










ESM2. Simulations from F3 sequences and their correlation with M77/ICIT





































In the tabulation below, Each F3 sequence is placed in a shaded row. Below a shaded row, there are white rows split in two columns. The number of white rows under a shaded row varies according to the number of discordances that an F3 sequence permits, and the results that each query produces. The simulated query string is placed in Column 1. Column 2 displays the results and labels the results by D type, or the error type E1 as the case may be. **E1** is a corpus error, a misprint in M77 or a serious disagreement between M77 and ICIT that cannot be verified with CISI.

A single frontal sign with no dorsal sign produces blank white rows in Table 2. Such rows need not be reproduced in Table 2, but they are, to make it convenient to cross-refer it with Table 1.

By design, the study goes after discordance, and reports it exhaustively. However, a concordance note is provided in Table 2 for every natural F3 sign string which produces concordance in M77 when it is numerically significant.

It is important to note that some D1/D2 labels in Table 2 are assigned on the basis that $\overline{\text{r}}99$ infixes to $\overline{\text{f}}342$ to create $\overline{\text{f}}344$. This may be true also of $\overline{\text{r}}97$ and $\overline{\text{f}}343$, and $\overline{\text{r}}102$ and $\overline{\text{f}}345$, and tentatively taken as such. The decision is justified under Section 5.4 of the article.




Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
1  59. CISI: K-37. M77: - - - -. Symbol: Goat. Orientation: Right	
a None	
2  59. CISI K- 34. M77: - - - -. Symbol: Markhor. Orientation: Left	
a None	
3  59. CISI B-14. M77: - - - -. Symbol: Urus?. Orientation: Left	
a None	
4  59. CISI M-410. M77: 2133. Symbol: Gharial. Orientation: Left	
a None	
5  171. CISI B-11. M77: - - - -. Symbol: Markhor. Orientation: Right	
a None	
6 $\overline{\text{r}}99$  284 CISI M-272. M77: 2554. Symbol: Turning goat. Orientation: Left	
a 284 after 99	None.
7  162  109 CISI: M-1904. M77: 2565. Symbol: Goat. Orientation: Left.	
a 109 after 162	None. 2658 (M-1365) LTR.  .

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
8  162  110 CISI: B-10. M77: 9204. Symbol: Markhor. Orientation: Left	
a	110 after 162 None.
9  112?  167? (ICIT 411) CISI: B-12. M77: - - - -. Symbol: Goat. Orientation: Left.	
a	167 after 112 None
10  211 ? CISI: M-1905. M77: 2516. Symbol: Goat. Orientation: Right.	
a	None
11  211  171 CISI: Blk-5. M77: - - - -. Symbol: Urus. Orientation: Left	
a	171 after 211 None.
12  342  326 CISI: K-26. M77: 8071. Symbol: Unicorn. Orientation: Left	
a	326 after 342 None.
13  162  342  336 CISI: M-223. M77: 1167. Symbol: Unicorn. Orientation: Right. Note: The direction of reading is noted as LTR in both M77 and ICIT. M77 deals with  162 as a stand-alone. ICIT lists it as a proxy sign for the cult object.	
a	336 after 162 D1 (1): 4718 (H-369)                       

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
	2666 (M-708): 𐎠 𐎠 𐎠 𐎠
	4082 (H-449): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4141 (H-68): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4351 (H-773): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	7107 (L-46): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	9011 (Lh-1): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	9092 (Sktd-2): 𐎠 𐎠 𐎠 𐎠
	ICIT 744 (H-1993): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	ICIT 4348 (Dholavira): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
c2	D2 (33):
	1174 (M-1739): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	1222 (M-965): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	1433 (M-1343): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	1556 (M-203): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	2160 (M-933): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	2263 (M-131): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	2335 (M-900): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	2521 (M-300): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	2594 (M-94): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	2660 (M-851): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	2867 (M-437): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	3031 (M-12): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4075:10 (H-597): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4075:20 (H-597): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4089 (H-449): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4104 (H-39): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4109 (H-52): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4111 (H-466): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4132 (H-454): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	4139 (H-510): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	5115 (H-1079): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	7215 (L-198): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
	9822 (x-???/Kish): 𐎠 𐎠 𐎠 𐎠 𐎠 𐎠
































































































Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers		
Simulation	Anisotropy by D type and its marker	
	5286 (H-734):	
c6	Dx (1):	
	8104 (K-78):	
14	<p>CISI: B-4. M77: - - - -. Symbol: Urus. Orientation: Left. Note: No entry in M77. M77 does not also recognise a left-facing crab sign. ICIT features it as 797 and a look-up for this sign produces four outputs including B-4. The right-facing crab sign in ICIT is 798, the only sign featured in the results below.</p>	
a	53 after 162	D1 (2):
		1555 (M-51):
		4351 (H-773):
b	342 after 162	D2:
		The look-up is the same as in row 13c1.
c	53 after 342	E1 (1):
		4827 (H-1393, graffiti on pottery):

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers				
Simulation	Anisotropy by D type and its marker			
		5460 (H-912):		
d1	342 after 86	D1 (6):		
		1028 (M-756):		
		1066 (M-678):		
		1097 (M-706):		
		1214 (M-211):		
		5090 (H-389):		
		7080 (L-4):		
d2		D0 (22):		
		1187 (M-155):		
		1263 (M-951):		
		1336 (M-263):		
		2057 (M-1160):		
		2066 (M-937):		
		2157 (M-1695):		
		2233 (M-136):		
		2397 (M-389):		
		2526 (M-1982):		
		2581 (M-1883):		
		2629 (M-812):		
		2805 (M-1431):		
		2843 (M-493):		
		2936 (M-2062):		
		2941 (x-???):		
		3039 (x-???):		
		3085 (M-837):		
		4145 (H-471):		
		4574 (H-982):		
		4615 (H-440):		
		6213 (C-15):		
		6306 (C-40):		
		7280 (L-141):		
		e1	342 after 98	D4 (9):

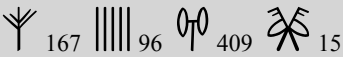
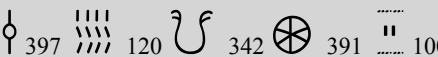
Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
	2071 (M-709): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 2493 𐎧 𐎧 𐎧 𐎧 𐎧 (on the basis that 𐎧 𐎧 is unitary, 112 occurrences in ICIT)
	2184 (M-758) 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 3181 𐎧 𐎧 𐎧 𐎧 𐎧
	2213 (M-394): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 2890 𐎧 𐎧 𐎧 𐎧 𐎧 (on the basis that 𐎧 𐎧 is unitary, 51 occurrences in ICIT)
	2231 (M-707): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 2377 𐎧 𐎧 𐎧 𐎧 𐎧
	2450 (M-1177): 𐎧 𐎧 𐎧 𐎧
	2521 (M-300): 𐎧 𐎧 𐎧 𐎧. cf. ICIT 2819 𐎧 𐎧 𐎧 𐎧
	2687 (M-165): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 2212 𐎧 𐎧 𐎧 𐎧 𐎧
	3044 (M-1979): 𐎧 𐎧 𐎧 𐎧. cf. ICIT 4011 𐎧 𐎧 𐎧 (on the basis that 𐎧 𐎧 is unitary, 39 occurrences in ICIT)
	4118 (H-61): 𐎧 𐎧 𐎧 𐎧. cf. ICIT 1120 𐎧 𐎧 𐎧 𐎧 (on the basis that 𐎧 𐎧 𐎧 is unitary, 31 occurrences in ICIT)
e2	D5 (3): 9071 (Dlp-1): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 123 𐎧 𐎧 𐎧 𐎧 𐎧 (on the basis that 𐎧 𐎧 are both marked versions of 𐎧, correlated in Section 8.3). 1122 (M-782): 𐎧 𐎧 𐎧 𐎧. cf. ICIT 3196 𐎧 𐎧 𐎧 𐎧. (on the basis that '𐎧' is marked with a 4-stroke circumfix, even though evidence is absent for the sign form without the circumfix) 1306 (M-266): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 2789 𐎧 𐎧 𐎧 𐎧 𐎧 (on the basis that 𐎧 𐎧 are both marked versions of 𐎧, correlated in Section 8.3).
e3	Dx (5): 2697 (M-1308): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 3613 𐎧 𐎧 𐎧 𐎧 𐎧 7224 (L-124): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 2068 𐎧 𐎧 𐎧 𐎧 𐎧. ICIT has 11 results for the string 𐎧 𐎧 𐎧. They are all impressions on Lothal clay tags, made most likely with the same seal (Erenez 2020). This analysis takes it as a single occurrence. 8004 (K-56) LTR: 𐎧 𐎧 𐎧. cf. ICIT 1919 𐎧 𐎧 𐎧 1432 (M-1302): 𐎧 𐎧 𐎧 𐎧 2069 (M-634): 𐎧 𐎧 𐎧 𐎧 𐎧. cf. ICIT 3084 𐎧 𐎧 𐎧 𐎧 𐎧
18	 402  249  162 CISI: K-39. M77: 8011. Symbol: Rhino. Orientation: Right. Reading direction in M77: LTR. Reading direction in ICIT 1907: RTL. Additional note: The banner or flag on K-39 waves left. The only other instance of a left-waving flag is on 7065 (L-115), and it is doubtful if it is 402, or even a variant of it. M77, ICIT and the font package do not have a left-waving variant.
a1	162 after 402 D1 (6): 3031 (M-12): 𐎧 𐎧 𐎧 𐎧 𐎧 𐎧 1186 (M-48): 𐎧 𐎧 𐎧 𐎧 4304 (H-180): 𐎧 𐎧 𐎧 𐎧 4085 (H-54): 𐎧 𐎧 𐎧 𐎧


