

This is a strong argument in favour of the assumption of general validity of the discussed distribution of the Arabic verbal roots. The regularity of their distribution in the vocabulary is probably a manifestation of a more general law governing the domain of semantic information. It seems that the above regularity could be connected with the so-called Willis' Law (see Herdan, *l. c.* and B. Mandelbrot „On the Language of Taxonomy“ in *Information Theory*, ed. C. Cherry, London 1956), but this problem would require a separate study.

STANISŁAW JAN GĄSIOROWSKI

INTERPRETATION OF NATURE IN THE ART OF ANCIENT MESOPOTAMIA

Definition of Terms

a) The interpretation of nature in art is conceived here to consist in the following: which natural phenomena are seen by the artists and in which way the observed phenomena are rendered, which forms are given to them, in which way they are grouped in scenes, etc., i. e. in which way are modified the things seen. The understanding of this process permits to establish the role of imagination. Other questions should also be considered: the respective roles of visual data and of their memory, and the treatment of space (perspective).

b) It is therefore attempted in this paper to confront two series of phenomena, artistical and natural. The following groups of natural phenomena will be distinguished: man; animals; plants; atmosphere; waters of land and sea; land itself; sky and celestial bodies; distance and surface; and the following groups of artistical phenomena: statues, reliefs, seals, and paintings mainly ceramical.

c) The Ancient Mesopotamia (Fig. 1) is conceived to be formed of three regions, Lower Mesopotamia, Upper Mesopotamia (Assyria), and to the West, Syro-Mesopotamia; to these should be joined during some periods the Elam or Susiana; and to exist from the prehistoric times till the end of the Assyrian state.

Mode of Establishing the Relation of Art to Nature

It follows from the above that it is necessary to understand very exactly the criteria on which the relation of art to nature may be established. Two questions should be answered. The first

concerns the identification of natural phenomena represented in art: anthropological characters of men, species of animals and of plants, sea and land waters, various kinds of atmospherical phenomena, of surface of land, of celestial bodies. The second

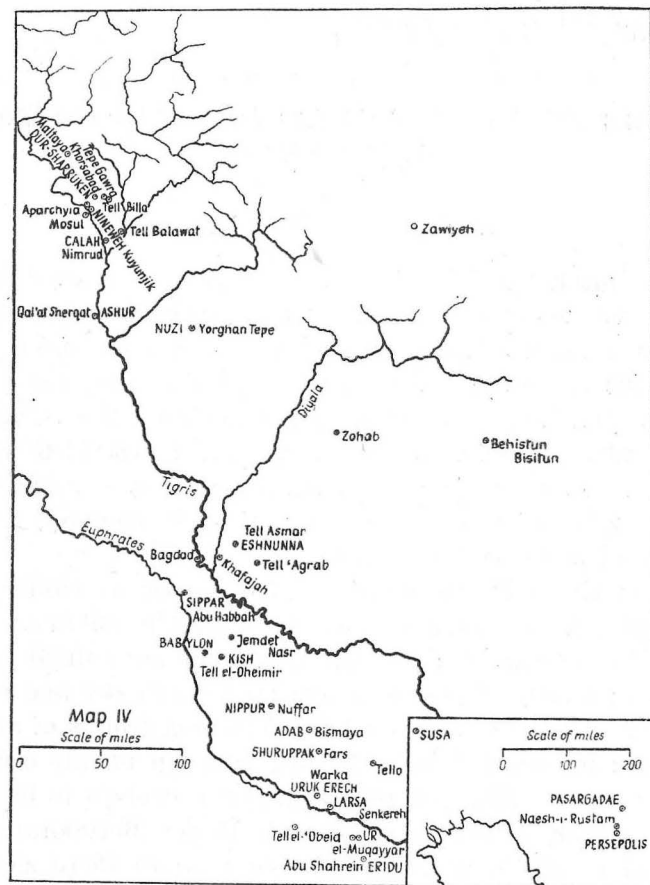


Fig. 1. Map of Mesopotamia. Pritchard, James B., *The Ancient Near East in Pictures relating to the Old Testament*, Princeton, New York 1954, Map IV

question concerns the mode of representation by the artist of the observed natural phenomena, and belongs therefore to the domain of the History of Art.

Terminology used in the study of the history of art is imperfect consisting of names of notions whose definition is difficult,

e. g. realism, idealism, naturalism, abstractionism, schematism, conventionalism, geometrism; or, to give examples of terms used to classify or to evaluate, decorative, linear, typical, tectonical, monumental, traditional, or, lastly, beautiful and ugly. This state of things does not very much help to understand precisely the artistical phenomena. On the other hand, some at least of the terms used are unambiguous, e. g. anthropomorphism, theriomorphism, antitetical group, heraldic, frontalism, isocephalism, zoomorphism; these denote certain formal features of some works of art. Nevertheless, this does not suffice to evaluate lucidly a work of art, and an approximation is the best that can be made.

