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PRESIDENTIAL ADDRESS

H. TORCZYNER

(JERUSALEM)

In accepting the honour of acting as President of the Palestine Oriental Society for 1936 I am taking over a work which has been begun and brought to a very high standard by men and scholars whose name and fame, earned by their excellent achievements in the many fields of Palestinian and Oriental research, will always make the presidency of the Society a distinction that none of their successors can accept without a feeling of his unworthiness and of the great obligations connected with his position. It is no easy task to reach the standard set up by Père LAGRANGE, Prof. J. GARSTANG, Prof. W. F. ALBRIGHT, Père (now Prof.) DHORME, Mr. (now Canon) PHYTHIAN-ADAMS, the late Prof. M. MARGOLIS, the late Père G. ORFALI, Dr. T. CANAAN, Père A. MALLON, Mr. E. T. RICHMOND, Père ABEL, Dr. (now Prof.) L. A. MAYER, M. R. NEUVILLE, Mr. J. W. CROWFOOT and Canon H. DANBY. My task is the more difficult after such a successful period as the last few years have been for our Society and in succession to such a distinguished scholar and brilliant man as Prof. W. F. ALBRIGHT, the President for 1935. Prof. ALBRIGHT, whose name and work will always be connected with the Palestine Oriental Society and with our work in Palestinian research, is leaving Palestine. Let us, with our thanks for his merits in the past, express the hope that he will in the near future return to Palestine, to stay with us as a permanent resident of Jerusalem and continue the work which he has begun and carried on with such skill and success.

However, while Prof. ALBRIGHT leaves us for the time being, we are all the more obliged to the other "pillar of our society," Dr. T. CANAAN, who as our Secretary since 1929 not only keeps up the Society's traditions during the annually changing govern-

ments, but gives all his immense industry, zeal and devotedness to the mission of the Palestine Oriental Society. It is due in a very great part to his unceasing activity that our *Journal* has been enlarged from about 240-260 pages in 1933 to 320 pages in 1934, and to 360 pages, full of valuable material, in 1935, that the *Journal* is highly appreciated and quoted throughout the learned world, that the number of our members has increased steadily, and that instead of four to six general meetings as in former years we could arrange eight meetings in 1935, all of which drew large and interested audiences. Our heartiest thanks are due also both to the American School for Oriental Research and to the Ecole Pratique d'Etudes Bibliques for their hospitality in kindly permitting us to arrange our meetings at their rooms, and to Canon H. DANBY and Prof. W. F. ALBRIGHT for the editorship of the Society's *Journal*. Since Prof. ALBRIGHT leaves us, we have co-opted Mr. D. N. BARBOUR who has kindly consented to take over Prof. ALBRIGHT's work as co-editor of the *Journal* with Canon H. DANBY for 1936.

It is one of the greatest merits of the Palestine Oriental Society that, while its members are recruited from many nations and faiths, the Society, in the common enthusiasm for pure knowledge and conscientious research, finds it easy to maintain neutrality in political matters, and that students from different countries and religions are united in it for the one purpose of learning from each other. It may therefore not be considered as inappropriate if I use this Presidential Address to deal with a few questions of word-relations between the Accadic language of the Assyrians and Babylonians and the Hebrew and Aramaic of the ancient Jews. Word-relations are documents of cultural relations; and in particular the many loanwords and loan-translations wandering from country to country and from nation to nation remind us of the truism that no nation has built up its culture entirely by its own genius, but that all races and religions have contributed to the ever changing and ever incomplete culture and civilization of mankind.

Since the first attempt of scholars to read and interpret the documents of the ancient Assyrians and Babylonians, written in cuneiform characters, particular interest has been given to the manifold relations of Hebrew words to Accadic equivalents and especially to the numerous loan-words which, mostly from Babylonian,

penetrated into the Hebrew and Aramaic languages of the Biblical and Talmudic period. It was these very equations of words which helped to a first understanding of the then unknown language which, to the great surprise of students, emerged from the complicated signs of cuneiform writing. Since then there have been many attempts to gather the results of the scattered studies and arrange them systematically in one comprehensive work. Thus the late HEINRICH ZIMMERN, both in the third edition of *Die Keilinschriften und das Alte Testament* and in his special study *Akkadische Fremdwörter als Beweis für babylonischen Kultureinfluß* (1916/17), tried to give a complete survey of all the words which, directly or indirectly, passed from the Accadic language (or from Sumerian through Accadian) to western Asia and thence to other countries and cultures. ZIMMERN, however, in this study gives only results without their reasons and proofs, and without mention of his predecessors, all of whom contributed to these results. As ZIMMERN says in the prefatory note to his index, he intended to issue a fuller work, in order to complete and enlarge his popular study on these and other points. Whatever has been published since (e.g. LANDERSDORFER's *Sumerisches Sprachgut im Alten Testament*) is of no particular value, and the best of it is based on ZIMMERN's incomplete book. In 1903 D. H. PICK had begun to deal especially with the Accadic traces in Talmudic sources in his dissertation *Talmudische Randglossen zu Delitzsch' Assyrischem Handwörterbuch*; but this was never completed. Thus a full and comprehensive treatment of all the Accadic loan-words which penetrated into the cultural sphere of the ancient Jews still remains to be written.

Yet even so scholars in many countries have never ceased to point out and discuss many examples of such loan-words, and this unceasing work of many scholars has gone far to clarify and establish the obvious relations. Thus he who now tries to contribute anything new to this problem must penetrate deeper. And it may be that his results, reached by a more complicated process of reasoning, may lack certitude. Some may only be probable or merely possible. But our research should not neglect even possibilities. Their discussion may induce additional proof or disproof and so help to throw more light on the facts.

With this reservation I submit for discussion a few Accadic-Hebrew

word-equations, not always cases of Accadic loan-words in Hebrew, but sometimes of real identity of words, original in both languages.

That the whole extent of Accadic-Hebrew word-relations has not yet by any means been fully recognised, has been shown by me in a note published in the *George Kohut Memorial Volume*.¹ It is there suggested that קְרוֹב טָמֵאָה הַפּוֹכֵךְ in Ez. 28¹⁴, variously and unsatisfactorily interpreted, contains a series of *three Babylonian vocables*.

Here is the usual translation of Ezek. 28¹²⁻¹⁶:

12. Son of man, take up a lamentation upon the king of Tyre, and say unto him, Thus saith the Lord God: Thou art the seal of beauty² (*not*: Thou sealest up the sum), full of art (here *not* wisdom, חֲכָמָה), and perfect in beauty.

13. Thou hast been in Eden, the garden of God; every precious stone was thy covering (טָמֵאָה), the sardius, the topaz and the diamond, the beryl, the onyx and the jasper, the sapphire, the emerald, and the carbuncle, and gold: the workmanship of thy tabrets and of thy pipes was prepared in thee in the day that thou wast created.

14. Thou art the *anointed cherub that covereth*: and I have set thee so: thou wast upon the holy mountain of God; thou hast walked (up and down) in the *midst of the stones of fire*.

15. Thou wast perfect in thy ways from the day that thou wast created, till iniquity was found in thee.

16. By the multitude of thy merchandise they have filled the midst of thee with violence, and thou hast sinned: therefore I will cast thee as profane out of the mountain of God; and I will destroy thee, *O covering cherub* (קְרוֹב הַפּוֹכֵךְ), from the midst of the stones of fire.

The main difficulty of this passage is the fact that the king of Tyre, called in v. 12 a *seal of beauty* (חֹתֶם חֲכָמָה; חֲכָמָה itself seems to be also an Accadic word: *taqnītu, taknītu*, "perfect, beautiful,") "full of art and perfect in beauty," adorned with all kinds of

¹ New-York. 1936 (in Hebrew).

² With a number of manuscripts and many scholars we have to read חֹתֶם for חֲכָמָה.

precious stones (v. 13), is at the same time called a cherub, i.e. the כרוב ממשח הסוכך.

The lists of the temple-treasure of Qatna-Mishrefe in Syria, as published by VIROLLEAUD in "Syria," 1930, mention together with other pieces of jewellery: a seal (*kunukku*), *nimšahu*,¹ (*mašāhu*, to shine), and *sakkak*,² and thus it seems very plausible that Ezekiel here describes the "seal of beauty" by the regular Babylonian technical terms *kunuk* (read כנוך, כנוכ for כרוב) *nimšahi sakkak*, approximately, "seal of the splendour of crystal" (the word *sakkak* may be connected etymologically with Hebr. זכוכית Aram. זוגיתא "glass"), thus quoting three Babylonian words in his simile. I am now inclined to add that also מסכתך in v. 13 seems to be a Babylonian word. The Accadic language uses the expression *abnē nisiqli*, "stones of ornament," for "precious stones," and this "thy ornament" is apparently מסכתך, perhaps pronounced *misiktekh*, with the same change of *m* for *n* as in ממשח = *nimšahu* and *k* for the not more emphatically pronounced *q*, as in חכנית for *taqnitu*.

Here are further examples:

1. ואבן. אשוח, which occurs in Meša^c 1.9 in the sentence: ואבן. אשוח. בא'אל-מע'ון. "and I have built Ba'al-Me'on and I made in it the. . . ." is usually understood as "water-reservoir, basin," and connected with the Hebrew-Aramaic word שוח "to be low" or "pit." Compare also the passage in (the Hebrew) Sirach 50¹⁻³:

שמעון בן יוחנן הכהן

2. אשר בדורו נברך הכית ובימיו חזק היכל

3. אשר בימיו נכרה מקוה אשיח כם (read פִּימֹנִי בְּהִמּוֹנִי)

"Simon the son of Johanan, the priest, in whose time the House was repaired and in whose days the Temple was strengthened, in whose days the water-reservoir was dug, a basin (??) like the sea (?) in its roaring." The text of this verse is more than doubtful. The last copyist, who gave the reading אשיח כם, understood it (cf. BEN-YEHUDA, *Thesaurus*, I, s.v. אשוח) as אֲשִׁיחַ כָּם, "I tell of

¹ *Nimšahu* stands according to Accadic phonetics for original *nimšahu* because of the following labial *m*. However, in reproducing the Babylonian word the Hebrew ear may also have heard *m* instead of *n* as (vide infra) in מסכת for *nisiqtu-nisiqlu*.

² VIROLLEAUD reads SAG.KAK as ideograms, but we have to read simply *sak-kak*.

these," and to reach this sense he has *adapted* his text, wherein **אִשִּׁיחַ** could have been miswritten under the influence of **אִשֶּׁר** at the beginning both of v. 2 and v. 3. And "a basin like the sea in its roaring" is by no means a correct and likely phrase: one would rather expect another predicate (as in 2b) continuing the relative clause in 3a ("In whose days the water-reservoir was dug [and deepened" e.g. **וְהוֹרַשָּׁה**]), or at least "*the basin* (**הַשִּׁיחַ**)" instead of the indefinite apposition "a basin." Whatever may be the true explanation, the noun **אִשִּׁיחַ** in Sirach is in itself not sufficiently established to serve as a basis for the explanation of **אִשׁוּחַ** in Meša^c. And here, if the word has to be pronounced as **אִשְׁוֹחַ**, the **א** *prostheticum* remains unexplained. Such an **א** is added in such cases as **אֶזְרוֹחַ** for **זְרוֹחַ**, where the double consonant made pronunciation difficult and led to a contraction with the (ending) vowel (of the preceding word). But why add an *Aleph prostheticum* to the simple syllable **šū(a)ḥ**? Thus pronounced the **ו** in **אִשְׁוֹחַ** also seems superfluous. I am, therefore, inclined to see in **אִשְׁוֹחַ** an analogy to the Accadic word *gimahḫū*, which in its Sumerian original meant "the sublime place," and is used as a loan-word in Babylonian for *grave, sepulchre*. This word, in the form **גַּמְחִין**, pl. **גַּמְחִין**, but also **גַּח**, and plur. **גַּחִין** (*giwahḫū* for *gimahḫū*, with the well known Babylonian interchange of *w* for *m*) appears in Nabataean and Palmyrene inscriptions for "grave, grave-niche." Thus we may find in **אִשְׁוֹחַ**, pronounced **אִשְׁוֹחַ**, the Sumerian-Accadic *ešmahḫū-ešwahḫū*, which also originally meant "the sublime dwelling," and occurs (in, it would seem, a secondary sense) as the designation of a celestial place. **אִשְׁוֹחַ** of the Meša^c-Inscription may, as **גַּח**, be used for a grave-sanctuary. However it may stand here, according to the word's origin, for any other *sacred* building.

2) **בָּשָׂם** in Amos 5¹¹ **כִּי יֵשֶׁן בְּדֹשָׁכָם עַל דָּרַךְ** is usually explained as a misspelt form of the verb **בָּשָׂם** "to tread upon, to trample on": "Forasmuch therefore as your treading is upon the poor and ye take from him burdens (*better*: "rent") of wheat." However, to reach this translation we have to correct **בָּשָׂם** into **בֹּשֶׁסֶם** for which correction the parallelism "to tread upon" and "to take rent" hardly provides a satisfactory basis. But this very parallelism suggests that we seek in **בָּשָׂם** a verb which could be the Hebrew equivalent for the Accadic *šabāšu šibša ina eqli*, "to take rent from

a field." The verb and the noun derived from it are particularly frequent in the temple accounts of Nippur from the Cassite period (see the present writer's *Altbabylonische Tempelrechnungen*, Vienna, 1913). We may, therefore, vocalise בָּשֹׁסְכֶם or בָּשֹׁסְכֶם, "Forasmuch therefore as ye lay rent upon the poor and ye take from him burden (= rent) of wheat."

3) בָּרִיתָ קָם in Is. 42⁶; 49⁸: וְאֶתְהַנֶּהֱלֵךְ בְּרִיתָ קָם (לְאֹר גוֹיִם) has been compared with the Accadic (*ana*) *tabrāt nišē*, "(as) a sight for men," "to the astonishment of men." But this provides no parallelism with לְאֹר גוֹיִם "as a light for the nations" with which Is. 42⁶ follows בָּרִיתָ קָם. As a parallelism to אֹר "light" we should rather see in בָּרִיתָ a word corresponding, originally or as loan-word, to Acc. *bararītu* "splendour, (time of the) rising of the stars," from *barāru* "to give light, to shine": "And I give thee for a splendour of the people, for a light of the Gentiles." ברית as a derivation from *brr* rather than from *bry*, occurs also Ezek. 20³⁷ f: "And I will bring you into the bond of the purging (תְּבָרִית, not "covenant"): and I will purge out (וְכָרַתִּי from בָּרַר) from among you the rebels, and them that transgress against me."

4) מְנַזְזָר used, Nah. 3¹⁷, in the plural מְנַזְזָרִים in strict parallelism with מְסַפְּרִים "thy *tuṣṣarrē*, scribes, officials," as an Accadic expression for Assyrian officials, cannot stand (as has been suggested) for Acc. *maṣṣāru* "guard" (a *high* official is meant), nor or מְנַזְזָרִים (which would be Hebrew and would not fit the context); still less can it stand for an impossible מְנַזְזָרִים (P. HAUPT: "sorcerer"). Only a frequent Accadic name for a *high* official comes into consideration as corresponding with *tuṣṣarru*. There seems little doubt that we should read simply מְנַזְזָרִים "thy *manzāzē*." *Manzāzu*, together with *tuṣṣarru*, is one of the most frequent names for an Assyrian official occurring both alone and in such combinations as *manzāz ekallī*, "official of the palace," *manzāz babi* or *abulli*, "door prefect," *manzāz pāni*, "chamberlain," *manzāz rēši*, "body guard," etc.

5) סוֹחֲרִים in Is. 47¹⁵ is clearly not "thy merchants," but, as in Acc. *sāḫīru*, Arab. سَاحِرٌ, "magician, sorcerer", "thy magicians." Cf. 13—15:

13) Thou art wearied in the multitude of thy counsels.
Let now the *astrologers*, the *stargazers*, the monthly *prognosti-*

cators stand up and save thee from these things that shall come upon thee.

14) Behold, they shall be as stubble; the fire shall burn them; they shall not deliver themselves from the power of the flame: there shall not be a coal to warm at, nor fire to sit before it.

15) Thus shall they be unto thee with whom thou hast laboured, *thy magicians* (not merchants), from thy youth: they shall wander every one to his quarter; none shall save thee."

6) בִּירֹוחַ כִּפְפָנִי יַעֲמֹק וְנִשְׁמֹחַ אֲנִי עֲשִׂיתִי, Is. 57¹⁶, seems to correspond to Acc. *edēpu* (*elēpu*?) "to blow": "For the spirit blows from (not: should fail) before me, and the souls, I have made [them]."

7) וְאֶנְכִי תִרְגַּמְתִּי רָאִפְרָם חֲרַגְרָ, Hos. 11³, (usually connected with רִגְלָ "foot" and therefore interpreted as "I taught Ephraim also to go") has been compared by F. PERLES (in *Or. Literaturzeitung*, VIII, 133) with the Accadic *tarkullu* (or *tarqullu*), which with other scholars he understood as "oar" or "rudder," thus arriving at almost the same general meaning of the sentence as that of the traditional interpretation. Since then, however, P. JENSEN has shown (in *Keilinschriftliche Bibliothek*, VI, 1, p. 493 sqq.) that *tarqullu* is not the oar, but, together with *markasu* (to *rakasu* "to bind"), "der Schiffspfohl oder Mast, der zum anbinden oder verbinden dient." Moreover the sentence "I taught Ephraim to go" does not fit into the context where Ephraim is pictured, not as a child, but as a cow wearing the yoke. It is better therefore, to interpret the loan-word חֲרַגְרָ as "to bind to the pole (of the yoke)." Thus the meaning of Hos. 11³⁻⁴ will be:

3) I bound Ephraim to the yoke, taking them by their arms: but they knew it not, because I kept them loose (רָפָא, from רָפָה "to be loose, to keep loose," not: רָפָא "to heal"). I kept¹ them with cords of men, with bands of love: and I was to them as they that put the yoke upon (not: take off! Hebrew; לִפְתִּי מִלִּפְתִּי) their jaws . . ."

¹ מִשָּׁךְ "to keep," not "to draw"; see *MGWJ*, LXXVII (1932), p. 401-412: *Leshonenu* VI (1935) 327-336.

CHRISTIAN KILWA

NELSON GLUECK

(CINCINNATI, OHIO)

During December 1932, the writer, then Director of the American School of Oriental Research in Jerusalem, and Mr. GEORGE HORSFIELD, Adviser to the Director of the Department of Antiquities in Transjordan, undertook an expedition through the desert of eastern Transjordan from Mafraq to Kilwa. The other members of the party were Mrs. GEORGE HORSFIELD, Mr. R. G. HEAD, Mr. A. H. DETWEILER, Mrs. NELSON GLUECK, and Miss ANN FULLER. The expedition is indebted to the Transjordan Government for placing at its disposal an army truck, with a guard of an officer and six soldiers. An important new prehistoric station belonging to the palaeolithic period was discovered at Kilwa. On the smooth surfaces of a small, hard sandstone hill, there were found rock-drawings of ibexes and other animals, and one rock drawing of a man, the first representation of prehistoric man ever to be discovered in Arabia. These finds have been reported on in the *American Journal of Archaeology*, Vol. XXXVII, pp. 381-386 and in the *Bulletin of the American School*, No. 50, pp. 9-10. According to recent reports which have come to me, there are several other hills in the vicinity of Kilwa, which are similarly covered with prehistoric rock-drawings (see Fig. 2.) Also a very large dolmen field has been seen on the way from Kilwa to Fort Ja'far. The entire region requires a systematic survey. For the position of Kilwa on the map of Arabia, see Fig. 1 and the excellent map of Arabia in JAMES A. MONTGOMERY's book *Arabia and the Bible*.

Several hundred metres west of the sandstone hill with its prehistoric rock-drawings, an early Arab settlement was discovered, consisting of a group of basalt buildings resembling in general type the buildings in southern Haurân described by HOWARD CROSBY BUTLER. GERTRUDE BELL seems to be the first European to have visited these ruins on her way to Hâyl in 1914, merely recording the

fact in her *Letters*, p. 273. In recent years the site has been visited by Captain GLUBB and other members of the Transjordan military forces. The various buildings were planned by Mr. A. H. DETWEILER,

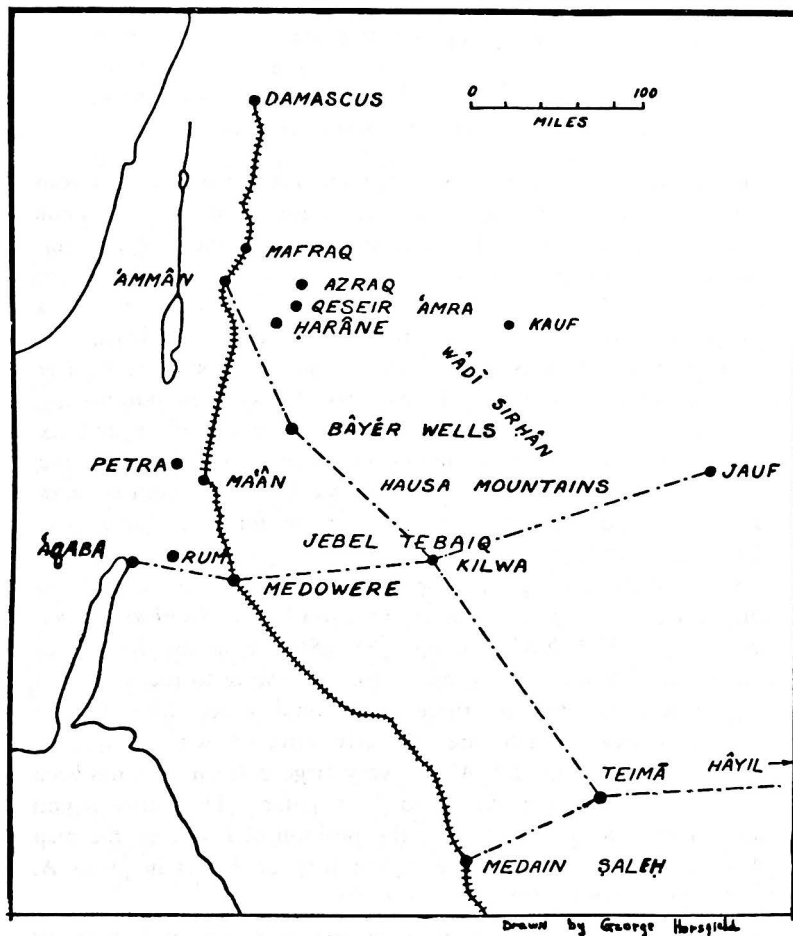


Fig. 1.

whose architectural notes have been incorporated into this article. Two of the buildings are placed at opposite sides of an open court. A wall can be traced on the east side of the compound, and there are suggestions of a wall on the west side. All the visible doorways

of these two buildings open into the interior court. South of this compound is an isolated building of two rooms. An opening cut through the centre of the lower part of the west wall of room A in this building indicates that it was used as a cistern. A well-defined conduit approaches this opening in room A from the nearby low hills to the northwest, but is now broken off before it reaches the building. The intact portion of the conduit is 112 paces long. South of this building was a shallow *birkeh* of considerable size (Fig 2). The interior walls of rooms A and B were still plastered in places (Fig. 3). The floors were covered with fallen stone beams from a second story. That there was originally a second story is also indicated, according to Mr. DETWEILER, by the presence of a corbel course near the top of the walls with several stone courses above it. The segment of a semi-circle of carefully cut stone is visible on the outside of the south wall of room A. The masonry projection extending from the north wall of room B may have been originally connected with the building at the south end of the enclosed court. In the centre of room A a large sandstone block was found with an Arabic inscription on it (Plate, I B). Outside the southeast corner of room A there was found a rectangular sandstone block, with a weathered sundial incised on it.

