐌪𐌫𐌬𐌭𐌮𐌯𐌰𐌱𐌲𐌳𐌴𐌵𐌶𐌷𐌸𐌹𐌺𐌻𐌼𐌽𐌾𐌿𐍀𐍁𐍂𐍃𐍄𐍅𐍆𐍇𐍈𐍉𐍊𐍋𐍌𐍍𐍎𐍏𐍐𐍑𐍒𐍓𐍔𐍕𐍖𐍗𐍘𐍙𐍚𐍛𐍜𐍝𐍞𐍟𐍠𐍡𐍢𐍣𐍤𐍥𐍦𐍧𐍨𐍩𐍪𐍫𐍬𐍭𐍮𐍯𐍰𐍱𐍲𐍳𐍴𐍵𐍶𐍷𐍸𐍹𐍺𐍻𐍼𐍽𐍾𐍿𐎀𐎁𐎂𐎃𐎄𐎅𐎆𐎇𐎈𐎉𐎊𐎋𐎌𐎍𐎎𐎏𐎐𐎑𐎒𐎓𐎔𐎕𐎖𐎗𐎘𐎙𐎚𐎛𐎜𐎝𐎞𐎟𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟
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the obverse and the reverse reads from left to right, as happens not infrequently in this category of inscribed objects, in H-2145 however the obverse has the normal order); in the tablets H-940, H-2147 and H-2148 the reverse has the sign no. 41 ('a [kneeling] man holding a pot'). The text on the obverse of these tablets, compared to the text no. 7, occurs also on one side of the incised quadratic prisms H-942 (one other side IIIU) and H-2240 and H-2241 (one other side dots-in-circle); but it also occurs among the seal inscriptions, forming the sole text of the unicorn seal M-77. The final spear-like sign no. 189 of the discussed sequence, following the 'plain fish' sign no. 60, has in the text no. 8 (M-2110) as its counterpart (cf. Parpola 1994, 69, 78 and 94 fig. 6.6) the four dots that surround the 'plain fish' (making together the sign no. 61). The text no. 8 is paralleled by the text of the unicorn seal M-729, except that the seal text does not have the sign no. 88 ('crab with claws'), with which the text no. 8 begins. This sign no. 88 is closely connected with the sequence of the signs nos. 101 ('fish-gig', cf. Parpola 2011, 45-46) and both in the tablets (e.g. H-748) and 60/61, and often occurs in this position in texts belonging to practically all categories of objects (for the tablets cf. H-748 and for the seals M-395).

In the drawing and the photograph of the impression, the text no. 15 (M-2091) seems to end in the sign no. 311 ('bull's head', cf. Parpola 1994, 104-106 with fig. 7.4), which would be a unique case. In this particular three-sign sequence we expect the last sign to be sign no. 4, where the sign no. 311 has been compounded with the sign no. 1 ('man carrying two pots with a carrying yoke'), so as to form the 'head' of the resulting ligatured sign. If the last sign actually is no. 4, this text has many parallels; in the bar seal H-670 it forms the whole text, as in this rod inscription. This three-sign sequence ends many seal inscriptions. Followed by the comb-like sign no. 107, it forms the text of the faience tablet H-1808 (the reverse side is apparently plain), and of many moulded tablets having the image of a sacred tree of the reverse (H-189, H-190, H-724, H-725, H-726, H-727, H-1104, H-1105, H-1106).

The text no. 3 (M-2103) recurs as the obverse text of the incised tablets H-2089 and H-2090 (with a three-sign text on the reverse), on the moulded tablets H-211 (with the 'bow and arrow' sign no. 187 reversed, and with IIIV on the reverse) as well as on the three-sided moulded tablets H-849 and H-850 (with the sign no. 187 reversed and VII on the second side and the 'plain fish' sign no. 60 in horizontal position on the third side; as this 'plain fish' in the normal vertical position is on some tablets placed together with the numeral and 'pot' signs, it may indicate fish as the content of the 'pots of offerings').

