Iconography and ideograms. A preliminary outline of an experimental study on the non-verbal languages of Ancient Mesopotamian cultures

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Most scholars agree that writing had an administrative-economic origin; however in the past a few solitary voices such as those A. Hertz and K. Szarzyńska suggested also a link between writing and iconography. The main aim of this work was to make a detailed stylistic analysis of some pictographs engraved on the seals. It was found that many iconographies featuring images of buildings are related to specific signs found in the cuneiform writing. Although this relationship is fully explained in the following pages it is important to emphasize from the outset that my study was based on the experiences of A. Hertz and K. Szarzyńska, expert scholars who have unfortunately, until now, remained on the outskirts of mainstream thought.

There is no doubt that the cylinder seal was one of the innovations introduced in the Near East during the second half of the 4th millennium BC (the Late Uruk period 3300 – 3100 BC)[1]. We are talking about a small cylinder-like object which was used constantly in Mesopotamia, for private purposes, up to the end of the 1st millennium BC; it was usually made of stone[2], with a hole through it, its height varies between 1cm - 3cm and the average diameter is 1.5cm, it has a continuous decorative motif deeply engraved over the whole surface. This engraved surface

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[1] The first cylinder seals appear in southern Mesopotamia (Uruk) and in south west Iran (Susa) during the second half of the 4th millennium BC. The cylindrical form was preferred in Mesopotamia, Iran, and Syria, it remained a distinctive type of seal in almost all the East up to the first half of the 1st millennium BC.

[2] Hard stone was usually used to make this object although other materials such as faience, wood, bone, shell, ivory and semi-precious stones such as lapis lazuli, chalcedony, agate and marble were used in various periods by engravers to satisfy the requests of the buyers, according to the trend of the period and funds. Seals in fired clay, wood and bone were often lost due to their fragility. Exceptionally, a seal made of combusted wood was found in Ebla (MILANO 1991, p. 48). Generally these semi-precious stones were imported , but it is not easy to identify where they were produced. It is however clear that the material with which they were made varied according to the social level of the owners.

was made with the purpose of obtaining a continuous impression in relief[3] by rolling the seal over a malleable surface such as clay[4].

The invention of this object relates to the need to satisfy the instinctive impulse of self assertion, aimed at creating personal guarantees of identification and ownership.

The creation of a sign, or in actual fact a signature, allowed the recognition of one's own authority, because once the impression of the seal on the clay dried and hardened, the impressed mark became eternal.

Glyptics and writing developed contemporaneously and it is now the unanimous opinion of orientalists that both can be ascribed to just one particular phase[5]. Cylinder seals were mainly used to control administrative relations[6]. The practice of sealing was closely linked to the administration of temple goods[7] as a way of controlling the circulation of goods stored inside the temples by authorised officials[8], but as the seals were easy to carry they were also used as a product guarantee in commercial activities. They were widely used throughout the whole of Mesopotamia and scholars[9] consider their invention and usefulness to be of great importance.

One naturally wonders where man's need to write came from, what necessity was there and is there to write, to record data, feelings. Clearly any simple drawing corresponds to an endless number of potential meanings that are inaccessible to us as observers who are unfamiliar with their codes and symbology.

Present scientific knowledge is based on the principle that: what you can see is really there, or rather there is a perfect correspondence with physical reality; this illustrates the common sense by which the phenomenal (from the Greek root *phainomai,* meaning "appear") perceived reality,

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[3] The scene engraved on the seal was closely connected to the owner of the object and the pattern had to make its identification immediate (v. COLLON 1987, p. 68). For this reason the main task of the engravers, who were skilled in representing a wide range of scenes, was that of producing seals that had differences, at times only minimal, and never to reproduce exactly the same pattern. Orientalists have not succeeded in defining the personality of seal engravers who were always anonymous in the Ancient East (v. AMIET 1980, p. 23). In Sumerian the artist was called a "Burgul" adapted in Akkadian language as "Purkullu" (v. COLLON 1987, p. 102).

[4] The impression obtained in the clay was rectangular, the length being that of the circumference of the seal.

[5] During one of his lessons, held at the University of Palermo in 2005, H. Nissen acknowledged that the two events are contemporaneous and claimed that writing and cylinder seals emerged parallel to each other (NISSEN 2005).

[6] NISSEN 1993b, p.66.

[7] MOORTGAT-CORRENS 1989, p. 20.

[8] A considerable quantity of *cretulae* impressed by cylinder seals has been discovered in all the temples; once removed they were collected and placed in special containers and subsequently kept in an archive adjacent to the temple (see MOORTGAT-CORRENS 1997, p. 39). Once the *cretulae* were removed from the containers and broken they lost the value as a guarantee they had had all the time they had sealed the goods, and assumed a new purpose as a rudimentary administrative document to confirm that the withdrawal had taken place (see COLLON 1987, p. 116), it was a kind of receipt that was kept inside the temple. It could also be used for subsequent checking of the flow of goods in and out of the temple. This system allowed a record of transactions to be kept for a certain period: the number of *cretulae* indicated the number of transactions, whereas the impression on the seals indicated the people who had carried out those transactions (FRANGIPANE 2004, p. 36 and RAMAZZOTTI 2006, p. 515). The *cretulae* were kept inside an archive for just one year because they did not give any information about the date of the transaction; if they were mixed with those of the following year they could have caused administrative mistakes and confusion in the accounting.

[9] From FRANKFORT 1939 up to COLLON 1987.

has a perfect correspondence with physical reality. In reality we have realised that the retina is not just a passive screen but an active organ of the nervous system that does not merely register information; the fundamental conclusion reached from that starting point is that the eye and the mind tend to give what they see, and are aware of, a "structure", even at the cost of forcing the data. The discovery of this activity, which was to make a whole structure emerge by putting the data in a vaster and more organized context, led to the belief that one is not free to interpret what one really sees or knows, but is unconsciously forced by our need of order and hierarchy. Such a belief, very simply expressed here, gave birth to the emergence of the structuralist thought: according to anthropologists such as C. Lévi-Strauss[10] and sociologists such as M. Foucault[11], every phenomenon of our life is conditioned by the necessity to conform to a structural order. There is a current of thought in opposition to this hypothesis that scientific literature calls the psychology of form - a translation of the German word *Gestaltpsychologie*[12]: discipline of psychology; the scholar who has most closely to apply the *Gestalt* theory of art was Rudolf Arnheim. Gestalt theory was the first to firmly oppose the theory that our senses passively register external stimuli; in fact, before its formulation, the hypothesis that the eye was a passive organ reigned[13]. One of the most important principles of *Gestalt* theory is that "the whole is greater than the sum of the parts", it is a known fact how the same image assumes different characteristics if it is observed as a whole or in separate parts. If we stop to reflect on the aim of this current, it becomes evident how ways of communication and the reciprocal and dialectic relationship between objects and cultural subjects change.

These preliminary remarks are an introduction to what is set out in the following pages, in other words, it is important to focus, right from the start, on the objective of this research, which is linked to the close relationship that exists between images and signs, or rather an attempt will be made to verify the possible correspondence between some architectural subjects on the seals and known cuneiform ideograms, with the aim of showing their connections and continual interference. As recently claimed by J. Cooper[14], in ancient proto cuneiform writing there is a complementariness between signs and images, subsequently, as time went on, cuneiform signs evolved and each of them became an abstract configuration of lines that rapidly lost any trace of their archaic iconicity.

It should be pointed out that only recently, thanks to the contribution from semiotic studies, has there been renewed interest in the study of glyptics that entailed the application of detailed analysis to the images depicted on the impressions: the signs of cuneiform writing composed of the signifier and the signified[15]. With this concept in mind, rather than examining the images from a purely iconographic point of view, more attention was given to their possible semantic implications. A Hertz[16] and K. Szarzyńska[17], two archaeologists and philologists, were pioneers of these observations. During the years between the two world wars Hertz supposed that the

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[10] LEVI-STRAUSS 1958.

[11] FOUCAULT 1967.

[12] This current was born in Germany in 1912 with the first works of the psychologist M. Wertheimer and it developed with the studies of K. Kohler and K. Koffka. The German word *Gestalt*, noun commonly used to mean shape or form, refers to a set of scientific principles derived primarily from experiments on sensory perception (ARNHEIM 1954).

[13] GOMBRICH 1984, pp. 8-9.

[14] COOPER 2005, pp.71-99.

[15] RAMAZZOTTI 2006, p. 515 and related bibliography.

[16] HERTZ 1930.

