TOWARDS AN UNDERSTANDING OF THE ROLE OF GLYPTIC IMAGERY IN THE ADMINISTRATIVE SYSTEMS OF PROTO-LITERATE GREATER MESOPOTAMIA

HOLLY PITTMAN

INTRODUCTION

The considerable value of glyptic art as a source for the study of pre- and proto-historic cultures of the Near East is clear from the fact that it has been successfully incorporated into wide variety of analytical approaches. In addition to its invaluable role as a chronological and regional marker, glyptic art is one of the few artifact types regularly scrutinized for insights concerning both the ancient belief and symbolic systems. While it has long been known that seals were used in the administration of the pre-literate economies, this subject has recently become a focus of greater attention, as the stimulating symposium of "Archives before Writing" demonstrates[1].

As my contribution to the symposium, I want to discuss glyptic in the context of pre- and proto-literate systems of accounting used in greater Mesopotamia. My discussion will proceed from two perspectives that are usually kept separate in the analysis of glyptic art. One, which has been so clearly articulated in the seminal work of Enrica Fiandra and Piera Ferioli, focuses on the functional role of seals in administrative systems. Another considers the symbolic message of the imagery engraved on the seals.

Rather than discussing a specific category of seal imagery, a specific administrative practice or a specific site, I will raise here more general questions about the glyptic imagery of the proto-literate period in greater Mesopotamia[2]. For example, should we expect there to be any correlation between glyptic imagery and the administrative process in the proto-historic period? If so, to what degree might such correlations exist? If imagery is involved with administration, how would we expect that association to be expressed through the imagery? How did the imagery work in the administration? It is not answers to these questions that I offer in this preliminary attempt. Rather I will examine some of the assumptions that must underlie a discussion of these questions.

As has been so clearly shown both through the work of Denise Schmandt-Besserat[3] and through the work of German and other scholars who have studied the archaic scripts[4], the economic administration in the ancient Near East developed out of a system of signing that denoted quantity through abstract number and denoted quality through visual symbols that acquired their meaning through both resemblance and convention. Through the archaeological evidence we know that from the beginning, seals were one of the tools of the ancient administrative systems that also used tokens and clay masses of various shapes into which marks were incised or impressed[5]. It is the symbolic value for the economic administration of the marks made by those engraved stones on clay masses that I am concerning with here.

This is not a new topic for consideration[6]. Hans Nissen openly grappled with the problem of the function of glyptic imagery in the economic administration of proto-historic Mesopotamia[7]. Nissen's hypothesis divided glyptic imagery of the Late Uruk period into two categories. His criteria for these divisions were first, complexity, or more accurately uniqueness, of image and second, technique of manufacture. He designated these categories the "schematic" (Fig. 1 a, b) and "complex" groups (Fig. 2). He proposed that "schematic" seals, which could be quickly made with mechanical tools such as the

Fig. 1a - Uruk: UVB 5 tf. 27b *(after Amiet 1980: no. 346).*

Fig. 1b - Seal in New York *(after Amiet 1980: no. 312).*

cutting wheel and the drill (and were therefore cheap to produce) belonged to institutions. He contrasted these with seals having more complex figural imagery. He concluded that these would have belonged to individuals whose position within the administrative hierarchy required that they take individual responsibility for the commitment undertaken through the act of sealing. The assumptions that underlie this construct deserve to be examined because it has become a model through which variation in pre- and proto-literate glyptic imagery is understood[8].

Nissen supports his hypothesis through two lines of reasoning. The first concerns social organization and argues that because complex seals would have taken a long time to make, they would have been expensive. From that one deduces that they were objects of elite ownership, in particular they belonged to elite individuals who held positions of authority within the economic administration. The second line of reasoning concerns systems of signing. Nissen argues that the mechanism through which the seals would have been differentiated and associated with individual people was the unique features found among the design elements or within the composition of the imagery. To support such a hypothesis, he argues that while proto-literate seals share themes and design elements, there are very few examples that are virtually indistinguishable[9]. Nissen does not, however, explore how such a system of signs would function but proceeds to a consideration of administrative hierarchy.

Before going further, let us consider the assumption that lead Nissen to this conclusion in the first place. It is consistently asserted in the scholarly literature that seals "as markers of their owners, ... served to witness, guarantee, acknowledge receipt or confirm obligation when rolled on commercial or administrative documents, letter orders, envelopes, bullae, jar and door sealings"[10]. When we look carefully at the impressions in their administrative context, it becomes clear that this authorizing function was not accomplished through the carved imagery *per se* but rather through the more general act of sealing, of making a mark, be it the impression of a seal, a fingernail, or the fringe of a garment[11]. The identity of any individual seal owner was conferred not through imagery[12], but rather through an inscription, either on the seal itself or on the document that was sealed. The glyptic art of the pre- and proto-historic periods do not carry inscriptions[13]. Thus the sole means by which individuals were designated on seals of the historic periods was not employed in the earlier seals.

Returning to the imagery on proto-literate seals, Nissen's notion works well enough in the absence of visual differentiation, namely with the so-called "schematic" seals which have a low level of differentiation and might therefore designate institutions or groups[14]. But even if we accept the idea that repeated imagery denoted membership in a particular group, it is not possible to conclude from this that the opposite would be true, that a high level of visual differentiation would serve to denote individuals.
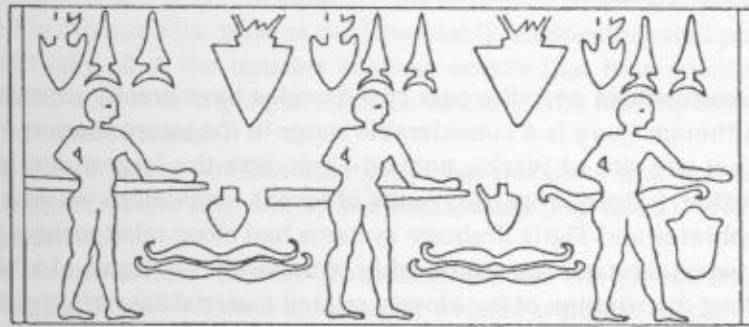
Fig. 2 a - Uruk *(after Brandes 1980b: 79 no. 6)*.

Fig. 2 b - Uruk: UVB 26/27 (1972) pl. 42a *(after Amiet 1980: no. 1609)*.

What Nissen is proposing is a system of signs that was used to designate individual. If one actually considers how such a system would work, it seems that it would entail the exceedingly uneconomical task of memorizing large numbers of unsystematized differences. Semiotic systems do not work in this way. When "code" is established to denote something as specific and as numerous as individual identity in a community of any size, consistency and economy in that symbolic system are of the highest value[15].

At around the same time that Nissen offered his hypothesis, Mark Brandes, in a study of seal images from Level IV of the Eanna precinct at Uruk, suggested that the seal imagery of the proto-literate period should be considered as referring to such things as distinct offices within the administration or particular occasions[16].

In a third consideration that combines the approaches of Brandes and Nissen, Reinhardt Dittmann proposed an interpretation of the proto-literate seal imagery based on the large sample from Susa[17]. Dittmann proposed to understand the "complex" seal images as literal depictions of activities relevant to different sectors of the proto-literate economy. Along with Nissen, Dittmann assumed that administrative hierarchy would be an important message contained in the glyptic imagery. Looking for the markers for such hierarchy, he proposed that within each sector theme higher and lower ranking in the administration was flagged by the presence of certain symbols embedded in the sector-specific imagery[18].

It should be stated at this point that it has been shown through numerous analyses that by the Late Uruk period a hierarchical political/economic system had long been in place in southern Mesopotamia[19]. But can we conclude therefore that such a hierarchical structure would be the single most or one of the most important features flagged by the imagery of glyptic for the economic administration? Or can we assume that, although there are clear references to social and economic hierarchy in the imagery, symbolic references that are indeed extremely valuable to us in our understanding of the political/economic and the administrative system in which they were used, all images held what might be considered essentially equal value. That is to say that their primary function was not to convey hierarchical status in the administration but rather to convey some kind of information directly relevant to the transaction at hand.

THE IMAGES THEMSELVES: THEMES VERSUS HIERARCHY

Archaeological investigations over the past two decades have greatly extended our knowledge of the Late Uruk period. Although there is a considerable range in the interpretation of the evidence, there is general agreement that the site of Warka, ancient Uruk, was the largest site in the Mesopotamian alluvium at the time. Further, judging from the results of recent excavations we now know that a number of sites in the upper Euphrates and Tigris drainage systems had close relationships with Uruk. Guillermo Algaze has argued that we understand the relationship of these sites in terms of a "World System" model which explains the farflung distribution of the closely related material assemblages through the idea that people living in the resource-poor Mesopotamian alluvium penetrated neighboring regions in order to extract raw materials from the rich neighboring regions[20]. He defines several different types of relationships that sites in the periphery had with the center. Many of these sites, referred to here through the use of the generic term "colonies," have produced administrative evidence including sealed documents, seals and sealings that are closely related to those known from Uruk.

Of all of the sites of the proto-literate period, the glyptic from Susa is the best known[21]. Within the Susa assemblage, virtually all of the theme and style-types of the proto-literate glyptic repertory are known. Further, they are known at Susa through ancient impressions as well as actual seal stones, a fact that allows us to be confident that seals with all types of imagery were actually used in the administrative system. Most of the impressions retrieved from Late Uruk period Susa[22] were made on documents rather than sealings used for closing jars or doors[23]. Hollow clay bullae enclosing clay tokens are the most common administrative document, followed by numerical tablets and tags. All of these documents carry impressions of between one and three cylinder seals[24]. Although none of the other excavated groups of sealings from the Late Uruk period have been fully published, from what is currently available it appears that the general patterns of sealing known from Susa were also practiced at other "colonies" at Habuba Kibira, Jebel Aruda, Nineveh as well as at Choga Mish in Khuzistan[25].