The texts nos. 1 (M-2087) and 2 (M-2112) provide one of the interesting cases of textual parallels suggesting that some basic signs, in this case no. 225, probably have the same meaning as the corresponding ligatures (compound signs) in which the sign in question is bound to the 'man' sign (no. 13), the ligature being in this case the sign no. 40 (for other similar cases, see Parpola 1994, 80-81 with fig. 5.3a). The last four signs of the text no. 2 constitute the whole text of the unicorn seal M-161; the first two signs begin very many seal inscriptions and seem to form some kind of 'optional' attribute (see Parpola 1994, 82-92). The last four signs of the text no. 1 constitute the whole text of the bison seal M-1080 and the unusual square moulded tablet H-1767, which has the image of a zebu on the reverse; these four signs also form the text of one side of the moulded tablet H-875, which was noted above in connection with the ivory rod text no. 5, which is paralleled on the other side of this tablet (except that the first sign of the rod text is missing). The sequence of the first four signs in the rod text no. 1 has its closest parallels in the seal H-1037, which agrees otherwise but has the sign no. 148 ('two long vertical strokes') inserted in the middle, and the moulded tablet H-697, which similarly has the sign no. 72 ('fish with upright prongs') inserted in the middle (the reverse has the signs VII and the image of a 'unicorn' bull with the characteristic ritual stand in front of it—though in this case the animal exceptionally is not 'unicorn' but has two horns).

4 Inscriptions Incised on Harappan Ivory/Bone Rods

The text no. 6 (M-2086 and M-2102) recurs in the last three signs of the six-sign text on one side of the large moulded and twisted tablet M-1424 (the reverse shows the image of a bison feeding from a manger and a different text of four signs).

The text no. 9 (M-1650) has its closest parallel in the pottery graffito H-1398, where the final sign no. 107 ('comb') of the rod text is missing and the 'fish' sign has different diacritics, i.e. the sign no. 72 ('fish with upright prongs', reading uncertain) replaces the sign no. 68 ('halved fish') of the rod text (the first sign of the rod text (no. 88, 'crab with claws') might have been in the text of the pot, but we do not know as it is broken. The last three signs of the text no. 9 recur as the last three signs of the text no. 10 (M-2113), where they are preceded by the sign no. 147 ('single long vertical stroke'). There are many different cases where the absence and presence of this sign no. 147 varies at the beginning of stably occurring sign sequences (see Parpola 1994, 80 with fig. 5.2). The last three signs occur frequently in the incised tablets which have the image of a crocodile of the reverse (H-287 and others), but these cannot really be compared, since the sign no. 213 always starting the four-sign text in these tablets is essential.

In the text no. 18 (M-2088), the first sign (on the right) seems to be no. 228, where a single long vertical stroke goes through the middle of the basic sign no. 225. However, the sign no. 228 does not occur elsewhere before the sign no. 54 which is the final sign of this two-sign rod text, whereas the sign no. 225 occurs very often in this position. The latter sign sequence forms the whole text of the unicorn seal M-939, and it occurs as the final part of many longer seal inscriptions. In the tablets this two sign sequence is found in the tablet H-1310, but this text is clearly broken and undoubtedly belongs to the tablets, mostly incised (like H-359 with VII on the reverse and H-344 with VIII on the reverse), but also moulded (H-1123 with VII on the reverse), where this sequence is preceded by the sign no. 68 ('halved fish').

The basic sign no. 225 which may be involved in the text no. 18 occurs in the text no. 17 (M-1017), where it begins this two-sign inscription. As a complete text this sign sequence is attested only here, but it is very common as the opening phrase of many seal inscriptions, sometimes on a separate line (see Parpola 1994, 82-84, 89-90). It also begins the text on one of the two inscribed sides in a group of identical incised tablets from Mohenjo-daro, where such objects are rare (M-501, M-1444, M-1445, M-2040, M-2041). Interestingly, this two-sign phrase ends the inscription on one of the two inscribed sides of the incised, broken tablet H-2158. The text no. 16 (M-2089 and M-2090) belongs to the same category of phrases that usually begins a longer inscription, mostly on seals, but occasionally in other types as well. Without the first sign, no. 11 ('man with long hairdo'), it is actually the most common "initial phrase", which in a few cases constitutes the entire text (see Parpola 1994, 82-84, 89-90). In the unicorn seal M-35, the rare sign no. 11 begins the text, followed directly by the sign no. 127, which ends the text no. 16, being thus parallel to it with the exception that the middlemost sign is missing. In the unicorn seal M-875 the sign no. 11 ends the inscription.

All the remaining texts form one category. The sign no. 91 (which seems to depict both a 'branching tree stem' and 'arm ending in the hand with fingers', cf. Parpola 2011, 32-33) is repeated four times in the text no. 20 (M-2093) and three times in the text no. 21 (M-2094). In the text no. 23 (M-2095) the repetition is replaced by numerical indication: the sign no. 131 ('four short vertical strokes') stands for number 4, expressing 4 times sign no. 91 (cf. Parpola 1994, 81). The text no. 24 (M-2099) is broken, but clearly the sign no. 91 was preceded by some number. In the text no. 22 (M-2096 and H-1517) the number preceding the sign no. 91 is 5 (sign no. 132). In this case the phrase '5 x sign no. 91' is further preceded by a two-sign initial phrase, which in both objects having this text is unclear with regard to the first sign, but on the basis of the numerous parallels in seal and tablet inscriptions the most frequently occurring initial phrase mentioned above in connection with the text no. 16 (the sequence of the signs nos. 376 and 127) is involved. Inscriptions consisting of the sign no. 91 preceded by a number, with or without the initial phrase just mentioned, often constitute the entire text