For the aims of the present study this imperfection is attenuated, because it is not necessary to use any terms pertaining to value; we are dealing here exclusively with the relation of nature to art. Terms such as realistical or schematical representation will be used here in a purely formal sense, completely abstracting from any judgements on artistical value. It must be remembered that a natural phenomenon might have been exactly observed but this observation inexactly rendered in the work of art. It is not therefore possible to go back to the exactitude of observation in every case. A native of Ancient Mesopotamia, beginning from the third millenium, certainly knew quite well the formal features of men, of plants, of animals, etc., but in many cases accepted conventional modes of representing them, and therefore it might be assumed that he interpreted nature, as did the Ancient Egyptians, the Minoans, or the XIXth century impressionists. Various texts prove that the natives of Ancient Mesopotamia have been able to observe exactly the natural phenomena. Various obviously conventionalised representations e. g. of date palm or of water, imply the early existence of conventions.

Returning once more to the relation of the work of art to the process of observation, I should add that I mean to consider not only the features of natural phenomena rendered in art, but also the assemblages composed of elements which belong to Nature. For example, it is not only the rendering of the anatomical characters of a human, of an animal, or of a plant that I propose to consider, but also the rendering of the movement of these characters, of their association in scenes placed in various back-

grounds, on the surface of land, in water, under sky, and of their association in beings that are partly human and partly animal. Furthermore, I should consider the mode of seeing in space, nearer or farther, below or above some object. These relations in space are an important character of every art.

Present Knowledge of Nature and of Art of Ancient Mesopotamia

A study such as the present one is necessarily based on the published data. Among the works of a general character dealing with the nature of Recent Mesopotamia I should mention this invaluable publication, *A Survey of the Fauna of Iraq*, prepared by a group of British officers in Iraq in Mesopotamia and in NW Persia; an important counterpart pertaining to Ancient Mesopotamia is an excellent study by E. Douglas Van Buren, *The Fauna of Ancient Mesopotamia as represented in Art*, Istituto Biblico Pontificio, „Analecta Orientalia“, XVIII, Roma 1939. I will mention also some more detailed works, such as Thompson's *Assyrian Herbal* (1924), M. Rutten's on the landscape in the art of Ancient Mesopotamia (1941), F. Basmadzki's on the landscape element in the art of Mesopotamia in the fourth and in the third millenium (1943), Less' and Falcon's on the geographical history of the Mesopotamian plains (1943), and also the works of Dantine (1937) and of Perrot (1937), and my own work on the Tree of Life („Bull. Acad. Pol. Sci. et Lettres“, Cracovie 1930). I can omit here some more widely known papers dealing with art, but I should say that I had the opportunity to read the very important study by Sir Leonard Woolley (*History of the scientific and cultural development of mankind*, Vol. I, Part 2, *The foundations of Civilisation from the Introduction of metal to 1200 B. C.*), the first great synthesis of the history of the Bronze Age in Asia, as yet unpublished as far as I know.

I should add that the most recent archaeological discoveries made in Assyria established completely new data concerning agricultural plants, and breeding of animals in oldest settlements, i. e. those of the fifth and of the fourth millenium. I mean above

all Jarmo and some other localities. Furthermore, the discovery in the upper course of the river Zab of a man from a Mousterian period (to use European nomenclature) dated as 50 000 B. C. is extremely important, and makes Assyria comparable with Palestine in this respect.

Data Pertaining to the Relation of Art to Nature

These data may be classified in the following groups:

a) Data concerning the natural history of the Ancient Mesopotamia: remains of animals and plants found during excavations (e. g. skeletons of donkeys at Ur) — such remains are rather rare in Lower Mesopotamia because they were not preserved in swamps and in areas frequently flooded, and somewhat more abundant in Assyria where nevertheless they are much less frequent than in Palestine or in Egypt.

b) Data concerning the natural history of the Recent Mesopotamia; here also much more is known about Egypt or Palestine.

c) Iconographical data; beginning with the three Pre-Dynastic periods of Lower Mesopotamia they are very abundant; they are rarer in the earliest times in Upper Mesopotamia. — Pre-Dynastic periods are represented by small sculptures showing various animals, by ceramical works, and by cylinder-seals. — In later periods the most interesting and important (not only for the present study) data are furnished by reliefs and by seals, though the latter do not always permit the identification of the represented men, animals and plants due to their very small dimensions. Generally speaking iconographical data are not equally distributed throughout the whole Mesopotamian history, but almost all periods till the conquest by Cyrus in 539 are represented. The second millenium is not so well represented as the other times.

d) Inscriptions permit to understand the meaning of some scenes, to establish the attributes and symbols of gods, etc.

e) Works of art from other regions, mainly Indian, Syrian, Iranian, Anatolian and sometimes Egyptian, permit to establish in some cases the derivation of some representations in the

Mesopotamian art, e. g. of monkeys in the third millenium or of elephants in the first millenium.