[17] K. Szarzyńska's studies (SZARZYŃSKA 1997 e 1998) were the first complete discussion on the possible semantic implications of the images on cylinder seals.

ideograms of the writing of the Near East (Sumerian and proto-Elamite[18]) had a common origin from decorations painted on ceramics of Susa I (Obeid period)[19]; her close examination concentrates on considering the existence of a preliminary stage immediately preceding actual writing that she defines pictographic writing, also called *Wortschrift* by the Germans, meaning "writing of words[20]". *Wortschrift* is not a regular language system, but a set of representations

 that directly trigger an idea, that in turn recalls a word or group of words[21]. Starting from similar considerations A. Hertz says it is actually in the figurative repertoire of Susa vases that it is possible to recognise real extracts of historical or religious "manuscripts", a kind of picture story, or rather a series of closely linked drawings that reconstruct the plot of a story or a speech[22]. We are talking about stylised compositions of images, the purpose of which is to express concepts; starting from this idea she concentrates on observing the images painted on Susa I vases, and considering the graphical signs as a kind of drawing of the thought to be represented. At this preliminary stage, every sign is an ideogram, that is to say it indicates the represented object[23]. According to Hertz the difference between ideogram and sign is limited only to their form; in fact, in writing it is not the graphical rendering of the sign that is important, but the concepts that the reader associates with it[24]. This hypothesis, which is completely detached from the economic origin of Sumerian writing, is linked to the considerations suggested by K. Szarzyńska who, in 1989, indicated a number of seals from the Uruk and Jemdet-Nasr periods that presented clear likenesses to the signs of cuneiform script regardless of their lexical meaning. Furthermore, the afore-mentioned scholar very soon pointed out the appearance of divine anthropomorphic images on the seals. Among the oldest representations of divinity there are also symbols[25] that in some cases later become the

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[18] Protoelamite writing originates in Elam, in that the first recorded tablets appear in the layers pertaining to the Susa II period (3300-3100 BC). This writing is more or less contemporaneous with that of Uruk and has a definite similarity to proto-sumerian, both in its figurative representation and in its geometric signs (DIRINGER 1969, p. 65).

[19] Acccording to A. Hertz it is impossible to accept that all the complicated decorations on Susa I ceramics are only for aesthetic purposes, it is more probable they represent writing signs (HERTZ 1929, p. 220). According to this scholar, Susa I vase painting is strongly stylized and conventional, the animals, birds, plants and weapons in it depict the divinities of Proto-Elamite I. Through analysis she succeeds in identifying a group of signs that confirm her hypothesis; for example she considers the crescent-shaped sign which is often found on Susa I beakers (DE MORGAN 1912, plate VII, 2) to be a number, the concentric circles that constantly cover the background of Susa vases (DE MORGAN 1912, plate II, 4) represent great stars such as the sun and the moon (HERTZ 1929, p. 226). Lastly she also finds an unquestionable concordance between the design of an eight pointed star and the practically identical divine sign *dingir* in Sumerian texts (HERTZ 1929, p. 229). The scholar incontestably considers these correspondences as clear evidence of the existence of a repertoire of figurative motifs that were chosen as simplified models for graphic signs that were later used in writing (HERTZ 1930, p. 110). Many of these signs disappear on the ceramics of Susa I, but many of them reappear, after a long lapse of time, on proto Elamite tablets. So it is not a casual resemblance and Hertz reaches the conclusion that these signs, already on Susa I ceramics, correspond to script letters (HERTZ 1929, p. 217 see also HERTZ 1930, p.114).

[20] FÉVRIER 1992, p. 20.

[21] FÉVRIER 1992, p. 36.

[22] For example when man comes and plants two spears on the altar, that has to be interpreted as a ritual ceremony (HERTZ 1932, p. 125). See also FÉVRIER 1992, p. 36.

[23] The word ideogram is etimologically composed of *ideo* (idea, or mental representation) and *gramma* derived from the Greek word *graphein* (writing). In fact an ideogram has the ability of creating an immediate abstract mental picture that no other writing system based on phonetic combination has.

[24] HERTZ 1930, p. 104.

[25] SEMINARA 2004.

cuneiform sign that indicates a divinity[26]. Also H. Nissen argues that some of the earliest pictographs can be easily identified with known objects, however other, are abstract[27].

These aspects will be discussed and clarified in detail below as they represent some of the observations included in the study that will follow. In essence, the topic will deal with two main aspects, one is archaeological and the other is graphical, the assonance between the images of some buildings and the signs of Sumerian script being clearly visible[28].

That being said, the first interesting question to be examined is to ask oneself how acceptable it is to think only of the thesis presented by Schmandt-Besserat[29], which directly or indirectly says that it is reasonable to consider the origin of graphical signs, considering the possibility of a writing system that originates in the graphical representation of the seals.

Although some aspects[30] of Schmandt-Besserat's hypothesis have come under attack, her interpretation of the spherical *bullae* as bookkeeping instruments has now been accepted by most scholars. According to the scholar the *tokens* were precursors of numerical symbols and pictograms from which cuneiform writing later developed[31]. It has to be said that the scholar took up her considerations again in 2006 and pointed out not only a possible influence of writing on glyptics, but through three different evolutionary stages she proposes the finding of a marked change in the iconography of the seals with the advent of writing in the Mesopotamian culture; by analysing the representations engraved on the seals of Tepe Gawra she confirms how glyptics, from the preliterary period (stage I periods of Halaf and Ubaid) to the protoliterary period (stage II level XIIa of Tepe Gawra) follow a compositional and stylistic development that reaches its apex in the literary period (stage III, Protodynastic period, of Akkad and Neo Sumerian) where the determinative signs of cuneiform writing are actually imitated to create complex narrative scenes[32]. Today many scholars accept the close correlation between writing and cognitive approaches[33] that allowed language to be captured, analysed and transmitted in time and space. This had numerous implications in the history of civilisation and regards a wide range of areas. It is not of course easy to demonstrate these links because one risks making statements that are difficult to demonstrate, however it is in this area of research that we must try and look for the solution to our problem in that we must try to collect all possible interactions between stylistic forms and graphical rendering. For this reason, in this

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[26] For example the symbol in ancient Uruk art that represents interwoven reeds with a volute became the ancient sign that indicated the goddess Inanna (SZARZYŃSKA 1989, p.7).

[27] NISSEN 1993b, p. 60.

[28] SZARZYŃSKA 1997, p. 22.

[29] D. Schmandt-Besserat, (taking up again matters already proposed, but making use of them for her own original system), expresses the following idea: the first forms of registration of amounts, going back to the 7th millennium BC, are *tokens* (counters); of various materials and shapes, they represented numerical value and products, were used for counting calculations, and most probably symbolised different kinds and quantities of goods. They were shut in a container (*bullae*) on which an image was impressed on wet clay with a cylinder seal. The seal ensured the integrity of clay containers and at the same time identified the guarantor of the transaction: some ideograms, of difficult interpretation, could be added to some drawings on seals but they are not identifiable as personal names (they probably refer to the official's position) (SCHMANDT-BESSERAT 1992, p. 29.)The use of personal names to identify the owner of the seal is attested in the Fara period (AMIET 1980, pp. 54-55).

[30] Criticism regards on the one hand the comparisons made by Schmandt-Besserat between the shapes of the tokens and that of the signs, and on the other the scholar's supposed existence of a "lingua franca" based on the system of tokens, which regarded the whole Near East area (LE BRUN, VALLAT 1978, p. 33).

[31] SCHMANDT-BESSERAT 1992, p. 29.

[32] SCHMANDT-BESSERAT 2006, p. 183.

[33] DAMEROW 1999, p. 8 and relative bibliography.

context, the cuneiform script signs are considered as being closely linked to their points of reference, or architectural structures. An ideogram is the signifier and is used to graphically describe an object one wants to refer to and which acts as the signified, in other words its iconic value. Artistic expression (in this case the reproduction of architectural structures engraved on seals) will therefore be considered deeply linked to the invention of writing, given that some definite coincidences suggest a choice that can hardly be considered as being casual.

This is obviously not a context where research into matters closely connected with semiotic studies can be made, however it is appropriate to point out the underlying links they may have with this study. These first considerations allow us to define which premises we intend to use to cope with the phenomenon of writing and in which terms we interpret this event. The iconographic motif of the temple is treated differently in many seals (figs. 4, 23, 32); in some cases it also has wings (type known as "winged temple" (Type I) fig. 38, 39). On other impressions, the lintel of the building is decorated with a row of small circles in relief that may represent the end face of the beams of the roof (fig. 7, 8, 13, 19, 24; Types: C4 and C13). One or more steps led to the roof terrace (Type D4), used for official open-air ceremonies[34] (fig. 27) but the existence of temples with several storeys is not excluded.

In Mesopotamian glyptics, in the Late Uruk period, temples are often depicted very schematically (fig. 9, 11, 13, 20, 21, 22, 29); engravers only draw the façade, or the door, decorated with panels (type C9; fig. 4).

