NATIVE GROUP CLINDER SEAL ENGRAVERS OF KARUM KANISH LEVEL II

ROBERT L. ALEXANDER

The recent publication of almost one hundred native group cylinder seal impressions of Karum Kanish Level II provides an important foundation for new studies of Anatolian thought, iconography, and art during the Middle Bronze age[1]. These impressions

[1] Nimet Özgüç, *The Anatolian Group of Cylinder Seal Impressions from Kültepe*, Ankara, 1965 (hereafter *AnatGr*). Although few specific references will be made to this book, its content, observations and conclusions will be implicit throughout this paper. For example, I do not indicate earlier studies of the style of the Kültepe impressions as they are given fully in *AnatGr*, p. 45, to which add Mebrure Tosun, "Styles in Kültepe Seal Engraving as Expressions of Various Cultural Influences," in *Studies in Honor of Benno Landsberger on His Seventy-fifth Birthday, April 21, 1965* (Oriental Institute Publications, Assyriological Studies, 16), Chicago, 1965, pp. 183-188. All references to the seal impressions will follow the catalogue numbers in *AnatGr*, and of course this study is dependent on the excellent illustrations in *AnatGr*.

It is a pleasure to acknowledge the active encouragement and cooperation of Tahsin and Nimet Özgüç, while I was engaged on this project. For work with the actual tablets I am much indebted to Raci Temizer, director of the Hittite Archaeological Museum at Ankara, and Seyyide Celikkol, curator of the tablets. For similar permission to study the tablets in Istanbul, I am indebted to Necati Dolunay, director of the Archaeological Museums, and the curators of the tablet collection, Muazzez Çığ and Hatice Kızılyay. This work was accomplished during a study year in Turkey made possible by a fellowship granted by the American Research Institute in Turkey.

Some of the following abbreviations are not customary in Assyriological literature but are used here to emphasize the reference to seal impressions rather than texts.

Berlin = A. Moorgat, *Vorderasiatische Rollsiegel*, Berlin, 1940.

BIN = *Babylonian Inscriptions in the Collection of James B. Nies, Yale University*, New Haven, vol. IV: A. T. Clay, *Letters and Transactions from Cappadocia*, 1927.

Brussels = L. Speleers, *Catalogue des intailles et empreintes orientales des Musées Royaux d'Art et d'Histoire*; *Supplément*, Brussels, 1943

CANES = *Corpus of Ancient Near Eastern Seals in North American Collections*, vol. I: E. Porada, *The Collection of the Pierpont Morgan Library*, New York, 1948.

CC = H. de Genouillac, *Céramique Cappadocienne*, 2 vols., Paris, 1926.

heretofore have been discussed in general stylistic classes. Now, with such a large number of examples, detailed analyses of technique, form and imagery can lead to the discernment of the work of individual engravers. Living in a relatively small and closed society, each artisan knew the work of his fellows, and a representation, design, or style that attracted admiration could immediately be imitated by others. Workshop traditions, too, would create strong bonds between several individuals over two or more generations. It is such a play of artistic influences that leads from an individual to a genuine group style. Our purpose here is to study the formation of the style of the native or Anatolian group of seal impressions uncoverd by the Kültepe excavations.

Use of the cylinder seal was foreign to Anatolia, and it flourished only during the period of the Assyrian trading colonies, approximately the first quarter of the second millennium B. C. At Kültepe Levels II and Ib of the Karum, or trading center, correspond to this period. A few actual cylinders and hundreds of impressions have survived to show the extensive use of the form at Kültepe, the ancient Kanish. Analysis of these examples has shown that some seals were actual imports, taken to Cappadocia not at one moment, but recurrently throughout the duration of the Assyrian colonies. The artistic influences thus introduced have been defined with relative assurance: they

De Clercq = *Collection de Clercq; Catalogue méthodique et raisonné*, vol. I: *Cylindres orientaux*, Paris, 1888.

Frankfort = H. Frankfort, *Cylinder Seals*, London, 1939.

GS - H = C. Contenau, *La Glyptique syro - hittite*, Paris, 1922.

Heidelberg = B. Kienast, *Die Altassyrische Texte des Orientalischen Seminar der Universitat Heidelberg und der Sammlung Erlenmeyer - Basel*, Berlin, 1960.

Hilprecht = J. Lewy, *Die Keilschrifttexte aus Kleinasien*, Leipzig, 1932.

ICK = *Inscriptions cunéiformes de Kültépé*, Prague, vol. I: B. Hrozny, ed., 1952; vol. II: L. Matous, ed., 1962.

JCS = *Journal of Cuneiform Studies.*

JNES = *Journal of Near Eastern Studies.*

Kültepe 1949 = T. and N. Özgüç, *Ausgrabungen in Kültepe*, Ankara, 1949.

Louvre = L. Delaporte, *Catalogue des cylindres cachets et pierres gravés de style oriental*, 2 vols., Paris, 1920-23.

MDOG = *Mitteilungen der Deutschen Orient - Gesellschaft.*

Morgan, see *CANES.*

Newell = H. H. von der Osten, *Ancient Oriental Seals in the Collection of Mr. Edward T. Newell, Chicago*, 1934.

TC, III, 3 = J. Lewy, *Tablettes cappadociennes*, vol. III, pt. 3, Paris, 1937.

were three, southern Mesopotamian, Assyrian, and the Syrian[2]. The southern Mesopotamian was two - fold, Neo - Sumerian and Old Babylonian. The Neo - Sumerian way of life reached its peak with the Third Dynasty of Ur, shortly before the Karum Kanish Level II, and thus was strongest as an influence early in Level II. The glyptic of the First Dynasty of Babylon reached its artistic peak a few generations before Hammurabi[3] perhaps about the time Level II came to an end. As the early Old Babylonian developed contemporaneously with Level II, its influence was felt during the latter part of Level II's existence. From Assyria, in northern Mesopotamia, came the second major external influence, as traders carried cylinders from their home to Anatolia. Assyrian glyptic was itself a provincial reflection of southern Mesopotamian, a retardataire Ur III. In view of our limited knowledge of artistic production in the city of Assur at this time, a recent tendancy to see Kültepe Assyrianizing impressions as part of a larger Assyrian art may well be justified[4]. The third influence, Syrian, came about by virtue of the geographical relationship between Anatolia and Assur, for some trade routes passed through northern, inland Syria. Again, cylinders produced largely under this influence (and called variously Syrianizing, Syro - Cappadocian, Syro - Anatolian) may be looked upon as part of a widespread North Syrian glyptic that was based upon surviving traditions of the third millennium and on Neo - Sumerian[5]. In sum, the engravers of Kültepe had a wide range of cylinder seal traditions brought to their attention. Early Dynastic and Akkadian elements from the third millennium were present; Ur III was known directly, and this influence was reinforced by Assyrian and Syrian ex-

[2] For discussion of these foreign influences, see *Kültepe 1949*, pp. 229-237, with some additions in *AnatGr*, pp. 47-48.

[3] E. Porada, *JCS*, IV, 1950, pp. 155-162.

[4] Tosun, pp. 183-184.

[5] Mrs. Özgüç informs me that study along these lines is in process and will lead to the full definition of "Old Syrian" glyptic.

Less emphasis is placed here on a separate Akkadian influence (see *AnatGr*, p. 47) or the Sumero - Akkadian substratum (see Tosun, p. 185), as the elements from the third millennium may have been transmitted to Kültepe through Syrian glyptic (see P. Amiet, *Syria*, XL, 1963, pp. 57-83; *Syria*, XLI, 1964, pp. 189-193). There can be no doubt, however, of the Sumero - Akkadian survivals, and we shall point out a number of examples.

amples; and the vigorous early Old Babylonian was known before the end of Level II.

Individual engravers reacted in different ways to this variety of styles. Some imitated the subject matter, form, and style of imported work, producing the provincial Babylonian, provincial Assyrian, and Syro - Cappadocian cylinders. Occasional pieces, indeed, show varied combinations of the different sources. With time and understanding, new compositions were created, unlike those of Mesopotamia and Syria. A genuine native style did not develop, however, until designers grasped the nature of the cylinder seal, mastered its design problems, and introduced Anatolian themes and motifs.

The strong Anatolian tradition of stamp seals continued its own development in the early second millennium and contributed to the history of the native group of cylinders. It possessed a vocabulary of masks, such animals as the stag, birds, including the spread eagle, isolated bird and animal heads on long necks; vessels of different types; geometrical designs of diagonals,rectilinears, and spirals; and radial patterns. The fitting of these elements onto the square, rectangular, and circular stamps nourished not only a strong control of design, but also an interest in patterns and textures based on line rather than on representation.

Other forms of Anatolian art of the third and early second millennia comprised a final element in the background of the native group of cylinder seals. Of great importance was the prominent use of metal in figurines and small sculpture, such as the standards and furnishings of the royal graves of Alaca Hüyük. Bronze was basic and was used lavishly, but silver, gold, and lead occurred. Geometric patterns, including mazes, chevrons, zig - zags, concentric circles, formed some standards, covered vessels, and were applied to animal and and human figurines. Even the ceramic ware of Level II acquired flaring shapes, sharp arrises, and other elements carried over from metal vessels. Native iconography employed the stag, as well as the bull, as a very important element. Statuettes of the human figure, in a simple frontal pose with arms across the body, occasionally showed touches of realism, but, with the marble idols of Kültepe, also moved toward abstraction, especially in the emphasis on linear textures.

Characteristics of the Anatolian cylinder seals have been defined by a number of scholars. Chief among these is the texture created by

parallel striations across figures and animals, without much regard for anatomical structure, and indeed, even as a substitute for modeling and detailing. These striations tend to become patterns, occasionally curvilinear, often herringbone. Compositions acquire a schematic quality that has been compared to the use of squared graph paper as the basis for design. Figures are stiffer than those in Mesopotamian work. There are irregularities in sizes and proportional relationships of figures and objects represented, along with a tendency toward superposition, as though the engraver wished to squeeze more subject matter into the limited space. Fillers, too, are numerous and increase the density of the surface enrichment. Most subject matter derives from foreign sources, for example, the ritual scene. Some motifs undergo Anatolian development; the Syrian god over his animal (usually the weather - god over a bull) is multiplied to become a row of mounted deities; the Anatolian hunt - god, with a bird and dangling animal in his outstretched hand, a shouldered weapon in the other, developes from a figure of the Third Dynasty of Ur. The Neo - Sumerian introducing goddess and the Old Babylonian suppliant goddess appear, but more common is the Anatolian interceding deity, probably male, with both hands held out before the face. The bull altar with cone, however, has no Mesopotamian parallels. The stag, used not infrequently, is certainly owed to Anatolian tradition, as is the frequent use of animals. The rich iconography of Level II seal impressions deserves extended study, and will be discussed in this paper only when pertinent to the definition of individual engravers. Technical and formal characteristics are the bases for the detailed study undertaken here.

The excavations have in general established the time and conditions under which the native style appeared. For three generations, around the nineteenth century B. C., Karum Kanish Level II flourished, its trade increasing as well as the number of traders, both foreign and native[6]. Rather than suffering decline and slow extinction, it

[6] Balkan gives Level II a total of eighty years, the latter part contemporary with Sargon I of Assyria; Kemal Balkan, *Letter of King Anum - Hirbi of Mama to King Warshama of Kanish*, Ankara, 1955, p. 52. The excavators imply as much as twenty to thirty years longer for this period; T. Özgüç, *Kültepe - Kanish: New Researches at the Center of the Assyrian Trade Colonies*, Ankara, 1959, pp. XIX-XX. For a recent study and bibliography of present knowledge of the period, see P. Garelli, *Les Assyriens en Cappadoce*, Paris, 1963.

was cut off at its height by destruction. Inscribed tablets were found in groups on house floors, a sign that a great part of these business records must date from the last years of Level II. The tablets were sealed with Anatolian group cylinders, with imported cylinders and provincial variants, and with stamp seals. It is possible that some of the Anatolian group were made in other centers, but the nature of the economy and way of life would encourage local production. In consideration of the wide variety of styles current in this city, one need not look for a large number of engravers of native style cylinders. Those who were successful and produced many pieces were probably sought out for the superiority of their works. From our study, we believe that the factor of judgment, a form of practical art criticism, played an important part in discouraging poor workers and making a small number of engravers the major producers of the Anatolian style in Kanish.

The first group of works in the native development shows an an artisan juxtaposing many imported and local elements. With experience, however, he develops the Anatolian characteristics and and acquires both increased technical competence and command of the design problems. The group of impressions is best defined by the nearly identical repetition of images in different pieces. In nos. 32 and 33 there is almost line for line identity in the motif of the nude hero, streams flowing from his hands, over his shoulders, and down to small triangular vases, over the bull in a reclining position[7]. The two figures before the seated deity on no. 33 are repeated on no. 55, and one is retained on no. 34. On nos. 34, 55, and 44 crossed animals have a head (human or animal) as a filler between their legs, and they support the bull altar with cone[8]. Even a filling motif, such as

[7] Additional impressions of no. 33 are Istanbul Ka 281 seal A (*ICK*, II), and Ka 942 seal A (*ICK*, I, no, 39a); the first shows clear herringbone striations in the seated deity's beard (see below, section on artist A). I mention additional duplicate impressions only as they have come to my attention. The motif of the hero with streams over a bull is probably an Anatolian invention (see *AnatGr*, p. 62). The couchant animal common in this artist's work and in early pieces by one of his followers (see below, artist B) may be an earlier form, preceding the standing and walking animals.