The rooms of the south and north wings of the enclosed court face and open into it (Fig. 3). In room C, windows which are mere slits on the outside were let into the west and south walls. Two small recesses were cut into the south wall on either side of the window. A larger one was sunk into the wall to the right of the doorway leading into the court. These recesses were carefully plastered. Room C is the only room that has retained most of its ceiling. On the ceiling beams can be seen layers of pebbles and plaster that make up the floor above, as is shown in the section drawing at double scale of the north wall of room C. Much of the wall surface of this room was plastered.

A small doorway leads from room C to D. There are no windows in this room. Portions of the wall surface are still plastered. All the corbel courses on the north and south sides of room D are still in place, as well as most of the stone ceiling beams.

An interesting feature of the corbel construction in room D is the presence of additional corbels in the east and west walls, which run

parallel to the stone beams. Thus two corbels in the east wall and one in the west wall, made it possible to place two small ceiling beams instead of one large one next to each of these walls. Mr. DETWEILER has suggested an explanation for this arrangement. When

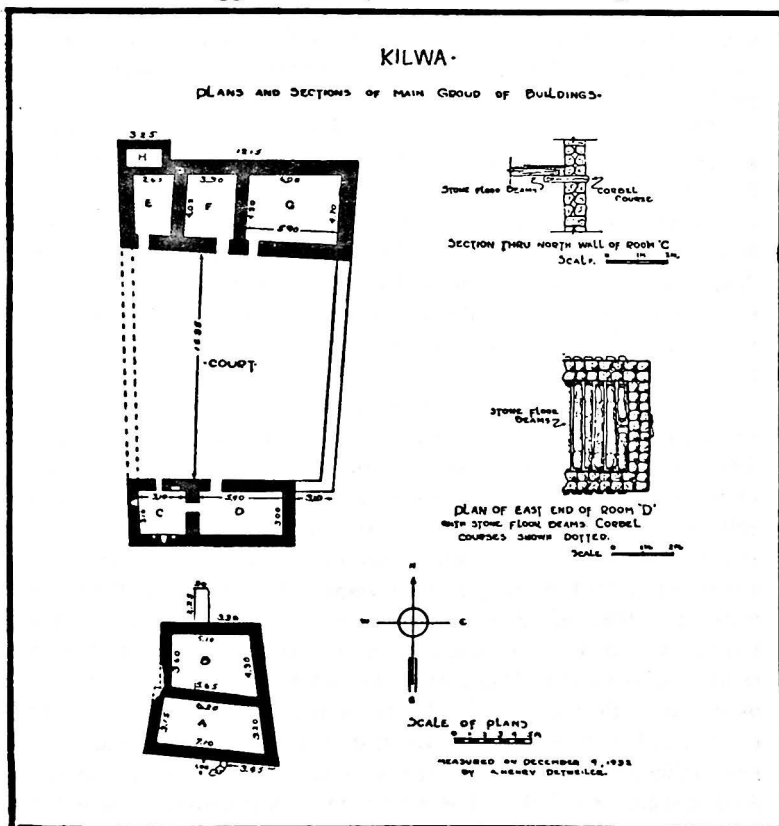


Fig. 3.

the wall parallel to the beams sagged, as it was almost certain to do, the end beams could move under the weight of the plaster above and not break, as a single beam might have done. The drawing of the plan of the east end of room D at double scale illustrates the point in question (Fig. 3). The corbel course of room C is one course higher than that of room D, indicating, perhaps,

that the two rooms were built at different times. There is also a break in the stone coursing of the partition wall between these two rooms. On the outside face of the south wall of room D is an interesting piece of plaster decoration, which measures 160 cm. in height, and averages 40 cm. in width, and extends from above the corbel course. A border of pebbles is set into the rectangular plaster patch.

The rooms in the building on the north side of the court are a mass of fallen walls and floor beams. The outside face of the lintel above the doorway leading from the court into room F is decorated with a triangular piece of plaster. The three doorways of rooms E, F, and G had holes let into the jambs to receive a door bar. Room H measures 2.35 by 1.25 metres inside. The walls of this room are only 40 cm. wide, instead of the usual 88 to 90 cm. No doorway was visible to connect it with the adjoining room E.

Immediately north and east of these buildings were numerous small circular graves, and small square and rectangular cells (Fig. 2). The graves were formed either of small stones heaped into a rough circle, or of large uncut stones arranged in a circle. Most of the cells were roughly rectangular in shape, with one or two central pillars of rudely squared stones set on top of each other, which supported a roof of rough stone slabs. The walls of these cells were often built of large monoliths set on end. Over one of these chambers was a stone lintel, with an Arabic inscription, to the right of which was a Maltese cross (Plate, I A). The inscription is much weathered. Professor L. A. MAYER of the Hebrew University, who has studied it, is of the opinion that it belongs to the end of the first millennium A.D., and that the other inscription found in room A is considerably later. His report on the inscriptions, which he has most kindly sent to me, is as follows: *بسم الله عمل هذا... قلية. In the name of God. Made this . . . cell.* The portion here marked by dots presents several difficulties. If my transcription of the fourth word is correct, it ought to end either in an *alif* or a *ha* and be followed by the article; so far as I can judge from the photograph this does not apply in either case. Nor does the last word but one (من^ا or من^ا) make sense when read in connexion with the last word. With the help of a good squeeze we could probably read

the text. However that may be, the photograph shows only the *beginning* of the inscription. Whether the remainder has been destroyed or was cut on another stone is a matter for speculation. The existence of Christian communities in Transjordan is a well-known fact."

With regard to the inscription found in room A, Professor MAYER writes as follows: "One is tempted to read: عاكر ابن راش[د]. Against this reading two objections have to be raised: (a) that the *sin* is hardly ever written in 3 strokes, of which the middle one is the highest, the strokes being usually either of equal height or sloping from right to left; (b) that 'Asākir is not a proper name. The wide margin to the right makes it barely possible to see here the last line of an inscription. Even for this text a squeeze would be of greater help than a photo, more especially since there is a possibility that what I read as ابن is in reality لى. The fact that the *alif* of ابن would sin against the rules of Arabic grammar does not carry any weight in this case, as several examples of similarly incorrect usage can be quoted."

In addition to the cross to the right of the inscription mentioned, two other crosses were found in cells. One cross consisted of two curved lines over a vertical line, which was topped by an open triangle. On another stone found in one of the cells was incised a very crude representation of an animal. Whether the inscriptions are to be dated to the end of the first millennium and later, respectively, or as Pères VINCENT and SAVIGNAC, who have also most kindly examined the inscriptions, suggest, no later than the ninth century A.D., it is certain that the cells belonged to Christian monks.¹ It is indeed possible that the very name Kilwa is derived from the Greek *kalyba*, κάλυβα (pronounced *kalyva*), as Mrs. HORSFIELD has suggested to me. I am indebted to her for a reference to A. FORTESCUE, *The Eastern Orthodox Church*, p. 355: "Many lauras have daughter-houses subject to the abbot; such a house is called Kellion (κέλλιον) or Kalyba (κάλυβα), and they are sometimes grouped in a sort of a village called Sketa (σκήτα)."

¹ For references to somewhat similar cells see *Revue Biblique*, IV, pp. 399-400; CONDER, *Survey of Eastern Palestine*, p. 251; BRÜNNOW and DOMASZEWSKI, *Die Provincia Arabia*, II, p. 181.

It is quite possible for a small monastic group to have lived at Kilwa, even though surrounded by a Moslem world. Christian tribes are known to have lived in amity with their Moslem neighbors. I am indebted to Mr. L. BILLIG of the Hebrew University for the following reference from the *Travels of Ibn Jubair*, ed. WRIGHT-DE GOEJE, 1907, p. 259: "A day's journey from Damascus, he stopped at a large village belonging to the Christians, with whom the Moslems had made a treaty. Its name was al-Aara, and it had no Moslems." Ibn Jubair (1145-1217 A.D.) travelled in the years 1183-1191 A.D.

It is possible that the monastic settlement at Kilwa is later than the period to which the main buildings belong. Be that as it may, the early Christian settlement at Kilwa was well situated. It was on a track leading from 'Ammân to Teimā via Bayir Wells. The Egyptian west-east Hajj route from 'Aqabah crosses the Jebel Ṭubaiq near Kilwa, where there were once some wells.¹ Before the advent of Mohammed, orthodox hermitages lay on the main caravan routes. The monks went to Arab fairs, where they helped nomad travellers with water and tended the sick.² The Christian inhabitants of Kilwa must be thought of as functioning in a similar capacity.

¹ MUSIL, *Arabia Deserta*, 1917, pp. 517-518.

² LAMMENS, *La Mecque*, p. 353; O'LEARY, *Arabia before Mohammed*, pp. 141-145.

A.



B.



- A.* Inscribed Lintel over Monk's Cell at Kilwa
B. Arabic Inscription Found at Kilwa in Room A.

ZABÛL YAM AND THÂPÎṬ NAHAR IN THE COMBAT BETWEEN BAAL AND THE SEA

W. F. ALBRIGHT

(JERUSALEM)

VIROLLEAUD's publication of an epic fragment from Ugarit describing the combat between Baal and the Sea-god Yam, has been brilliantly elucidated by GINSBERG in the preceding number of the *Journal*. While I do not quite agree with his view of the tenses, and hence regard the fragment before us as prospective rather than as narrative, I must express my hearty agreement with most of his changes in VIROLLEAUD's translation.¹ In this note I shall not attempt to duplicate his treatment, but will restrict myself to some comments on the names of the Water-god, with observations on an Egyptian text which apparently belongs to our cycle.

The expression *zbl Ym* makes it certain that the word *zbl* is an appellation of Yammu (the actual pronunciation of the name *Yam*, with the nominative case-ending), just as it is of *B^cl-^larṣ* in the group *zbl B^cl-^larṣ*, which simply refers to Al'êyân Ba'al. GINSBERG's rendering "prince" is entirely possible, but a somewhat more natural meaning would be "exalted" (*zabûl* being the passive participle of *zbl* = Accad. and Arabic *zbl*, "to raise, carry"), like *niššâ*, "exalted," *nāšû*, "prince" from *nš*, Accad. *našû*, "to raise, carry." The first expression then means "the exalted one, Yammu," while the second one is "the exalted one, Lord of the earth."²

A glance at the passages in the Bible where the stem *zbl* occurs will be instructive, and will show that BAUER is unduly pessimistic. Is. 63¹⁵, "Look down from heaven and see, from the *zabûl*

¹ Here again it must be stressed that I regard VIROLLEAUD's translation as an admirable pioneer effort. Only scholars who have been unaccustomed to dealing with such material can criticize his work adversely.

² Contrast my discussion of the appellation *Zebûl* in the *Journal*, XII, 191 f.

of Thy holiness (מְבוֹרָךְ קִרְשֶׁךָ),” may most naturally be interpreted in the light of parallel expressions like מְרוֹם קִרְשׁוֹ, “height of His holiness,” so *zabûl* means “elevated (place).” I Kings 8¹⁸ = II Chron. 6² evidently means, “I have indeed built Thee an exalted house (בֵּית זָכוֹר), an establishment (מְכוֹן) as Thy dwelling for eternity.” Hab. 3^{10f}. יָרַח עָמַד זָכָרָה may perhaps be translated, “The moon stood (on) his (!) height (lit. high place)”; the rendering “dwelling” would be quite inapposite here. Finally, the words of Leah (Gen. 30²⁰), הַפֶּעַם יוֹבְלָנִי אִישִׁי, surely mean, “This time my husband will raise me (my status to that of most-favored wife).” Our rendering of *zabûl* as “exalted” is thus practically demanded by the biblical occurrences of the form and the stem.

It follows from GINSBERG's interpretation of the text that Yammu plays essentially the same rôle in Canaanite cosmogony that *Tiāmat* and *Labbu*, etc., do in Mesopotamian, and that the dragon *Illuyankas* does in Hittite. In Canaanite cosmogony we have the parallel monster *Lôtân*, Heb. *Liwyātân*, while in Hebrew cosmogony *Tehôm* and *Râhab* figure in a similar way.³ At the same time, however, Yammu is one of the gods, and an important member of the Canaanite pantheon⁴; he is also the friend of *Astarte*. Curiously enough, *Yam* and *Astarte* appear together, apparently as friends, in an Egyptianized Canaanite myth, presumably arising from the same cycle to which the fragment before us belongs. This text of the late New Empire was originally published more than thirty years ago by NEWBERRY and partly explained by SPIEGELBERG⁵; it has now been republished and restudied by GARDINER, to whom important observations are due.⁶ Unfortunately, its condition is such that we can only guess at the original myth. *Astarte* appears

³ It is too early to reach any definite conclusion with regard to the original provenience of these monsters, whether from the East or West. It is interesting to note that Accadian *Tiāmat*, which means “Sea” (*tiāmtu-tāmtu*=sea) in Accadian, like Can. *Yammu*, *Yam*, corresponds etymologically to Heb. *Tehôm*, properly the subterranean ocean (Can. *tehāmatēm*, “the two deeps”).

⁴ Cf. BAUER, *ZAW* 1933, 92. BAUER's combination of *Ym* with *yôm*, “day,” is now proved to be wrong. Heb. *Yemû'el* is entirely distinct; cf. *Journal*, VIII, 249.

⁵ See *Proceedings of the Society of Biblical Archaeology*, XXIV, 41 ff.

⁶ See the GRIFFITH *Festschrift*, pp. 74–85. SAYCE's attempt to find a Hittite parallel (*Journal of Egyptian Archaeology*, XIX [1933], 56 ff.) is not convincing.

as engaged in a colloquy with the Sea (*p3 ym*), whom she apparently befriends in his fight with the gods of heaven and earth, in return for which she must have received some valuable gift or concession. GARDINER identifies the Sea with the ruler (*h33*), who is said to sit on a throne (*ʿsbt*), reminding one forcibly of the throne of Yammu in the present text. Astarte is also granted a throne.⁷ The meaning of the friendship between Astarte and Yam is presumably that Astarte, like her doublet, Aṭirat-yam, was also a sea-goddess (cf. the Egyptian Neith of Sais, with SPIEGELBERG), and so was thought to have received this power of hers from Yammu himself.

How are we to explain the other name of Yamm, *ṭpṭ Nhr*? VIROLLEAUD renders this expression, "the suffete of the river," while GINSBERG translates more correctly, "the Suffete, Naharu." The term "suffete" belongs, however, to a very advanced stage of evolution of the Phoenician magistracy, and it is questionable whether it can safely be used in so early a period as the one in which our texts were composed.⁸ I should render *Tâpiṣu Naharu* simply, "the judge, River". This translation perhaps sounds enigmatic, but there is an almost perfect Accadian parallel, which makes it quite intelligible. We find the river-god *Nâru^m* among the Accadians at a very early age; it appears in the personal name *I-ti-^dNâru^m* (= *Idi-Nâru^m* or *Idin-Nâru^m*) at the very beginning of the third millennium at Mari (Tell el-Ḥariri on the Middle Euphrates).⁹ *Nâru^m* is naturally the Accadian contraction of **Naharu^m*. In the Code of Hammurabi, § 2 (twentieth century B.C.) we have a description of trial by ordeal, with the words, *ana ^dNâri^m illak ^dNâra^m iṣalliḏamma*, "To the River-god he shall go, into the River he shall plunge." What this river and River-god mean is explained in a later Accadian commentary to a passage of the so-called Babylonian Job¹⁰: *ina iṭē nâri aṣar dēn nîṣē ibbirru*, "in the border of the river, where the judicial case of men is examined"; the commentary explains *iṭē nâri* by *Hursân*, "Mountain," i.e., the

⁷ Cf. *American Journal of Semitic Languages*, XXXVI, 260 f.

⁸ Especially since *ṭpṭ* is a synonym of *dn*, "to judge," in our texts; cf. VIROLLEAUD, *Syria*, XII, 23.

⁹ PARROT, *Syria*, XVI, 27; THUREAU-DANGIN, *Revue d'Assyriologie*, XXXI, 142.

¹⁰ VR 47, rev., 30 ff.

mountain in which men are judged after death, according to Babylonian conception. Since ZIMMERN and EBELING have fully discussed the scanty available material,¹¹ it is enough to say here that the river in question is the River of Death (*nâr Hûbur*),¹² which was not unnaturally conflated at various times and in various ways with the terrestrial Euphrates. It is on the bank of the River of Death that men are judged after decease, according to Babylonian conceptions. The transfer of the notion of trial by a river to ordeal by plunging into a river is very natural, though it is by no means impossible that the trial by ordeal in this way came first, and that the conception of the River of Death was modified by it.

Just why the "judge River" and the "exalted one, Sea" were equated is more difficult to determine, but one may suspect that the Syrian personification of rivers in the form of dragons is ultimately responsible.¹³ It would be very easy to combine two water-monsters with similar characteristics.

Again we see what a priceless body of material is furnished the student of Canaanite civilization and religion by the tablets of Ugarit, for whose discovery, decipherment, and publication we are so much indebted to MM. SCHAEFFER and CHENET, BAUER, DHORME, and VIROLLEAUD, whose careful and methodical publication of the material has saved scholarship from many errors.

¹¹ See ZIMMERN, *Zum babylonischen Neujahrsfest II* (1918), 46, and EBELING, *Tod und Leben nach den Vorstellungen der Babylonier* (1931), *passim*.

¹² Cf. TALLQVIST, *Sumerisch-akkadische Namen der Totenwelt* (1934), pp. 24 f., 33 f.

¹³ See ABEL, *Journal*, XIII, 152 ff.

THE ŞAQR BEDOUIN OF BİSÂN

T. CANAAN

(JERUSALEM)

In the east and south-east of the village of Bîsân live the Şaqr Bedouin. Their territory extends to Tûbās in the south, but in the winter months they move even as far as el-‘Ōdja (north of Jericho). In the summer months they may settle in certain parts of the districts of Nazareth, Djenîn, or even in that of Haifa. To the north of their territory lives the tribe el-Ghazzāwīyeh, with whom the Şaqr are in continuous feud. The grand *şēh* of the Şaqr assured me that his tribe emigrated from the Arabian Peninsula, probably from Nedjd. Their ancestor is said to have had two sons, Mallāk and Fawwāz. The brothers quarrelled and decided to separate. Fawwāz went northward and settled ultimately in the southern part of Syria. His descendants are at present known as ‘Arab es-Sirdīyeh. A sub-tribe of the Sirdīyeh settled in Başret eš-Şām and became *fellāhîn*. The descendants of Mallāk moved slowly to the north. A part of them settled in the district of es-Salt and are at present known as ‘Arab el-‘Abbād; while the remainder ultimately reached Palestine and occupied the *ghôr* of Bîsân. The grand *şēh* of the Bîsân Bedouin assured me that his tribe reached Palestine about 50 to 75 years before the era of Aḥmad Pāšā edj-Djazzār, i.e. 200—250 years ago.

Enquiry made in Transjordan¹ verified the statements of *şēh* Faḍl about the Bedouin of ‘Abbād. This tribe is divided into two important sub-tribes. In the following an account of these sub-tribes with their *aşāyir* and leaders is given:

I. The sub-tribe ‘Abbād el-‘Arḍah, known also as ‘Arab

¹ I have to thank Dr. T. Qa‘wār for his great help, and Mr. ‘Āyd el-Karādī for his valuable information. Most of the notes sent to me by Dr. Qa‘wār originate from the eighty-year old *şēh* Muḥammed eš-Şamlūl.

edj-Djrūmīyeh. The last expression is derived from the name of their ancestor Djurm, who was the founder of this sub-tribe. They live in the upper part of Ghōr Abū 'Bēdeh and in Ghōr el-Mašālḥah. This sub-tribe is made up of the following *'aṣāyir*.

1. Manāšīr el-'Asālmeh. Their grandfather and founder was Dīb el-Kanānī who came from the Banī Kanāneh about 400 years ago. Their present leader is *ṣēḥ* Sa'd el-Ḥalaf.

2. Manāšīr el-'Ōneh. The founder of this subtribe was 'Ōn ibn Aḥmad. He came about 400 years ago from Ḥidjāz. Their present *ṣēḥ* is Karīm Pāšā en-Nahār. This *'aṣīreh* lives in Wādī es-Sīr.

3. el-Ḥ(a)ṭālīn. A member of this *'aṣīreh* is called ibn Ḥitlān. Their grandfather, who emigrated about 450 years ago from Nedjd, was Dghēm of the er-Rašīd family. Their present *ṣēḥ* is Aḥmed el-'Abd ibn Ḥitlān.

4. en-N'ēmāt came about 200 years ago from Djolān. Their leader is Mūsā 'Abd er-Raḥmān el-Ya'qūbī.

5. el-Yāzdiyyīn (pronounced by some also el-Yazqīyīn) call themselves Qaršīyeh as they pretend to have come from Quraiš¹. Their present *ṣēḥ* is Šhāb el-Ḥamad.

6. el-M'ādāt (pronounced also el-Ma'dāt). Their grandfather Miḥim el-M'ādāt came 300 years ago from Ḥidjāz. The present leader is Mūsā el-Miḥdjin.

7. el-Ghanānīm emigrated about 250—300 years ago from the district of Aleppo. They are related to the N'ēmāt Bedouin of Aleppo. Their founder was Ghannām and the present *ṣēḥ* is Raḍwān Abū Ḥrēs.

8. er-Ramāḍneh family is made up of two parts. a) The Dawāhīk, related to the Ḥwētāt of Transjordan. The leading *ṣēḥ* is Ḥamrān. b) A second part, who came from Ḥidjāz.

9. el-Ḥadjaḥdjeh are related to el-Fuqarā. Their ancestor was Muḥammad el-Faqīr. They live in Šihān ('Arḍet el-'Abbād).

10. eṣ-Šanābreh's ancestor was Miṣleḥ Abū Šnōbar who came about 250 years ago from Nedjd. A member of this family is known as Abū Šnōbar.

11. edj-Djabbūrīn or 'Abbād 'Īrā and Yarqā. They are made up of the following families:

¹ According to Dr. T. Qa'wār.

a. el-Bqūr are the oldest family of the whole 'Abbād tribe. Their ancestor Iḥbēd el-'Adri¹ emigrated from Egypt. He settled first at Tell Šhāb in Ḥaurān. Later the tribe moved to Transjordan (Ḥirbet Kafr Hūd). Their present leader is Muḥammad Pāša Kāyid Abū Baqr. The name *Bqūr* is derived from their occupation of raising cows (*baqarah*, pl. *baqar*).

b. er-Raḥāmneh emigrated about 300 years ago from Tripoli in Africa. They constitute a part of the tribe with their own ancestral name. Their ancestor 'Alī settled first in *Ḥirbet* Kafr Hūd. Later on the tribe moved to Ghōr ez-Zarqā. The present *ṣēḥ* is 'Abd er-Raḥmān er-Raḥāmneh.

c. ez-Ziādāt's ancestor, 'Ilwān, came about 250 years ago from Karak. He belonged to the Bedouin of el-'Amr. The members of this '*aṣīreh* are renowned for their valour; their *ṣēḥ* is Nimr el-I'rēdj.

d. edj-Djabrā. Their ancestor, Ḥamdān, emigrated about 300 years ago from Egypt. The present *ṣēḥ* is Ḥusēn el-Fāris.

e. el-Mhērāt are *fuqahā*.

