

5. CATALOGUE A: THE BELLY LANDING ATTACK ©ASIA HALEEM 2015

DEFINITION OF THE BELLY LANDING ATTACK IN REAL-LIFE

The feline attacks the victim fallen onto its back, mostly head to head, sometimes head to tail.



Ill.5- 1: From the BBC 1 programme PREDATORS, shown 4 May 2000 - Radio Times

From observing big cats catching prey on their back in real life, the situation only arises when the animal being chased is caught up with from behind, trips and rolls over. Such an instance is shown above in the case of a cheetah chasing a small buck. At this point the predator leaps over its body to bite the victim's throat, which is conveniently presented upwards to her jaws. In art, there is often a conflation of the moment in the chase where the helpless victim falls on its back, belly upwards, and the time split seconds afterwards when the big cat lunges to its victim's neck to give it the death bite.

INTRODUCTION TO THE CATALOGUE

This first catalogue – with its comparatively small sample – provided the ideal size on which to work out the architecture for the best presentation of the evidence in the later, more complex catalogues. The material that follows, arranged in chronological order, should to a large extent speak for itself (all dates are BC). With seals it is usually their sealing that we illustrate (at times only the sealing survived anyway).

Being the first of eight, this catalogue is the basis for the interleaving of later catalogue material to form the **Amalgamated Catalogue**. Coming back to it later to correct obvious errors, as my initial foray into dealing with the subject it was inevitably experimental and naïve - which hindsight cannot completely iron out. A more systematic method arose out of the experience of this catalogue, and the next ones will, I hope, remedy many of its deficiencies. They will also use a more systematic presentation with recognisable headings and sub-headings across the board within the main Art History –v- Iconography divide. This means material looked at from the art historical angle then goes through the sieve a second time in order to plumb the depths of its iconography.

Since the *Master Bibliography* will not be ready until the whole work is finished, key references in the Catalogue entries are expanded in full bibliographies at the end of each catalogue only for items coming under the relevant *Chronological Focus*.

THE CANON OF ANCIENT NEAR EASTERN ART

CATALOGUES OF EVIDENCE

A: THE BELLY LANDING

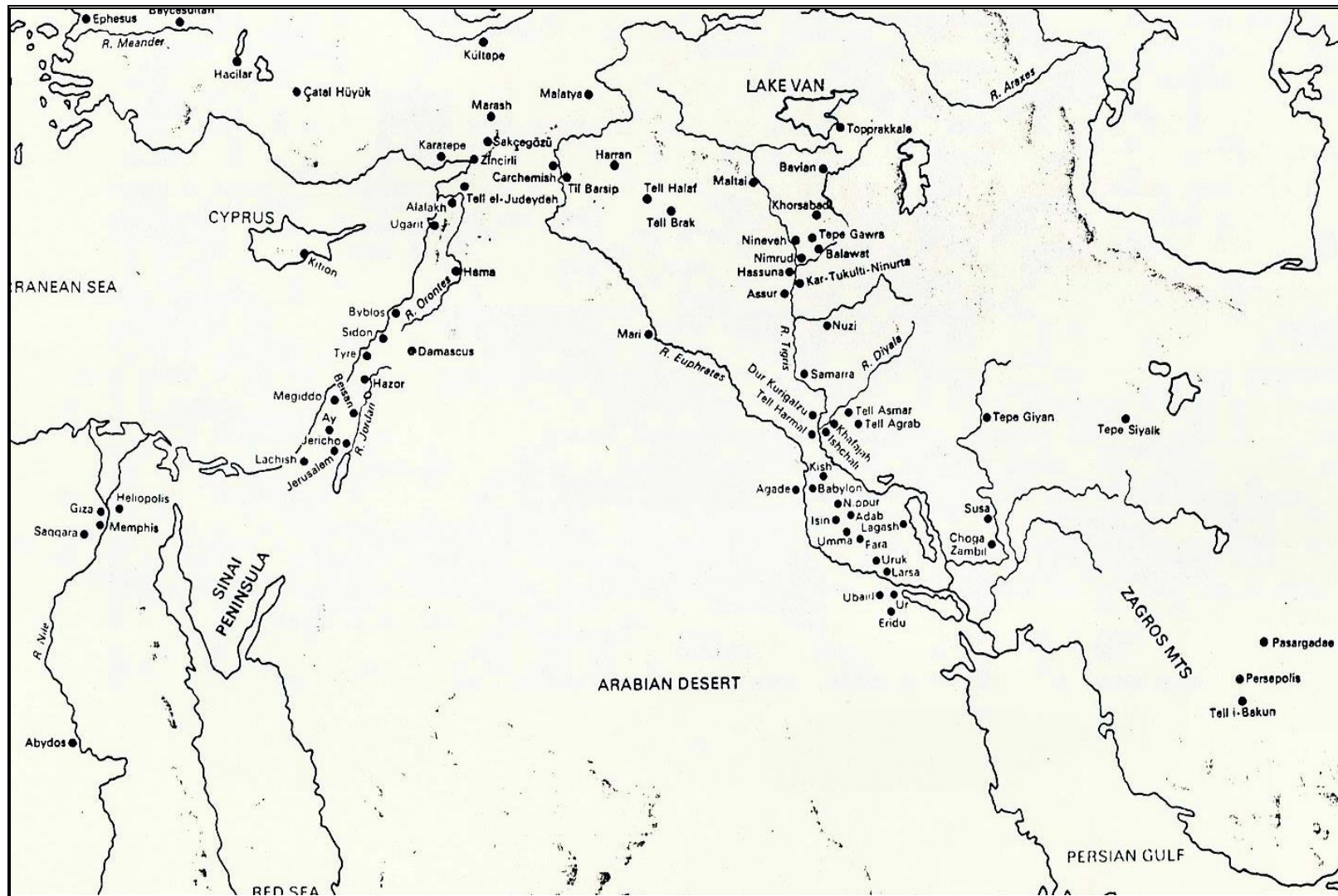
References given in the commentaries are given in full, and do not necessarily appear in the bibliographies at the end. Since so many seals crop up in every catalogue, there is a separate list of the main Seal Catalogues consulted. For references given to original Excavation Reports, again these will not be given until the *Master Bibliography* is ready, but hopefully the basic title given should be sufficient to be able to look them up.

In the *Art History* Section assessing the catalogue entries, the *Distribution Map* gives a quick *Gestalt* for the geographical scatter of the material, based simply on the principal item in each entry, whilst the *Frequency Chart* highlights peak periods of use for this compositional type. Still within the *Art History* Section, we take one particular period of high use of the motif for our *Chronological Focus* to provide a fuller background that might shed further light on it. On this factual foundation the *Iconography* Section offers initial thoughts on possible meanings for the *Belly Landing*, the leads to which are sometimes given in passing comments in the entries. One key approach emerged from work on this small catalogue – that in considering the lion and prey group with the other images it is next to we build up an implicit cycle of images lying at the heart of all ancient near eastern art - our ultimate goal is to unearth its meaning. In doing that the significance of the lion-prey group will fall into place.

THE CANON OF ANCIENT NEAR EASTERN ART

CATALOGUES OF EVIDENCE

A: THE BELLY LANDING



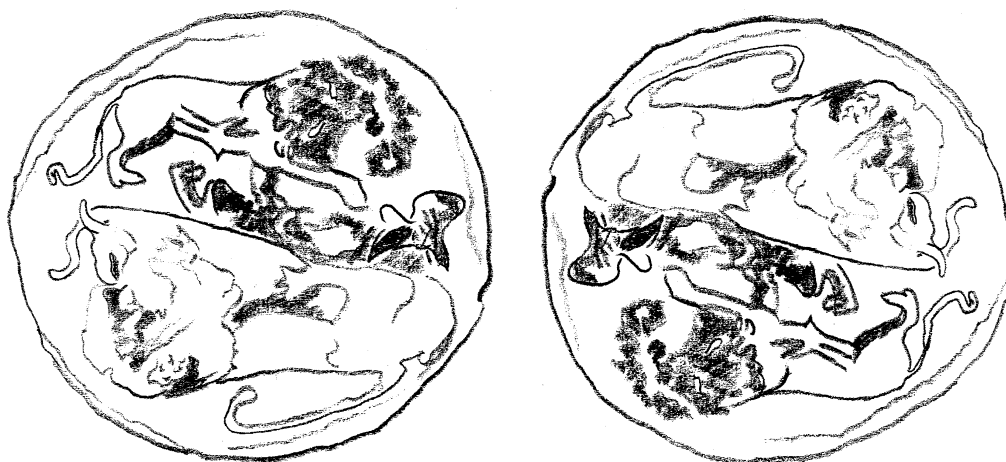
General Map for most place-names mentioned in this Catalogue, from Abydos to Persepolis

CATALOGUE OF BELLY LANDING ARTEFACTS

Belland-1

FINDSPOT	Unprovenanced – Fertile Crescent	
ON ARTEFACT	Hemispheroid stamp seal	
MATERIAL	Brown limestone with pink and cream encrustations	
EXCAVATION REF.		
PRESENT LOCATION	Yale University Babylonian Collection, Princeton	
MUSEUM REF.		
PUBLISHED IN	YaleCat 100/ NewellCat 7; c.f. Briggs Buchanan JAOS LXXXVII 1967, 530 n.24	
PERIOD & DATE	Late Uruk/Susa II	3500-3235
INSCRIPTION: NONE		

Two heavily maned lions, one with tail raised, each attack a bovine prey. The two groups are counter-changed to each other, with their feet on a common diameter as ground-line - showing considerable visual sophistication for this early date. (Seal 102 in the same collection, of the same type, shows two contrasted goats, this time with their horns aligned at the centre line.) Though unprovenanced, this is clearly the earliest belly landing composition known and must stand as **Belland-1**. Compare its reappearance in twin form on Minoan seals in **Catalogue C: The Rear Attack**.

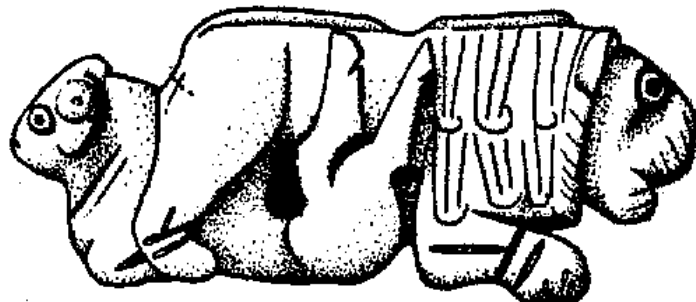


Stamp seals were devised before cylinder seals, and are more characteristic of the Susa region than the Sumerian in the prehistoric period. This is a large seal, 4cm across, a sign of extreme earliness in time. Its verso is hemispheroid (no doubt based on a prototype of the struck-off section of a large, round pebble – there are several examples using the Back Lunge variation – **BaLu-1/2**). The back is pierced low down, along the full length of the stone, so that it could be held attached to the person by a string or leather thong. Briggs Buchanan in **JAOS** cited above explains the nature of such seals well. Hertzfeld 1933 opines that stamp seals developed from incised buttons, over time found to be useful in marking products with a mud sealing. In his excavation of Halaf period levels in the Diyala, Max Mallowan believed amulets with grooved decoration to be hung round the neck came, over time, to have dual use as individual stamps.

Belland-2

FINDSPOT	Tell Agrab, Shara Temple	
ON ARTEFACT	Amulet or votive offering	
MATERIAL	Shell	
EXCAVATION REF.	M14:12	
PRESENT LOCATION	Iraq Museum, Baghdad	
MUSEUM REF.	Ag. 36:67	
PUBLISHED IN	Delougaz et al. OIP LVIII, P.268; ILN 6.11.37, fig. 5; Behm-Blancke - amulet no. 159	
PERIOD & DATE	Jemdet Nasr/ED I	3235-3000
INSCRIPTION: NONE		

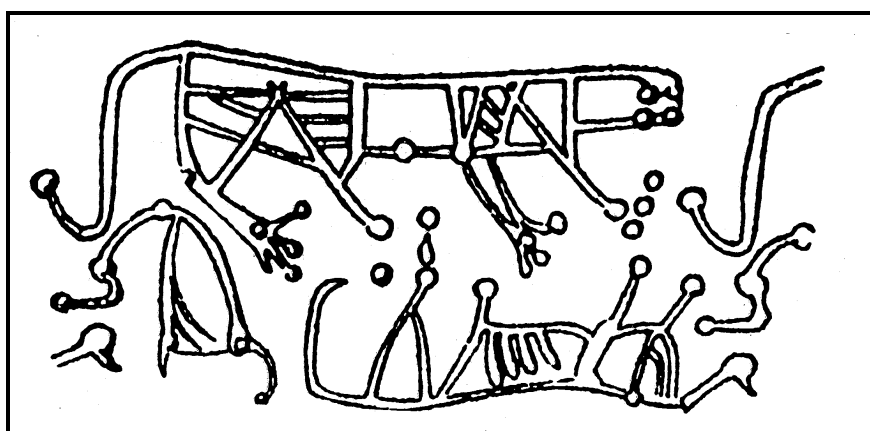
This example shows the lion's head at the victim's rear, often known as the tête bêche (or head-to-tail) arrangement (see also **Belland-9 & -14**), where most of the other Belly Landing examples show them head to head. We could make this into a separate compositional category, but have decided not to because their number can be counted on the fingers of one hand, and the key factor is that the prey lies prostrate on its back. In this instance the prey also shows torsion at the waist (as also in **Belland-12**), an elaboration to be seen frequently on designs from Syria, which well conveys the motion of rolling over.



As can be seen from the *Distribution Map*, Tell Agrab (named after the Scorpion and dedicated to the God Shara, son of Inanna) lies in the Diyala region of eastern Sumer, on terrain easily accessible overland from the Susa region along the foothills of the Zagros mountains - without the need to cross major rivers, as the Tigris and Euphrates both flow to the west. This amulet was one among many ritual items including stone mace-heads and thousands of beads found buried under the pavement of the sanctuary and sacristy - and built into the altar itself.

Belland-3

FINDSPOT	Susa, Acropolis Sounding 2	
ON ARTEFACT	Cylinder seal	
MATERIAL	Dried clay	
EXCAVATION REF.		
PRESENT LOCATION	Iran Bastan Museum, Teheran	
MUSEUM REF.		
PUBLISHED IN	MDP XXIX p.30, fig. 24,3	
PERIOD & DATE	Jemdet Nasr/EDI	3235-3000
INSCRIPTION: NONE		



This time Susa itself features, with a specific find-spot for this image stamped onto wet mud. This is an interesting example of an imprint from an early cylinder seal which was not carved, but made of a roll of clay with further lines and blobs stuck on. The scene could be endlessly repeated as the cylinder was rolled across wet clay, in contrast to the single effect of a stamp seal.

Along with the lion and prey attack appears a rudimentary scorpion (bottom left) which is often seen in the iconography of seals and sealings in this era, as also on chlorite pots like the next example.

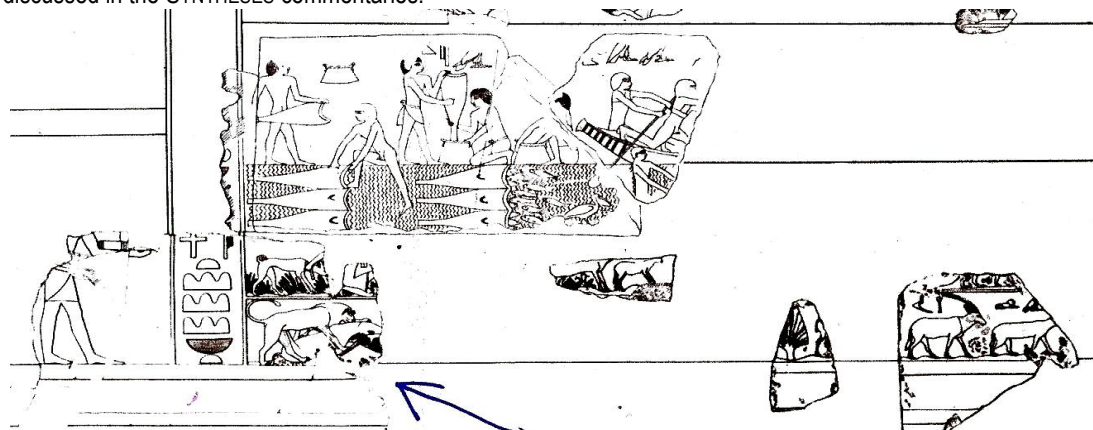
Belland-4

FINDSPOT	Unprovenanced, said to be from Khafaje but probably imported from central Iran, perhaps Tepe Yahya itself (photo author)	
ON ARTEFACT	Carved pot	
MATERIAL	Chlorite	
EXCAVATION REF.		
PRESENT LOCATION	British Museum, London	
MUSEUM REF.	BM 128887	
PUBLISHED IN	BMQ XI pp117-19, pls xxxib & xxxii	
PERIOD & DATE	Jemdet Nasr/EDI/EDII	3235-2700
INSCRIPTION: NONE		

This Belly Landing attack was carved on the most iconographically complex of all the chlorite vases to be imported from ancient Iran and said to have been found in Khafaje situated, like Tell Aqrab, in the Diyala region of eastern Sumer (see *Distribution Map*). The section of the decorated vase shown here has the Belly Landing attack surrounded by a scorpion, a raptor-type bird which we will call an eagle, and a palm-tree with two small bears (one is off-picture). On the complete pot this vignette is flanked by two further main scenes, the three together perhaps referring to the ancient Iranian version of the Three Seasons of the year as known to be used in Old Kingdom Egypt. We analyse the arrangement and iconography of the three scenes taken together in the *Amalgamated Catalogue (Chapter 13)*. The question arises whether, when compared to related zebu bull and human female fleshy-nosed face pot fragments (already thoroughly compared in the literature with locations mapped by Kohl (1980)) was carved in central Iran at a place like the Tepe Yahya workshop found near chlorite outcrops, or by an immigrant from Magan using an 'Indus style'. This artefact typifies the ambiguity of whether the lion & prey symbol is native to Sumer or introduced from the Iranian Crescent.



We see the same type of attack on an animal thrown onto its back in a scene from VD Abu Ghurob depicting the three Egyptian seasons of the year in Niuserre's Sun Temple – to be compared with other such Egyptian wall scenes in *Chapter 13*, the overall theme discussed in the SYNTHESIS commentaries.



Belland-5

FINDSPOT	Ur, Royal Cemetery, Tomb of Queen Puabi (no. PG800)
ON ARTEFACT	Lid of cosmetic jar
MATERIAL	Shell or bone
EXCAVATION REF.	U 10436
PRESENT LOCATION	Philadelphia Museum
MUSEUM REF.	CBS 16744
PUBLISHED IN	<i>Ur Excavations II</i> , pl.103
PERIOD & DATE	ED/II 3105-2700

The Ur tombs date from a period when Sumer was trading its agricultural products for huge amounts of rare raw materials from the hinterland to the east of Susa, especially lapis lazuli. However, it is not clear whether the occupants of the tombs of Ur were local Sumerians, or nomads coming down from Susiana.



Found amongst the hundreds of belongings of Queen Puabi and her retinue in her tomb at Ur, this is one of many objects found in it decorated with the lion and prey theme, though this is the only instance of a Belly Landing - this time a sheep is the prey.

Most of the seals found in the Ur tombs use the *Crossover Attack* (see **Catalogue G**).

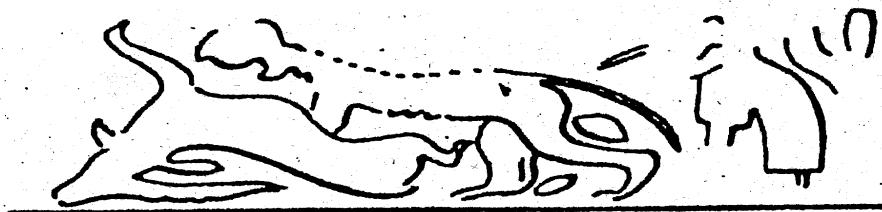
Belland-6

FINDSPOT	Fara	
ON ARTEFACT	Sealing	
MATERIAL	Clay	
EXCAVATION REF.		
PRESENT LOCATION	Vorderasiatische Museum, Berlin	
MUSEUM REF.	VA 6550	
PUBLISHED IN	<i>Heinrich</i> 1931 no. 58e; <i>GMACat</i> 816; <i>MartinCat</i> no. 197	
PERIOD & DATE	EDI/II	3105-2700
INSCRIPTION: NONE		

The following three examples of the Belly Landing survive on clay sealings, the first associated with the temple at Fara with deer

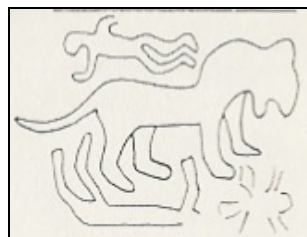


as prey and including a large dagger, two men with similar weapons, and a crescent enclosing egg shapes. The lion in the first two seems to have a human head (animals with both eyes at the front of the face were considered akin to humans).



The second, a clay sealing from Nippur (Philadelphia Museum no. CBS 8204) published in Legrain 1925, no.43 (repeated *GMACat* no. 810) was probably associated with the Inanna Temple there (above).