When the depiction of a temple is stylized it seems that the artist just wanted to give the idea of any building, without worrying about reproducing the image of a specific building in detail[35]. Sometimes however, the building is rendered in more detail, representing both the base of the temple and a flat covering usually hidden by a thick cornice. The structure consists of a rectangular base with vertical walls, the façade features a series of niches and buttresses. These buildings have one (Type C4: fig. 8), two (Type D1: fig. 5) or even several entrances (Type F1: fig. 3). In the southern part of the sacred area of Eanna a large construction that had three entrances has been recognised as being similar to the image engraved on seal number 3.

Another important iconographic motif, which has been analysed in this context, is a representation of a tower with several storeys, called a ziggurat, that appears in the later phase of the Protodynastic period. Two seals from Mari, dated in the Protodynastic III period (fig. 30, 31) actually reproduce a very stylised image of this building. Lastly, the ziggurat on some impressions that date back to the period between the end of the Protodynastic period and the beginning of the Accad period (2750 – 2350) is associated with the effigy of the boat god; this god often appears to assist in ceremonies that take place near the ziggurat (fig. 34, 35, 36). Impression number 37 from the Akkad period shows the building of a three storey ziggurat by two figures with very stylised physiognomic features (Type H3).

Thanks to the data laid out up to now we have all the elements necessary to reach the proposed objective; so let us examine the possibility of isolating, inside a whole scene among those being examined, some relatively diverse real building shapes that are easily recognised as cuneiform ideograms. Using what has been said as a base, I will try to start a visual comparison between some building shapes, that present a series of homogeneous lines, and some ideograms.

Essentially symbolic oriental architecture is, like cuneiform writing, composed of two kinds of signs: ideograms, that clearly refer to the reproduced object and signs that reproduce just the main lines necessary for the recognition of the object, that although simplified in shape is

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[34] Amiet 1977, p.69.
[35] Amiet 1957, p. 129.

characterised by a strong symbolic importance that makes its meaning equally clear[36]. The iconographic and semantic study of 3rd millennium seals, limited to the Mesopotamian area in the period between the early Uruk era and that of Akkad, led to the establishment of a possible correspondence between images and signs of writing. In order to better understand the importance of the result of this level of investigation it is necessary to briefly summarize the analysis procedure used.

The investigation was carried out starting from the decomposition of the whole scene, isolating those that represented buildings. After that it was possible, through comparison, to establish in at least thirty cases, a uniformity between images and signs. I would like to point out that the separation of the images of buildings from the scenes does not mean that they have lost their reference to the scene from which they have been isolated, rather their meaning coincides exactly with the scene impressed on the impression. The analysis of the shapes of some buildings depicted on the seals shows that in some cases they have been substituted with ideograms, thus resulting in the recognition of seven designs of distinct ideograms of Sumerian script in specific scenes (see plates in appendix of the text[37]).

The results of studies conducted in the area of correspondence between Sumerian writing signs and buildings in ancient Uruk[38] texts have already been widely illustrated and discussed in the history of studies[39]. The same symmetry has been found in this work, accepting a parallel importance in the area of Mesopotamian seals of the 3rd millennium. Seven of these can be analysed in parallel and it is the moment to analyse them case by case.

Éš₃/sanctuary (see fig. n. 36): the sign is already present in texts of the Late Uruk period, identified in twelve different attestations[40], and in three texts of the Uruk III period. Great graphical variations between the two eras cannot be seen. It is used in the same way and in the same periods in glyptics the term refers to the sacred enclosure of the temple[41]. In four texts dating back to the late Uruk III period, the logogram Éš₃ is followed by the name of the Goddess Inanna which confirms that the enclosure was connected to worship of the Goddess Inanna.

The analysis of the lists of signs shows that in the Uruk period the term Éš₃ appears mainly associated to titles of high dignitaries[42], this fact led to the formulation of a possible new interpretation of the meaning of this sign; this hypothesis sustains that in the Uruk and Gemdet-Nasr period, the Éš₃ sign not only specified a great centre of worship dedicated to a divinity, but also an administrative centre used by several dignitaries and high officials. More generally, it is arguable that the Éš₃ logogram was used in orthography as a toponym to indicate the great enclosure dedicated to the supreme god of the city.

- Tur₃ /cereals, corn and leaves (see fig. no. 6, 12, 23) it is clear, by observing the plates that follow the text, how the aspect and the meaning of this sign corresponds exactly to the same object both in texts and seals. Its shape is identical to that of a hut with the typical banner at the top. The sign has frequently been recognised in documents that date back to the Late Uruk and

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[36] SZARZYNSKA 1997, p. 14.
[37] The analytical method I aspired to is that of K. SZARZYŃSKA , the scholar argues that the analysis of cuneiform signs represented in glyptics and plastic arts can sometimes facilitate the comprehension of these signs (see SZARZYŃSKA 1996, p. 236).
[38] SZARZYŃSKA 1997, p. 40.
[39] SZARZYŃSKA 1997, p. 40, NISSEN-GREEN 1987.
[40] SZARZYŃSKA 1997, p. 57.
[41] SZARZYŃSKA 1997, p. 39.
[42] SZARZYŃSKA 1997, p. 41.

Jemdet-Nasr periods. In the examples proposed in this context, Tur$_3$ is always represented in association with animals, probably to be interpreted as the divinity's sacred herd.

- Lu /abundant, multiply (see fig. no. 10, 17, 18) is a logogram that appears in texts of the Late Uruk period and in those of Jemdet Nasr, there do not seem to be obvious graphical differences between the two periods[43]. This sign has obvious likenesses to the previous one (Tur$_3$), the only visible difference is the triplication of the banner on the sloping roof of the structure. Although the semantic differences between Tur$_3$ and Lu are not easily discernible, these signs obviously had to refer to the same class of meanings.

- The pictogram Sila$_4$/road (see fig. no. 22, 24, 28, 45) is present in texts of the Late Uruk period and also in the following Jemdet-Nasr period. The sign can be compared with representations of some buildings on seals from the end of the Jemdet-Nasr period, and it can also be seen on a seal of the Akkad era. Its graphical variants are invariably noticeable both in writing and on seals, the only visible difference is guaranteed by the rendering of the decoration of the monuments; in one case only (fig. no. 45) is the image of the building identical to its logogram.

- Du$_6$ /mound, hilloch but also indicates the burial mound, intended as a heap of earth placed over the burial (see fig. no. 1, 2, 30, 31, 33, 35) is the fifth ideogram that has been recognised in these comparisons, it has been identified in sixty-five attestations on texts dating from the Late Uruk period to that of Jemdet-Nasr[44]. It is clearly visible on six cylinder seal impressions: two dated as being from the Late Uruk period found at Tepe Gawra, the other later ones from the Protodynastic period were found at Mari and Uruk. In these impressions the rendering of the iconographic construction coincides exactly with the sign in the writing. The sign is composed of one graphical variant assimilable to the form of a triangle. The term probably indicated an area, or a building for worship, but we know very little as regards its meaning, it could also indicate a special kind of building for worship, or it could more generally indicate a building in which a special ritual was celebrated. It is not examined in K. Szarzyńska's study.

It is possible to compare the same correspondence between writing and iconography, or sign and image in eight seal impressions. The sign Ur$_3$ /sweep, level, flatten, destroy (see fig. no. 9, 14, 15, 16, 25, 26, 28, 44) is already represented in the texts of the Late Uruk period and in those of the following Jemdet-Nasr period, it is constantly represented in glyptics in all periods as many specimens confirm. In iconography it is represented in a more stylised way and only rarely presents decorative embellishments in its structure; the look of its shape in fig. nos. 9, 25, 26, 28 is a perfect copy of the graphical rendering of the sign written in texts.

The last possible observable comparison is the assonance between representations on cylinder seals and the sign E+GI.GI or Giguna/"Worship terrace" (see fig. no. 38, 39, 40, 41, 42, 43). This is documented in two texts of the Late Uruk period, it does not seem to appear in any text of the Jemdet-Nasr era, after the Akkad era it is used again to represent buildings.

It seems that the logogram written Gi-gù-na in Sumerian originally referred to a reed structure erected on an artificial raised terrace where one or more temples were built. The more ancient name Gigun is attested in one of the texts of Eannatum in the lexical list of Šuruppak- SF 59 III-11 and in an inscription of Entemena[45].

The latter clarification of data was necessary to pursue the initial hypothesis based on the possible interaction between two worlds, that of writing and that of art. A consideration regarding the production of some images can however be added: it is probable that some

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[43] NISSEN-GREEN 1987, p. 275.