The grand *ṣēḥ* of all the 'Abbād tribe is Aḥmad el-'Abd ibn Ḥitlān and their *kafīl* is Muḥammad Pāša el-Baqr. The first named *ṣēḥ*, i.e. the grand *ṣēḥ*, who is also called '*ilm* 'Abbād, is at the same time the chief and highest judge of the whole tribe and the last instance in political affairs. The *kafīl* is the person who has the power and duty to execute all the orders of the grand *ṣēḥ*.

I have been told that there are no foreigners in the 'Abbād tribe. This list shows clearly that the different '*aṣāyir* came from different countries. Although most of them emigrated from the Arabian Peninsula, there are some who came from Egypt and others from Tripoli in Africa.

The Ṣaqr tribe of Bisān is made up of several '*aṣāyir*. Each '*aṣīreh* is composed of several *ḥamāyil* (pl. of *ḥamūleh*). Some of these families are of true Bedouin descent, while others are '*abīd* (pl. of '*abd* = negro) and *ghawārneh* (pl. of *ghōrānī*, from *ghōr*,¹ lowland). The origin of the '*abīd* is from negroes who were bought by the ancestors of this tribe as slaves. With time they became numerous, were released from slavery, and formed distinct families. The *ṣēḥ* Faḍl el-'Irsān el-Mallāk could not give me any information about

¹ *Ghōr* is the name given to the Jordan depression.

the origin of the *ghāwārneh*. Probably they are the descendants of the original inhabitants of the *ghōr* who were defeated by the invading *Ṣaqr* tribe and were slowly amalgamated with them. The word *ghōrānī*, pl. *ghawārneh*, is a correct derivative of *ghōr* and means "an inhabitant of the Jordan valley."

The true Bedouin of this tribe are again divided into three groups: the *ʾUmarā* (the princes), the *Ṣyūḥ* and the *Fuqarā*. The latter are *darāwīš* and *ʾaṣḥāb ʾarīqah* (followers of a special order). The different *Fuqarā* sub-tribes trace their origin back to the *Nʿemāt* tribe. They are renowned in the *Ghōr* as possessing special knowledge and ability in curing hydrophobia and treating dislocations, especially those of the upper jaw. The *Fuqarā* are followers of *ʿIzz ed-Dīn Abū Ḥamrā*, a *welī* whose shrine lies near Aleppo.

The leader of the whole tribe of the *Ṣaqr*, *Ṣēḥ* Faḍl el-*Irsān* el-Mallāk, is at the same time the direct *Ṣēḥ* of the sub-tribes of the *ʾUmarā* and *Ṣyūḥ*. The following list gives the names of the different *ʾaṣāyir* with their respective leaders:

The *ʾUmarā ʾaṣāyir* are:

el-Hawābī: Ḥasan el-*Bēdī*. el-Mahādī: Fāris. Bani-*ʾr-Rbāyʾah*: Fāḍil er-Rbē¹*ah*.

The *ʾaṣāyir* of the *Ṣyūḥ* are:

ez-Zāmil: *ʿĀrif*. el-Wādī: Ḥusēn *ʿAlī* Djabr. eṣ-*Ṣlēbī*: Muḥammed. er-Rabāḥ: Sālīm el-*Iḳāb*. el-Mifliḥ: *ʿAbdallah ʿIrsān*.

The *ʾaṣāyir* of the common Bedouin:

el-Mrūdī: *ʿĀrif*. el-Mrēḥ: Ḥasan Abu *Ṣūḥah*. el-Hawālid: *Ṭrēhim* el-*Ḥdjērī*. el-Badāndīyeh: Ḥasan el-*Ḥamad*. Zbeyed: *ʿAlī* el-Fāris. el-Ma²*ʿādīn*: Sālīm el-*ʿAbdallah*. el-*Ḥmūd*: Ḥusēn. *Qarrūt*: Qāsim el-*Blād*.¹ el-Luēmeh: *ʿĀyd*. el-Ghniyeh: *Ṣāmiḥ*. el-Mawālī: *ʿAbdallah*. el-Baṣātšmeh:² Ḥasan es-Salāmeḥ. et-Ta³*ʿālbeh*: Ḥasan el-Falāḥ. I³*bēd* edj-Djanāḥ: Qāsim.³ es-Sabārdjeh: *ʿAlī ʿAuwād*. el-Qazāzmeh: Fāri³ el-Qazzām. eṣ-*Ṣōbakeh*: Sa³d eṣ-*Ṣōbakeh*. el-Harrān: Bḥēt. el-*Ardjāt*: Lāfi. ed-D³*ūm*: *ʿAlī*. el-B³*šērī*: *ʿAbdallah* el-B³*šērī*. el-*Alyāt*: Lāfi. er-Rbē³*ʿīyeh*: Mnēzil el-Mizān. el-*Blādiyeh*: *ʿAlī Muḥammad Ḥsēn*. el-Ghazālīn: Ḥsēn Ghazālī el-Hawāwri: Salmān.

¹ The *q* (ق) is pronounced by some as *dj* (ج)

² It is written *الباك*, the *k* (ك) being pronounced as *ts*.

³ Some pronounce the *q* (ق) like a German *g*.

The *ʿAbid ʿaṣāyir* are:

el-Ghrēr: Fḍel. el-Himwēl: ʿUmar. el-Iʿbēd: ʿId. el-Qūṣān: ʿAlī. el-Mawālī: Ḥasan Yūsif. el-Murdjān: Ḥsēn. el-ʿĀbed: Maḥmūd. eṣ-Šhūr: ʿAwaḍ el-Mufliḥ. el-Mahdī: Rašīd ʿAbd el-Mahdī. el-Bayātrah: ʿAbdallah.

The *Ghawārneh ʿaṣāyir* are:

el-Māṣālīḥ: Ḥallūt. el-Qahāwṣeh: ʿĪd. Djarabint: ʿUqlaḷ-Hādī.

The *Fuqarā* families are:

el-Iʿwētiyīn: Mḥammad. ez-Zēdān: Rādī.

The five *ʿaṣāyir* of the *Şyūḥ* belong to the sub-tribe el-Mallāk, which is said to be the direct descendant of the founder of this Bedouin tribe, Mallāk the son of Şaqr. The *ṣēḥ* of the *Şyūḥ* families is at the same time the grand *ṣēḥ* of the whole tribe of eṣ-Şaqr. The *maṣāyīḥ* of these five sub-tribes hoist one or more ostrich feathers on their tents. The feather is fastened to the central pole of the tent, which is known in this region as *el-quṭb*. The *şyūḥ* (leaders) of the other sub-tribes hoist a white flag. The *ʿAbid* and *Ghawārneh şyūḥ* do not enjoy any of these prerogatives.

The Zbeiyed family is the largest *ʿaṣīreh* in the whole tribe. The Bani-ʿr-Rbāyah are proud to be Ḥuseiniyeh, i.e. descendants of Ḥusēn the son of Fāṭmeh, the daughter of the Prophet Mohammed. A thorough analysis of all the data given above shows clearly that the Şaqr and the ʿAbbād tribes, which claim to be descendants of one and the same father, came from different regions. Time and political needs amalgamated them.

Most of the Şaqr tribe cultivate grain. The land used to be their own property, but was expropriated by Sulṭān ʿAbduḷ-Ḥamīd. As these Bedouin, like many other owners of tracts of lands, could not pay the official taxes for several years, the Sulṭān paid the accumulated sums to the *ḥazīneh* and took possession of the land. The former owners were allowed to continue the cultivation of the land, paying 20% of the income, 10% being the regular land tax and 10% for the Sulṭān as the rent of the land. The British Government, recognizing the cultivation rights of these Bedouin, kept them in their district. A new regulation makes it possible for every one to take complete possession of his land after paying L. P. 1,500 for every dunum.

The cultivated land lies in the Bisān district, mainly to the east

of the village, in the *ghōr* of Bisān, and in the subdistrict of Blād Hārteh. The Ṣaqr raise also cattle and move with them in different seasons to different places.

The men of one class may take for wives only girls from their own category or from an *ʿašīreh* of a lower class. The *ʿUmarā*, the noblest class, on the other hand, may take their wives from any one of the different classes. The most important qualification in such a case is beauty. The *mahr* of a virgin negress is 45 sheep (*ṣāh*) and L.P. 10; that of a widowed or divorced *ʿabdeh* (negress) is only 30 sheep and L.P. 5. The *mahr* of a daughter of an *ʿAmīr* or *Ṣēh* may be as high as L.P. 250. A bridegroom pays for his cousin only one quarter of the *mahr*, as he has the first right to her.

Circumcision may take place at different ages. It is seldom done before the age of two months, and boys often reach the age of fifteen years before it is performed. The Bedouin prefer to do this act in special "houses" (*byūt* = tents), like those of the *maṣāʾiḥ* of el-Mallāk, the "houses" of Ṣēh Fāriʿ el-Qazzām, Ḥasan Abū Ṣūḥah, el-Mrēḥī, ed-Dwēš, and Rādī ibn Zēdān.

In their quarrels the members of the Ṣaqr Bedouin come to one of the following two judges (*qāḍī*, pl. *quḍāt*): Fāriʿ el-Qazzām of the Qazzāmeh sub-tribe and Marʿī l-Ḥasan of the ʿAbādī. The first is the more important. Their decision is final. If a party refuses to submit to the judgement, the grand *ṣēh* of the Ṣaqr has to execute the same by force. The position of the judge as well as of the *ṣyūḥ* of the *ʿaṣāyir* is hereditary. The son of a *ṣēh* or of a *qāḍī* becomes, after the death of his father, a chief or a judge respectively.

When a Bedouin commits a murder or a rape his life and property are at the mercy of the sub-tribe of the murdered person or raped woman. The only way to protect himself and thus to gain time for settling matters, is to put himself under the protection of an influential *ṣēh* or still better under that of the grand *ṣēh* of the whole tribe. This act is known as *el-widjh*. The rights of such a refugee are strictly respected.

This protection extends generally for four to five months. A person who dares to break the *widjh*, i.e., who does not respect the privileges of the refugee and consequently does not respect

the honour and the position of the *ṣēḥ* who is giving the refugee protection, becomes the enemy not only of the *ṣēḥ* but of the whole tribe. Only the family of such an "honour-breaker" (*qāṭi' el-widjh*) stands on his side. They have to appease the *ṣēḥ* whose *widjh* has been broken for the wrong done by one of their members. The punishment of a *qāṭi' el-widjh* is very severe. He has to place a line of white camels, a line of white silver coins (*medjidi*) and a line of white garments from the place where he attacked the protected person to the tent of the protecting *ṣēḥ*, the *ṣāḥib el-widjh*. As he is, in practice, unable to fulfil these requirements, he must flee to another district and remain there for a period not less than seven years, after which he may return to his *ʿaṣīreh*. His people must, however, first have given satisfaction for the wrong he has done (*ṣulḥah*).

A person in financial need is generally helped by the members of his sub-tribe. Such a help is called *el-ma'īneh*. Occasions necessitating such help are marriage, buying a mare, atonement for murder or rape. Sheep, goats, or money are presented. All such gifts are debts which have to be paid back by the person who receives them.

The Ṣaqr tribe honour several *awliā* (saints). All lie in their own territory or near to it. Oil, candles and a white flag (*rāyeh bēdā*) are vowed to them. White flags are stuck on the grave itself or on the wall surrounding the court (el-Ḥalabī). White flags are met with more often in this district than in central Palestine. At times red and green flags are seen, but the white colour predominates. When a vow is to be fulfilled the relatives of the person offering the vow accompany him to the respective shrine and dance several hours a day for one to seven days around the shrine. They intend to express in this way their gratitude to the *welī*, and to show their joy at being answered. As at other places in Palestine the Bedouin of this district place some of their goods—wheat, barley, field tools, etc.—around the sanctuary, being sure that nobody will dare to touch them, for they are under the protection of the man of God. This custom is slowly dying out. Wheat and barley used to be stored in oval holes excavated in the immediate vicinity of the shrine (Abū Faradj).

The *awliā* of the Ṣqūr are:

1. Mhēšiq. His shrine lies in el-ʿArīḏah. He is the most important local saint. Mhēšiq is a very irritable (*niziq*) saint. He punishes every person who uses his name unlawfully, or who irritates him in any other way. The following story is characteristic of a *niziq weli*. A jackal ate an onion from a garden adjacent to the *weli's* shrine. Next day the Bedouin found the animal dead with the undigested onion protruding from its anus.

2. El-Ḥidr (in Bardalah, near Ṭūbās) is a powerful and forbearing saint.

3. Ḥamd el-Fātūr in el-Fātūr (to the south of Zarrāʿah) is an unimportant and not irritable saint.

4. El-Ḥalabī has his shrine in the village of Bīsān. The tomb is surrounded by a high wall. He is regarded as the next powerful saint after Mhēšiq. El-Ḥalabī is forbearing (*tawīl er-rūḥ*), treating people with patience, even when they offend him.

5. Irḥāb has his sanctuary at el-Ḥamrā, not far from Farwāneh. This and the following saints are not much respected. All are *ṭawīlīn er-rūḥ*.

6. Sālīm el-Wābši, at el-Ḥamrā,

7. Abū Faradj in el-Ḥnēzīr, near ez-Zarrāʿah.

8. eš-Šūbāši, near Ṭūbās.

9. Muḥammad el-Qabū, in eš-Šafā.

10. ʿAnṭar in el-Ḥamrā.

11. ʿeš-Šēḥah Fiḏdah in el-Ḥnēzīr.

12. er-Radghā in er-Radghā near Ṭūbās. The two last are, as their names already denote, female saints.

The cemeteries of this Bedouin tribe are scattered in different places. They generally surround the shrine of a *weli*. The sub-tribes of the ʾUmarā and Šyūḥ have their own cemeteries.

The inhabitants of Palestine were until recently divided politically into two groups, the *Yaman* and the *Qēs*. The Ṣaqr tribe belongs to the *Yaman* party. They are thus naturally allied to all Bedouin tribes and peasants who belong to this political party. If a tribe is attacked by any enemy they ask the help of their allies, whose moral and sacred duty it was, and still is, to come at once for assistance, even if they live far away. This custom is at present more strictly practiced by the Bedouin than by the *fellāḥīn*. Eš-Ṣaqr are thus allied to the following Bedouin tribes:

<i>Tribe</i>	<i>Location</i>	<i>Name of the Şēh</i>
Banî Şaḥr	Salṭ district	Mitqāl bin Fāyz
ʿAbbād	Balqā	Ibn Ḥatlān
es-Sardiyeḥ	Ḥaurān	Sʿūd el-Klēb ibn Fauwāz
Baṣātweh	Djisir el-Madjāmiʿ	Zāhir el-Mitqāl
edj-Djbārāt	Gaza district	Muḥammad ibn Muşrif
Banî Ḥmēdeh	Kerak	Lāfi bin (i)Brīz
et-Turkmān	Merdj ibn ʿĀmir	Radjaḷ-Yaʿqūb
el-Balāwnī	ʿAdjūn	Yūsif Abū Znēmeh

The present ties of alliance are not as strong as they used to be in past times. Thus for example the political bonds between eṣ-Şaqr and Banî Ḥmēdah have been so neglected that they have nearly vanished, although formerly they were very strong. The Şaqr are also allied to some *Yamanī* villages. Such villages are usually headed by some influential families. A family belonging to this category is the Dār Djarrār, who live in Sannūr, Djabaʿ, and Burqīn. The first village was their capital. Dār Djarrār had many political quarrels with Dār ʿAbd el-Hādī who are *qēṣī*. The Şaqr always came to the succour of their allies.

The natural enemies of the Şaqr Bedouin are those tribes who belong politically to the *qēṣī* faction. The most important Bedouin tribes of this category are:

<i>Tribe</i>	<i>Location</i>	<i>Name of the Şēh</i>
el-ʿIdwān	Between the Jordan Valley and es-Salṭ	Sulṭān
Banî Ḥasan	ez-Zarqā	Şhāb ez-Ziyūrī
el-Ghazzāwīyeḥ	The ghōr north of Bisān	Bşīr el Ḥasan
el-Mašālḥah	Abū Iʿbēdeh	Muḥammad Saʿīd el-Fāʿūr.
el-Masāʿīd	Wādī el-Fārʿah	ʿAbdallah eḍ-Ḍāmen
el-Fḥālīyeḥ	en-Naqrā (Ḥaurān)	ʿAbdallah el-Badhān

The following story, which has doubtless some historical background, is given as the cause of the bitter enmity between eṣ-Şaqr and el-ʿIdwān. The latter attacked the tribe of ʿAbbād which is, as we have seen, related to the Şaqr Bedouin, drove it out of its own territory in el-Balqā and occupied the latter. The beaten ʿAbbād took refuge among the Şaqr Bedouin and lived with them for fourteen years. The Şaqr assigned a special part of

their territory to their guests. At the end of these fourteen years the two tribes together attacked the 'Idwān and drove them out of the land of the 'Abbād. In order to protect the 'Abbād against any unforeseen attack by the 'Idwān the Ṣaqr stayed with the 'Abbād Bedouin for seven years.

The cause of the bitter enmity between the Ṣaqr and the Ghazzāwīyeh was the murder of two 'umarā of the latter by members of the former.

Women play an important rôle in some phases of the daily life of the Ṣaqr as is the case with all Bedouin tribes. This is especially the case in *ghazāl*. The following story illustrates this fact better than any description. The 'Idwān Bedouin, reinforced by the family 'Abd el-Hādī and their *fellāhīn* followers, attacked the Ṣaqr near the village el-Mirhād, in the Bīsān district. After a hard fight, the less numerous Ṣaqr, who had defended themselves very bravely, had to retreat in disorder as far as the Wādī eš-Šarrār, near Mt. Tabor. In the first line of the retreating and beaten Bedouin were two Ṣaqr Bedouin: a negro, Bḥēt eṭ-Tlédjeh, and a true Bedouin, Sa'īd el-Muṭlaq. A girl, named Fhēdeh, was waiting at the outskirts of the camp, with the women of the tribe who were longing impatiently for news of the battle. From the excited state of the two horsemen she at once understood the whole situation, and knew that their men were beaten. She called on the two *ḥaiyāleh* (horsemen) to stop, and forced them by her words to go back and try to save the honour of the tribe and the safety of the women. She shouted at them: *Bḥēt, Bḥēt yā Aḥū Frēdjeh; Sa'īd, Sa'īd yā Aḥū Šarbeh*. The two warriors, preferring death to being despised for not having answered the call of women to save them from falling into the hands of the enemy, turned back and fought heroically in the first lines. They finally succeeded in retrieving the situation and in driving the enemy back. The 'Idwān and their allies were completely beaten. The Ṣaqr boast that Sa'īd el-Muṭlaq killed 72 of the enemy on this occasion.

The *naḥweh* (exhortation) of the women inspires and stimulates the fighting men of every Bedouin tribe. A man is always called "the brother of (the name of his sister)"; for the honour and the protection of his sister, especially if she is not married, is his first and most sacred duty.

The Šaqr tribe possesses several well-bred mares. One of the most important, Kḥēlet 'Adjūz, came from Nedjd. The name 'adjūz (old woman) came from the old woman who raised her up. Imm 'Arqūb received its name from the following story: Two Bedouin who were on bad terms met unexpectedly in a lonely part of the desert. One was riding a well-bred horse called Mašhūr and the other a mare known by the name Kḥēleh. Following the Bedouin rule that if two enemies meet in a deserted place and there is nobody to intervene and to stop their fighting (*ḥadjdjāz*) they have to forget their enmity for the moment, they dismounted, shook hands and partook together of a simple meal. The owner of Kḥēleh asked his opponent if his mare could be fecundated by Mašhūr. This was agreed upon under the condition that they should meet at this same place after the mare gave birth to a filly. The owner of the mare went in fulfilment of his promise a few weeks after his mare had given birth to a filly. His opponent, who intended by this trick to take possession of the filly, was awaiting him. He warned him of his intention. The owner of the mare galloped back, and his opponent was unable to overtake him. The filly forced her mother, by running from time to time in front of her, to lessen her speed. The Bedouin, afraid of being overtaken by his enemy, drew his sword and smote the filly on her 'arqūb (tendon of Achilles). The blow slightly reduced the speed of the animal, but it still kept up with its mother. Having reached the tents of his tribe, the owner of the mare examined the wound and found it superficial. The filly received the name Imm 'Arqūb and proved, as it grew, to be the swiftest mare in the tribe. Other well-bred mares are: Kbēšeh, M'annaqīyeh, Samḥā, I'baiyeh Imm Djrēš, Ḥiqlāwīyeh, Djidrāmiyeh, Maḥladiyeh, Hadbā, Djafā, Ḥamdāniyeh and Šwēmeh. The last owes her name to a birth-mark (*šāmeh*) on one side of her breast. It is said that all these mares have Nadjd blood.

Although the Šaqr are at present a very poor and uninfluential tribe they still remember past times when they played an important rôle in the political affairs of their district. They used to have a cavalry of 1000 *djada'ah* (a two year old mare) beside 1500 other horsemen and more than 2000 footmen. Nowadays they have become so poor that they have been obliged to sell large stretches

of their excellent land. Men and women work here and there to earn a few pennies to cover the expenses necessary for their miserable life.

A NOTE ON SYNAGOGUE ORIENTATION

HELEN ROSENAU

(LONDON)

In the *Bulletin of the American Schools of Oriental Research* (No. 54, April 1934, p. 18 seqq.) C.H. KRAELING discusses the influence of the Wilderness Tabernacle on the second synagogue of Dura-Europos. The problem treated by KRAELING is of importance not only regarding this building but also because it raises questions of general significance to the synagogue. The statement that the plan of Dura is similar to that of Hammâm Lîf is correct and KRAELING's opinion that Dura has the same orientation as the Wilderness Tabernacle can be sustained. But this would not prove that there was a direct influence of the tradition of the Tabernacle on the synagogue, because the orientation of the Temple in Jerusalem was in accordance with this tradition.¹

Instances of the synagogue replacing the Temple are frequent, such as the blessing of the priests and the *musaph* prayer in the synagogue. The frequent representation of the *Torah* shrine, in the shape of the Temple and near the candlestick with seven branches, is based on the close relationship between Temple and synagogue.² The same idea is expressed in the Tosefta Megilla, (IV, 22) where it is stated that entrances to synagogues are to be made in the east side. This is in accordance with the Temple tradition.³

¹ Cp. *Theologische Blätter*, 13, 1934, col. 289 seqq. and H. ROSENAU: *Design and Medieval Architecture*, London 1934, p. 3, where the similarity between Dura and Hammâm Lîf is also mentioned. The aim of this study is to correct and enlarge the statements regarding the orientation of the synagogue.

² S. KRAUSS: *Synagogale Altertümer*, Berlin-Wien, 1922, *passim*; *Der Morgen*, 11, 1935, p. 59 seqq.; K. L. SCHMIDT, *Die Kirche des Urchristentums*, Tübingen, 1927, shows the close relation of the terms *ἐκκλησία* and *συναγωγή* in early Christian times.

³ Cp. this *Journal*, XV, 1935, p. 169, where another explanation is given.

R. KRAUTHEIMER's opinion (*Mittelalterliche Synagogen*, Berlin, 1927) unduly stresses the importance of the synagogue as a house of learning, for during periods of strong religious life learning and prayer are not mutually exclusive. They are not even separate for the Jew in modern times. The profane uses of the synagogue were accessory, not main, features and the buildings adjacent to the house of prayer, as discovered in Hammâm Lîf and Dura, may have served this purpose.