[8] On no. 44, see Frankfort, p. 251. Cf. Old Babylonian crossed bulls with filler between the legs, *ibid.*, XXVI h; for a provincial example of crossed lions with filler between legs and heads, found at Kültepe, see Istanbul Ka 1039 seal C (*ICK*, I,

the human-headed fish, a very unusual image, is almost identical on nos. 33 and 44.

On technical and stylistic grounds relationships between individual pieces can be strengthened, and others can be joined to the group. The monkey on nos. 34, 44, and 55 shows dependence on striation rather than rounded modeling for a sharp distinction between the legs and the upper torso. Similarities in the flat figure of the seated deity and the uncertain throne forms, as well as in the modeling of shoulders and arms of standing figures, and in the pose of the mounted deity join no. 4 to the group. No. 47 shows unmistakable similarities to nos. 34, 44, 55, and 4 in the modeling of human faces and bodies as well as in detailing of lion, bull, and other animal parts[9]. Throughout, arms attenuate to very thin forearms, and in the worshiping figures of nos. 33 and 55, the pipe-stem arm akimbo ends without a visible hand. Inscriptions on nos. 4, 33, and 44 are large and bulky, and the wedges have a broad, pedestrian shape. All these relationships are the evidences that these works are not just part of a general group, but are the products of one craftsman.

In his work there is a technical development from the rather flat shapes modeled simply by striation, to more rounded forms that are less abruptly separated from the neutral background (compare nos. 32 and 44). Seated deities, covered by a long garment, retain the the flatness most persistently. Figures in action show the change most obviously in the shoulder and arm treatment; compare the awkward, flat forms of the figure of no. 34 with rounded, nearly profile view of Shamash in no. 4. A single detail, the eye, whether in human figures,

no. 36a). For a possible earlier, Post-Akkadian example, see Morgan 262. Frankfort (p. 244) emphasizes the Old Babylonian origin of crossed animals, and the human head as filler, and on crossed animals as support for the bull altar with cone, see *ibid.*, p. 248. The motif of crossed animals, sometimes with fillers between the legs, need not indicate direct Mesopotamian contact, as it was popular in Syrian glyptic during the third millennium (Amiet, *Syria*, XL, 1963, figs. 17, 18, 20, pl. VI, 1-3; *Syria*, XLI, 1964, pl. IX, 1, 3).

[9] For similar works, perhaps by this same engraver, see: in Ankara, Kt. a/k 925 (unpublished); in Istanbul, Ka 932 seal A, 961 seal A, 965 seal A, and 10 35 seal D (*ICK*, I, nos. 40a, 21a, 25a, and 30a), Ka 439 and 745 (both *ICK*, II); in Paris, Louvre AO 8307a (*TC*, III, 3, no. 75); in Jena, Hilprecht 352B seal C. To avoid extended comment, additional works by each artist will be introduced where they seem most comparable.

animals, or fish, demonstrates well the engraver's increasing technical skill and precision. In no. 32 it is an almond shape, with upper and lower lids surrounding the eyeball. In nos. 33, 34, and 55 the artist shows an awareness of the distinction between frontal and profile views by the relation of the lids to the eyeball and the nose; in addition, the upper lid overlaps the lower one and is drawn back toward the ear. For nos. 4 and 44 the grossness of these parts has been refined. Thinner, more rounded features are set within a face where, in the handling of nose and cheek, the artist shows a desire to model in the round.

The ritual scenes in this group of cylinder seal impressions suggest largely Mesopotamian sources. The group of worshiper being physically drawn by goddess toward a seated deity, in no. 32, seems essentially a copy of an imported piece from the end of Akkad or Ur III [10]. Adad on a lion (no. 55) has the same background, and the nude hero with streams achieved prominence first in Neo - Sumerian Mesopotamia [11]. Shamash subordinate to another deity (no. 4), and crossed human - headed bulls (no. 44) are later imports into Anatolia, coming from the early Old Babylonian glyptic where they were current at the same time as these impressions [12].

Syrian glyptic around 2000 B. C. has been little studied and and published, yet it is clear that some aspects of our artist's works certainly derive from this source. The motif of Adad on a bull (no. 4), though accompanied by a lion, has its Syrian origin underscored by the streamers on the god's helmet. The cutaway effect of the robes in nos. 33 and 55, and the garment of the introduced worshiper in no. 32, are elements prominent in the Syrianizing impressions of Level II. [13] Compositions dominated by animals (nos. 34, 47) may be inventions or may record the artist's debt to Syria, although little exists that can be offered as sure prototypes. While parts eventually derive from Mespotamia, e. g., the lion attacking a goat or bull,

[10] Cf. Frankfort, XXVI a, c. By the same engraver: Istanbul Ka 612 (*ICK*, II), and Louvre AO 8307a (*TC*, III, 3, no. 27).

[11] On the nude hero with streams, see Frankfort, pp. 88, 166, 237.

[12] On human - headed bulls, see Frankfort, p. 244.

[13] Cf. *Kültepe 1949*, figs. 690-699. Neo - Sumerian aspects seen also in the Syrianizing impressions are strong throughout the works here attributed to this master; see *ibid.*, pp. 234-236.

later Syrian glyptic shows a certain preference for such compositions [14]. One motif especially, the hunter thrusting a spear into his prey (no. 47), appears frequently among Syrian hunting scenes at later dates [15]; on the same impressions both heroes wear costumes that are not Mesopotamian but may have Syrian origins.

Despite the number of imported elements, Anatolian aspects become very important in this group of impressions. In the costume of the worshiper on no. 32 the Syrian or Mesopotamian type of modeling is reduced to a flat, linear pattern, while in other garments of this and other impressions the abstract texture of striations is dominant. Costume, in general, moves toward, but does not reach the Anatolian types of later engravers. Although processions do not appear, still the numerous mounted deities indicate the coming local preference. This artisan's relationship to the native stamp seal tradition appears especially in the kinds and the position of fillers. Popular as fillers are fishes and a variety of heads: human heads, linear and almost skeletonized heads of goat, antelope, and gazelle, and bird and animal heads on long necks. Unlike the designs of younger artists, the works

[14] Frankfort illustrates numerous Mesopotamian animal combats, from Early Dynastic (pls. X-XVI), Akkadian (pl. XVI b, e), and Old Babylonian (pl. XXIX e) glyptic. Direct Mesopotamian parallels are not necessary as these motifs occur on Syrian glyptic from earliest times (see above, note 8). Frankfort, XLII 1, a Syrian cylinder, is perhaps later than the period of Level II, but the attacking lion or griffin has already become an ancillary motif not much later than the time of Level II, *ibid.*, XLI f, j, XLII e, j, etc.

[15] For the lion attacking a bull or goat and being attacked by a hunter, see Early Dynastic examples, Frankfort, X d, g, XI b, XII a, c, XIII f, XIV b, d, XV i; examples from the time of Akkad, R. M. Boehmer, *Die Entwicklung der Glyptik während der Akkad - zeit*, Berlin, 1965, nos. 768, 768a, 769, figs 259-260. The weapon in these earlier examples is usually a dagger, for the spear in Level II representati ons is a new feature(Frankfort, p. 246). The kneeling spearman in a Syrianizing impression (*Kültepe 1949*, fig. 697) may be borrowing from a native style artist (below, artist C). Specific conclusions concerning this and other motifs on Syrianizing impressions of Level II must await the full publication of the material. Syrian examples of later dates are known: CUA 80 seal A (B. Buchanan, *JCS*, XI, 1957, pl. II); a cylinder in Paris (H. Seyrig, *Syria*, XL, 1963, pl. XXI, 2). For later Syrian use of the attacking hunter, see R. D. Barnett, *A Catalogue of the Nimrud Ivories... in the British Museum*, London, 1957, pp. 66-69; H. Frankfort, *The Art and Architecture of the Ancient Orient*, rev. ed., Harmondsworth, 1958, pp. 138-139. Animal and hunting scenes also retained interest in Anatolia, as attested by the Imperial Hittite reliefs of Alaca Hüyük.

of this engraver do not use pottery as a filling ornament, only the elixir vase on nos. 32 and 33. Often rather large in size, fillers intrude between the limbs and bodies of animals and figures, in any otherwise empty area. Their function is not identification, but satisfaction of the *horror vacui*, covering the surface with ornament.

Very important in defining the place of this engraver are signs of unfamiliarity with the cylinder seal as a design shape, for the fillers intrude in such a way that some impressions must be turned 90 and 180 degrees for their comprehension. Indeed, nos. 34, 44, and 55 have several inverted elements along the top of the impression. This discomfort with the long panel suggests that the maker had experience with the stamp seal, rectangular, square, and circular, where multiple points of view were common; such an explanation of his origins is strengthened by the presence of the double - headed eagle on no. 32, a frequent motif in Anatolian stamp seals [16]. Some pieces (no. 4) reveal increased understanding of the cylinder seal format as the composition is clarified and obtains a single point of view. The whole aspect, however, is that of a designer who turned to the cylinder seal with engraving experience gained from work on stamps.

This engraver, then, shows the characteristics of the generation that developed from simple copying of imported pieces to independent design. The increasing technical and design mastery, the variety of Mesopotamian and Syrian imports, and the increasing Anatolian characteristics suggest a sequence of manufacture for the surviving pieces by our artist. No. 32 seems to be the earliest, followed by nos. 33, 34, 47, and 55; nos. 4 and 44 are the latest [17].

A more specific place in the approximately one hundred years of existence of Level II can be assigned to this engraver. Detailed study of the works of three more individual artists will show, in varied

[16] For examples of the double - headed eagle at Boğazköy, see T. Beran, *MDOG*, LXXXIX, 1957, pp. 39-40, fig. 32 a, b, d; and K. Bittel *et al.*, *Boghazköy III*, Berlin, 1957, p. 45, pl. 29, 17; at Kültepe (Karum Level Ib), N. Özgüç, *Anatolia*, IV, 1959, pp. 44-45, pl. II b; at Alishar, E. Schmidt, *Alisar 1928-29*, Chicago, 1928-29, pt. 1, p. 145, fig. 182.

[17] The complete absence of such an object as the altar table from the works of this engraver is negative evidence that he preceded the full development of the native style in the last generation of Level II. Prototypes were probably available, but not yet used; see the Mesopotamian, Post - Akkad cylinder found at Kültepe (Balkan, *Letter*, fig. 12); see also Frankfort, pp. 239, 248-249.

ways, dependence upon this craftsman, as though the three were his assistants at different times. Impressions of their works are more numerous and in content show increasing borrowings from contemporary Old Babylonian rather than earlier glyptic. Their careers apparently end with Level II, making them members of the last generation of the period. For these reasons - his relationship to the next generation and the subject matter of his works - this engraver probably belongs in the middle decades of Level II, and may be considered a creator of the Anatolian style.

Among the elements making up the style of an individual artist are a number of technical and formal devices, shorthand methods of rendering familiar, usually secondary parts. These devices, often recurring, may reveal the practice, skill, and character of an artist. One such technical device may serve as a starting point for defining the work of an outstanding engraver of Kanish, whose surviving works are numerous and thus available to detailed analysis.

A particularly good example for discussion is the beard treated in the herringbone pattern of engraved lines on a small number of Level II impressions, nos. 11, 37, 46, 49, and 75.[18] The bull - men offer the fairly large surface of frontal beards for the enrichment provided by the herringbone. For the seated deity the area is much smaller and the detail so fine that the work is a technical tour - de - force. One artist treated both frontal and profile beards in this manner, as they occur on the same impressions (nos. 46, 75). The technical device thus becomes a distinctive mark of the work of an individual master. On the profile face the beard seems to grow from the neck rather than the lower jaw, another peculiarity of this designer. Impressions of other seals, where not seriously blurred, generally show the beard as a series of parallel vertical striations. Another minor detail appears in the bull - men in four of those compositions. The artist interpreted the horns and side locks as continuous curvilinears interrupted by the ears.

Two more technical characteristics add further evidence for joining these five impressions into a group. The nose is modeled by

[18] See above, note 7, for a specific relationship between this artist and the engraver of the second generation, probably an indication of the master - apprentice relationship between these two men.

a long diagonal stroke that is cut broader and deeper in the lower part, rather than meeting a short horizontal to form the lower edge (cf. nos. 12, 34, 77, by other artists). Even when blurred the nose is a modeled rather than linear form. The other characteristic is the extension of the modeling to whole figures. Human and animal forms and objects like vases are rounded masses, not simply flat areas in relief. On the seal itself, of course, the carving was reversed, the bodies hollowed out of the surface in these plastic shapes. The characteristic striations and herringbones were then cut into the surface to emphasize rather than create the modeling. Despite rubbing over the fresh impressions, the better works of this seal cutter show unquestionable modeling in the figures[19].