In total, there is a published corpus of more than 450 images that can be assigned with confidence to the proto-historic phase contemporary with and related to levels VI through III in the Eanna precinct at Uruk[26]. Virtually all of these images can be categorized as figural even if we cannot readily identify the subject. Looking at these images by theme rather than by style (that is complex vs. schematic), we see that within the extant sample there exist a substantial number of different themes[27]. Individual examples within each theme are differentiated by varying design elements. Themes are defined though an assemblage of design elements. Examples of these themes can be found among both the complex and the schematic style groups. When combined in this way, these thematic categories divide into two large groups. One that depicts or refers to events or activities and the other which depict things or places or emblems.

In the first category are the images that Henri Frankfort long ago called "action" scenes, a term that neatly skirts the thorny problem of narrative[28]. One way to think about these images is that they all depict events. Through the clarity of their presentation, many of these events can be readily interpreted as depictions of rituals or ceremonies that were probably central to the functioning of the Late Uruk state. Many show goods that were offered or brought to or emerged from a structure that we identify as a "temple." It is possible that such events took place at regular intervals as an important mechanism through which goods were redistributed[29].

From Uruk itself we are extremely fortunate to be able to relate the most frequently occurring theme on the seal images from Uruk to one of the most famous proto-literate monuments, the Uruk vase (Fig. 3)[30]. Several seal images show the so-called priest-king and a second figure approaching large conical baskets (Fig. 4 a), holding symbols (Fig. 4 b). Others show the stepped altar carried on the back of an animal (Fig. 4 c). And others show paraphernalia such as vessels in the shape of animals (Fig. 4 a,d). There is never an architectural structure (i.e "temple") associated with this scenes. Other seals refer to other registers on that monument showing files or animals and rows of plant (Fig. 4 e)[31].

Another prominent theme seen in the glyptic images from Uruk is the procession of figures bearing

goods towards the temple (Fig. 5 a-d)[32]. In addition to a reference to the Warka vase, we have hints of the same theme depicted in other media, such as the lamentably fragmentary wall paintings from the painted temple at Uqair[33]. Virtually all of the temples in these scenes that have identifiable symbols have the standard with the single, double or triple paired rings. Although the identity of this deity is uncertain, we can be confident that it is not Inanna[34].

A third theme shows young animals emerging from the biers that are associated both with the deity of the double ringed emblem (Fig. 6 a, b) and with Inanna (Fig. 6 c, d). This scene must refer to the increase in the temple herds.

In another series of "action" themes from Uruk we see the priest/king receiving bound and controlled prisoners (Fig. 7 a-e)[35]. These also depict events, a public display of the defeated human enemies of the early state. From Uruk all prisoners are clearly identifiable by their rope binding and their crouched posture, distributed helter skelter over the image ground (Fig. 7 a, b, c). From the "colonies" at both Choga Mish and Susa (Fig. 7 d, e) come a small number of images that show events that involve either the priest/king or warfare. Representations of bound prisoners from the site of Susa are always shown standing or bent over (Fig. 7 e). If the system of images are linked between sites then it is possible that these different postures represent particular stages in the tenure of these individuals as captives.

In addition to the "action" scenes shared with Uruk, there are many images that were found at the "colony" sites that are different from those we know from Uruk[36]. They are not different in style, in compositional structure, or in individual design elements, but in theme. While at Uruk the themes of action depict what can be categorized either as a ritual or military/political event, at Susa the most common theme among the "action" images is the manufacturing of goods. Among the most common industries depicted in the Susa glyptic are activities related to weaving (Fig. 8 a-e). As is true in the scenes of presentation of goods to the temple at Uruk, the relationships of individuals in the workplace are clearly and consistently defined. Worker, supervisor, commodities, record keeping in the workplace are shown[37]. Another activity is the threshing and the storage of grain (Fig. 9 a, b). Other images show working the fields (Fig. 10), the birthing of young animals (Fig. 11), and the transportation of goods (Fig. 12 a, b)[38]. Included in
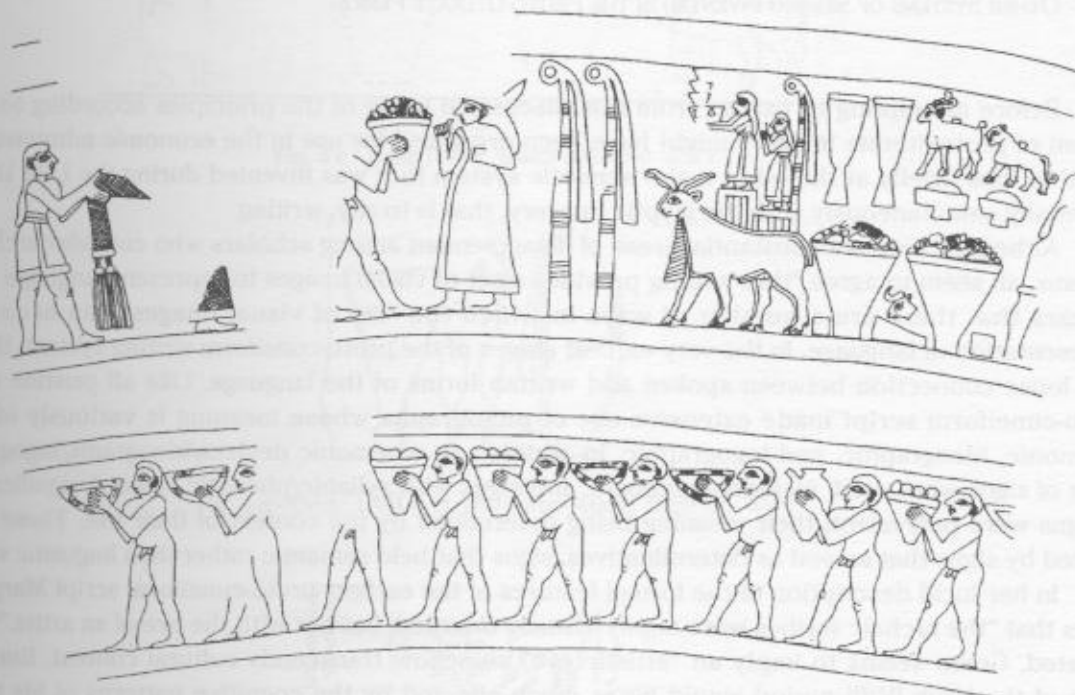

Fig. 3 - Uruk Vase *(Pittman 1987)*.

this group are the numerous impressions of seals found at Susa of pigtail ladies carrying a variety of objects that might be commodities or standards signifying group membership (Fig. 13 a-f)[39].

The other major group of images carved on proto-literate seals both in the center at Uruk and in the "colonies" does not present literal representations of events, either as ritual or as production. Rather than a "discursive" one, the arrangement of the design elements, many times identical to those found in the "action" images, have a formal "symbolic" or "emblematic" character.

There are several types of these "symbolic" representations. One group known from both Uruk and the "colonies" show vessels, tools or products of manufacturing in rows (Fig. 14 a, b). Some show these in association with human figures, such as the weaving or manufacturing scene from Susa (Fig. 8 c), but others seem not to refer to a process, but rather they appear to list visually the end products of the manufacturing process (Fig. 14 a). At Uruk we do not find among the published seals such visual lists of commodities, instead they are combined with scenes of "action."

A related subject shows animals associated with certain of these manufactured products. From both Uruk and the "colonies", caprids are shown with finished textile and plants (Fig. 15 a); with textile, vessel and plant (Fig. 15 b, c); with a ladder pattern[40] (Fig. 15 d); and felines and raptors with vessels (Fig. 16 a-d). The last group shows groups of animals in files (Fig. 17 a-c) or confronting posture (Fig. 18 a,b).

The final large group of symbolic or emblematic images considered here shows compositions of caprids (Fig. 19 a, b), felines (Fig. 19 c, d, e), or snake-necked felines (Fig. 19 f, g) rampant towards each other or otherwise heraldically arranged. These paired creatures are not usually shown alone, but rather they are modified by design elements in the upper and lower fields, most commonly birds (Fig. 19 b, d), vessels (Fig. 19 c, h) or both (Fig. 19 d). In one instance we see a human figure, carrying a open cup (Fig. 19 f).

A related formal composition is also known both at Susa and Uruk. This is the use of the snake interlace that surrounds and separates a single design element which takes on the character of a sign (Fig. 20 a, b, c).

OTHER SYSTEMS OF SIGNING INVENTED IN THE PROTO-LITERATE PERIOD

Before attempting to extract from this discussion some of the principles according to which this system of proto-literate imagery might have been organized for use in the economic administration, it is useful to look briefly at the other major semiotic system that was invented during the Late Uruk period, essentially simultaneously with the glyptic imagery, that is to say, writing.

Although there are substantial areas of disagreement among scholars who consider archaic writing systems, all seem to agree "that writing provides a set of visual images to represent language items." [41] It appears that there are a number of ways in which the "set of visual images" can accomplish the representation of language. In the very earliest stages of the proto-cuneiform writing system, there is only very loose connection between spoken and written forms of the language. Like all pristine scripts, the proto-cuneiform script made extensive use of pictographs whose meaning is variously identified as mnemonic, ideographic, and logographic. In addition to mnemonic devices/ideograms/logograms other types of signs were used, including numbers, and signs with syllabic/phonetic value. A significant number of signs were polyvalent, their meaning being determined by the context of their use. These were often marked by signs that served as determinatives, signs that held semantic rather than linguistic value.[42]

In her lucid description of the formal features of the earliest proto-cuneiform script Margaret Green states that "the archaic scribes were highly visually oriented, but not with the eye of an artist."[43] Although unstated, Green seems to imply an "artistic eye" somehow transcends cultural context. But surely the artist of the Uruk IV/III period would be as much affected by the cognitive patterns of his time as the scribe. It is indeed the "eye", or more accurately the "mind", of the artist of the Uruk IV/III period that I am trying to explore here. What is possible to see is that in the proto-literate period in greater Mesopotamia,

Fig. 4 a - Seal in Dresden *(after Amiet 1980: no. 643)*.