Evidently, in the present paper only some iconographical data are considered. To make a complete inventory of all the Mesopotamian representations of natural objects would be hardly possible and also aimless. It would be aimless, because some standardized representations have been repeated many times. It would be hardly possible, because many are still not published, and many publications are not easily accessible. My list is based mainly on objects belonging to the British Museum, the Louvre, Berlin Museum, the Iraq Museum in Bagdad, and to the Istituto Biblico Pontificio. Comparisons are made mainly with Iran (many objects published in the *Survey of Persian Art*), with Egypt, Anatolia and India. — Animals are dealt with in a similar way to that accepted by Van Buren, and even his classification of data, which does not agree with taxonomy, is followed. Plants and other natural objects are presented in a way which is mine only. Man is but quite shortly dealt with, not only because these questions are rather widely known, but also because the human body is seldom represented excepted partly by the Sumerians.

Principles and Order of Study

Conclusions are based on the study of works of art and of natural objects, supplemented in some cases by inscriptions, and no general preconceived principles are involved.

Groups of works of art are distinguished according to groups of objects seen by man. A chronological division would be inconvenient due to the traditionalism of the Mesopotamian art and also due in some cases to the doubtful dating. Nevertheless it has been attempted to establish a roughly chronological order in particular groups.

It might be thought that a study of this type should be preceded by a biogeographical description of Ancient Mesopotamia. I deem it to be unnecessary, because the habitats of men, animals and plants are generally not represented in works of ancient art. It is most rarely represented in Assyria and in other cases either completely omitted or denoted exclusively by symbols.

Almost all representations of the surface of earth, of mountains, rocks, waters, forests, are conventional — with some exceptions in Assyria.

It would be interesting to study in a more detailed way the treatment of nature in the literature beginning with Sumerians. Fragments cited here are mainly of a purely descriptive character; but I cite also e. g. the poem on the Flood, on Gilgamesh, the *Enuma elish* (When above). It is well known that nature plays a very important role in the Mesopotamian mythology, religion, cosmogony, and magic.

It is not thought necessary to consider here the relation between nature and material culture.

The Man

1) The observation of Man may result in Art in the following ways. a) Way of rendering the external characters of the body, of head, thorax, hands and legs, generally speaking in the modelling of body, of marking the muscles and bones, of dealing with skin, its folds and colour, and with hairs and beards, their type and colour. b) Way of rendering the expression of face and eyes. — In these ways are rendered the anatomical and psychical characters. c) Way of rendering the position, and eventually of d) the movement it is connected with. — Evidently, different mediums — statuary, reliefs, paintings where perspective may be used — present different possibilities.

But in the art of the Ancient Mesopotamia some of the above mentioned features were not rendered or rendered very rarely; if rendered, they may be but fragmentarily known. Thus: a) The human body is frequently draped and not nude; draping is a rule in the Assyrian art and occurs also in the Sumerian art; besides, in the Sumerian art the lower parts of body are not presented being schematized in blocks. Therefore modelling is usually absent in statues and reliefs. Representations of humans on seals are too small to make a more exact modelling possible. b) Therefore the natural colour of skin and of hairs were generally not rendered or not recognizable. There exist some fragments of decorations

in colour (as the geometrical ones of Uruk), and, from the Sargonide times, fragments of compositions resembling reliefs and very small figures, but these are so conventional that they are not very instructive. c) Already in the art of the Early Sumerian Dynasty men are either bearded or beardless. Contenau (*L'Art de l'Asie Occidentale ancienne*, Paris et Bruxelles, 1928, p. 18 sq., Pl. XIII) is probably right in assuming that this is due rather to changes of fashion than to the difference of race, as both types represent the Sumerians. Eyes, even if they were rendered by coloured pieces of shells or stones, do not individualize the person represented. The expression of face is generally neutral.

2) I think therefore that it is very difficult if not impossible to identify, not only the individuals represented, but even the anthropological type. It was otherwise in the Egyptian art, where occur excellent portraits (individual characters and great artistic value). — Undoubtedly, the individuality of the expression of the human face and of the anatomy is more easily apparent even in a given ethnological group than in a species of animals or of plants.

3) The Sumerians consisted of three different racial elements (Woolley, *op. cit.*, p. 11—12), i. e. the first immigrants in Lower Mesopotamia, the people of al'Ubaid, who came from the East; they were joined by the second immigrants, the people of Uruk, coming from the North; and finally, they were joined by the third immigrants, the people of Jemdet Nasr who came already before 3000 B. C. This is certainly a great simplification, but it is still impossible to be more exact. In any case the beginnings of the culture of the Early Sumerian Dynasty go back to the time of al'Ubaid.