The plasticity of the artistic forms is related to the conception of space, and the works show clearly that the artist in question envisioned figures in the round. In contrast to the generally used "memory image," with the shoulders in frontal view, the head and the lower torso and legs in profile, these figures can turn and move more freely in spatial depth. The shoulders may be frontal when so required by the action, as in the lion - man and offering - bearer of no. 49. Our artist, an innovator, sought a more realistic representation showing the shoulder and arm as well as the rest of the body in profile. In mastering the problem he developed a personal formula that gives his figures a round - shouldered appearance, a mannerism apparent even when the upper torso is frontal. Although the figures exist in space, it is a very shallow space, and when smaller figures are used, they cannot be construed as extending the depth of the stage; rather, they fit into the area available.

There is, however, a sense of weight as a concomitant of plasticity, and when figures rise over the surface of the seal impression, they generally have the semblance of support; e. g., in no. 11 the nude hero kneels over the curving leash. Although in no. 11 the nude female simply floats against the neutral background, in no. 75 she stands over a bull - man. The bull altar with cone in no. 37 receives at least visual support from the crossed lions. Deities over their at-

[19] We are aware of the cautions voiced by authorities who have worked extensively with both cylinders and impressions, concerning the deceptive plasticity of some impressions. If we consciously exaggerate the effects of modeling, it is to emphasize technical distinctions.

tendant animals, as on no. 11, a frequent motif for this artist, are probably intended to be seen as if standing upon the animals[20]. In his ambitious works this master developed superposition as a method of covering the surface with a rich composition that retains an elaborate structure and disposition of weights (see *AnatGr*, fig. 6 and no. 70).

Within the longitudinal compositions formed by the rolling of the cylinders, the figures have similar relationships with each other in all these impressions. At one end is the principal object of veneration, the bull altar on no. 37, in others the seated male deity, with an amphora or altar table. Two or more human and divine figures approach in adoration, a procession interspersed with one or two symbolic or mythological images. Figures generally fill the height of the strip, varying when a visible excuse is offered, such as an animal mount. A regular rhythm links the figures in the procession, and its disruption by massing or spacing gives increased emphasis to the major element. Since this craftsman conceives of figures as moving along a shallow space, he does not rely on fillers to the same degree as other engravers. Nos. 46 and 49, with several fillers, may represent earlier work before the designer fully interpreted the surface as a continuous stage. To his individual manner of handling the cylinder seal, this master added the custom of combining small figures and animals by superposition, as in nos. 37 and 75, and in no. 11 one sees clearly the direction he was to follow in spreading the composition upward over the surface of tall cylinders, moving toward vertical as well as horizontal continuity. This compositional procedure seems not just an artistic device, but a method of making clear the relative hierarchic position of each personage.

By another artistic means this engraver emphasizes the subject matter of his compositions. Supplementary motifs not only enrich the surface but make more explicit the significance of the deities. Meanings today are often obscure, so that explicitness beyond a general reference to the insuring of fertility and abundance is impossible. Motifs can be

[20] Frankfort points out (pp. 239-240) that the row of gods over their mounts is not a Mesopotamian motif, and (p. 244) that the weather-god on and holding the rein of the bull may be a Syrian idea. The Anatolian procession of mounted deities is probably an invention of the period under discussion here, and perhaps of this artist (see above, note 7).

studied, however, as visual images. Most, of course, derive from Mesopotamian and Syrian art, the lion defeated by a bull-man or nude hero, for example, a motif of the greatest popularity in Anatolian glyptic art, appears in four of the five impressions under discussion. Anatolian variations and inventions possess special interest. The crouching monkey, as he appears on nos. 46 and 75, probably came from Mesopotamia via Syria and undoubtedly referred to fertility. An Anatolian artist gave him a pitcher, adding to the general fertility symbolism by indicating the importance of water for agricultural success. The foliage in the pitcher (no. 11) gives support to this interpretation. Reasons for considering this image as a new element introduced at just this period in Cappadocian glyptic are numerous. The monkey's shape and position are unvarying; when he carries a pitcher it has the same specific Anatolian shape, never a tea-pot or long-spouted type. On no. 24 the monkey with a pitcher was a later revision of the seal, replacing the parallel zig-zags of the storm-god's lightning, which are visible on one impression (Kt. b/k 833). It is obvious that for our artist the monkey with pitcher and foliage was a symbol with desirable specific meaning.

More properly of ritual significance are the groups formed by deities and their appurtenances. The seated deity, usually holding a cup, may have a large amphora with reeds protruding from the wide mouth, as on nos. 46 and 49. Often the object of veneration has an altar table with bull's legs joined at the center of the table, descending together about halfway, then separating to the corners (nos. 11, 37). The table usually carries three circular vases or breads and arm reliquaries or cups. The deity sits on a simple bench, slightly rounded to fit the body, paneled at the side or provided with two or three vertical strips for solid support. An officiant carries a libation pitcher by the handle, giving it support with his free hand (no. 49); an interceding deity may raise his hands in supplication; it is not always clear that these two figures are divine (compare nos. 37 and 49). The retinue is completed by other adorants, vase and offering bearers, and symbolic figures like the nude female, and the bull-man or nude hero in one of several activities - conquering the lion, carrying the flowing vase, or holding a standard with disk and crescent. As his work developed, this master's compositions varied the simple procession not only by the use of superposition, but by the introduc-

tion of new motifs. The storm - god standing over a bull holds the rein of his mount and a cup or weapon; a figure may appear over the rein, and the pedestal altar or other device between the rein and his body (no. 11).

In one respect this artist's work shows little variation, in his representation of costume. Seated deities wear a long garment that covers the body from neck to lower leg. In standing and walking figures the garment swings back to leave the forward leg free below the knee. The kilt may be worn by a very active figure, like the lion-man (no. 49) who stretches an arm in either direction, holding animals. The greatest variety appears in headdresses: Female figures wear a beret, with or without ribbons; other figures may wear a skull - cap or simple conical miter that slopes down to cover the back of the head and sometimes fits closely its ovoid shape. If the miter has horns, they invariably occur in two pairs, the first starting at the brim and rising two - thirds of the height, the other pair extending for the upper third of the hat. Other examples (no. 71) show a disk and crescent at the top of the hat[21]. Often a lock of hair curls outward from the bottom of the cap at the back of the neck (nos. 49, 75).

All these details were personal interpretations or inventions by the artist, and while they are elements that aid in the analysis of his work, they do not define the character of his art. The general impression given by a group of his pieces is of fluidity and vitality. Verticals tend to be rounded by the curvilinear shapes; static horizontals play little part in comparison with the staccato accents of the angles formed by arms bent at the elbows. Figures reflect this character, holding themselves erectly against the pull of gravity, often using both hands to carry pitcher, cup, reins, weapon, animals. The seated deity appears not so much set on his bench, as perched alertly, elegantly, almost nervously. Even the animals share this alert elegance as they lift their heads with intentness and expectation.

To this core of works here characterized can be added many other pieces, the total giving the picture of a man developing his art and achieving success in his career[22]. No. 5, exemplifies his early work

[21] The storm - god over a bull on no. 11 wears what seems to be an elaborated skull - cap topped by a simple disk with an inscribed cross (cf. impression on Kt. m/k 62), identical with the headdress of one figure on no. 17 (by another engraver).

[22] Although previously defined criteria of this artist's style will not be reiterated, they bear upon each of the works to be discussed.

as shown by its very simple composition and rhythm, by awkwardness in placing the eyes and handling the furniture. It reveals a dependence on his master in the nude hero with streams (cf. nos. 32, 33). The wings of the rampant lion are unusual, but the bushy tail is the type used by the teacher in places where the lion serves as an identifying element (cf. nos. 33, 55, 4). Although lacking the saw-toothed knife, the sun-god with rays is closer to the Mesopotamian Shamash than later adaptations by this artist. The use of fillers, too, shows a beginner's hesitation.

A time of increasing mastery is indicated in nos. 46 and 49, as the artist gains control over the representation of the upper torso in profile, develops his characteristic motifs and costume, and invents such a figure as the lion-man. Decorative devices, such as fillers, are retained, but the realist's point of view is developed. His vases, for example, duplicate some actually excavated at Kültepe. He gives attention to such a detail as the hairs at the knees and ankles of the lion-man.

Certainty in the sequence of specific pieces is impossible, but the general development of characteristic tendencies and preferred motifs can be followed in pairs or small groups of compositions. With no. 37 the object of adoration is the bull altar with cone posed directly over crossed lions as was done by the designer of the previous generation (cf. nos, 34, 44, 55), but the present artist set an altar table with bread and arm reliquaries before the bull altar[23]. The change emphasizes the actuality of the ritual scene. All animals, including those parts of the bull-men, are treated with a realism that suggests some actual observation of nature. To show the bull's ability to receive the offering, the artist has provided it with hands extending from the chest. Thus some iconographic novelties have appeared. Perhaps because he introduced new images, the designer omitted all fillers. In no. 25, too, there is a relation to the older engraver, here in the animals and fillers behind the deity[24]. Rather than the confusion of

[23] The replacement of the vase with reeds, favored in this artist's early work, by the bull-legged altar table indicates that the former motif came to be considered old-fashioned. Perhaps it was a Sumerian survival; but see Frankfort, p. 238.

[24] A characteristic of this artist's manner of working is the reuse of his motifs (especially his own inventions) in slightly revised compositions. There are several variants on the composition of no. 25: Louvre AO 7049 (*GS-H*, no. 28 = Frank-

nos. 34 and 55, however, clarity is gained by setting the animals apart from the integral group of deity and officiant. Animal scenes are not new, but this use in a ritual scene frieze is. Spread upward over the surface the animals create a problem for the realist, and the solution is hinted at by the superposition of the next works. The deity, vase with reeds, and officiant with pitcher closely resemble those on no. 49, except for the seating of the deity on an animal, a motif joining this piece with nos. 70 and 71 [25].

Artistic maturity appears in no. 70, a virtuoso display of technique in the fine precise carving of this cylinder seal of modest dimensions, and of composition by the staging of animals and figures on successive levels. On the top of the structure is the main figure, the female deity seated on a crouching goat, with both altar table and vase with reeds before her. The iconography is enlarged with the storm - god over a bull with the pedestal altar, the hunt - god who carries a curved weapon over one shoulder and an eagle and rabbit in his outstretched hand [26]. There are a number of kilted figures and a rich vocabulary of fillers, including fish, birds, bear, lion - birds, many of which may be borrowed motifs. Surely his invention, though, is the storm - god in ascending pose, stepping from a double - peaked mountain onto his bull, holding a goblet and reins in his forward hand, while behind he grasps a plant that grows from the mountain and rises to the top the seal. Over his rein is the female who raises her veil like a large wreath. She and the plant indicate the importance

fort, fig. 80); Ashmolean 833 seal C (B. Buchanan, *Catalogue of Ancient Near Eastern Seals in the Ashmolean Museum*, vol. I, Oxford, 1966); Ashmolean 833 seal D (ibid.), same as Louvre AO 9385 (*CC*, I, pl. C, 3; *TC*, III, 3, no. 92); Kt. k/k 35 (unpublished). The first may be contemporary with no. 25; the others are later, extending perhaps to the end of the engraver's career.

[25] The deity seated on an animal is important for Kültepe iconography (*AnatGr*, pp. 69-70). The motif occurs in Early Dynastic Mesopotamia (Berlin 144) but does not retain popularity later. It occurs in other than native group impressions of Level II, Kt. b/k 664 and a/k 82 (*Kültepe 1949*, figs. 691, 697) and Istanbul Ka 632 (*ICK*, II); but this evidence is not sufficient to prove a borrowing by native group artists from contemporary outside sources. Berlin 513 (=Frankfort, fig. 78) was found at Assur and may be an import from Anatolia; it does not prove Assyrian origin for the motif.

[26] A figure holding an eagle in one hand and rabbit in the other is probably the prototype of the Anatolian hunt - god. It occurs in an undoubted Ur III context in Istanbul Ka 839 seal A (*ICK*, I, no. 26a = *Kültepe 1949*, fig. 668) and 961 seal B (*ICK*, I NO. 21a).

of rain for agriculture. With no. 71 he revised the composition, perfecting the superposition, providing an unquestionable terminus in the enthroned deity, and becoming more explicit with references to water. Anatolia knew the Neo - Sumerian method of symbolizing rain by water flowing from the vases of flying genii [27]. Here, however, a more direct representation is given in the indication of a cloud and falling rain drops, and the seated deity's cup is filled by the officiant who supports the pitcher with his outspread thumb and fingers, a device seen in the contemporary seal no. 75 [28].

Nos. 79, 75, 11, and 57 belong to this period of high technical performance, the first two as processions on the order of nos. 46 and 49, the second pair more complex in composition [29]. All show a desire to relate figures of different sizes on the horizontal relief, and it is possible that some superposition and changes of size are but means for including in the limited space some of the richness of nos. 70 and 71. Figural similarities are strong, too, as the seated deities on paneled thrones are all closely related to the one of no. 71. The figure with vase and rabbit, on no. 57, might almost be taken from no. 70. The appearance on no. 11 of Adad on a liondragon is startling, but the figure has the same awkwardly bent leg as the storm - god of nos. 70 and 71. All four impressions show an interest in activities of the bull - men, or in no. 11, his alternate, the nude hero. These figures carry the flowing vase, conquer a lion, carry disk and standard, and often appear in pairs. These beings and the reclining bull by the disk

[27] Cf. Istanbul Ka 961 seal A and 982 seal A (*ICK*, I, nos. 21a, 80a). The motif of a figure pouring liquid (no. 70) undoubtedly had its source in Ur III and Syrianizing works. It is characteristic of our artist that in no. 70 the motif is completely Anatolian in costume, pitcher, and cup, and in the realistic representation of the officiant pouring directly into the deity's cup.

