

# A Dravidian decipherment of Indus script

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This publication is for feedback and further elucidation on the basic decipherment for larger community of enthusiast out there in the world. Important documents for understanding Indus script is the corpus created by Asko Parbola and [Iravadham Mahadevan's concordance](#) work (here on referred to as M77). We also need the [Dravidian Etymological Dictionary](#) (DED) by Burrow and Emeneau. Please download the two PDFs from Internet Archive and you should be ready. There are two excellent software versions of these PDFs: [Iravadham Mahadevan's concordance](#) maintained by Roja Muthiah Research Library and [Dravidian Etymological Dictionary](#) maintained by Digital South Asia Library of the Chicago University. Another rich source of conjectures and data is the great work of Bryan Wells: [The Archaeology and Epigraphy of Indus Writing, Archaeopress, 2025](#), who also has an excellent online database.

If you want to write documents with Indus signs then you need Asko Parbola's NFM Indus Script font. This document was written in that font, a lovely gift from MVB to me. Now on to the beautiful discovery of the decipherment.

The decipherment became possible with the arrival of the splendid work by MVB in Sasanam: M.V. பாஸ்கர் (Bhaskar), அன்றைய தலைப்பு செய்திகள் (Yesterday's headlines), சிந்துவெளி நாகரீக சிறப்பு வெளியீடு (Indus Valley Civilization Special Issue), கிருஷ்ணகிரி மாவட்ட வரலாற்று ஆய்வு மையம் (Krishnagiri District History Research Center), சாசனம் (Sasanam), 2025.

This laid down the map that lead to all the linkage between graphics and the text, building this beautiful journey of discovery enabled by M.V. Bhaskar, with whom I have been working for the past several years. My learning in art, Brahmi and Indus Script derived from his interactions.

Decipherment is a commutative diagram:



Of course, a lot of hard work and walking on three legs. We use M77 to denote Mahadevan's sign numbers, but the glyphs are provided by Asko Parbola's NFM Indus Script font.

## Skilled artistry of Indus script

At the core of Indus script lies the mastery of a skilled metallurgist (𑀲𑀺?). We will illustrate this with these few examples:

𑀲𑀺𑀲𑀺𑀲𑀺 = 𑀲𑀺𑀲𑀺𑀲𑀺 = vel-tiraḷ-nuraṇ-ūr = வேல்திரள்நுழனூர்

The semantic meaning being the town with tailors, jewellery and hunting professions.

𑀲𑀺𑀲𑀺𑀲𑀺 = 𑀲𑀺𑀲𑀺𑀲𑀺 = mu-iru-mel-per-ul = முவிரு மேல்பொருள்

The semantic meaning being the mighty great guardian of the township (elevated to kings and gods at later times).

## Some important townships

This is just indicative of the various kinds of townships and professions, and a deeper quantitative study is required to obtain their relative importance. What is interesting is that the last one is farmer's town, which doesn't count really as a town, but in Dravidian languages, the term "ūr" seems to cover what we call "village" also.

| M77 Sign | Glyph | Syllable           | DED | Description                 | Tamil            |
|----------|-------|--------------------|-----|-----------------------------|------------------|
| 342      | 𑀲     | ūr                 | 752 | town                        | ஊர்              |
| 347      | 𑀲     | velūr              | -   | hunter's town               | வேலூர்           |
| 358      | 𑀲     | chevūr             | -   | bronze worker town          | செவ்வூர்         |
| 351      | 𑀲     | vel-nura-ūr        | -   | hunter-cloth worker town    | வேல்நுழவூர்      |
| ?        | 𑀲     | che-palla-ūr       | -   | bronze-elephant worker town | செவப்பல்லூர்     |
| 355      | 𑀲     | vel-palla-ūr       | -   | hunter-elephant worker town | வேல்பல்லூர்      |
| 361      | 𑀲     | che-ko-ūr          | -   | herder-bronze worker town   | செங்கோவூர்       |
| 372      | 𑀲     | vel-tiraḷ-nuraṇ-ūr | -   | hunter-jeweller-tailor town | வேல்திரள்நுழனூர் |
| 15       | 𑀲     | uṛavūr             | 688 | working, farming town       | உழவூர்           |