[44] NISSEN-GREEN1987, p. 276.

[45] SZARZYŃSKA 1997, p. 48.

drawings of buildings reproduced on seals could represent graphic signs of Sumerian writing, incorporated into artistic compositions; this harmony can only be explained through the hypothesis that the artist producing the subjects intended to refer, in that particular figuration, to the name of a well-defined building.

That would imply that the rendering of architectural structures on seals is the real representation of the first buildings of worship, as E. Heinrich[46] and K. Szarzyńska[47] already suggested some time ago. The proofs provided up to now suggest how and why that could have come about, in that they demonstrate how in some cases the image reproduces an exact convergence with the logogram. Cases such as seal no. 36 show this coincidence so exactly that the image can be alternatively proposed both as a representation of the building and a graphic sign; more exactly, both are suggested in the content of the seal. The artist has obviously used the same images to represent the same concept, according to a typically traditional oriental pattern that meaningfully resurfaces here.

At this point I find it necessary to draw some conclusions although I am aware of not having fully covered the various problems linked to the matter. My aim is to clarify and discuss the results obtained in this research rather than try to confirm the hypotheses. The results require a few summarising observations as regards their content and their meaning.

The interest in this close examination not only comes from simple observation based solely on the stylistic rendering of the representation of individual architectural buildings reproduced on seals, but also from the relative meaning of some images. These data suggest a comparison between artistic element and graphic representation; out of a hundred and fifty specimens examined, uniformity between the image of the building and the graphic sign was visibly verified in thirty-one of them. Therefore there is a close link between writing and signs, where one merges into the other allowing the comprehension of the "read" message regardless of the correspondence to exact categories of the spoken language. Some observations of I. J. Gelb[48] that had considerable influence on scholars of the first half of the last century shed some light on this matter.

J. Gelb supposed that pictography was the first step in writing <<At the basis of all writing stands the picture…[49]>> Moreover H. Nissen, R. Englund and P. Damerow are convinced that there are ‹‹clear indications›› to support the hypothesis that writing is not meant to satisfy a functional requirement, only economic, but that the system of signs characteristic of the first phase of the writing should have already been developed long before[50].

According to what has been said, which alternative can we propose in answer to the hypothesis to Schmandt-Besserat?

Given that the correlation between economy and the development of writing is not considered necessary, in the current state of affairs various clues suggest the possibility of supposing that writing began with the representation on seals, at least the comparisons made point in that direction. Comparisons can obviously present common elements and different ones too, in fact sometimes the image of an architectural structure is the exact copy of an ideogram, whereas in

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[46] Heinrich 1957, p. 90.
[47] Szarzyńska 1997, p. 49.
[48] Gelb 1952, p. 42-43.
[49] Gelb 1952, p. 43.
[50] Nissen 1993b, p. 70.

other cases the matter is more complex due to a very schematic[51] reproduction of buildings and an extreme simplification of their shape. We are undoubtedly up against the dialectics between organicity and abstraction, created by the existence of a series of iconographies that result as having been developed from known outlines. The results obtained lead to alternative answers, in that the architectural figures reproduced on seals represent the preeminent element that makes the two aspects, i.e. the iconographic one and ideographic one, inseparable. The two aspects not only show a tendency to interaction but once again emphasise the fact they are inseparable; the fact remains that only an integrated assessment of the data can give a full organic explanation; this work could be thought of as a daring and new possibility, given that the relation between the two aspects has, at least in seven cases, been confirmed. The fact that the hypotheses proposed only regard the samples examined must be taken into consideration, it will therefore be possible to verify their validity by comparing them with other samples.[52]

But what do these temple-like depictions represent? What do they want to tell us? What expectations can we have of them?

The images of these buildings have to be considered as architectural reconstructions of models that could easily be seen in the real world; their function is to carry the architectural image from ancient times to today, bringing it back to life. It is in fact difficult to think that these well differentiated constructions simply correspond to the creativity and inspiration of the engravers, who, with the common model of a temple in mind chose to represent particular views rather than others.

The results obtained from the analysis of these artistic testimonies open up many new expectations, but at the same time they shed light on the state of our still largely embryonic knowledge of one of the different and still silent facets of the Mesopotamian culture of the 3rd millennium BC.

These hypotheses remain for the moment in the field of the possibilities of work, in that it is extremely difficult to find confirmation in archaeological documentation and it is clear how further research can put the hypotheses that have been examined up to now into perspective and change them; however, considering all the reservations and difficulties involved in this specific matter, this coincidence has its intrinsic reasons, various investigations of clues show that the iconographic analogy is quite precise and the connections between these two components are not purely casual.[53] It also becomes evident how these representations are important for understanding perceptive and cognitive processes, which are typical of man; the nature of the image is analysed in terms of simultaneous integration between the representation of the building and the ideogram; the depiction responds to a concept in that way only[54], due to the simple fact that it reproduces the same cognitive structure. In other words, the images of architectural objects, recognised as bearers of meaning, are considered as closely dependent on their content or intrinsic meaning, making up the world of "symbolic" values[55]. According to E. Panofsky <<synthetic intuition>> is the regulative principle that is necessary for this kind of interpretation[56], linked to the close connection that exists between image and content. And it is

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[51] These drawings, characterised by schematic iconography, have probably been gradually simplified and details have slowly disappeared because they were not necessary for the deciphering of the image's meaning or more exactly the reading of its meaning (SzARZYŃSKA 1997, p. 12, 13).

[52] We promise ourselves to carry out more analyses in the near future, with the intention of widening the geographical area.

[53] HOCHBERG 1972, p. 60.

[54] HOCHBERG 1972, p. 60.

[55] PANOFSKY 1939, p. 4, 16.

[56] PANOFSKY 1939, p. 18.

exactly this that is the basis of visual integration, the "glue" by which images merge into one perceptive structure[57].

This is one of the levels of examination we tried to use in this research, in particular the concept of semantic information applied to visual representations[58] that consists in considering roughly similar objects as vehicles of the same information[59]. The images are the direct expression of the subjects and are the intrinsic content of the message that in psychology is called "simultaneous integration"[60], (as above). Generally it is the art historian who verifies how valid, in his opinion, the intrinsic meaning of an image is; it is with these words that we summarise one of E. Panofsky's most innovative and significant concepts: the re-interpretation of the images[61]. The method involves attributing symbolic content to the images: in fact it was the comparison between figurative tradition and textual tradition that allowed us to observe and study this particular dichotomy of images more closely.

Unfortunately it is impossible to reach a final conclusion on the observations discussed above, it seems they cause more problems than they solve. They touch important archaeological, art history and philological points at the centre of a problematic debate, such as that of the relationship between iconographic and ideographic signs.[62]

A graphical appendix of tables, is given at the end of the text for a better understanding of the subject dealt with.

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[57] HOCHBERG 1972, p. 81.

[58] BLACK 1972, p. 130.

[59] BLACK 1972, p. 130.

[60] HOCHBERG 1972, p. 81.

[61] PANOFSKY 1939, p. 89.

[62] There are still several points that need clarifying and re-examining as regards the matter in hand. Only further, scrupulous investigations, based on the integration of cross-checked data, will help shed light on one of the most cryptic aspects of the history of civilisation. Only new analyses will allow the clarification of still existing doubts that basically regard the general problem of historical/archaeological interpretation of images of the period in question, rather than that of glyptics.

* The images on the seals are taken from the publications quoted in the bibliography and have been reproduced in the same scale corresponding to 90% of the original dimensions.
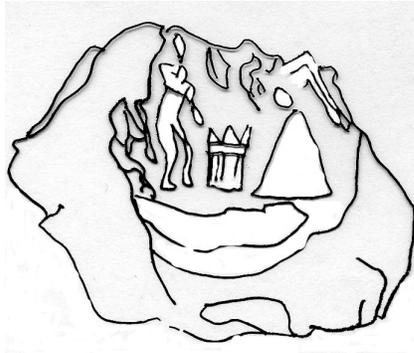
1.   Tobler 1950, p. 163, tav. 82.