[28] Morgan 894 is a further simplification of this composition. Parts of the composition appear on other cylinders, the ascending storm - god, rain and cloud, double-peaked mountain, growing plant: Istanbul Ka 744 (*ICK*, II), 905 and 963 seal A (*ICK*, I, nos. 75a, 48a), all from a slightly later cylinder, perhaps contemporary with nos. 27 and 57. In some instances the mountain is abbreviated into a shape with two right - angle bends: Brussels 1396; Hilprecht 315 seal A; Istanbul Ka 914 Seal C (*ICK*, I, no. 35a); and Kt. a/k 1435 (unpublished); in all these examples other elements indicate slightly later dates.

[29] Louvre AO 9384a (*CC*, I, pl. B, 4; *TC*, III, 3, no. 6) may be compared especially with no. 75.

of no. 75, probably indicate a revived interest in Mesopotamian imagery, now of the Old Babylonian dynasty. The sun-disk variants in nos. 71, 75, and 79 have a similar source, and it is of interest to note the increased size of this symbol. In nos. 57 and 11 the designer has taken an important step toward the creation of the Cappadocian "marque royale." Other elements common to this group include the elixir vase with carrying loop at the top and a tube or other part along one side, and the altar table and its furnishings. In form the table is virtually identical, but a change in accoutrements in no. 57 seems significant. The arm reliquaries point toward the deity, as in nos. 11 and 37, but there is a strange bend at the far end. The bend will increase in other examples (nos. 6, 8, 38, 69), and in some the orientation will change so that the angle faces the deity, raising a question as to whether all the long forms on altar tables are arm reliquaries. In a number of pieces, as in no. 57, goat, bull, or antelope heads occupy places above the altar and between its legs (cf. nos. 8, 40, 48), suggesting that they are not simply fillers. The heads may be parts of animal offerings, and the long forms on the table may be other parts, animal legs.

Nos. 48 and 57 have virtually identical deities, but the cross-braced throne appearing in the first will completely replace the earlier paneled bench. The decorative intention has led the artist in both pieces to space out the figures, paraphernalia, and inscriptions across the surface. It led also, in no. 57, to the experimental doubling of the sidelocks of one bull-man. But the most interesting development in design is the treatment of the inscriptions. The distinction between broad, long wedges and thin, multiple, parallel strokes seems an attempt to harmonize the inscribed characters with the large figures covered with striations.

One aspect of no. 71 is carried further in nos. 40 and 39, the clear division of the surface into ritual scenes[30]. On the new pieces the bull altar with cone occupies half the impression. It is carried on a platform, like those in nos. 70 and 71, by a pair of bull-men, and the ends of the platform may turn upward into animal heads. The altar table has only two circular objects and two indefinite objects that may be animal parts. As on no. 71, no. 40 has an inverted lion, but precisely under the altar as another lion is in no. 39. Perhaps

[30] See also Kt. d/k 22 (unpublished impression).

this image depicts an offering. The other ritual on both impressions is a libation before a seated male deity with both pedestal altar and vase with reeds. The officiant supports a pitcher with his cupped hand, and in no. 39, as on no. 71, liquid pours from the pitcher into the god's cup. Emphasis on water is increased by the presence on no. 39 of the mounted storm-god with cloud and rain and the cone with arrows. Disquieting aspects appear with these two pieces in the increasing use of fillers for decoration, and in the technique and composition. Comparison with earlier pieces (e. g., no. 37), moreover, shows less concern for the compositional niceties and the rendering of the figural formula, a change that cannot be explained solely by damage and blurring of the fresh impressions.

For its compositional and iconographic similarities no. 38 probably belongs with the last pair. It shares the bull altar with cone, on a platform carried by a pair of kneeling bull-men, with a simplified altar table and furnishings. The deity sits on a throne like that of no. 39, before a similar pedestal altar with hanging object, attended by a similar pitcher-bearing officiant[31]. Two novel features demand notice. One is the goblet with reeds, appearing also in a coarse copy (no. 36) of the work of this master at this stage in his career[32]. The other notable feature is the small deity in a long robe, with shouldered ax and in his outstretched hand a bow, standing over crossed lions and between two rows of cup sinkings[33]. The whole motif was not used

[31] The hanging object on the pedestal altar may be a cloth cover to protect offerings from insects; see Brussels 1396 where the offerings apparently are covered.

[32] The cup with reeds appears also in Hilprecht 315 seal A (see note 28), and in Syrianizing pieces not by this master, e. g., Istanbul Ka 281 seal E (*ICK*, II), and an impression in the Nies Babylonian Collection, no. 3843, at Yale University (*BIN*, IV, pl. LXXXII, e).

[33] Two other works by this master, Istanbul Ka 630 seal A (*ICK*, II) and Hilprecht 315 seal B, have a figure over crossed lions. This motif appears to be an adaptation of his teacher's crossed animals supporting the bull altar (cf. nos. 34, 44, 55; cf. also nos. 35, 36, 37). It is known, however, in Old Babylonian cylinder seal impressions from the time of Apil-sin and his great grandson, Samsu-iluna (Porada, *JCS*, IV, 1950, p. 159, fig. 1; *eadem*, *JNES*, *XVI*, 1957, p. 196, pl. XXXI, 10a, b). Grandfather of Hammurabi, Apil-sin may have been contemporary with the final decades of Level II which ended two to four generations before Hammurabi. The cup sinkings beside this motif in no. 38 and elements of no. 6 (see next paragraph of text) suggest an early Old Babylonian origin for the Cappadocian use. On the other hand, the evidence could lead to another explanation. The earlier Babylonian example,

by other artists, suggesting that Level II was nearing its end, but the figure does recur in this artist's work.

Nos. 52, 27, 6, and 8 form a group by their sharing of a number of motifs[34]. Identical officiants, in long vertically striated garments, appear in the first three impressions, in two actually holding the same kind of pitcher. Nos. 52 and 6 have the same deity, with shouldered ax and conical miter, seated on the same kind of throne, a development of no. 40, while the other two have a deity wearing a skull - cap and sitting on a flat, cushioned bench, In the lion - conquering group of nos. 27 and 8, the lion's tail is drawn across the body of the nude hero, a motif taken from this artist's major competitor (cf. nos. 29, 30), and even the use of fillers resembles the competitor's. These two also show as part of the ritual equipment the same small footed bowl, an unusual piece in these impressions. The group of animals in no. 52, and the goat - fish and animals in no. 8, like the goat - fish and animals of no. 40, are probably borrowings from still another artist, the youngest member of this generation. The cup sinkings in no. 6, like those of no. 38, and the suppliant goddess with a long necklace counterweight are two indications of contact with Old Babylonian imagery. Along with the numerous devices that can be traced to specific sources, there are two figures that are new, apparently partial inventions. The long - robed figure of no. 38 reappears in no. 8 as the sungod, in a form that is present also in no. 6. He has pairs of rays streaming from his hat, shoulders, elbows, knees, ankles and also from his outstretched hand[35]. This figure is not simply the Mesopotamian Shamash for he

perhaps contemporary with Level II, was produced by a workshop in the Sippar region that showed in other respects influences from Syria (E. Porada, in M. Weitmeyer, *Some Aspects of the Hiring of Workers in the Sippar Region at the Time of Hammurabi*, Copenhagen, 1962, pp. 102 and notes, 105 note 18, 109-111 and notes). The crescent-crowned miter and scepter on the Babylonian pieces recall Level II parallels (no. 70) as well as later Syrian cylinders (e. g., Morgan 916, 959). At least one Cappadocian cylinder was in use in Mesopotamia during the early Old Babylonian period (Porada, *JCS*, IV, 1950, fig. 14). A Cappadocian impression at Yale, NBC no. 1846 (*BIN* IV, pls. LXXXI d right, LXXXII c right, LXXXIV d), probably provincial Assyrian, shows a close parallel to this motif, Shamash over crossed lions. The possibility of an Anatolian or Syrian origin for the motif is great.

[34] See also Istanbul Ka 82 seal A and Ka 382 (both *ICK*, II). No. 6 duplicates Heidelberg 25 (Kienast, figs. 11, 12).

[35] Cf. examples from Akkad of rays streaming from various parts of the body of Shamash, Louvre A 139, 141, 143. The rays from the hand may be an alteration of

lacks the saw - toothed knife, and the multiplicity of rays harks back to the imagery of Akkad rather than the contemporary Old Babylonian. There is also an active kilted figure used on occasion earlier (cf. nos. 49, 70), his arms outstretched in either direction to hold weapons or other objects, in the ascending pose over an animal (nos. 8, 52), and full - length (no. 6) holding a mace and shield. To the new figures should be added variations in the sun - disk and altar table. Inventions, new and revived images, and borrowings from his fellow engravers occur together in this group of works, giving them unusual variety. Compositions seem less carefully studied (no. 8), while novelty, action, and richness are deliberately increased. One conclusion seems obvious; the artist is acceding to popular taste in an effort to counteract the competition offered by his younger colleagues. Continued use and variations on the new elements are indications of the preferences of the seal - buying public.

No. 69 may precede the last group, as some of the parts revert to nos. 70 and 71 [36]. The bull with cone stands on a rectilinear structure that in certain details recalls the base of the supports of no. 70. The earlier works also employed the reclining human - headed bull and the hunt - god with eagle and rabbit and curved weapon. This latter figure, however, was obtaining some popularity through the works of our artist's youngest competitor. Under the bull altar's table are two objects, a footed vase and either an incense burner, as on no. 11, or a multihandled fruit bowl of the type used by this artist's first competitor. The kilted god in ascending pose holds a mace in one hand and in the other a standard with disk in addition to the bull's rein. The row of cup sinkings and the group of enthroned deity and interceding figure with an altar table and equipment are unexceptional as marks of the relatively late stage for this piece.

No. 73 is a problem piece [37]. It has many details, figures, and shapes that fit the manner of our artist. Yet there are some uncharа-

the saw - toothed knife held vertically. That the sun - god has rays from the several parts of his body and his outstretched hand relates the motif to a similar figure on the later stamp - cylinder Louvre AO 20138 (A. Parrot, Syria, XXVIII, 1951, pp. 180-190, pl. XIII, 1, and fig. 1; Porada, *JNES*, XVI, 1957, p. 104, pl. XXX, 4).

[36] See also a piece at Yale, NBC no. 4014 (*BIN*, IV, pl. LXXXV d), with a similar hunt - god on a deer. This impression duplicates Istanbul Ka 914 seal C (see note 28).

[37] See also Louvre AO 8748 (*CC*, I, pl. C, 2 and 4; *TC*, III, 3, p. 4).

cteristic aspects; the equal division of the surface into two nearly symmetrical groups, the distribution of frontal figures on one side with profile figures on the other; the variety in figure sizes and the large size of fillers - birds, animal heads, monkey, and fish in the streams; the kinds of animals in the lower register, the unusual presentation of a tea - pot pitcher, the proportions of the small, elevated kneeling hero with standard, the low throne of the goddess, and the vases at the foot of the bull - man's streams. Many of these features point to an increasing influence by the youngest artist of this generation. If the piece is not a collaboration, it is the first evidence of this master's decline.

In contrast with the technical assurance and compositional virtuosity of a late piece like no. 6, the tentativeness of no. 5 shows more clearly that it is the work of a beginner. Awkwardness in proportions, like the large heads, grossness especially in the lines of the furniture, and irregularities in the parallel streams and rays stand out clearly. In the course of development this artist's style became more and more a refined expression of his innate elegance and precisionist point of view. Each motif served for a period and then was altered or discarded as new ones appeared in his vocabulary. The effect and solemnity of the composition depend on the rhythm of the design, and the presence or absence of fillers may reflect not compositional demands, but outside pressures, such as the desires of a client. His evident freedom in adapting borrowed motifs and inventing new ones is a sign of his mastery of the cylinder seal as an artistic medium.

At the peak of his productivity, in the course of his search for novelty in order to keep ahead of his competitors, this artist came upon the device that was to have the widest acceptance later. In his sun-disk, divided by parallel pairs of vertical and horizontal lines, he introduced double - curved lines in the corner quadrants. Only a tentative variant of the older form adorns no.38, and although in nos. 27 and 57 the curved lines are single, in other examples they are doubled. In his later works (nos. 11, 8) the disk and crescent become very large; by this criterion no. 73 can be seen as a very late piece. This device was not in the repertoire of other engravers of Level II, indeed the combination of curves and angles, aside from their juxtaposition as a specific motif, is characteristic of this man's style. The closest approach is the disk in no. 67, the work of an imitator. Al-

though used in no other medium of Level II, in Level Ib the device is employed as stamped ornament on pottery. Finally, in the developed form known as the "marque royale," it appears in virtually every Old Hittite site in Anatolia and continues in Imperial and Neo - Hittite times [38]. Whatever happened following its invention must certainly be a significant clue to Anatolian events during the interval between Level II and Level Ib.