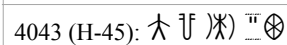

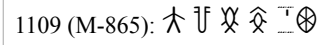
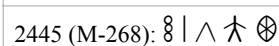
Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
	7005 (L-29): $\Psi \overline{\text{III}} \wedge \text{I} \diamond$
	ICIT 20 (Blk-2): $\Psi \text{U} / \text{I} \text{I} \text{I} \text{I}$
a2	D3 (0): 6115 (C-22): $\text{I} \Psi \text{II} \langle / \rangle \text{I} \Psi \text{O}$. Note: Ψ 162 doubles in this sequence and it can be taken as a D3 instance. However it is most likely not a single sequence at all. The line break cannot be negated.
a3	D5 (2): ICIT 1599 (H-694): $\text{I} \Psi \text{I} \hat{\text{X}} \text{I} \text{I} \text{I}$ (on the basis that $\hat{\text{X}}$ is a marked version of X) ICIT 1600 (H-695): $\text{I} \Psi \text{I} \hat{\text{X}} \text{I} \text{I} \text{I}$
b1	162 after 249 D2 (39): 1052 (M-66): $\text{I} \Psi \text{I} \hat{\text{X}} \text{I} \text{I} \text{I} \text{I} \text{I}$ 1174 (M-1739): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 1222 (M-965): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 1315 (M-1089): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 1433 (M-1343): $\text{I} \Psi \text{I} \hat{\text{X}} \text{I} \text{I} \text{I}$ 1556 (M-203): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2160 (M-933): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2263 (M-131): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2333 (M-35): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2335 (M-900): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 2473 (M-851): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 2521 (M-300): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2569 (M-834): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2594 (M-94): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2609 (M-1902): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2660 (M-851): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 2867 (M-437): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 3031 (M-12) $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 4075:10 (H-597): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 4075:20 (H-597): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 4082 (H-449): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 4104 (H-39): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 4111 (H-4) 466 $\text{I} \Psi \text{I} \text{I} \text{I} \text{I} \text{I} \text{I}$ 4132 (H-454): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$ 4139 (H-510): $\text{I} \Psi \text{I} \text{I} \text{I} \text{I}$



































Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
	4304: 20 (H-180): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	4304: 10 (H-180): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	6231 (C-12): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	7215 (L-198): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	7223 (L-139): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	7248 (L-196): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	9822 (x-??/Kish): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	ICIT 3226 (M-813): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	ICIT 537 (H-1692): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	ICIT 4155 (Gonur Depe): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	ICIT 4229 (Dholavira): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	ICIT 4195 (Dholavira): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	ICIT 4182 (Dholavira): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	ICIT 2489 (Dholavira): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
b2	D3 (1):
	2312 (M-882): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
b3	D4 (27): (on the basis that 𐎠 𐎢 𐎠 𐎢 and 𐎠 𐎢 𐎠 𐎢 are unitary)
	1081 (M-746): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	1300 (M-1017): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	1539 (M-734): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	2300 (M-968): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	1609 (M-432): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	1624 (M-????): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	3233 (M-433): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	3239 (M-430): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	4161 (H-75): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	4602 (H-816): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	4625 (H-533): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	4650 (H-1109): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	5123 (H-1046): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	5222 (H-733): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	5223 (H-1107): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢
	5276 (H-857): 𐎠 𐎢 𐎠 𐎢 𐎠 𐎢