The general rule of orientation in later times, viz. the turning towards Jerusalem in prayer, is generally assumed as a guiding principle, so much so that E.L. SUKENIK, in his study *Ancient Synagogues in Palestine and Greece* (London, 1934, p. 50 seqq.) does not take into consideration whether a building is turned with its apse or with its façade towards Jerusalem, although this alters considerably the features of the building. The fact of the two types of orientation needs explanation. Is there a model type of building which could explain this anomaly? The Temple had the Holy of Holies in the West. But the façade emphasized the Eastern direction.

The usual explanation of the western direction of the Holy of Holies is opposition to sun worship, but the typical pagan tradition which allows the light to shine through the doors gives a more convincing explanation.⁴

That the synagogue was considered a holy building is clear from the inscription "sancta sinagoga" in Hammâm Lîf, where, as stated before, the orientation is the same as in the Temple (cf. also the Greek inscription in Stobi). Jerash may also belong to this type as it is not so much directed towards Jerusalem as to the West, and as the Temple may have influenced its tripartite ground-plan.⁵

But this type is not the characteristic one at the beginning of synagogue development, above all not in Galilee, as KOHL and WATZINGER have pointed out.⁶ In those synagogues the

⁴ *Design and Medieval Architecture*, p. 1 seqq. F.J. HOLLIS: *The Archaeology of Herod's Temple*, London, 1934, *passim*.

⁵ J.W. CROWFOOT, *Churches at Jerash*, London 1931, p. 16 seqq. gives the interpretation of the synagogue as being directed towards Jerusalem. If the building excavated at Miletus was, as stated by SUKENIK (*op. cit.*, p. 40 seq.), a synagogue, it would be similar, as its entrance faced the east.

⁶ *Antike Synagogen in Galilaea*, Leipzig, 1916.

façade shows an orientation towards Jerusalem. That Jerusalem was considered the Holy City makes this fact clear. As the façade was important for the worshipper who stood before the Temple, this disposition was retained in the Galilean synagogues although the worshipper stood inside. Through the doors one could look out towards Jerusalem, if not in a material sense yet in a symbolic way. This so far is the earliest type known which does not replace the Temple, and therefore does not follow its example closely although it is turned in its direction. So it can be said that the orientation of the façade is derived from the Temple. This fact explains why the shrine is placed in the neighbourhood of the doors, although it necessitated the worshipper's turning round in an awkward manner.

But the synagogues of the Diaspora stood in even stronger architectural relation to this holy centre. In typical cases the niche for the scrolls was in the West as was the Holy of Holies.

The importance of Jerusalem persisted even when the Temple was destroyed; the site of the Temple grew more important than its form and therefore the western direction lost its meaning. This was a logical development which created the lasting type of synagogue orientation of which the earliest example so far known is in Aegina, dated between 300 and 350 A.D. There the traces of a pulpit (*bema*) have been found near the niche in accordance with the religious needs of a house of prayer, not merely of learning.⁷

This niche is directed towards Jerusalem and lies opposite the entrance so that the two previous types of synagogue architecture are combined. The direction of the Galilean synagogues towards Jerusalem is maintained and the niche stands opposite the entrance, stressing the direction of prayer as is typical for the Diaspora.

This form of religious building has not been altered throughout the centuries except in some types in Germany and Poland; its orientation is a logical development from Jewish tradition, which may have been enriched by the influence of other cults in particular cases, though this did not alter the general trend of its evolution. But architectural details were generally adapted from the style in

⁷ B.D. MAZUR: *Studies on Jewry in Greece*, Athens, 1935, p. 29; Cp. *Der Morgen*, loc. cit., where the centralised position of the *bema* in Alexandria is shown to be an exception.

usage in the particular areas concerned. Whereas the church, absorbing manifold pagan tradition, not only of architectural detail but also of some of the main secular features, had a richer and more varied development, the synagogue achieved its classical form in earlier times and has not since been substantially altered.

A SECOND FORGERY OF THE BALUSTRADE INSCRIPTION OF HEROD'S TEMPLE

W. R. TAYLOR

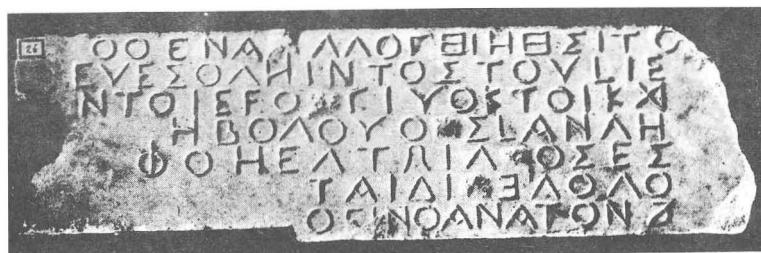
(TORONTO)

In the *Journal*, Vol. XIII, p. 137 f. and pl. VIII, an inscription in the possession of the Newman School of Missions (Tabor) in Jerusalem was identified by me as a forgery of the so-called balustrade inscription of Herod's Temple. In the following summer when Professor H. J. CADBURY of Bryn Mawr was in Jerusalem, he saw on display in the Museum of the Franciscan Monastery of the Flagellation a stone which was similar in character to that of the Newman School. After his return to America, Professor CADBURY secured a photograph of the stone through the courtesy of Father SALLER and Dr. W. F. ALBRIGHT and later kindly transmitted it to me for examination and comment.

It is obvious that the stone is another forgery of the aforementioned inscription, and for purposes of comparison we designate the stone in the Newman School as N and this in the Franciscan Monastery as F. A *coup d'œil* establishes the fact that both represent the same faulty transcript of the text of the original. But the treatment of the seventh letter of the fifth line (*Q* in the original), which in N is omitted but in F distorted, shows that the one is not a slavish copy of the other. The factitious defects in imitation of the corruptions of the original are effected in F firstly by spacing some letters (e.g., *A—A*, line 1; *O—Σ*, line 4; *A—O*, line 5), an artifice that is employed in N only in the instance of the first two letters of the first line, and secondly by effacing other letters in fair agreement with N. In F however the imitative defects are much more patently artificial than in N and generally the execution of the letters is rougher and the marginal line on the left side more irregular. In both stones, the greater attention paid

to the regularity of the right margin suggests that the lines were cut from that side and that the workmen were probably acquainted only with Arabic. Notwithstanding these minor differences the striking similarities between these spurious inscriptions in their misrepresentation of the original text, and in their manifest ignorance of its language and meaning, indicate that, if they are not the product of one workman, they have their provenance in the same workshop.

Plate II



Inscription in the Franciscan Convent of the Flagellation.

Photo P.A. BERARDI O.F.M.

EIN NEUES HEBRÄISCHES GEWICHT

A. REIFENBERG

(JERUSALEM)

I. BESCHREIBUNG.

Das Gewicht ist aus Bronze und hat die Form einer Schildkröte. Die Patina ist dünn, dunkelgrün und von guter Beschaffenheit. Die Länge beträgt 16 mm, die Breite 12 mm und das Gewicht 2.63 gr. Der Fundort ist nicht mit Sicherheit anzugeben; angeblich soll es in der Nähe von Askalon gefunden worden sein.

Auf der oberen Seite sind schwache Reste roh eingekratzter Zeichen vorhanden, deren ursprüngliche Form nicht mehr deutlich zu erkennen ist.

Auf der unteren Seite befindet sich die folgende sorgfältig eingravierte Inschrift:

2. DIE INSCHRIFT.

Die Inschrift ist zweifellos (רביעית =) ¹פלג רבע d. h. die „Hälfte eines Viertels“ zu lesen. Während *rebi't* in der Bedeutung „ein Viertel“ an mehreren Stellen der Bibel (allerdings plene geschrieben) vorkommt, findet sich *plag* in der Bedeutung „Hälfte“ nur in dem aramäisch geschriebenen Danielbuch (Dan. 7²⁵). Fernerhin findet sich das Wort in dieser Bedeutung in aramäischen Papyri des fünften Jahrhunderts.²

Die Inschrift besagt mithin: „Hälfte des Viertels“, d. h. „Achtel“ (Schekel). (Siehe Taf. III A.)

Der Schriftduktus ist der gleiche wie wir ihn auf Siegeln des

¹ Daß der Text פלג רבע(ית) und nicht etwa פלג רבע' zu lesen ist, hat als Erster M. NARKISS, Conservator des Bezalel-Museums, Jerusalem, gesehen.

² SACHAU, *Aramäische Papyri und Ostraka*, 1911, (Papyrus 30); SAYCE AND COWLEY, *Aramaic Papyri discovered at Assuan*, 1906, (Papyrus C 11).

8.–5. Jahrhunderts v. Chr. finden. Das Wort *plag*, deutet auf aramäischen Sprachgebrauch. Hierdurch erhalten wir einen terminus ante quem, denn um ca. 700 v. Chr. wurde aramäisch vom Volke noch nicht verstanden (2. Kg. 18²⁶). Das Gewicht dürfte demnach nicht älter als das 6.–5. Jahrhundert sein. Auf Grund des Schriftdukts kann als terminus post quem das 5. Jahrhundert betrachtet werden. Das Gewicht stammt somit wahrscheinlich aus dem 6.–5. Jahrhundert v. Chr.

Gewichte in Tierform (Ente, Löwe) sind besonders aus Babylonien bekannt, sodaß wir es auch in unserem Falle wohl mit babylonischem Einfluß zu tun haben, der ja maßgebend für das gesamte palästinensische Gewichtssystem gewesen ist.

Ein außerordentlich ähnliches Schildkrötengewicht ist von BARTON³ veröffentlicht worden.

3. STELLUNG DES GEWICHTES IM METROLOGISCHEN SYSTEM.

Unser Gewicht wiegt 2.63 gr. und stellt den achten Teil eines Schekels dar. Ein anderes Gewicht, das den achten Teil eines Schekels darstellt und die Inschrift *reba^c nešef*, d. h. „Viertel von einem Halben“ trägt, wiegt 2.54 gr. und wurde in Sebastie gefunden.^{4,5} Diese beiden Gewichte stellen somit identische Einheiten dar und zwar den achten Teil eines Schekels von 20.3–21.0 gr. bzw. den vierten Teil eines Halbschekels (*nešef*).

Halbschekelgewichte mit der Aufschrift „*nešef*“ sind wiederholt gefunden worden. Im Durchschnitt wiegen diese „*nešef*“ Gewichte 10.09 gr. (und nicht etwa, wie BARROIS⁶ infolge eines Rechenfehlers irrtümlich bemerkt, 9.84 gr.).

Dieses Gewicht eines Halbschekels (*nešef*) entspricht dem persischen Schekel, der 10.1–10.9 gr. wog.^{7,8}

Fernerhin brachte schon VIEDEBANTT⁹ die *nešef* Gewichte mit einem in Babylonien gefundenen Zehnschekelgewicht, das auf die Einheit von 10.13 gr. zurückgeht, in Zusammenhang.

Die größte äußere Ähnlichkeit hat aber, wie gesagt, unser

³ G.A. BARTON: *J.A.O.S.* 1906, vol. 27, p. 400.

⁴ *Q.S.* 1890, vol. 22, p. 267.

⁵ *Q.S.* 1894, vol. 26, p. 220.

⁶ *Revue Biblique* 1932, vol. 41, p. 50.

⁷ F.H. WEISSBACH: *ZDMG*, 1907, vol. 61, p. 379, und 1911, vol. 65, p. 625.

⁸ C.F. LEHMANN-HAUPT: *ZDMG* 1912, vol. 6, p. 607.

⁹ *Z.D.P.V.* 1922, vol. 45, p. 18.

Gewicht mit dem von BARTON¹⁰ veröffentlichten Schildkrötengewicht mit der Aufschrift „*ḥāmēš*“, d.h. „fünf“, welches 2.50 gr. wiegt. Trotz des geringen Gewichtsunterschiedes von 0.13 gr. der teils der Ungenauigkeit der damaligen Herstellungsmethoden und teils der Abnutzung bzw. Korrosion zuzuschreiben ist, gehören diese beiden Gewichte schon wegen der Ähnlichkeit der äußeren Form demselben System an und bezeichnen dieselbe Gewichtseinheit. Es entsprechen also die fünf Einheiten des Bartonschen Gewichtes einem achten Schekel. BARTON glaubt in dem Gewicht den fünften Teil eines Schekels zu sehen, was schon aus sprachlichen Gründen unmöglich ist.

Nun wissen wir, daß der Schekel in 20 Gera eingeteilt wurde (Ez. 45¹²; Ex. 30¹³; Lv. 27²⁵; Nu. 3⁴⁷ und 18¹⁶). Es liegt also nahe anzunehmen, daß auch der Halbschekel (*nešef*) in zwanzig Einheiten (halbe Geras) eingeteilt wurde. Besonders sei aber in diesem Zusammenhang auf Ausführungen von LEHMANN-HAUPT¹¹ verwiesen.

Die von LEHMANN-HAUPT erwähnte babylonische Mine, allerdings in ihrer um $\frac{1}{20}$, $\frac{1}{24}$, oder $\frac{1}{32}$ erhöhten „königlichen Norm“ liegt all den von uns angeführten Gewichten zu Grunde, indem wir annehmen, daß die Mine in 50 Schekel geteilt wurde, was sicherlich beim persischen Gewicht der Fall war.¹² Aber auch für palästinensische Verhältnisse geht dies aus Ez. 45¹² und z. B. daraus hervor, daß das Deuteronomium den durchschnittlichen Frauenpreis auf 50 Schekel festsetzt, wo der Codex Hammurabi eine Mine sagt.¹³

¹⁰ G.A. BARTON: *loc. cit.*

¹¹ LEHMANN-HAUPT schreibt in PAULY-WISSOWA'S REALENZYKLOPÄDIE SUPPL. III, p. 593: „Eine sehr merkwürdige Erscheinung, die sich auf dem Gesamtgebiet des antiken Maß- und Gewichts-Wesens und nicht zum Wenigsten auf das Gewichtswesen geltend macht, ist das Nebeneinanderbestehen von gleichbenannten Größen, die zueinander im Verhältnis 2:1 stehen, ein verwirrender Tatbestand, dem man nur begegnen kann, indem man unterscheidende Bezeichnungen hinzufügt, die jedoch wohlgemerkt—inschriftlich oder auf den Gewichtsstücken selbst—nicht bezeugt sind. So haben wir im Zweistromland eine „schwere“ und eine „leichte“ Mine von 982,4 bzw. 491,2 gr (nach „gewöhnlicher“ oder Landesnorm) nebst ihren Teilgrößen und Vielfachen. Ja, damit nicht genug, es begegnen uns auch Einheiten gleicher Benennung, die wir als doppeltso schwer zu bezeichnen haben. Diese äußerst unbequeme und verwirrende Erscheinung hat sich so lange und so zahl erhalten, daß noch im solonischen System schweres und leichtes Gewicht allerdings auf griechischem Boden—in ihren Bezeichnungen und ihrer Einteilung unterschieden—nebeneinander hergehen.“

¹² P. THOMSEN, *Kompendium d. pal. Altertumskunde*, 1913, p. 92.

¹³ BENZINGER, *Hebr. Archäologie*, p. 196.

Das Gewicht eines Schekels errechnet sich dann folgendermaßen:

Babylonische schwere Gewichtsmine				Schekel				
Gew. Norm		Erhöhte Norm		Gew. Norm		Erhöhte Norm		
		1/20	1/24	1/32		1/20	1/24	1/32
982.4		1031.5	1023.3	1009.1	19.65	20.63	20.48	20.18

Babylonische leichte Gewichtsmine				Halbschekel				
Gew. Norm		Erhöhte Norm		Gew. Norm		Erhöhte Norm		
		1/20	1/24	1/32		1/20	1/24	1/32
491.2		515.8	511.7	504.6	9.82	10.32	10.23	10.09

Ein Schekel wog demnach zwischen 20.63 und 20.18 gr., ein Halbschekel (*neṣef*) zwischen 10.32 und 10.09 gr. Dies entspricht dem Durchschnitt der aufgefundenen *neṣef*-Gewichte (10.1 gr.)¹⁴ Unser Gewicht entspricht tatsächlich dem achten Teil eines Schekels, nämlich $\frac{1}{8} \times 2.63 \text{ gr.} = 21.04 \text{ gr.}$ Das von BARTON veröffentlichte Schildkrötengewicht mit der Aufschrift *ḫāmēš* d. h. „fünf“ stellt das Gewicht von 5 Halb-Geras dar. Indem wir nämlich annehmen, daß auch der Halbschekel in 20 Einheiten eingeteilt wurde (siehe oben), die wir mit Halbgera bezeichnen wollen, wiegt ein Halbgera 0.5 gr. Fünf Halbgeras würden dann 2.5 gr. wiegen, was genau dem Bartonschen Schildkrötengewicht entspricht. Die folgende Übersicht möge zur Erläuterung dienen:

Hebräische Gewichte bezogen auf die leichte babylonische Gewichtsmine

Bezeichnung	<i>ḫāmēš</i> (5 Halbgeras)	<i>plag rebiṣ</i>	<i>reḫaṣ neṣef</i>	<i>neṣef</i>	10 <i>šiklugina</i>	Pers. Schekel (Doppelsiglos)	$\frac{1}{60}$ der königl. erhöhten leichten babylon. Gewichtsmine
Gewicht (in gr)	2.50	2.63	2.54	10.1	101.3	10.1-10.9	10.1-10.3
Teil bzw. Vielfaches d. Halbschekels	1/4	1/4	1/4	1	10	1	1
Gewicht bezogen auf Halbschekel als Einheit	10.0	10.5	10.2	10.1	10.1	10.1-10.9	10.1-10.3

¹⁴ BARROIS, *loc. cit.*, wo auch die philologische Begründung für *neṣef* gleich „halb“.



A.

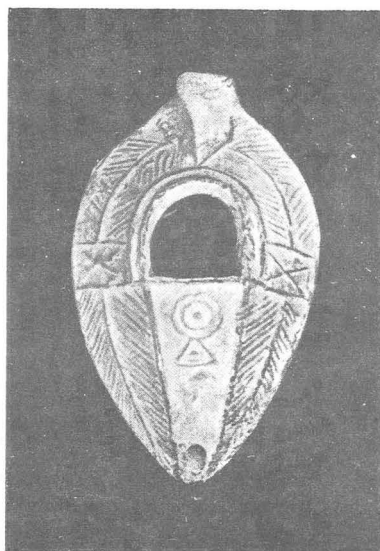


Gewicht mit Inschrift: „Hälfte eines Viertels“

REIFENBERG: Ein neues hebräisches Gewicht.

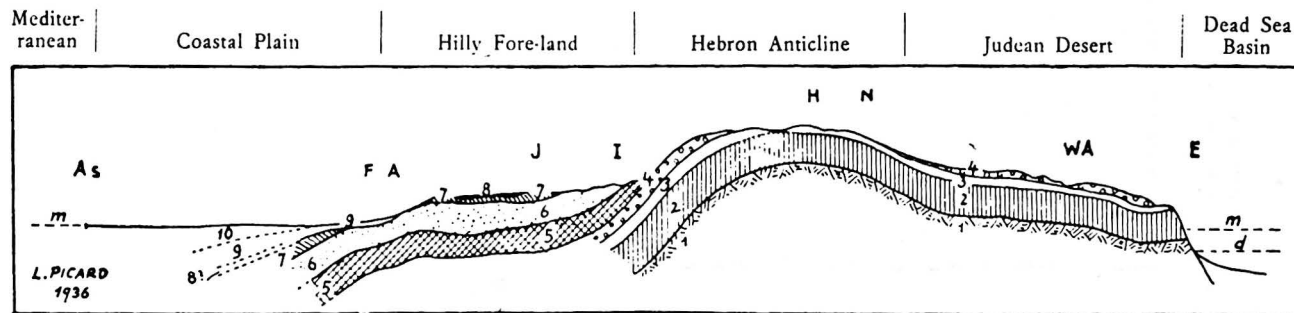


B.



C.

MAYER AND REIFENBERG: A Samaritan Lamp.



CROSS-SECTION FROM THE MEDITERRANEAN TO THE DEAD SEA BASIN by L. PICARD 1936.

Length of section 83 km. (1:500 000), vertical scale 7 times horizontal

Explanation: m Level of the Mediterranean. d Level of the Dead Sea. AS Askalon. F Faluje. A Arak el Menshiye.
 J Beit Jibrin. I Idhna. H Hebron. N Nebi Nain. WA Wadi Areje. E Engedi.
 1. Lower Cenomanian. 2. Upper Cenomanian. 3. Turonian. 4. Senonian. 5. Lower Eocene. 6. Upper Eocene.
 7. Oligocene. 8. Miocene 9. Pliocene. 10. Quaternary.

Der von verschiedenen Autoren als wahrscheinlich angenommene Gebrauch von babylonischen Gewichtseinheiten in Palästina wird an vier im Lande gefundenen Gewichten bestätigt.¹⁵

¹⁵ Wahrscheinlich gehören diesem Gewichtssystem auch die in Gezer gefundenen torpedoförmigen Gewichte ohne Aufschrift an. Vgl. dazu THOMSEN, *loc. cit.*

In einer späteren Arbeit hoffen wir auch die Stellung anderer in Palästina gefundener Gewichte aufklären zu können, die z. T. wohl sicherlich auf die babylonische Silbermine als Einheit zurückgeführt werden können.

A SAMARITAN LAMP

L. A. MAYER and A. REIFENBERG

(JERUSALEM)

A few months ago, a collection of lamps formed in various moulds, but all of one type, was put up for sale in Jerusalem, among them the one¹ reproduced on Pl. III B. It is an ordinary pottery lamp, 7 cms wide, 11.5 cms long and 3.5 cms high, with a plain nozzle and a handle standing up. The decoration consists of simple and double herring-bone patterns, interspaced by four squares, each divided by an X into four triangles, each triangle in turn filled with a pellet. As such it would have been one of the typical late Umayyad or early Abbasid lamps of which many specimens are known, and would have been not without interest, in spite of its frequent occurrence, since, as a class these lamps have never been properly studied.

But the particular claim to attention of this lamp lies in the inscription, which reads:

נר. לך i.e.
תמיד נשם
perpetual lamp

The letters are very plain and simple showing the well-known characteristics of Samaritan script and there is nothing to comment upon except the third letter, which however in inscriptions on stone appears almost exactly as on our lamp.

The Samaritans have never indulged in too many inscriptions. They used to carve holy texts in stone (and we would like to recall here the fact that the majority of their inscriptions consist in the repetition of passages from the Bible), or to adorn with them objects destined for liturgical or other ecclesiastical use. Only quite exceptionally do they furnish us with a name or a date.

¹ Now in the collection of Dr. A. Reifenberg, Jerusalem.

What then is the meaning of our little inscription? We can hardly assume that it stands as a label to the lamp itself, to indicate that *this* lamp served as a "perpetual" one in a synagogue or in a home. To the best of our knowledge this was never done; moreover, the shape of "perpetual lamps" (both Samaritan and Jewish) actually in use was very different from the one dealt with here. We venture therefore to suggest that the inscription in this case takes the place of a pictorial representation of such a perpetual lamp. In fact we find on various lychnaria (among them a good many in the collection referred to) a lamp depicted on the nozzle, which reproduces exactly the type of the Samaritan "perpetual lamp" as we know it from other sources.¹ A discussion of the symbolism of the lamp as the visual dispenser of light, or of the symbolism of light itself (which led Christian craftsmen to adorn their lamps with mottoes like *Φῶς Χριστοῦ φαίνει πάντες* etc.) would lead us too far here.