The presence of this symbol in late works is one of the several indications that this artist's career was interrupted at its peak. Very few works can be interpreted as showing signs of decline, although several impressions are imitations and testify thus to his general success. No. 31 is a pastiche of his motifs and a mannered imitation of his style. No. 61 is less skillful, perhaps the work of a shop assistant; no. 36 may be in the same category. The tablets with his seal impressions were found in the houses, indicating that his cylinders were in current use when life in Level II was interrupted. Close examination of the impressions reveals that the cylinders were still sharp and clear rather than being worn by use over a generation or more.

These are the outlines, then, of the career of an artisan of Karum Kanish Level II. As a business man he faced the problems of competition and the demands of his customers. As an artist he developed both the technical and compositional resources of his medium. He was a realist interested not only in a virtuoso performance, but in making the mythological representation more specific and credible. He matured rapidly, evolving an expressive personal style that kept apace with his expanding conception. We call him Master A, not only for reasons of chronology, but on the grounds of artistic quality.

The second designer of the last generation of Level II, to be called B, exhibits a completely different personality in his works. For the elegance of A, he substitutes boldness and force; for A's invention, B employs borrowed motifs; for A's sense of space and structure, B has a *horror vacui*. Where A has rounded modeling and endows figures with weight and muscular tension, B uses relatively flat raised areas, forms detailed by linear means, and devices emphasizing overlap.

[38] See *AnatGr*, p. 74; G. A. Wainwright, "The Cappadocian Symbol," *Anatolian Studies*, VI, 1956, pp. 137-143; and earlier discussions *CC*, I, pp. 33-34, and *GS - H*, p. 96.

The early works of B include two, nos. 9 and 13, that show a reliance on Mesopotamian motifs learned through the teacher of the second generation, a forcefulness in actions represented as well as in difficult visual problems, and a still immature technique. Both pieces show Adad, the Mesopotamian weather - god, on a lion - dragon, holding reins and lightning fork out front and a spear behind [39]. The figure has a profile head with heavy features, broad, straight shoulders and narrow waist, and one straight leg concealed by a long diagonal strip of garment; the bent leg begins immediately below the waist and the upper part is disproportionately short. He wears a low conical miter with one pair of horns curling out from the brim and following the upward lines of the hat, a headdress this artist will employ throughout his career. The wings of the lion - dragon of no. 13 are more fully developed, again a form he will prefer in future works. Other Mesopotamian motifs include the offering bearer, seated monkeys, crossed bulls, and a type of throne with two stout vertical legs and cross - bracing, unusual in the Anatolian group. The heavy chariot with four draft animals (no. 9), not used for many centuries in Mesopotamia, enjoyed a popularity in Anatolia [40]. The block - like

[39] As works by this engraver, add Louvre AO 9391 (*TC*, III, 3, no. 30) and Istanbul Ka 955 (*ICK*, I, no. 46a), and perhaps Istanbul Ka 636 (*ICK*, II) in very poor condition. See Istanbul Ka 504 (*ICK*, II) for another impression of no. 9.

[40] The motif of a god in a chariot drawn by four horses (though see *AnatGr*, pp. 67-68) appears only in Cappadocian glyptic, and no. 9 shows that it was current at the time of Level II. Other examples include Morgan 893 (provincial Babylonian), British Museum 89518 (Frankfort, XL m), Louvre A 954, Newell 282, 284, De Clercq 284, Istanbul 1997 (Tosun, fig. 18), one in Liverpool (T. Pinches, *Liverpool Annals of Archaeology and Anthropology*, I, 1908, pl. XVII, 7-12), and one from Nuzi (E. Porada, *Seal Impressions from Nuzi*, *Annual of the American Schools of Oriental Research*, XXIV, New Haven, 1947, no. 977). A chariot with one or two draft animals was essentially an Early Dynastic motif in Mesopotamia (Frankfort, XV n, Morgan 118, 119). Even earlier, as vase painting, the Mesopotamian motif showed four animals, a bird and other elements (S. S [mith], *British Museum Quarterly*, VIII, 1933, pl. VIII, fig. 1). That such an ancient Mesopotamian source underlies the Anatolian use is made more likely by the evidence that it diffused in another direction also; see M. - L. and H. Erlenmeyer, *Archiv für Orientforschung*, XXI, 1966, fig. 13). Babylonian terra - cotta chariot fronts, some showing four draft animals, offer interesting comparisons and suggest reasons for the revival of an apparently old motif (R. Opificius, *Das altbabylonische Terrakottarelief*, Berlin, 1961, nos. 280-285). On the Anatolian impressions and seals, although the chariot is represented in profile, its

forms and lack of organic structure suggest that our artist did not refer to nature for study, and the same can be said of the bird in each piece. Curvilinears are notably restrained. Monkeys' tails are short and reins take the most direct route between hand and mount rather than the elegant sweep given them by A. B tends to avoid long thin lines, both curved and straight, and never uses them with ease and assurance. Directness in the expression of an idea and forceful gesture characterize his designs.

Successive works show B as a young and ambitious artist learning through variations on stock figures and motifs. Adad and other figures in a similar ascending pose occur in nos. 10, 1, 2, and 12, and no. 3 may be the work of the same engraver [41]. Nos. 13, 10 and 12 are so similar as tosuggest that B is exploiting a composition learned from his teacher. The couchant animals of nos. 32, 33 and 55 are recalled by similar animals in no. 2. Additional Mesopotamian elements include the figures of Shamash (also used by his teacher, no. 4) and Usmu with streams and fish. The sequence of representations of Adad shows an increasing mastery of the engraving technique and development of a figural formula. Arms no longer simply hang from bulky shoulders, but respond to an understanding of bodily formation. B shapes the human face as his master did; the single deep incision for the forehead and nose meeting a horizontal for the lower edge, a small straight - fronted jaw with two thin, protruding lips, and a large eye with upper and lower eyelids clearly indicated. He uses also the same Mesopotamian type of divine helmet shown in no. 55, a skull - cap with a single pair of large horns. The simple striations of the first works become with nos. 1 and 12 a fine herringbone pattern, and the characteristic Anatolian group costume leaving one leg free is worn by the inter-

front is in frontal view and so has a towerlike appearance. The curving finials were probably intended to hold and guide the reins; some models actually are pierced here (E. D. Van Buren, *Clay Figurines of Babylonia and Assyria*, New Haven, 1930, nos. 304-307, 311, 314).The frontal view may have inhibited the representation, or perhaps in Anatolia braided reins did not permit the use of the guides. See similar rope braids on stamp seal borders, e. g., impression on Kt. k/k 1, from Level II.

[41] Add Kt. a/k 804 (*Kültepe 1948*, fig. 723), one in New Haven, NBc no. 1846 (*BIN*, IV, pls. LXXXI d right, LXXXII c right, and LXXXIV d), and Istanbul Ka 914 seal A (*ICK*, I, no. 35a), all clearly by the same hand and confirming the links between nos. 13, 1, and 2; perhaps also Louvre AO 8295 (*TC* III, 3, no 4). Istanbul Ka 936 (*ICK*, I, no. 41a) is slightly later, closer to nos. 12 and 10.

ceding deities of nos. 10 and 12. The sun-disk and crescent are usually accompanied by one or two stars, and the simple, coarse treatment of the disk of no. 13 changes to a more sophisticated pattern in no. 12. The sturdy bench of nos. 13 and 1 gives way in nos. 10 and 12 to a more fanciful cushion on a small crouching lion. The monkey, as a filler, appears twice in no. 13, three times in no. 10 and five times in no. 1, but is never again used so repetitiously. Exaggerated curvilinears in the divine horns and elongated thumbs are already a pronounced mannerism. Another is the care taken to indicate overlappings, as in the arms of the adorants. In no. 12 the tail of the defeated lion is drawn across the hero's body while the hero reaches behind one leg to grasp the far leg of the lion. The consequent irrelevance of proportions seems never to have bothered this designer. Several of these impressions show the altar table in a presumably early form, apparently an adaptation of the table shown often in Syrianizing seals[42]. Artist A did not use the altar table consistently until well into his maturity. These pieces predate the influence of A on B, and in his later work B uses another type of table. Representation of the table, thus, may derive from Syria, and its popularity in the Anatolian group may be dependent on B's frequent early use.

Additional impressions linked by motifs and style to this engraver show that his development was slow despite some erratic experimentation. Nos. 53 and 86 have the seat composed of a cushion set on a small lion[43]. The deity has a cross-braced bench in nos. 26, 59, 22, and 45. The hero grasps the far leg of the conquered lion in nos. 58, 45, and 29. Here and there, in nos. 26, 59, and 53, the awkward shoulder and arm structure of early pieces is evident, suggesting that they

[42] Cf. Louvre AO 8788 (*CC*, I, pl. C, 1). We consider the altar table a late addition to the native group; it does not occur in the works of the master of the second generation, and makes regular appearances in A's work only from the time of his maturity.

[43] No. 86 had an elixir vase with double articulation at top and bottom, exactly like the elixir vase in no. 2 (cf. N. Özgüç, *Belleten*, XVII, 1953, fig. 30). I follow Mrs. Özgüç in identifying this objects as "elixir vase," but for another interpetation, see E. Unger, "Die Symbole des Gottes Assur," *Belleten*, XXIX, 1965, pp. 423-483.

Istanbul Ka 709 (*ICK*, 11), Louvre AO 9400 + 9404 and AO 9386 (*TC*, III, 3, nos. 19, 20), and Louvre A 871 (=Frankfort XL o) are probably by the same artist.

precede no. 12. The influence of his teacher is still strong in, for example, the crossed bulls of no. 22; in no. 13 the bird (seen as a filler between the human - headed bulls of no. 44) dropped below the animals, but in no. 22 it is present between their legs and is matched by an inverted gazelle above. The interceding deity of no. 22 has the stance as well as the modeling of shoulders and arms to be seen in parallel figures by his teacher (nos. 4, 34, 55). Here is also the elixir vase and round flask, between the adorant and seated deity, already seen in no. 33. Linked together as they are on no. 22, they recur in nos. 26 and 59, and without a connecting tube in nos. 45, 29, and 58. In no. 53 the features have a sharpness and schematic quality already becoming evident on other pieces (nos. 22, 86), but not developed in his teacher's manner. For the multifigure composition with rather foreign garments of no. 53 he may have adapted a work by his master, but the spacing is simple and open, not theirr egular and more complex rhythm of nos. 33 and 55. His training supplied the fillers, but the bull - man shows a copyist's lack of understanding as the streams flow from the shoulders rather than from a vase held before the waist, and one set of streams lacks the small vase at the bottom. No. 22, on the other hand, has an Anatolian motif in the figure of Usmu standing over the boar. Whether this image was taken from a lost work by this teacher of from another source (cf. nos. 19/20, 21) is unknown.

Nos. 58, 59, 26, and 29 show a new development in his work[44]. Superposition, inherent in his master's work, allows him to spread upward over the area, but it does not always function effectively in giving a single direction to a procession (no. 59), a sign of a borrowed and not completely understood device. An awareness of the works of A, who serves now as a new source of motifs, may have led to this compositional expansion. Instead of a sense of space and structure, however, B reveals a *horror vacui*. The area is charged with stars, circles and globes, vases, animals, animal heads, and geometric shapes. Consistency in figural proportions appears secondary to surface elaboration (nos. 58, 59). To this stock of motifs he adds a new group,

[44] Another impression of the cylinder, on the same tablet, shows that the second figure before the deity on no. 59 stands over a supine human, the staff on the face of the victim. For Cappadocia this motif may be of Syrian origin. A related work is a cylinder known from several fragments Istanbul Ka 449 seal A, 515, 704 seal A, and 756 (all *ICK*, II).

the storm - god mounted on a bull and holding the rein of his animal, the pitcher bearer pouring liquid into the god's cup, the monkey seated before a bull, the representation of cloud and rain. All are introduced in no. 29, and the occurrence of so many new motifs in one piece suggests that they had a single source, the work of A (cf. no. 39). One other new motif is the cone with arrows set on the rump of the of the storm - god's bull, a form not in any surviving work by A, but known in other pieces, e. g., nos. 19/20 and 21, where the Anatolian Usmu over a boar also occurs. A compositional device, perhaps another misunderstanding, becomes effective for increasing interest in subordinate elements. In no. 58 the small lion begins an attack on the crouching bull. Presumably both are supporting animals, yet here they are made to act as an independent group. In these pieces B achieved interest, variety, and richness, but at the expense of clear meaning and unified composition.

Nos. 77, 30, and 15 may be linked on the basis of the squat bull-legged altar table with its furnishings, circular breads, animal legs, bird, and below it a many - handled fruitstand of a type excavated at Kültepe[45]. The table differs from the type used by A in that the bull

[45] Two impressions record another cylinder, Istanbul Ka 280 seal A (*ICK*, II) and Heidelberg 23 (Kienast, figs. 3, 4).