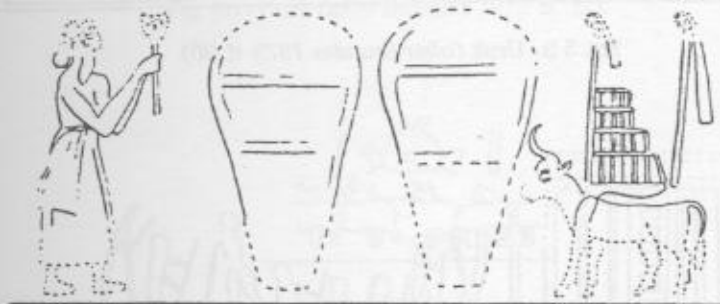Fig. 4 b - Uruk: Heinrich Kleinfunde tf. 18 b *(after Amiet 1980: no. 648)*.
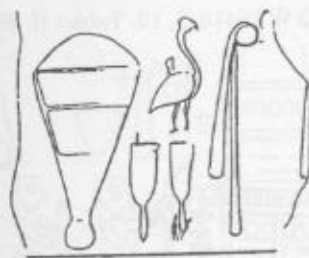
Fig. 4 c - Uruk *(after Amiet 1980: no. 652)*.

Fig. 4 d - Uruk: UVB 7, tf. 25e *(after Amiet 1980: no. 650)*.

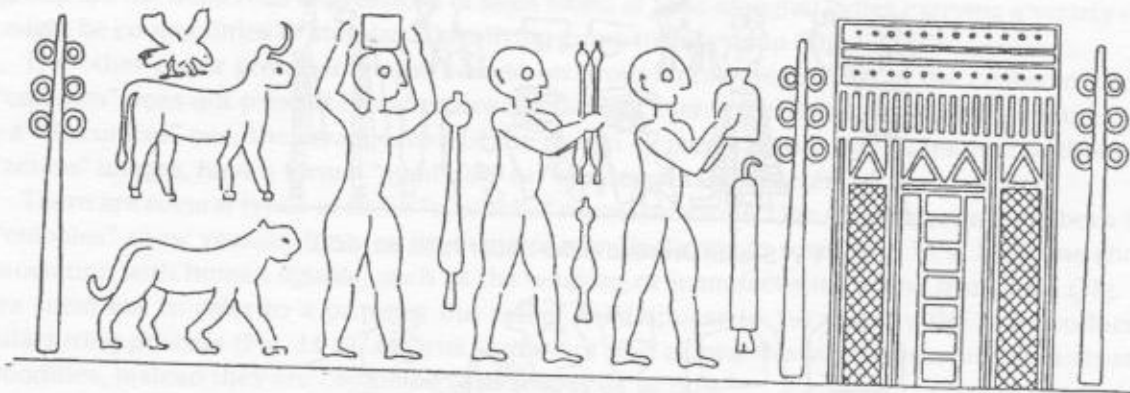Fig. 4 e - Uruk: Falkenstein ATU I tf. 71, no. 654 *(after Amiet 1980: no. 193)*.

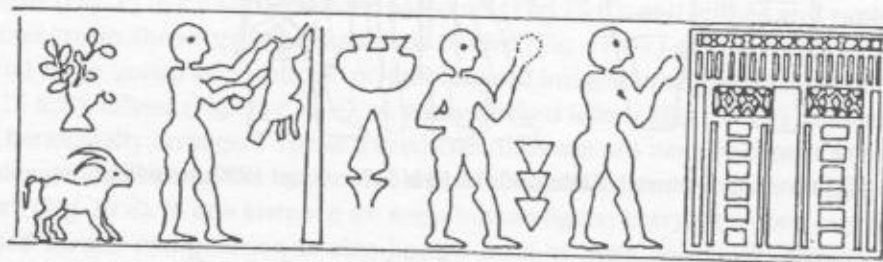Fig. 5 a - Uruk *(after Boehmer UVB 26/27 (1972) pg. 71 g)*.

Fig. 5 b - Uruk *(after Brandes 1979: tf. 30)*.

Fig. 5 c - Uruk: UVB 16 (1960) tf. 26 i; 31 a-f; p. 53 W 19410, 5, 12. Tablet tf. 30 level IVa *(after Amiet 1980: pl. 13 bis E)*.

Fig. 5 d - Tell Billa *(after Amiet 1980: no. 656)*.

Fig. 6a - Uruk: UVB 20 1964 pl. 26f. *(after Amiet 1980: no. 1604).*

Fig. 6b - Uruk *(after Brandes 1979: tf. 32).*

Fig. 6c - Uruk *(after Amiet 1980: no. 186).*

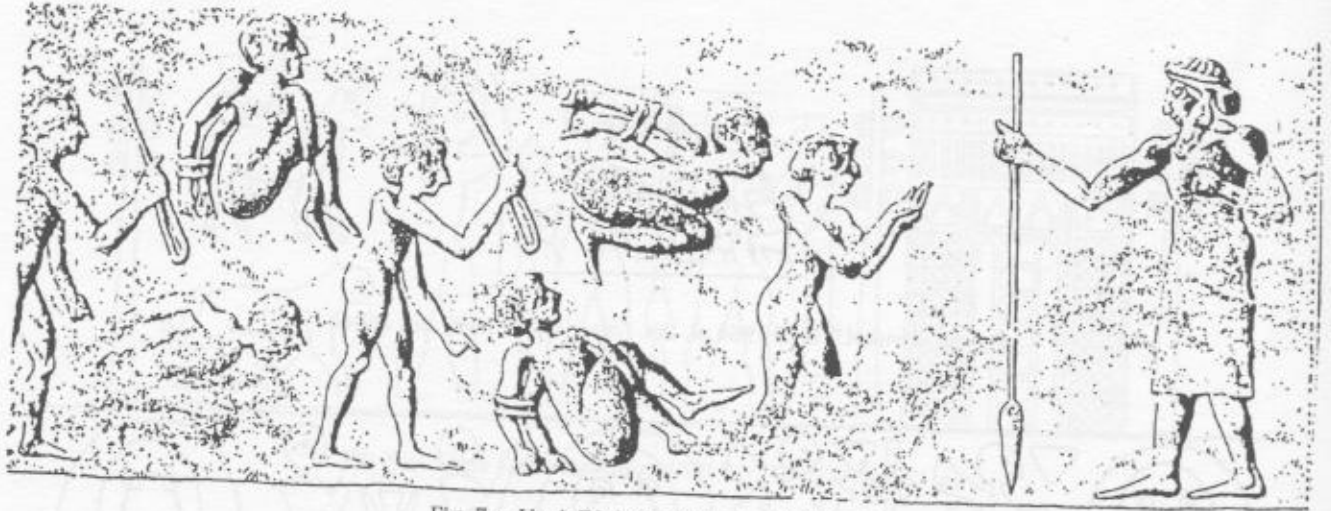Fig. 6d - Jemdet Nasr (?): Goff and Buchanan 1956 *(after Amiet 1980: pl. 48 bis a).*
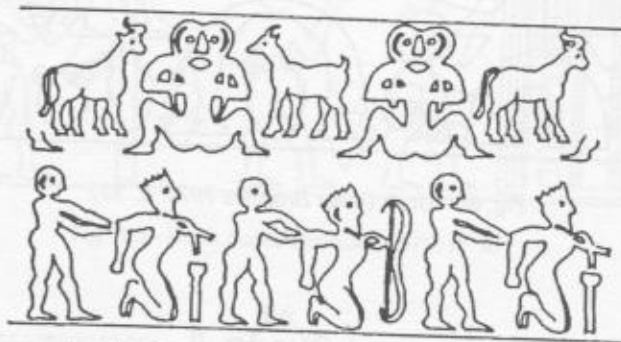
Fig. 7a - Uruk IV *(after Brandes 1979: tf. 1)*.

Fig. 7b - Uruk IV *(after Brandes 1979: tf. 13)*.

Fig. 7c - Uruk IV *(after Brandes 1979: tf. 12)*.
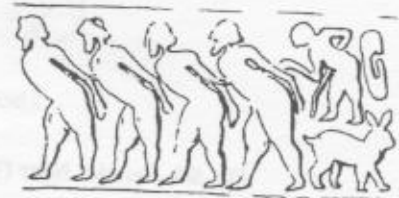

Fig. 7d - Susa *(after Amiet 1972: no. 695)*.

Fig. 7e - Susa *(after Amiet 1972: no. 683)*.

Fig. 8a - Susa *(after Amiet 1972: no. 674).*
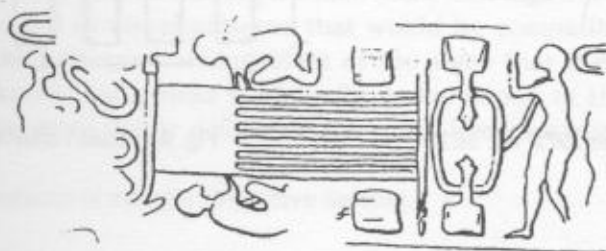

Fig. 8b - Susa *(after Amiet 1972: no. 673).*

Fig. 8c - Susa *(after Amiet 1972: no. 646).*

Fig. 8d - Susa *(after Amiet 1972: no. 641).*

Fig. 8e - Susa *(after Amiet 1972: no. 665).*

Fig. 9a - Susa *(after Amiet 1972: no. 663).*

Fig. 9b - Susa *(after Amiet 1972: no. 660).*

Fig. 10 - Susa *(after Amiet 1972: no. 621).*

Fig. 11 - Susa *(after Amiet 1972: no. 614).*

Fig. 12 a - Susa *(after Amiet 1972: no. 622).*

Fig. 12 b - Susa *(after Amiet 1972: no. 678).*

both "writing" and "picturing" systems of representation shared many features suggesting that the mind of the artist and the mind of the scribe were at least in some aspects two facets of a larger system of representation.

Among the fundamental principles that Green has defined as characteristic of the proto-cuneiform script are:

1) the sign is clearly legible without extraneous elaboration that would obscure its immediate recognition.

2) the sign appears in each instance essentially the same although there is certainly a range in graphic variation. Any significant graphic variation would mark a change in conventional meaning.

3) the signs are arranged in visual patterns that would be compatible with the transmission of verbal messages. It is in the patterned arrangement of the signs that the structure of the system of notation is revealed. We know that syntax is virtually undeveloped in the earliest proto-cuneiform inscriptions and becomes far more rigidly defined as the script becomes ever more capable of recording natural language.