2.   Tobler 1950, p. 163, tav. 83.
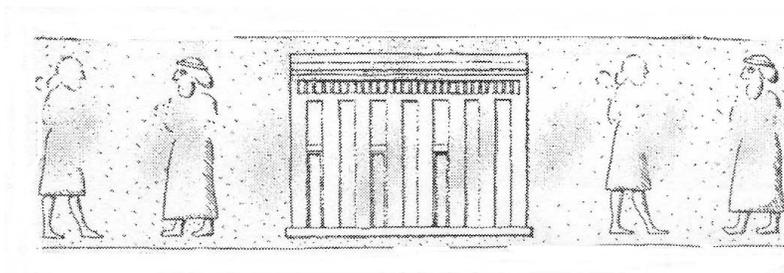
3.   Moortgat-Correns 1989, p. 20 tav. 1.
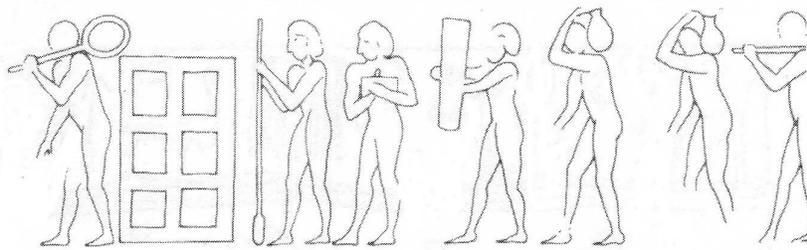
4. Moortgat- Correns 1989, p. 22 tav. 2.
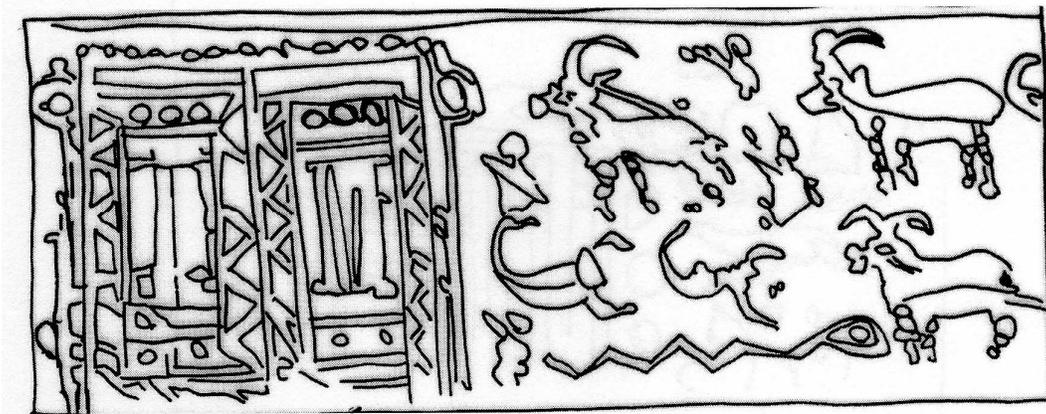
5. Delaporte 1923, tav. 27 A.
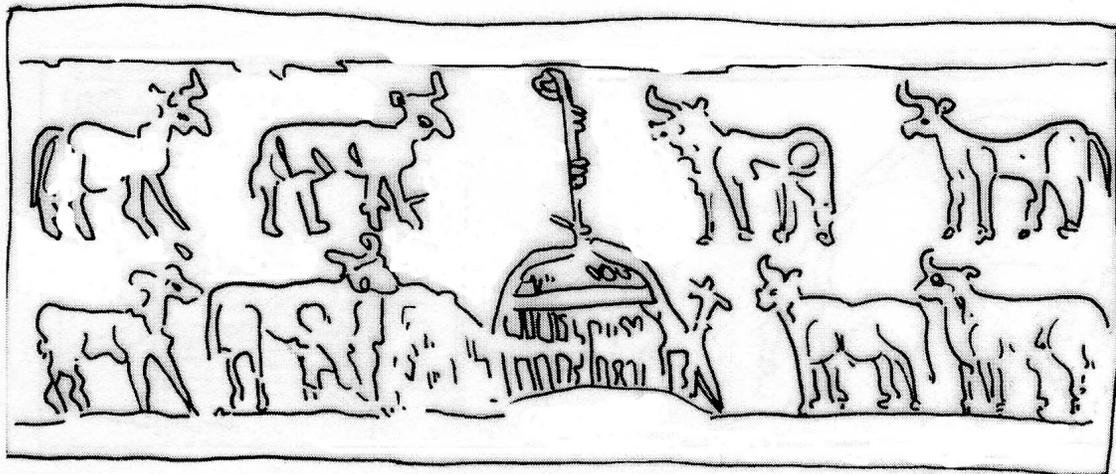
6. Delaporte 1923, tav. 63 n. 3b.
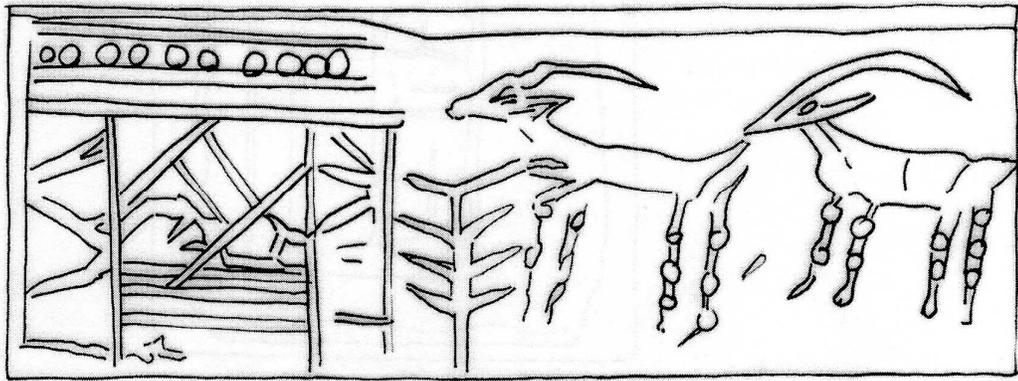
7. Delaporte 1923, tav. 63 n. 6.
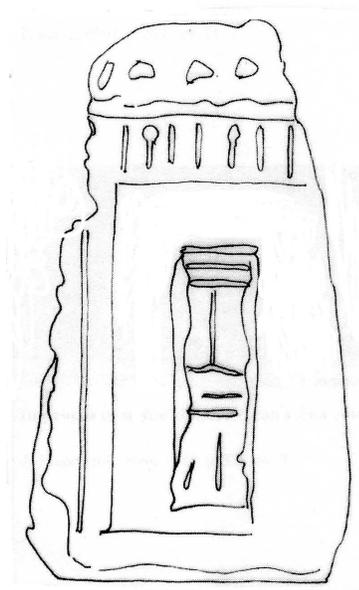
8. Heinrich 1936, tav. 19.
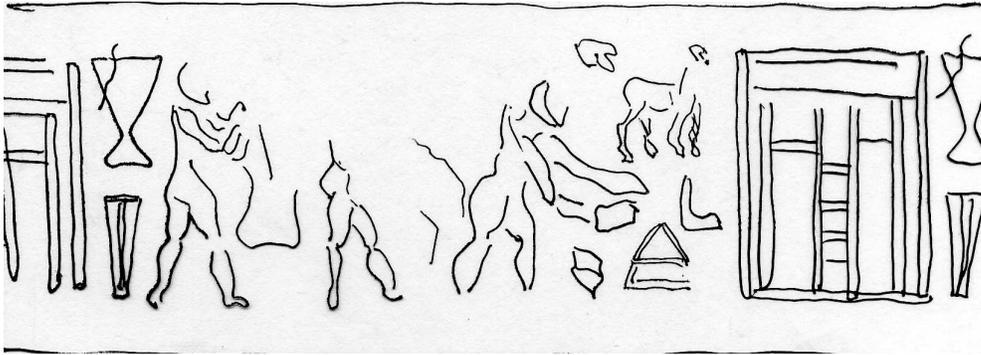
9. Pittman 1987, p. 53 tav. 14.
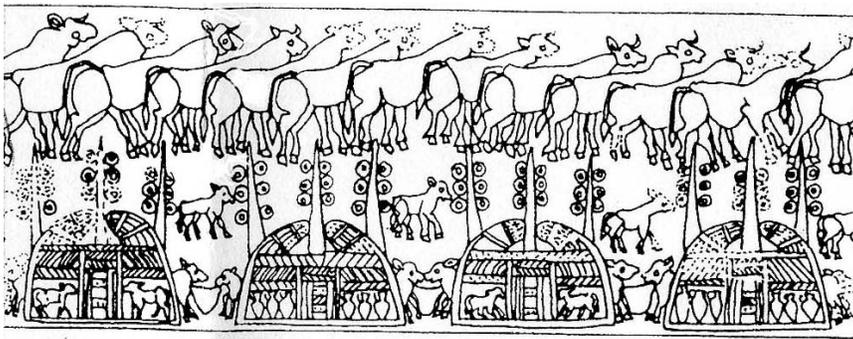
10. Forest 1996, tav. 39.
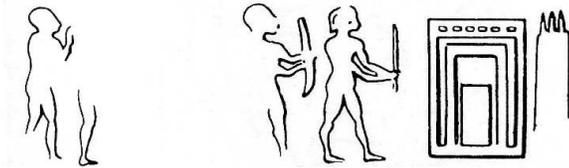
11. Amiet 1980, tav. 11 n. 203 A.
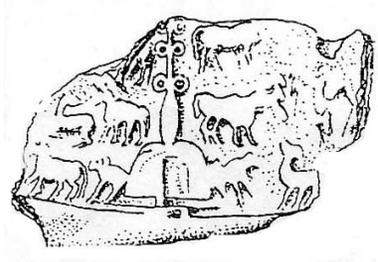
12. Forest 1996, p. 151 tav. 114.
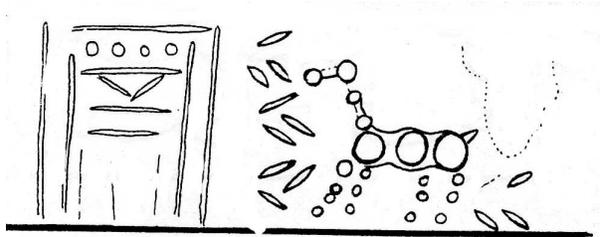
13. Doumet 1992, p. 27 tav. 36.
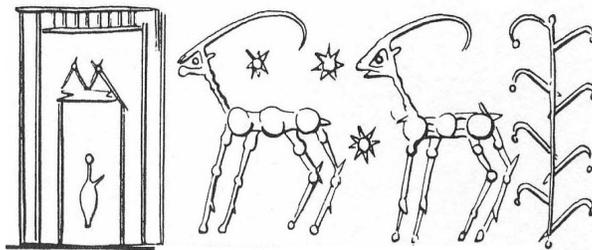
14. Amiet 1980, tav. 23 n. 389.
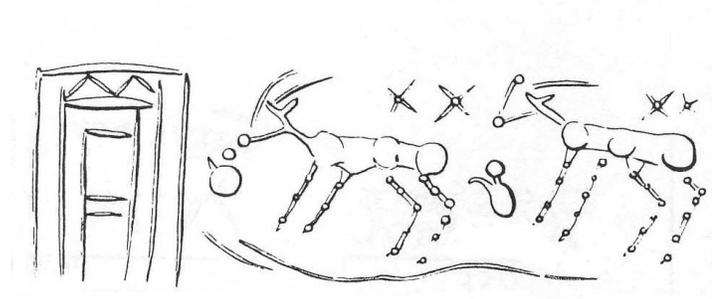
15. Amiet 1980, tav. 24 n. 393.
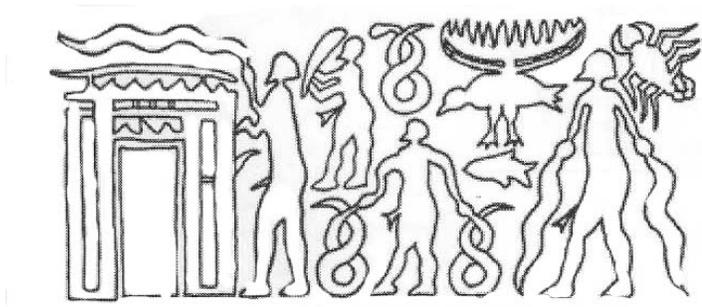
16. Rova 1994, tav. 43 n. 739.
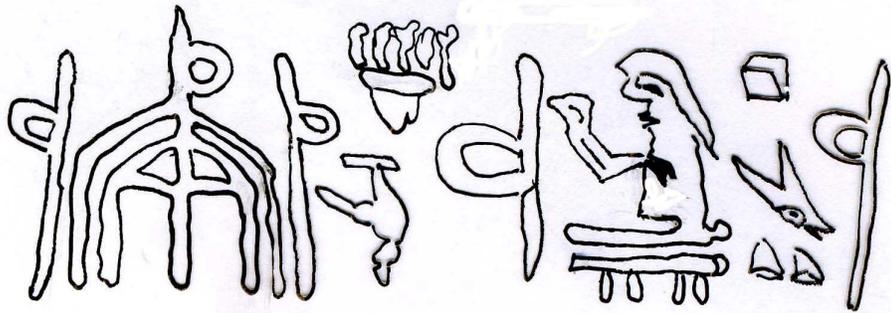
17. Collon 1987, tav. 801.
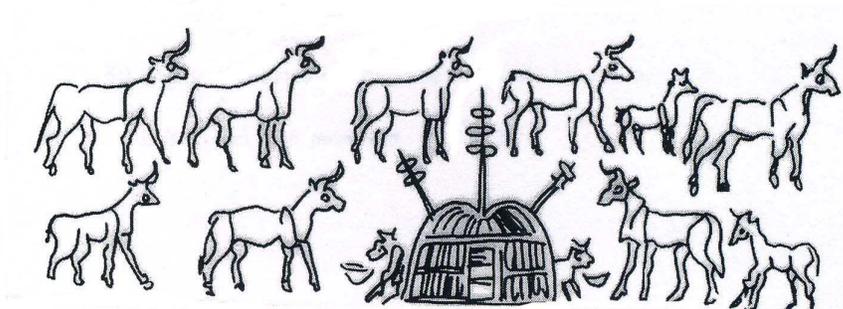
18. Amiet 1980, tav. 42 n. 629 a.
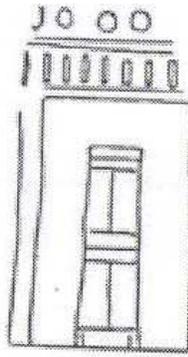
19.   Rova 1994, tav. 39 n. 664.
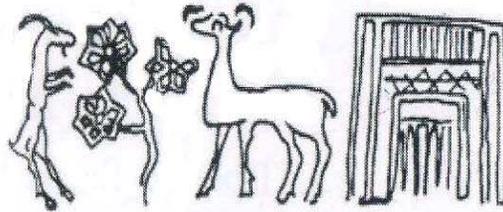
20.   Amiet 1961, tav. 26 n. 427.
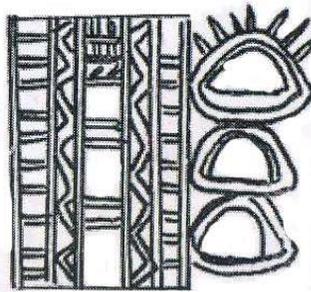
21.   Rova 1994, tav. 41 n. 710.
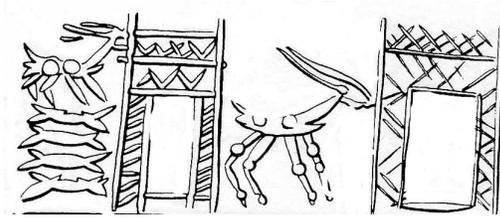
22. Amiet 1980, tav. 26 n. 428.