among the seal inscriptions. Thus the whole inscription consists of the sign no. 91 preceded by number 3 on the unicorn seal M-179 and on the large zebu seal H-585, preceded by number 4 on the unicorn seal M-749, preceded by the number 5 on the unicorn seal M-224, preceded by the number 6 on the unicorn seal M-178, preceded by the number 7 on the unicorn seal M-673. Complete inscriptions starting with the initial phrase mentioned and ending with the sign no. 91 preceded by number include the unicorn seals M-32, M-712 and H-407 (number 3), the unicorn seals M-984 and M-1063 (number 4). On the tablets such phrases are much less frequent and seem to occur only on moulded tablets, which in two cases are moreover twisted. One of these twisted tablets is H-812 (sign no. 91 preceded by number 5, reverse IIIU), the other one is H-2003 (sign no. 91 preceded by number 4 and starting with the two-sign initial phrase mentioned; the reverse is highly interesting, showing a horned anthropomorphic deity seated under what looks like a canopy). H-1942 is a three-sided moulded faience tablet with the sign no. 91 preceded by number 5 and the same initial phrase on one side, IIV on another side, and two dots-in-circle on the third side. The moulded tablet H-778 has the sign no. 91 preceded by number 4 and just the first sign of the initial phrase on the obverse and VII on the reverse.

The text no. 26 (Dales MD-580) also belongs to the group of texts discussed last, as it ends with the sign no. 91 preceded by number 5. It begins with an initial phrase that is different from that mentioned above, consisting of three signs, the last being the one most commonly ending an initial phrase (no. 127 'two short vertical strokes' normally raised to the top of the line, but here exceptionally written lowered to the bottom of the line like the following number 5, sign no. 132, which is normally placed in the middle of the line). The initial sign appears to be no. 192, which often occurs in text-initial position (on the interpretation of this sign see Parpola 2011, 34-36), but which is not followed by the sign no. 91 which comes next in the text no. 26. However, the relatively rare sign no. 191, which differs from no. 192 in having a long vertical stroke crossing the sign in the middle, in one particular context forms an initial phrase together with the two signs that follow no. 192 in the text 26. This context is the moulded tablet with circular cross-section, known in about forty (originally) identical specimens from Harappa (M-252 etc.) and having the image of a 'unicorn' bull on the reverse. The initial phrase is here followed by two signs, no. 72 ('fish with upward prongs') and no. 189 ('spear').

What, then, can be concluded from this comparison of the ivory/bone rod inscriptions with the texts of the other categories of inscribed objects? The texts nos. 1 and 2, as well as 8, 15, 16, 17, 18, and 20-24 are rather closely paralleled in the seals, which with great likelihood express proper names or professional titles (cf. Parpola 1994, 113-121). The text no. 7 is not as such attested in the seals, but without the last sign (no. 107 'comb') the rest of the text forms the complete inscription of the seal M-35. The last sign of this seal inscription, no. 189 ('spear') may be a priestly title (cf. Old Tamil *vēlan*, 'man wielding the spear', title of the priest of God Murukan, and the Harappan images of spearing a [sacrificial] buffalo, e.g. in M-492, M-1430 and H-1971; see also Parpola 1997, 178-187). The first two signs of the text no. 7 probably express a god's name (see Parpola 2011, 43-47). Several seals have inscriptions where signs or sign sequences probably denoting deities are followed by the 'spear' sign and thereafter a final 'comb' sign (e.g. M-956, M-1781, H-1027), possibly converting the 'priest' into a 'priestess'. I have already noted the frequency of the 'comb' signs at the end of the ivory/bone rod inscriptions, possibly indicating that they were specifically associated with women. Out of these, the texts nos. 3, 4, 5, 11, 13 and 14 are closely related with the 'sacrificial tablets', and in the case of nos. 5 and 13-14 (see Parpola 2011, 32-33 and 39-49) there are particular reasons to suspect that they are connected with a wish to get a baby. Text number 12 mentions 'three pots (of offerings)' in a sequence closely resembling the text of tablets which in addition show a human worshipper kneeling in front of a sacred tree and extending a pot of offerings to it (cf. Parpola 1994, 107-110; 2015, 268-271).

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