4) The question arises, how did the Sumerians look. The anthropological type of the Sumerians may be reconstructed on the following data. Bone remains are not frequent. Female skulls from Ur and from al'Ubaid investigated by Sir Arthur Keith (Woolley, *Ur of the Chaldees*, London 1954, p. 42) agree with the reconstruction of an Early Sumerian female skull from Great Death Pit at Ur made by Lady Woolley (Woolley, *op. cit.*, Pl. 4a). From a royal tomb at Ur are known skeletons of six males and sixty eight females (Woolley, *op. cit.*, p. 45). The

skull from Erech (Eridu) is dolichocephalic (Childe, V. Gordon, *New light on the most Ancient East*, London 1934, p. 144), some skeletons from Kish are brachycephalic more distinctly so in early tombs but mainly dolichocephalic belonging to two varieties, one of these with Western affinities being probably Mediterranean (Childe, *op. cit.*, p. 178 sq.). Whichever were the bone remains, Sumerians as represented in art are in some cases brachycephalic possessing a rounded skull and a beak-like nose (cf. Woolley, *Ur*, p. 89: „I have already said that we do not quite know who the Sumerians are; tradition would make them come from the East; the study of their bones and skulls shows that they were a branch of the Indo-European stock...“); but the nose of Gudea represented in a relief at Louvre (with a palm in hand — Fig. 2) is different, though the skull is also round; his cheeks are convex, he has great eyes and distinct eyelids, strong eyebrows, a protruding upper lip and great ears. — It may be seen that both anthropology and representations in art do not permit clear reconstructions of the anthropological type of the Sumerians. — In any case, besides a statuette of a dolichocephalic woman from Ur very different types are represented in art. — The Early Dynasty statuettes from Khafajeh and from Tell Asmar (Fig. 3) possess beak-like very prominent noses, long hair and beards both curled in locks, great eyes, very thick legs; another statuette from the latter locality represents a man with a beak-like prominent nose (Fig. 4) and a sharp beardless prominent chin. Eannadu and his soldiers represented in the „Stela of the Vultures“ (Parrot, *op. cit.*, Pl. VIb), men in the Funerary Stela (Louvre) and in the relief of Ur Nina (Louvre) have similar noses. On the other hand „Femme à l'écharpe“ has a smaller nose and her face is wider and her chin less sharp than those of the statuettes (painted in polychromy) from Tell Asmar (Fig. 5).

Semites of the Akkadian period (2360—2180) conspicuously belong to a different anthropological type; this may be seen e. g. in the stela of Naram Sin, king of Agade (Fig. 6), and later, in the stela of Hammurabi from Suza (Contenau, *op. cit.*, Pl. XXI). Variability of this type may be exemplified in the „Tête à turban“ of Gudea (Fig. 7) and by a later portraits of Ur-Ningirsu (Fig. 8, 9). The former has a very wide face, almost

rectangular, and is beardless, the latter has a rather wide face and a great beard. The noses are not preserved.

The type of the Semitic Assyrians, as represented in sculpture, is almost stable. In any case it does not agree with the type of

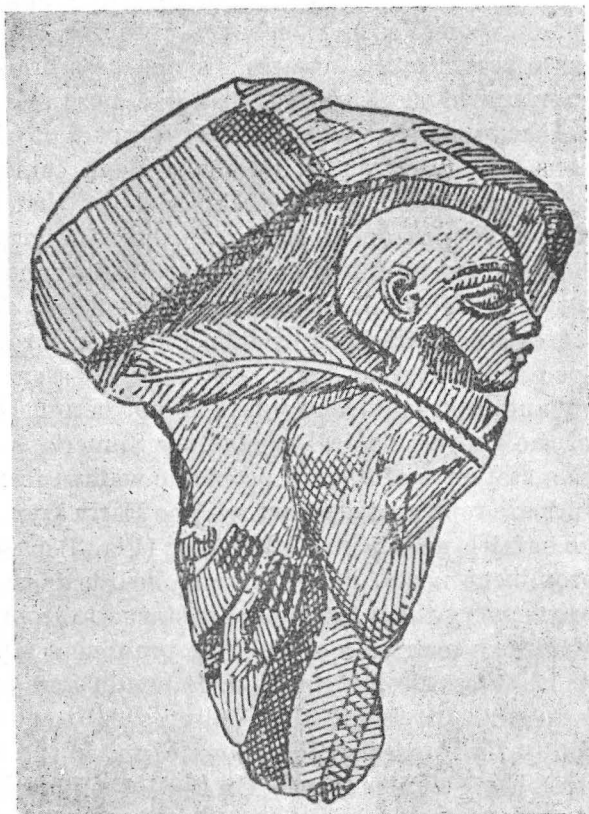


Fig. 2. Fragment of a stele: Gudea with a palm, followed by a deity. Parrot A., *Tello*, Paris 1948, fig. 36 j, p. 185; Contenau G., *L'Art de l'Asie occidentale ancienne*, Paris 1928, Pl. XIX

the Recent „Assyrians“ inhabiting after the I World War the region of Hakkiani in Kurdistan in Turkey, partly expatriated in the basin of Khabur which at this time was part of the French mandate of Syria (J. G. Browne, *The Assyrians*, „Geogr. Magazine“, April, 1937, p. 431 sq.).

It appears therefore that due to the numerous ethnical intrusions in Mesopotamia and due to many conventions in representations of humans accepted especially beginning with the Akkadian period, the identification of representations in art with ethnical types is almost impossible, excepted the undoubtedly Assyrian works.