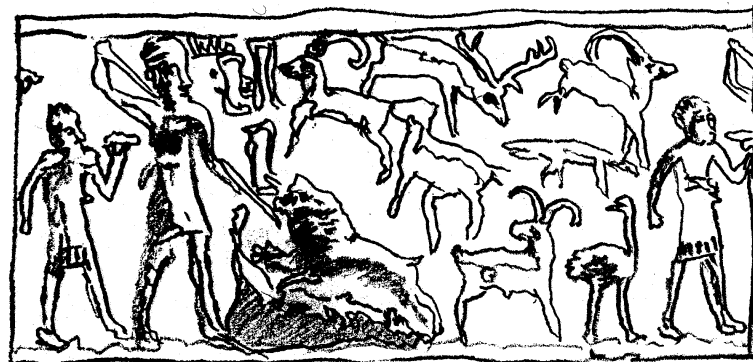
Roughly contemporary with them is a no less minimalist Syrian sealing incorporating a floating man (no attempt made here to combine man and lion into one creature) found on the surface at Hammam et-Turkman in the Balikh river area (Collon 1987 no.66 from van Loon 1983 fig. 5) - note the torsion of the bull's head to show ears and horns from above:



Belland-7

FINDSPOT	Unprovenanced – Akkadian by style	
ON ARTEFACT	Cylinder seal	
MATERIAL	Black serpentine	
EXCAVATION REF.		
PRESENT LOCATION	Yale Babylonian Collection, Princeton	
MUSEUM REF.	YaleCat 457	
PUBLISHED IN	NewellCat no. 680; Boehmer 1965 723 (iii)	
PERIOD & DATE	Akkadian	2500-2180
INSCRIPTION: Du-Du, En-Kas [Du-Du, Ambassador]		

Again, this is a tête bêche example of the Belly Landing, like the second in our catalogue. Though we usually only give a type number to artefacts of *known* provenance, this is the only instance of its period showing a Belly Landing, as well as being a striking rendition within a wider hunting scenario that includes many types of game, including an ostrich! This early Akkadian seal heralds the proficiency that marks most Akkadian art. It now includes the royal hunter, as found on the Early Dynastic seals and sealings of the previous entry – with animals scattered all over a flat background.



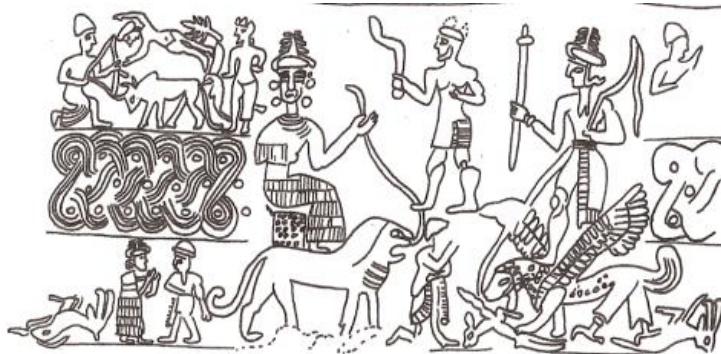
The art historian is always grateful for an inscription, which this seal has near the face of the spearsman, since it gives us some direction as to the owner. The seal catalogue translates 'En-Kas' as 'Messenger', but the quality of the seal suggests something more exalted in that line, such as 'Ambassador'. Du-du, perhaps himself the person, or symbolised by the person, wielding the spear to ward off the lion and protect the prey, is followed by an attendant, a further clue to his high status - much as Pharaoh Narmer on the Narmer Palette is followed by a scribe.

FINDSPOT	Alalakh, Level VII Palace, Room 11
ON ARTEFACT	Sealing
MATERIAL	Clay
EXCAVATION REF.	ATT/39/183
PRESENT LOCATION	Ankara Museum
MUSEUM REF.	Antakya 7761
PUBLISHED IN	Safadi ¹ no. 130/ AtchCat -105
PERIOD & DATE	c.1750-1650

The clay sealing below was found in the level at which local rulers finally abandoned the palace to attack and burning by the Hittites (**Gates** 1981 p.33). Note the moth in the air, to bear in mind in relation to its frequent appearance on Minoan/Mycenaean artefacts discussed in **Catalogue D**.



Another sealing from Alalakh discussed in **Catalogue D** (found in the same room) is of a bull-leaping scene (**BaLu-16**) a link to the next interesting unprovenanced Old Syrian seal below (Safadi *ibid.* no. 126), once in the Arndt Collection in the Munich Münzsammlung, original now lost. It shows Ishtar on her lion, Baal on an eagle-winged lion performing a double-Belly Landing attack and Reshef or Nergal between, in the old-fashioned Mesopotamian style - with a bull-leaping cameo as secondary theme above the triple guilloche.



The next seal is also unprovenanced and Old Syrian, in that interesting mixture of Mesopotamian and Egyptian iconography fully analysed by Beatrice Teissier² (**SyrPalCat** no. 43/**Moore-EisenCat** no. 142). As the second lion is not in attack mode I have not classified it as a Bilateral Attack.



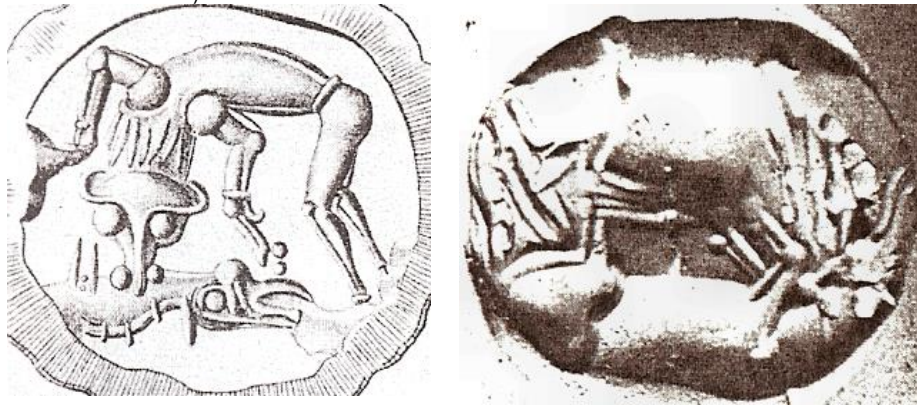
¹ Hicham El-Safadi 'Die Entstehung der Syrischen Glyptik und Ihre Entwicklung in der Zeit von Zimrilim bis Ammitaqumma' **UV VI** 313-

² **Egyptian Iconography on Syro-Palestinian Cylinder Seals of the Middle Bronze Age** Fribourg 1995

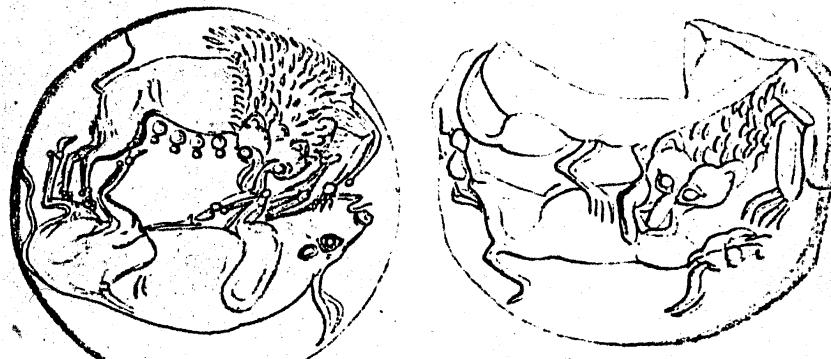
Belland-9

FINDSPOT	Mycenae, Grave 42, Lower Town
ON ARTEFACT	Lentoid seal
MATERIAL	Agate
EXCAVATION REF.	
PRESENT LOCATION	Athens Museum
MUSEUM REF.	2440
PUBLISHED IN	CMS I no.77
PERIOD & DATE	1650-1500

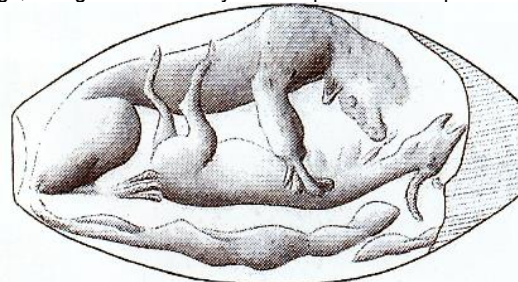
We have to give the inferior quality seal as our main item (below left) given it is the only one with provenance – even though the lion is actually a lion-man like **Belland-6** (discussed in **Catalogue D**) and the two are arranged tête-bêche. We compare it (below right) to an unprovenanced, unfinished red and brown agate lentoid (wrongly identified as two bulls) in the Geneva Museum (Inv.no. 1962.19773/ **CMS X**-256).



Our other examples, too, happen to be unprovenanced stamp seals, the first (below left) of black-flecked russet sard (Boston Museum no. 23.576/**CMS XIII** no.26) - and the second (below right) of light-brown sard, (Boston Museum no. 13.179/**CMS XIII** no. 4D) - probably contemporary. In the first example, although maned, the big cat also has teats. The double role of death-dealing lion and nurturing lioness is expressed again in the two separate scenes on the Tomb at Xanthos (**Belland-18**).



A final example in the Heraklion Museum (HMs 519/2.1658 – **CMS II**,6-94) is a sealing from Aghia Triadha, made with an amygdaloid seal on two string sealings, though unfortunately with no precise find-spot.



Belland-10

FINDSPOT	In the Montet Jar, Byblos, Levée X, square 22/10 at 26.20-26.00m deep - found just outside Temple of the Obelisks
ON ARTEFACT	Scarab
MATERIAL	'white stone'
EXCAVATION REF.	
PRESENT LOCATION	
MUSEUM REF.	
PUBLISHED IN	Dunand <i>Fouilles de Byblos II</i> , pl.CC no.11343
PERIOD & DATE	Canaanite/Hyksos/Early NK 1700-1450

Both found in the Levant, the next two seals demonstrate the confluence further west of contrasted seal-traditions (already evident between Susa and Sumer), this time in the 2M between a Canaanite scarab stamp seal showing Egyptian affiliations (cobra and sun-disc hieroglyphs top left) and the preference of local Levantine rulers for the cylinder seal (before being overtaken by the Hittites, who used both), as in the seal from Membij. We could call this scarab a 'bilingual' (compare with the items under **Ratt-14** and **BaLu-14** that use similar dual iconography) where the ibex (or gazelle) with hieroglyphs is contrasted with a graphic Belly Landing group coming from the Mesopotamian tradition.



It is during this period of cultural mixing preceding the International Style itself that we are sometimes lucky enough to find a comprehensive spectrum of the lion-prey group as on the seal below bought by T E Lawrence at Membij, Syria (Ashmolean Museum 1913.251/**AshCatI** 897E), best seen in Kantor's drawing³. The finesse of the shallow seal impression (my own photo) is misleadingly roughened if a stickier material is used (as below right in Hogarth **Hittite Seals** no.185). It shows four versions of the lion attack revolving round a palm tree (one predator is a griffin, rather than lion). We place it here for the borderline Belly Landing which on closer inspection shows a *role reversal*, of bull overcoming the lion falling onto its back.



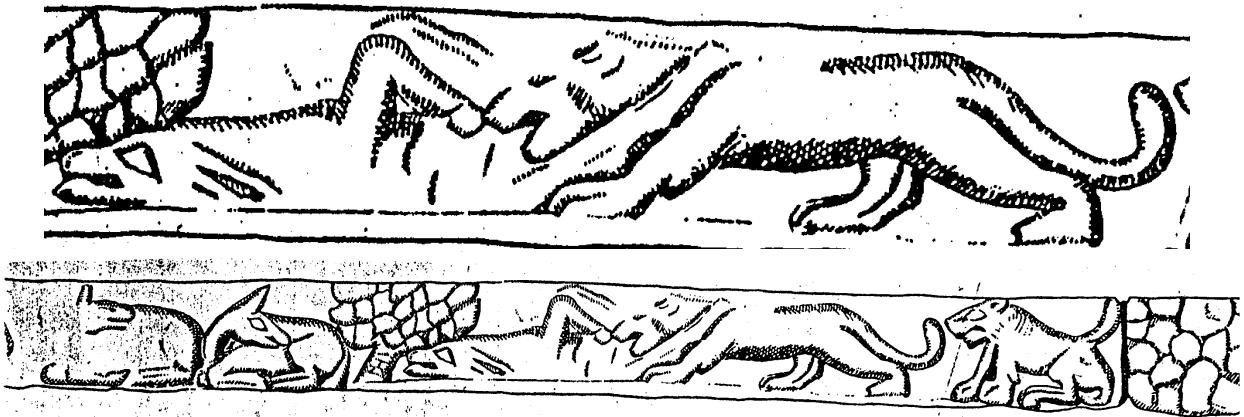
The strong indication here is that the four different compositions allude to the Four Seasons, the palm being the Polar Axis and the griffin representing the Vernal Point of the Spring Equinox (see the *Iconography* section of **Catalogue D**) - meaning the Belly Landing marks the position of the Sun during its nadir at the Winter Solstice (hence the lion itself is almost vanquished since the Sun is at its weakest point). We have repeated the seal under **Urusta-28** for the *Uruk Stance* attacks, where it is contrasted with several other seals of similar iconography spelling out the four quarters of the annual cycle.

³ H Kantor *The Aegean and the Orient in the Second Millennium BC* 1947, pl.xxiiiB.

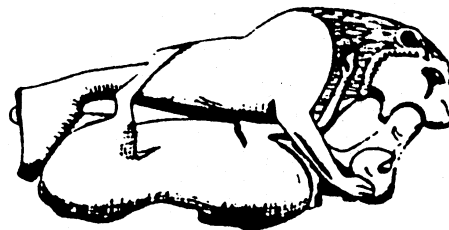
Belland-11

FINDSPOT	Ras Shamra/Ugarit, Treasury lobby
ON ARTEFACT	Baton (decorated on three sides with hunting/attack scenes and on the fourth with Egyptianising local rulers in full regalia)
MATERIAL	Ivory - square cross-section
EXCAVATION REF.	B2068
PRESENT LOCATION	Oriental Institute, Chicago
MUSEUM REF.	No. A22249
PUBLISHED IN	<i>OIP LII</i> pl.xxii, 125
PERIOD & DATE	Late Levantine IIIA2 1450-1300

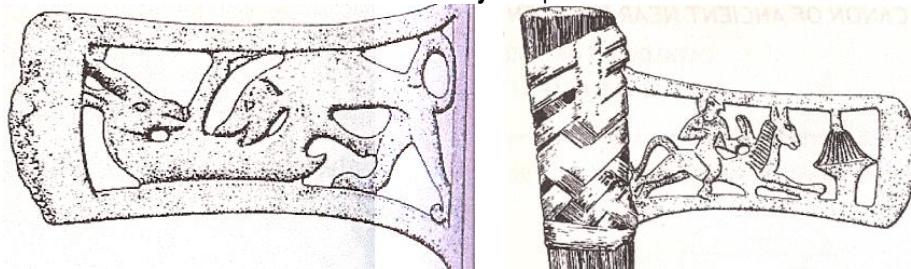
This baton of authority uses the lion and prey scene to express royal authority and status. The lion has just reached its victim and has not jumped over yet to the head to despatch it. The scene occurs on one side of a baton of square cross-section belonging to a petty ruler of Ugarit. There are associated scenes on the other facets of the baton, analysed in full when piecing together the **CANEA** in *Chapter 17*.



We set it against a partly damaged ivory ointment spoon, below, from Egypt (*Steindorff* 1909 p.285b; *Kantor* *ibid* pl. xviiiE) - one of many decorative objects from Egypt using the lion and prey theme during the New Kingdom, when Egypt was open to the reciprocal influence of both Crete and the Levant.



Openwork ritual axes using the motif were common in this period as in the example below left - from Haas (c.f. the similar *Ratt-25*). Considered to be either Syrian or Egyptian, another blade in the group (below right) with man on a donkey points to the former. The subject is seen on Egyptian wall paintings (more common with attacking dog than lion – it may indeed be a dog on the axe blade) - see *Kantor* *ibid.* and N de G Davies *Tomb of Puyimre* pl. xiiib.



Belland-12

FINDSPOT	Alalakh, Levels I/II, Fort area	
ON ARTEFACT	Plaque	
MATERIAL	Ivory	
EXCAVATION REF.		
PRESENT LOCATION	British Museum, London	
MUSEUM REF.	WAA.126157	
PUBLISHED IN	Woolley 1955 pls lxxvii/viii; 1959 pl.33; Barnett QEDEM 1982 pl.27e	
PERIOD & DATE	Aegeo-Hittite	1400-1200
INSCRIPTION: NONE		

Small ivory leaves like this one were used to clad furniture in the Levant. Although some ivory could have come from closer sources, the main entrepôt was Elephantine, in Egypt, where it marshalled and traded the material brought in from deep in Africa, in Nubia and beyond. By now the Hittites had occupied Alalakh and used the International Style of the Aegean, the lion and eagle being merged into all sorts of decorative versions of the griffin, a hybrid traceable to predynastic Susa.



A more baroque presentation with similar torsion of the prey appears on the lid of the round ivory pyxis found on the Athens acropolis at the former site of a Mycenaean palace. It again shows an attacking griffin with two toppled and twisting deer lying belly-up on either side of it (Barnet **QEDEM** 1982 pl.29a).

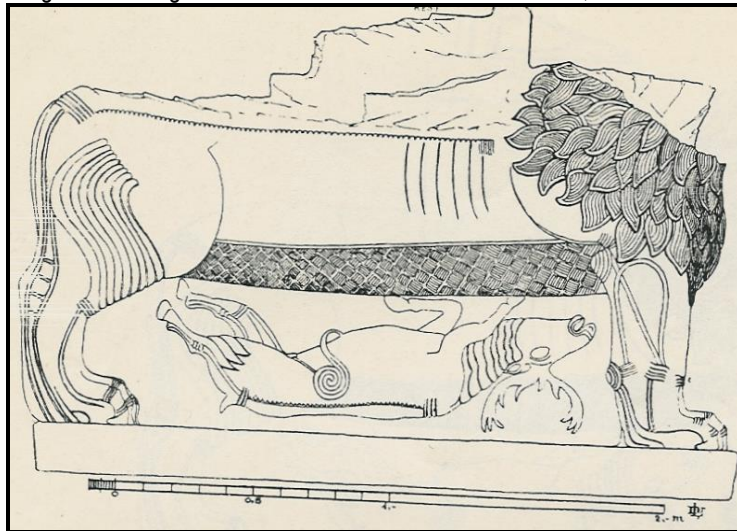


The scene on the box itself is catalogued as **Ratt-34** in **Catalogue C: The Rear Attack**. The *Iconography* section of **Catalogue D** explains the Levanto-Aegean renaissance of the griffin in the Second Millennium.

Belland-13

FINDSPOT	Tell Halaf, main portico
ON ARTEFACT	Gateway guardian sculpture
MATERIAL	Basalt
EXCAVATION REF.	
PRESENT LOCATION	Aleppo/Berlin Museums
MUSEUM REF.	
PUBLISHED IN	Oppenheim 1950, ill.27; Herrmann 1989; Winter 1989
PERIOD & DATE	NEOHITTITE c.900-875

Tell Halaf was the Hittite's new capital in the Levant, aping Assyrian palace complexes such as Nineveh and Nimrud at a provincial level. The continuation of the ruff along the belly of the lion indicates the Asian Lion is the model. No attempt is made to depict the attack as it would happen in real life, suggesting that realism in itself is not an aim, but that the group itself is symbolic. Appropriate for a region bordering on the nomadic territories of Central Asia, a deer is the victim, rather than the bull.



Compare the side view of the gateway with an earlier, cruder basalt relief from Tell Halaf, a slab of the same palace exterior dado cladding c.900BC, published in **Meyer** 1965 pl.98. Here the belly attack is seen in aerial view (the lion biting up into the stomach of its prey is sometimes seen in Egyptian or Minoan art).



We shall eventually see in the final few chapters that the entire Tell Halaf series of reliefs is one of the key suites that help to confirm the order of all the images in the **Canon of Ancient Near Eastern Art**.