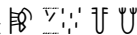





Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
	5286 (H-734):    
	5404 (H-1291):  
	7267 (L-202):    
	2176 (M-998):  
	ICIT 2925 (M-431):     
	ICIT 3812 (M-1592):  
	ICIT 1599 (H-694):     
	ICIT 1600 (H-695):     
	ICIT 1226 (H-194):    
	ICIT 868 (H-1802):  
	ICIT 6 (Ad-1):  
c1	249 after 402
	D1 (3):
	3031 (M-12):     
	4304 (H-180):    
	8006 (K-10):     
c2	
	D5 (3):
	2393 (M-894):      (on the basis that  is a marked version of )
	ICIT 1599 (H-694):      (on the basis that  is a marked version of )
	ICIT 1600 (H-695):     
19	
	 ₁₆₂  ₃₂  ₁₀₂  ₃₀₂
	CISI: Ns-56. M77: - - - -. Symbol: Unicorn. Orientation: Right.
a	302 after 162
	None
b	302 after 32
	None
c	302 after 102
	None
d	102 after 162
	D1 (1):
	4141 (H-68):     
e	102 after 32
	D1 (1):
	2657 (M-95):     
f	32 after 162
	None.
20	
	 ₂₄₂  ₃₄₂  ₂₄₄  ₆₇
	CISI: M-1719. M77: 1550. Symbol: Unicorn. Orientation: Right
a	67 after 242
	D5 (1):
	4345 (H-206):      (on the basis that  is a modified version of  , correlated in Section 8.4)
b1	67 after 342
	D1 (2):

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
	1347 (M-1910): cf. ICIT 2414
	1404 (M-638):
b2	D2 (2): 3319 (M-510): . Note: The first and last signs are documented entirely differently by M77 and ICIT. Thankfully, it does not matter to this analysis. 3320 (M-509): .
b3	D4 (2): 1093 (M-1792):
	1388 (M-960):
b4	Dx (1): 4061 (H-453):
c	67 after 244 D1 (3): 1087 (M-38):
	2228 (M-1188)
	ICIT 5218 (Bagasra):
d	244 after 242 D5 (1): 4345 (H-206): . (on the basis that is a marked version of 244, correlated in Section 8.4)
e1	244 after 342 D1 (1): 4265 (H-645): cf. ICIT 1560 . If ICIT is correct, then this is a Dx instance. The CISI image shows a marker, but it is a little above compared to the usual position.
e2	D4 (0): ICIT 3858 (Nd-1): . Note: ICIT prints this as left to right and boustrophedon. If read right to left, there is no anisotropy in Nd-1 . See Sign set 629-642 (ICIT), and relative position to 740, Section 8.1.
f1	342 after 242 D2 (1): 1122 (M-782): cf. ICIT 3196
f2	D2a (1): 2014 (M-180):
f3	D5 (2): 4345 (H-206): (on the basis that there are three marked versions in between: , respectively of) 1341 (M-1139): (on the basis that is a marked version of , correlated in Section 8.4).
21	242 162 1 CISI: M-1918. M77: 2279. Symbol: Buffalo. Orientation: Left
a	1 after 242 None

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers		
	Simulation	Anisotropy by D type and its marker
b1	1 after 162	D1 (1): 4141 (H-68): 𐤁 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋
b2		D3 (1): 2538 (M-1770) 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋
b3		D4 (1): ICIT 578 (H-2197): 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋
c	162 after 242	None.
22	 167 96 409 15 CISI: M-1180. M77: 1303. Symbol: Human-faced markhor. Orientation: Right	
a	15 after 167	None
b	15 after 96	None
c	15 after 409	None
d	409 after 167	None
e	409 after 96	None
f	96 after 167	None
23	 397 120 342 391 100 CISI: M-1718. M77: - - - -. Symbol: Unicorn. Orientation: Right. Note: ICIT documents the first sign as 002, equal to 𐤅99 in M77. I take it as 𐤅 100 in M77, and the decision is rationalised in Section5.6.	
a	100 after 397	None.
b	100 after 120	None
c	100 after 342	None
d	100 after 391	D1 (2): 4152 (H-472) 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 1478 (M-1369): 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌
e	391 after 397	None
f	391 after 120	None
g	391 after 342	D1 (1): 3155 (x-???) 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋
h	342 after 397	D1 (1): 3031 (M-12) 𐤅 𐤆 𐤇 𐤈 𐤉 𐤊 𐤋 𐤌 𐤍 𐤎 𐤏 𐤐
i	342 after 120	None
j	120 after 397	None
24	 393. CISI: M-1105. M77: 3080. Symbol: Zebu. Orientation: Right. Note: 393 has solus or terminal presence, and no medial. The zebu is synonymous with 393.	
a	No look-up	