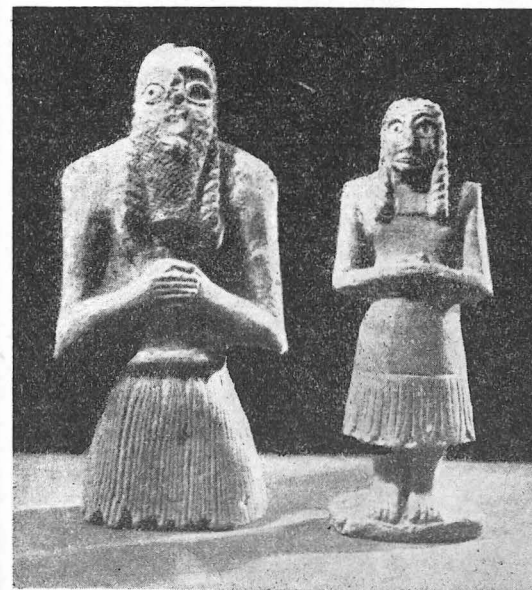


Fig. 3

Fig. 3. Statuettes of men from Early Dynastic period at Khafajeh. Pritchard, *op. cit.*, fig. 18—19, p. 252 ad no 19: „...The statue originally had a long beard but this has been chiseled away in Antiquity. The eyes are inlaid“



Fig. 4

Fig. 4. Statue of a man with shaved head and face wearing a kilt... It has been suggested that this statue may represent a priest. Tell Asmar, Square Temple, shrine II. Veined gypsum; eyeballs of shell set in bitumen; pupils of black limestone. Height: 0,49 m. Early Dynasty II (Early third millenium).

Pritchard, *op. cit.*, p. 252, fig. 20

5) It may be added that analogous questions concerning the Egyptian art may be much more clearly answered. The nude body is frequently represented, foreign anthropological types — Negroes, Lybians, Syrians — are distinctly characterized. — In the Mesopotamian art, even in scenes of battles against foreign peoples, the adversaries are not always represented as ethnically

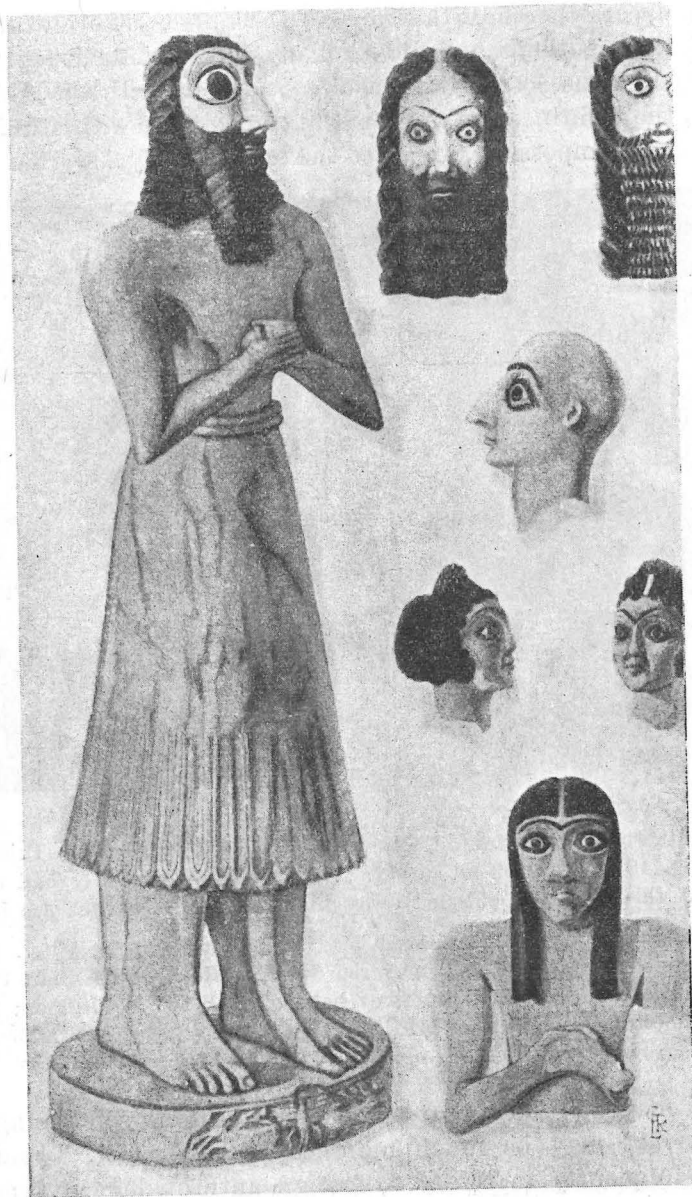


Fig. 5. Polychromed statuettes from Tell Asmar („Illustrated London News“, May 19, 1934, p. 777)

distinct, as is the case of reliefs depicting a battle against the Elamites; but the Arabs in reliefs with analogous scenes seem to be somewhat differentiated from the Assyrians.