23. Amiet 1980, tav. 120 n. 1605.
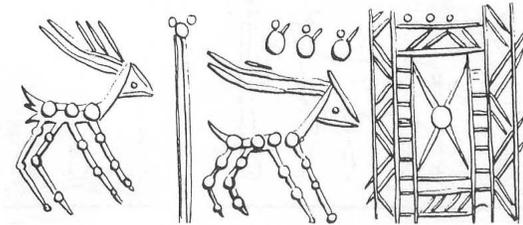
24. Amiet 1980, tav. 42 n. 630.
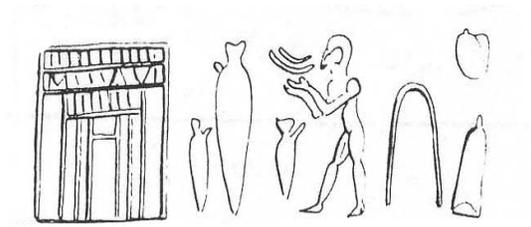
25. Amiet 1980, tav. 47 n. 668.
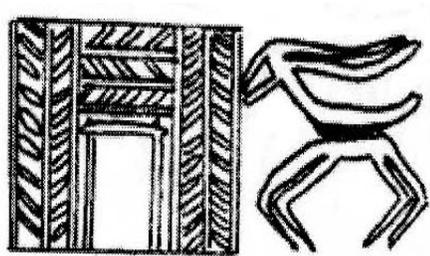
26. Frankfort 1955, tav. 5 n. 29.
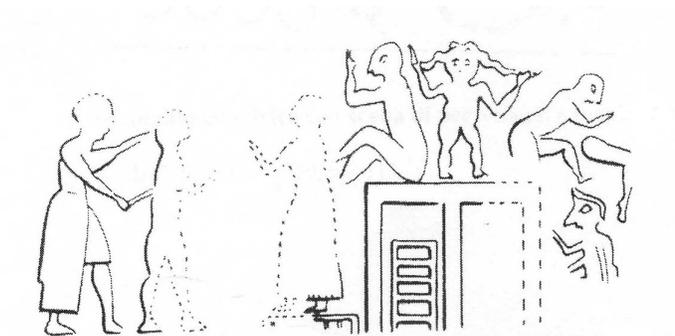
27. Marguerone 1993, p. 383 tav. c.
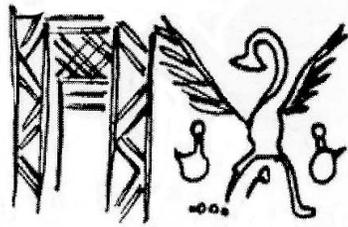
28. Amiet 1980, tav. 28 n. 448.
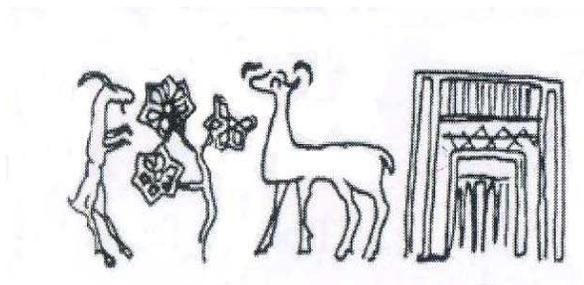
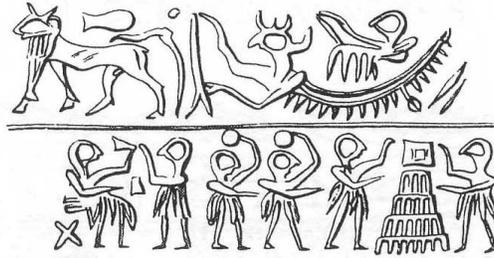**29.** Legrain 1936, tav. 18 n. 355.
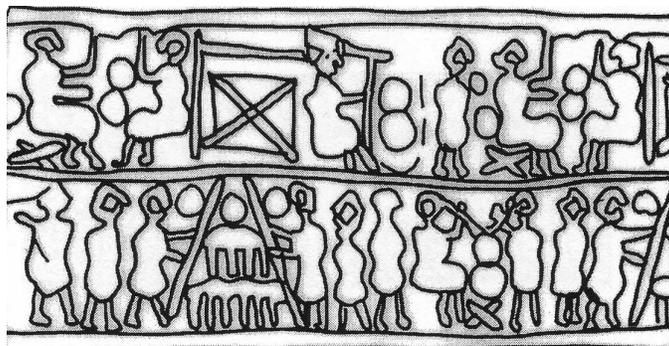
30. Parrot 1968, tav. 26.
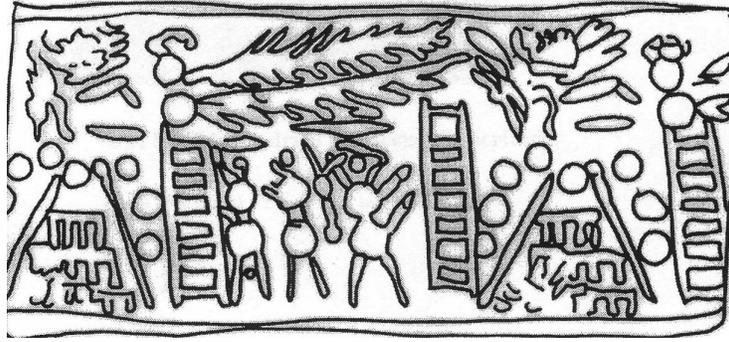
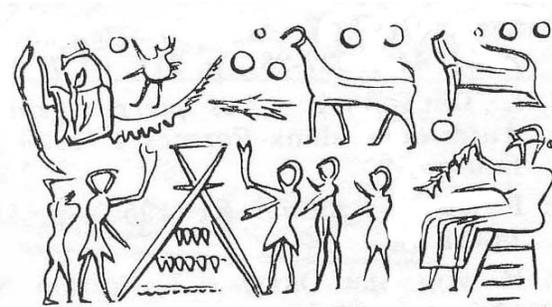**31.**   Parrot 1968, n. 32.