The many - handled fruitstand is very clear in no. 17 (by another artist). That the object on no. 11, by A, is an incense burner seems most credible (perhaps also in no. 69). Two other cylinders used in the Karum Level II show a tall object with what appear to be flames or fumes rising, Istanbul Ka 1034 seal C and Ka 1039 seal A (*ICK*, I, nos. 22a, 36a), the latter the same as one impression on Louvre A 847. In nos. 15 and 77 the representation seems to me more likely to be an incense burner than a fruitstand. Louvre A 847 has been called Old Babylonian (Frankfort, p. 245, n. 5) on the basis of the experimental rendering of the frontal seated deity; but see the frontal seated female nude of the Syro - Cappadocian cylinder Louvre A 931 (see also E. Strommenger, *JCS*, XII, 1958, pp. 115, 117, and fig. 1). For Louvre A 847 and Istanbul Ka 1034 seal C, the technique and other elements-the garments, the libation into a large vessel standing on the floor, the offering of a goat over an outstretched arm, the bull altar, the table altar - suggests the Syrianizing trend of Level II impressions with its background in Neo - Sumerian glyptic. Several different Syrianizing impressions show the same tall object Kt, b/k 664, a/k 821, and a/k 9955 (*Kültepe* 1949, figs. 691, 697, 695), and Louvre AO 9390 (*CC*, I, pl. A, 4). See also the similar representation in the later mural of room 132 at Mari (A. Parrot, *Missions Archéologique de Mari*, vol. II, pt. 2: *le Palais*, Paris, 1958, pl. XVII, colorplate E).

legs start at the corners of the table, converge and are tied together near the center, then diverge to the bottom of the legs. Other motifs show continuity as well as innovation; the small lion attacks a goat and although it is impossible to define them as simple supporting animals, they do reflect the struggle of the bull - man and lion above. On no. 77 the small lion is multiplied to become a frieze forming a lower register across the seal impression, but not clearly serving any supporting function. A personal invention, perhaps, but based on an earlier Mesopotamian image, is the turning of the head of the conquered lion so that it is seen frontally (nos. 15, 30); one filler on no. 15 is a ram's head seen frontally. This visual device is effective in part because it shares the forcefulness inherent in B's art. Similarly, strong overlap and foreshortening occur in the unique motif of a deity mounted side - saddle in no. 77 [46]. The sun - disk of these three pieces reflects this same quality in the interweaving of multiple verticals and horizontals, with the corner diagonals disappearing behind the center of the pattern.

Two details in no. 15 deserve notice, both of them probably the heritage of his teacher, the bull over crossed lions, and the goat - fish throne supports. He makes a slight alteration in substituting a bull for the bull altar his master placed over the lions (cf. nos. 34, 44, 55). The throne - carrying goat - fish is a motif used frequently by another, undoubtedly younger engraver (cf. nos. 16, 41, 54), still another assistant to the old master [47]. The sudden appearance of the motif in a mature work by B suggests that he also got from the same source

[46] Note similar overlap of figure and animal in Syrianizing impressions not by this engraver, Louvre AO 8747 (*CC*, I, pl. C, 2, bottom; *TC*, III, 3, no. 2) and from the same cylinder Istanbul Ka 281 seal E (*ICK*, II), and Istanbul Ka 959 seal F (*ICK*, I, no. 38a). For later Syrian examples of overlap, contemporary with the late Old Babylonian, see Porada, *JNES*, XVI, 1957, pp. 193-194, pl. XXX, 2, 3, and fig. 1.

[47] The goat - fish as throne support was not used until rather late by artist A; it appears earlier in the work of B and his still younger colleague (see below, artist C), both of whom show, in other respects, greater dependence upon the engraver of the second generation. Although later use may have been abetted by the survival and popularity of the motif in Old Babylonian glyptic (cf. Frankfurt, XXVIII k), its earlier introduction to Cappadocia can be understood on the basis of the Ur III influence (cf. *ibid.*, XXV d).

the frontal view of the lion's head (cf. nos. 50, 56, 60, 74) and perhaps also the lion - capride confrontation (cf. no. 23) [48].

Confused though it may seem, the tracing of borrowings helps to define B's accomplishment. His maturing as an artist was a difficult struggle. He lacked the inventiveness of A, and depended on borrowed motifs that he used over and over. From the reuse it is possible to chart the development of his technique and design procedures. He lacked the innate design sense of his younger colleague, yet with no. 15 he achieved a composition in which representation and meaning are reconciled, one major ritual scene dominating, and degrees of subordination giving due role to other elements. In comparison with the mere technical sufficiency and exhibitionism of no. 12, with the profligacy and confusion of motifs of no. 58, no. 15 restrains the visual shocks, gives order to the rich variety of subjects, and achieves a consistency of visual texture.

Unevenness in quality (compare nos. 26 and 83, 29 and 30) characterizes the works of his journeyman years. For B it was a long, hard road, and he became an artist *malgré lui - même*. Borrowing was not restricted to motifs, for perhaps as early as no. 12 he began to model such figures as the interceding deity on those of A. Imitation was the means by which B reached beyond his teacher to his own stylistic maturity. Even before this maturity, however, the competition offered to A spurred the latter to new efforts in reaction. Specific responses by A have been touched upon in the discussion of nos. 8 and 27, and may include also the small winged lion in nos. 39 and 57 (cf. nos. 10, 12, 13).

Motifs, forms, and modeling of figures and animals denote no. 7 a relatively late work of artist B. Borrowed motifs, generous spacing and the paucity of fillers give it a superficial resemblance to the work of A. How great the difference is becomes apparent in the comparison of a single image by B, the bull - men with standard and fish fillers, with the same representation by A in no. 57. The arm positions reveal all the contrast between the wiry, elegant, nervous tension of A's art and the blunt, awkward forcefulness of B's still developing manner. His method of showing water and vegetal fertility is equally simple and direct. The storm - god grasps a branch in his free hand,

[48] Cf. Berlin 513 (see note 25).

and a guilloche, symbol for water, hangs from the back of his miter (just as a curving stream descends from the headdress of the seated deity of no. 59)[49]. The interesting variation in the ascending god's relation to his mount, both supported by the bull-men, and the adaptation of the A's multi-rayed sun-god show a degree of potential development. Placing the deity's throne on a goat-fish and human-headed bull provides a novel adaptation of existing images, reinforcing the notion of support and strengthening the identification and meaning.

The relationship between B and his master seems fairly clear. Although he shows this indebtedness, as well as some to Mesopotamia and Syria, by motifs that appear throughout his career, he also accepts some Anatolian images, e.g., the god Usmu standing over a boar. While still in what may be called his journeyman years, he acquires motifs and figure modeling based on A's work of a period near maturity. In turn A makes borrowings from B, but in relatively advanced works. B, then, is several years younger than A, perhaps his successor as apprentice to the old master teacher. A curious difference exists in their surviving pieces. For A the large proportion comes from his maturity, while for B the large proportion is earlier, thus stressing his long and slow maturing.

It is interesting to speculate on the possible future development of B. Artist A certainly reached maturity early and maintained a high level of production. Works like nos. 6 and 71 possess monumentality and a certain grandeur, and these qualities are incipient in such an early piece as no. 5. For B we cannot see a similar accomplishment. There is strength in many pieces, and he acquired an excellent technique, but he lacked a consistent artistic point of view. He probably would have continued a first-rate artisan, depending on novelty and strength for effect, content with commercial success.

The last major engraver of Level II cylinder seals of the Anatolian group differed markedly from both A and B. He was a miniaturist, a designer of surface decoration, and a specialist in animals. He developed the finest and most precise engraving technique, giving his forms sharp and clear relief against the neutral surface (cf. no. 50). Many of

[49] See also the storm-god holding a branch, by another engraver, on Istanbul Ka 960 seal C (*ICK*, I, no.. 45a).

his cylinders were among the shortest in general use, but with a relatively large diameter, so that the impression often seems very long (no. 64). He designed for continuous rolling of the seal, without a clear beginning or end (no. 63), alternating the centers of attention so that partial impressions (no. 62) and those with repetitions (no. 50) might still retain interest and meaning. For religious subjects (nos. 62, 65) he came to prefer mythological narratives and processions of deities, and his ritual scenes often became lost in the rich surface texture and linear flow (no. 74). Interested in visual enrichment, he ordered the elements of his design over the whole surface without regard for naturalistic proportions or vertical structure, but exploiting elements of variety, like reindeer antlers (no. 81) and the unusual forms of the turtle and crab as well as imaginary beasts (nos. 63, 74). He reached artistic maturity when he found ways of making the design and the subject functionally interdependent.

Gifted with an almost natural facility in engraving, C, as he will be called here, rapidly developed certain technical distinctions. His forms tend to be flat areas worked with striations, and the herringbone pattern is common (nos. 50, 74). The bodies of fish and birds generally have one longitudinal incision with side cuts in the herringbone (nos. 60, 62, 74). He used the same method for making a cloud and the tall cone (nos. 28, 64, 65), and the cone contrasts strongly with the type used by B (cf. no. 30), and the cloud contrasts with A's (cf. no. 71). In animal bodies there is no longitudinal line, but a similar concept is evident in the parallel incisions diagonal and perpendicular to the axis of the forms (nos. 62, 96). Only in large animals do the longitudinal and diagonal lines follow the usual pattern of other artists (nos. 56, 63). Repetition of similar striated forms over the surface without regard for representation gives a consistency of texture that is the mark of a sensitive decorator (nos. 62, 74). The same decorative concern led this engraver to make expressive use of linear elements, both the elegant curvilinears of animal tails and reins and the staccato accents of angles formed by bent limbs (nos. 28, 66). To do this was possible only with a highly developed engraving technique that allowed deep, thin incisions that made sharp, clear impressions in the clay. With a similar treatment of the limbs, his figures occasionally acquire a spidery appearance (nos. 63, 74).

C began from a point in advance of both A and B, and he profited greatly from his studies of their work, but he began as an apprentice of the by now old master teacher. The seated deities of nos. 54 and 56 hold goblets rather than cups (cf. his teacher's use of goblets in nos. 33, 55), and the bodies under the garments are flat and formless (cf. no. 4). Like his master he employed animal heads and especially the animal and bird heads on long necks as fillers (cf. nos. 55, 47), often disproportionately large and intrusive by their placement between related figures, under the rein held by a mounted deity, before the profile face of an active or moving figure. Shoulder and arm positions are awkward repetitions of those of his teacher (cf. nos. 33, 34), and the thin pipe - stem arms of the bull - man with streams disappear behind the body like the arm akimbo in his teacher's work (cf. nos. 33, 55). Through his teacher's turn to contemporary Babylon, he received at an earlier stage of his career than did A and B the bull - man holding a standard with sun - disk, and perhaps from the same source the goat - fish support for the seated deity, and the attacking lion with its face seen frontally, two motifs he used later [50]. Some aspects can be pointed out as his own. A peculiarity of his early work is the line of the upper edge of the beard, making the beard appear false. The kneeling figure on no. 56, one leg folded underneath the body, is so common in his seals as to be a hallmark of this designer. Perhaps this figure is his adaptation of the nude hero known in Mesopotamia as early as Akkad [51], but C at this stage employs it beardless and with profile face. Two features on both seal impressions suggest that already C is imitating the work of A: the war - god wears a simple conical miter shaped to the head, and the beards of the deities have the fine herringbone incisions [52].

[50] An impression at Yale, NBC no. 1846 (*BIN*, IV, pls. LXXXI d left, and LXXXII c left), shows an upright lion with frontal features attacking an upright bull (cf. Frankfort, XXV g); the cylinder may have been an imported early Old Babylonian piece with some Cappadocian additions, e. g., altar table, inverted figure. See *ibid.*, pp. 243-245.

[51] E. g., De Clercq 46.

[52] The strange piece no. 80 is also related to the work of A by its motifs and forms. The ineptness indicates an untrained hand. Kneeling figures, animal file, birds, the stand for the large vase, curved weapons, all these will be used by C. Perhaps no. 80 is a very early piece by him. No. 83, Istanbul Ka 638 seal A (*ICK*, II), and Ka 914 seal D (*ICK*, I, no. 35a), all rather coarse, might be related as works of a beginner.

As no. 56 makes clear, C renders animals with greater understanding than figures, and his early pieces dominated by animals seem almost to be the work of another engraver. The same teacher, however, provided models for this type of composition, models that include the representation of rampant lion in attack (no. 34) or being speared from behind (no. 47). In nos. 91 and 81 and later pieces C employed the combined image as the lion attacks a bovine or capride and at the same time is being speared. In no. 91 the lion is upright, and in the the other moves diagonally over its prey, but in both cases the legs are bent as though the animal moved on its whole lower leg. The spearman is a direct adaptation of the kneeling figure of no. 56. In both pieces the obtrusive head fillers are prominent. Compositionally no. 81 shows a step in the direction of C's strength. Animals cover the surface, moving outward diagonally and horizontally from the vertical pole made by the spearman. As a long impression the composition has figural focal points separated by animal piles, and it gains continuity through the representation of the capride attacked from two directions. Such a composition is not accidental, but the result of purposeful design. One may note also the considered use of the very decorative antlers of the reindeer, another image to reappear in several works by C.