4) the signs appear outside of strictly depictive setting.

These formal visual features of proto-cuneiform script can help us to understand some of the formal qualities of the structure of glyptic images used in the proto-literate period.

1. Legibility

In the glyptic imagery of the proto-literate period, the prime importance of legibility can be observed both on the level of individual design elements which can always be clearly and easily distinguished even when combined, and on the level of composition in which individual design elements are evenly spaced to give each equal emphasis on a neutral ground. There is rarely overlapping unless it is clearly meant to be understood as conjoining. This feature stands clear opposition to the principles that determined the composition of the glyptic imagery of the following Early Dynastic period[44].

2. Standardization

In the script there is a narrow range of graphic variation in individual signs. Any significant graphic variation would mark a change in conventional meaning. This is also true of the design elements in the glyptic art. There is only a slight range in the graphic presentation of any design elements; and all of the distinguishing features are present regardless of the quality of execution.

3. Syntax

In the inscriptions, signs are arranged in visual patterns that would be compatible with the transmission of verbal messages. Unlike the first two formal features that are shared by both the text and glyptic images, it is not the verbal message that governs the organization of the design elements. However, a parallel principle does seem to hold. Design elements are arranged according to patterns that are compatible with the clear transmission of various types of visual messages. Such a message might be: procession delivers commodity to temple on specific occasion.

4. The last point, that in systems of written script, signs appear outside of strictly depictive setting, does not apply to all glyptic imagery. It applies to those images that do not show "action" but rather present design elements in serial or heraldic relations. But unlike in the script, one cannot assume the possibility that there was a transfer of meaning to natural language[45].

It is also relevant that the core images of an "action" scene are frequently modified or expanded by design elements that are not arranged according to principles of visual messages but are either visual lists or serve to otherwise modify other images, acting therefore in the capacity as a determinative. These design elements are not meant to be understood as part of the core depictive message, but rather are added to impart additional information (e.g. Fig. 2 b in the series of objects above the procession). Often

Fig. 13 a - Susa *(after Amiet 1972: no. 712).*

Fig. 13 b - Susa *(after Amiet 1972: no. 703).*

Fig. 13 c - Susa *(after Amiet 1972: no. 711).*

Fig. 13 d - Susa *(after Amiet 1972: no. 710).*

Fig. 13 e - Susa *(after Amiet 1972: no. 706).*

Fig. 13 f - Susa *(after Amiet 1972: no. 708).*

such design elements will be "slotted" one for the other within a depictive setting (compare Figs. 5 a and 5 b)[46]. One type of plant replaced with another, or divine symbols, or commodity type, or vessel type.

Through this comparison with the structure of the earliest texts, I want to suggest that the "mixed" nature of the visual imagery can be thought of as parallel to the "mixed" nature of the proto-cuneiform script. Some design elements act iconically through resemblance much like a pictograph/ideogram (Fig. 2 a). Others seems to be more like logograms in which they are an abstract symbol for a thing/word (Fig. 5 a). Others seem to be more like determinatives, slotted in one for the other (Fig. 13 a-f or Fig. 17 b, c).

In addition to these formal features in which the presentation and the organization of the glyptic imagery can be seen in some ways comparable to the script, there is undeniable similarity in the appearance of some signs and some design elements used in glyptic imagery. Obviously, since we cannot read these signs on the tablets, it is impossible to speculate on whether they could have the same meaning in both systems, but in the case of the frontal bulls head[47], or divine symbols[48], or the typology of vessels[49], the similarity cannot be overlooked[50].

CONCLUDING REMARKS

Having compared the formal structure of proto-cuneiform texts and proto-literate glyptic images, we can return to function of the imagery in the economic administration. What, if anything could they have contributed to the administrative system in which they are used? Are they really the visual equivalent of names, of signatures? It seems in fact that the one topic that the seal imagery does not address is name. We have representations of different types of officials, the priest/king, acolytes,
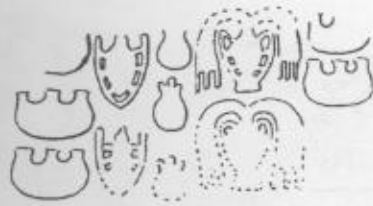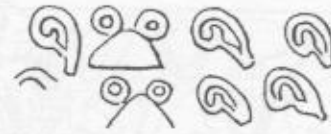
Fig. 14 a - Susa *(after Amiet 1972: no. 629)*.   Fig. 14 b - Susa *(after Amiet 1972: no. 713)*.

supervisors and personal workers. They are all clearly distinguished both by attire and by posture but they are treated as generic types and are not differentiated.

Before the administrative role of the seals can be understood in the proto-literate period, we must have a clearer understanding of the scope and the objectives of the administrative processes. This seems to be a very difficult thing to know. It is in many ways contingent on our understanding of the structure of the Uruk "state" and the fundamental purpose of the administration. From the evidence we have, it is possible to suggest that an interrelated if not integrated administrative system was widespread throughout greater Mesopotamia.

The type of administration envisioned here is one that was concerned with a small but extremely important part of the economy, the portion that was of interest to the central authority. Further, the glyptic imagery suggests that the most commonly occurring themes, those of rituals or activities of production were all bound together. All of these economic functions must have been extremely important not only to the religious life but also to at least a significant portion of the economic life of the Late Uruk state.

In such a context, images could be indicating a particular occasion and hence the time and the particular destination of goods[51]. Images of production show us in quite specific terms what was produced and what the social relations of production were. Could these be the production of goods that were given at time of ritual celebrations? Or are they goods that were given in exchange for raw materials? Images that do not refer to actual events are more difficult to interpret. Many seem to refer to particular commodities or combinations of commodities: textiles, vessels, caprids for textiles, caprids for milk, caprids for meat/sacrifice. Others might flag social groups. The emblematic groups are often modified either by vessels or by symbols whose meanings are lost to us; perhaps they are designations of cities or production groups or other corporate entities.

A literal reading of these images will always lie beyond our reach, just as a literal reading of the archaic texts. But I believe that they must be approached together both because they were invented together, and because they were used together in the same administrative system. These images somehow contributed to the administration of the economy in a way that augmented the inscriptions. When individual seal ownership becomes important, during the later part of the Early Dynastic I period, is the point when names were added to the seal imagery through the use of proto-cuneiform inscription. It is also at that point that the large number of themes so typical of the proto-literate period are replaced by the undifferentiated and illegible theme of animal combat.

As important as reading these laconic documents, is what they can tell us about the social and indeed cognitive habits of ancient humanity. Not only do we have the invention of writing at this moment, but we have the invention of what Frankfort has called "action" art. Before this time, much of the material culture that we define as "art" is essentially the residue of ritual or ceremonial activity or it served as status markers within the social hierarchy. The art of the proto-literate period, both on the seals and in other media records for us (as it did for its original audience) status and ritual, but unlike the "art" of earlier periods, it does not do so directly. What images begin to do for the first time was to narrate social relations and social behavior; through illustration, imagery communicated social norms

Fig. 15 a - Uruk IVa *(after Amiet 1980: 171)*.

Fig. 15 b - Uruk IVa: Kleinfunde tf. 15 l *(after Amiet 1980: 175)*.

Fig. 15 c - Uruk IVa: Kleinfunde tf. 15 k *(after Amiet 1980: 173)*.

Fig. 15 d - Susa *(after Amiet 1972: 511)*.

and it extended ritual. It stood outside of the event; it conveyed message through time and space that was clear to all who were literate in the visual system.

It has long been noted that one of the features that accompanies the appearance of the "state" is the occurrence of this kind of representation. At least in greater Mesopotamia, we see the representation of ever more elaborate and detailed and differentiated events and relationships. Both writing and visual narration as systems of symbolizing were invented in the same crucible. Both were the externalization and the concretization of information and both were tools of social control.

I am exploring in more general terms the ways in which these two modes of symbolic expression, textual and visual, were related. My investigation of this early material suggests that there was a strong structural, contextual and thematic linkage between visual works of "art" and "written" texts and that these two modes of expression stood in opposition to spoken communications, in particular to dialogue, and to ritual or other acts of physical communication. Implicit in such a view is an explanation for the tremendous thematic variety that characterizes the proto-literate glyptic corpus, a variety that rapidly constricts following the collapse of the proto-literate social economic organization and the re-alignment into what we know as the Early Dynastic city states.

Fig. 16a - Susa *(after Amiet 1972: 561).*

Fig. 16b - Susa *(after Amiet 1972: 536).*

Fig. 16c - Susa *(after Amiet 1972: 534).*

Fig. 16d - Uruk *(after Amiet 1980: 1661).*

Fig. 16e - Susa *(after Amiet 1972: 491).*

Fig. 16f - Uruk *(after Brandes 1979: tf. 15).*

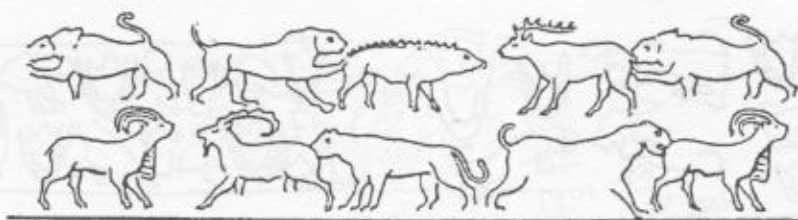Fig. 16g - Uruk *(after Brandes 1979: tf. 16).*

Fig. 17a - Uruk IV; UVB 2 p. 42 abb. 32. UVB 5 tf. 24 e, Niv. IV *(after Amiet 1980: 182).*