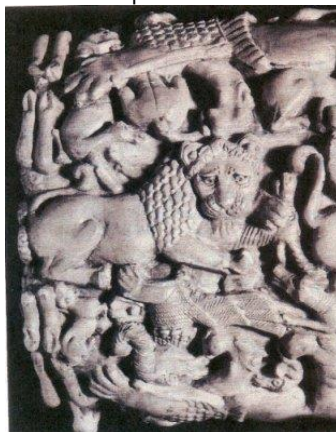
Belland-14

FINDSPOT	Nimrud, Burnt Palace	
ON ARTEFACT	Fragment of veneer panel for furniture	
MATERIAL	Ivory	
EXCAVATION REF.		
PRESENT LOCATION	British Museum, London	
MUSEUM REF.	126645	
PUBLISHED IN	R D Barnett <i>British Museum Nimrud Ivories Catalogue</i> 1975 pl. lxvii, S158d	
PERIOD & DATE	NEO-ASSYRIAN	900-700
INSCRIPTION: NONE		

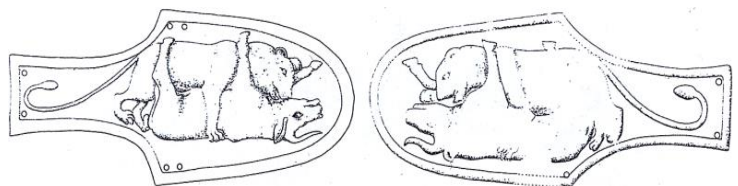
Palace life in a later era again provides the context for this small piece of ivory cladding used on furniture. The Assyrians followed Syrian practice in making extensive use of ivory veneers for their furniture, some of their craftsmen being imported from the Levant, with Assyrians also trained locally. Enough of the scene survives to identify that this is another tête bêche example of the Belly Landing.



Almost baroque in character is the underside of an ivory cosmetic palette below, found several decades later in two pieces in Well AJ of the North West Palace at Nimrud (S and S al-Iraqi *Ivories from Nimrud* no.1, IM 79501/02):



Finally, amongst the sets of cast bronze horse-blinkers from the time of the Assyrian occupation of Cyprus comes the odd example using the Belly Landing, as below from Chariot B, Tomb 79 – see Karageorghis *Necropolis of Salamis III* pl. lxxxviii/158 and pl.cclxvii/158 and 195 – now in the Nicosia Museum. Most Assyrian horse blinkers were made of a lighter material like ivory so these may have been made locally given Cyprus' rich natural mineral resource - copper - with a dash of tin from Anatolia to make bronze.



Belland-15

FINDSPOT	Sparta, Temple of Artemis Orthia	
ON ARTEFACT	Votive amulet	
MATERIAL	Ivory	
EXCAVATION REF.		
PRESENT LOCATION	Athens Museum	
MUSEUM REF.	15544	
PUBLISHED IN	E Marangou <i>Lakonische Elfenbein-und Schnitzereien</i> 1969 no.66	
PERIOD & DATE	GEOMETRIC/ARCHAIC	c.900-700
INSCRIPTION: NONE		

Below is a votive amulet associated with a Temple of Artemis - in Sparta which often had oriental allies such as the Persians or Phoenicians (some say the hatched mane is neo-Hittite in style). It is one of several other examples discussed more fully under **BaLu-36**, and is the only one that has a standing human couple carved on the underside of its base (the same juxtaposition as made on the Etruscan biga (**Belland-19**)).



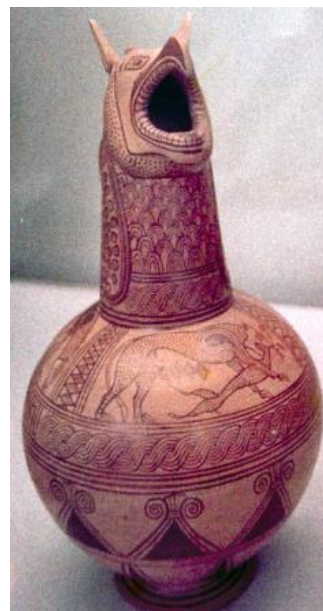
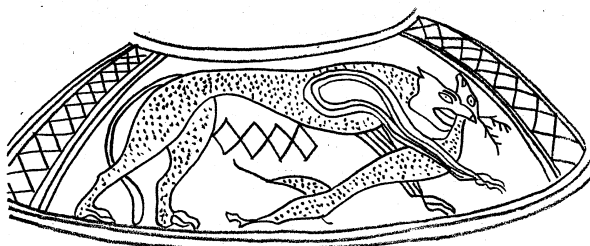
Similar votive amulets were found in the sacred lake at Perachora, also in Sparta, described by Humfry Payne⁴ 1962 pl.174a-f. Bone and ivory seals were found here with the same motif, illustrated *op.cit.* plates 175a (A26 - A27 shows griffin over prey); 177a&b(A35); 191(B22b); 192(D541). Some of these could be later than the Sparta examples, being generally of the Orientalising period 700-600.

⁴ *Perachora: The Sanctuaries of Hera Akraia and Limenia II: Pottery, Ivories, Scarabs and other Objects from the Votive Deposit of Hera Limenia* 1962 (edited posthumously by T Dunbabin) - pl.174

Belland-16

FINDSPOT	Aegina - precise find spot not known
ON ARTEFACT	Jug
MATERIAL	Red clay, decorated in black and violet paint
EXCAVATION REF.	
PRESENT LOCATION	British Museum, London
MUSEUM REF.	GR1873.8-20.385, A547
PUBLISHED IN	Schefold 1967 pl.177
PERIOD & DATE	CYCLADIC 675-650

The hundreds of Greek islands in the first centuries of the 1M formed a scatter of stepping stones between the Levant, Asia Minor and Greece during the long Orientalising period. Long used by the Minoans and Mycenaeans, the Lion & Prey motif was readopted from the East by native, or brought there by immigrant, craftsmen. It is hard to say whether this is a leopardess attacking a spotted deer, or a lioness given an overall texture like the deer, but the teats are cleverly emphasised, with the theme of lioness as life-giver as well as death-dealer fused. The decorative, semi-geometric treatment of the animals is Phrygian in nature. The jug is decorated all over with patterns (note the Syria-derived guilloches, and the neck and spout fashioned into a griffin head with open beak and lion ears. There are three picture panels on the upper vase belly: this scene, underneath the open beak and therefore at the front of the jug, is flanked by two similar renditions of a grazing horse.



From roughly the same period (8-7C), indicating its currency still in the Levant we give below the sealing from a cone shaped stamp seal with thread hole (top damaged) bought in Jerusalem, catalogued by Hildi Keel-Leu⁵. (Biblical Institute no. 142):

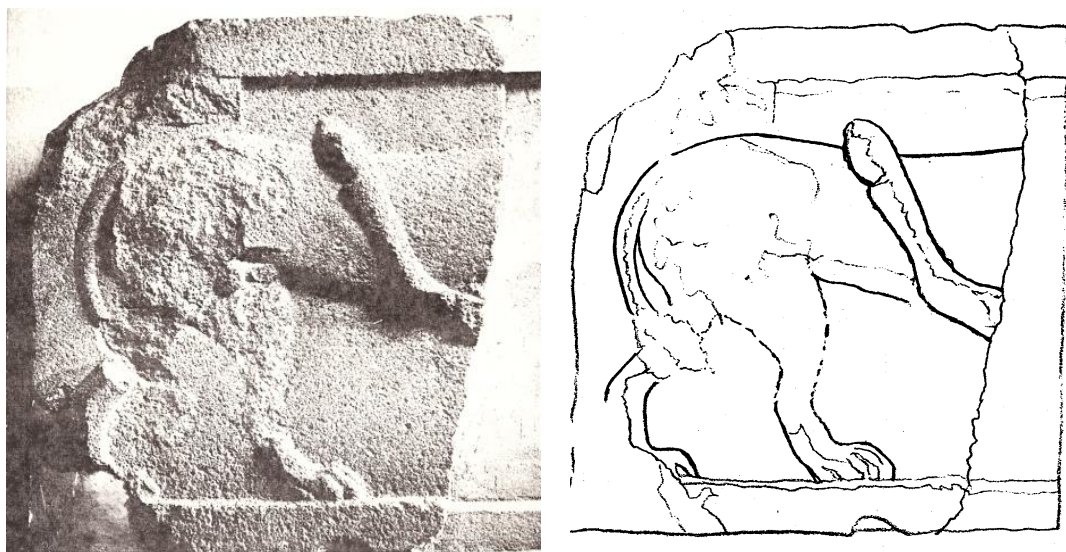


⁵ H Keel-Leu *Vorderasiatische Stempelsiegel: Sammlung des Biblischen Instituts der Universität Freiburg* Göttingen 1991 (Series Orbis Biblicus et Orientalis 110)

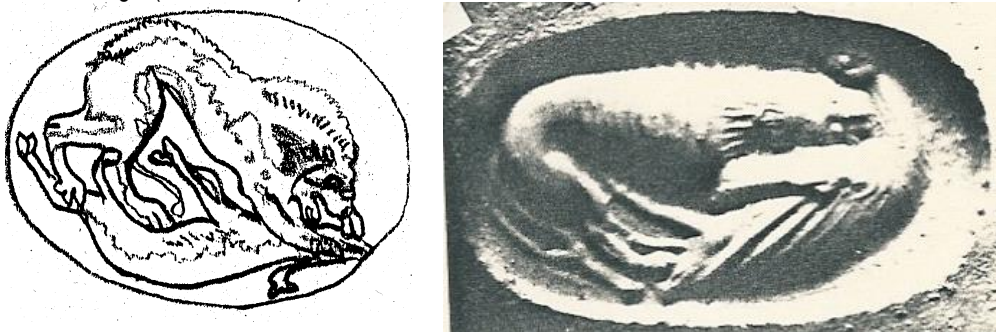
Belland-17

FINDSPOT	Anatolia, Assos (Troad), Doric Temple of Athena
ON ARTEFACT	Architrave frieze fragment
MATERIAL	Limestone
EXCAVATION REF.	
PRESENT LOCATION	Istanbul Museum
MUSEUM REF.	
PUBLISHED IN	<i>Finster-Hotz</i> 1984 pl.xv 28
PERIOD & DATE	ARCHAIC 625-600

The simplicity of this temple and its carving place it at an early date, probably later than the one built for Artemis Orthia (see **Catalogue D, BaLu-36**). The other Virgin Goddess, Athena, is described by Homer as the *Dea ex machina* of the Trojan War, protecting many of its heroes on the Mycenaean side. Temples were built to her in both Attic Greece and Lydia until the final break between Greece and Persia in the early 5C, and there seems to be a close connection between her temples and the lion-prey theme (**Catalogue F: The Bilateral Attack** will especially demonstrate this in its *Chronological Focus*). The entire architrave frieze of the temple to Athena at Assos - not far from Troy - includes most variations of the lion-prey group (see for instance **Catalogue B: Urusta-42** and **Catalogue C: Ratt-48**). Although a motif expressing the power of the Goddess Athena, taken together they may also allude to the changing seasons (compare with the similar concept on the Membij seal at **Belland-10/Urusta-28**). This piece is all that remains of what must have been a panel showing a *Belly Landing*, and will be discussed more fully as part of the entire frieze programme in the **SYNTHESES**.



We can set it against two roughly contemporary seals: the first (below left) a chalcedony scaraboid from Kourion, Cyprus, in the British Museum (ref 539/GGFR no.389), where the lion attacks a reindeer, resting its back legs on those of its prey. More unusually, the second (below right), an antique scarab seal in the catalogue of the Geneva collection (**GenevCat231**) shows an attack on a moribund eagle (GGFR no.256).

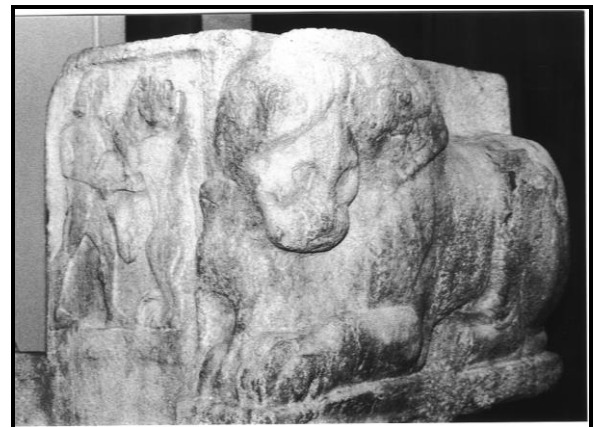
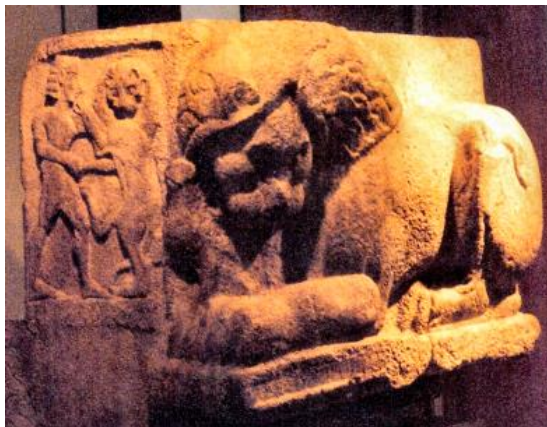


Belland-18

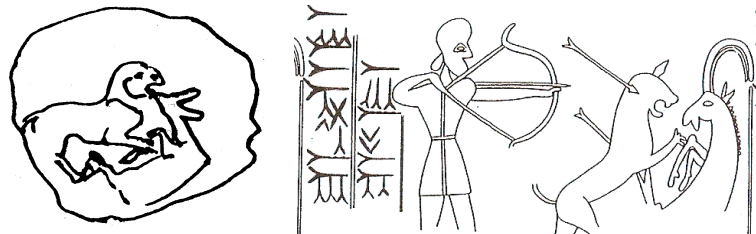
FINDSPOT	Xanthos, Necropolis
ON ARTEFACT	Free-standing sarcophagus
MATERIAL	Marble
EXCAVATION REF.	
PRESENT LOCATION	British Museum, London
MUSEUM REF.	GR1840.10-20.31, B286
PUBLISHED IN	Perrot & Chipiez V, figs 276-80; Hölscher 1972 pl.I
PERIOD & DATE	Archaic (time of Cyrus the Great) 560-530

The lion bites the neck of its upended prey as their heads and hind legs interlock. Such high-relief carving on the main front of the stone sarcophagus leaves us no doubt that this is the main subject. The iconography of the entire piece, which has three more scenes on the other sides that complement this Belly Landing frontage, are presented more fully in the **SYNTHESES** Section.

Modern scholars such as Shahbazi⁶ confirm the conclusions of earlier explorers into Lycia that this sarcophagus is Irano-Lycian, and likely to have belonged either to an Iranian colonising dynast, or a native Lycian vassal of the Achaemenids. It is crudely carved and evidently from time of Cyrus the Great after his invasion of Sardis and Xanthos - the local population of Xanthos was massacred and a Mede appointed as Satrap. The monument compares with the small-scale Spartan and Perachoran amulets instanced above under **Belland-16** and in **BaLu-36**. Sparta's links with Persia included a route via Lycia by sea, and the ivories indicate a similar vassalage situation where Achaemenid iconography was adopted by the Greeks.



We can set this against two later (550-490) Achaemenid sealings from Darius' reign – the first (below left) from a Persian house at Ur (U18124/UE X no.802/AJ XII pl.lxxvii) (other such seals come under **Ratt-55**). Such seals could have belonged to a Persian administrator during its occupation by the Achaemenids of what had now become the Babylonian Satrapy. For the people of the city of Ur this had been their own symbol from its earliest history and must have seemed strangely familiar when seen stamped on goods or documents under comparatively foreign occupation. The second sealing, from the Persepolis Fortification Tablet archive of 509-494 during Darius' reign (with damaged and untranslatable Elamite inscription) shows a hunter firing arrows into the lion) and is seen by Garrison⁷ (his fig. 8/PFS35*) as in the Achaemenid court style:



We bring in the latter sealing again under **Urusta 47f** along with a handful of other Achaemenid seals.

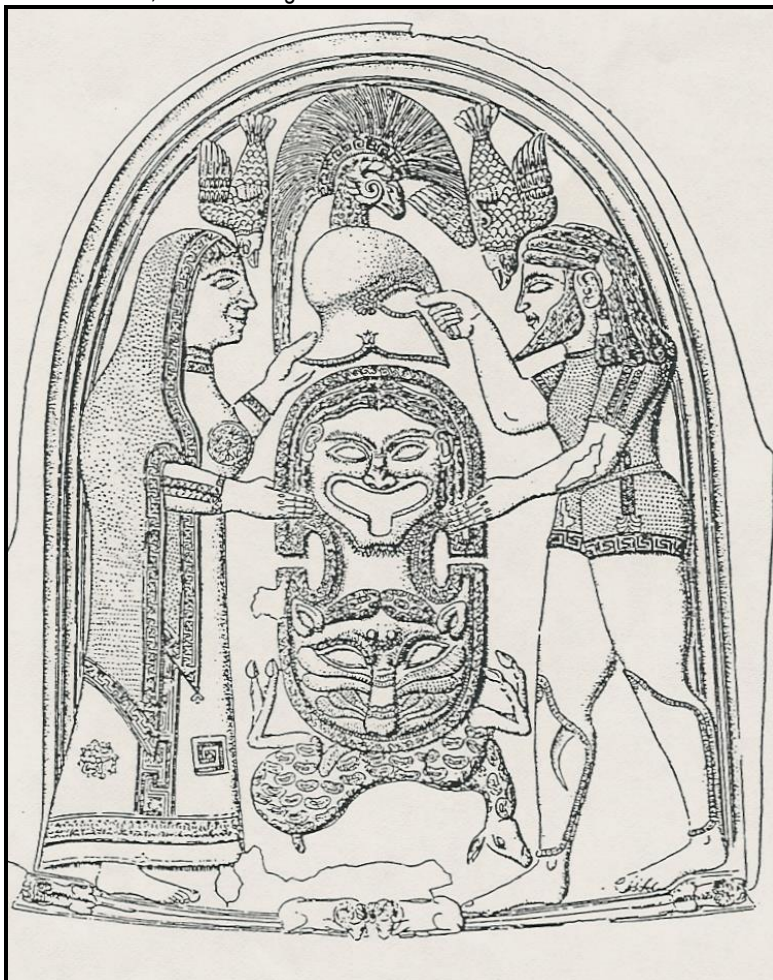
⁶ A Shapur Shahbazi *The Irano-Lycian Monuments* 1975

⁷ Mark Garrison 'Achaemenid Iconography as evidenced by glyptic art' in C Uehlinger et al (eds) *Images as media : sources for the cultural history of the Near East and the Eastern Mediterranean : 1st millenium BCE* 2000

Belland-19

FINDSPOT	Italy, Monteleone di Spoleto	
ON ARTEFACT	Etruscan biga (two-wheeled chariot)	
MATERIAL	Bronze-clad wood	
EXCAVATION REF.		
PRESENT LOCATION	Metropolitan Museum, New York	
MUSEUM REF.	03.23.1	
PUBLISHED IN	Ducati 1927, pl. 108 no. 287.	
PERIOD & DATE	Archaic	550-540
INSCRIPTION: NONE		

On this chariot front a disembodied lion head forming the lower half of a shield bites the belly of a doe, with Gorgon of devouring Time twinning the lion head as the top half of the shield. Eagles and rams also feature in framing the hero who takes his armour from his beloved/a priestess, preparing to face death. In **Belland-15** we have the same juxtaposition of Belly Landing with standing couple while on the chariot sides there are further scenes comparable to those on the Xanthos sarcophagus in **Belland-18**, discussed together in the **SYNTHESES** Section. These include other lion-prey attack scenes (see **Urusta-43**).



In view of the Persian connection It is interesting to note a Luristan bronze with Gorgon head as the central boss from the Zagros mountain area of Susiana, in the Tepe Hissar style (c. 8C, above right) - cited by Dussaud in **Syria XXVI** p.205 – it also has two heraldically arranged borderline tête-bêche Belly Landing attacks on the left and right rim (similar in treatment to the pair on the Thasos plate in the next entry), stabbed by hunters either side of a tree of life forming the neck of the Gorgon head. The more day-to-day family group at the top of the Gorgon head allies it to the nomadic style of the Hasanlu Bowl.

Belland-20

FINDSPOT	Takht-i-Sangin, Tajikistan
ON ARTEFACT	Dagger sheath
MATERIAL	Ivory
PRESENT LOCATION	Tadzhikistan Academy, Dushanbe
MUSEUM REF.	
PUBLISHED IN	B Brentjes <i>Der Tierstil in Eurasien</i> 1982 pl.18
PERIOD & DATE	Hellenistic Scythian 300-200 BC

On the fringes of the Persian Empire vassals adopted the lion and prey symbol either to express their own power in imitation of King of Kings, or to indicate their alliance to him (Darius had gone into Scythia and was worsted by them before going on to Marathon, but they sometimes became allies). As on the Tell Halaf gateway (**Belland-13**) and Etruscan biga (**Belland-19**) the prey is carved as disproportionately tiny compared to the might of its attacker - symbolic in itself, but also a design constraint of the artefact's shape - such that we could as much take it as a sideways attack by an upreared lion as a true *Belly Landing*. The sheath usefully shows the bottom stopper, or chape, which in **Catalogue D: The Back Lunge** is shown on Persian examples to have been appropriately decorated in its own right with the same motif. For the convenience of comparing several items close to each other in composition we have placed these here since they all highlight the issue of barbarian -v- urban art which continues to be a theme in every catalogue - and not only in the Graeco-Persian period. The question is whether these items are made with all the same meanings in mind - or only the more obvious connotations.