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
25  CISI: M-288. M77: 2518. Symbol: Tiger. Orientation: Left. Note: 2518 is the longest sequence involving a frontal sign. 7 signs come before. M77 carries a misprint and reports 257 as 197. 257 has just 3 occurrences in M77. None of the 7 before signs in 2518 come after 257.	
a	125 after 391 D3 (1): 1110 (M-108): 
b	125 after 1 None
c	125 after 342 None
d	125 after 48 None
e	125 after 343 None
f	343 after 391 D1 (1) 2665 (M-1164): 
g	343 after 1 None
h	343 after 342 D3 (1): ICIT 4221 (Dholavira): 
i	343 after 48 None, though ICIT 2654 reports one instance.
j	48 after 391 D1 (3) 1438 (M-372):  1010 (M-595):  ICIT 3074 (M-623): 
k	48 after 1 D3 (1) 2538 (M-1770): 
l	48 after 342 None
m	342 after 391 ICIT returns 81 results for this query. I filter it down to instances of Dx (2): 4813 (H-1402):  8020 (K-6): 
n	342 after 1 Same as in row 16 d1
o1	1 after 391 D1 (5): 4043 (H-45):  8044 (K-16):  . Note: This is a rare sequence that starts from below. 2567 (M-260):  1109 (M-865):  ICIT 3853 (Ns-5): 
o2	Dx (1): 2445 (M-268): 
26	 410. CISI. H-95. M77: - - - -. Symbol: Hare. Orientation: Right

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
a	No look-up Hare is synonymous with 410.
27	 267  201. M-1367 (2661). Bison x 2. Note: Two facing bisons correspond to two signs in front. If that be so, both signs should not occur in a sequence featuring a single bison. They don't. Only 267 is ever seen on a seal with a single bison. See Bhaskar MV 2022 .
a	No look-up
28	 167?  60  87  123  305 M-1793 (2316). Unicorn. Note: As the identity of the terminal sign is doubtful, I use the rest of the sequence for simulation.
a	305 after 60 None
b	305 after 87 None
c	305 after 123 None
d	123 after 60 None
e	123 after 87 D0 (2): ICIT 4177 (Dholavira):    . Note: This adjacency   is improbable. ICIT 897 (H-2089):    (incised Harappan tablet)
f1	87 after 60 E1 (1): C-79 (M77 6211; ICIT 75): Both sources normalise C-79 to an extreme and produce vastly different readings
f2	D3 (1): 2456 (M-1769):    
29	 267  29  99  180  175  28  381  102  327  C-23. 6402. Goat. M77 reports this sequence in 3 lines, and omits the 'double axe'  that the goat is facing. Frontality is not decisive.
a	First sign lost
b	327 after 267 D1 (1): 5058 (H-137):          
c	327 after 29 None
d	327 after 180 None
e	327 after 175 None
f	327 after 381 None
g	327 after 102 None
h1	102 after 267 D1 (10): 1091 (M-712):    2080 (M-1697):    2085 (M-72):           3107 (M-391):           

Supplementary Catalogue ESM2. Correlation between F3 and M77, anisotropies by D type, and their markers	
Simulation	Anisotropy by D type and its marker
30	 <p>M-1792 (1093). Unicorn. Note: The line break on this seal cannot be negated. The frontal signs and the dorsal signs each form two independent sequences. The conclusion is reached on the basis that 342 doubles in a line 22 times, but it occurs thrice only in 1093. The dorsal sign sequence is irrelevant for simulation as sign 82 is a singleton. The frontal three are taken up in the rows below.</p>
a	59 after 342 D4 (1): ICIT 3858 (Nd-1):  . Note: There are three other hits for 59 after 342: 6104, 9101, and ICIT 3377. In each case, at least one sign in between is lost.
b	59 after 347 D4 (1): ICIT 3858 (Nd-1):  . Note: the result is the same as in 30a. It confirms the that a habitual string is an agency and marker of anisotropy,   in this case.
c	347 after 342 Same as in row 17c.
Seal impressions	
31	 <p>K-67 (8121). Urus. Note: This is the only seal impression (a bas relief tablet) in CISI with a same frontal and dorsal sign, 326. Does the sign double anywhere else? No.</p>
a	No look-up
32	 <p>M-1429. Gharial, also on M-410 in left orientation on a seal, besides M-482 B, M-489 A, M-1923 d, H-172, H-705, H-1958, H-1961.</p>
a	No look-up
33	 <p>M-446. Rhino</p>
a	No look-up