Fig. 17b - Uruk; Red Temple: UVB 5 tf. 24a *(after Amiet 1980: 176).*

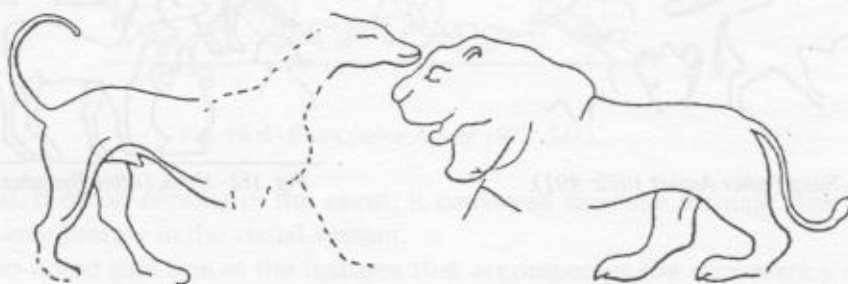Fig. 17c - Uruk; Anu Ziggurat; UVB 9 tf. 30e *(after Amiet 1980: 224).*

Fig. 18a - Uruk; Limestone Temple: UVB 5 tf. 25f *(after Amiet 1980: 178).*

Fig. 18b - Uruk IV: UVB 5, tf. 24c. level 4 *(after Amiet 1980: 177).*
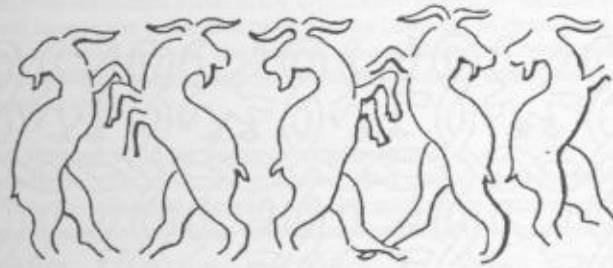
Fig. 19a - Susa *(after Amiet 1972: 464)*.

Fig. 19b - Uruk IV: UVB 5 tf.26f *(after Amiet 1980: 196B)*.

Fig. 19c - Uruk IV: Lenzen ZA 15 tf. 4 abb 11
(after Amiet 1980: 197).
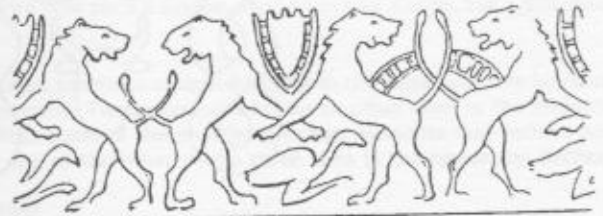
Fig. 19d - Uruk; Limestone Temple: UVB 5 tf. 26b
(after Amiet 1980: 199).

Fig. 19e - Susa *(after Amiet 1972: 478)*.

Fig. 19g - Susa *(after Amiet 1972: 475)*.

Fig. 19f - Uruk: UVB 16 1960 tf 26g; 30 a-d; p. 50:
W 19421 a,b *(after Amiet 1980: pl. 13 bis L)*.

Fig. 19h - Uruk; Red Temple: UVB 5 tf. 22d. Lenzen ZA 15 tf.
4 abb. 9 *(after Amiet 1980: 201)*.

Fig. 20a - Uruk IV *(after Brandes 1979: tf. 28).*

Fig. 20b - Uruk IV *(after Brandes 1979: tf. 29).*

Fig. 20c - Susa *(after Amiet 1972: 488).*

1 This is a rewritten version of the paper presented at the conference. I am grateful to the organizers for their invitation and for their patience. It has benefitted from comments made at the symposium as well as remarks by the editors.

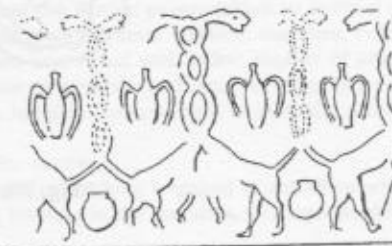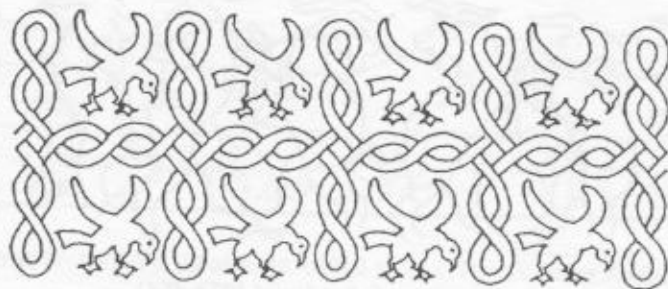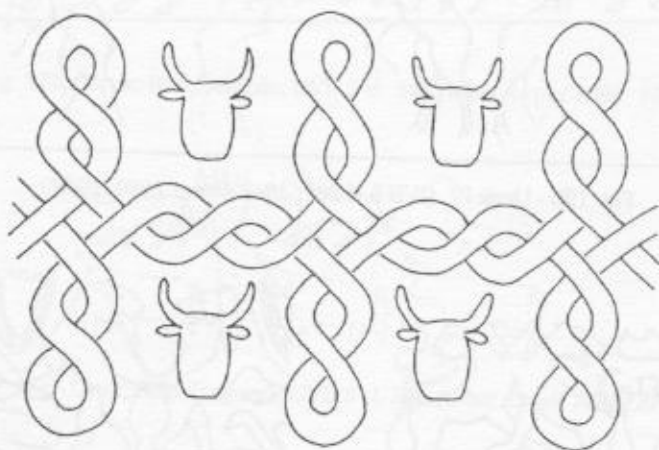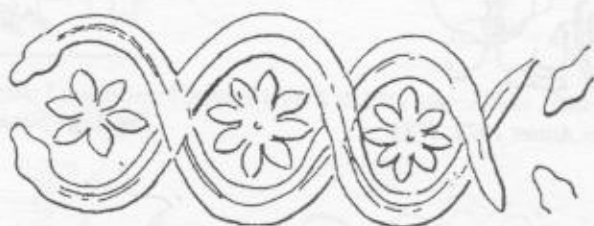2 The term "proto-literate" is used here in the sense first proposed by Delougaz to denote the cultural horizon equivalent to the level VI through III in the Eanna sounding at Uruk. The general geographical term "greater Mesooptamia" embraces southern Mesopotamia, Khuzistan, and those sites in Syria and northern Mesopotama which were, judging by their material culture, closely associated with the southern sites.

3 SCHMANDT-BESSERAT 1992.

4 See NISSEN, DAMEROV AND ENGLUND 1990, pp. 220-1 for a selective bibliography.

5 The earliest impressions of seals on clay are know from the Halaf period at Arpachiyah. Arguing from the criterion of discernable differentation, both the shape of the seal and the number of impressions on those flat, round or oblong "documents" may have contained information about number and commodity (or subject). For illustrations see VON WICKEDE 1990.

6 The symposium on seals and sealings held in Chicago in 1975 initiated the current discussion of this subject. GIBSON AND BIGGS 1977. Others who have tackled this problem in the early periods are LE BRUN AND VALLAT 1978; SHENDGE 1983; AMIET 1985; ALIZADEH 1988; Rothman this volume.

7 NISSEN 1977.

8 For example, LE BRUN AND VALLAT 1978; ROTHMAN 1988; ALIZADEH 1988.

9 BRANDES 1979, tf. 25, 26, 27, 28, opp. 29 illustrates separate seal images that are virtually indistinguishable. These seals belong to Nissen's complex category. By Nissen's reasoning, these seals would have belonged to the same individual.

10 WINTER 1987, p. 81.

11 RENGER 1977, p. 77.

12 Although as one might expect, it is possible to discern some instances of consistent patterns linking imagery and seal owner or user. For example, Winter has shown that there exist correlations between the rank of official and the content of seal imagery in the Ur III period. WINTER 1987.

13 However, it seems that personal names were represented in the proto-cuneiform script. See NISSEN, DAMEROV AND ENGLUND 1990, pp. 66-7 for a discussion of the use of personal names in the archaic script.

14 This system would work in essentially the same way as the Neo-Sumerian seals in which rank was flagged through imagery, although there is never the rigorous consistency in the Proto-literate schematic seals that one finds in the seals of the Neo-Sumerian period.

15 We can suppose from the lexical lists that the Proto-Sumerians were interested in systematic correlations. Lists of fishes see CIVIL 1961; birds see CIVIL AND BIGGS 1966; list of professions and titles NISSEN, DAMEROV AND ENGLUND 1990, pp. 153-7. FALKENSTEIN 1936, pp. 44-47. MSL XII 4-24.

16 BRANDES 1979; 1980a; 1986. He did not, however, attempt to explore how such a system would work as a code. For a discussion of these issues see the review by COLLON 1981/2.

17 DITTMANN 1986.

18 Because, following Nissen, his interest is in hierarchy of early states, Dittmann assigned a place in the administrative hierarchy to each image and then counted the number of tiers in the hierarchy. The assignment to one or other level in the hierarchy depended on the presence or absence of design elements. While some of the modifying design elements may indeed have reflected status, others seem arbitrary in their assignment to one or the other of the three tiers in the hierarchy. DITTMANN 1986, pp. 337-38.

19 For a discussion and bibliography see WRIGHT 1977 and WRIGHT 1982.

20 ALGAZE 1989.

21 Thanks to the tireless work of Pierre Amiet, the corpus of glyptic imagery from Susa has long been fully published in AMIET 1972.

22 Defined in archaeological terms as levels 19 to 17B in the Acropole sounding. See LE BRUN 1971.

23 AMIET 1972; CHARVÁT 1988.

24 The analysis presented here does not attempt to account for the co-occurence of the impressions of different seals on these documents. Dittmann charts the patterns of occurence but fails to detect any convincing pattern.

25 STROMMENGER 1980; VAN DRIEL 1982; 1983; COLLON AND READE 1983; DELOUGAZ AND KANTOR 1972. There is striking homogeneity in the administrative systems used in these "colonial" sites, while the administrative system found at Uruk has some different features. For one attempt to consider the function of the sealings from Uruk see RIGILLO 1991.

26 What I include in this number are glyptic exemplars contemporary with Levels VI through III at the Eanna sounding at Uruk. According to my count of published examples there are 161 images from Uruk; 14 from Jemdet Nasr; 6 from Habuba Kibira; 9 from Tell Kannas; 43 from Jebel Aruda; 220 from Susa; 4 from Choga Mish; and 2 from Nineveh. When all of the material is published this number might be perhaps doubled. What I exclude from that sample are the proto-elamite images from Susa and from the sites on the Iranian highland and those from the Seal Impression Strata levels 8-4 at Ur. The same general functional and structural argument can, in my opinion, be applied to both of these groups of seal images.