## Numbers

Numbers are treated separately, but they are just like other glyphs, easily welded and affixed to other glyphs, producing a plethora of possibilities.

| M77 Sign | Glyph | Syllable   | DED  | Description                 | Tamil      |
|----------|-------|------------|------|-----------------------------|------------|
| 86       | 𑀲     | mu-, mutal | 4950 | primary (see also sign 237) | முதல், -ல் |

|     |  |                    |          |                      |                    |
|-----|--|--------------------|----------|----------------------|--------------------|
| 87  |  | ra-, ir-, iru-     | 474, 481 | two, great, eminence | ரண்டு, -இர், இரு-  |
| 89  |  | mū-, mūn-          | 5052     | three                | மூ-, மூன்-         |
| 95  |  | nal-, -nāl, nalla- | 2912     | four, good           | நல்-, நால்-, நல்ல- |
| 96  |  | -ai                | 2826     | five                 | -ஐ                 |
| 108 |  | -ar                | 2485     | six, river           | -ஆறு               |
| 110 |  | ēru, eru           | 910      | seven, rise          | ஏழு, எழு           |

#### Application of above phonemes

|     |  |                      |      |                        |                               |
|-----|--|----------------------|------|------------------------|-------------------------------|
| 112 |  | nalām, nālam, munnal | 2913 | land, healthy, before  | நலம், நாலம், முன்னால்         |
| 116 |  | nallai, nellai       | -    | rice                   | நல்லை, நெல்லை                 |
| 121 |  | nal.nel.nāl          | -    | good rice person       | நல்நெல்லானால்                 |
| 120 |  | mu-munamum           | -    | three generations back | மும்முன்னோனும், மும்முன்னமும் |
| 119 |  | mu-munnor            | -    | two generations back   | மும்முன்னோர்                  |

## Clitics

Clitics provide sentence structure (the subject and the object). The default reading order is right to left, but before the clitic " (sign 99), the reading is left to right.

| M77 No. | Glyph | DED   | Description        | Tamil                       |
|---------|-------|-------|--------------------|-----------------------------|
| 97      | 𑌵     | -     | -il, -da, -ta, -in | -ட, -டு, -த, -து -இல், -இன் |
| 99      | 𑌶     | -     | -ra, -ru           | -ர, -ரு, -ற, -று            |
| 123     | 𑌷     | -     | -yar, -yin         | -யர், -யார்                 |
| 344     | 𑌸     | ūr-ar | -                  | important sign with clitics |
| 343     | 𑌹     | ūr-il | -                  | important sign with clitics |

## Learn through pun

Following are an indication of the pun that abounds in Indus script, which is termed as the “rebus principle”. Of course, it only makes sense if your language is close to ancient Dravidian. For deeper understanding you may have to refer to some of the sign values below this in the section on “Syllabic development”. We only sketch a few, but the Indus script syllabary abounds in such pun. The reduction of number of glyphs required for a writing system for Dravidian language is very much dependent on prudently choosing glyphs that provide highest possible homophony.