The young artist's conscious striving for self-improvement is evident in no. 16, especially in the concern with the critical problem of the shoulder and arm joint. The goat-fish and the deity with a goblet and herringbone beard resemble his earlier ones. The unusual throne and undivided garments, however, along with clarification of the design by the simple figures and rhythm and the elimination of fillers, suggest a foreign seal, probably Babylonian, as partial model for this composition. Here he introduces the image of the kneeling hero holding the tail and foot of a monkey, perhaps an adaptation of the Mesopotamian kneeling nude hero holding a lion overhead[53]. Monkeys are common to all the Anatolian group engravers, but some small distinctions can be made in the works of different men. Those in nos. 81 and 16 are the type used also by B (cf. nos. 10, 53, 7), following the model preferred by the teacher (cf. nos. 4, 55); the articulated arm separates from the body at the shoulder, coming out diagonally. The forearm of the monkey in A's work (cf. nos. 8, 25, 46, 71) seems to

[53] Cf. Morgan 362, Old Babylonian.

project from the body at waist level, and this type will appear in most of C's later work. From his teacher he derived the human facial type, standard from no. 16 on, a face remarkably similar to those of B. At this stage, however, his technical ability is beyond that of B at a similar stage.

No. 67 is a clear attempt to imitate the style and composition of A in the spacing against a relatively neutral ground, the type of seated deity and bench, the pitcher motif, the miter with two pairs of horns, the hunt - god with curved weapon and bird, and the treatment of the sun - disk [54]. That it is the work of C is shown by the modeling of the faces and hands, the shoulder and arm relationship, and the long, undivided garments. In the figure with a kid he attempted an overlapping of one supporting arm, and the malproportions resemble those in no. 54. The kneeling hero holding the monkey overhead now has the frontal face of the Babylonian type, but lacks the curling sidelocks, and so recalls those of no. 54; the monkey is the type used by A. It is chronologically significant that C is still a young man, now at the beginning of his career, using motifs that A developed in his mature works, thus toward the end of Level II.

No. 23 shows continued use of A as a model in the officiant supporting a pitcher with cupped hand and in the vase with reeds before the seated deity. The latter figure is like those of nos. 16 and 54, flat, wearing a false beard with herringbone striations, supported by a goat - fish. Other fish by the throne recall the work of his teacher (cf. no. 34), as do the inverted animal head fillers. The work of B is evoked by the small lion attacking the goat - fish, and again a chronological relationship is established as this idea belongs to a somewhat advanced stage in B's career (cf. nos. 58, 15). The spearman is a seated figure rather than one actively attacking. A new motif appears in the animal pile, a lion over a deer [55]. This idea may be a development of the bull altar supported by an animal, as on no. 41, another work by C that shows the influence of both A and B. Its division into two ritual scenes

[54] An unpublished impression on Kt. b/k 268 may be another work by C in imitation of A.

[55] The cylinder seal Brussels 1383 has both a kneeling figure and a similar animal pile. It may belong to the native group but is not the work of the artist discussed here.

suggests that the same may be true of no. 23, that the spearman crouches in adoration before the group of animals. In no. 41, and also no. 35, C prefers the more naturalistic bull altar often used by A (cf. no. 37). Adoring figures do not have the full profile treatment of shoulders, but they have an articulation sufficiently like B's figures to be a source of confusion[56]. Other motifs of note are the large bird fillers, the multiplication of animals to form a nearly continuous lower register, and the kneeling bull - man with streams flanked by large fish (no. 35). The two bull - men on no. 35 have a rather hesitant treatment of the sidelocks, and in the case of the kneeling one, the proportions of the legs leave no doubt that this is a figure by C (cf. no. 23).

Two animal pieces, nos. 82 and 96, provide C the opportunity to display his method of design[57]. Each has a vertical element, spearman or monkey, around which the composition revolves, and the movements and position of the animals give a sense of rhythmic flow that is enhanced by the emphasis on lines. The spearman has the more slender proportions of the bull - men on no. 35, and the same long leg with a curvilinear foot. The monkey of no. 96, like that in no. 41, is the type employed by A, and here it sits over a goat - fish, a combination to reappear later. No. 82 also has a goat - fish, not specifically supporting anything, and both impressions have an unusual grouping in the boar beside the sun - disk and crescent and not far away a lion with its head seen frontally. Another facet of his activity appears with the circular stamp impression no. 98, which shares with no. 96 the branch - like filler and the goat with reversed head, holding its forelegs at an awkward, impossible angle. This relationship suggests that the development of C's surface design was aided by work on stamp seals. The animals themselves, on this small group, show the perfecting of C's precise engraving technique and his formula for rendering animal bodies, taking full advantage of the texture of the incised striations.

[56] Heidelberg 24 (Kienast, figs. 13, 14) is another work by C in imitation of B.

[57] From the number of animal and hunting scenes produced by this artist, the subject must have been very popular. Other examples include Kt. d/k 16 (N. Özgüç *Belleten*, XVII, 1953, fig. 27), Kt. d/k 10 and k/k 35 (both unpublished), Louvre AO 8298 (*TC*, III, 3, no. 94), Louvre A 850 (*GS - H*, no. 27 = Frankfort, fig. 79), and Heidelberg 37 (Kienast, fig. 23).

For the procession of deities in no. 17 C draws upon B's vocabulary of motifs[58]. There are the types of altar table and associated bowl, but with the multiple handles more clearly engraved than B over achieved, the conquered lion with its tail drawn across the hero's body, the type of monkey, the skull - cap with horns, and the simple conical miter with a single pair of long curving horns. The figures are so close to B's as to be distinguished only by their slimness and greater elegance. The intellectual stature of C is revealed by his use of identifying attributes as a symbolic substitute. The cone with spears and arrows and the supporting goat - fish combine to serve as a substitute for Ea and thus become the object of adoration for the procession. In its form the cone resembles those of B (cf. nos. 26, 30), the tall shaft divided by horizontal bands, and the segments striated diagonally in alternation. (This type of cone also appears in nos. 19/20 and 21.)

In nos. 28, 65, and 64 the cone hovers in the air, associated loosely with a goat, and so is probably again a substitute for the deity Ea and the object of the procession of mounted gods. The small size of the cone, on these low seal impressions, may have prevented the segmental subdivision, as it consists of a vertical line with herringbone striations; but it has a blunt top with a few short verticals, like the cone used by A (cf. no. 39). The representation of cloud and rain in nos. 28 and 65 also resembles that of A (cf. nos. 39, 71) rather than B (cf. no. 29). The number of devices continued from earlier works- the large heads and other fillers used especially under outstretched arms, the goat with awkwardly bent forelegs, the spearman over a lion - makes clear the chronological brevity of C's development.

Nos. 62, 50, 74, and 60 share many motifs, especially of C's animal repertoire, and present variations of his design method[59]. Familiar images often are varied; the monkey over a goat - fish reap-

[58] Fragmentary impressions of this seal occur as Hilprecht 292B seal B.

[59] Less complicated and probably preceding these compositions are some simple animal files on two levels separated by a horizontal band, showing the whole range of C's animals. All are from short cylinders: Istanbul Ka 165 seal B (*ICK*, II), Louvre AO 9383 (*TC*, III, 3, no. 93), and Kt. d/k 17 (N. Özgüç, *Belleten*, XVII, 1953, fig 29).

The turtle (no. 74) probably had a Mesopotamian origin; cf. Morgan 305, and Istanbul Ka 936 seal C and 83 B (*ICK*, I, no. 41a; *ICK*, II); it occurs also on no. 14, the seal of Ilivedaku.

pears in no. 74, and in nos. 60 and 62 has the pitcher with vegetation, used also by A (cf. no. 11). From the work of A (cf. nos. 25, 70, 71) comes the animal seat of the deity in no. 74, used with the kneeling officiant holding a pitcher on the other side of the vase with reeds (cf. no. 23). Along with the human - headed fish, known from the work of his teacher (cf. nos. 33, 44), there is the lion - fish with the frontal head of the attacking lion (no. 60). Kneeling figures abound, as the hero with monkey overhead (no. 74), the spearman over an attacking lion (no. 62), and in new roles, the hunting god (no. 62), and the speared victim (no. 50). Unusual in the Kültepe iconography is the conception of human beings as the victims of the gods, in a scene of war (no. 50), or trampled by and carried in the mouth of a griffin (no. 74), both ideas probably derived from Mesopotamia [60]. Nos. 74 and 62 elaborate the compositional pattern of no. 82; the first by making two different subject matters, the second by showing two related figures enclosed by the animals - a hunting god and the hero as spearman under the guidance of the deity (who appears as a tiny figure before him, only the legs visible in the illustrated impression). In no. 50 the latter method functions very effectively as the war - god is preceded and followed by the spearman and martial scenes.

Substitutions for the god Ea appear in nos. 66, 60, and 63, in the first two a nude hero with streams accompanied by a goat - fish or several goat heads, and in the third by the bull - man conquering a lion, here associated with the goat - fish and a branch of vegetation. The combining of images seems to be C's method of emphasizing a specific meaning. Nos. 60 and 66 probably represent experiments on the effectiveness of combinations of verticals and horizontals [61]. In no. 60 the inscription and bull - man form an effective vertical, indeed flanking a perpendicular line, but the strict ordering of real and imaginary beasts in superposed registers is rather dry, and the fillers too, stars and animal heads, have an almost mechanical air. The hunting god with bird and rabbit of no. 17 appears four times in no. 66, all identical rather than with the variety offered by different mounted

[60] For related Old Babylonian griffins, see Morgan 362 and Frankfort, XXVII g. The group of a figure thrusting a spear or staff into a recumbent victim occurs in several other impressions, nos. 51, 59, 76.

[61] Vertical and horizontal rows of motifs become very popular in Cappadocian and Syrian glyptic, e. g., Berlin 531-534, 536, Louvre A 931, A 939.

deities (cf. no. 65). There is, however, a clarification of the design by the elimination of most fillers where they might be meaningless.

The essential lyricism of C's design method is best presented in no. 63 where the vertical design centers are separated yet joined by the enclosing curvilinears. Bull - man and lion, kneeling hunt - god, and storm - god on a bull are spaced out by the piles of beasts, superposed but with the alignment adjusted to create sweeping curves like those in nos. 62 and 74. With neither the casualness of no. 62 nor the mechanical regularity of no. 60, the animals provide horizontal accents across the composition and thus keep all elements on the surface. The most unusual part is not visible on this impression and the photograph[62]. Before the storm - god is stretched a bull, as dead game or offering, but disposed in a large curve and as though seen from above. The bull's tail hangs in a sweeping reverse S - shape that is symmetrically duplicated by the rein in the hand of the storm - god. A suggestion of this pattern appears in no. 28, where the monkey's tail and a rein form a similar decorative accent. In no. 63 smaller curves reflect each other in the crescent moon and the tail of the running animal above the recumbent bull, and, as the horns of the mounted bull and goat - fish, they reappear at the bottom. One of the very few fillers left on the surface, the eight - pointed star, emphasizes the divinity for which the elegant bull - man and lion group stands, and it indicates the idea of this representation: Ea, god of waters, makes vegetation flourish to sustain life in the air, the water, and on the land. The storm - god and the hunt - god pay homage to him with their offerings of bull and fowl. Altogether this composition is C's most accomplished and one that links his method of design to the native Anatolian stamp seal tradition[63]. There is a high degree of sophistication in the organic unity achieved between meaning and decorative pattern.

Although younger than both A and B, indebted to them for his own advancement, C apparently had some influence on them. In

[62] More is visible in *Kültepe 1949*, fig. 712.

[63] Compare especially the method of joining animal and bird heads on long necks in a whorl design, a fashion limited to stamp seals of Levels II and Ib: Kt. d/k 10 (unpublished); Kt. g/t 309 (N. Özgüç, *Anatolia*, IV, 1959, pl. 2, c); Istanbul Ka 932 seal C (*ICK*, I, no. 40a). Nos. 92 and 93 show a direct adaptation to the cylinder seal of this method of forming arbitrary, abstract patterns dependent on shapes and textures, although composed of presumably realistic elements.

some cases, for example, the small lion and prey confrontation, it is impossible to attribute primacy of use, but for the frequent representation of the goat - fish, both A (nos. 11, 40) and B (nos. 7, 15) seem dependent on C. Similarly he made early use of the kneeling bull - man or hero (nos. 67, 35, 66, 74), while A (nos. 8, 11, 73) and B (nos. 7, 15) adopted the figure in late works only.

The monkey opens the way to a complex problem in meaning and artistic relationships. With a general significance of fertility it was used by all artists He holds a cup or small vase in no. 57 by A, no. 15 by B, and no. 67 by C. He holds a pitcher in later works by A (no. 40, where the goat - fish also appears). B shows a monkey with a leaf, by the storm - god's mount in no. 29. In late works of A (nos. 11, 8, 73) and late works by C (nos. 62, 60) the monkey holds a pitcher with a leaf emerging from the mouth. For us certainty is impossible, but C's habit of combining images suggests that he created this new composite, and then it was immediately taken up by A. C it was who associated the monkey with the goat - fish, probably a substitute for Ea, at least in no. 96, while A used these symbols separately and primarily for identification. As a symbol of vegetal fertility the vase with foliage was used since the time of Akkad and retained its currency in Mesopotamia and Syria during the First Dynasty of Babylon[64]. In the repertoire of Anatolian designers the composite image became another symbol of the fertilizing power of water, like the goat - fish, hero or bull - man with stream, the vase with reeds, the officiant pouring from a pitcher, the storm - god, and the representation of rain itself.