Samaritan objects of any antiquity, whether works of art or articles for daily use, are so rare that we have thought it worth while to add to the exceedingly small number hitherto known by reproducing a photograph of the above mentioned lamp, one of the oldest Samaritan objects extant, for the benefit of the readers of this *Journal*.

¹ Cf. Pl. III C. This lamp has passed into the collection of Mrs. SCHLOSSINGER.

BOOK REVIEWS

ALEXIS MALLON S.J., ROBERT KOEPEL S.J. and RENÉ NEUVILLE, *Teleilat Ghassul I: Compte rendu des fouilles de l'Institut Biblique Pontifical 1929-1932* (Rome, 1934).

It is matter for deep regret, not least amongst members of the Palestine Oriental Society, that Père MALLON is no longer with us to continue the excavations to which he devoted his last years and that he did not live to see the publication of even the first volume describing the results of his labours.

This, the work now under review, is handsomely produced, with a frontispiece and eight plates in colour, 64 photographic plates and 67 figures (including plans) in the text. After a Preface, summarising the course and result of the excavations, by Father A. BEA S.J., (Rector of the Pontifical Institute) and a well-deserved tribute to the memory of Père MALLON, both written in Italian, there follows a section (pp. 3-26) in German by Father KOEPEL, mainly devoted to the natural features of the site and its neighbourhood. In Part II Père MALLON gives an account of the excavations and in Part III a detailed description of the pottery and other finds, with the exception of the flint artifacts, which are dealt with by M. NEUVILLE. Part IV consists of a survey by Père MALLON of the environs of Teleilat Ghassul, describing neighbouring tells and cemeteries and the "megalithic" civilisation to which they are considered to belong; in conclusion Father KOEPEL contributes descriptive notes on some of the illustrations.

The small mounds known as Teleilat Ghassul are situated about $5\frac{1}{2}$ kilometres east of the Jordan and about the same distance from the north-eastern end of the Dead Sea. They are described as lying on the ancient way from the Jordan to Ma'in, near the boundary of an area intersected by watercourses and capable of being cultivated by means of irrigation. Megalithic remains and traces of inhabited sites show that at an early date this neighbourhood was relatively populous. Recognition of this fact has not unnaturally led to a revival, during the last few years, of the opinion that the site of Sodom and Gomorrah should be sought for at the northern end of the Dead Sea and that Teleilat Ghassul and the surrounding tells may be the remains of the cities of the plain. This view is by no means universally accepted, and in the present volume the excavators maintain a wise reserve with regard to it, though Father BEA would have us reckon with the fact that a flourishing civilisation existed on this site about the time of Abraham. This accords with Père MALLON's opinion, expressed on p. 160 and supported by a number of eminent archaeologists, that the occupation of Telailat Ghassul lasted throughout the Early Bronze Age and that the site was not deserted till 2000 B.C. or even later. It is legitimate however to feel, with all due respect, that on the whole the evidence now published is against accepting so late a date.

The area of occupation was found to extend for about 800 metres from north to south and 600 metres from east to west, and to include three separate tells, divided by shallow depressions, Tells 1 and 2 close together and Tell 3 a little further to the north. Preliminary soundings have proved that the debris of occupation is at most somewhat less than seven metres in depth and that remains of four successive building levels can be distinguished. These levels have been numbered, in the logical but somewhat unusual order, from the lowest upwards, so that Level I is the earliest stratum, resting on virgin soil, while Level IV represents the latest period. The scope of the

present volume is confined to recording (a) the excavations on the upper level of Tell 1, (b) researches in the outlying portions of the area and in the surrounding plain, (c) objects found at various points during the first three seasons and (d) some important fragments of wall-paintings. Tell 3 is intended to form the subject of a subsequent report.

The levels of occupation are separated by layers, called by Father KOEPEL "Aschenbänder", consisting of ashes or carbonised wood with an admixture of sand, vegetable matter and other refuse. These have been examined by him with praiseworthy diligence and are described at some length in Part I, pp. 21-26; though it may perhaps be felt that their significance has been somewhat over-emphasised, an important conclusion has been drawn from the study of these layers, namely that the occupation of the site was practically continuous and that no lengthy period elapsed between the destruction of one level and the building of the next above it. The excavators were convinced that each level had been destroyed by fire.

The houses cleared on the uppermost level of Tell 1 are described in detail, and a tabulated list is appended of all such features as hearths and ovens, shafts, silos, pebble pavements and so forth. The walls are of brick or of rammed earth (*pisé*), standing on foundations of undressed stone seldom more than one course in depth, but in the excavations of the lower levels no stone foundations have as yet appeared. No town wall or trace of fortification was discovered. The custom of burying infants and children under the floors of houses is attested by a number of examples; the bodies do not seem to have been placed in jars but were as a rule covered over with potsherds. The severed head of a child six or seven years old, enclosed in a jar which had been broken in two, was found at the foot of a wall on Tell 3; in Père MALLON's opinion the care that had been taken to preserve this head made it seem very probable that a human sacrifice was involved. In passing we may note a similar find at "Site O" in the Wādi Ghuzzeh.

The most important section of the publication is naturally that which deals with the flint industry, the pottery and other finds. It is, however, expressly stated that the description of these objects does not constitute a "stratigraphic study", and though the provenance—tell and level—of the pottery is indicated in almost every case, such information is only occasionally given in respect of other objects. This seems regrettable; it would be interesting, for example, to know whether all the basalt fragments illustrated in Fig. 23 were found in the upper levels, as they seem to come from vessels (*trépieds*) which bear a striking resemblance to finds from Wādi Ghuzzeh "Site A" (STARKEY, *Beth-Pelet II*, Pl. XL, 30, 34, 36), and concerning which we are only told that one example is from Tell 3, Level III and another from Tell 1, Level IV.

The few bronze implements that have as yet been found are all stated to be from Level IV; one fragment has been analysed and proved to contain 7% of tin.

With respect to the flints, the omission to state the provenance of each implement may be justified by the homogeneous nature of the industry, in which no change or evolution is perceptible from the lowest to the highest level. M. NEUVILLE has carefully described and illustrated the implements characteristic of the Ghassulian culture, with abundant references to the material already published on the subject, but he is obliged to confess that its origins still remain obscure, and that it does not appear to derive from any known industry of Palestine, Egypt or Mesopotamia. One of the most distinctive types is the so-called fan scraper and it could have been of interest if M. NEUVILLE had commented on the examples found in the Wādi Ghuzzeh (sites D2, B and A) in addition to observing that the type is represented at Ma'ādi in Egypt.

As matters stand the flints afford no assistance in dating the various levels and for this we naturally turn to Père MALLON's detailed and amply illustrated

description of the pottery (pp. 87-128) which is a most serviceable piece of work. The examples are chiefly from the upper levels, III and IV, more especially from the latter, but in a preliminary discussion of rims, jar-bottoms with impressions of basket-work and handles and lugs comparisons are made with fragments from the lower levels. Various shapes are then described under forty-one headings and several pages are devoted to the decorated pottery, from which it would appear that incisions and finger-impressions, either on the surface of the vase or on raised bands, are the most characteristic forms of ornament, and that painting, though not uncommon, is confined to simple motives such as straight or wavy bands, hatched triangles and lozenges. Taken as a whole the pottery is distinctive of the site and cannot at present be exactly matched elsewhere, but nevertheless there are analogies in the material from other excavations which should not be overlooked. Thus for example the bands with finger-impressions, common at Level IV, recall those of the lowest levels (XVI-XVIII) of Beth-Shan (*Museum Journal* 1935, Pl. 1), while on the other hand the inturned rims shewn in Fig. 38 are perhaps more closely akin to types from Megiddo and from Beth-Shan at Levels XIII and XIV. The fragment of a bottle neck with lug handles, Pl. 43, 3, which PÈRE MALLON thought to belong to the early part of the Middle Bronze Age (see p. 110), may rather be compared to vases from Levels XIII and XIV at Beth-Shan (*Mus. Journ.* 1935, Pl. v, 9 and 10); the lug-handled pot Fig. (59, 5) which he classed with it may well be of later date but its provenance is not stated and it has all the appearance of an intruder in the pottery of the Ghassûl tells.

As others have pointed out, the "neolithic" sites in the Wâdi Ghuzzeh provide examples of jar bases with impressions of matting, of handles set on near the bases of cups (cf. Fig. 59, 3) and of the vessels with tapering bases (*en forme de cornet*) which are common at all levels of Ghassûl. Ledge handles are said (p. 94) to have been found at all levels; as the illustrations shew (Fig. 41, Pl. 40, 3) they are either plain or of the early types with indented or wavy edges; the "pushed-up" shape, which is one of the characteristics of Tomb A at Jericho, is noticeably lacking at Ghassûl. The evidence of Megiddo and Beth-Shan seems to shew that this type of handle became prevalent not later than the second quarter of the third millennium and its absence adds to the probability that much of the Ghassûl pottery is earlier than 3000 B.C. and that the site was abandoned within a few centuries of that date. It is to be hoped that the publication of the pottery from the recent excavations in the low levels at Jericho may help to settle this question once for all. In any case it does not affect the dating of the neighbouring mounds and cemeteries described in Part IV of the present work; they have not been systematically excavated but appear to contain pottery (as shewn on Pl. 61-64) of later date than that of Telcîlât Ghassûl.

In conclusion some reference must be made to the discovery of three large wall-paintings of which substantial fragments have been preserved. They are of great importance inasmuch as it would seem that no strictly comparable decoration has been found elsewhere, but their significance is obscure. By his full description and discussion of these paintings PÈRE MALLON has added greatly to the interest of this valuable contribution to his favourite study.

G. M. FITZGERALD

The Ras Shamra Tablets, their Bearing on the Old Testament; Old Testament Studies, published under the auspices of the Society for Old Testament Study, Number 1. By J.W. JACK. Pp. X + 54, T. & T. Clark, Edinburgh, 1935. 3s net.

In the Foreword to this inaugural number of *Old Testament Studies*, Prof. THEODORE H. ROBINSON explains that the series is intended to fill "a serious gap in British literature dealing with the Old Testament" by providing an opportunity for the publication, hitherto difficult, of such works of original research as "cannot be compressed within the limits imposed by a magazine article or expanded into normal book size"; it is hoped that it may thus render to the English-speaking world a service similar to that which is performed in Germany by the *Beihfte zur Zeitschrift für die alttestamentliche Wissenschaft*. All lovers of biblical and oriental studies will welcome the project and wish that the new series may prove, in impartiality, in hospitality to scholars of all races and denominations, and in scientific quality, a worthy companion to the *American Journal of Biblical Literature* and the *British Schweich Lectures*.

A more fascinating subject than that of the present volume can hardly be conceived. But the very thing that makes the subject fascinating—namely, the fact that the entire complex of problems is still in a state of flux, (for a number of important texts have not yet been published)—renders its choice unfortunate. For the bearing of the Ras Shamra tablets on the Old Testament is largely a question of what they say, and we do not as yet know what that is, even in the case of the texts already edited, with sufficient accuracy. It was to be expected *a priori* and is proving to be true *a posteriori* that the pioneer interpretations of the French scholars—whose merit is in no wise diminished thereby—will have to be modified considerably as a result of subsequent studies and precious new finds; but even the most up-to-date exegesis is still very defective, and the more excellent it is the more conscious it is of its deficiency. Obviously, conclusions arrived at in the absence of a reasonably good understanding of the text, or, worse still, on the basis of an erroneous understanding of the text, are bound to be problematic.

In these circumstances, it is particularly to be regretted that JACK, though acquainted with the English and German literature on the Ras Shamra documents, is excessively dependent upon the *éditiones principes* and on the learned, but premature and hazardous, mythological and religio-historical speculations of DUSSAUD based upon those first editions. The only non-French writings of which he makes copious use are those of T.H. GASTER; which contain some good suggestions but in which, alas, "une énorme érudition est au service d'une imagination déconcertante."¹ He might have avoided many a mistake by a more intensive study of the papers of ALBRIGHT and MONTGOMERY, to mention only English ones.

Moreover, in addition to building shaky edifices upon dubious renderings of often fragmentary passages in the published tablets, the author generally takes at their face value the announcements and communications made by VIROLLEAUD at various times concerning the subject matter of still unedited texts. Some of these statements were made two or three years ago, when our knowledge of Ugaritic was so slight that all of us have since changed our minds on many points. It is not only possible but probable that VIROLLEAUD no longer takes quite the same view of the contents of the documents in question today. In any case, all we have in the matter are his statements *about* those writings, very rarely a *translation*, which will almost certainly have to be revised, made from an original of whose wording we are still in ignorance, and many small groups of words torn from their context. With these, in the absence of vowel notation (except after *hamza*), punctuation marks and any-

¹ DHORME, *Langues et écritures sémitiques*, p. 66, with reference to GRIMME'S *Altsinaitische Buchstaben-Inscriben*.

thing more than a very sketchy knowledge of the language, we can do practically anything we please; but past experience with the way a quotation assumes an entirely new aspect when its context is published warns us to do no more than is indispensable, and to wait patiently for the appearance of the complete texts from which they are derived.

There is nothing to be gained by citing a long list of examples of the inaccurate statements, false renderings, unfounded hypotheses, and even self-contradictions to be found in JACK's book. In part they are extenuated by the above circumstances, under which, as has been said, the work ought not yet to have been undertaken; but it is unpardonable under any circumstances to write, for example, on the very first page "the mound at Ras Shamra" (as if the tell had no name, and "Ras Shamra" were that of the neighbouring village), and "the 25th April 1928" as the date on which the first "remains of some ancient buildings" (actually a vaulted sepulchre) were discovered at "Minet el-Beida" (read Beida); for the discovery took place in March, and the report upon the ensuing visit of VIROLLEAUD and his assistant LEON ALBANESE is dated 24th-28th March 1928 (*Syria* X, p.20).

It is pleasanter far to praise than to blame. There is a useful table of the Alphabet of Ras Shamra, a reproduction, with transliteration and translation, of a piece of original epic text (in l. 10 read *lst* and in l. 17 *lqbrnh*), a suggestive selection of illustrations of the "Light Thrown on the Biblical Text," and an appropriate map of the Ancient East. The reviewer quite agrees with the author's opinion that the language of Ugarit is essentially an ancient northern dialect of Phoenician; far too much has been made of the divergences in some quarters. The lesson to be learned from what we know of the *Dn'il* epic of Ras Shamra is also well put. Further, the "List of Divine Names" at the end of the volume is useful, however much one may differ with the author on points of interpretation.

For at least the greater part of the year, the author is limited to the library resources of, it is true, an exceptionally well stocked manse in Perthshire. Many of the readers of this *Journal* know what a handicap to research even residence in Tell Aviv can be. We admire the author's courage and industry, and hope he may give us a second edition of his work some years later, when the material is complete and its sense on the whole well established.

H. L. GINSBERG

Denkmäler Palästinas. Eine Einführung in die Archäologie des Heiligen Landes, I: Von den Anfängen bis zum Ende der israelitischen Königszeit. By CARL WATZINGER. Pp. viii, 117, with 98 illustrations in the text and on 40 plates. Leipzig, Hinrichs, 1933.

Since modern scientific archaeological work in Palestine began in 1890 there have been numerous efforts to compile some sort of synthesis of the results for the use of non-specialists. At the same time a few attempts have also been made to produce a handbook for the sake of specialists in the field. The first serious effort to write a handbook resulted in VINCENT's *Canaan*, which admirably reflected the level of knowledge attained in 1906, and was particularly noteworthy for its elaborate comparative treatment. Unfortunately, *Canaan* was rather neglected until after the War, when it naturally became antiquated in detail. It was, furthermore, restricted in plan to the period before the Israelite conquest, though it actually covered more ground, especially in the later chapters. BENZINGER's *Hebräische Archäologie*, originally published in 1893, appeared in new editions in 1907 and 1927, but no real use was made of the new archaeological

material. HANDCOCK's *Archaeology of the Holy Land* (1916) was an industrious but uncritical compilation, and the chronological framework was so self-contradictory that the resulting picture was completely blurred (cf. *APB*³ 35). THOMSEN published two good but very brief handbooks, which furnished excellent synopses and bibliographical indications. Being dependent on his archaeological sources, which provided conflicting indications, the results could hardly be called syntheses, useful though they were. DUNCAN's *Digging up Biblical History* (two volumes, 1931) is an ambitious but uncritical and inaccurate treatment, of even less value than HANDCOCK's much earlier one. The reviewer's *Archaeology of Palestine and the Bible* (*APB*, third edition, 1935) is in no sense a synthesis, though it provides relatively complete bibliographic indications, and gives material for an ultimate synthesis.

In the book before us Professor WATZINGER of Tübingen has given us a great deal more than is promised by the title and the price. Thanks to compact letterpress and concise style, thanks also to the economy with which the illustrations are reproduced, we have *multum in parvo*. Moreover, we have here for the first time a real synthesis of the results of Palestinian archaeology, satisfactory both on the chronological and the comparative side. This synthesis has been made possible in part by the great development of Palestinian archaeology since the War, but in large part by the author's own qualifications. Having spent years in Palestinian archaeology, in connection with Jericho, Megiddo, and the Synagogues of Galilee, and being the author or joint author of three important publications on the subject, he is admirably equipped for writing such a synthesis. Moreover, as a classical archaeologist of note he possesses the training in comparative archaeology which is best received in that field, just as the best comparative linguistic training is obtained in the Indo-European field. Not least in importance for the success of the book before us is the collaboration of ALT, which guarantees the general historical soundness of the author's views and ensures the correctness of the modern place-names.

If our observations are numerous, they are only an index of our interest in the book and of our desire to make the second edition even better than the first. Many of them are due to the rapid advance of archaeological research in Palestine, which generally writes a new chapter of history every year or two.

Petra was discovered by BURCKHARDT in 1812, the year after SEETZEN's death (contrast p. 7 above). The American missionary who made ROBINSON's success possible was named ELI SMITH, not "Ely Smith" (p. 7). Some reference should have been made to the brilliant work of CLERMONT-GANNEAU, the father of scientific epigraphy and surface archaeology; in comparison with him GUÉRIN was a third-rate man. On p. 13 (and *passim*) *tell el-fûre'* should be *tell el-fâr'a* (Arabic *تل الفارعة*; cf. e.g., in 'ARIF EL-ARIF'S *Ta'rîḥ Bi'r as-Sahî'*). There are a few other slips and misprints in proper names in the Introduction, but none of them will cause any confusion.

The treatment of the Palaeolithic and Mesolithic (pp. 16-20) is good, and has not been antiquated appreciably by the further researches of Miss GARROD and Mr. NEUVILLE, though very important additional data will soon be published. When the author reaches the Neolithic (p. 20 ff.) he is on very uncertain ground, to judge from the extraordinary diversity of opinion. The structure at Rujm el-Malfuf near 'Ammân is probably not Neolithic, but Early Bronze; cf. YEIVIN, *QS.*, 1934, 189 f. While avoiding absolute dates, WATZINGER has adopted the reviewer's chronology of Tleilat el-Ghassûl (26-8), which he assigns to the "Neolithic," and dates before the Early Bronze. Unfortunately, he has since, in a review of ENGBERG and SHIPTON, changed his view and adopted the late date of Ghassûl (OLZ, 1935, 148). Since the reviewer will establish his own high date in a more detailed treatment in the *Journal* ("Palestine in the Earliest Historical Period," cited henceforth as "Palestine, etc."), it is not necessary to discuss the matter here. The results of the recent excavations in the earliest strata of Megiddo and Beth-Shan were not available, so

the author was not able to use this important material, which revolutionizes our knowledge of the ceramic development of the late third millennium and the early second.

With p. 29 the author enters the Bronze Age. For the absolute dates which he suggests as convenient points of demarcation the reviewer would now substitute 2100 (for 2000), 1500 (for 1550), and 1150 (for 1200). The Egyptian chronology of the author is definitely too high; Sahurê, e.g., should be dated in the 24th century rather than about 2700. This results in a definitely false relation between Egyptian and Palestinian cultural history, as the reviewer has pointed out in his "*Palestine etc.*"

On p. 35 WATZINGER has fallen a victim to PETRIE's chronology, though he has in general avoided the pitfalls set by *Gaza I-II* (the only volumes available to him). The rapier (*Stichswehr*) of Tell el-Ajjûl is the one represented *Gaza I*, pl. XVIII: I=NIX: 47, from a "Copper Age" tomb, i.e., from about 2000 B.C. (cf. the chronological treatment in the reviewer's "*Palestine etc.*"), as shown by the register of objects found with it in Tomb 294. The proposed date in the Mycenaean period (LB II) is thus quite wrong. To the same cemetery, with the same type of pottery, belong Tombs 227 and 275, which yielded peculiar weapons composed of lance-heads with long shafts ending in a bent tang, which WATZINGER on the same page ascribes correctly to Middle Bronze (i.e., about 2000 B.C.). These extraordinary weapons are never found in other contexts in Palestine.

The so-called toggle-pins (p. 36 f.) appear now, in Early Bronze context, with much thicker head, giving them the appearance of an elongated cone. This makes the explanation as pins for fastening garments, already very dubious, quite impossible, and shows that they were used in hair-dressing. That they were occasionally used, especially in North-Mediterranean lands, for fastening garments is naturally possible. The early cemeteries of Ur and Kish make a Mesopotamian origin reasonably certain; see WOOLLEY, *Ur Excavations: the Royal Tombs*, pl. 231, above, and MACKAY, *A Sumerian Palace and the "A" Cemetery at Kish*, II, pl. LVIII.

The spear-butts from Egypt, assigned by PETRIE originally to the Twenty-sixth Dynasty (seventh-sixth centuries), really belong to between the twelfth century and the tenth, as shown by the reviewer *American Journal of Archaeology*, 1932, 301 f.), a fact which makes the author's perplexity on p. 41 unnecessary.

The author's discussion of Bronze Age pottery on pp. 42-50 is excellent, but is naturally superseded in part by the publication of the earlier strata of Megiddo and Beth-Shan by ENGBERG, SHIPTON, and FITZGERALD (see above). It may be noted that the treatment of the earlier pottery of Tell Beit Mirsim in the first volume of this publication (cf. p. 42, n. 4) is now supplemented and corrected in detail by the more extensive material published in *Tell Beit Mirsim I A: The Pottery of the Fourth Campaign*. For further details on the ceramic sequence of Early and Middle Bronze see "*Palestine etc.*," especially the chronological table. WATZINGER was prevented by his own work at Jericho from dismissing the I-H stratum at Tell Beit Mirsim as cavalierly as has been done by some scholars. Now that Tell el-Ajjûl, Tell ed-Duweir, Bethel, etc., have been added to Jericho and Tell Beit Mirsim, there cannot be any doubt at all that WATZINGER and the reviewer were correct. The bearing of these data on the chronology of the Early Bronze has been stated by the reviewer in the paper just cited. After this ceramic period comes that of Tell Beit Mirsim G-F, whose continuous and homogeneous character has been proved by subsequent discoveries at Tell el-Ajjûl, Jericho, and especially at Aphek (Râs el-Ain). In favour of VINCENT's Mesopotamian derivation of the painted MB II ware mentioned on p. 48, above, must now be mentioned the parallelism between MB II motives and forms and similar ones from the MB II of northeastern Mesopotamia (Tell Billa). P. 48, middle, WATZINGER has some very sound observations on the character of the carinated pottery of MB II,

with its clear metallic prototypes, and correctly objects to its being termed "Hyksos."