| M77 Sign | Glyph   | Syllable         | DED               | Description                        | Tamil           |
|----------|---|------------------|-------------------|------------------------------------|-----------------|
| 298      | ))))  | valai = vala+ai  | -                 | ) = vala+5                         | வல+ஐ=வலை        |
|          | Right-parenthesis is “vala” (curved as well as right) in Tamil and “vala” + “ai” = “valai”. “vala” is curve, as well as “right”, which fits well with description of right parenthesis. This is further explained by a pun statement shown in the next row. |                  |                   |                                    |                 |
| 62       | (ஃ)   | valai-kanni      | 5379              | scabbard fish with fang-like teeth | வாளை மீன்       |
|          | The fish “vālai” is known as the scabbard fish that has sharp teeth. A nice tooth is drawn at the top to elucidate the learning. This explains that the parenthesis sign (299, 287) carry the phonetic value “valai”  |                  |                   |                                    |                 |
| 295      | )ஃ  | eri-valai        | 902               | Another sharp tooth fish           | ஏரி வாளை (மீன்) |
|          | A fresh water shark, <a href="#">Wallago attu</a> , also known “eri-valai”, a pun again on the word with rebus equation: “vālai” ≈ “valai”. The prefix “eri” comes from “two” or “iru”, leading to one more rebus equation: “iru” ≈ “eri”.                  |                  |                   |                                    |                 |
| 63       | (ஃ)   | kanni-pori-valai | -                 | Trapping of birds                  | கன்னி-பொறி-வலை  |
|          | This learning tablet defines the phonetic value of fish as “kanni” and the bird as “puri” by defining it through a polysyllabic pun as “kanni-pori” with a parenthetic “valai”. The “kanni-pori” in Tamil is “trapping”.                                    |                  |                   |                                    |                 |
| 64       | ⋮(ஃ)  | valai-kanni      | -                 | The clitic reverses reading order  | கன்னி-பொறி-வலை  |
|          | The clitic sign 64 reverses the reading order to the right of it. This learning script defines that.  |                  |                   |                                    |                 |
| 376      | ☪   | pal              | -                 | teeth                              | பல்லு           |
|          | A teeth is indicated by the protruding teeth effect, just like in the fish teeth.   |                  |                   |                                    |                 |
| 57       | இரூம்பு   | irumpu           | 486               | iron                               | இரும்பு         |
|          | Now we have triple pun: iru-pu (two insects) ≈ erumpu (ant) ≈ irumpu (iron)   |                  |                   |                                    |                 |
| 181      | கொட்டு  | kottu            | 2065, 2064        | pour (sting)                       | கொட்டு          |
|          | We can see pincler claws are indicated to show “sting” and “pour” are homophones in Dravidian “kottu”. The stinging honey-bee also is supposed elucidate connotations of “honey” that pours (kottu) from the beehive.                                       |                  |                   |                                    |                 |
| 393      | பல்லர்  | palla-ar         | 3986a, 1045, 4016 | palla, pallar                      | பல்லர் (பள்ளம்) |
|          | The sign 391 “palla” (see sign list below) is indicated here by putting it upside down in a hole (pallam) by creating the pun.  |                  |                   |                                    |                 |
| 310      | விலவில  | vila-vila        | 5424              | tremble with fear                  | விலவில          |
|          | This cognates with “vavvāl” (DED 5370), probably a long-tailed fruit bat, with an eerie shivering scene that it creates.  |                  |                   |                                    |                 |

|   |   |      |     |  |    |
|---|---|------|-----|--|----|
| 303                                     | ) | iṭa, | 432 | cleft, gap, split,<br>crack open ,<br>slit, breach,<br>chasm | இட |
| Also works as “iṭaveli” ≈ “iṭai-valai”. |   |      |     |  |    |

## Syllabic development

We outline from top to bottom how the syllabary is slowly developed from simple to complex glyphs. Happy journey!

| M77 Sign | Glyph | Syllable              | DED                | Description           | Tamil                          |
|----------|-------|-----------------------|--------------------|-----------------------|--------------------------------|
| 1        | 𐀀     | an                    | 131, 132           | person                | அன்                            |
|          | 𐀁     | an(n)-an              | 131, 132           | brother               | அண்ணன்                         |
| 2        | 𐀂     | kāvalan               | 1417, 1416         | security guard        | காவலன்                         |
| 25       | 𐀃     | mutalvan              | 4950               | chief                 | முதல்வன்                       |
| 26       | 𐀄     | nal-mutalvan          | -                  | good chief            | நல்முதல்வன்                    |
| 3        | 𐀅     | anal                  | 327                | fire                  | அனல்                           |
| 4        | 𐀆     | natt-an               | 3638               | country man           | நாட்டான்                       |
| 5        | 𐀇     | natt-ar-an            | 3638               | country rules         | நாட்டாரன்                      |
| 6        | 𐀈     | cadai-an              | 153                | hairy man             | சடையன்                         |
| 7        | 𐀉     | val(i)-an             | 5276               | skilled man           | வலியன்                         |
| 8        | 𐀊     | vel-an                | 5368               | lance fighter         | வேலன்                          |
| 9        | 𐀋     | valai-velan, valaiyan | 5288               | animal trapper        | வலையன்                         |
| 12       | 𐀌     | vuṛavan               | 688                | worker, farmer        | உழவன்                          |
| 13       | 𐀍     | vuṛaval               | 688                | work, farming         | உழவல்                          |
| 14       | 𐀎     | per-uṛavan            | 688                | big farmer            | பேர் உழவன்                     |
| 15       | 𐀏     | uṛavūr                | 688                | working, farming town | உழவூர்                         |
| 35       | 𐀐     | valaiyan              | 5288               | trapper               | வலையன்                         |
| 41       | 𐀑     | kīṛān                 | 1621               | poor                  | கீழான்                         |
| 42       | 𐀒     | pallan                | 3986a              | mahout                | பல்ல(வ)ன்                      |
| 54       | 𐀓     | pu                    | 4345               | flower, insect        | பூ (பூச்சி)                    |
| 55       | 𐀔     | pol                   | 4550               | flowering             | பொலி, பொலிவு                   |
| 374      | 𐀕     | -n                    | 1159b, 3621, 3621a | night, bug            | நீர் (துளி), (ப)னி, நள், நல்லு |
| 410      | 𐀖     | nān                   | 3639               | me                    | நான்                           |
| 415      | 𐀗     | nannan                | 3639               | a name                | நண்ணன்                         |