As an artist, then, C matured rapidly, aided by a great natural facility and a clear perception of his artistic goals. He borrowed from many sources, but modifying, adapting, and combining images with versatility. These combinations not only enriched meaning, but provided elements of continuity important for the content and the

[64] From the time of Akkad the flowing vase often contained also some vegetation, De Clercq 46, Louvre T 43; at the time of Gudea, on a stele fragment and a seal impression, Louvre T 108 (A. Parrot, *Tello*, Paris, 1948, figs. 35 d, 43 f); from Mari at the time of Zimri - lim, the investiture mural of court 106 (Parrot, *Mission Archéologique de Mari*, II, 2, pls. VIII-XI, colorplate A); on Syrian cylinder seals, Louvre A 913, A 914, Morgan 928, 929, 933, Berlin 398. It occurs without the overflow of water on a Syrian cylinder, Newell 301, and Old Babylonian ones, Morgan 391, Berlin 503, Brussels 464.

visual effect of his compositions. His understanding of symbolic substitution, the use of an identifying image in place of the deity, indicates a high intellectual level. The method of composing around focal points with subordinated relating elements shows that he grasped more firmly than others the nature of the cylinder seal as an object for design.

In studying the works of each engraver, we have seen how the times and traditions within which he worked, the foreign influences that bore upon him, and his own character all affected the development of his individual style. During the middle decades of the Level II period these forces operated through such men as the teacher of the second generation and brought the native style into existence. His work was formed by the traditions of the Third Dynasty of Ur, known to him probably through Syrian, Old Assyrian, and southern Mesopotamian examples. His animal and hunt scenes may have been based on survivals of those subjects from the time of Sumer and Akkad. The degree to which native Anatolian interest has already led to animal motifs, as well as mounted deities, is not known. From a native stamp seal tradition, however, he apparently derived his vocabulary of fillers and his technique. He cut deeply, thus giving the impressed figures a high relief, though with a relatively flat surface, and modeled details with deep linear grooves.

With a base established, the third generation moved toward the full native style, exploiting all methods of enriching the surface. Striations, especially in the herringbone pattern, characterize the treatment of parts, yet a basic realism influenced figural poses and actions and the representation of many details, including supplementary furnishings. Repetition, simple duplication as well as variation (such as the row of mounted deities), was a means for multiplying images. The upward spread of composition provided more levels for narrative and mythological motifs. Characteristic fillers, costumes, deities, and other motifs appeared as a clearly Anatolian iconography expanded. The degree of foreign influence depended largely on the inclination of the individual designer toward the strong and assertive forms of the developing Syrian and early Babylonian arts.

Artist A was most receptive to foreign ideas, but with sufficient inventiveness to make them serve his purposes[65]. His use at times of rounded forms (though retaining the striations) most nearly approached the plasticity of advanced Syrian and Mesopotamian work. Motifs, too, occasionally approximated the foreign ones, but more often underwent variation and change in contexts. He made the largest contribution to Anatolian iconography by his adaptations and inventions, intended apparently to endow mythology with greater credibility and impressiveness. The weightiness of his forms, compositional rhythms, and subject matter made him the monumental artist of his generation.

Most retardataire, B remained closest to the teacher and also to the Sumero - Akkadian substratum that probably survived through

[65] His use of the nude female reveals the strength of his artistic personality. Two forms of this figure appear in the Syrianizing impressions, a simpler type, with her hands before her waist or holding her breasts, and a more complex form, the unveiling nude who extends both arms to hold the tips of the drapery stretched behind her body. For the latter figure there evidently was an archetypal composition in which she was flanked by ithyphallic bull-men reaching out to aid in the unveiling. Syrianizing impressions of the Level II period preserve all stages of the deterioration of this motif: One or both bull - men may be omitted, or the nude hero substituted; the unveiling female may be replaced by the simple nude; the veil may be omitted so that arms stretch out inexplicably; in the latter case her hands may hold weapons or animals. Her legs may or may not be flanked by smaller fillers, including monkey, rampant goat, elixir vase, human head, fish. Artist A preferred the unveiling type of nude, and a Syrian source is strongly indicated. He used the figure several times, elaborating the veil into a circular wreath - like form (nos. 70, 71: Morgan 894; Istanbul Ka 905 and 963 seal A: *ICK*, I, no 48a). In some examples she may hold spear and bow in outstretched hands (Istanbul Ka 392: *ICK*, II) or, like the lion-man of no. 49, two animals as offering (Louvre AO 9384 a: *CC*, I, pl. B, 4). In nos. 11 and 75 one arm is outstretched as she holds a bird or kid. In Louvre AO 9384a and no. 75 her legs are flanked by fillers, and in the latter bull - men surround her, although in these and no. 11 there is no hint of the unveiling action in the poses of the bull - men or the nude. In several cases she is closely associated with the storm- or weather - god, a relationship occurring on only one Syrianizing impression (Istanbul Ka 1035 seal A: *ICK*, I, no. 30a); sheer numbers indicate that A established a relationship that survives in later Syrian pieces (Morgan 967, 968); as possible background for this relationship, see Morgan 220, a cylinder seal from Akkad.

Syrian glyptic[66]. Perhaps to this background he owed his early insistence on deities over animal mounts, that may be his most significant contribution to Anatolian iconography. His vigorous modeling (even though inept in early work) and interest in overlapping forms and foreshortening also had more Syrian than Old Babylonian relationships. Just as he was aided by the work of A, he was probably indebted to his Syrianizing fellow engravers rather than to imported pieces.

The most isolated of these artists and the least affected by foreign styles was C, who may have been almost exclusively dependent on personal relationships with such men as his teacher and artist A. His youth was probably responsible for his limited range of artistic contacts. Such an isolation permitted him to elaborate his own design propensities, as new motifs were abstracted from their former contexts and made subject only to his fancy. His precise miniaturist's technique, by its variation from low to high relief, demonstrated the freedom made possible by his youth and provincialism. He was, however, in touch with the native stamp seal tradition, and his method of design profited from its arbitrary patterns and fanciful constructions. No creator of motifs - his vocabulary was quite limited by comparison with that of A - he invented by combination, and his strength lay in his insistence on the lineal patterns drawing together the parts of his compositions.

Any attempt to isolate these engravers in the artistic community of Kanish would falsify the probable conditions of life in that community. An individual like A might have had as neighbors a Syrianizing designer on one side and on the other a man closer to Babylonian ideas. The conservative nature of the crafts, however, will have created what may be called vertical relationships, the continuity

[66] In contrast to artist A, B seldom employed the nude female, and when he did it was the simpler form, as on a cylinder used for several impressions (see note 44) and in no. 3 (shown behind the seated deity in another impression; however, B's authorship of no. 3 is very questionable). In another case, Istanbul Ka 914 seal A (*ICK*, I, no. 35a) she stands over the reins of Adad's lion - dragon; although her face is in profile, her feet point in opposite directions, an indication of B's bold struggle with foreshortening problems. The teacher and C did not represent the nude female.

Fig. 1 — An early work by the master of the second generation (Özgüç, *Anatolian Group*, no. 55)

Fig. 2 — A late work by the master of the second generation (Özgüç, *Anatolian Group*, no. 47)

Fig. 3 — An early work by engraver A (Özgüç, *Anatolian Group*, no. 37)

Fig. 4 — A late work by engraver A (Özgüç, *Anatolian Group*, no. 69)

Fig. 5 — An early work by engraver B (Özgüç, *Anatolian Group*, no. 12)

Fig. 6 — A late work by engraver B (Özgüç, *Anatolian Group*, no. 15)

Fig. 7 — An early work by engraver C (Özgüç, *Anatolian Group*, no. 56)

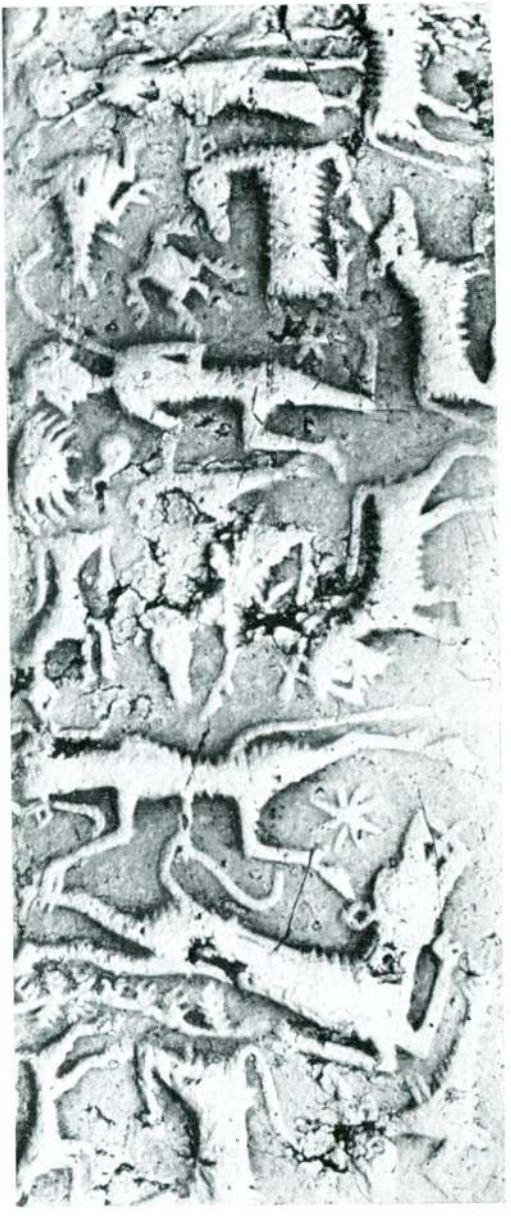

Fig. 8 — A late work by engraver C (Özgüç, *Anatolian Group*, no. 63)

between teacher and pupil. A workshop tradition, in fact, with all its apparatus of techniques and recipes handed from master to apprentice, seems to us a most reasonable way of understanding the emergence of the native group within the multiplicity of stylistic currents [67].

In consideration of the number of tablets found and the number of cylinder seal impressions by our masters now known, it is probable that the outlines of their careers in this activity are established. For no one of them can the numbers be accounted a life's work. Certainly these engravers made stamp seals, and they possessed the skills and equipment to cut stones for jewelry and ornament, as well as the molds for metal casting [68]. Both metal stamp seals and the small lead figurines have sufficient stylistic and iconographic relationships with the cylinder seals to suggest that some could be the work of the same artisans. If then the craftsmen were jewelers in the broadest sense, working in both stone and metals, they may also have produced pins,

[67] We cannot rule out the probability of other individuals, and minor shops, as producers of cylinders of the native group. Our four artists account for most of the published impressions, although with some questions here and there. Of the remainder, very few show stylistic relationships. Perhaps nos. 24 and 31 are the work of one man, nos. 18 and 68 the work of another, and, with less certainty, nos. 19/20 and 21 by still another. The seals of nos. 88 and 89 may have been survivals from an earlier generation rather than dating from the end of Level II. Nos. 92 and 93, like nos. 97 and 99, seem the work of men more accustomed to the imagery and decoration of the stamp seal tradition. Individual and unrelated pieces include nos. 2, 14 (the Ilivedaku seal; add Kt. a/k 924, and Istanbul Ka 8 and 270: both *ICK*, II), 42, 51, 76 (add a fragmentary impression, Pinches, *Liverpool Annals of Archaeology and Anthropology*, I, 1908, pl. XVIII, 13 = *GS - H*, no. 10), 84, 85, 87, 90, 94, and 95. If these all date from late in Level II, then it is clear that many craftsmen attempted cylinder seals, but few were successful enough to win continued patronage. Some of the individual pieces may, of course, be imports from other Anatolian centers.

[68] See J. V. Canby, *Iraq*, XXVII, 1965, pp. 42-61, with excellent bibliography.

ax heads, and numerous other objects in metal. Seal cutting may have been a minor aspect of their activities, but one in which the personal impress was greatest [69].

[69] Addendum - Although the text of this article was completed in 1966, its publication has been delayed for translation. I am much indebted to Miss Hulya Salıhoğlu and Mrs. Aslıhan Yener for making the translation. The text has not been changed since there has been no significant recent publication bearing upon the problem treated here. If I were to redo this study, I should consider the iconography more thoroughly. I do wish, however, to add a few observations on seal impressions outside of Turkey.

With the aid of a generous research grant from the University of Iowa, I have been able to study the impressions on tablets in New Haven, London, and Oxford, Paris, Brussels, and Berlin. One change I must make refers to an impression in Oxford (see note 24); Ashmolean 833D is the work of engraver C. Two impressions in the Louvre can be added; AO 9385 is by artist A, and AO 7048 by artist C. The impressions on Kültepe tablets in the British Museum will be published in a catalogue by Miss Dominique Collon; several examples will be added to the works of each of the masters of the last generation.

Finally, it is a pleasure to acknowledge once again the generosity of Mrs. Nimet Özgüç, along with the authorities of the Türk Tarih Kurumu, for supplying the illustrations.