27 The themes I have defined for the seal imagery from Uruk include feeding the flocks; presentation to Inanna; procession to temple; boat approaching temple; ritual at temple; herd to temple; animal bier; workers; warfare; marshes; twist; animal and object; animal file; heraldic animals; symbols. For Susa the major themes are: ritual with ruler; master of animals; combat; prisoners; hunting; herding; figures with goods/standards; transportation of goods; symbols; weaving; figures and vessels; lists; human birthing; animal birthing; working in the fields; animal files; heraldic composition of animal; composite animals; snake interlace; animal and object.

28 FRANKFORT 1939, p. 16. He divides these further into ritual scenes and secular scenes.

29 Other themes less obviously refer to ritual or ceremonies but do show the priest/king engaged in activities which must also have been of symbolic importance. In one example we see the priest/king hunting in the marshes, perhaps an efficacious event that was somehow associated with the economy.

30 For a discussion of the iconography of the vase see HANSEN 1976.

31 BRANDES 1986, p. 55 argues that such seal imagery directly copies the Warka vase. A striking characteristic of the art of the proto-literate period, first observed by FRANKFORT 1939, p. 23, is the homogeneity of the imagery across media in this period. I intend to explore the significance of this relationship in a future study.
32 Among the published examples, this theme of procession overlaps with the previously considered theme in only in shared emphasis on the girdle of the priest king as seen on the vase itself.
33 LLOYD AND SAFAR 1943.
34 This could be the divine sign for Enki, if the assigned value of sign 421 as Eridu in GREEN AND NISSEN 1987 is correct. The procession of the boat always approaches the temple with this ringed standard. The association with water reinforces such an interpretation.
35 FRANKFORT 1939, p. 22 suggests that these scenes have what he terms an "historical" character.
36 The fact that the "colonies" are indeed contemporary with Uruk IV is finally proven by the close analysis of seal impression which allows us to be unequivocal in our opinion that Habuba Kibira; Susa level 18-17 and Uruk IV are contemporary regardless of the fact that neither Habuba Kibira nor Susa have proto-cuneiform script at that point. See SÜRENHAGEN 1986 for another opinion.
37 PITTMAN 1993.
38 These are images that DITTMANN 1986 assigned to different sectors of the economy, an interpretation that is generally consistent with the one offered here, excepting the variable of hierarchy.
39 Following Nissen, DITTMANN 1986, pp. 338-39 includes these in a group that would denote the lowest level of the administrative hierarchy.
40 This enigmatic form could denote either a fence or a neck stock used to control animals.
41 GREEN 1981, p. 346. I rely entirely on the work of other scholars for the origin and early development of the proto-cuneiform script. In particular the positions elaborated by POWELL 1981 and GREEN 1981 are central to my understanding.
42 POWELL 1981, pp. 421-23 for a discussion of the conceptual background of the proto-cuneiform script.
43 GREEN 1981, p. 356.
44 For example see AMIET 1980.
45 Although as GELB 1963, p. 67 shows that is the case in the heraldic device for the towns of Oxford, Berlin and Munich. In all three cases there is a phonetic transfer involved in the emblematic devices.
46 HARRIS 1986, pp. 145-46; p. 155 for a discussion of "slotting" in writing systems.
47 GREEN AND NISSEN 1987: sign no. 29 and 30 compare to Fig. 20 b.
48 GREEN AND NISSEN 1987: sign no. 375 which is the gate post of Inanna see Fig. 6 d.
49 GREEN AND NISSEN 1987: sign nos. 88; 93-124; 190 are vessel types that are used as design elements.
50 Precisely the same relationship exists between the designs element used in the glazed steatite seals and the proto-elamite system of writing. See PITTMAN 1990.
51 This is diametrically opposed to the interpretation offered by LE BRUN AND VALLAT 1978. Their analysis which is based on the assumptions developed by NISSEN 1977 posits a market economy in which individuals are documenting private transactions through the administrative tools of the hollow clay balls and numerical tablets.

ABBREVIATIONS

ATU	Archaische Texte aus Uruk, Leipzig.
MDAI	*Mémoires de la Délégation Archéologique en Iran*
UVB	Deutsche Forschungsgemeinschaft, Berlin. Vorläufiger Bericht über die von der Notgemeinschaft der deutschen Wissenschaft in Uruk-Warka unternommenen Ausgrabungen, Berlin
ZA	Zeitschrift für Assyriologie und verwandte Gebiete, Leipzig.

BIBLIOGRAPHY

ADAMS, R.McC. 1966.
The Evolution of Urban Society, Chicago.

ALGAZE G. 1989.
The Uruk Expansion: Cross-cultural Exchange in Early Mesopotamian Civilization, in "Current Anthropology", 30, pp. 571-607.

ALIZADEH, A. 1988.
Socio-Economic Complexity in Southwestern Iran during the Fifth and Fourth Millennia B.C.: The Evidence from Tall-i Bakun A, in "Iran", 26, pp. 17-34.

AMIET, P. 1972.
Glyptique susienne, des origines à l'époque des Perses Achéménides, in "MDAI", 43, 2 vols., Paris.
— 1980.
La glyptique mésopotamienne archaïque, 2nd ed., Paris.
— 1985.
A propos de l'usage et de l'iconographie des sceaux à Suse, in "Paléorient", 11, no. 2, pp. 37-38.

BRANDES, M.K. 1979.
Siegelabrollungen aus den archaischen Bauschichten in Uruk-Warka, Freiburg Altorientalische Studien, vol. 3, Wiesbaden.
—1980a.
Modelage et imprimerie aux débuts de l'écriture en Mésopotamie, in "Akkadica", 18, pp. 1-30.
— 1980b.
Waffenkammer — ein neues Siegelthema der Uruk-Zeit, Forschungen und Funde: Festschrift Bernhard Neutsch, pp. 77-87, Innsbruck.
—1986.
Commemorative Seals?, in KELLY BUCCELLATI, M., (ed. in collaboration with P. Matthiae and M. van Loon), *Insight through Images: Studies in Honor of Edith Porada*, in "Bibliotheca Mesopotamica", 21, pp. 51-56, Malibu, Calif.

CHARVÁT, P. 1988.
Archaeology and Social History: The Susa Sealings, ca. 4000-2350 B.C., in "Paléorient", 14, pp. 57-63.

COLLON, D. 1981-82.
Review of M.K. Brandes 1979, in "Archiv für Orientforschung", 28, pp. 177-181.

COLLON, D., READE, J. 1983.
Archaic Nineveh, in "Baghdader Mitteilungen", 14, pp. 33-41.

COULMAS, F. 1989.
The Writing Systems of the World, Oxford.

DELOUGAZ, P. and KANTOR, H.J.1969.
New Light on the Emergence of Civilization in the Near East, in "UNESCO Courier" (November), pp. 22-28.
—1972.
New Evidence for the Prehistoric and Protoliterate Culture Development of Khuzestan., in "The Memorial Volume of the Vth International Congress of Iranian Art and Archaeology", vol. 1, pp.14-33, Tehran.

DITTMANN, R. 1986.
Seals, Sealings and Tablets: Thoughts on the Changing Pattern of Administrative Control from the Late-Uruk to the Proto-Elamite Period at Susa, in FINKBEINER, U., RÖLLIG, W. (eds.), *Gamdat Nasr: Period or Regional Style?*, pp. 332-366, Wiesbaden.

DOLLFUS, G. 1973.
Cachets en terre cuite de Djaffarabad et 'cachets' apparentées, in "Revue d'Assyriologie", 67, pp. 1-19.

FALKENSTEIN, A. 1936.
Archaische Texte aus Uruk. Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka, band 2, Berlin.

FINKBEINER, U., RÖLLIG, W. eds. 1986.
Gamdat Nasr: Period or Regional Style?, Beihefte zum Tübinger Atlas des Vorderen Orients, Reihe B, no. 62, Wiesbaden.

FRANKFORT, H. 1939.
Cylinder Seals: A Documentary Essay on the Art and Religion of the Ancient Near East, London.
—1955.
Stratified Cylinder Seals from the Diyala Region, in "Oriental Institute Publications", 72, Chicago.

GELB, I.J. 1963.
A Study of Writing: The Foundations of Grammatology, rev. ed. Chicago, (first published 1952).
—1980.
Principles of Writing Systems within the Frame of Visual Communciation, in KOLERS, P.A., WROLSTAD, M.E., BOUMA, H. (eds.), *Processing of Visible Language*, 2, pp. 7-24, New York.

GIBSON, MC G., BIGGS, R.D. (eds.) 1977
Seals and Sealing in the Ancient Near East, in "Bibliotheca Mesopotamica", 6, Malibu.

GOFF, B.L., BUCHANAN, B. 1956
A Tablet of the Uruk Period in the Goucher College Collection, in "Journal of Near Eastern Studies", 15, pp. 231-235.

GREEN, M.W. 1981.
The Construction and Implementation of the Cuneiform Writing System, in "Visible Language", 153, pp. 45-72.

GREEN, M.W., NISSEN, H.J. 1987.
Zeichenliste der Archaischen Texte aus Uruk, Ausgrabungen der Deutschen Forschungsgemeinschaft in Uruk-Warka , vol. 11, ATU, vol. 2, Berlin.

HANSEN, D.P. 1976.
Frühsumerishce und Frühdynastiche Flachbildekunst, in ORTHMANN, W. (ed.), *Propyleän Kunstgeschichte*, vol. 14., *Der Alte Orient*.

HARRIS, R. 1986.
The Origin of Writing, La Salle, Illinois.

JOHNSON, G. 1978.
Information Sources and the Development of Decision-making Organizations, in REDMAN C.L., *et alii*, (eds.), *Social Archaeology: Beyond Subsistence and Dating*, pp. 87-122, New York.