|   |   |                              |                  |  |                        |
|---|---|------------------------------|------------------|--|------------------------|
| 299   | ( | ida, idai                    | 449              | hip, left                                  | இட-, இடை               |
| 301   | ᳵ | idayan                       | 450              | herder, herdsman                           | இடையன்                 |
| 287   | ) | vala-, vaḷai                 | 5313, 5314       | bent, trap, right                          | வல, வளை                |
| 293   | ) | valaiyan                     | 5288             | animal trapper (short form)                | வலை வேலன், வலையன்      |
| 328   | ᳵ | vu                           | 651, 761         | ooze, mortar                               | வ, உ, ஊ                |
| ?   | ᳵ | vala, vala                   | 5304             | strong, fertile                            | வல-, வள-               |
| 32  | ᳵ | vuvan                        |                  | person between two                         | உவன்                   |
| 332   | ᳵ | vai                          | 5549-53          | to stay, straw of paddy, to abuse, sharp   | வை                     |
| 336   | ᳵ | valan                        | 5276             | strong, skillful                           | வலன்                   |
| 337   | ᳵ | velanai                      | 5368             | lance fighter                              | வேலனை                  |
| 342   | ᳵ | ūr                           | 752              | town, village                              | ஊர்                    |
| 347   | ᳵ | vellore                      | -                | hunter's town                              | வேலூர்                 |
| 358   | ᳵ | chevur                       | -                | bronze worker's town                       | செவ்வூர்               |
| 344   | ᳵ | ūr-ar                        | -                | important sign with clitics                | ஊரார்                  |
| 343   | ᳵ | ūr-il                        | -                | important sign with clitics                | ஊரில்                  |
| 373   | ○ | pa                           | 3805, 4016, 4124 | sun, pot                                   | பகல், பள்ளம், பாணை     |
| 375   | ① | pal, pala                    | 3986a            | teeth, many                                | பல், பல                |
| 391   | ⊕ | pallā                        | 3986a, 1045      | elephant                                   | பல்லா (யாணை)           |
| Depicted by the ornamental oval-shaped plate that is fixed on it's forehead |   |                              |                  |  |                        |
| 392   | ᳵ | nal-pallar (nalla-palla-iru) | -                | good mahout                                | நல் பல்லர்             |
| 403   | ᳵ | parru, pattu, paṛai          |                  | sale announcement with a drum beat         | பற்று, பட்டு, பறை      |
| 404   | ᳵ | nal-paṛai                    |                  | good announcement                          | நல்ல பறை               |
| 254   | ᳵ | paṭi, paṭṭi                  | 3848,3850        | settlement, rest, roost, step gradee, rank | படி, பட்டி             |
| 216   | ᳵ | tan, tān                     | 2946, 3188, 3110 | earthen pot                                | தன், தண் (தண்டி), தவளை |
| 217   | ᳵ | atan                         | 1                | there                                      | ஆதன்                   |
| 53  | ᳵ | tāvu                         | 3177             | jump, luxuriant, tread gently              | தாவு, தவளை             |
| 222   | ᳵ | talū                         | 3105             | beat, crush                                | தள்ளு                  |