Our knowledge of the Early Bronze architecture of Palestine will be vastly increased by the publication of the remarkable discoveries of Mme. MARQUET at et-Tell (Ai), with city-walls and public buildings from the period 3000-2200 B.C. The excavations at Megiddo and Beth-Shan, with their apsidal houses from the end of the fourth millennium and the beginning of the third, are also of great interest in this connection. Extensive additional material will unquestionably be forthcoming soon from these and other sites. The Egyptian representation of a Palestinian fortress at Deshâsheh must be dated about the 24th century, not in the beginning of the third millennium (p. 51). The date of the Middle Bronze walls of Jericho, Shechem, and Tell Beit Mirsim should probably be lowered about a century (1700 for 1800, 1600 for 1700, etc.).

WATZINGER's treatment of the house-plans of Palestine in the Middle and Late Bronze (pp. 56-62) is extremely good, and represents a great advance over any previous treatment. The reviewer disagrees with him, however (though tempted at first to accept his view), in regarding the large room in the D mansion of Tell Beit Mirsim (a plan of which is first published here, fig. 21) as roofed over, i.e., as a living room rather than as a court. In favour of this interpretation is the fact that the thickness of the outside walls of the house is the same as that of the outside walls of this locus. Against it are the following cogent data. First, the size of the locus, 11.70 x 6.20 metres (inside measurements) is opposed to the interpretation of the author, since no traces of pillar bases were found, though the locus was very carefully dug. Secondly, in the locus we discovered a large shallow basin, lined with marl plaster (*hawârâh*), nearly two metres in diameter, which would be quite in place outside, but singularly out of place in a room. Thirdly, the width of the outside walls of this locus is naturally explained by two considerations. We were able to demonstrate that there had been two stages in the history of the mansion in question. Though no traces of older pillar bases were found, there may well have been such bases originally. In several houses we found that roofed living rooms of phase E had been turned into small open-air courts in phase D; this development may also have taken place between D₁ and D₂. In the case, the width of the walls would be explained as due partly to the fact that the original substructures were continued up to the top of the walls, without change in thickness. The other consideration is that the thickness of the walls in question was determined partly by the desire for security. That horses were kept in it remains probable, and the basin was presumably used as a manger. The horses were evidently stabled in rooms 5 and 8.

The Late Bronze mansion type discussed on p. 58 is also found at Bethel; see *BASOR*, No. 56, p. 9. The date of this building is about 1400 B.C. On p. 59 f. the author discusses the curious structure with immensely thick walls, discovered by SELLIN on the acropolis at Shechem; he is clearly right in interpreting it as a tower, though one may doubt whether the designation *Herrenhaus* is happy. That this structure is the base of the *migdal Šekem* of the Abimelech story (Jud. 9) is possible, if we assume that its original location was forgotten before the story was put into its present form (cf. Jud. 945-46). It is characteristic of WATZINGER that he avoids making any identifications or combinations on the basis of the biblical narrative.

The number of Canaanite temples (p. 63) has increased still farther in the past two years, especially by the discovery of a small temple from the middle of the third millennium at Ai and of a Late Bronze temple, with three successive phases of construction, at Lachish (Tell ed-Duweir). A temple from the late third millennium has also been discovered by the reviewer at Ader in southern Moab. In general it is becoming clearer and clearer that the former view of most scholars that the Canaanites worshipped mainly in open-air sanctuaries, was wrong. The one exception seems to be the Gezer "high place,"

but even there WATZINGER is probably justified in accepting EDUARD MEYER'S comparison with the stela-field of Assur. The *massēbōth* of Gezer were then erected in commemoration of men, not of gods, and belong with the *yad* of Absalom. The date of the "high place" seems to be exclusively Bronze Age; its essentially religious character is not diminished by recognition of the nature of the stelae, which presumably illustrate the cult of the dead. In this connection it may be noted that Beth-shemesh was destroyed by Nebuchadnezzar, not by Sennacherib (p. 64), as we know from the numerous seventh century seals and jar-stamps, including the stamp of Eliakim steward of Joiachin, which cannot be earlier than 598 B.C. (cf. *JBL*, 1932, 77 ff.); with this the mass of typical seventh century pottery naturally agrees.

The temple of the goddess Ninegal (not "Ningal," who was quite different) of Qatna (Mishrifeh) was probably destroyed by Suppiluliuma of Khatte, who mentions the capture of the city and exile of its inhabitants in the Mattiwa treaty. That it was not destroyed by Tuthmosis III, a century earlier, as suggested by the author (p. 65) is made likely by the Amarna letters written by its prince, Akizzi, just before Suppiluliuma's invasion. It is a pity that the plans of the two Middle Bronze temples at Ugarit (Rās esh-Shamrah) were not published in time for their utilization by the author (see provisionally *Syria*, XVI, pl. XXXVI); his treatment of these interesting structures would have been most instructive. The second temple is particularly interesting since it is the first certain example of a Canaanite temple of Dagon.

The stratification of Beth-shan makes WATZINGER'S suggested date for the famous lion slabs of Beth-shan (not before cir. 1200 B.C., p. 68) impossible, though DUSSAUD has urged an even lower date. Since this orthostate was discovered in the so-called Tuthmosis III stratum, is ought not to date later than cir. 1400 even if we follow the revised (and slightly lowered) chronology of FITZGERALD. Under no condition, however, can it be later than the fourteenth century B.C. WATZINGER is absolutely correct in placing the orthostate artistically before the Assyrian period of Syro-Hittite art began in the ninth century, thus excluding DUSSAUD'S date. But this is only a *terminus ante quem*. Comparison with the later lion of Arslan Tash, which has a star or rosette on its shoulder, like the lion of Beth-shan, misled DUSSAUD into giving too late a date (cf. GALLING'S useful study, *ZDPV*, 1934, 153-6). Several scholars (the writer first; cf. *APB* 42 and already *AJA*, 1929, 134 f.) have referred this lion to the Syrian and North-Mesopotamian art of the Hurrian age (seventeenth to fourteenth centuries B.C.), and have pointed out the parallels between it and the art of Gozan (Tell Halaf), from about the eleventh century B.C. The last mentioned art is much ruder, belonging to the period of the Aramaic occupation, following the decline of Hurrian culture, but it still exhibits the same characteristic dominance of antithetic and animal motifs, following the Sumero-Accadian tradition of the third millennium. The closest parallel to the rosette or star on the lion's shoulder is now given by the fourteenth century representations on a gold bowl from Ugarit (SCHAEFFER, *Syria*, XV, pl. XV). This bowl so effectively demonstrates the high standard attained by Syrian art in the early part of the Late Bronze, that the orthostate of Beth-shan can offer no further surprise. The latter is naturally post-Hyksos, and cannot well antedate the sixteenth century, but the fourteenth century is the latest possible date.

The cylindrical cult-stand of the second millennium, which has been elucidated so well by the author (p. 69), first appears in Palestine in Tell Beit Mirsim G-F, about 1800 B.C.; see *BASOR*, No. 58, p. 29, *AASOR* XII, pl. 44: 14. It presumably came in from the north (ultimately from Mesopotamia) in the preceding period, about 2000 B.C.

WATZINGER is correct (p. 74) in assigning all the Beth-shan examples of anthropoid clay sacrophagi to about the twelfth century, and not, as the reviewer supposed in the paper to which the author refers, partly to the thirteenth.

FITZGERALD has informed the reviewer orally, since the appearance of the paper in question (*AJA*, 1932, 295 ff.), that ROWE was mistaken in assigning some of the tombs to the thirteenth century, and that they belong to the twelfth. On the other hand, it seems rather improbable, on stylistic grounds, that there is any direct connection between the anthropoid sarcophagi of this type and period (Iron I) and the Phoenician group belonging to the fifth and fourth centuries. The latter are rather, as maintained by the reviewer, a direct imitation of Egyptian sarcophagi of the Saite period (seventh-sixth centuries B.C.).

The Kapara period at Tell Halaf is probably the eleventh century (see above), though it may have begun in the twelfth and continued into the tenth (contrast p. 75, where the author prefers a date in the 10th-9th century). This date suits the pottery of the tomb in question better, and is also a better date for the gold mouthpiece. MOORTGAT and CONTENAU favour the same dating, for which there are numerous other indications. The palaeography of the cuneiform texts mentioning Kapara is against a date after the eleventh century.

On pp. 77-81 WATZINGER has given the best account of the Philistines and their pottery which has yet appeared, in spite of its brevity. His conclusions are essentially the same as those of the reviewer, but tempered by his first-hand control of the Aegean archaeological material belonging to his own specialty. HEURTLEY takes nearly the same position in a forthcoming study in *QDAP*.

The pedestalled bowl (*Fußschale*, p. 82) actually made its appearance first in the Middle Bronze II, and was in use through the Late Bronze. It seems to disappear in the early part of Iron II, before the eighth century. It should be added that the type changes considerably, and the height of the foot is, as a rule, considerably less in earlier specimens.

The author's treatment of the chronology of the early fortifications of Jerusalem on the east, excavated by Duncan, is very good; it is to be hoped that the ascription of the great revetment to the Jebusites instead of to the period of the Jewish monarchy will disappear from archaeological literature. It is doubtful whether any part of the fortification remains can be referred to David (contrast p. 86). The remarks on the Millo question are brief, but illuminating (p. 87); cf. the reviewer in the *Jewish Quarterly Review*, XXII, 415, where the etymology and archaeological meaning of the term are treated.

The latest excavations at Megiddo have brought additional material of importance for the question of the date of the stables (cf. p. 87 f.), so that we may now attribute the oldest and best built phase (not yet found when the book before us was finished) to Solomon, the next phase (previously considered as Solomonic) to one of his successors, and the third phase to the end of the ninth or the beginning of the eighth century; cf. *AJA*, 1935, 138. Similar remains have also been found in Taanach and Hazor (Tell el-Qedah, unpublished excavations of GARSTANG). At least 500 horses were stabled in Megiddo alone.

The treatment of the architecture of the Temple of Solomon (pp. 89-95) is excellent; the reviewer is happy to express his full agreement with it. The Assyrian theory of MÖHLENBRINK is untenable, and the Egypto-Phoenician theory is the only possible one, as the reviewer has maintained for many years. It is quite true that there are striking Mesopotamian borrowings, especially in cult-objects and in nomenclature, but these loans go back to the Bronze Age, whereas the architecture represents new forms of the Early Iron, in the main. Since we hope to take up these matters in much more detail elsewhere, we may be excused from entering into further elaboration here. On p. 95 "Beth-Sean" is a *lapis calami* for "Samaria." The treatment of the Palace of Solomon (pp. 95-7) is also very sound and illuminating.

On pp. 97-9 there is a good description of the Israelite buildings of Samaria. "Kalamu" (Kilamuwa) on p. 98, above, is a slip of the pen for "Bar-rekub"

(Bir-Rakeb); in the inscription of the latter we learn that the former had one palace for both winter and summer, while the latter, a century later, built a special summer house. The round towers built outside the acropolis (p. 99 above), which were first ascribed by the excavators to Jeroboam II, must now be referred with certainty to the Hellenistic period, as we know from the discovery of Hellenistic pottery at the bottom of the tower (inside) during the spring of 1935. This correction relieves us of the necessity of attributing a wholly distinct type of masonry to the Israelite age. The quoin construction of Megiddo in the ninth century (p. 99 below) was imitated elsewhere in Palestine (Bethel, etc.) in the eighth century, and appears at Tell Abū Hawām on the Bay of Acre as late as the sixth (HAMILTON, *QDAP* IV, pl. II, 1). This type of masonry must have appeared in the twelfth century or earlier in Phoenicia, (Tell Abū Hawām!) since we find it spreading into central Palestine (Bethel, Beth-zur) in an earlier, more primitive form, where rough blocks of stone are piled up at irregular intervals, with rubble walls between, in the twelfth and eleventh centuries B.C.

Proto-Ionic capitals like those at Megiddo (p. 100) have also been found at Samaria (ninth century) and in Moab (Early Iron); their origin in the lily capital of Egypt and Syria in the Late Bronze Age is now established.

The dye-plant at Gezer, correctly explained by WATZINGER (p. 101), is much more closely related to the contemporary Hellenistic dye-plant at Beth-zur (SELLERS, *The Citadel of Beth-zur*, p. 17).

Admirable as usual is the author's discussion of the interesting type of house first recognized at Tell en-Naşbeh, and since explained by some scholars as a temple—for which there is no justification, as he shows (pp. 101–2). This house which has the same ground-plan in three elongated rooms or “naves”, side by side, with a broad, but short, vestibule in front of them, as underlies the Roman basilica, is also known from Schechem and Tell Jemmeh, as observed by the author. To these examples may be added an exceptionally large one from Beth-shemesh, the vestibule of which is not preserved (GRANT, *Ain Shems Excavations*, I, pl. XXIX–XXX, 30–AB), dating from early in Iron II, apparently. The so-called *hillani* of Jericho, dating (to judge from the sherds in the surrounding area) from the eleventh-tenth century, resembles this ground-plan closely. The type of building in question was thus most in vogue between the eleventh and the ninth centuries. The reviewer has never found an example of it in any of the excavations with which he has been most closely connected, such as Tell Beit Mirsim, Bethel, Gibeah, Beth-zur, or Shiloh, though all these sites were occupied during all or part of the period 1100–800 B.C.

P. 104 below. This explanation of the curious rock-cutting found by WEILL before the War is rendered improbable by his discovery of an indubitable rock-hewn tomb of the Phoenician royal type in the unpublished excavations of 1923–4. Since quarrying operations in Roman times sliced off the top of the tomb-chamber proper along with the upper part of the vertical entrance-shaft, its nature is not visible at the first glance.

WATZINGER is right in assigning the cist-tomb cemetery of Tell el-Fār'ah (No. 200) to the period following Solomon, as already indicated by PETRIE (p. 105). Since most of the pottery is clearly tenth-ninth century in date, we may tentatively assign it to the period following Shishak's occupation, cir. 920 B.C. But, as WATZINGER observes, the cist-type has a long history in the Eastern Mediterranean basin, down into the Roman period, so there is no reason *a priori* to assign the so-called Philistine tombs of Gezer to cir. 800 B.C. The reviewer is convinced that these tombs are Persian in date, agreeing with WOOLLEY and GALLING against MACALISTER. The proof of this may now be brought from the excavations of JOHNS at 'Athlit, admirably published in *QDAP* II, 41 ff. (which appeared too late for use by WATZINGER). Here a large number of tombs dating from the Persian period (between the sixth and the third centuries B.C., but mostly from the fifth and fourth) was uncovered; characteristic of

them is the rock-hewn slot or cist, covered with slabs, as at Gezer. The alabastron of Gezer I, fig. 157: 22 appears in 'Athlit, Tomb L 16 (p. 62, fig. 19) from the fifth-fourth century, as well as in Tomb L 20, No. 548 (from the early fourth century, according to the coins). Numerous other resemblances might be cited, but this is the closest. [The question of the date of the Fār'ah and Gezer tombs is now very fully discussed by ILLIFFE in *QDAP* IV, 182-6, with the same results as we have reached].

The author's discussion of the steatite lion-censer of Tell Beit Mirsim is good. The reviewer would suggest that a short wooden mouthpiece was slipped over the pipe-opening and fastened to it by some adhesive, and that the burning incense was then placed in the steatite bowl of the pipe, which was refractory to fire. The mouthpiece was next put into the mouth of the person who was supposed to use the object, and the latter inhaled the incense just as a pipe-smoker inhales tobacco smoke. The purpose is more obscure. Dr. D. I. MACHT, the eminent American pharmacologist, has shown in his book, *The Holy Incense*, that incense was not used to narcotize or intoxicate; its physiological effect is mainly antiseptic. The best tentative solution seems then to be that some form of incense was smoked for therapeutic purposes. The lion-censer was then used for medical, not for religious purposes, though some magical association with religion is probable. On these censers see now also PRZEWORSKI, *Syria* XV, 223 f.

The date assigned to the silver bowls and objects from the "Philistine" tombs of Gezer and the rich tomb No. 650 at Tell el-Fār'ah is too high, and must be reduced from about the ninth to about the fifth century (see above on the former); the author's date is thus three or four centuries too high (p. 109-11). WATZINGER should have followed such analogies as those from the Persian and Hellenistic periods which he himself quotes on p. 110, and not have been misled by the excavators' own dates. That the tomb from Tell el-Fār'ah belongs to the Persian period is definitively proved by SUKENIK's finding Aramaic letters on the bronze bedstead, after it had been cleaned (not yet published). It may be added that Petrie's dating of the one piece of pottery found in this tomb (*Beth-pelet* I, p. 14, pl. XLIV: 2) is wrong; the piece in question certainly belongs to a Persian jar of the type found in abundance at 'Athlit (*op. cit.*, p. 50). [See above on ILLIFFE's paper.]

WATZINGER is probably right (p. 110 f.) in insisting that the fibula was not introduced into Palestine until the tenth century B.C., though the reviewer has hitherto held to a date in the twelfth-eleventh century. But negative evidence is increasingly in favour of the lower date.

On pp. 112-4 the author discusses the ivories from Samaria and Arslan Tash, reaching nearly the same conclusions as CROWFOOT (*QS*, 1933, 7-26) arrives at after detailed study. The latter maintains that the two styles appear at Samaria in the ninth century, more or less contemporaneously, and that their differences are to be attributed to different ateliers. In favour of this conclusion is the fact that the ivories of the Samaria class, which are not found at all at Arslan Tash, are strongly egyptianizing in ornamental repertory, and so came probably from Phoenicia or were made under direct Phoenician inspiration. The ivories of the second class, on the other hand, coming from Arslan Tash and Samaria, must be attributed to Damascus, owing to the inscription on one of the Arslan Tash pieces mentioning Hazael, king of Damascus. WATZINGER emphasizes the Phoenician and Aramaean origins of the two types even more strongly than CROWFOOT, but dates the first a century later, in the eighth century, because of the close parallels from Sargon's time in Nimrūd and from the first half of the seventh century in Praeneste (Italy). The reviewer is inclined to explain the differences between the two styles as chronological rather than local, though he would naturally not deny that the styles may have originated in different places in Phoenicia or Syria. The primary reason for his view is that the Cretan bronze shields (see especially KUNZE's recent publication, *Kretische Bronzereliefs*) of the eighth century are so closely related in

their motifs to the ivories of Arslan Tash that Phœnician origin of the latter can hardly be doubted. Furthermore, the growing eastern influence in the second type must reflect a period when Mesopotamian influence was growing, i.e., after the middle of the ninth century. On the other hand, the ivories of the first class reflect a very immediate Egyptian influence, which is still pre-vaillingly religious and mythological in theme, and thus very different from the dominantly profane motifs which were borrowed from Egypt in the Ethiopian and especially in the Saite periods (after the end of the eighth century). This Egyptian influence is historically and typologically best interpreted as being exerted during the period of the Bubastite expansion, from Shishak to Osorkon II, cir. 930-850 B.C. Though arguments from the evolution of artistic style must be used with caution, it is clear that the ivories of the first style exhibit much more delicate and detailed treatment than those of the second type, whose execution is undeniably more summary. Since the palace at Nimrud was originally built by Assurnāširpal in the early ninth century, there is no certainty that the objects found in it were all deposited there in the reign of Sargon (end of the eighth century). Nor can we be sure that all the objects found in the Barberini Tomb at Praeneste date from the century before; some of them may easily be older heirlooms. We therefore suggest a date for the first type in the early ninth (and perhaps already in the tenth century), and for the second type in the late ninth and early eighth century.

On p. 116 f. there are some good observations on the stamped jarhandles of Judah; the explanation of the reviewer's "flying scroll" as the Assyrian winged solar disk with human head and bird's tail is perhaps correct, and would certainly fit the reviewer's date for this class of stamps, the seventh and early sixth century. On p. 117, "Beth-Semes" should be read for "tell en nasbe."

In concluding this rather lengthy review, we want again to express our admiration of the book, from which we have learned a great deal. As stated above, the length of our review is a token of our interest. From Volume II, which will cover the Perso-Hellenistic, Roman, and Byzantine periods, we may expect even more.

W. F. ALBRIGHT

G. DALMAN, *Arbeit und Sitte in Palästina*, Bd. IV, *Brot, Öl und Wein*. Schriften des Deutschen Palästina-Instituts. pp. XIV, 452. C. Bertelsmann in Gütersloh, 1935.

This excellent volume, with 115 illustrations, is a masterly piece of work. It describes in three chapters everything connected with bread, oil and wine. The different sorts of fuel, utensils, ovens, the different kinds of bread and sweets, the various sorts of olive trees and processes connected with pressing oil and preparing wine are minutely described. The numerous Arabic technical terms, proverbs, idioms and songs, the simple but exact descriptions, as well as the various appendices at the end of the book, are a welcome feature of all books of DALMAN. Wherever the author was not sure about the meaning of an Arabic word, or of any aspect of the many processes described, he sought exact information from authorities in Palestine.

The following additions may be noted: The *fās qasās* (or *qasāseh*), which has a pointed edge on one side and a blade-like edge on the other, is also used in gathering wood and thorns (p. 2). A load of wood branches is also known by the name *hizmeh* (p. 4). A proverb says *aḥadnā min el-hizmeh 'ūd wil-bāqyin tāḥudhum el-qūd*, "We have taken a stick from the load. The devil take the rest." This proverb is said when a young man chooses the most beautiful of several sisters as his bride, ("the pick of the bunch," as we say in English). Pieces of charcoal which are not thoroughly burnt during the process

of their preparation are called *ʿadriūt* at Šarāfāt and in the other villages around Jerusalem *ʿurrdī*. I heard in Ramallah *huškul* for *djift* (p. 17). *Duqq mašābīn* is burnt during the cold days of the winter in *kaḡānīn* (pl. of *kānūn*, p. 17). *Baṣṣah* is a burning piece of coal (p. 24). An idiom describing a very short visit is *ʿaiy djaī tādḡud baṣṣet nār*, "Are you only coming to take a piece of burning coal?" P. 33, *kibbeh*, in the colloquial, is not a synonym for *kabāb*. The latter stands for balls of minced meat roasted on iron spits (*siḡḡ*). Read, on p. 34, *manfas*, instead of *nafs*. The following proverb (p. 50) is well known all over the Arabic speaking world of the East, *mā biḡīn el-milḡ wil-ʿeṣ illa bn el-ḡarām*, "None but a bastard will betray (the obligations imposed by the eating of) salt and bread." A visitor should therefore not partake of his host's hospitality until he has disclosed and discussed the purpose of his visit, for the rule is *mā fi taʿām illa baʿd el-kalām*, "There is no food except after the conversation (has taken place and the result is satisfactory)." A synonym for *ṣaqfeh* (p. 65) is *ṣarḡah*. *Qraṣ ibzaʿtar*, *ib-ʿuṣmāneh* and *ibnaʿnaʿ* are also known (p. 85). They are prepared in the same way as *qraṣ ib-baṣal*. Crushed flint used formerly to be placed in a layer under the stone pavement of ovens, as it is a good insulating material. Powdered *ḡuwar* mixed with lime makes the mortar for fire-places and ovens (p. 137). Small thick and round *ṭabūn* loaves are called in Ramallah *daʿbūb* (p. 137). The following kinds of bread may also be mentioned: *maṭṭiṭeh* is bread made of dough mixed with a small quantity of sugar and oil. It is baked in the *ṭabūn*. The *luḡmeh* mentioned on p. 148 is also known as *luḡmet el-qādi*. *Muḡammar* are *daʿbūb* loaves smeared with oil before they are baked. The following sweets may be added to the list described on pp. 143-148:

Burmā is made of vermicelli, sugar and powdered nuts in the form of short sausages.