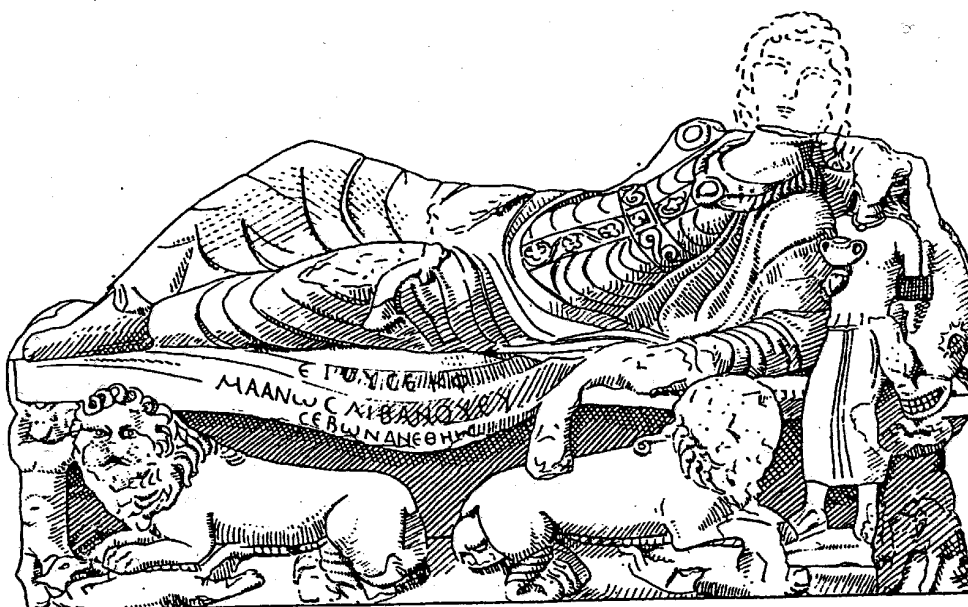
We have a similar notional Belly Landing (depending on which way round it is viewed) on a 7C Archaic plate (above right) showing the same disparity of size between prey and predator: it is mirrored heraldically by another pair opposite, as on the Luristan plate in the previous entry. Cited by Salviat and Weill⁸, it comes from the island of Thasos which, occupied by Phoenicians, became a vassal of the Persian Empire due to its strategic position. It is close in iconography to a similar plate from Delos described by these authors - and is again associated with the precinct of the Virgin Goddess. It is an ambiguous pose which could as well be read as a rearing lion playing with a tiny prey, but it serves to make a telling contrast with the dagger sheath.

⁸ 'Plat aux Lions Affrontés de l'Artémision Thasien' BCH LXXXV 1961 98-122

Belland-21

FINDSPOT	Private house in Damascus - Palmyrene style	
ON ARTEFACT	Commemorative sculpture	
MATERIAL	Marble	
EXCAVATION REF.		
PRESENT LOCATION	Damascus Museum	
MUSEUM REF.		
PUBLISHED IN	H Seyrig Syria XXVII 1950 pp229-236, pls ix-xii	
PERIOD & DATE	Seleucid	213-214 BC
INSCRIPTION (in Greek):	Ma'anos son of Libano, made this offering out of piety in 525 (Seleucid Era)	

From the inscription Seyrig suggests this monument was erected by the son of Libanos in his father's memory. 525 Seleucid chronology (superseded by the present-day chronology based on the year of the Birth of Christ) is equivalent to 213-214BC. The head is lost, but Seyrig suggests it would have been raised as reconstructed here, to suggest his awakening from the dead.



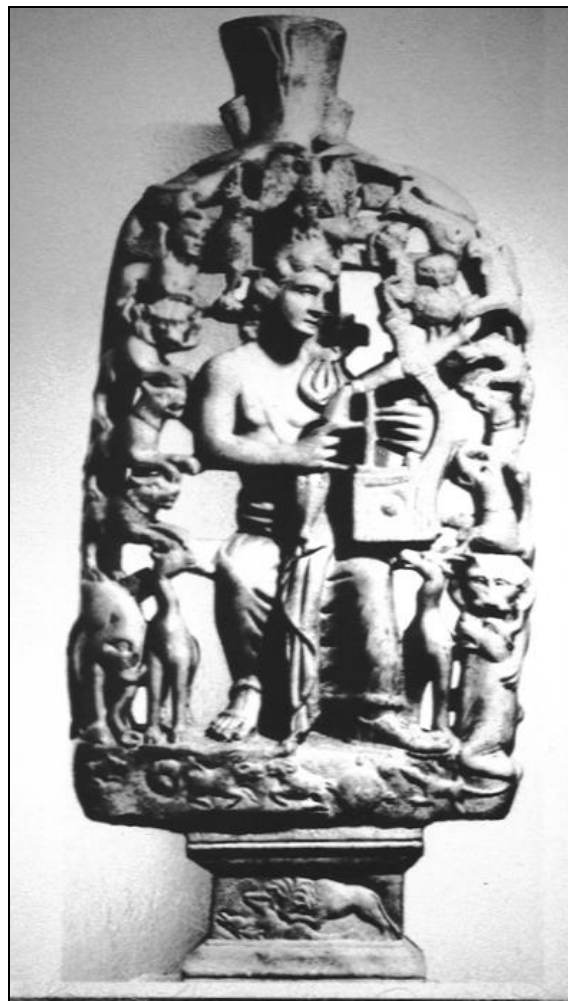
The subject is reclining as if at a funerary banquet, dressed and posed exactly as are family members in the tomb of A'ailami and Zabida at Palmyra itself (see Makowski 1983). Under his couch lies a pair of antithetically placed *Belly Landings*, while an attendant with feasting cup and dolphin stand to the side. The reclining pose is probably a deliberate reference to the Syrian Bel, equivalent of Dionysos/Adonis who dies, journeys to the Underworld and then rises again – an ancient Syrian tradition (see **Catalogues C/D**). Tesserae - small tokens which worked as entry tickets used by those attending funerary feasts in honour of Bel - attest this (two are illustrated by Seyrig in **Syria XLVIII** p.105), below:



In fact, the one on the left shows a celebrant with attendant similar to that on the sculpture. The major enhancements of the Damascus memorial sculpture are the added symbols, in particular, the two *Belly Landing* attacks, alluding to the crossing-point of life into death (see more in our *Iconography* section) – and also of death into life – in a new beginning.

Belland-22

FINDSPOT	
ON ARTEFACT	Votive carving of Christ as Orpheus
MATERIAL	Ivory
EXCAVATION REF.	
PRESENT LOCATION	Byzantine Museum, Athens
MUSEUM REF.	
PUBLISHED IN	
PERIOD & DATE	Late Antique 300-600AD



It is helpful confirmation to see the lion attacking prey on the base of a Late Antique Christian iconostasis, since it underlines just how significant the symbol still was, to be incorporated into the iconography of a new religion. On the right of Christ is a standing lion and prey group in the stance similar to the Scythian sheath, Thasos plate and Luristan bronze (**Belland-19/20**). Christ is portrayed as Orpheus with his lyre bringing the cosmos or zodiac into order and harmony. At this early period of Christian art the cross and crucifixion had not been introduced, so possibly the *Belly Landing* motif on the base of this ivory carving takes its place as a symbol of life and death, serving the same purpose as on the Palmyrene Adonis memorial monument in the previous entry: the new hero is now Christ-Orpheus, rather than Bel.

DISTRIBUTION AND ART HISTORY OF CATALOGUE ITEMS

It is useful to start with this category where no more than 30-40 images survive. Not only does it enable us to demonstrate in embryo the procedures we will follow in each catalogue for arriving at informative conclusions, but the small amount of material also sums up in a nutshell the history of the spread of the lion-prey symbol over the centuries as more or less that followed by the other compositional types with varying emphases. Use of the lion-prey image can only be understood against its historical background, and its heartland for all compositional types lies in Elam and Mesopotamia, invented in the region at the turn of the Fourth Millennium and then successively borrowed by administrations all round that centre of origin - sometimes simply as an innocuous decorative device but usually as a sign of official authority or religious alliance - at differing levels depending on how it was understood at the time. We shall see how this general picture repeats itself as we bring in other versions of the lion attack, noting at which points new compositions were invented – and how fashionable variations on them had short-lived currency for comparatively brief periods – all of which helps to date them.

FREQUENCY OF USE

Flicking quickly through the catalogue entries, it is useful to draw up a table showing instances of the use of the compositional type in 500-year blocks which shows (counting in all provenanced artefacts in each entry) that the *Belly Landing* (despite the small number of items) was significantly most frequent 3500-2500, and again 1000-500 BC.

Period	4000-3500	3500-3000	3000-2500	2500-2000	2000-1500	1500-1000	1000-500	500-0	0-500
No of artefacts	0	4	2	1	3	2	7	2	1

III.5- 2: Usage per 500 years, based on the main entry of every catalogue item

Even from our small initial sample the overall picture is straightforward, already summarised millennium by millennium under the three main headings above. The home of the *Belly Landing* compositional type is Sumer and Susa, since the earliest examples come from that region, dating to the 4-3M, then that after a hiatus it reappears in several places in the Levant during the 2M, and in Egypt, Crete and even Mycenaean Athens. Then in the early 1M this version of the image continues to be used in the Levant and is picked up by the Assyrians and Neo-Hittites on both ivories and in the monumental sculpture of Tell Halaf. Half way through the 1M BC, as the Assyrians lose their empire to Babylon, and theirs in turn to Persia – back to the homeland of the symbol - the composition takes on new life in territories touched by Achaemenid rule, from Archaic Greece to barbarian Scythia, Western Anatolia, Cyprus, Etruscan Italy and Persian-occupied Ur.

We could not resist showing (our cut-off point is really the death of Alexander in 323) how still in the Levant, as late as Seleucid times, in the 3C BC a prince uses the symbol on a memorial to his dead father in Damascus (**Belland-21**). Some centuries later it is incorporated into the iconography of a Byzantine Christian ivory icon (c.300-600 AD) now in the Athens Museum (**Belland-22**), indicating how smoothly the life and death theme conjured up by the Lion & Prey image could translate from civilisation to civilisation and religion to religion under different guises - indicating a fundamental continuity of meaning even at a time the **Canon of Ancient Near Eastern Art (CANEA)** as a whole (see Introduction) might have lost currency.

BELLAND-1 TO BELLAND-7: THE EARLIEST MATERIAL 5M-3M

The first surviving occurrence of the Belly Landing comes from prehistoric South Iraq or Susa, dating back to the mid-fourth millennium BC (**Belland-1**), after which time several examples have been found at temple sites along the rivers of Tigris and Euphrates, in towns mentioned in the King List as founding the succession of early kingdoms of Sumer (all trading with neighbouring Susa and Susiana, later known as Elam). These date to the Jemdet Nasr, Early Dynastic and Akkadian periods up to the end of the 3MBC – see our basic outline of comparative dating in the *Chronological Table* given a few pages further down.



III.5- 3: Amiet's concept of the hinterland to Susa – the Iranian Crescent

Pierre Amiet, Curator of Ancient Near Eastern Antiquities in the Louvre, showed in his synthesis⁹ of decades of learned articles on the subject since the discovery and continued digging at Susa by the French, that the territory beyond the Zagros mountains to the east of Susa and Sumer constituted a separate Iranian Crescent walled off by the Zagros Mountains - not so much fertile but mineral and craft rich – and peppered with small sites which arose to service the new style of life led by the emerging urban centres of the river plains. We have labelled it as such on our basic Map below: the full detail (which we do not need) of the distribution and nature of the sites in both in the mountains and down round the fringes of the central Iranian deserts is given in Hole¹⁰. They were more like crofts or hamlets specialising in small-scale processes of mining, herding and craftsmanship in contrast to the Susa and Sumer districts which were developing an international commercial network, based on barter of their excess agricultural produce, its tentacles reaching as far as Egypt and Syria.

⁹ P Amiet *L'Age des Échanges inter-iraniens 3500-1700* 1985

¹⁰ F Hole *The Archaeology of Western Iran* 1987

Compared to the large urban agglomerations of Sumer these villages set up to funnel into Susa *remained* small and utterly provincial. Being local mining or craft workshops acting as intermediate entrepôts, they relayed their wares on to Susa which in turn forwarded them to the temple towns lying on the Sumerian plain by two main routes - either going down to Uruk and then bearing north to reach the sites along the Euphrates as far as Syria - or hugging close to the Zagros foothills at the Susa end to reach other places, such as Khafaje and Tell Aqrah along the northern bank of Tigris and its tributaries, up to the Diyala plain region of North Iraq.

Since many lion attacking prey examples come from these provincial Iranian Crescent sites (Amiet's map of the region gives an excellent idea of the contrasts of terrain and the extent and multiplicity of sites stretching north and east to Bactria on the one hand, and south and east to the early Indus sites on the other), the importance of the territory cannot be underestimated for arriving at the bigger picture of what was going on in the **4th-3rd M BC** in this area, a key example being **Belland-4**, possibly from Tepe Yahya itself. In other catalogues other Iranian Crescent sites such as Tell-i-Malyan or Sialk come into the picture.

BELLAND-8 TO BELLAND-12: THE SECOND MILLENNIUM MATERIAL

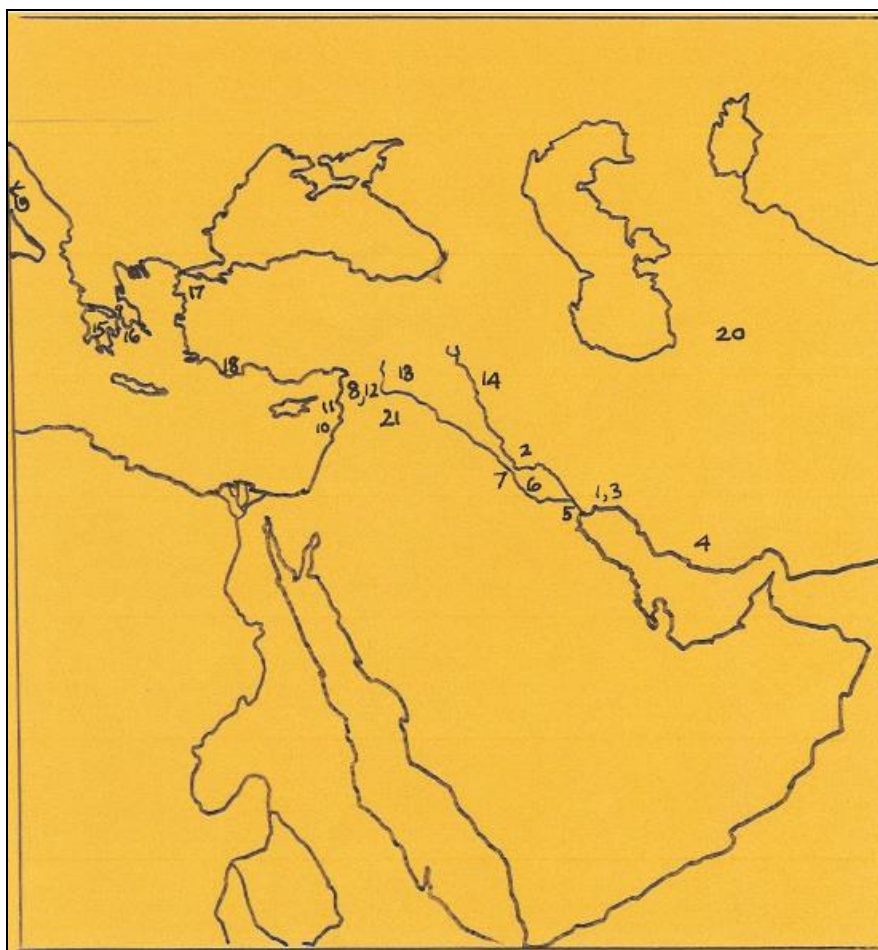
In the **Second Millennium** we enter an ever-increasingly International Period that leaves Susiana, Sumer and Akkad behind - as Minoan/Mycenaean, Syrian, Hittite, Levantine and Old Assyrian cultures arose on the fringes of the urban civilisations of Egypt and Mesopotamia up to and during Egypt's Middle and New Kingdom with the Hyksos invasions in between (the *Chronological Foci* for **Catalogues C, D and E** study this millennium in great detail). Each of these cultural zones, which engaged in increasingly open trade and cultural interchange during this time, tended to use the Belly Landing only sporadically, and even then, often not at its most serious level of symbolism given its use on more decorative, secular items.

BELLAND-13 TO BELLAND-20: THE FIRST MILLENNIUM MATERIAL:

Looking at material from the **First Millennium**, the Levant perpetuated examples of this compositional type via the apparatus of new empires (**Belland-13/14**) - those of the Neo-Hittites and Neo-Assyrians. Then Greeks, Scythians, Etruscans, Phoenicians and Anatolians at home and abroad used it (**Belland-15 to Belland-20**) mostly due to direct or indirect contact with the imperial thrust of Achaemenid Persia, which revived for their own state art a symbol known of old in Susiana. Interestingly, the image continued to have spasmodic significance even into the Seleucid, and Byzantine periods in Syria and Greece where knowledge of the inner meaning of the symbol must have endured (**Belland-21/22**).

OVERALL DISTRIBUTION

Using the numbering of the first artefact of each entry (where provenanced) the spread of the motif geographically over time is shown in the *Distribution Map* on the next page. The gaps in that process will slowly be filled in by the evidence provided by other compositional types as we work through them: for instance, with the *Uruk Stance* type (**Catalogue B**) its beginnings in Uruk and Susa is not attested further afield in the Iranian Crescent until the Achaemenids arrive in the mid 1M, while on the other hand strong contemporary linkage with Egypt shows up from the very beginning.



III.5- 4: Distribution Map for Belly Landing Attack artefacts (1st item of each catalogue entry, where provenanced)

THE CANON OF ANCIENT NEAR EASTERN ART
CATALOGUES OF EVIDENCE

A: THE BELLY LANDING ART HISTORY

Ancient Near Eastern Chronology 5000-2180

ACCORDING TO MANETHO, FOR EGYPT

DYNASTIES I-VIII LASTED 955YRS 10days

DYNASTIES III-VIII 532Y

DYNASTIES I-II 550Y

DATES OF OTHER LANDS ARE SET AGAINST THE EGYPT BENCHMARKS

Centuries BC	EGYPT	Pharaoh	MESOPOTAMIA	Leader/King	Cntl Asia/Susa	Canaan	Greek World			
5000	BADARIAN		UBAID I			PN-A				
4900	AMRATIAN/ NAQADA I		UBAID II			PN-B				
4800										
4700										
4600										
4500										
4400										
4300										
4200				UBAID III			SUSA I	PN-B		
4100										
4000										
3900										
3800	EARLY GERZEAN/NA QADA II 4000- 3500		UBAID IV TO 3750 UR FLOOD to 3655		SUSA II	Ghassoulian				
3700										
3600			Early URUK [Levels 11-6] 3655-3500				Meskiagasher	EARLY BRONZE AGE I	Early Minoan/Helladi c I [= Egyptian Dynasties I-III] 3300-2613	
3500										
3400		Proto-Dynastic/ NAQADA III 3500-3300								
3300	Dynasty 0 3300-3265	Narmer/ Neithotep	LATE URUK [Levels 5-4] 3500-3235	Enmerkar/Nimrud	SUSA III Proto-Elamite					
3200				JEMDET NASR 3235-3105		Lugalbanda				

THE CANON OF ANCIENT NEAR EASTERN ART
CATALOGUES OF EVIDENCE

A: THE BELLY LANDING ART HISTORY

Centuries BC	EGYPT	Pharaoh	MESOPOTAMIA	Leader/King	C Asia/Susa	Canaan	Greek World
3200	Dynasty I 3265-3002	Hor-Aha/ 62Y Meryt-Neith 3203	JEMDET NASR [Level 3] 3235-3105	Dumuzi	SUSA III [Proto-Elamite] cont'd	EB I cont'd	Early Minoan/Helladic I [= Egyptian Dynasties I-III] 3300-2613
3150		Djer 57Y 3146				EB I	
3100		Meryt-Neith 31Y					
3100/3114		3115 Djet 23Y	Early Dynastic I 3105-3000	Gilgamesh	SUSA IV	EB I	
3000	3092 Den 20Y 3072 Anedjib 26Y 3046 Semerkhet18 3028 Ka'a 26Y	SHURUPPAK FLOOD					
2900	DYNASTY II 3002-2700	3002 Peribsen 38Y 3964 Ra-Neb 39Y 2925 Neteren 47Y	Early Dynastic II 3000-2700		SUSA IV	EB I	
2800		2878 Sekhemib 17 2861 Sendji 41Y 2820 Neterka 17Y					
2700		2803 Neferkara 25 2778 Khasekhem 48 2730 Khasekemwi 30					
2600		D III 2700-2613 5 KINGS IN 74 YEARS	Sanakht 18Y DJOSER 19Y Sekhemkhet 6Y Khaba 6Y Huni 38Y	Early Dynastic III 2700-2300		SUSA IV SUSA IV	

Centuries BC	EGYPT	Pharaoh	MESOPOTAMIA	Leader/King	C Asia/Susa	Canaan	Greek World
2500	D IV 2613-2498 9 KINGS IN 115/120 YRS	Sneferu 24Y KHUFU 22Y RaDjedef 8Y KHAEFRA 28Y MENKAURA 28Y Shepseskaf 4 Ptahdjedef 2-2498	Early Dynastic III 2700-2500 (CONT'D)		SUSA IV SUSA IV	EB II	EARLY MINOAN/HELLADIC II [= Egyptian Dynasties IV-VI]
2400	D V 2498-2345 8 KINGS IN 140/150YRS	Sahura'14 Djedkara' 39 Neferirkara' 10 Neferefra' Userkaf 7 Shepseskaf 7 ?Shepseskara'? Menkauhor 8 Unas 30 Niuserra' 31	AKKADIAN 2500-2180	Sargon I	SUSA IV	EB III	
2300	D VI 2345-2180 165 YRS	Userkara' + Iput, Pepi I & Merienra'53 tog. PEPI II 94Y Meryenra' Antiemsaf + Netjerikara' 10 tog. Menkara'(Nitocris)2		Naramsin	SUSA IV		
2200				Sharkalishari	SUSA IV	EB IV	
STARTS 2180	First Intermediate Period DVII (8½y) & DVIII(14y) 15 MEMPHITE RULERS, 11 & 6		GUTI over 22 years				

III.5- 5: Basic Date Chart for Catalogue A Chronological Focus, subject to modification in later commentaries

CHRONOLOGY OF A KEY PERIOD WITH HIGH USE OF THE BELLY LANDING

For each catalogue of images we focus on the period of most interest for that compositional type. For the Belly Landing - where the earliest examples are the most striking – looking at the distribution map and its chronological frequency, it is of most interest to consider its context during the protohistory of Egypt, Susa & Sumer. To start at the beginning of the story lays foundations for firm insights into the context and genesis of the lion and prey subject as depicted for the same period in succeeding catalogues – most notably for Catalogue B with its large amount of material dating to this time.