|  |       |                     |                         |   |  |
|--|-------|---------------------|-------------------------|---|--|
| 223  | 𐎡𐎴    | mumuta              | -                       | grand-parent  | மும்முத  |
| 229  | 𐎡𐎠    | taṛ, taṛi           | 3178                    | bow down  | தாழு, தாழி                                     |
| 36   | 𐎡𐎠𐎵   | tan                 | 3045                    | cold, water   | தண் (தண்ணீர்)                                  |
| ?  | 𐎡𐎠    | pān                 | 4068                    | song, melody  | பாண்   |
| 31   | 𐎡𐎠𐎵   | pānan               | 4068                    | tamil bard  | பாணன், பாடுபவன்                                |
| 59   | 𐎡𐎠𐎵   | kaṇ, kanni          | 1159a, 1166, 1168, 1417 | boat, bamboo raft   | கண், கன்னி                                     |
| 60   | 𐎡𐎠𐎵   | nalla-kanni         | -                       | good vehicle  | நல்ல கன்னி                                     |
| 67   | 𐎡𐎠𐎵   | kondū, kōnda, gōnde | 2053, 2216              | bull, with  | கொடு (கொண்டு),<br>கோண்டே,<br>கொண்டே, கொண்<br>ட |
| 72   | 𐎡𐎠𐎵   | kōl                 | 2238                    | boat, raft  | கோல்   |
| 70   | 𐎡𐎠𐎵   | kāl                 | 1483                    | cart  | கால்   |
| 65   | 𐎡𐎠𐎵   | peru-kanni          |                         | big boat  | பெருங்கன்னி                                    |
| 78   | 𐎡𐎠𐎵   | pur, puri           | 4374                    | bird  | -புர், -புரி, புரா                             |
| 81   | (𐎡𐎠𐎵) | valai-puri          | -                       | trapped bird  | வலைபுரி, புரிவலை                               |
| 319  | 𐎡𐎠𐎵   | mura                | 4977                    | snail, curl   | முற, முறை, முறுக்கு                            |
| 134  | 𐎡𐎠𐎵   | peru                | 4411                    | big, large  | பெரு   |
| 261  | 𐎡𐎠𐎵   | ko                  | 2207, 2203              | fort, gentry  | கோ, கோட்டை                                     |
| Origin of the word “ko” could be the Gond people of the mountains, reinforced by the West wind, from western practice of having kings in Sumeria |       |                     |                         |   |  |
| 30   | 𐎡𐎠𐎵   | kovan               |                         | herder, herdsman, gentry  | கோவன்  |
| Cattle class that eventually becomes the ruling gentry   |       |                     |                         |   |  |
| 261  | 𐎡𐎠𐎵   | koṭa, koṭṭa         | 2207, 2203              | fort, gentry (west wind, western practice of having kings in Sumeria) | கொட, கோட்ட                                     |
| 242  | 𐎡𐎠𐎵   | māṭi, māṭu          | 4796a, 4798             | mansion, terrace, ox  | மாடி, மாடு                                     |
| 197  | 𐎡𐎠𐎵   | mēl, mettai         | 5058                    | top, terrace  | மேல், மெத்தை                                   |
| 402  | 𐎡𐎠𐎵   | nādu                | 3638                    | country (as a contrast to village)                                    | நாடு   |
| 162  | 𐎡𐎠𐎵   | vēl                 | 5536                    | spear, valour   | வேல்   |
| 245  | 𐎡𐎠𐎵   | tatṭi               | 3036                    | cloth, wooden frame   | தட்டி  |
| 296  | 𐎡𐎠𐎵   | vaṛi                | 5297                    | way   | வழி  |
| 149  | 𐎡𐎠𐎵   | nālvaṛi             | 5297                    | cross-road  | நால்வழி  |
| 297  | 𐎡𐎠𐎵   | aruvaṛi             | 5297                    | six-way crossing  | அறுவழி, ஆறுவழி                                 |
| 135  | 𐎡𐎠𐎵   | peruvaṛi            | 5297                    | big way   | பெருவழி  |