ʿAṣābiʿ zēnab are small cakes made of plain dough with sesame oil, syrup, anis and *ḡilbeh* (fenugreek). The surface is rolled on the *ḡurbdī* to give it a ridged appearance.

Madliḡah is *kndfeh* with cream (*ḡaṣṭah*) and ground pistachios (*fustuq*).

Kōl u uṣkur are small pieces of *baḡlāwah* containing powdered pistachios (Damascus).

Basandūd (called also *barāniḡ*) is made of the same dough as *maʿmūl*. Between one layer and the next of this dough a layer of semolina (*smīd*), *ḡaldāweh*, powdered nuts (*djōz*) and inula (*zandjabīl*) are placed.

Buḡdfeh, *ʿiṣṣ* (*ʿuṣṣ*) *el-bulbul* and *ʿēbiyāt* are different sorts of cakes prepared from the same dough and ingredients as *baḡlāwah*. *Buḡdāj* (pl. of *buḡdfeh*) are oblong cakes with the *ḡaṣweh* (sugar and powdered nuts) placed on the surface and the four sides slightly turned upwards. *ʿIṣṣ el-bulbul* are oblong, thin and round. The *ḡaṣweh* is partly visible. The dough of *ʿē-ʿēbiyāt* is divided into pieces by a broad wooden ruler, called *ḡinddāzeh*, and not by a knife as is the case with *baḡlāwah*. The longitudinal sides of each cake are rolled slightly upwards.

Kulldāj is made by placing *ḡaldāweh timriyeh* in the centre of several layers of round and large starchy leaves, which are as thin as thick paper. The sides are moistened and then folded over this *ḡaṣweh*. After baking in *siṣidj* they are dipped into syrup. The starchy leaves are imported as a rule from Turkey or Syria, and may be bought in *sūḡ el-ʿaṣṣārīn*.

ḡalawdnī (p. 191) is the usual name for the person who prepares the various Arab sweets. This is well expressed in the proverb, *Miṣ kull min ṣaff ʿeṣawdnī ṣār ḡalawdnī wald kull min ḡammaṣat ḡamṭah ṣārāt marah*, "Not every one who sets the plates in order (in his shop) becomes a sweet-maker, nor every woman who swaddles (a child) a (proper) wife." The proverb about *imm stēl* on p. 268 is an expression of scorn and ridicule.

Dārūk is a long branch of vine the middle of which is buried with the aim of its shooting new roots, thus making a new vine. After the roots have

grown, the connection with the mother vine is cut (for p. 295). A special sort of grape is known as *rdzqi* (p. 308). The berries are whitish with a reddish tint. The bunches are large. The expressions *zēni* and *mistakdwi* are also known in Palestine.

The following list of proverbs may be added. For chapter I, pp. 1-152: *Yd rélni ghābeh win-nās fiyeh ḥattābeh*, "I wish I were a forest and people were wood-cutters in me," i.e. I wish I were an important and influential person, I would then not mind criticism.

El-bard bi'allim sirqit el-fahm, "Cold teaches the stealing of coal."

Djamrah ḥallāfat ramād, "A burning coal brings forth (i.e. ends in) ashes."

Fih min ḥakieh rutab, ufih min ḥakieh ḥaṭab, ufih min ḥakieh niṭl ed-darb 'ala-r-rukab, "There is a talk (as agreeable) as fresh dates; and talk like (hard) wood (i.e. useless), and talk like blows on the knees (i.e. painful)."

Biyyuḥluṭ el-tin bil-'adjin, "He mixes mortar with dough," i.e. he does not know what he is saying.

Ḥaṭ-ṭineh miš min ḥaṭ-'adjineh, "This mortar is not from this paste."

Ḥaṭ-ṭabūn bidduh ḥaṣ-ṣmāmeḥ, "This ṭabūn needs this cover," i.e. both are of the same material and quality.

Illi bikibb iṭhinuh fiš-sōk biš'ab 'alēh lammuh, "The person who throws his flour in thistles will have difficulty in gathering it."

Yd lābis (or lā iyghurrah) ed-djūḥ wil-fird wahl ed-dār ibtiṭṭan bil-kirā, "O who are clad in (or, Do not be misled by) wollen cloths and furs while your (lit. the) wife (is so poor that she) grinds (wheat for another), to earn a living."

El-taḥḥān biydhud bil-rām wallah biḥdsbuh bil-ḥardm, "The miller takes a handful (of flour), but God will settle with him the account for his unlawful action (= theft)."

Bitnin, bitnin ubtākul baswāti l-'adjin, el-wadja' bir-rukab wiz-zarddim sdltm, (or wil-ḥalq sāgh salim), "She moans and moans but eats (wooden) basins (full) of dough (i. e. bread). While the disease is in the knees, the gullets are sound and healthy," i. e. the disease is of no importance.

Mā ḥasadnākum 'ala ṭ-sawī wir-rqāq btiḥsidnā 'ala nōm ez-zqāq, "We did not grudge the roasted (meat) and the flat bread-loaves (that you have), but you grudge us even sleeping in the streets."

Illi biya'mal ḥāluḥ kmddjeh bitkammdjūh en-nās, "The person who behaves as a kmddjeh (see p. 133) will be treated by people in the same way"; *bitkammdjūh* = make himself a kmddjeh.

El-awlād mitl kasāsir el-saḥḥād, kull saqfeh šikel, "Children are like the beggar's fragments of bread, every bit different."

Ḥubz ḥāf bi'arriḍ el-ktāf, "Plain bread makes the shoulders broad."

Bitāriḍ wara-r-rghif umiṣ lāḥquh, "He runs after a loaf of bread and is unable to reach it."

Sidr knāfeh warāha ḍāfeh, "(This is like) a large dish of knāfeh which is followed by misfortune."

Lā fākha illa l-knāfeh 'ala ṣ-sawāni tingala; lā fākha illa l-'arūs fil-bēt tindjala; lā fākha illa d-darāhim fil-djēb mahma-ṣṭahēt yuṣṭara, "There is no (real) merriment but the knāfeh while being fried in trays; there is no real merriment but a bride while she is being displayed; there is no (real) merriment except (having) money in the pocket to buy whatever one wishes."

Ahla min el-ḥaldwi ṣ-sulḥa ba'd el-'addweh, "(Still) sweeter than ḥaldweh is peace after enmity."

Proverbs for chapter II, pp. 153-290:

Zētūn ibzētūn ḥurrah fi bēti bakūn, "(As I shall have through marriage nothing but) olives (as I have now only) olives, I prefer to remain free in my house."

Fi ḍāb bidūr ez-zēt fiz-zētūn, "In August the oil begins to circulate in the olive (berries)."

In ḥamal fi ntsdn ld tqa'id tahtuh niswdn, "If it (= the olive tree) begins to bear fruit in April, do not let women sit under it."

In ḥamal fi sbāt haiyilu l-mifrāt, "If it (= the olive tree) shows in February the first fruits prepare the reaping sticks."

In kunt zaiydt bibdn (bibayn) 'ala ḥaiimā (ḍelak, ḍidlak), "If you are an oil merchant it shows on your clothes."

qālū lal-umidn ez-zēt ḡdli qali mistaghni 'annuh min zamān, "They told the blind 'oil is expensive'. They answered 'we have dispensed with it long ago.'"

Yā kāyl ez-zēt fil-iltmeh allah 'alēk raqib, "O thou who measureth oil in the darkness God is watching thee."

Idhū btilḥaq ez-zēt el-maḡḥit, "Her hand follows the boiling oil, (i.e. she is skilful and diligent)."

Lamma yiqā' el-fār biz-zēt bitihmū kull el-firān, "When one mouse falls in the oil, all mice are accused (of being troublesome)."

Ez-zēt in itḥarrūh ḡḥluḥ biḥram 'ad-djāmi', "If oil is needed by its owners, it is forbidden (to be presented) to the mosque," i.e. if a near relative of a girl wants her in marriage, she cannot be given to a stranger, even if he is noble and rich.

Proverbs for chapter III, pp. 291-409.

Qndbet el-madjūh bilidji bahdli, "The trimming of the ignorant is bad (lit. foolish)."

El-ḥinab fi adār qadd dinēn el-fār, "The (leaves of the) vine in March are as (large as) the ears of a mouse."

Baṣrab el-ḡall wala l-batāleh, "I drink vinegar rather than remain lazy," i.e. I would rather do the hardest and most unpleasant work than sit in idleness.

El-ḡall ḡḥlu l-ḡardal, "Vinegar is the brother of mustard."

Maktūb es-sakrān biḡara fil-ḡammārah, "The letter of the drunkard is (usually) read in the tavern."

Inti zai djardōn el-ḡammārah (ḡa'mā usukardji), "You are like the tavern rat (blind and a drunkard)."

T. CANAAN.

Administration des Biens Privés et des Palais Royaux. *Recueil des Firmans Impériaux Ottomans adressés aux Valis et aux Khédives d'Égypte*, 1006 H.—1322 H. (1597—1904). Reunis sur l'ordre de Sa Majesté Fouad Ier, Roi d'Égypte. Imprimé par l'Imprimerie de l'Institut Français d'Archéologie Orientale du Caire, 1934. Edited by H. E. Chief Rabbi H. NAHOUM Effendi. xvii, 366 pp. text (price 8/-) and eight volumes of facsimiles of firmans (not in commerce).

Turkish firmans belong now definitively to history, no matter whether they were addressed to officials or private individuals. Now that the Arabic characters have been abandoned in Turkey, they have, in addition, acquired a certain antiquarian interest.

Several collections of Turkish firmans exist in different parts of the former Ottoman Empire. Some have been published¹ but others are unfortunately not at present available to the public.

¹ E.g. FEKETE, L.: *Türkische Schriften aus dem Archive des Palatins Nikolaus Esterházy 1606—1645* (Schriften des Palatins Nikolaus Esterházy, Bd. 2). Im Auftrage des Fürsten Paul Esterházy. Budapest, 1932; and the fine publication by the Franciscan

In Jerusalem there exist several well-arranged collections of Turkish firmans. Those of the Franciscan Fathers have been translated into French, but so far none have been published except the few found in GOLUBOVITCH, *Biblioteca Bio-Bibliografica*, 2 series. The Archives of the different Patriarchates in this city though complete are not generally accessible. The very important collection of firmans addressed by Ottoman rulers to the Patriarchate of the Phanar, Constantinople, bound in 110 vols, now forms a valuable part of the Manuscripts of the Bibliotheca Vaticana, where they will be ultimately arranged and edited. Besides the firmans in non-Moslem possession, there are extensive private archives, e.g. those of the Guardians of the Holy Sepulchre (the well known Judeh and Nuseibeh families, who possess each several hundreds), and of the Huseini and Dajāni families of Jerusalem whose archives are generously put at the disposal of students. But all these, valuable as they are, are nothing compared with the very important collection of the Royal Dynasty of Egypt. The latter owes its publication to the personal initiative of His Majesty King Fuad I of Egypt, who is well known for his enlightened encouragement of scientific research; and a copy of the work has been very generously presented by His Excellency the Administrator of the Royal Household in Cairo to the Palestine Archaeological Museum Library, Department of Antiquities, Jerusalem. The sumptuous publication is indeed a royal gift to students of Egyptian and Oriental history and of Ottoman administration during three centuries. The eight large (75×48 cms) and attractively bound volumes contain 1064 firmans, a worthy monument to the zeal for learning, discrimination and taste of the Royal Patron.

The firmans are published on fine strong paper in facsimile, sometimes slightly reduced in scale in order to secure uniformity. The last volume contains the signatures of the Grand Viziers in office at the time, reproduced from the relevant firmans.

Terra Sancta Custody in Jerusalem of Arabic Mamluke Rescripts. Though this publication began in 1926 it is still in course of printing (2 octavo volumes; text on opposite pages in four columns).

Another publication of the Franciscans (which is, however, not for sale) is the following:— A Catalogue raisonné of the Royal Rescripts and official Judgements, Sentences and Declarations (*hujaj*) granted to the Franciscans in the Holy Land between 1219 and 1902, published by the Librarian of the Custody of the Holy Land under the title P. EUTIMIO CASTELLANI, O.F.M., *Catalogo dei Firmani ed altri documenti legali emanati in lingua araba e turca concernenti i Santuari le proprietà i diritti della Custodia di Terra Santa in Gerusalemme* (1920?) Jerusalem, Franciscan Press, 168 pp., viii plates (representing portraits of Turkish Sultans) 2644 items, with index.

In this connexion attention may be drawn to J. DENY, *Sommaire des Archives Turques du Caire* (published under the auspices of His Majesty the King of Egypt by the Société Royale de Géographie d'Égypte as a special volume), Cairo, 1930, viii, 638, folded plan, lvi plates. Price £ 1.8.6 It is indispensable for the study of Turkish and Arabic documents of the last four centuries in general, and forms a most welcome and valuable companion to the book under review. It has nothing in common with the well-known publication of G. NORADOUNGHIAN, *Recueil des Firmans et actes internationaux de l'Empire Ottomane*, 4 vols., Leipzig, 1902, Harrassowitz.

The National Library at Bāb el-Khalq, Cairo, possesses the originals and copies of several firmans and official documents in Turkish which have been bound together in one volume. In December, 1933, when I last studied them, they had not been published.

The following is a list of these volumes:—

Vol. No.	Firman No.	Year A.H.	Year A.D.
I	1— 71	1006—1220	1597—1805
II	72— 290	1220—1232	1805—1817
III	291— 535	1233—1246	1817—1830
IV	536— 780	1246—1264	1831—1848
V	781— 889	1264—1279	1848—1863
VI	890—1020	1279—1296	1863—1879
VII	1021—1064	1296—1322	1879—1904
VIII Supplementary volume containing signatures on bottom and back of every firman.			

The accompanying volume of text, the work of the learned Chief Rabbi HAIM NAHOUM Effendi, provides the student with every aid that could be desired for the study of these firmans.

The introduction together with much other information contains a list of the Sultans issuing these Royal Rescripts, of whom Maḥmūd II (1785—1839) is represented by no less than 610 firmans. The founder of the dynasty, Moḥammed Ali the Great, was the recipient of 708 documents. It must be stated, however, that these firmans do not represent all the Turkish official documents issued to the rulers of Egypt. For a period of more than eighty years from the conquest of Egypt by Sultan Selim I Yavuz no firmans exist in the Royal Archives.

P. xiii contains a translation of the introductory preamble of the firmans.¹ It is usually the same to all Pashas of the same rank; innovations and additions in the latter half of the 19th century, mention the orders and medals (sometimes also the position and office) of the recipient.

There follows (pp. xvi—xxv) a chronological list of the Qādis of Mecca and Medina from A.H. 1228 (A.D. 1813) to A.H. 1308 (A.D. 1890/1) during which period they were receiving certain provisions and sums each year from the Egyptian Government. The list of the *Khaṭān Aghasi* ("servant" of the private apartments of the Imperial Household) who used to present the Sherifs and Sheikhs of the two Holy Cities with Robes of Honour on behalf of the Sultan, is traced from A.H. 1230—1308 (A.D. 1813—1890/1). A special column refers to the particular firmans in which these high functionaries are mentioned. Copious notes are offered on the following subjects:— The rank of the recipient (xxv), (with translation on p. xxvii), the two Holy Cities (xxxvi), finance (xxxiv), consignments and customs (xxxvi), poll tax, *jizya*, (xxxviii), public works (xli), army and navy (xlii), exequaturs (xliii), treatment of foreigners (xliv), foreign loans granted to Egypt (xlv), justice and non-Moslem communities (xlvi). The text (pp. 1—343) gives an extract from every firman published, numbered consecutively, with the date of issue and the corresponding year of the Christian era, the name of the recipient and the summary of its contents, to which are added explanatory notes here and there. Wherever a translation is given in full it is from the official text of the Sublime Porte, as, e.g., in the Royal Rescripts dealing with the succession of the Royal Dynasty (Nos. 745 p. 223, 923 p. 287, and 925 p. 296), the contraction of foreign loans (Nos. 956, p. 309 and 1043, p. 335), the establishment of the Suez Canal Company (No. 923, p. 287), the construction of railways (No. 898, p. 280), navigation (No. 851, p. 267), the reorganisation of the army following the suppression of the Janisaries (No. 471, p. 148) and the Haṭṭ-i Sherif of Gülhānē of the 3rd November, 1839 (No. 726, p. 219). Special expressions are given in Arabic and Latin characters. Pages 345—359 contain a useful vocabulary of 130 technical expressions, giving the original form and its transliteration, which contains additional

¹ Cf. STEPHAN, *Two ancient Turkish Letters of Appointment* in JPOS., vol. XIII, p. 108—9 (footnote), for an alternative translation, which is also given in a longer version by J. DENY, *op. cit.*, p. 57 bottom.

material to that already offered in J. DENY'S *Sommaire des Archives Turques du Caire*, and treats every expression ably and exhaustively.

The Index at the end of the book summarises the contents from the following points of view :—

- I. The Epoch anterior to Mohammed 'Ali.
- II. The Epoch of Mohammed 'Ali.
 - a) Investiture,
 - b) The two Holy Cities,
 - c) Finance (from private & public aspects),
 - d) Army and Navy,
 - e) Interior.
- III. Ibrahim Pasha,
- IV. 'Abbās I,
- V. Sa'īd Pasha,
- VI. Ismā'il Pasha,
- VII. Tewfīq Pasha,
- VIII. 'Abbās Hilmi Pasha.

The editor's own opinion on these firmans is that the material furnished is of modest interest, as far as historical and administrative problems are concerned. This statement is due to his modesty and does not do justice to the considerable amount of labour and care spent on a work of this magnitude. He has spared no efforts to give the student the greatest possible help within the limits set out. In this he has had the advantage of profound learning, wide reading and a mastery of classical and vernacular Turkish as well as several other languages. He is heartily to be congratulated on his fine achievement.

ST. H. STEPHAN.

Ancient Synagogues in Palestine and Greece. The Schweich Lectures of the British Academy, 1930. By E. L. SUKENIK. London, 1934. Pp. xvi + 90, 19 plates.

On reading the title one wonders why this combination of Palestine and Greece; it would have been better to describe the geographical area, which the author had in mind, as the Near East, which would have included all synagogues mentioned and described in the book. This title would have included also Egypt, but the supposed remains of Onias' Temple at Leontopolis would not have come within the scope of his volume, for Onias' Temple was no mere synagogue, but a sanctuary with sacrificial services, and therefore of essentially different character.

The history of the exploration of ancient synagogues in Palestine, though very brief, is full and excellent. It calls, however, for a few remarks: KOHL'S HILLER'S and WATZINGER'S work in Galilee can hardly be described as excavations (p. 5, l. 9 from the top), since on their own testimony they hardly did more than shift several stones in some of the ruins, with a view to ascertaining a number of details.¹ The work done by the Department of Antiquities in 1926 at Chorazin was carried out by Mr. ORI, Inspector of Antiquities in the Northern District at the time. ORI'S work at Chorazin (on behalf of the Department of Antiquities), AVI-YONAH'S work at 'Isfīyeh (also on behalf of the latter) and his excellent little note in *BJPES* I, 2, pp. 9-15, BEN-ZEWI'S various contributions to the problems under discussion (Peqi'in, etc.), BRASLAWSKY'S researches in Galilee (Kefar Hananya, etc.) are all ignored.

¹ H. KOHL UND C. WATZINGER, *Antike Synagogen in Galilaea*, p. 43 (e.g.); the only excavation of any size was carried out at Capernaum, which was not an excavation, archaeologically speaking, since the ruins were previously covered up with stones and earth, see *ibid*, p. 2.

Once the author embarks on the description of the actual remains he is on sure ground, and his accounts of the various earlier ruins (ch. I) are detailed and excellent. Some of his explanations are both new and suggestive. Very interesting and original is the author's hypothetical explanation of the "carruca" at Capernaum as illustrative of the vision of Ezekiel (p. 17, n. 2).

Very important and certainly original is the author's classification of the types of synagogues and their attribution to successive periods (ch. II, pp. 27-28). The author thinks that the two new features found in the later type, namely a fixed apse for the ark and mosaic floors, were contemporaneously introduced. This assumption is, in the reviewer's opinion, erroneous, since the two new features were due to entirely different causes. The cause of the first change has been fully dealt with by SUKENIK (pp. 27 & 53). As to the second, the author does not comment on one feature common to all mosaic-synagogues (Na'aran, Beth-Alpha, Jerash, 'Isfiyeh), namely, that none of these show any sign of the elaborate stone ornamentation on the outer façades as well as inside the buildings. The reviewer is inclined to attribute this phenomenon to two more or less contemporaneous causes, one political and one economic. But before proceeding with these, it is necessary to discuss the date of the introduction of mosaics into Palestinian synagogues (p. 27). The fragment of the Talmud Yeruṣalmi published by Epstein from a Geniza MS. forms the subject of a small, but instructive, article by Prof. S. KLEIN,¹ who after a detailed analysis of the additional sentence in the new MS. arrives at the conclusion that the R. Abūn mentioned in it is not R. Abūn the elder (so SUKENIK, p. 28), but R. Abūn the second, who lived in the second half of the IVth century A. C. This date agrees much better with the political and economic causes obviously underlying the above mentioned innovations. Economic conditions throughout the Roman Empire grew worse during the second half of the third century A. C. Following a brief recovery under Constantine the Great and his immediate successor, there set in a definite and most pronounced decline, which continued throughout the late IVth, Vth and VIth centuries A. C. This is very obvious, e. g., on all Egyptian sites of the period, excavated so far. Palestine was, probably, no exception to the general rule; no doubt, modest mosaic decorations are much cheaper than elaborate stone carvings; so that we have here an economic reason underlying the change of policy. This, however, was not all. The late fourth century coincides with the great expansion of Christianity, its definite recognition as the official state religion, and—what is more—an intensified fanaticism after the abortive counterstroke of Julian the Apostate. Consequently, it was no doubt felt in Jewish circles, especially in Palestine, that the less conspicuous synagogue buildings were on the outside the better for all concerned. Herein lies the political factor of the change. The introduction of coloured mosaics into the synagogues is to be attributed, therefore, to the second half of the fourth century A. C. On the other hand, one can hardly assign such a late date to the second innovation (a fixed place for the ark in the basilica proper). Both the synagogue at Dura-Europos (first half of the third century A. C.) as well as that at Priene (which may be later, but not very much) have the ark-niche (though square in both cases, and not semi-circular as in later Palestinian synagogues) in their wall of orientation.² Even if we assume that the fixed ark-niche was introduced in the Diaspora before it came into vogue in Palestine (and at present there is no ground for such an assumption), one cannot stretch the difference in time to over a hundred years. Another pointer in the same direction is to be found at 'Umṣi-l-'Amad (p. 26). There an early flagstone floor is overlaid by a mosaic floor, undoubtedly laid during repairs carried out

¹ *BJPES* I, No. 2, pp. 15-17.

² Priene, *Ancient Synagogues*, fig. 12 on p. 43; Dura Europos, *JPOS* XV, fig. 26 on p. 164.

sometime after the introduction of mosaics into the synagogues; and yet both the synagogue at Capernaum as well as that at Chorazin show blocked portals (right), associated by SUKENIK with the introduction of a fixed place for the ark, p. 53), without a trace of later mosaic floors. Here, again, it seems that the two innovations were not as concomitant as SUKENIK takes them to be (p. 69). The present reviewer has provisionally assigned the following dates to these changes: the introduction of the fixed ark into the synagogue proper seems to have taken place sometime in the late third-early fourth centuries A.C., whereas mosaic floors began to be laid during the late fourth and possibly not till the early fifth century A.C.¹

One must also take exception to S's interpretation of R. Abūn's concession (p. 28). In no way can it be explained as allowing representations of animal life into the synagogue, since such representations in stone occur in the early synagogues of Capernaum and Chorazin. R. Abūn's pronouncement means exactly what it says: it is concerned with the *introduction of pictorial mosaic designs* and not with their *contents*.