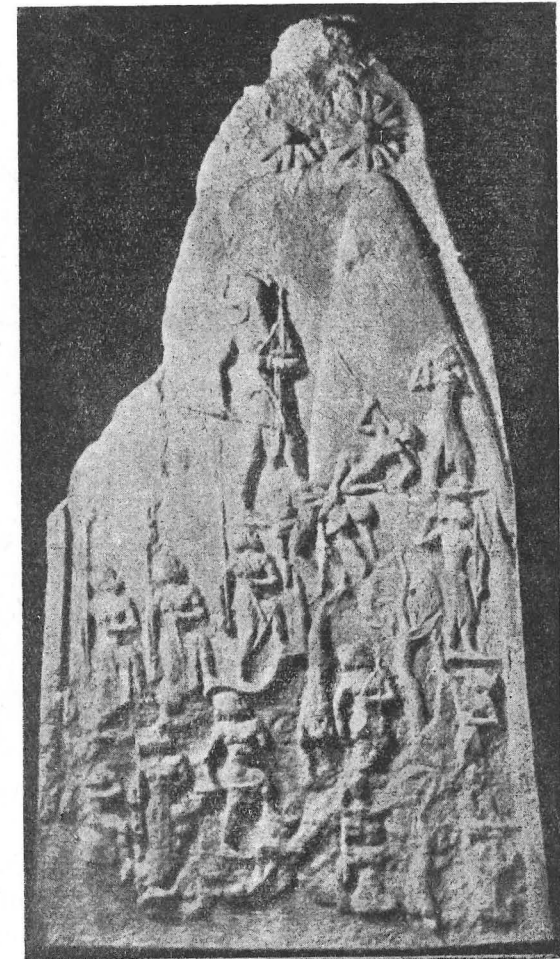


Fig. 6. Naram-Sin of Agade stands before a stylized mountain victorious over the Lullubans, on a stela from Susa. Louvre, first half twenty third century. Pritchard, *op. cit.*, fig. 309

To conclude. The animals and plants represented in Mesopotamian art are living still, either in Mesopotamia itself or in other regions; but from the population of Mesopotamia between the

fourth and the first millenium nothing remains save some bone remains and inadequate representations in art. The recent population of Mesopotamia possibly has not much in common with the Ancient ones.



Fig. 7. Gudea „Tête à turban“, Louvre. Parrot, *op. cit.*, 168—169, pl. XVIIIa

6) Still one group of data should be briefly considered. Common in the Mesopotamian art are representations of composite creatures formed of natural elements (Fig. 10), e. g. human figures with wings of birds, with heads of birds and of other animals, covered with scales like fishes, with plants growing from shoulders. These involve questions different from those previously considered. It seems that the naked parts of the human body are treated in the same conventional ways as are those in the representations of fully human beings. — Very interesting comparisons with Egypt might be made.

7) As to the position and movement of man, they are represented according to scenes — a man may be alone or one of a group, he may be motionless or moving, fighting, swimming, carrying an object. And the subjects dealt with in the Mesopotamian art



Fig. 8



Fig. 9 →

Fig. 8. Statue of Ur-Ningirsu bearded. Berlin. Parrot, *op. cit.*, p. 209, Pl. XXIIIa

Fig. 9. Statue of Ur-Ningirsu beardless, reconstructed. Louvre. Parrot, *op. cit.* pl. 208, p. XXIIIc

are not wide. Statues as a rule represent one human only and not groups (it was otherwise in Egypt), and were made to be looked at de face including the head; this is valid even for the composite creatures as the Neo-Sumerian androcephalic bull. This

is understandable, deriving from the religious beliefs or from the court etiquette: one does not stand turned sideways before a deity or a sovereign — ritual crossing of hands (Tell Asmar, Napir Asu, Gudea).



Fig. 10. Terre cuite. Neo-Sumerian period. Parrot, *op. cit.*, Pl. XXVIIIb

Themes of reliefs are of course more diversified, but here also the scenes mainly represented are only the following: religious, mythological or legendary; war and scenes connected with war, as paying of tribute or triumph (Fig. 11, 12); hunting. The second and the third groups of scenes occur both in the Sumerian and