CHRONOLOGICAL FOCUS: EMPIRES OF THE FERTILE CRESCENT 5000-2500 BC

Without going into more detail than is necessary for the task in hand, we have given a rough overview of relevant historical events as charted in our *Chronological Table* above, drawn up to guide the ordering of the earliest items in both this and the next catalogue. Diodorus Siculus states the Chaldaeans were the 'companions of Belus on his trip from Egypt to Babylon', but this still does not clarify which side was the pupil and which the teacher, nor at what period in time we should apply that journey to Babylon – whether very remotely far back, or more recent in relation to Diodorus' own times – but it is at least a documented clue that the link was well-known.

We have in the first instance to rely on the groundwork of the experts who since Egyptology's beginnings have over decades painstakingly established the primary chronology of ancient Egypt, but then we have to weigh up for ourselves their interpretation of the surviving writings not only of the original third-century BC (3C BC) historians, Manetho, Josephus and their copyists - who assembled accounts of ancient history according to the temple records of Egypt and Babylon – and how to align indigenous Egyptian and Mesopotamian King Lists, their surviving dated monuments and, not least, then to bring in 20th and 21st Century (AD) developments in Carbon-dating.

Feeding into the well-known background to the conventional dating of key ancient near-eastern civilisations, new archaeological discoveries at the end of the twentieth century by the Deutsches Archaeologisches Institut (DAI) at the predynastic sites of Umm el-Qaa^b and Abydos in Egypt have provided fine-tuned Carbon-14 dates that help to underpin current trends to push back dates for the formative centuries linking Sumer and Egypt (Vertesalji; Hassan] that preceded the emergence of the first fully recorded dynasties of Old Kingdom Egypt and Early Dynastic Sumer. Artefacts have not in the past always been given enough prominence alongside written documents in helping to put together the jigsaw of chronological sequences, which is where we hope our study, through art historical methods, might indicate adjustments to some parts of the time-grid.

THE STARTING LINE FOR OUR ENQUIRY

According to the sparse, and in some cases damaged, evidence surviving, images of the lion attacking its prey first nudge into the Fertile Crescent at the end of the Fifth Millennium BC (5M BC). This is a late Neolithic world where farming and herding - as well as the older modes of gathering wild food and hunting wild game - served to meld a new kind of village society on the brink of developing into the earliest urban centres. Referring to *Chronological Table A* above, we note how in Egypt the Badarian period is taken by experts such as Hoffman to have ended around 5000BC, being contemporary with the Ubaid I period in Sumer. There is no need to consider a starting line earlier than this, for it is mostly in the 4000s BC that our first few surviving examples of Lion Attacking Prey iconography occur. We shall perhaps find that its use reflects some

aspect of this very process of urbanisation in the mythology of the people who made it significant: I started to think it was connected with the running of these countries by an early form of institutionalised calendar.

SIRIUS RISINGS IN DATING EVENTS

Some Egyptologists have referred in the past to a predynastic anchor date of 4240BC, extrapolated back from a firmly recorded Middle Kingdom Sirius rising recorded in the last half of the Second Millennium BC (2M BC) during the Middle Kingdom (fuller details discussed shortly), when the star would have risen at dawn with the Sun (known as a heliacal rising) at the Summer Solstice (around 16-19 July), against the stars of the constellation Leo. The difficulty is that Sirius has a precessional cycle of 1471 years measured from that precise Summer Solstice rising whereby, day by day during that millennium-and-a-half cycle, it slips backward from the day of its rising. Although some Egyptologists consider farmers along the Nile would by 4240 have noticed a link in timing between the heliacal rising of Sirius around the Summer Solstice and the onset of the Nile floods to irrigate their fields some 40 days later, it took centuries – probably at least another Sirius cycle on from that 4240 event - for priests in charge of the temple calendars to understand how also to take into account Sirius' departure from that solstitial 'peg' and calculate its gradual backward motion through the entire zodiac – since to set up the calendar uncritically by Sirius dawn risings only would at first have led to its becoming increasingly out of joint with actual seasons for most of its cycle, until it neared its original benchmark at the Summer Solstice once more. Relying on this slippage alone could be one of the causes of the first failure of proto-urban societies - explaining the hiatus before the Old and Early Dynastic Kingdoms respectively in Egypt and Sumer: the extent of actual slippage in Sirius' cycle could only be cross-checked by integration with Sun and Moon cycles, whose behaviour was probably grappled with first by the Egyptians in the 6M BC stone circles of Nabta Playa¹¹ which depended on the use of shadows as pointers.

In fact, the periodic return of the Sirius cycle back to its starting point - represented in Egyptian art by the Phoenix of Heliopolis, the Sacred Ibis of Egypt - provided in miniature a window on the nature of the Sun's much slower 25,000 year precessional cycle, measured from its rising point against the stars at the Vernal Equinox. Along with its Solstice points sometimes coincident with Sirius risings, the VP was also slipping back through the zodiac, but over an immensely longer period of time. Yet the predynastic habit of viewing the Sirius heliacal rising - at whatever time of year it actually happened - as the marker of the New Year retained its aura throughout Egypt's Pharaonic history, even though in practice the Sun's Solstice points were more reliable in themselves (by using obelisks and shadows) in fixing the year's turning points, so that the actual seasonal New Year in Egypt would still begin at the Summer Solstice (around 16-19 July in our times) whether or not Sirius locked in or not – because of the natural geographical marker, the Nile Inundation.

All the same, over time the astronomer-priests must have realised that the Solstice points were correspondingly shifting infinitesimally, meaning that other planetary checks and balances needed to be called upon. Moon cycles were useful to measure months, but otherwise too variable, but in Mesopotamia where star risings were recorded at twilight and midnight as well as at dawn, Eclipse cycles were gradually becoming predictable, as also the periods of Venus (5 Venus years fit almost exactly into 8 solar years). Due to documentation from Elam showing they used a Venus-based week and year (see **Chapter 19**) we can say this knowledge was *Susa and Sumer's particular contribution to the regulated calendar*. Archaeological evidence on several artefacts shows Egypt and Mesopotamia joining forces in a significantly prominent way from around 3500BC for just a few centuries when the sharpening of regulation of the calendar must have been coming to a head. In this and **Catalogue B: The Uruk Stance** we see this evidence as revealing the exchange of astronomical

¹¹ See page 2 of my Cosmokrator Newsletter for 2013 on Standing Stones in the Middle East and Europe for a picture of Nabta Playa, by following this link <http://www.cosmokrator.com/newsletter.pdf>.

knowledge concerning the interlocking cycles of the Sun, Moon and Venus¹² - both in this period and then again during the Second Millennium (a further, better documented period - when Egypt entered into varying dialogues with the Levant and the entire Aegean region, as Baal/Amun/Jupiter was added to the repertoire of calendrically useful planets). In our **Chapters 19 and 20** on ancient near eastern astronomy (in the Age of Taurus and Age of Aries respectively) we explain in full depth the importance of these interacting planetary cycles for urban calendars – and the imagery and mythology used to describe them. Certainly from c.3500 BC the hallmark of temple trading complexes in both lands, where astronomical observation was part and parcel of temple life, is of increasing complexity and efficiency.

SIRIUS CHRONOLOGY IN THE PREDYNASTIC PERIOD

Referring again to our simplified *Chronological Table A* - based initially on Hoffman's **Egypt Before the Pharaohs** – we see that it begins when the Badarian/Ubaid I periods ended around 5000BC. We start to get interested as the Amratian, or Naqada I phase of Egyptian history emerges, which lasted around 1000 years (5000-4000BC). Counting back in Sirius cycles from the known Middle Kingdom sighting, this is the millennium into which the Sirius solstitial rising of 4240 slots, and the time some Egyptologists reckon was the first Sirius rising to be consciously observed and taken into account by the priests of Egypt's budding civilisation.

Mention in the ancient Egyptian historical records of the dates of known Sirius risings (not necessarily at the Summer Solstice) has been a useful, if double-edged, tool for Egyptologists to secure sparse chronological 'pegs' on which to calculate the lengths of early eras by counting back to what must have been earlier solstitial Sirius risings, whence to fix and unroll known kings' reign lengths. There is no doubt that gradual mastery in Egypt over the calendar through observation of Sirius and other stars, coordinated with Sun (Ra^c) risings – and in Mesopotamia through observing key ecliptic, tropical and *zīqpu* stars, along with notation of the periods of key planets (notably Sun, Moon and Venus) – led between them to better prediction of the seasons, enabling more efficient farming which in turn must have led to a produce surplus that could be traded. This means that from around 3500 urban centres began to agglomerate as entrepôts all along the Fertile Crescent (roughly, present-day riverine Iraq, Syria, Canaan and Egypt – see Map). At their heart were large temple complexes erected in various specific ways to measure aspects of time (different temples were dedicated to different planetary Gods, and thus had different functions) run by astronomer-priests to whom each marker star or planet was also a divinity, symbolised by appropriate animals and plants according to season. Let us look at the detail.

There are several grounds for such links during the Naqada III, Dynasty 0, ID& IID periods, for each king (and sometimes also their queens or viziers) had mudbrick North and South tombs made for themselves at Abydos and Saqqara, while the imagery on contemporary artefacts betrays interchange of iconography with protohistoric Susa and Sumer during the Susa II/Late Uruk periods. We have put Dynasties III & IV in Egypt contemporary with Early Dynastic III in Sumer because of the Stepped Pyramid at Saqqara built by Djoser of the IID in Egypt. It is a sophisticated Egyptian rendering of a Sumerian mud-brick ziggurat faced with small stone bricks (indeed the words 'ziggurat' and 'Saqqara' are the same word). The stone buildings bordering its temenos in scores of instances copy the reed building types of Sumer, the details of which are demonstrated by Badawi¹³. Even into the time of the construction of Menkaura's Pyramid near the end of the IVD in Egypt, extensive use of mud brick is seen in ancillary buildings around it, and in the New Kingdom when Mesopotamian influence became strong again, Amenophis III used mud-brick throughout to build his Malqatta palace at Thebes. Even into

¹² See my piece (originally a blog) on Venus cycles large and small through this link:
<http://www.layish.co.uk/venusworship.pdf> .

¹³ Alexander Badawi **History of Egyptian Architecture 1954**

Mycenaean times mud-brick was used for the lower walls of the Treasury of Atreus at Mycenae, a sure sign of Egyptian influence in turn derived from Mesopotamia.

Chronological Table A shows the Naqada I millennium (5000-4000) as coinciding roughly with Ubaid II & III in Sumer - at which time, if contact between Sumer and Egypt existed (as it did later), there is little tangible archaeological evidence to show for it. At this same time in the Susa I period on the Khuzestan plain (below the Zagros mountains at the head of the Sumerian Gulf – see Map) there seems also in this period to have been little contact even between Susiana and Sumer. The archaeological evidence within Susiana (present-day Khuzestan - Hole 1987) shows that small groups of people were coming and going between mountain and plain in this self-contained bowl of land and founding small villages close to small-scale mines, smithies or potteries, then relaying their products into what seems to have been two 'capital' centres, Dur-Untash and Susa at the foot of the Zagros mountains. The pursuit of these cottage industries often involved the use of ovens built with clods of mud that, to high temperatures, became burned bricks. A cheap and quick building material, the brick was probably invented as a by-product of smelting and pottery-making, and by the 4th Millennium (4M) the brick, baked or unbaked, serves as a marker of transmission from Sumer or Susa to wherever it was adopted. It is at the very end of this phase that the cumulative process of this loose-knit Susiana economy reached critical mass, putting it in a position to exchange surplus goods for agricultural produce beyond its borders, to Sumer and even by sea to Egypt. At this point clay labels identifying goods were stamped with seals bearing all sorts of designs, some (like the lion-prey group) remaining in currency on a permanent basis.

It is in the Early Gerzean, or Naqada II period we really sit up and show an interest for, as Amiet (1986) describes so well, where Susa's periods I and III saw the Khuzestan area independent and self-sufficient, during Susa II it had very close relations with Sumer - at just the time it was also forging stronger links with Egypt. While this phase continued uninterrupted in Egypt until roughly 3500, in Sumer the corresponding Ubaid period came to an end with a vast flood, whose silt was discovered by Woolley just above the last Ubaid level in the Pit at Ur. We surmise from the evidence that while herding and farming life proceeded smoothly in Egypt at this time, Sumer was in the process of slowly, but ambitiously, recovering. The primitive, Ubaid levels of settlements at Eridu and Uruk were built over and re-initiated on a grand scale during what we know as the Early Uruk period – best represented by the use of the Uruk Stance compositional type in **Catalogue B** showing the lion-prey group also had a strong religious connection.

During this time, then, Susa and its inventions, including pictorial, came into the orbit of Uruk and Eridu when it was for some centuries more strongly biased towards Sumer than to its mountain hinterlands. It seems that at the same time those who had moved away after the flood, both from Susa and Sumer, dispersed not only northward by river or mountain routes to the Syrian region, but, interestingly for this section of our study, by sea along both coasts of the Persian Gulf, either to India (Magan) or round Arabia (Meluhha) to the Horn of Africa (what I see as an early form of 'the Zanzibar Triangle' - characterised more fully in relation to the indigo trade in **Catalogue D**), seeking to consolidate and amplify trade routes perhaps initiated in an earlier era by lone groups for the purchase of desirable stones, shells and animals in exchange for their home products and craftsmanship.

On Egyptian artefacts touched by their presence it is not easy to unravel at this juncture what was Sumerian, what Susan, and what native African. Certainly by the end of the Naqada II period we start to have material finds on Egyptian sites that indicate iconographical or structural (e.g. knife-handle decoration/mud brick building) origins in Susa and/or Uruk. This has been comprehensively confirmed by the Umm el-Qa'ab excavations undertaken by the DAI from 1979 onwards all through the 1980s and 1990s (see reports named under Umm el-Qa'ab in **BIBLIOGRAPHY B: EXCAVATION REPORTS – MDAIK**

Vols 35/38/46/49/52/54 et seq.). These recent and ongoing excavations have provided material for more precise dating for our *Chronological Focus* period, which we look into next.

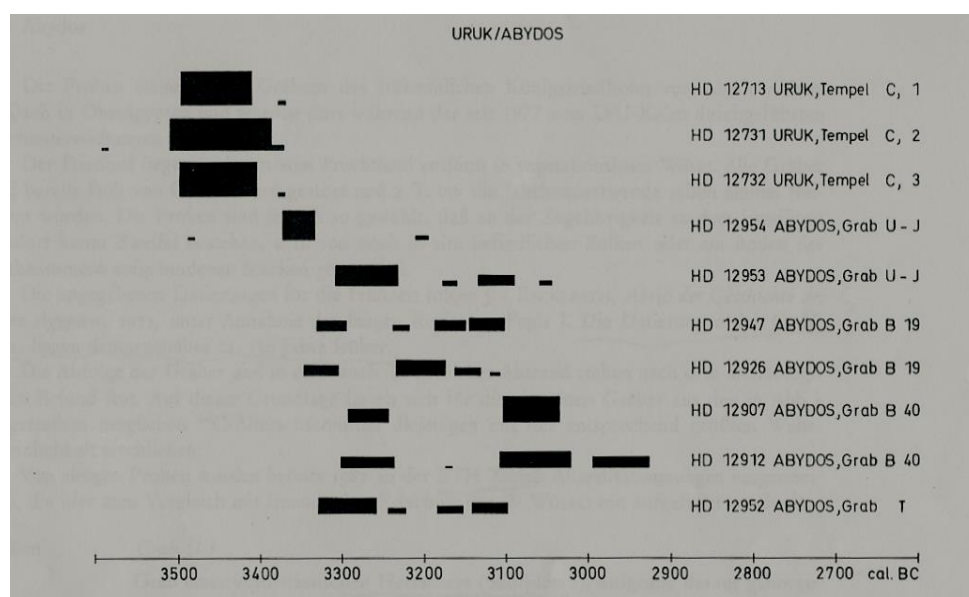
RECENT CHRONOLOGICAL ADJUSTMENTS

The essential conclusion arrived at by Boehmer et al.¹⁴ on the Carbon-dating results made at the University of Heidelberg from contemporary wooden artefacts found not only in the earliest Umm el-Qa^cab tombs, but also from Uruk temples - is that the Naqada periods are to be dated back to a time-scale much earlier than Egyptologists usually credit them to be (Petrie being a major exception). In the former paper the conclusion is that 'vor allem über die Messergriffe und Rollsiegel des frühen Ägypten gewonnenen Vorstellungen, wonach Uruk IV (Tempel C) in etwa mit Naqada IIc zeitgleich ist und Uruk III ("Gemdet-Nasr-Zeit") der Phase entspricht, die frühestens mit ausgehendem Naqada IIc beginnt und über Naqada IIId bis Naqada IIIa anhält', and that 'Versucht man, historisch betrachtet, absolute Daten einzusetzen, die man nur schätzen kann, dann kommt man in etwa zu folgendem Bild:

Naqada IIIb = etwa 3100-3000 v.Chr	
Naqada IIIa}	} = etwa 3250-3100 v.Chr
Naqada IIId }	
Naqada IIc	= etwa 3400-3250 v.Chr

III.5- 6: Boehmer's Chronological adjustments¹⁵ – to be read from bottom row up

His table of comparative chronology (below) based on this underlines the clear precedence (of earliness) of the Uruk Temple C samples over the grave contents of a 'Follower of Horus' (Grave U-j) at Abydos, let alone the earliest nameable predynastic B Graves already excavated by Petrie and others previously. Thus although there are a few signs of certain Egyptian features (especially in the case of African animals) transmitted back to Susiana/Sumer, the consensus now is that there is no doubt the predominance of imports was from Mesopotamia to Egypt, not the other way round (we look at the evidence overall in the **SYNTHESES** chapters).



III.5- 7: Revised comparative chronology between Uruk and Abydos from Boehmer (ibid.)

¹⁴ in **BaM XX** 1991 and **MDAIK XLIX** 1993

¹⁵ R M Boehmer 'Einige früzeitliche ¹⁴C-Datierungen aus Abydos und Uruk' **MDAIK XLIX** 1993

THE CANON OF ANCIENT NEAR EASTERN ART

CATALOGUES OF EVIDENCE

A: THE BELLY LANDING ART HISTORY

These calibrations were further summarised and fine-tuned by Görsdorf et al.¹⁶, and it is on this very latest evidence provided by the DAIK - as objective as it could possibly be within the parameters of the method - that we feel justified in the early dates and coordination of Sumerian and Egyptian chronologies given in our own Chronological Table above, which is relevant to those artefacts in this catalogue (**Belland 1-7**) but even more so in **Catalogues B** and **C** which have more substantial material for this period (but happened due to the preponderance of 2M material to need to analyse other periods under their respective *Chronological Foci!*).

LATEST CARBON-14 FINE-TUNING

With the Predynastic chronology adequately brushed in, and happily now clarified and enhanced by the recent C14 dating secured by DAI Kairo from their coverage at Umm el-Qa^{ab}, we have a firm enough framework to make sense of the earliest examples of the lion & prey image, knowing that it was being used contemporaneously with symbolic intent by the embryonic administrations of both Sumer and Egypt. However, the following adjustments should also be borne in mind - arrived at some two to three decades later using correspondingly refined technology and criteria - by Dr Michael Dee of the *Oxford Radiocarbon Accelerator Unit* at the Research Laboratory for Archaeology and the History of Art, University of Oxford, shared in two exhaustive papers at a recent conference in London¹⁷ (to be read in chronological order from the bottom up). On coming back to this catalogue to make corrections and insertions I decided not to change my chronological

3085-2867	DYNASTY I
3325-3085	NAQADA IIIA-D
3450-3325	NAQADA IIC-IID
3650- 3450	NAQADA IC-IIB
3750-3650	NAQADA IA-1B
4350-3750	BADARIAN

III.5- 8: Further revised comparative chronology by Dr Michael Dee as of 2014

table to Dee's dating, given it would mean the necessity of rejigging all the early material of Catalogues A, B, C and D! Knowing further adjustments will be ongoing into the future over coming decades and given his dating remains close to that given by both Boehmer and Petrie, I must leave individual fine-tuning to the reader.