|      |     |                         |               |                                    |                           |
|------|-----|-------------------------|---------------|------------------------------------|---------------------------|
| 136  | 𑌕   | aim perumvarī           | 5297          | five big way                       | ஐம் பெருவழி               |
| 153  | ↑   | perupavan               | 4422          | receiver                           | பெருபவன்                  |
| 155* | 𑌕   | anupu, anbu             | 330           | send                               | அனுப்பு, அன்பு            |
| 211* | ↑   | ambu, anupu             | 5536          | send                               | அனுப்பு, அன்பு            |
| 83   | 𑌕   | irappan, irappu         | 501           | death                              | இறப்பு                    |
| 50   | 𑌕   | āṭu                     | 5152          | goat                               | ஆத்து, ஆடு                |
| 124  | 𑌕   | ēr                      | 2815          | plough                             | கலப்பை                    |
| 125* | 𑌕   | vilagu                  | 5423          | diverge                            | விலகு                     |
| 47   | 𑌕   | aṛan                    | 204           | squink                             | அரண், அரணை                |
| 43   | 𑌕   | nal-aṛan                | -             | good behavior                      | நல் அறன்                  |
| 113  | (𑌕) | viḷai-ñālam             | 5437, 2913    | fertile land                       | விளை நாலம்                |
| 415  | 𑌕   | mu-pala                 | 7-            | important many                     | முப்பல                    |
| 171  | 𑌕   | nil-(v)anji, nilai      | -             | stable                             | நில்வஞ்சி, நிலை           |
| ?    | 𑌕   | nal-inai, nāl-inai      | -             | good joining, joining four         | நல்லிணை, நாலிணை           |
| 49   | 𑌕   | kula                    | 1829          | generation, geneology              | குலம்                     |
| 51   | 𑌕   | māru, mu-kula-iru-māran | 4834          | reliable third generation barter   | மாறு, முக்குல மும்மாறனார் |
| 149  | 𑌕   | mārru                   | 5297          | eXchange                           | மாற்று                    |
| 130  | 𑌕   | kol                     | 2151          | exchange, buy/sell                 | கொள், கொள்முதல்           |
| 148  | 𑌕   | marrukoḷ                | 5297, 2151    | exchange, buy/sell                 | மாற்றுகொள், buy/sell      |
| 237  | 𑌕   | mutal                   | 4951          | base, foot, stump                  | முதல்                     |
| 304  | 𑌕   | vil                     | 5422, 5421    | bow, sell                          | வில்                      |
| 305  | 𑌕   | villai                  | 5421          | price                              | வில்லை, விலை              |
| 127  | 𑌕   | alaku/aṛagu             | 239, 246, 255 | beak, beauty, grains of paddy      | அலகு, அழகு                |
| 306  | 𑌕   | alaku-vilam             | -             | good home                          | அழகு ஈஇல்லம்              |
| 307  | 𑌕   | vilampu                 | 5434, 5433    | proclaim openly, superintends food | விலம்பு                   |
| 397  | 𑌕   | thiraḷ                  | 3245          | pearl necklace                     | திரள், முத்து மாலை        |
| 377  | 𑌕   | nal-thiral-pala         | -             | many good pearl necklaces          | நல்திரள் பல               |
| 233  | 𑌕   | mumalai                 | -             | three mountain range               | மும்மலை                   |
| 235  | 𑌕   | mumalai-vel             | -             | three mountain range worker        | மும்மலை வேல்              |
| 180  | 𑌕   | koṭṭu                   | 2063, 2064    | pour, sting                        | கொட்டு (தேன்)             |
| 181  | 𑌕   | koṭṭu                   | 2063, 2064    | pour, sting                        | கொட்டு                    |