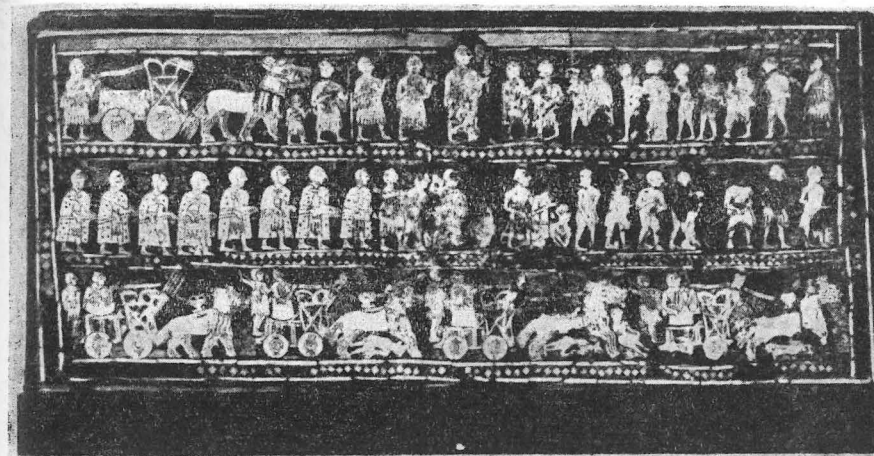


Fig. 11. „Standard“ of Ur. Mosaic in shell, lapis lazuli and red limestone. „The war panel from a standart found at Ur, depicting the triumph of the king over his enemies“. Early Dynasty, 25th century. Pritchard, *op. cit.*, fig. 303

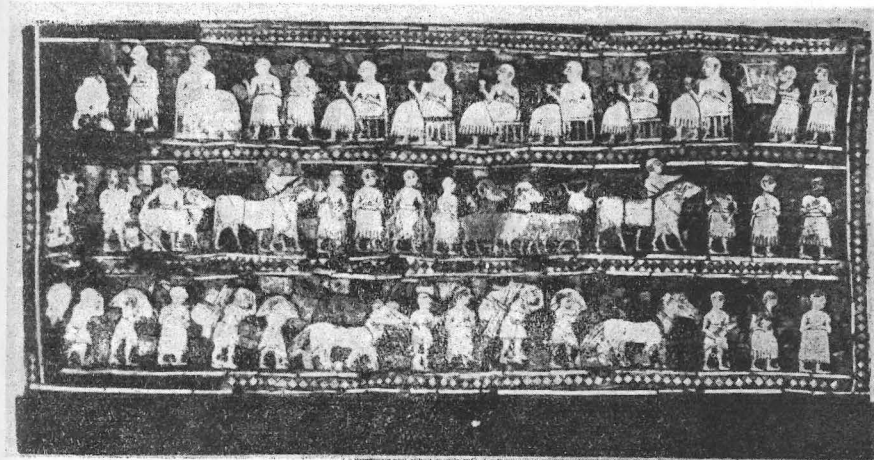


Fig. 12. „Celebrations of a victory with music and feasting, on the „peace panel“ from the „standard“ found at Ur. Pritchard, *op. cit.*, fig. 304