32.   Amiet 1980, tav. 102 n. 1358.

33.   Amiet 1980, tav. 110 n. 1468.

34.   Amiet 1980, tav.109 n. 1444.
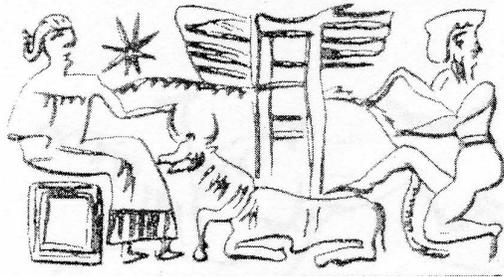

35.   Amiet 1980, tav. 109 n. 1446.

36.   Amiet 1980, tav. 109 n. 1448.
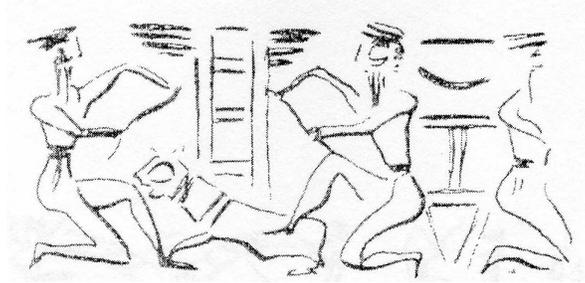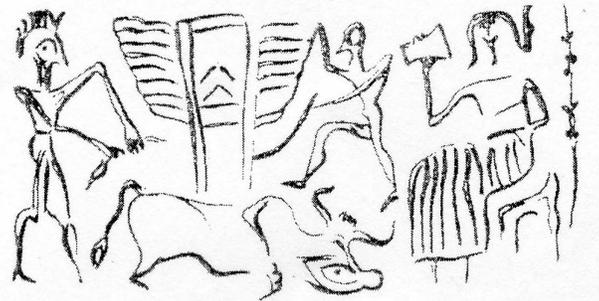
37. Amiet 1980, tav 109 n. 1454.

38. Buchanan 1966, tav. 3.
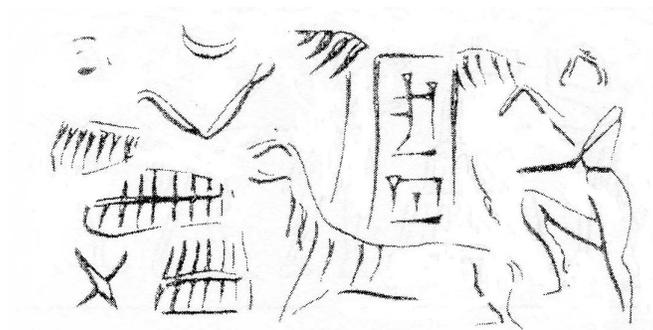

39. Amiet 1960, tav. 2.

40. Amiet 1960, tav. 1.
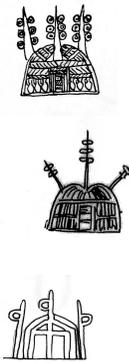

41. Amiet 1960, tav. 4.
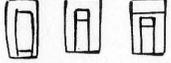

42. Amiet 1960, tav. 6.

43.   Amiet 1960, tav. 7.

44.   Amiet 1980, tav. 86 n. 1139.

45.   Amiet 1980, tav. 92 n. 1218.

Correlation Table

Lettura segno ideografico	Segno ideografico	Segno iconografico	Tipo	Bibliografia
Éš$_3$			H3	Cfr. Amiet 1980, tav. 109 n. 1448.
Tur$_3$			A2	Cfr. Delaporte1923, tav. 63 n. 3b. Cfr. Forest 1996, tav. 114.
			A3	Cfr. Amiet 1980, tav. 120 n. 1605.
LU			A2	Cfr. Forest 1996, tav. 39.
			A3	Cfr. Amiet 1980, tav. 42 n. 629 a.
			A4	Cfr. Collon 1987, tav. 801.