KANTOR, H.J. 1976.
The Excavations at Choga Mish, 1974-75, in BAGHERZADEH, F.B., "Proceedings of the IVth Annual Symposium on Archaeological Research in Iran", pp. 23-41, Tehran.
— n.d.
Excavations at Choga Mish, in "The Oriental Institute Annual Report for 1974-75", pp. 17-26.

LANGDON, S. 1931.
New Texts from Jemdet Nasr, in "Journal of the Royal Asiatic Society ", pp. 837-844.

LE BRUN, A. 1971
Recherches stratigraphiques à l'Acropole de Suse, 1969-1971, in "Cahiers de la Délégation Archéologique Française en Iran", 1, pp. 163-216.
— 1978a
La glyptique du niveau 17B de l'Acropole (Campagne de 1972), in "Cahiers de la Délégation Archéologique Française en Iran" ,8, pp. 61-79.
—1978b.
Le niveau 17B de l'Acropole de Suse (Campagne de 1972), "Cahiers de la Délégation Archéologique Française en Iran", 9, pp. 57-98.
—1985.
Le niveau 18 de l'Acropole de Suse. Mémoires d'argile, mémoire du temps, in "Paléorient", 11, no.2, pp. 31-36.

LE BRUN, A., VALLAT, F. 1978.
L'origine de l'écriture à Suse, in "Cahiers de la Délégation Archéologique Française en Iran", 8, pp.11-59.

LIBERMANN, S. 1980.
Of Clay Pebbles, Hollow Clay Balls, and Writing: A Sumerian View, in "American Journal of Archaeology", 84, pp. 339-358.

LLOYD, S., SAFAR, F. 1943.
Tell Uqair Excavations by the Iraqi Government Directorate of Antiquities in 1940 and 1941, in "Journal of Near Eastern Studies", 2, pp. 131-158.

NISSEN, H.J. 1976.
Zur Frage der Arbeitorganisation in Babylonien während der Späturuk Zeit, in "Acta Antiqua Hungerica", 22, pp. 5-14.
— 1977.
Aspects of the Development of Early Cylinder Seals, in GIBSON, MC G., BIGGS, R.D. (eds.), *Seals and Sealing in the Ancient Near East,* in "Bibliotheca Mesopotamica", 6, pp. 15-23, Malibu.
— 1986.
The Development of Writing and Glyptic Art, in FINKBEINER, U., RÖLLIG, W. (eds.), *Gamdat Nasr: Period or Regional Style?,* Beihefte zum Tübinger Atlas des Vorderen Orients, Reihe B, no.62, pp. 316-331, Wiesbaden.

NISSEN, H.J., DAMEROV, P., ENGLUND, R.K. 1990.
Frühe Schrift und Techniken der Wirtschaftsverwaltung im alten Vorderen Orient, Berlin.

PITTMAN, H. 1987
Ancient Art in Miniature, New York.
— 1990.
The Glazed Steatite Style: The Structure and Function of an Image System. (PhD. diss. Columbia University).
— 1993
Pictures of an Administration: the Late Uruk Scribe at Work, in FRANGIPANE, M., HAUPTMANN, H., LIVERANI, M., MATTHIAE, P., MELLINK, M. (eds)., *Between the Rivers and over the Mountains. Archaeologica Anatolica et Mesopotamica Alba Palmieri Dedicata,* pp. 235-245, Università "La Sapienza", Roma.

POWELL, M. 1981.
Three Problems in the History of Cuneiform Writing: Origins, Direction of Script, Literacy, in "Visible Language", 15, pp. 419-440.

RATHJE, W.L. 1977.
New Tricks for Old Seals: A Progress Report, in GIBSON, MC G., BIGGS, R.D. (eds.), *Seals and Sealing in the Ancient Near East*, in "Bibliotheca Mesopotamica", 6, Malibu, pp. 25-32.

RENGER, J. 1977.
Legal Aspects of Sealing in Ancient Mesopotamia, in GIBSON, MC G., BIGGS, R.D. (eds.), *Seals and Sealing in the Ancient Near East*, in "Bibliotheca Mesopotamica", 6, Malibu, pp. 75-88.

RIGILLO, M.T. 1991.
Sealing Systems on Uruk Doors, in "Baghdader Mitteilungen", 22, pp.175-222.

ROTHMAN, M. 1988.
Centralization, Administration, and Function at Fourth Millennium, B.C. Tepe Gawra, Northern Iraq, Ph. D. diss., University of Pennsylvania.

SAMPSON, G. 1985.
Writing Systems: A Linguistic Introduction, Stanford.

SCHMANDT-BESSERAT, D. 1992.
Before Writing. From Counting to Cuneiform, Austin.

SHENDGE, M.J. 1983.
The Use of Seals and the Invention of Writing, in "Journal of the Economic and Social History of the Orient", 26, pp.113-136.

STROMMENGER, E. 1980.
Habuba Kabira, Eine Stadt vor 5000 Jahren, Mainz am Rhein.

SORENHAGEN, D. 1986.
The Dry-Farming Belt: The Uruk Period and Subsequent Development, in WEISS, H. (ed.), *The Origins of Cities in Dry-Farming Syria and Mesopotamia in the Third Millennium B.C.*, pp. 7-43, Guilford, Connecticut.

VAN DRIEL, G. 1982.
Tablets from Jebel Aruda, in VAN DRIEL, G., *et alii* (eds.), *Zikir Sumin: Assyriological Studies Presented to F.R. Kraus*, pp. 12-25, Leiden.
— 1983
Jebel Aruda, the 1982 Season of Excavations, in "Akkadica", 33, pp.34-62.

VAN DRIEL, G., VAN DRIEL-MURRAY, C. 1979.
Jebel Aruda, 1977-78, in "Akkadica", 12, pp. 2-8.

WICKEDE, A. VON 1990.
Prähistorische Stempelglyptik in Vorderasiens, Berlin.

WINTER, I.J. 1986.
The King and the Cup: Iconography of the Royal Presentation Scene on Ur III Seals, in KELLY BUCCELLATI, M.

(ed. in collaboration with P. Matthiae and M. van Loon), *Insight through Images: Studies in Honor of Edith Porada*, in "Bibliotheca Mesopotamica", vol. 21, pp. 253-268, Malibu, Calif.
— 1987.
The Legitimation of Authority through Image and Legend: Seals Belonging to Officials in the Administrative Bureaucracy of the Ur III State, in Gibson, Mc G., Biggs, R.D. (eds.), *The Organization of Power: Aspects of Bureaucracy in the Ancient Near East*, "Studies in Ancient Oriental Civilizations", 46, pp. 69-93, Chicago.

Wright, H.T. 1977.
Recent Research on the Origin of the State, in "Annual Review of Anthropology", 6, pp.379-397.
—1982.
Prestate Political Formations, in Earle T. (ed.), *On the Evolution of Complex Societies: Essays in honor of Harry Hoijer*, pp. 41-77.

Zettler, R.
Sealings as Artifacts of Institutional Administration in Ancient Mesopotamia, in "Journal of Cuneiform Studies", 39, pp. 197-240.

RESPONSE

BY JUDITH WEINGARTEN

I should like to start with a brief consideration of the two glyptic groups, schematic and complex seals, which generally may be read as geometric and figurative seal imagery. Pittman quotes the distinction between the former cheap, possibly institutional seals, and the latter expensive, possibly individual seals, and (rightly I think) questions the underlying assumptions. Before discussing that, however, I would like to know more about how proto-literate schematic seals were used – for, if the contrast with figurative seals had any objective value, it ought to be reflected in sealing practices. At Tepe Gawra, for example (Rothman, M.S., elsewhere in this volume), we saw that an analysis of sealings could result in some clear functional distinctions between geometric and figurative seals ... though the interpretation of those differences might be open to dispute. There, in Phase 11, over 70 figurative seals but only four geometric seals stamped container - and door-sealings, surely not a chance distribution. So, the question arises: what did all the other geometric seals actually do? And can we probe further: did the 34 Tepe Gawra figurative seals that sealed jars differ in any visual or thematic way from the 40-odd figurative seals that sealed sacks and baskets? One does not expect an administrative open-and-shut case since each figurative seal stamped only a single sealing (how much simpler had a single figurative seal stamped 34 different jars); nonetheless, it is only by such analyses of actual seal use that we can hope to understand more objectively the different roles – and attached values – of seal imagery.

In evaluating complex versus schematic seals in the pre- and proto-literate periods, what bothers me is an implicit assumption that figurative seals, as the wave of the future, must have necessarily been more important then, at the time when both types of seals were in use. Because figurative seals are more visually interesting to us, were perhaps more expensive to fabricate[1], and we know that the future will (as a general rule) favour them, does not necessarily tell us how seal-users *at that time* would have regarded them. One may equally well imagine a tenacious regard for geometric motifs among certain groups, even among high-ranking individuals. It seems to me that the only way to avoid imposing our own aesthetic and historical values on the range of proto-literate glyptic imagery is to consider seal imagery in actual seal-use. I would therefore like to ask Pittman: does the material for such an analysis exist? Is it possible to study proto-literate sealings by thematic groups? Can we discern if figurative complex seals are actually performing different tasks from the schematic seals?

My second point is the use of the word 'narrative' to describe scenes on some figurative seals. If we define 'narrative' as the representation of specific events involving specific individuals[2], I would be astonished if any proto-literate seal was narrative in intent. Rather, they must display typical scenes: a typical procession, or type of ritual, or king receiving bound prisoners.

Indeed, in the absence of specific attributes or inscriptions, how could anyone – even of that time – relate the scenes to specific individuals or to real events? One wonders then, if it is not somewhat academic to ask if the king slaughtering glyptic prisoners is the king of Uruk or the king of Susa (discussion following Amiet's paper; he is a king doing what all, any and only kings do; as such, this imagery could easily migrate from town to town, without any necessary – indeed any possible – political consequences.