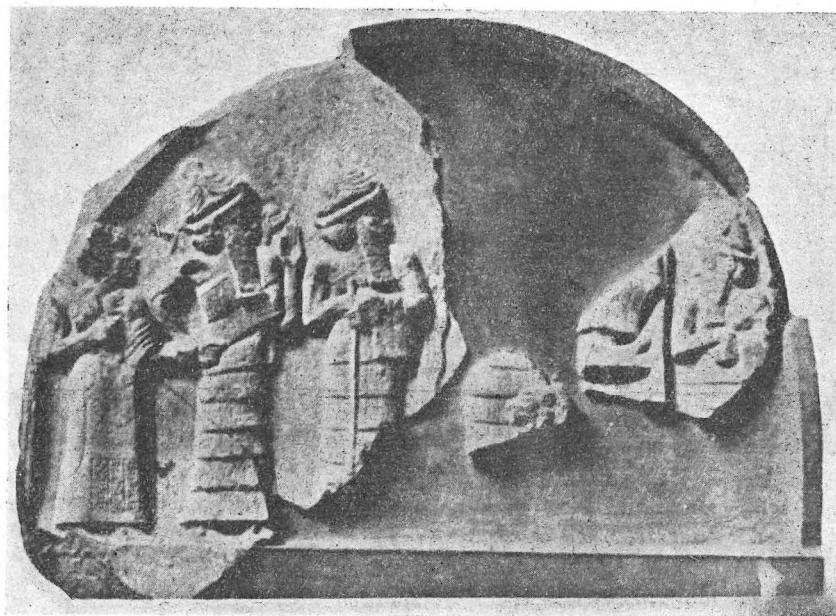


Fig. 13

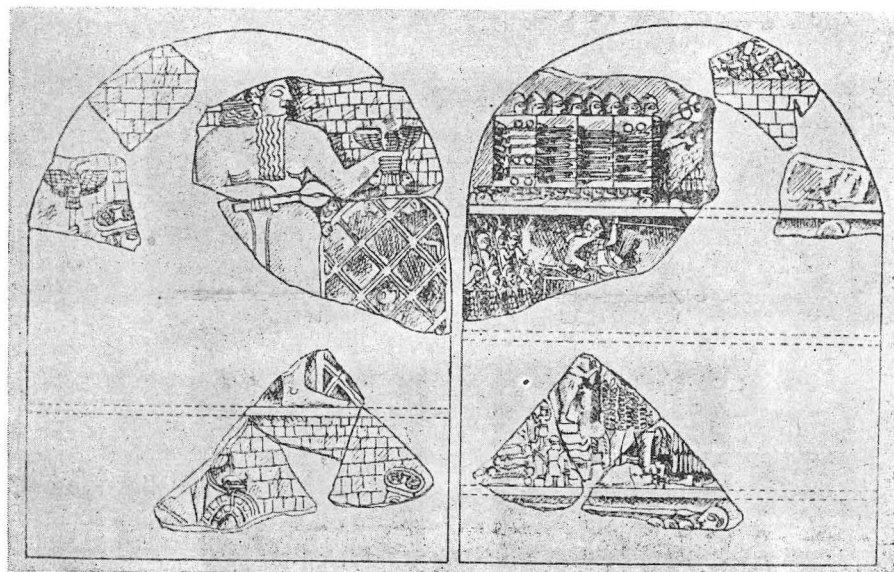


Fig. 14

in the Assyrian art. Scenes of everyday life are not numerous, much more frequent in the Sumerian than in the Assyrian art.

The Egyptian art is in this respect much richer. Let us enumerate some scenes: mowing and other scenes from rural life (papyrus), gardening, eating meals, scenes with musicians, audiences before a high state functionary and before a sovereign, largesse given by a king, homage rendered to an officer and to his wife (relief in Berlin, Rij and his wife, ca 1400), expressive scenes of funerals and weepers.

Even the subjects dealt with in both arts are presented in Mesopotamia in a much more monotonous way. Ritual scenes, e. g. presentation of persons (Fig. 13) or of offerings, are generally not very different one from another. Military scenes (Fig. 14) are either almost primitive in composition, as in the art of the Early Dynasty, or rather schematical, as in the art of Assyria excepting the times after Sargon II. Perhaps the most diversified are the human movements in scenes of hunting in all periods.

In the Sumerian sculpture, both in statues and in reliefs, the early conventionalisation is conspicuous. This led to the rendering of types and not to the making of portraits. In statues the tendency to present the subject en face led to the symmetrical position of the body. In reliefs, men and animals are generally presented in profile. Space is marked by one object partly covering another, or by a distribution of groups in zones; this is characteristic of the entire Mesopotamian art and was never abandoned till the reign of Sargon II. The visual image has been analysed and elements subsequently joined in the work of art. Similar type of process occurred in Egypt, but the mode was different. The Egyptian scheme was always binding, the Mesopotamian one was sometimes omitted.

Fig. 13. Two protecting deities guide Gudea to the throne of the omnipotent deity. „Stèle de Berlin“. Parrot, *op. cit.*, p. 184—185, Pl. XX

Fig. 14. „Stèle des vautours“. Scheme of the position of fragments. Tello. Pre-Sargonic period. Parrot, *op. cit.*, fig. 23

In the Akkadian period some changes occur, but art is still based on the Sumerian art. The same principles continue during the first Babylonian dynasty and even in Assyria. In the Assyrian art are characteristic a monotony of heads, exaggerate emphasis on the modelling of legs and feet not covered by draperies; representations of animals are better than those of humans.

It may be concluded that it cannot be said that the human body was dealt with in the Mesopotamian art in an interesting way. Animals were dealt with in a much more interesting way.

From the Editor:

The present paper is the first part of a study whose following parts will appear in the annual „Archeologia“, vol. XV—XVII (1964—1966), Warszawa 1965—1967. The whole study was presented to the Komisja Orientalistyczna of the Polish Academy of Sciences (Sprawozdania z posiedzeń Komisji Oddziału PAN w Krakowie, styczeń—czerwiec 1960).

TOMASZ MARSZEWSKI

REMARQUES SUR L'ÉTAT DES RECHERCHES CONCERNANT LES CONTACTS ENTRE LES PEUPLES DU BASSIN DE LA MÉDITERRANÉE ET CEUX DE L'ASIE DU SUD-EST, DANS L'ANTIQUITÉ

Avant d'entamer la matière, il convient de rappeler que les recherches, sujet de nos considérations, furent, auparavant, presque entièrement subordonnées à l'étude des contacts maritimes entre l'Empire Romain et la Chine. Ce fut avant tout l'acquisition successive — grâce surtout aux investigations archéologiques ¹ — de données nouvelles, qui causa une émancipation des recherches, quoique les deux problèmes restassent toujours réciproquement liés.

Il semble qu'on peut distinguer trois phases dans le développement des recherches en question.

Dans la première phase, elles pouvaient se baser uniquement sur l'interprétation et la confrontation de sources écrites, donc de certaines relations grecques ou latines et chinoises nous renseignant sur les voyages en Asie du Sud-Est accomplis par des Méditerranéens et sur la connaissance qu'avaient ces derniers des régions dont il s'agit.

La seconde phase peut être datée ² à la découverte, en 1927, et à l'analyse d'un premier incontestable apport méditerranéen en Asie du Sud-Est, soit de la lampe de P'ong Tük au Siam, ce qui

¹ Cf. Luciano Petech, *Rome and Eastern Asia*, „East and West“, Roma, July 1951, p. 72.

² Cf. Louis Malleret, *L'archéologie du Delta du Mékong*, Tome III, Paris 1962, pp. 379—380.