Lettura segno ideografico	Segno ideografico	Segno iconografico	Tipo	Bibliografia
Sila$_4$			C14	Cfr. Amiet 1980, tav. 26 n. 428 e tav. 28 n. 448.
			C13	Cfr. Amiet 1980, tav. 42 n. 630.
			C26	Cfr. Amiet 1980, tav. 92 n. 1218.
Du$_6$			A1	Cfr. Tobler 1950, n. 82 e n. 83.
			H2	Cfr. Parrot 1968, n. 26.
			H3	Cfr. Parrot 1968, n. 32.
			H5	Cfr. Amiet 1980, tav. 110 n. 1468. Cfr. Amiet 1980, tav. 109 n. 1448.
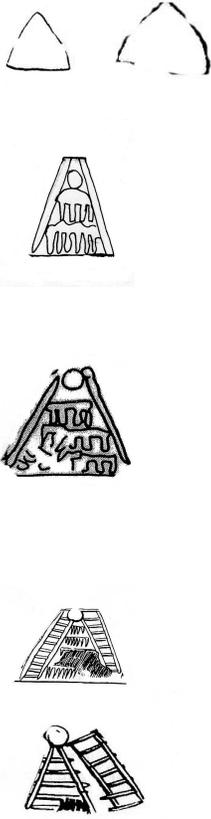
Lettura segno ideografico	Segno ideografico	Segno iconografico	Tipo	Bibliografia
Ur$_3$			C2	Cfr. Pittman 1987, tav. 14. Cfr. Amiet 1980, tav.23 n. 389 e tav. 24 n. 393.
			C7	Cfr. Rova 1994, tav. 41 n. 700.
			C14	Cfr. Frankfort 1955, tav. 5 n. 29 e Amiet 1980 tav. 28 n. 448.
			C19	Cfr. Amiet 1980, tav. 47 n. 668.
			C25	Cfr. Amiet 1980, tav.86 n. 1139.

Lettura segno ideografico	Segno ideografico	Segno iconografico	Tipo	Bibliografia
GIGUNA			I 1	Cfr. Buchanan 1966, tav. 337; Amiet 1960, tav. 1 e tav. 4.
			I 2	Cfr. Amiet 1960, tav. 6.
			I 3	Cfr. Amiet 1960, tav. 2 e tav. 7.
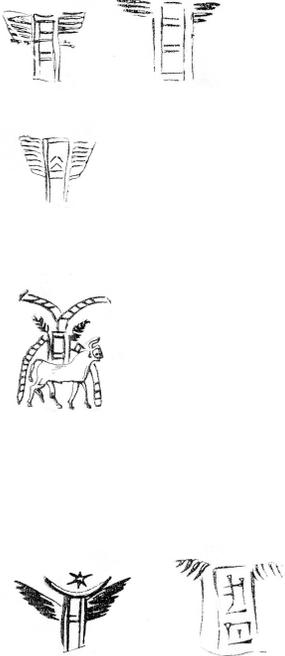
References

List of Abbreviations
CMAO   Contributi e Materiali di Archeologia Orientale.
JEOL   Jaarbericht van het voor-aziatisch egyptisch Gezelschap ‹‹Ex Oriente Lux››.
OAC   Orientis Antiqui Collectio.
RA   Revue d'Assyriologie et d'Archéologie Orientale.
Rar   Revue Archéologique.
SEL   Studi Epigrafici e Linguistici.

Amiet, P.
1957   *Gliptique Archaïque*, in *RA*, LI, pp. 121-129.
1977   *L'Art Antique du Proche- Orient*, Paris.
1980   *La Glyptique Mésopotamienne Archaïque* (2 ed.), Paris.

Arnheim, R.
1954   *Art and Visual Perception : A Psychology of the Creative Eye*, University of California

Black, M. - Gombrich, E.H. - Hochberg, J.
1972   *Art, Perception, and Reality*, Baltimore.,

Charvat, P.
1997   On People Signs and States, Prague.

Collon, D.
1987   *First Impressions. Cylinder Seals in the Ancient Near East*, London.

Cooper, J.
2005   *Babylonian Beginnings: the Origin of the Cuneiform Writing System* in
         The First Writing: Script Invention as History and Process, pp. 71-99, Cambridge.

Damerow, P.
1996   *Prehistory and Cognitive Development*, Berkeley.
1999   *The Origins of Writing as a Problem of Historical Epistemology*, University of Pennsylvania.

Diringer, D.
1969   *L'alfabeto nella storia della civiltà*, Firenze.

Février, J.G.
1958   *Histoire de l'écriture*, Paris.

Foucault, M.
1967   *Le Parole e le Cose*, Milano.

Frangipane, M.
2004   *Alle Origini del Potere. Arslantepe, la Collina dei Leoni*, Roma.

Frankfort, H.
1939   *Sculpture of the Third Millennium B. C. from Tell Asmar and Khafajah*, Chicago.

1939b   *Cylinder Seals. A Documentary Essay on the Art and Religion of the Ancient Near East*, London.

Gelb, I. J.
1952   *A Study of Writing: The Foundations of Grammatology*, Chicago.

Glassner, J.
2003   *The Invention of Writing: Cuneiform in Sumer*, Baltimore.

Gombrich, E. H.
1984   *Il Senso dell'ordine: Studio sulla Psicologia dell'Arte Decorativa*, Torino.

Heinrich, E.
1957   *Bauwerke in der Altsumerischen Bildkunst*, Wiesbaden.

Hertz, A.
1929   *Le Décor des Vases de Suse et les écritures de l'Asie Antérieure,* in
            RAr, I, pp. 217-234.
1930   *Die Kultur um den Persischen Golf und ihre Ausbreitung*, Lipsia.

Le Brun, A. e Vallat F.
1978   *L'origine de l'écriture à Suse*, in *Cahiers de la Délégation Archéologique Francaise en Iran*, vol 8, pp. 11-59, Paris.

Levi-Strauss, C.
1958   *Antropologia strutturale*, Milano.

Liverani, M.
1998   *Uruk, la prima città*, Roma.

Matthews, R.
1993   *Cities, Seals and Writing: Archaic Seal Impressions fron Jemdet Nasr and Ur*, Berlin.

Milano, L.
1991   *Luoghi di culto in Ebla: economia e sistema delle offerte*, in
            CMAO, VII, pp. 40-60, Roma.

Moortgat-Correns, U.
1969   *The Art of Ancient Mesopotamia*, London.
1989   *La Mesopotamia*, Torino.
1997   *Archives and Libraries in the Ancient Near East, 1500- 300 a. C.*, London.

Nissen, H.J
1988   *The Early History of the Ancient Near East, 9000-2000 B.C.*, Chicago.
1993b   *The Context of the Emergence of Writing in Mesopotamia and Iran*, in Curtis, J. (ed.), *Early Mesopotamia and Iran:contact and conflict 3500-1600 BC,* pp. 54-71, London.

Nissen, H.J.- Damerow, P. - Englund, R.

1993   *Archaic Bookkeping, Early Writing and Techniques of Economic Administration* in *the Ancient Near East*, London.

Nissen, H.J. - GREEN, M. W.
1987   *Zeichenliste Der Archaischen Texte Aus Uruk*, Berlin.

Panofsky, E.
1939   *Studies in Iconology*, Oxford University Press.

Pittman, H.
1994   *Towards an Understanding of the Role of Glyptic Imagery in the Administrative Systems of Proto-literate Greater Mesopotamia*, in *Archives before Writing*, pp. 177-203, Berlin.

Ramazzotti, M.
2005   *Segni, Codici e Linguaggi nell' "Agire Amministrativo" delle Culture Protostoriche di Mesopotamia, Alta Siria e Anatolia*, in *INA KIBRĀT ERBETTI*. Studies in Honour of Paolo Matthiae offered by Colleagues and Friends on the Occasion of his 65 Birthday, pp. 511- 564, Roma.
2010   *Archeologia e Semiotica. Linguaggi, codici, logiche e modelli*, Torino.

Ross, J.
2005   *Representations, Reality and Ideology*, in *Archaeologies of the Middle East*, pp. 327-350, Oxford.

Rothman, M.
2001   *Uruk Mesopotamia & its Neighbors*, Santa Fe.

Rova, E.
1994   *Ricerche sui sigilli a cilindro vicino-orientali del periodo di Uruk- Jemdet-Nasr*, in *OAC*, XX, Roma.

Schmandt- Besserat, D.
1992   *Before Writing*, University of Texas.
2006   *The Interface Between Writing And Art: The Seals of Tepe Gawra*, in *Syria*, 83, pp. 183-193, University of Texas.

Seminara, S.
2004   *Quando gli dei erano "imperfetti"… La prova e i processi di maturazione nel mondo sumerico, attraverso la serie lessicale Nir, Nirgal e Namnirgal*, in *SEl*, 21, pp. 1- 34.

Strommenger, E.
1964   *5000 Years of the Art of Mesopotamia*, New York.

Szarzyńska, K.
1989   *Some of the oldest cult Symbols in Archaic Uruk*, in *JEOL*, 30, pp. 3- 21, Leiden.
1996   *Some Comments on Individual Entries in the Uruk Sign-List Zatu*, in *Acta Sumerologica*, 18, pp. 235- 260, Hiroshima.
1997   *Sumerica Prace Suemroznawcze*, in *Philologia Orientalis*, 3, pp. 1-219,   Warsaw.
1998   Written on Clay and Stone, Warsaw.