A final (perhaps deeply unfashionable) point: in our studies of seal use and sealing administration,

we are in some danger of ignoring, or at least pushing aside, the very probable magical significance of seal imagery. While we pay lip service to amuletic values, we tend to regard these as a property of the stone. What I am talking about rather is the magical property of the image, whereby the single scene on a seal not only stands (*pars pro toto*) for a whole sequence of events but actually – magically – primes and starts those events. In this sense, the glyptic scene causes its own completion: 'the whole is inevitably there'[3]. One thinks particularly of the 'colonial' seals and the list-scenes of manufactured goods and processes which Pittman discusses. Though necessarily confined to a single glyptic frame, I wonder if such scenes should not be regarded as intending the entire process, indeed triggering that process, rather than reporting a single phase of economic industry. Then, this process would include, too, the final act of sealing, which completes the activity illustrated on the seal. In this sense, one might say that the seal participates in its own imagery, a perhaps more fruitful way of thinking about the purpose of a seal – and here I rejoin Pittman – then as an arbitrary system for denoting individuals.

---

1   On the practical ambiguities of a 'cheapness versus expensiveness' argument, see WEINGARTEN, J. 1990, pp. 77-83.
2   Defined by KRAELING, C.H. 1957, p. 43, introducing a Symposium on the subject.
3   DEMETRACOPOULOU LEE, D. 1948, pp. 411-412.

BIBLIOGRAPHY

DEMETRACOPOULOU LEE, D. 1948.
Magic, Science and Religion, and Other Essays, pp. 411-412.

KRAELING, C.H. 1957.
Narration in Ancient Art, in "AJA", 61, p. 43.

WEINGARTEN, J. 1991.
The Sealing Structure of Karahöyük and some Administrative Links with Phaistos on Crete. (With an Appendix on the Sealings from Uronarti, in "Oriens Antiquus", 29, pp. 63-95.

DISCUSSION

PITTMAN

Some of those questions are easier to answer than others.

I'm a great believer in the work that is being done on seal function. I have written a dissertation in which I examine the administrative function of the major geometric group of seal images used in this period, namely the glazed steatite group. And I think that there are groups of material that we can do even further analysis on to show that geometric seals are indeed used for different functions that figurative seals. Certainly this is true for the glazed steatite type seals from Susa and Malyan and the piedmont where, with two or three exceptions, they are never used on tablets. They are used only to seal jars and doors, they are used for storage. That function stands in opposition to the function of the figural seals which are used to seal the proto-elamite tablets and are also used to seal containers as well.

There are, in my opinion, very few geometric seals in heartland Mesopotamia. In fact, I do not consider the pigtail ladies to be geometric or even the rows of drilled vessels. Both of these seal images represent something that exists in the world.

We certainly have a long and rich tradition of geometric seals in northern Mesopotamian and in Anatolia. If we look to more southern sites such as Tell es Sawwan and Wailly those are sites that have produced figural representations in the very earliest period. Perhaps there was from that very early period a greater interest in the south towards figural representation. Thus there is a difference between the north and the south. I don't think that it has to do with an interest in identifying individuals.

The problem of the 34 figural and the 34 individual representations – I am not quite sure how to deal with that. No one has convinced me what the significance is of multiple impressions. I am sure that there is a significance but given the nature of our sample, and given the ways in which this material is preserved for us, it is only when your have a situation like Arslantepe that you can say anything about numbers or the meaning of single versus multiple impressions.

What I am trying to accomplish in my line of argumentation is to release us from the notion that seals have to mean persons always. I don't know what they mean. It is certainly possible that they could in certain cases designate personal offices. But we always see every seal impression as defining and authorizing a separate authorizing person, and that is I think a concept which is not likely to be true in the Late Uruk period.

One of the points that I was trying to make is that figural representation of the proto-literate horizon is different from what we know from later periods. They are, in fact, almost like the text in that they are very clear, very easy to read, very distinct. If you know the glyptic of the ancient Near East, you know that at the end of this period, we move into a time when there are only two major scenes instead of more than a dozen. One is the combat scene among which it is impossible to distinguish, and the other is the banquet scene. And so I do not see the Uruk style or the Uruk figural expression as the wave of the future.

Your objection to the use of the term "narrative" is well taken. I do not understand these images as representations of specific events. I mean them as representations of repeated events that were, represented in a idealized and economical manner so that everyone who needed to understood what was going on. And their purpose is to show that this is the priest king, and that he has relation with specific people and with specific events.

The question of whether the priest king on the seals from Uruk is the same as the priest king on the seals from Susa – at least in my mind – has major implications for understanding the structure of the Late Uruk period. If we see this as a representation of the person (office) who is in charge of the Uruk polity we have an entirely different situation than if we see him as a representation of the person who is

in charge of Susa and the other colonies. Do they all have rulers that are represented in exactly the same way that the ruler of Uruk is represented?

And on that I think more work need to be done. But one of the functions of imagery – and we assume that it was an important function in the earlier periods – was to define boundaries. It was the define boundaries between people, between polities, between communities. One of the ways that you establish boundaries is to differentiate, and so I think one question is this: if you have two competing polities would they logically represented their ruler in exactly the same manner?

One of the ways that we can get at the relationships between the sites in the center and periphery of Mesopotamia is to look at the administrative system, and part of the administrative system is the images seen in the glyptic.

The last issue you raise is magic. I think that images can and might have been efficacious but I do not think that seal impressions being stored in archives were perceived of as magical. There are two things that I believe about seal impressions on administrative documents: I do not think that they are there for decoration and I do not believe that they were magically protecting anything. The seal impression are part of a practical administrative system. It is a complex system. They're not putting information into the seals that is not useful.

WEINGARTEN

When I brought up the possibility of a magical purpose, it was really to break the one-to-one interpretation of, for example, a picture of people working on a textile loom and the assumption that the seal must have belonged to the administrator of textile production. I would like to get away from (what seems to me) an extremely simplistic set of assumptions; but it is not a major point.

ALIZADEH

I am prepared to accept what Holly said with some modification. If "Greater Mesopotamia" is used as a geological/geographical designation, then Susiana may be included. But as a cultural designation it glosses over significant cultural differences between southern Mesopotamia and Susiana. But Holly's analysis of glyptic designs and imagery and the messages they relate is highly relevant to the study of cultural complexity.

In the late prehistoric period the repertoire of seal designs is limited, consisting of mostly geometric designs and simple scenes showing stylized animals and humans. In the Protoliterate period, concomitant with the emergence of the first states, there developed a complex repertoire of seal designs which included some motifs shared inter-regionally. Based on Holly's analysis, the inter-regional glyptic images may have been used as a vehicle for cross-cultural communication for regional integration of various independent polities.

PITTMAN

There are many people who are far more qualified to speak about the political structure of the Late Uruk period than I am and so I appreciate your objection and I hesitate to get into a discussion on it. The one think that I will say is that I do not agree that these seal images have "diffused" into the region. The imagery is not a single line on a pot nor it is a series of dots. It is a very specific, very complicated system of imagery that you do not see before Susa 19 level. It starts in the middle of the Uruk period and by the time we get to the Late Uruk period it is very specific and I think quite short lived. And we can see the fact that Habuba Kibira and Susa and Jebel Aruda and Uruk are sharing these images, and all are separate one from the other. The imagery is used, I think, more than any other evidence other than administrative evidence as the basis of the argument for the existence of "colonies" in the Late Uruk period, certainly along with the pottery. So I think that we have to respect the specificity of the iconography and the specificity of the style just as we respect the specificity of a tablet showing up in a context. We must deal with what that it means.

FIANDRA

Do you allow that some of these representations would be the "signature" of an individual person?

PITTMAN

I don't know how it would work. There are two or three seals of the Late Uruk period that have signs on them. Those might in fact be names. I don't deny the possibility any more than anything else. But I don't think that images exclusively denoted individuals.

FIANDRA

But how do you explain, for example, the seals which have an inscription and say "The seal of Addu, son of Asqudum"? That is a person and an official.

PITTMAN

I explained that a sealing is individualized through its relationship to an inscription, but if you think, for example, of the Early Dynastic combat scenes where in the Royal Cemetery for example only a small number of the combat scenes carved in lapis were inscribed. All of the seals are owned by individuals but there is no way to know who these individuals were both in antiquity and now unless they have an inscription associated with them.

SCHMANDT-BESSERAT

I will discuss the cylinder seal featuring the priest-king. It is noteworthy that, wherever such seals occur, be it at Uruk, Mesopotamia; Susa and Choga Mish, Persia; or Habuba Kabira, Syria; they are part of an administrative assemblage that includes clay cone mosaics, beveled-rim bowls, nose-lugged jars, complex tokens, envelopes and impressed tablets. These artifacts depict a bureaucracy: its lavish buildings; the leader and his paraphernalia of power; the administrative kit, including measures, counters, record keeping devices and seals. The context makes it clear that the significance of the seals was their role in economic control.

PITTMAN

I do not disagree with any of that and I am not saying that this isn't a system of control. It is absolutely a system of control. But what I am trying to do is to ask what role do the seal images play in this system of control. And I am suggesting that I do not see the administration as a system of control where everybody in the Uruk community is having to pass through all of these controls just to get breakfast. I am seeing it as a way of channeling goods to the centralized institution, and so it is only affecting a particular segment of the centralized institution. It is only dealing with a particular segment of the economy and of production and transportation of raw materials. The other thing is that, of course there are individuals, and of course there are responsible individuals. I have no question about that. But I am not talking about individuals. I am talking about the imagery on the seals. And what I see there is, perhaps at least in part, a reflection of the mechanism through which this redistribution or control was achieved. It was achieved through religious sanctification and that is why we are seeing what we are seeing in the glyptic images. If they had wanted to add names to the images though could have done that. They had writing. They had rebus. If they had wanted to denote individuals by name, they would have done it.

SCHMANDT-BESSERAT

Because the seals bearing the image of the priest-king, and the administrative assemblage to which

they belong, are known to be of Uruk origin, their presence in Persia and Syria indicates the Mesopotamian temple zone of influence or, in other words, the extent of the Uruk priest-king's power.

PITTMAN

So we agree.

24 OCTOBER, AFTERNOON

LIVERANI

The next one is a paper by Joan Aruz from the Metropolitan Museum, New York. Now we are crossing the Bosphorus, leaving the Near East to enter into the Aegean.