|     |   |                      |                        |  |                      |
|-----|---|----------------------|------------------------|--|----------------------|
| 169 |    | nilam                | 3676                   | land, ricefield                            | நிலம்                |
| 171 |    | nilai                | 3675                   | firm, stable                               | நிலை                 |
| 174 |    | iru-nilam            | 481, 3676              | great/vast land                            | இருநிலம்             |
| 88  |    | nal-iru              | 3610, 480              | fine life                                  | நல்லிரு              |
| 176 |    | anjih, añcal         | 56, 55                 | to take on shoulder, resting place         | அஞ்சி, அஞ்சல்        |
| 249 |    | māṭṭu                | 4801, 4802             | fasten, put in, fasten, hook, kindle, fire | மாட்டடு              |
| 253 |    | māṭṭal               | 4802                   | necklace                                   | மாட்டடல்             |
| 182 |    | accu                 | 48                     | loom frame, mould, ridge in field          | அச்சு                |
| 178 |    | kalappai             | 1304                   | plough                                     | கலப்பை               |
| 323 |    | il, ila              | 494, 497               | non-existence, leaf                        | இல                   |
| 325 |    | ila                  | 497                    | leaf                                       | இல                   |
| 326 |    | ilai                 | 497, 496               | leaf                                       | இலை, இலஞ்சி          |
| 327 |    | ilavaṛian            | -                      | name?                                      | இலவழியன்             |
| 76  |   | cē                   | 1931                   | red  | சே, செம்மை           |
| 311 |  | yār, eril            | 5156                   | harp, music, beauty                        | யாழ், எழில், இசை     |
| 400 |  | nuṛan                | 3715                   | penetrate                                  | நுழ-, நுழன், நுழம்பு |
| 310 |  | vila-vila            | 5424                   | tremble with fear                          | விலவில               |
| 219 |  | tai                  | 3473                   | sew, stitch                                | தை                   |
| 214 |  | irutai               | 481, 3473              |  | இருதை                |
| ?   |  | cī, cīpu, cil, calli | 2599, 2622, 1577, 2382 | wooden peg, small piece of stone           | சீ, சிப்பு, சில்     |
| 215 |  | cīruttai             | 2590                   | panther                                    | சிறுத்தை             |
| 258 |  | calavai              | 2368                   | washing/bleaching cloth                    | சலவை                 |
| 258 |  | cilāpam              | 2369                   | pearl fishery                              | சில்லாபம்            |
| 256 |  | cutti, cuttiyal      | 2668                   | Small hammer                               | சுத்தி, சுத்தியல்    |

## Common phrases

Here we list multiple logos (mostly pairs and triplets) that commonly occur together in IVC. We also list a few non-aglutinative entangled glyphs which we try to describe them as complex mixed states.

| M77 Signs | Glyph | Syllable | DED | Description | Tamil |
|-----------|-------|----------|-----|-------------|-------|
|-----------|-------|----------|-----|-------------|-------|

|                              |             |   |               |   |   |
|------------------------------|-------------|---|---------------|---|---|
| 148                          | 𑌕 = 𑌕 + 𑌕   | marukoḷ                                 | 5297,<br>2151 | exchange,<br>buy/sell                               | மாற்று கொள்                               |
| 12-124                       | 𑌕𑌕          | ēr-vuṛavan                              | -             | farmer  | ஏர் உழவன்                                 |
| 169-124                      | 𑌕𑌕          | ēr-nilam                                | -             | farm land   | ஏர் நிலம்                                 |
| 130-51                       | 𑌕𑌕          | maṛu-koḷ, mu-<br>kula-iru-maran-<br>koḷ | -             | barter  | மாற்று கொள்                               |
| 402-267                      | 𑌕𑌕          | koṭa-naṭu                               | -             | herder country                                      | கோட நாடு                                  |
| 402-267                      | 𑌕𑌕          | valaiyan-naṭu                           | -             | trapper's<br>country                                | வலையன் நாடு                               |
| 402-76                       | 𑌕𑌕          | cē-nadu                                 | -             | red country,<br>bronze<br>country                   | சே நாடு                                   |
| 67-65                        | 𑌕𑌕          | peru-kanni-<br>kondu                    | -             | with big<br>vehicle                                 | பெருங்கன்னி கொண்டு                        |
| 59-67                        | 𑌕𑌕          | konda-kal                               | -             | bullock cart  | கொண்டா கல்,<br>கோண்ட கல், மாட்டு<br>வண்டி |
| 59-67                        | 𑌕𑌕𑌕         | peru-konda-kal                          | -             | big bullock<br>cart                                 | பெரு கோண்ட கல்,<br>பெரு மாட்டு வண்டி      |
| 372 =<br>342+400+<br>397+162 | 𑌕 = 𑌕𑌕𑌕     | vel-tiral-nuṛan-ūr                      | -             | town with<br>hunters, pearl<br>and cloth<br>workers | வேல்திரள்நுழனூர்                          |
| 194 =<br>342+400+<br>397+162 | 𑌕 = 𑌕 𑌕 𑌕 𑌕 | mu-iru-mēl-per-<br>ul                   | -             | the mighty<br>mel-perul                             | மூவிரு மேல்பொருள்                         |