RISE OF THE DYNASTIES BEFORE AND AFTER NARMER-ENMERKAR IN EGYPT, URUK & SUSA

The archaeological evidence from those centuries pinpointed by Boehmer of cooperation between Egypt and Sumer during Naqada IIc-IIIb/Uruk III/IV provides us with a multishafted linchpin by which to organise a good deal of succeeding chronology throughout the Fertile Crescent, where other sources of information cannot provide absolute start dates. David Rohl¹⁸ argues that it was during this period that Meskiagasher of Uruk was one of those leading such an expedition to the Horn of Africa which ended in the founding of Kush, based on the syllable in his name, and that thereafter in the Late

¹⁶ in MDAIK LIV 1998

¹⁷ **A New Chronology for Ancient Egypt** - a day conference sponsored by the Bloomsbury Summer School held at University College, London 1 March 2014 alternating with the other speaker, Dr Alice Stevenson, Curator of the Petrie Museum of Egyptian Archaeology, UCL.

¹⁸ **Legend: The Genesis of Civilisation** 1998

Gerzean/Naqada III period (sometimes further subdivided at its end into the Protodynastic Period prior to the unification of Egypt) there was an actual Sumerian conquest of Egypt led in the Late Uruk period by Enmerkar, known to be the son of Meskiagasher. We see a reverse Egypt effect on Uruk, where during Uruk IV, Enmerkar, famous in the records for his building operations at Uruk, is probably responsible for the great complex of temples built there, using not only mud brick clad in a mosaic of painted clay, or stone cones, but also of imported stone, just at the time Narmer was said to have unified Egypt. His name on the Narmer Palette, using hieroglyphs for a chisel and a Red Sea squid that spell out NRMR is so uncannily close to that of (E)NMR(K)R that it would be surprising if they were not, indeed, the same person. At this very period (the Late Uruk period between 3500 and 3300 parallel to Naqada III), Egypt took up the technique of mud brick building, heavily in use at Uruk, in the tomb complexes of Umm el-Qa^cab and Abydos - as also for the early temple and palace at Hierakonpolis built *inside* the pisé mud constructions used by earlier communities. Because the Mesopotamians (coming both from Sumer and Susa) were the first to use mud brick – as excavated at Susa, Eridu and Uruk - it is clear that they not only taught Egypt a quick method of building walls, but also shared strengthening methods such as the 'palace façade' wall articulation, an enfilade of niches based on the bunches of reeds used to keep the walls of the semi-floating huts of the marshlands of Sumer upright. In Egypt the effect was also created by planks of cedar laid across and behind each other in long strips, as found in some of the early tombs at Umm el-Qa^cab.

As attested in Sumerian legend (looked more closely in the *Iconography* sections of this catalogue and even more so in **Catalogue B**), Enmerkar is famed for his building of Uruk, whilst Narmer in Egypt, described as the very first Pharaoh, is mentioned in several inscriptions and depicted on the famous slate palette named after him. Though they could be one and the same person, we have put their names parallel to each other on the chronological table at around 3300 BC: certainly there are too many coincidences of evidence not to align them chronologically, round the very time the Lion & Prey symbol was coined in the art of both countries – which has dynastic overtones (clearer through the more plentiful artefacts of **Catalogue B: the Uruk Stance**). This gives us a plausible benchmark for Predynastic Egypt and Mesopotamia from which to lay out the ordering of succeeding kings given in the King Lists of these countries, as Narmer and Scorpion were known to immediately precede the Dynasty I Pharaohs. The shadowy names of kings listed before Narmer and Enmerkar in the Turin Canon and the Sumerian King List respectively are too difficult to place coherently because of the immensely long reigns allocated to them which may indicate that measures shorter than years were used to make up the totals, such as Moons, or that the names referred to are of dynasties and eras rather than of individuals. The Edfu temple texts in Egypt mention visitors to Predynastic Egypt from distant parts, calling them 'Gods of Far Memory', and include the Great Seven, or Shebtu named as Wa, Aa, Nay, Djeser Tep, Kema Sa Ta, Neb Haty, Neb Ankh Was and Neb Sekhem Haut Iry Adjy Ba Ankh Was (see Rohl *ibid.*). How these periods of Predynastic Egypt and Sumer/Susa match with the Biblical account of the genesis of ancient near-eastern tribes from Cain and Abel to Noah, and the dispersion of Shem, Ham and Japheth after the Flood, is a maze that needs such guiding threads as Rohl has daringly proffered after painstaking research, and should be read in full by those interested, since he provides a trellis onto which the events of the Old Testament and the records of archaeology and ancient history can be more credibly entwined than others have succeeded in doing.

After the Gods of Far Memory, as preamble to the reign of Narmer, the Palermo Stone (confirmed by the Turin Canon), gives the names of the early kings of Upper Egypt who preceded him. As these are listed as nearer in time than the Shebtu, it indicates there was no vacuum, but a succession of notable chieftains before the Unification, important enough to be remembered as the predecessors who prepared the foundations for Egypt's amalgamation of North and South into one kingdom. We have no evidence from inscriptions elsewhere in Egypt of their existence because at this stage their remit was

Upper Egypt alone (Narmer is the first to have instances of his name on objects from both Upper and Lower Egypt). These early kings were probably 'The Followers of Horus' listed in Egypt's records as preceding the dynastic pharaohs - the question is thoroughly explored by Werner Kaiser in his three-part series of articles entitled 'Einige Bemerkungen zur ägyptische Frühzeit' in **ZÄS**. The names as given on the Palermo Stone were transliterated by Breasted as 'Seka, Khayu, Teyew, Thesh, Neheb, Wazenz and Mekh. The remains of (mostly robbed) mud-brick tombs in the prehistoric cemetery at Hierakonpolis were considered by Werner Kaiser in his reassessment of the importance of Hierakonpolis (1958) to be the graves of chieftains who were in the families of the Followers of Horus immediately preceding Narmer. He stated that the half-intact grave (Tomb 100, known as the Painted Tomb - which has its place in the **CANEA**) discovered by Quibell and Green must have been the tomb of such a proto-pharaoh, seemingly (from the iconography) with strong Mesopotamian connections. It dates from the end of Naqada II/beginning of Naqada III, and must have belonged to one of 'der ersten Könige von Oberägypten oder [at least]... 'Gau'fürsten (local nobility.' He concluded that Hierakonpolis must have been the oldest capital of Upper Egypt, and that 'das Herrschaftszentrum eines vorgeschichtlichen Reiches von Oberägypten am ehesten eben diese Stadt gewesen sein dürfte'.

Despite some tombs found at Hierakonpolis itself, it was Umm el- Qa^cab at Abydos that became its main cemetery and dynastic funerary centre. To build on his assessment of Hierakonpolis by aiming to extract every last bit of evidence of the proto-pharaohs throughout Egypt, the leader of the excavation, Werner Kaiser, decided to take stock of the entire overall archaeological picture of Naqadan Egypt up to the start of the Old Kingdom by undertaking an extensive survey along most of the Nile from Upper Egypt to the Delta, taking in minor and major prehistoric sites on both banks, prospecting for what the next site in importance should be to be investigated (reported in **MDAIK XVII/1961**). This is how it emerged that, even aside from Memphis, the next great site of importance to go through with a toothcomb was Umm el-Qa^cab on the West Bank of the Nile (even though it had already been investigated by both Amélineau (badly) and then Petrie (thoroughly, but having to mop up Amélineau's damage). This prehistoric site on the outskirts of Abydos, further north from Hierakonpolis but still in Upper Egypt, is on territory regarded by the ancient Egyptians as the mausoleum of Osiris, and therefore had the status of Egypt's Holy Land, serving as a necropolis for the proto-pharaohs, with unbroken continuity into the line of known pharaohs of the Archaic Period starting with Narmer/Menes.

After slippage from their hoped-for start date of 1970 due to the military situation in the Middle East, the Deutsches Archäologisches Institut (Abteilung Kairo) finally began the re-excavation (in fact the re-re-excavation) of the mud-brick-tombed prehistoric cemetery of Umm el-Qa^cab/Abydos in 1977. Here Narmer and Scorpion of Dynasty 0 (roughly 3300-3265) are the first kings' graves placed in sequence next to those of the predynastic chieftains' tombs that can be identified with a particular person. Although we have lists of names from the Palermo Stone and rows of graves at Umm el-Qa^cab, they have not yet been linked together individually, despite rich grave goods and a new fund of primitive hieroglyphic inscriptions and sealings. For Narmer and Scorpion there is extensive inscriptional evidence from Upper to Lower Egypt, indicating that they both (Narmer especially) were indeed responsible for the Unification of Egypt, as claimed in the records and artefacts they left behind in both areas. As far as our chronological table is concerned, we could make Naqada III shorter, and Dynasty 0 longer and distribute the kings differently, but this is an exercise we leave to the specialists, as it does not alter the overall drift of the significance of the predynastic finds decorated with lion attacking prey at this time, explored in coming catalogues.

Following Narmer/Enmerkar we reach comparatively firmer ground with the Egyptian Dynasty Lists, for which Manetho, writing in the 3C BC, provides us with some interesting generalisations we can use to rough out a time frame. The durations he gives for reigns in the very early period correspond well with what is given in the Turin Canon and on the Palermo Stone, so he was evidently working from temple library documents that repeated the standard information. Although the complete original Manetho document has not survived, his copyists, Africanus, Eusebius & Syncellus' versions agree within ten years of each other on the duration of the First Dynasty, with reign lengths for each king slightly varying from version to version. Following Emery's analysis of the matter in his *Archaic Egypt*, we have followed Africanus and accordingly allocated his lengths of reigns for these kings to that part of our chronological table. This means that Dynasties 0 and I coincide roughly with the start of the Sumerian periods of Jemdet Nasr (the time of Dumuzi at Uruk) and Early Dynastic I (the time of the famed Gilgamesh, known for building a wall round Uruk, and who probably lived at the time of the second great Flood of Sumer which Rohl calls the Shuruppak Flood, probably referred to in the account of Gilgamesh's search for immortality during his encounter with Utnapishtim - the Sumerian Noah).

To complete our underpinning of *Chronological Table A*, and broadening our horizons to wider connections between those civilisations and the Mediterranean basin, it is sufficient to broadly sketch in the Early Minoan and Helladic I periods for Crete and mainland Greece as lasting to the end of Dynasty III in Egypt, with Early Minoan II lasting to the end of the Old Kingdom - since no lion and prey subject matter is known on mainland Europe at this time. Indeed, it quickly went out of currency in Egypt as soon as contact with Susa/Uruk ended after the Unification of Egypt at the start of its Archaic Period. For later periods a good rule of thumb to go by is that the reappearance of the lion and prey image in Egyptian art signifies contact with Mesopotamia again.

In *Chronological Table A* we followed the reign lengths given by Africanus from Manetho for Dynasty II (IID), making it roughly contemporary with EDII in Sumer for which a proliferation of kings is named in the cuneiform Sumerian King List, analysed by Jakobsen (see Bibliography). Similarly, hoping that we have not over-simplified, following the reign lengths given in the Turin Canon, Palermo Stone and Saqqara List, summarised in Manetho and checked by Hayes in his piece in the *Cambridge Ancient History* (see Bibliography) we have placed Dynasties III and IV as contemporary with EDIII in Sumer, matching the last two dynasties of the Old Kingdom with the Akkadians in Sumer. Looking at the Chronological Table, Amiet's general point is a good yardstick to go by: that in the successive Susa I-IV periods Susiana was subject to alternations of independence from, or subjection to, Sumer and Akkad - summed up well by J D Gadd: [Susa] '... was in all ages so intimately connected with the fortunes of Babylonia, either as a dependency, a trading partner, or a rival, that the buildings and antiquities found there are as much inspired by the ideas of Babylonia as of the native Elamites...'. The point to understand from this quotation is that Khuzestan/Elam nonetheless had a distinctive tradition of their own whose character could never be entirely eradicated, reflowering several times over the millennia. One of its indicators is the Lion & Prey symbol on commercial labels which in predynastic times it lent to both Sumer and Egypt (especially observable in the spread of Belly Landing and Uruk Stance types) and although 'going underground' it persisted as a local symbol until it was taken up on a grand scale by the Achaemenids building their winter palace at Susa and spring palace at Persepolis in the 6C BC.

ANCHOR POINT OF THE CHRONOLOGICAL TABLE

Although we have documentary assertions for all the relative reign lengths of the kings of the Archaic Kingdom in Egypt (Dynasties I & II), the problem is at what year to make this succession of reigns begin, given that our coincidental date of 3300 for Enmerkar and Narmer is general. If we are to be oriented in pretty much the right period by the many concrete

clues of relations between Sumer and Egypt which is revealed in their art and architecture at this time, the standard linch-pin used by Egyptologists for the entire body of dynastic Egyptian chronology is the date given in Egypt's own records for the heliacal rising of Sirius on 16 August in the 7th year of Middle Kingdom Pharaoh Sesostri III of the XIIID which would have been true of any year between 1876 and 1864. As Hayes explains, the reigns of his Middle Kingdom predecessors are recorded as amounting to 120 years, which, using 1870 BC as the mean bench mark, takes us back to 1990BC. The Turin Canon gives a further 143 years for the duration of the XID, which takes us back to the start date of 2133. If the XID started in 2133 BC, then the entire Middle Kingdom ended in 1780BC. (In fact, in the Chronological Foci of **Catalogues C** and **D**, in the light of the material evidence and other writers' dating, it has made more sense to shift the end of the MK to roughly a century later.) In the end, as Petrie so well demonstrated, we found sequences and seriation of archaeological and art historical material often counted more than absolute dating.

Nonetheless, counting back from this Sirius date, although the historian we most turn to, Manetho, cannot totally be relied upon, he did maintain, on authority of the priests he spoke to, that Dynasty I to the *end* of Dynasty XI lasted 2300 years. Using the Middle Kingdom Sirius date we established above, and counting up reign lengths of all the Pharaohs, including those in the Middle Kingdom, means that the start of Dynasty I must fall around 3100BC, which is entirely satisfactory because it dovetails with the general calculations above. Although ancient historians give differing lengths of reign for individual Pharaohs of Dynasties I-VI, they still add up overall close to the 955 years asserted by Manetho as being the number of years for those first dynasties, again giving a start date of plus or minus 3100. From this anchor date it is possible in a general way to extrapolate backwards to the Naqada III/II and I Predynastic eras which cross check with the Late Ubaid and Uruk periods of Mesopotamia. As already stated, we do not need to go further backwards in time for the particular task in hand.

Having performed these over-arching cross-checks, we can establish firmer ground in more closely pinpointing the range of years into which Narmer/Enmerkar's intercontinental enterprises fit. Present-day historians debate on whether to include Narmer and Menes within Dynasty I, parallel with the Jemdet Nasr time in Mesopotamia that followed their Great Flood, or whether to place them in a Protodynastic period sometimes known as Dynasty 0 before dynastic history proper. Let us again double-check: we allowed a period 3500-3265 for this threshold time, roughly parallel with the Late Uruk epoch in Sumer. As explained above already, this gap could arguably be partly sucked back into the Naqada III period backwards and the Dynasty I period forwards, giving a reasonable ID start date of 3135. If we use 3135 as a start date for Egypt's dynastic history - only adding a further 35 years (a generation, to include Scorpion and Narmer) to the rough calculation of 3100, Manetho's further statement that Dynasties I-VI lasted 955 years means that the First Intermediate Period began in 2180BC with the unstable VII and VIII Dynasties. However, adding up actual reign lengths for DI & DII kings as given by Manetho means a start in 3265BC, counteracting his generalisation. Of course the discrepancy could arise from the fact that one king's reign could have ended and another king's started in the same year, each being credited with that year to their reign length.

All things considered, despite using the 955 year statement as a general check, we in this work decided to be literal and start the Egyptian dynasties at 3265, 35 years after the 3300 anchor date we first postulated for Narmer and Enmerkar, because of subsequent chronologies that have to be fitted in and the ambiguity of how many protodynastic kings to make precede or be part of Dynasty I. We cannot arrive at perfect precision for these early times, but there are enough cross-checks to provide a basic grid of time into which to arrange a satisfactory, because meaningful, relative sequential order for

our lion & prey material. Flinders Petrie was the first to put forward the idea of sequencing pottery while waiting to anchor his system to precise dates. Now excavations at Umm el-Qa^cab have enabled more precise dating to become a reality, on to which sequences can be grafted – but it will never have total precision so far back in time.

SUMMARY

With the recent C¹⁴-dating of artefacts from Umm el- Qa^cab and Abydos, along with already-known documentary evidence and the revised conclusions of the DAI archaeologists led by Werner Kaiser, Gunther Dreyer and Ulrich Hartung, we conclude that very roughly the Naqada I & II periods correspond to the Ubaid period in Sumer which ended in a Flood. After the Flood, Early Uruk under Meskiagasher must be contemporary with late Naqada II Egypt, while Enmerkar in the Late Uruk is even more strongly linked with the Early Egyptian Naqada III/Protodynastic periods. The First Dynasty of Egypt was established during the end of the Late Uruk period in Sumer where Lugalbanda was now king (mentioned in an important surviving legend written in cuneiform – of which more in **Catalogue B** - and probably Dumuzi heralded the Early Dynastic era in Sumer in the protodynastic equivalent to Egypt, the short Jemdet Nasr period. Thereafter we have lists of kings and their names for both countries which seem to have a fluctuating correspondence to peaks and troughs of art and architecture in each land.

Our *Chronological Table A* ends, for Mesopotamia, in a last flowering lasting two or three centuries from 2500, after Semitic Akkadians unified the country from their territory further north where the Tigris and Euphrates come their closest to each other, near modern Baghdad, meaning the cultural emphasis moved away from the Sumerian Gulf coast. Susa itself was conquered by the Akkadians in Susa IV and made a dependent province, participating in the production of artefacts of an extremely high standard of execution and iconographical complexity. In Egypt, the Pharaohs of Dynasties V & VI were at this time also putting more store by their links in the Middle East to the contiguous Levantine land table, shifting away from Red Sea Africa and its sea links to ancient Susa and Sumer round Arabia.

Living more passively off the foundations built up by the first four Dynasties, the bonds of unification began to loosen as Egypt's roots in Africa and Yemen were neglected and Government dissipated amongst local chiefs again. From 2180 during the First Intermediate Period in Egypt, no king ruled longer than 1½ years and the country returned to internecine struggles between aspiring local warlords in provinces along the Nile. At the same time Sumer and Akkad fell prey to the depredations of the Guti, barbarian hordes descending from the mountains north of Susiana to despoil the work of civilisation created by others out of their materials and ideas. These chaotic events we do not need to dwell upon as far as our Lion and Prey material is concerned, since the image disappears from use, even in Mesopotamia itself - its very absence an indication of the waxing and waning of civilisation and changing kingdoms.

Ultimately in our discussion of chronology we start to spot the correspondence between effective calendrical regulation under successful dynasties, and the ebb and flow of the Lion and Prey symbol by temple, palace and business administrations. The jigsaw puzzle of periods assembled using different kinds of incomplete information fits together well enough to provide a grid on which to fix our material evidence, at least in relative terms, enabling us to arrive already at several interesting tentative conclusions, whose iconography the Catalogue material reveals in precise instances.

INITIAL THOUGHTS ON THE ICONOGRAPHY OF CATALOGUED ENTRIES

Almost all the artefacts using the **Belly Landing** symbol are connected with either religious or government administrations, though the context varies over the centuries as geography and centres of government shift.

To the reader completely new to this material and only knowing so far about this one compositional type, simple questions come to mind as initial lines of enquiry for establishing the meaning of the lion-prey symbol, already hinted at in the entries themselves. It is surprising to see what variety of objects carry it, from tiny to monumental in scale - and what a wide range of possibilities for meanings thus presents itself.

- Many are seals or sealings found at temple sites or officials' homes or tombs nearby, indicating use as a badge of office in the name of a temple economy or state authority (does it go as far as indicating a job description?).
- The prehistoric round stamp seal type was replaced by the more commonly used cylinder seal, but it never died out and was favoured especially in Canaan (in scarab form), Crete and Mycenae, then adapted to ring seals in the Classical world. The round stamp seal type with its roots in Susa was brought to the Levant by the Syrian route at a time when experiments in founding palace economies of middle-eastern type were tried at several sites further west in Anatolia, Crete and Mycenae. If the two animals concerned refer to planetary divinities, does the motif signify a perennial religious allegiance common to all these lands?
- Some items contrast a pair of lions engaged in a belly landing attack on one piece: the first are contrasted upside down to each other, the others horizontally or vertically. **Belland-18** contrasts a male lion attacking prey with a lioness protecting her cubs - the significance of which we discuss in the **CANEA** quadrant. Does this opposition refer to extremes of season, and/or of life –v- death?
- In three instances the Belly Landing occurs in a funerary context, though it also appears on artefacts found in tombs which were items of everyday life rather than made specifically for the funeral. When used on tomb sculpture, is it a reference to death only – or also to a new start, and eventual resurrection?
- Two or three examples suggest either a chieftain's emulation of an imperial authority, or vassalage to them. Some of the 2M seals and sealings when used by the Syrian petty kingdoms can assert individual, local authority, vassalage to a higher king, *and* allegiance to certain Gods.
- Others were used as decorative ivory or bone cladding in a palace or army context, implicitly or explicitly denoting allegiance to a royal authority – but also simply alluding to a belief system involving a mythology taken for granted.
- We have an example used on a monumental scale to adorn a gateway, contrasting with a handful used as votive offerings in a temple setting, or apotropaic amulets which again point to belief in protection given by the God or Goddess represented by the animals in question. It already seems the lioness refers to a female divinity, the bull to a male divinity, and the male lion to the Sun – yet this is not hard and fast.

- One of the most remarkable items is the Etruscan chariot which appears not simply to have been functional, using apotropaic iconography at a votive dimension seeking protection against death in battle, but it was then buried in the tomb of its owner on his death.

Altogether, looking at the kinds of object it decorates, one comes to the conclusion the Belly Landing has connotations of Life, Death and Resurrection, and could even be a reference to the power of the Goddess of Life, Venus (whether as Inanna or Ishtar). In Her Name it appears to have been used as the stamp of a person's administrative authority (whether as king, official or political ally) – but also in a more superficial way to decorate high quality luxury palace items. The need has been triggered for further exploration in later catalogues into the interface between key planetary gods/goddesses and their representative animals – and how they link to the astronomical concerns of temple administrations in running the state calendar.

One other feature stands out as offering a future line of enquiry needing to be dealt with in the **SYNTHESES** Section.

THE BELLY LANDING IN CONJUNCTION WITH OTHER IMAGES

Our small collection of artefacts often shows the lion and prey subject juxtaposed with a handful of other recurring images – many of which have not been illustrated in the entries in order not to distract attention at this early stage:

- ◇ On the Khafaje chlorite vase (**Belland-4**) there are two further scenes round the rest of the vase;
- ◇ On the Fara sealing and Akkadian seal, hunters and other animals are involved (**Belland-6/7**);
- ◇ On the 2M Syrian seals (**Belland-8/10**) allusions to Gods and/or Goddesses appear in anthropomorphic or animal form, with subplots (such as bull-leaping) that may further enhance the reading of the scene;
- ◇ On the Megiddo baton (**Belland-11**) images on other facets convey messages about the holder's authority;
- ◇ On the Aegina vase in the form of a griffin (**Belland-16**) two horses are shown grazing either side;
- ◇ On the Doric frieze of the Temple of Assos, other panels show different scenes, including several compositional variations on the lion-prey group;
- ◇ On the Xanthos tomb (**Belland-18**) both life and death are symbolised by lioness and lion, with two further scenes involving victory and departing for war in a chariot;
- ◇ The Etruscan biga refers to themes of both love and war connected to the chariot, and has other lion-prey groups on it. Its focal point at the front is a Gorgon head mirroring the lion-prey group beneath, much on the lines of the centre boss of a cycle of images on a plate from Luristan (**Belland-19**);
- ◇ On the Syrian Seleucid funerary monument (**Belland-21**), under the reclining deceased appears an antithetical pair of Belly Landings. If this memorial had been made in Palmyra itself its inscription would have been in Aramaic: the fact that it is in Greek suggests the subject was a Palmyrene who died in the Damascus area, or a Greek who admired the Palmyrene style of celebrating death. The dress is Iranian-derived, and the Gods of Palmyra themselves are often thus robed, most notably the Sun-God Helios/Aglibol. But it was Bel who ultimately stood for the Sun's journey through both day and night - hence the significance of the story of his journey to the underworld and the return from it (studied in great detail in **Catalogues C** and **D**, which look at a large quantity of 2M Syrian material from the time the myth came into prominence). The dolphin, we are told, refers to Aphrodite/Inanna and the cup-holder acts for the mourners at the funeral of Adonis, as well as handing the last drink to the deceased. The tritons refer to Chaos, because they are the servants of the monster Tiamat overcome by Marduk as given in the 2M Babylonian version of the myth of Bel/Tammuz. The

meaning of the lions attacking their prey are therefore likely to be adjuncts to the Hellenised form, not only of the great myth of death and resurrection embodied in the story of Tammuz and Inanna, but also of Baal's struggles with Mot, God of Death.

- ◇ Finally, on the Byzantine ivory iconostasis (**Belland-22**), although our remit could be stretched to end in 30BC with the death of Kleopatra (rather than 323 with the death of Alexander), we should not dwell on its

intricacies overlong other than to realise it is being used within a larger scheme of images belonging to a new religion that still finds it valid to include the lion-prey subject, possibly because of its connotations of death and resurrection.



III.5- 9: The 12C effigy of Sir John Nowers in Christ Church Cathedral, Oxford – photo I Sailko

Crusaders would have seen monuments using the lion-prey subject in Syria during the Crusades, and the idea of an overall funereal allusion to Adonis as Hellenised Tammuz, is reiterated in the mediaeval tomb sculpture of Sir John Nowers in Christ Church Cathedral, Oxford (above) where the knight's head rests on a bull's head with rosette on its forehead (like the well-known Minoan and Mycenaean rhyta) and his feet on a lion/eagle-headed griffin - to express the contrast between passing, and eternal, Time.

CONCLUSION: THE CONCEPT OF THE CANON OF ANCIENT NEAR EASTERN ART

To gain a foothold into understanding the basis of the lion & prey symbol it appears we need to take into account its neighbouring motifs, which even at this early stage of our research appear to add up to a cycle of images of which it is an important component. Because these images are repeated over at least three thousand years in ancient near-eastern art, singly or in combinations, in the last quarter of this study (the **SYNTHESES** Section) as the first step all the catalogues will be amalgamated into one, interleaved in chronological order. Then we will piece together all the different images for this Canon on the basis it was likely to be seasonal on an everyday level and at its highest level astronomical and religious. I sense at this early stage that ultimately it was also a practical visualisation of the state calendar (of which there were many varieties in the ancient world over time).

The more cases we can assemble of such juxtapositions from all the catalogues taken together, the easier it will be to plan out and understand the vast story cycle to which the lion & prey symbol must belong, even if at this early stage we only have a general idea as to what that story is.

In the final chapters of the book we should be able to pin down the key constituents of the Canon with the help of one or two occurrences of what appears to be the execution of the entire Canon in one place, leaving us in prime position to intelligently deduce its overall ordering – turning to the great epics of near eastern literature for confirmation. The lion-prey symbol will undoubtedly turn out to be one of the climactic pieces in the jigsaw.

Small as this first catalogue is, it has served to lay out quite clearly the lines of enquiry we need to pursue in more detail in ensuing catalogues, moving now to **Catalogue B**.

BIBLIOGRAPHY 1: PREDYNASTIC TO 3200BC

AUTHOR	DATE	TITLE
ADAMS, B	1997	Protodynastic Egypt Princes Risborough
ADAMS, R M et al.	1972	The Uruk Countryside Chicago
ALGAZE, G	1986	Mesopotamian Expansion and its Consequences: Informal Empire in the Late Fourth Millennium BC PhD Thesis Chicago Oriental Institute
ALGAZE, G	1993	The Uruk World System: The Dynamics of Expansion of Early Mesopotamian Civilisations Chicago
ALLCHIN, F R & HAMMOND, N (eds)	1979	The Archaeology of Afghanistan New York
AMIET, P	1960	00000 Archéologia LX 59
AMIET, P	1975	'A Cylinder Seal Impression found at Umm an-Nar' East and West XXV, 425-6
AMIET, P	1988	'Les Modes d'Utilisation des Sceaux à Suse au IV ^e Millénaire' AMI XXI 6-16
ASSELBERGHS, H	1961	Chaos en Beheersing Leiden
BARRELET, M-T (ED)	1980	L'Archéologie de l'Iraq du début de l'époque néolithique à 330 avant notre ère Colloques Internationaux du CNRS 5/80, Paris
BAUMGARTEL, E	1947	The Cultures of Prehistoric Egypt London
BOEHMER, R	1974a	'Das Rollsiegel im prädynastischen Ägypten' AA IV 495-514
BRANDÈS M	1979	Siegelabrollungen aus den archaischen Bauschichten in Uruk-Warka FAOS III, Wiesbaden
BRIGGS- BUCHANAN, B	1967	'The Prehistoric Stamp Seal: A Reconsideration of some old Excavations' JAOS LXXXVII 265-79 & 525-40
BRUNTON, G & CATON-THOMPSON, G	0000	Badarian Civilisation 000
CALDWELL, D	1976	'The Early Glyptic of Gawra, Giyan and Susa, and the Development of Long Distance Trade' Orientalia XLV 227-50
CAPART, J	1905	Primitive Art in Egypt London
COLLON, D	1978/9	Review of 'Glyptique Susienne' by P Amiet AfO XXVI 104-08
DELOUGAZ, P	1972	'Some New Evidence pertaining to Cultural Relations between sites in Southwestern Iran and Southern Mesopotamia in the Protoliterate Period' Memorial Volume of the Vth International Congress of Iranian Art and Archaeology Teheran
DREYER, G	1998	'Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königsfriedhof [9/10 Vorbericht] MDAIK LIV 77-168 [includes under section I: 'Das prädynastische Königsgrab U-j und seine frühen schriftzeugnisse']
HAKEMI, A	1976	'Decouverte d'une civilisation préhistorique à Shahdad au bord ouest du Lut, Kerman' ICIAA Memorial Vol.VI
HARTUNG, U	1998	'Friedhof U: Gräber' (includes analysis of fragments of 7 ivory knife-handles, the most notable found in grave U503) in Dreyer 1998 79-100 (see above)
HOLE, F	1987	The Archaeology of Western Iran Washington
JEQUIER, G	1905	'Cachets et Cylindres archaïques' in MDP VIII 2-27
KAISER, W	1959/60/ 61/64	'Einiger Bemerkungen zur ägyptischen Frühzeit' (spread over four vols) ZÄ LXXXIV 119-132; LXXXV 118-137; LXXXVI 39-61; XCI 86-125
KAISER, W	1958	'Zur Vorgeschichtliche Bedeutung von Hierakonpolis' MDAIK XVI 183-92
KAISER, W	1987	'Zum Friedhof der Naqadakultur von Minshat Abu Omar' ASAE LXXI 119-25
KAISER, W	1990	'Zur Entstehung des gesamtägyptischen Staates MDAIK xlv 287-99
KAISER, W & DREYER, G	1982	'Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königsfriedhof (2. Bericht) MDAIK XXXVIII 211-69 [includes assessment of the Coptos statues from Hierakonpolis]

KANTOR, H	1952	'Further Evidence for Early Mesopotamian Relations with Egypt' JNES XI 239-50
KANTOR, H J	1944	'The Final Phase of Predynastic Culture: Gerzean or Semainean?' JNES III 110-136 + 11pls
LAFFINEUR, R et al (eds)	1991	Thalassa: L'Égée préhistorique et la Mer Liège
MELLAART, J	1966	The Chalcolithic and Early Bronze Age in the Near East and Anatolia Beirut
MELLAART, J	1975	The Neolithic Near East London
MELLINCK, M	1962	'The Prehistory of Syro-Cilicia BiOr XIX 219-26
MELLINCK, M et al.	1974	Frühe Stufen der Kunst PKG XIII Berlin
MORGAN, J de	1905	Cachets et Cylindres archaïques MDP VIII
MORGAN, J de	1911	Étude sur les Intailles susiennes MDP XII
OATES, J	1960	'Ur and Eridu: the Prehistory' Iraq XXII 43-44
PETRIE, F	1920	Prehistoric Egypt London
PEZARD, M	1911	'Étude sur les Intailles Susiennes' MDP XII 79-122; & 'Complément à L'Étude sur les Intailles susiennes' 123-41 Paris
PIGGOTT, S	1950	Prehistoric India to 1000BC Harmondsworth
PORADA, E	1950	'A Leonine Figure of the Proto-literate period of Mesopotamia' JAOS LXX 223-5
POTTS, T	1987	Aspects of the Relations Between Southern Mesopotamia and her Eastern Neighbours in the Late Fourth and Third Millennia BC PhD Thesis Oxford University
PUMPELLE, R	1908	Prehistoric Civilizations of Anau (2 vols) Washington
RICE, M	1990	Egypt's Making: The Origins of Ancient Egypt 5000-2000BC London
ROTHMAN, M S	1989	Centralisation, Administration and Function at Fourth Millennium BC Tepe Gawra, Northern Iraq Ann Arbor
ROWLANDS, M (ed.)	1987	Centre and Periphery in the Ancient World Cambridge
SCHOTT, E	1971	'Ein Stempelsiegel in Form eines Elefanten' MDAIK_XXVII 99-110
SPEISER, E A	0000	'Impression of a Cylinder Seal from Gawra VI' BASOR LV 1-3
SPENCER, A J	1993	Early Egypt: The Rise of Civilisation in the Nile Valley London
SUMNER, W	1973	'Excavations at Tell-i-Malyan 1971-72' Iran XII 155-77
SUMNER, W	1974	'Excavations at Tell-i-Malyan (Anshan)' Iran XIV 103-113
TEISSIER, B	1958	'Glyptic Evidence for a Connection between Iran, Syro-Palestine and Egypt in the Fourth and Third Millennia' Iran XXV 27-53
THOMSON, G	000	The Prehistoric Aegean London
TUNÇA, Ö	1984	L'Architecture religieuse protodynastique en Mesopotamie Leuven
UNGER, E	1966	'Der Beginn der Altmesopotamische Siegelbildforschungen...' SBWien [Phil-Hist] CCL,2 Vienna
WENDORF, F & SCHILD, R	1980	Prehistory of the Eastern Sahara New York
WICKEDE, A	1990	Prähistorische Stempelglyptik in Vorderasien, Munich

BIBLIOGRAPHY 2: ARCHAEOLOGY, ARTS AND HISTORY FIRST DYNASTIES 3200-2000 BC

AUTHOR	DATE	TITLE
ADAMS, B	1974	Ancient Hierakonpolis Warminster
AHARONI, Y	1962	Excavations at Ramat Rahel Rome
ALBRIGHT, W F	1921	'Magan, Meluhha and the Synchronism between Menes and Naram-Sin' JEA VII 80-86
ALDEN, J	1982	'Trade and Politics in Proto-Elamite Iran' Current <i>Anthropology</i> XXIII (6) 613-40
ALDEN, J	1982	'Trade and Politics in Proto-Elamite Iran' Current <i>Anthropology</i> XXIII (6) 613-40
ALDRED, C	1965	Egypt to the end of the Old Kingdom London 1965
ALDRED, C	1973	The Development of Ancient Egyptian Art from 3200-1315BC London
AMIET, P	1963	'La Glyptique Syrienne Archaïque: Notes sur la diffusion de la civilisation mesopotamienne en Syrie du Nord' Syria XL 57-83
AMIET, P	1964	'Cylindres Syriens Presargoniques' Syria XLI 189-93
AMIET, P	1966	Elam Auvers-sur-Oise
AMIET, P	1975	'A Cylinder Seal Impression found at Umm an-Nar' East and West XXV, 425-6
AMIET, P	1979	'Archaeological Discontinuity and Ethnic Duality in Elam', Antiquity XIII 195-204
AMIET, P	1985	L'Age des Échanges inter-iraniens 3500-1700 Louvre Paris
AMIET, P	1986	'Les importations exotiques à Suse' Paper presented at the CNRS-NSF Joint Seminar on the Development of Complex Societies of South West Iran 24-49 June, Bellevaux, France
AMIET, P	1988	'Les Modes d'Utilisation des Sceaux à Suse au IV ^e Millénaire' AMI XXI 6-16
ANDRAE, W	0000	Die Kunst des Alten Orients
ANDRAE, W	1922	Die Archaischen Ishtar-Tempel in Assur Leipzig
ANDRAE, W	1938	Das Wiedererstandene Assur Leipzig
BEALE, T W	1973	'Early Trade in Highland Iran' World Archaeology V 133-48
BEALE, T W	1978	'-----' JNES 289-313 [bevel-rimmed bowls]
BECKER, A	1993	Uruk: Kleifunde I (Stein) AUWE VI
BEN-TOR, A	1978	Cylinder Seals of Third-Millennium Palestine BASOR Supplement XXIII Cambridge MASS.
BERMANT, C et al.	1979	Ebla London
BIBBY, G	1958	'The Ancient Indian Style Seals from Bahrein' Antiquity XXXII 243ff
BIBBY, G	1969	Looking for Dilmun New York
BITTEL, K	1964	Vorderasiatische Archäologie: Studien und Aufsätze Anton Moortgat zum 65 ^e Geburtstag gewidmet Berlin
BOEHMER, R	1965	Die Entwicklung der Glyptik während der Akkadzeit Berlin
BOEHMER, R	1969	'Zur Glyptik zwischen Mesilim- und Akkadzeit' (EDIII) ZA LIX 261-91
BOEHMER, R	1971	'Gutisiegel' RLA III 707-8 Berlin & New York
BOEHMER, R	1974a	'Das Rollsiegel im prädynastischen Ägypten' AA IV 495-514
BOEHMER, R	1975a	'Glyptik von der frühsumerischen bis zum Beginn der altbabylonischen Zeit' PKG XIV 213-41
BOEHMER, R et al.	0000	Uruk: Die Gräber AUWE X
BOEHMER, R et al.	1993	'Einige früzeitliche ¹⁴ C-Datierungen aus Abydos und Uruk' MDAIK XLIX
BOUCHARLAT, R	1986	'Suse, marché agricole ou relais du grand commerce' Suse' Paper presented at the CNRS-NSF Joint Seminar on the Development of Complex Societies of South West Iran 24-49 June, Bellevaux, France
BRANDÈS M	1979	Siegelabrollungen aus den archaischen Bauschichten in Uruk-Warka FAOS III,

		Wiesbaden
BRICE, W	1962	'The Writing System of the Proto-Elamite Account Tablets of Susa' BJRL XLV 15-39
BRIGGS- BUCHANAN, B	1965	'A Dated "Persian Gulf" Seal and its Implications' Studies in Honour of Benno Landsberger 204ff
BRIGGS- BUCHANAN, B	1967	'The Prehistoric Stamp Seal: A Reconsideration of some old Excavations' JAOS LXXXVII 265-79 & 525-40
BRIGGS- BUCHANAN, B	1967	'A Dated Seal Impression connecting Babylonia and Ancient India' Archaeology XX 104ff
CALDWELL, D	1976	'The Early Glyptic of Gawra, Giyan and Susa, and the Development of Long Distance Trade' Orientalia XLV 227-50
CANAL, D	1978	'La Haute Terrasse de l'Acropole de Suse' Palaeorient IV 169-76
CHRISTIAN, V	1940	Altertumskunde des Zweistromlandes (2 vols) Leipzig
COLLON, D	1978/9	Review of 'Glyptique Susienne' by P Amiet AfO XXVI 104-08
COLLON, D	1981	Review of 'Ancient Art in Seals' by Edith Porada Bi.Or XXXVIII 690-96
COLLON, D	1982	The Alalakh Cylinder Seals British Archaeological Reports, International Series 132
COLLON, D et al.	1983	'Archaic Nineveh' Baghdader Mitteilungen 35
CONTENAU, G	1927-47	Manuel d'Archéologie Orientale [MAO] (4 vols) Paris
CONTENAU, G	1934	Monuments mésopotamiens nouvellement acquis ou peu connus Louvre Paris
COOMARASWAMY, A	1929	'A very ancient Indian seal' Bull.Boston Mus.FA 28-29
CRAWFORD, H	1973	Mesopotamia's Invisible Exports in the Third Millennium World Archaeology V (2)
CRAWFORD, V E	1959	'Nippur, the Holy City' Archaeology XII (2) 74-83
DELOUGAZ, P	1940	The Temple Oval at Khafaje OIP LIII Chicago
DELOUGAZ, P et al.	1942	Presargonic Temples in the Diyala Region OIP LVIII Chicago
DESHAYES, J (ed)	1977	Le Plateau iranien et l'Asie centrale CNRS Paris
DIEULAFOY, M	1890	L'Acropole de Suse Paris
DIEULAFOY, M	1913	Les Antiquités de Suse Paris
EICHMANN, R	?	Uruk: Architektur I, Von den Anfängen bis zur frühdynastischen Zeit, AUWE XIV Mainz
EICHMANN, R	1989	Uruk: Die Stratigraphie. Grabungen 1912-77 in den Bereichen 'Eanna' und 'Anu-Ziqqurra' (2 vols) AUWE III Mainz
ELLIS, R	1972	A Bibliography of Mesopotamian Archaeological Sites Wiesbaden
FRANKFORT, H	0000	Mesopotamia, Syria and Egypt and their earliest Interrelations London
FRANKFORT, H	1939	Sculpture of the Third Millennium BC from Tell Asmar and Khafajah OIP XLIV Chicago
FRANKFORT, H	1943	More Sculpture from the Diyala Region OIP LX Chicago
FRANKFORT, H	1951	The Birth of Civilisation in the Near East London
FRANKFORT, H	1954	The Art and Architecture of the Ancient Orient London
GADD, C J	1921	The Early Dynasties of Sumer and Akkad London
GADD, C J	1929	The History and Monuments of Ur London
GADD, C J	1932	'Seals of Ancient Indian Style found at Ur' Proc.Brit.Acad. XVIII 191-210
GIBSON, M	1972	The City and Area of Kish Miami
GIBSON, M & BIGGS, R D (eds)	1987	The Organisation of Power: aspects of Bureaucracy in the Ancient Near East Chicago

GIBSON, M et al.	1977	Seals and Sealing in the Ancient Near East Bib.Mes. VI Malibu
GOETZE, A	1961	'Early Kings of Kish' JCS XV 105-
GOETZE, A	1968	'Early Dynastic Dedication Inscriptions from Nippur' JCS XXIII 2-
GORDON, C	1957	Adventures in the Nearest East London
GORDON, E	1953	'Mesilim and Mesanepade - are they identical?' BASOR CXXXII 27-
GORELICK, L	1981	'The Origin and Development of the Ancient Near Eastern Cylinder Seal' Expedition XXIII (4) 17-30
GREENEWEGEN-FRANKFURT, H et al.	0000	Art of the Ancient World: Painting, Pottery, Sculpture, Architecture NY
HALL, H R	1928	La Sculpture babylonienne et assyrienne au British Museum Ars Asiatica XI Paris
HALL, H R	000	The Ancient History of the Near East London
HALLER, A	1954	Die Gräber und Grufte von Assur Berlin
HALLO, W et al.	1971	The Ancient Near East: A History New York
HANSEN, D P	1971	'Some Early Dynastic I Sealings from Nippur' in D Mitten et al. (eds) Studies Presented to G M A Hanfmann 47-54 Mainz
HANSEN, D P	1975	'Frühsumerische und frühdynastische Rundplastick' / 'Frühsumerische und frühdynastische Flachbildkunst' in Orthmann PKG XVIII 158-70 & 179-93
HANSEN, D P et al.	1962	'The Temple of Inanna, Queen of Heaven, at Nippur' Archaeology XV (2) 75-84
HARTUNG, U	1998	'Prädynastische Siegelabrollungen aus dem Friedhof U in Abydos (Umm el-Qaab)' MDAIK LIV 187-217
HEINRICH, E	1975	'Sumerisch-akkadische Architekttur' 'Architektur von der alt-bis zur spätabylonischen Zeit' in PKG XVIII 131-58 & 241-87
HEINRICH, E	1982	Die Tempel und Heiligtümer im alten Mesopotamien Berlin
HENRICKSON, R C	1984	Godin III, Godin Tepe and Central Western Iran PhD Thesis University of Toronto
HEUZEY, L	1891-1915	Les Origines orientales de l'art Paris
HEUZEY, L et al. (see also under de Sarzec)	1884-1912	Découvertes en Chaldée Paris
HINZ, W	1972	The Lost World of Elam London (Engl. Trsl. of German edn 1969 Berlin)
HOFFMAN, M et al.	1986	'A Model of Urban Development for the Hieraconpolis Region from Predynastic through Old Kingdom Times' JARCE XXIII 175-87
HÖLBL, G	1979	Beziehungen der Ägyptischen Kultur zu Altitalien (2 vols) Leiden
HUMPHRIES, J	1967	Some Early Dynastic Seals from Mesopotamia unpubl.MS Peabody Museum Library, Harvard University
JEQUIER, G	1905	'Cachets et Cylindres archaïques' in MDP VIII 2-27
JOHNSON, G A	1980	'Spatial Organization of Early Uruk Settlement Systems' in Barrelet 1980
JOHNSON, G A	1987	'The Changing Organisation of the Uruk Administration on the Susiana Plain' in Hole 1987
KAISER, W & GROSSMANN, P	1979	'Umm el-Qaab: Nachuntersuchungen im frühzeitlichen Königsfriedhof (1. Bericht) MDAIK XXXV 155-64
KARG, N	1984	Untersuchungen zur Alteren Frühdynastischen Glyptik Babyloniens BF VIII Mainz
KOHL, P	1978	'The Balance of Trade in South-Western Asia in the Mid-Third Millennium BC' Current Anthropology XIX 463-92
KOHL, P	1987	'The ancient economy, transferable technologies and the Bronze Age world-

		system' in Rowlands 1987 13-24
KOHL, P (ed. and transl.)	1981	The Bronze Age Civilisation of Central Asia: Recent Soviet Discoveries NY and London
KOSE, A	?	Uruk: Architektur IV (2 vols) AUWE XVII Mainz
KRAMER, S	1959	History Begins at Sumer New York
KRAMER, S	1963	The Sumerians: their History, Culture and Character Chicago
KRAUS, F	1954	'Le Role des Temples depuis la III ^e Dynastie d'Ur jusqu'à la I ^{ère} de Babylonie' Journal of World History I 518-45
LAMBERG-KARLOVSKY, C	1972	'Tepe Yahya 1971' Iran X 89-100
LAMBERG-KARLOVSKY, C	1973	'Urban Interaction on the Iranian Plateau: Excavations at Tepe Yahya' (The Albert Reckitt Archaeological Lecture 14 Nov.) PBA LIX 260-319
LAMBERG-KARLOVSKY, C	1975	'Third Millennium Modes of Exchange and Modes of Production: A Case Study' in Ancient Civilisations and Trade ed. ibid.
LEGRAIN, L	1925	The Culture of the Babylonians from their seals in the collections of the [Pennsylvania] Museum Philadelphia
LEBRETON, L	1956	À Propos des cachets archaïques susiens (I)' RA L 134-9
LEGRAIN, L	1921	'The Cylinder Seals' UE II London and Philadelphia
LEGRAIN, L	1925	The Culture of the Babylonians from their Seals in the Collections of the Museum Philadelphia BPUM XIV
LENZEN, H	1960	'Die Beiden Hauptheiligtümer von Uruk und Ur zur Zeit der III ^e Dynastie von Ur' Iraq XXII 127-
LENZEN, H	1974	'Die Siegelabrollungen aus E-anna' UVB XIX 17-22
LOFTUS, W	1847	Travels and Researches in Chaldaea and Susiana London/NY
LOFTUS, W L	1859	'Warkah, its Ruins and Remains' TRSLKU VI 1-64
MACKAY, E	1925	'Sumerian Connections with Ancient India' JRAS 00
MARTIN, H	1988	Fara: A Reconstruction of the Ancient Mesopotamian City of Shuruppak Birmingham
MASSON, V et al.	1972	Central Asia: Turkmenia before the Achaemenids London
MATTHEWS, D M	1977	The Early Glyptik of Tell Brak: Cylinder Seals of Third Millennium Syria OBO XV
MATTHIAE, P	1977	Ebla: un impero ritrovato Turin
MAZZONI, S	1972	'Sigilli Cilindrici dell'Istituto Orientale di Napoli' Annali Reale Istituto Orientale di Napoli NS XXII 419-451 + pls
MAZZONI, S	1984	'Seal Impressions on Jars from Ebla in EDI A-B' Akkadica XXXVII 18-45
MCADAMS, R (ed.)	1981	Heartland of Cities Chicago
MCADAMS, R (ed.)	1981	Heartland of Cities Chicago
MECQUENEM R de	1907	Cachets et Cylindres archaïques MDP VIII
MECQUENEM R De	1911	Étude sur les intailles susiennes MDP XII
MECQUENEM R de	1925	'Inventaire de Cachets et de Cylindres (Suse 1923-24) RdA XXII 1-15
MECQUENEM R de	1928	'Choix d'Intaille susiennes' RdA XXV 169-77
MITTEN, G et al. (eds)	1971	Studies Presented to George M A Hanfmann Mainz
MOOREY, P R S	0000	'Ur in Retrospect' Iraq XXII
MOOREY, P R S	1976	'The City of Kish in Iraq: Archaeology and History c.3500BC-AD600' AJA_LXXX 65-66
MOOREY, P R S	1977	'What do we know about the people buried in the Royal Cemetery?' Expedition II 24-40 Philadelphia

MOOREY, P R S	1978	The Kish Excavations Ashmolean Museum Oxford
MOOREY, P R S	1979	'Unpublished Early Dynastic Sealings from Ur in the British Museum' Iraq XLI 105-120
MOOREY, P R S et al.	1978	'Ancient Near-Eastern Cylinder Seals Acquired by the Ashmolean 1963-1973
MOORTGAT, A	000	Sumer and Akkad Köln
MOORTGAT, A	1932	Die Bildende Kunst des alten orient und die Bergvolker Berlin
MOORTGAT, A	1935	Frühe Bildkunst in Sumer MVAG XL(3) Leipzig
MOORTGAT, A	1959	Alt Vorderasiatische Malerei Berlin
MOORTGAT, A	1964	[Festschrift] see under BITTEL
MOORTGAT, A	1969	The Art of Ancient Mesopotamia London
MOORTGAT, A	1984	Babylon und Assur Köln
MOORTGAT, A et al.	1950	Ägypten und Vorderasien im altertum Munich
MOORTGAT, A et al.	1967	Die Kunst des Alten Mesopotamiens Köln
MOORTGAT-CORRENS, U	1955	'Neue Anhaltspunkte zur zeitliche Ordnung syrischer Glyptik ZA NF XVII 88-101
MOORTGAT-CORRENS, U	1959	'Bemerkungen zur Glyptik des Diyala Gebietes' OLZ LIV 341-54
MORGAN, J de	1905	Cachets et Cylindres archaïques MDP VIII
MORGAN, J de	1911	Étude sur les Intailles susiennes MDP XII
NAGEL, W et al.	1956	'Alalakh und Siegelkunst' JCS xii 1958 109-
NEGAHBAN, E O	1979	'Seals of Marlik' Akten des VII ^e Internationalen Kongress für Iranische Kunst und Archäologie München 1976 Berlin
NEWBERY, P E	1912	'The Wooden and Ivory Labels of the First Dynasty' PSBA XXXIV 274-89
NISSEN, H J	1976	'Zur Frage der Arbeitsorganisation in Babylonien während der Späturuk-Zeit Wirtschaft und Gesellschaft im Alten Vorderasien Budapest
NISSEN, H J	1977	'Aspects of the Development of Early Cylinder Seals' in Gibson Seals and Sealing Malibu
NISSEN, H J	1988	The Early History of the Ancient Near East 9000-2000BC Chicago
NISSEN, H J	1993	Archaic Bookkeeping Chicago
NISSEN, H J et al (eds.)	1982	Mesopotamien und seine Nachbarn BBVFG I Berlin
NORTH, R	1957	'Status of the Warka Expedition (16 seasons)' Orientalia XXVI 185-256
OFFNER, G	0000	'Les Grandes Ecoles de Glyptique à l'Epoque Archaïque' RdA XL 157-204; XLI 111-149
OPIFICIUS MAYER-, R	1986	'Bemerkungen zur Mittelassyrischen Glyptik des 13 und 12 Jhdts v.Chr.' Bibl.Mes. XXI [Porada Festschrift] 161-69 + pls
OPIFICIUS, R	1964	'Syrisch-ägyptischer Einfluss auf die Kunst des Zweistromlandes in altbabylonischer Zeit' in Bittel 1964
OPIFICIUS, R	1964	'Syrisch-ägyptischer Einfluss auf die Kunst des Zweistromlandes in altbabylonischer Zeit' in K. Bittel Vorderasiatische Arch. 216-20
OPIFICIUS, R	1969	'Syrische Glyptik der zweiten Hälfte des zweiten Jahrtausends UF I 95-110
OPPENHEIM, A	1964	Ancient Mesopotamia Chicago
OPPENHEIM, A (ed.)	1970	'Trade in the Ancient Near East' Proceedings of the 5 th International Congress of Economic History Moscow
ORTHMANN, W	1971	Untersuchungen zur spätethitische Kunst Saarbrücker Beiträge zur Altertumskunde VIII
ORTHMANN, W (ed.)	1975	Der Alte Orient PKG XVIII Berlin

OTTO, A	0000	Untersuchungen zur Assyrologie und Vorderasiatischen Archäologie UAVA 00 Berlin
OTTO, A	2000	Die Entstehung und Entwicklung der Klassisch-Syrischen Glyptik UAVA VIII Berlin
ÖZGÜÇ, N	1949	'Siegel und Siegelabdrücke' in the annual Kültepe Kazisi Raporu Ankara
ÖZGÜÇ, N	1968	Seals and Seal Impressions of Level 1B from Karum Kanish Ankara 1968
ÖZGÜÇ, T	1986	'Glazed Faience Objects from Kanish' Bibl.Mes. XXI [Porada Festschrift] 201-8 + pls
PARROT, A	1948	Tello: 20 Campagnes de Fouilles 1877-1933 Paris
PARROT, A	1960	Sumer London & Paris
PEZARD, M	1911	'Etude sur les Intailles Susiennes' MDP XII 79-122; & 'Complément à L'Etude sur les Intailles susiennes' 123-41 Paris
OATES, J	1960	'Ur and Eridu: the Prehistory' Iraq XXII 43-44
PORADA, E	1962	The Art of Ancient Iran London
PORADA, E	1979	'Iranian and Mesopotamian Styles of Seal Engraving III-early IM BC – in R: VII th Colloquium of Iranian Art & Archaeology
PORADA, E (ed.)	1980	Ancient Art in Seals Princeton
POSTGATE, N	1992	Early Mesopotamia London
RAO, S R	1963	'A "Persian Gulf" Seal from Lothal' Antiquity XXXVII 96-
RAO, S R	1973	Lothal and the Indus Civilisation London
RASHID, S A	1963	'Die Ausgrabung von Tell el-Wilayah und die Bedeutung ihrer Rollsiegel' Sumer XIX
RATNAGAR, S	1981	Encounters: The Westerly Trade of the Harappa Civilization Delhi
RENFREW, C	1972	The Emergence of Civilisation: The Cyclades and the Aegean in the Third Millennium BC London
RICE, M	1985	The Search for the Paradise Land Harlow
SABLOFF, J et al. (eds)	1975	Ancient Civilization and Trade Albuquerque
SAGHIEH, M	1983	Byblos in the Third Millennium BC Warminster
SARZEC, E de	1884-1912	Découvertes en Chaldée (ed. M L Heuzey) Paris
SCHÄFER, H et al.	1925	Die Kunst des Alten Orients Berlin
SCHARF, A	1942	Die Frühkulturen Ägyptens und Mesopotamiens Leipzig
SCHARF, A & MOORTGAT, A	1950	Ägypten und Vorderasien Munich
SCHEIL, V	1935	Textes de Comptabilité proto-élamites II MDP XXVI
SCHLOSSMAN, B L	1975	Metropolitan and Provincial Styles in Mesopotamia and the Surrounding Lands in the Late Third and Early Second Millennium BC PhD Thesis Columbia University NY
SCHMANDT-BESSERAT, D	1976	The Legacy of Sumer Malibu
SCHOTT, E	1934	'Die Siegelbilder der Uruk-Schicht IV' UVB V 42-51
SCOTT, E	1971	'Ein Stempelsiegel in Form eines Elefanten' MDAIK_XXVII 99-110
SMITH, S	000	'Babylonian Cylinder Seals from Egypt' JEA VIII 0-0 pl.xxiii
SOLLBERGER, E	1959	'Byblos sous les rois d'Ur' AfO_XIX 120-22
SPEISER, E A	0000	'Impression of a Cylinder Seal from Gawra VI' BASOR LV 1-3
STEIN, A	1937	Archaeological Reconnaissances in North-Western India and South-Eastern Iran London

STEINDORFF, G	1909	Die Kunst der Ägypter Leipzig
STEINDORFF, G & SEELE, K	1955	When Egypt Ruled the East Chicago
STERN, L	1874	'Urkunden über den Bau des Sonnentempels zu On ZÄg XII 85-96
STEVENSON-SMITH, W	1981	The Art and Architecture of Ancient Egypt (rev. Wm Kelly Simpson) Harmondsworth
STROMMINGER, E	1964	The Art of Mesopotamia London [photos by M HIRMER]
TEISSIER, B	1958	'Glyptic Evidence for a Connection between Iran, Syro-Palestine and Egypt in the Fourth and Third Millennia' Iran XXV 27-53
THIMME, J	1978	The Art and Culture of the Cyclades in the Third Millennium BC Chicago
UNGER, E	1966	'Der Beginn der Altmesopotamische Siegelbildforschungen...' SBWien [Phil-Hist] CCL,2 Vienna
VAN BUREN, E D	1944	'The Cylinder Seals from Brak' Iraq XI 59-76 [Commentary on Mallowan's plates xxi-iv in Iraq IX]
VANDIER, J	1952	Manuel d'Archaeologie Egyptienne (2 vols) Paris
WARD, W	1963	'Egypt and the East Mediterranean from PreDynastic times to the end of the Old Kingdom JESHO VI 1-57
WARD, W	1964	'Relations between Egypt and Mesopotamia from Prehistoric Times to the end of the Middle Kingdom JESHO VII 1-45; 121-35
WEISS, J et al.	1975	'The Merchants of Susa' Iran XIII 1-17
WELTEN, P	1969	'Die Königs-Stempel' ADPV Wiesbaden
WHEELER, Sir M	1962	The Indus Civilization Cambridge
WHEELER, Sir M	1966	Civilizations of the Indus Valley and Beyond London
WICKEDE, A	1990	Prähistorische Stempelglyptik in Vorderasien, Munich
WISEMAN, D	1959	Cylinder Seals of Western Asia Prague
WRIGHT, H T	1975	'Early Fourth Millennium Development in SW Iran' Iran XIII
WRIGHT, M	0000	'Contacts between Egypt and Syro-Palestine during the Protodynastic Period' BA XLVIII 240-53
ZETTLER, R L	1987	'Sealings as Artifacts of Institutional Administration' JCS_XXXIX 21-27
ZETTLER, R L	1992	The Ur III Temple of Inanna at Nippur BBVO XI Berlin

SEAL CATALOGUES QUOTED

ABBREVIATION	AUTHOR/EDITOR	YEAR	PUBLICATION
AshCatI	BUCHANAN, B	1966	Catalogue of Ancient Near Eastern Seals in the Ashmolean Museum I: Cylinder Seals Oxford
AshCatII	BUCHANAN, B with P R S MOOREY	1985	Catalogue of Ancient Near Eastern Seals in the Ashmolean Museum II: the Prehistoric Stamp Seals Oxford
AshCatIII	BUCHANAN, B with P R S MOOREY	1988	Catalogue of Ancient Near Eastern Seals in the Ashmolean Museum III: The Iron Age Stamp Seals, Oxford
AtchCat	COLLON, D	1975	The Seal Impressions from Tell Atchana/ Alalakh (2 vols) AOAT XXVII Newkirchen-Vluyn
CMS	I PINI & W MÜLLER (eds)	1964-2012 and ongoing	Corpus der Minoischen und Mykenischen Siegel (Many Vols - with Supplements - as quoted)
GGFR	BOARDMAN, J	1981	Greek Gems and Finger Rings London
GMACat	AMIET, P	1961/ up-dated 1980	La Glyptique Mesopotamienne archaïque CNRS Paris
GSCat	AMIET, P	1972	La Glyptique Susienne, des origines à l'époque des Perses Achéménides (2 vols) MDP XLIII, Paris
MartinCat	MARTIN, H	1972	Fara: an Archaeological Study of a Third Millennium City Chicago
MooreEisenCat	EISEN, G	1940	Ancient Oriental Cylinder and other Seals with a description of the collection of Mrs William H Moore OIP XLVII Chicago
NewellCat [superseded by YaleCat]	OSTEN, H von der	1934	Ancient Oriental Seals in the Collection of Mr Edward T Newell OIP XXII Chicago
PierMorCat	PORADA, E	1948	Corpus of Ancient Near-Eastern Seals in North American Collections: the Collection of the Pierpoint Morgan Library (2 vols) Böllingen Series XIV Washington
RasShamCatI	SCHAEFFER-FORRER, C F A	1983	Corpus des cylindres-sceaux de Ras Shamra-Ugarit et d'Enkomi-Alasia Paris
SCSCat	FRANKFORT, H	1955	Stratified Cylinder Seals from the Diyala Region OIP LXXII Chicago
SyrPalCat	TEISSIER, B	1995	Egyptian Iconography on Syro-Palestinian Cylinder Seals of the Middle Bronze Age Göttingen
UEX	LEGRAIN, L	1951	Seal Cylinders [from Ur] UE X London and Philadelphia
YaleCat	BUCHANAN, B	1981	Early Near Eastern Seals in the Yale Babylonian Collection (new edn. ed. Ulla Kasten) New Haven