The description of the second type of synagogues (Na'aran, Beth-Alpha), which follows, is just as thorough and excellent as that of ch. I (Capernaum, Chorazin, Kafr-Bir'im). The reviewer would like to point out only one flaw; the explanation of the mysterious object, referred to in an earlier publication of SUKENIK's as a scroll,² and here as a lectern (p. 37). Had SUKENIK known of the lecterns discovered, e. g., on Christian sites in Egypt,³ he would not have made this wholly improbable suggestion. That the object in question is a snuff-shovel has been now fully proved by NARKISS in a detailed and well-documented article.⁴ SUKENIK of course, could not know in 1933 what Narkiss would publish in 1935, but the same suggestion was put forward by the present reviewer as early as 1933.⁵

Extremely interesting is also ch. III, which contains a very full and excellent recapitulation of the literary and archaeological evidence available at the date of publication. Especially interesting is § 5, which offers a detailed discussion of all materials concerned, as well as a very illuminating and partly novel interpretation of the facts. Here, however, as elsewhere SUKENIK misses some points through non-consideration of contemporaneous pagan and Christian materials (the tripartite arrangement of portals and niches, semi-circular niches with shell-tops and ornamental designs for religious purposes, general plans etc.), allusion to which was made by the present reviewer in his review of SUKENIK's *Ancient Synagogue of Beth-Alpha*.⁶

Among the appendices one misses a mention of the remains of a synagogue at Kefar-Hananiya, described by BRASLAWSKY in *BJPES*⁷ long before the synagogue at Hamat-Gader was uncovered (Appendix 2).

In summing up one can say that the little volume is excellent as far as it goes, in giving a full and illuminating account of the material remains; but it fails adequately to consider comparative material of the non-Jewish world, and to fit the described remains into their proper historical and economic background.

S. YEIVIN

¹ *BJPES* IV, p. 43.

² E. L. SUKENIK, *The Ancient Synagogue of Beth-Alpha*, pp. 25 foll. (Hebrew edition).

³ G. A. WAINWRIGHT, *Coptic Reading Desks from the Fayyum*, AS XXIV (1924), pp. 97 foll.

⁴ *JPOS* XV, pp. 14 foll.

⁵ *Moznaim* I, No. 3, p. 106 (Hebrew).

⁶ *Ibid.*, pp. 104 foll. See also *Yedi'ot Šion*, No. 6-7, pp. 20-21.

⁷ *BJPES* I, No. 2, pp. 20-21.

The Call of Israel. By W. J. PHYTHIAN-ADAMS. Pp. xiv, 227. Oxford University Press, 1934. 8 sh 6d.

A book by Canon PHYTHIAN-ADAMS is certain to be both brilliant and original; it is also certain to be independent of other scholars, sometimes to a disconcerting extent. The book before us exhibits precisely the qualities which we have learned to associate with him during the past fifteen years. It is true that he has changed in some important respects during this period: he now accepts the results of the literary criticism of the Hexateuch in the main, whereas he formerly rejected them; his orientation has changed from archaeological and anthropological to historical and theological. The book is well and often eloquently written, so that he is likely to carry the reader by storm, unless the latter has a very solid foundation of historical and oriental training to keep him from being swept away.

Much of the book is definitely outside of the present reviewer's field of competence, however much he may sympathize with the author's point of view. We shall, accordingly, omit any discussion of the theological and philosophical side, except to say that the charm of PHYTHIAN-ADAMS' style and the verve of his presentation are such that the reader is almost certain to be captivated.

With the author's views as stated in chapter III (pp. 40-54) the reviewer is decidedly in sympathy, though one may naturally differ in the details of the earliest history of Israel. For our views on the Exodus and Conquest see now *BASOR*, No. 58, pp. 10-18, to which we may refer for details; the results are more or less intermediate between those of BURNEY and those of GARSTANG and PHYTHIAN-ADAMS. It is a pity that the latter has remained ignorant of the great importance of ALT's work for his subject (it may be added that a forthcoming paper by the reviewer in *JBL* on the name and figure of Shaddai has a direct bearing on both ALT's and PHYTHIAN-ADAMS' position).

Part II (pp. 57-131) deals with the present form and historical basis of the traditions regarding the Exodus, the Wilderness Wanderings, and the early history of Israel in Canaan (especially the cult-history). It is full of ingenious and stimulating observations, but all the author's artistry cannot quite conceal the subjective character of much of the reasoning. Among the acute suggestions of the author is his reconstruction of the earlier history of the early historical traditions of Israel (p. 103, n. 1), which is very much like that held by the reviewer. The reviewer is also in general agreement with the author's view of the cult-history of Israel, which is a case of the thesis shared by us, viz., that the historical traditions of Israel must be taken much more seriously than the complex history of these traditions and the late date of their being fixed in written form might lead one to suppose—and, in fact, much more seriously than most competent biblical scholars are yet willing to admit. The contention of the author that Horeb was a volcanic mountain in Midian, i.e., in the region southeast of Edom, and that it was first identified with Sinai (at or near the modern traditional site of the name) between the age of Solomon and the Exile, is most ingenious and may be correct, but we cannot, of course, prove it. That Kadesh-Barnea was at Petra is a most tempting revival of the rabbinic theory, but is hard to square with the results of GLUECK's archaeological explorations in Edom, which at least prove that Petra was in the heart of Iron Age Edom, whereas the biblical tradition rather pointedly places it outside of Edom. The reviewer thus continues to prefer the identification of Kadesh with 'Ain el-Qudeirat, the connection of which with Judah is proved by a fortress of the early post-Solomonic period, with Jewish pottery, last examined and dated by GLUECK. In any case, the original and arresting observations of PHYTHIAN-ADAMS undoubtedly mark a forward step in the consideration of the difficult topographical problems of the Negeb.

Part III is entirely devoted to the examination of the traditions regarding

miraculous happenings at Horeb, the Red Sea, Nile, and Jordan, which were connected in some way with the still greater miracle of the Call of Israel. His treatment is again most striking, and is far more nearly adapted to modern knowledge than most—perhaps any—studies of these traditions which place the emphasis on extraordinary natural phenomena rather than on folklore. Here again the reviewer's own attitude is intermediate. In any case, PHYTHIAN-ADAMS' attempt to solve these knotty and elusive problems is worthy of most serious consideration, though his solutions move in part in the plane of theological rather than of profane history, and hence are rather difficult for the archaeologist, philologist, and historian to deal with.

In conclusion we repeat that this is a most original and stimulating book, exceedingly well written. The spirit of intellectual adventure that breathes through its pages may sometimes evoke a world of romance rather than the world of historical induction in which scholars are accustomed to dwell—but we live in two worlds, whether we like it or not.

W. F. ALBRIGHT.

It is with the deepest regret that we have learned, on the eve of the publication of the Journal, of the death of our esteemed colleague and collaborator

Dr. Lewis Billig

Dr. BILLIG was shot by an unknown assailant during the night of Thursday, August 20th, 1936, in his room in a house near Talpioth, Jerusalem. He was working at the time on an Arabic text.

We feel sure that all members of the Palestine Oriental Society will wish us to take this opportunity of expressing to the late Dr. BILLIG's family and friends, to his colleagues and pupils in the Hebrew University and to the Jewish Community in general the heartfelt sympathy of the Society in the cruel loss which they have sustained.

NEW HISTORICAL ITEMS FROM JERASH INSCRIPTIONS

C. C. McCOWN

(JERUSALEM)

Documentary material on the history of ancient Gerasa is almost entirely wanting. The few paltry references in Josephus, Pliny the Elder, and Ptolemy the geographer, the mistaken introduction of the name into a considerable group of New Testament manuscripts, and allusions by an occasional later writer constitute no basis for the history of a city. So much the more valuable are the rich contemporary epigraphic sources.

No city in Palestine or Syria can boast so many Greek and Latin inscriptions, unless the finds at Antioch, not yet published, should surpass it. In all the region south of the Amanus mountains and between the Euphrates and the Mediterranean only Dura and Palmyra can vie with Gerasa in epigraphic materials. The Greek and Latin inscriptions thus far found cover the first six centuries of the Christian era. The earliest dated inscription, which is in Greek, falls in 22-3 A. D., the latest Greek inscription in 611 A. D. Between these dates the numbers fluctuate in frequency. The greater proportion appear between 50 and 250 A. D. They are quite numerous between 450 and 550 A. D. Two high points are reached, one in the third quarter of the second, the other in the second quarter of the sixth century. Between 350 and 425 A. D. not a single dated inscription is known, and only a few between 250 and 525 A. D. These figures tell their own clear story of the prosperity of the little city. The period when paganism was failing and Christianity was in its infancy coincides with the lowest ebb in the city's fortunes before the Arab conquest.

Three years ago a report in the *Bulletin* of the American Schools of Oriental Research summarized the progress of the epigraphic section of the Jerash expedition.¹ Since that time the

¹ No. 49 (Feb., 1933), pp. 3-8.

efforts of the staff have added nearly fifty new items to the inventory of inscriptions. A brief visit this last autumn discovered new fragments.

In all, the inventory list now includes 347 separate inscriptions, of which 279 are Greek, 54 Latin, and 9 Arabic. Two are Latin and Greek, one is Greek and Nabatean, one Aramaic, and one Syriac. These statistics also tell something of the city's history, for, disregarding the later Arabic intrusion, on this showing, its literate population was 83 per cent Greek and about 16 per cent Latin, with almost no Semitic admixture. The names, however, make it clear that this somewhat overstates the case, for, out of about 400 persons mentioned, less than half have purely Greek names, nearly a quarter have Latin or Latinized Greek names (with *nomen* and *cognomen*, usually also *praenomen*), and about one eighth are Semitic. In some instances a Semitic name appears in an otherwise Greek pedigree. Due allowance being made for the adoption of Greek and Latin names by ambitious Semites, but also for the adoption by Greek Christians of biblical names, the evidence is still not strong for any considerable admixture of Semitic blood in the ruling classes of the population. That the lower, uneducated classes were largely Semitic is probable. The strictly Latin element was practically confined to soldiers and officials of the imperial government.

It cannot be claimed that Gerasene inscriptions throw a flood of light on the outstanding political and military events within the Empire during the Roman and Byzantine periods. What they do give, however, suits the modern conception of history far better than the prejudiced or tendentious accounts by court historians and the insincere flattery or sarcastic jibes of sycophantic poets, for the inscriptions offer a direct glimpse into the life of a vigorous caravan city on the edge of the Syrian steppe, one of the stations on the far-flung lines of Roman occupation. There are few better illustrations of the penetrating vitality and transforming power of Hellenism than this little city on the border of the Roman Empire. For nearly seven centuries after it adopted the era called Pompeian (beginning about October 1, 63 B. C.), Gerasa used the Greek language in preference to all others, called her sons and daughters usually by Greek rather than Semitic or even

Latin names, and proudly held to the title adopted from some Seleucid monarch, "the city of the Antiochenes on the Chrysorrhoeas, formerly the Gerasenes."¹

As might be expected, a considerable number of inscriptions afford contemporary evidence as to the constitution and government of a Graeco-Roman city in Syria, others as to its business, still others as to its games and amusements. A large number are building inscriptions. One group sketches the history of the building of the temple of Zeus Olympios through nearly a century and a half, another most imperfectly the history of the cult of Artemis and the building of her temple. Still another group tells of the building of Christian churches. The numerous dated inscriptions in the beautifully preserved ruins assist materially in tracing the evolution of architecture in Syria.

THE CITY WALLS AND GATES

The problem of the date of the city walls and gates has been difficult of solution. A considerable group of inscriptions which give evidence either direct or indirect now makes progress possible. It has been argued by competent historians that, during the Roman period, that is until the fourth or fifth century, the country was so well defended by the Roman legions that walls would have been an unnecessary expense. While, even before dated inscriptions were known, it was regarded as probable that the gates were at least as early as the second century, it was supposed that they were erected to mark the *pomerium* and stood free, like the great triple arch south of the city. A priori arguments to the contrary are obvious. So great peace and security could hardly have prevailed on a frontier facing the steppe where Bedouins were always ready to raid the settled country. But a priori arguments are no longer necessary. Both inscriptional and architectural evidence proves such inferences to have been wrong.

The northwest gate was erected in 75-6 A. D., as is plainly recorded by a lintel inscription, part of which was discovered by the expedition of the Palestine Exploration Society of America

¹ ROSTOVITZ, *Caravan Cities*, Oxford, 1932, p. 63; HORSFIELD, *Official Guide to Jerash*, p. 1.

under SELAH MERRILL in 1875-77 and part by Messrs. JONES and HUCKLESBY for the present Yale University-American School expedition in 1932-3. The north gate was built in 115 A.D., as duplicate inscriptions, discovered by Mr. HORSFIELD and Mr. DETWEILER and coming from the two faces of the attic above the arch, declare. The south gate shows by the character of its ornament that it belongs near the time of the triumphal arch, which is dated by its recently discovered monumental inscription in 130 A.D. The gate, however, is later than the wall, for it was built into it so as to break one of the large square towers which are a feature of the wall,¹ and the wall, therefore, must have been built early in the second or in the first century.

The north gate is clearly earlier than the adjoining walls in their present form, but the later are built of re-used materials and are obviously later than the original city walls. Moreover, excavations down to the foundations of the gate discovered "a single row of more finely dressed and fitted masonry with an orientation slightly different" from that of the present gate, thus pointing to an earlier gate and wall.² Unfortunately sufficient excavation has not yet been made at the northwest gate to determine its chronological relation to the wall, and the southwest gate has as yet presented no evidence of any kind.

The *terminus ad quem*, therefore, for the building of the walls and original gates is 115 A.D. A less definite *terminus a quo* is furnished by the south wall near the temple of Zeus. Here the section which runs westward from the gate covers an earlier wall with exterior engaged columns which surrounded the temenos. Is it possible to determine the date of the temenos wall?

An inscription of a certain Theon, who dedicated two sons and a daughter to the service of Zeus and gave, all told, ten thousand drachmae for the building of the temple, records a gift of 7100 drachmae for the building of the temple in 69-70 A.D., and adds that already 1500 drachmae had been previously given for the building of the propylon of the temple. A tower of this propylon, excavated in 1931, was bonded into the pavement of the forum, which, according to the pottery found in the débris

¹ C. S. FISHER, *BASOR*, 45 (1932), p. 9.

² C. S. FISHER in *BASOR*, 54 (1934), p. 8.

under it, must have been laid down not much later than the middle of the first century. One can hardly imagine the propylon being erected before the enclosing wall of the temenos, especially if no city wall were in existence. Evidently gifts of 1500 drachmae for the building of the temple were made every year or every half year over a long period. A priest of the imperial cult made such a gift, according to the earliest dated inscription, in 22-3 A.D. The gymnasiarch for the six months October to March, 42-3 A.D., and the same official for the similar period in 62-3 A.D. made gifts of a like amount.¹ Since the erection of the temple had long been under way, it is probable that the temenos wall and the city wall which covers it had been built some years, perhaps many, before Theon's inscription of 69-70 A.D. refers to the propylon.

Now two finely cut duplicate inscriptions (Inscr. 70 and 207) record the building of some structure at the city's expense in 66 A.D., "on behalf of the *pax Augusta*" (ὕπὲρ τῆς σεβαστῆς εἰρήνης). Surely the city official who composed that inscription had in mind the fact that King Tiridates of Armenia had just visited Nero at Rome and the two rulers, who regarded themselves as joint lords of the whole earth, had concluded an eternal peace pact, the temple of Janus had been closed, and the Arval brothers had made sacrifice to Peace.² It is one of those ironies in which history abounds that this was also the year in which the Jewish War began, and, even if Josephus is wrong in describing Gerasa as sacked by both Jews and Romans,³ the Gerasenes had need of walled defences in spite of the "Augustan peace."

Most unfortunately the word which names the edifice to which this inscription refers is missing in both copies. In the one first

¹ Inscr. 8, LUCAS in *MNDPV* 1901, p. 53; inscr. 10, LUCAS, *loc. cit.*, CLERMONT-GANNEAU, *Rec. d'arch. orient.* V (1903), pp. 103; inscr. 179, ABEL in *RB* 1909, p. 451, No. 4, where the date is to be corrected, so I think, to δκρ'. The latter two inscriptions are to appear as Nos. 6 and 7 in a collection of Jerash inscriptions soon to be published by Yale University in a volume on *Excavations at Jerash*, under Professor KRAELING's editorship.

² Dio Cassius 63, 1-7; cf. Tacitus, *Annals* 15, 29; 16, 23; Pliny, *HN* 30.6. See Suetonius, *Nero* 13, 14; cf. HENZEN, *Acta fratrum Arvalium*, p. 85; *CIL* VI, 2044, I, 12; WISSOWA, *Relig. u. Kult. der Römer* (1912), p. 334; FINK in *JRS* XXIII (1933), 109-24, especially, 118-21.

³ *BJ* II, 458 (18. 1); IV, 487 (9. 1).

discovered all of the latter part of the text is lost. In the copy found by the present expedition a square hole for a beam was cut into the block when it was reused in some later building and only the *omicron-sigma* ending of the word remains. So little is missing that it is possible to measure the space which the word would have occupied most accurately, and Miss HARRISON, one of my students, prepared a very careful full-scale drawing which demonstrated that the word *τείχος*, "wall", was the one which seemed best to fit the space, when all the possibilities were considered. That, of course, is no demonstration. However the first copy was found near the south gate and the second near the south forum, both, therefore, not far from the city wall. It certainly is within the range of probability that these two inscriptions give the date when the city wall was built, in 66 A.D. Historical, archaeological, and epigraphic evidence, while not conclusive, points, therefore, to the period of the Jewish War as the time when the city walls were constructed in approximately their present form.

It may be taken as reasonably certain that there had been walls about the Hellenistic city, of which the expedition in 1931 uncovered some remains.³ It is certain that the Roman walls were repaired and rebuilt more than once in the succeeding centuries. Ammianus Marcellinus (XIV, 8, 13), in latter part of the fourth century, mentions Gerasa as a mighty city fortified with strong walls. Epigraphic evidence is given by an undated Byzantine inscription, which refers to the rebuilding of the wall, and one of 441 A.D., which mentions the rebuilding of a tower.⁴ Doubtless the frequent earthquakes of Palestine necessitated the repeated repairs which are witnessed by the use of blocks with half-effaced funerary inscriptions, pieces of sarcophagi, and other re-used materials.

³ C. S. FISHER, *BASOR* 45 (1932), 7 f.; cf. ROSTOVITZEFF, *Caravan Cities* (1932), p. 73.

⁴ Inscr. 23 (LUCAS, *MNDPV* 1901, p. 63) mentions the rebuilding of the wall. It was found in the ruins of the south city wall. Inscr. 28 (*op. cit.*, p. 64) records that in 441 A. D. a "tower was renewed from its foundations" (*ὁ πύργος ἀνεκτίθη ἐκ θεμελίων*).

THE HADRIAN ARCH INSCRIPTION

The most important recent epigraphic discovery is that of the inscription from the great triple triumphal arch, locally known as Bâb 'Ammân. It was expected that the inscription would be found amid the débris on the outside, *i.e.* toward the south. A complete clearance, the results of which at once strike the approaching traveller's eyes, failed to reveal a letter. But when, at Professor Rostovtzeff's suggestion, the heaped-up stones which had fallen from the inner, or north, side of the attic were removed, at the bottom of the pile the blocks which had formed the inscription panel began, one by one, to come to light. The expedition spent a week of excited suspense until the final block was recovered.¹

The great inscription, seven meters long, in four lines of letters twelve cm. high, had been carved on a *tabula ansata* high up in the square tympanum, or attic, above the central arch. All of the blocks lay practically in their approximate places at the foot of the arch, where some earthquake had thrown them, and only a few letters, which could easily be restored from the context, were missing. The inscription was fully dated, in the fourteenth "tribunician power" (δημαρχικῆς ἐξουσίας τὸ ιδ') and the third consulship of Hadrian, as well as in the year 192 of the city, that is in 130 A.D. It is the first inscription found at Jerash with both imperial and city dates fully preserved and thus finally settles the city's era, which had actually been fully assured by the correspondence of numerous dates with the Byzantine system of indictions. It proves that the arch may be properly called "triumphal," for the inscription says the gate was set up in honor of Hadrian "with a triumph" (ὀν θριάμβῳ), whatever that may mean.² It doubtless was built in honor of a visit which coincided with Hadrian's journey to Petra, made, according to the report of Aelius Spartianus, in 129-30 A.D.³ It is possible that the emperor spent a considerable portion of the winter in Gerasa and that this was the occasion when the city received the title *hiera et asulos et*

¹ See STINESPRING in *BASOR* 56 (1934), 15 f.; ROSTOVITZEFF in *CRAI* 1934, pp. 264-72.

² Professor ROSTOVITZEFF (*loc. cit.*) discusses the inscription at length. He proposes to translate ὀν θριάμβῳ as "with a triumphal statue."

³ *Vita Hadriani* 14, 4.

autonomos, recorded in an inscription set up by members of the imperial body-guard who had wintered at Gerasa.⁴ It is customary to say that Hadrian spent the winter at Antioch on the Orontes. The inscriptions may be taken as indicating that it was *Antiochia ad Chrysorhoan quae et Gerasa*, to quote the phrase used by the *equites singulares*.

One curious feature is revealed by a careful study of the stones of the inscription. The latter part of the third and all of the fourth line have been chiseled out and a much abbreviated statement put in the place. Fortunately, the cerifs at the bottoms and tops of the letters and occasionally a bit of the red paint which filled them escaped destruction, and tantalizing portions of the erased inscription can be recovered. What now stands in the erased portion states that the city erected "the gate with a triumph from the will of Flavius Agrippa in the year 192." Enough traces are left to show that this was the closing portion of the original inscription and that also a certain Philip was mentioned, probably as the city official who was given the responsibility for the erection of the arch. Two other inscriptions of the same date show similar erasures. What intrigue or tragedy in the court or within the city administration led to the erasure of Philip's name is left to the historian's imagination.

This inscription distinguishes the period of the city's greatest prosperity and most magnificent building, a period that began with the erection of the north gate in honor of Trajan in 115 and culminated in the Artemis propylaeae of 150, the completion of the temple of Zeus in 162, and the erection of the Nymphaeum in 190 A.D. As already noted, it sets a *terminus ad quem* for the city walls because it gives an approximate date for the ornamental south gate. It shows the little caravan city on the border of the Syrian steppe for a brief time basking in the blaze of imperial glory and enjoying the morbid thrills of a local *damnatio memoriae*. It adds an interesting, if tantalizing, item to the historian's knowledge of the life of one of the greatest of Roman emperors.

⁴ Published by CHEESMAN in *JRS*, 1914, pp. 12-16.

THE HISTORY OF RELIGIONS.

Seriously considered, however, such "history" is relatively unimportant. A profounder and more genuinely human interest attaches to the Gerasene inscriptions which illuminate the history of religions. It is a remarkable fact that in this city far back from the seacoast, in the midst of what had once been a thoroughly Semitic population, only one Semitic deity is mentioned. Strangely enough he is otherwise unknown, except for a brief Delian inscription, yet this unknown Semitic Pakeidas had been able to take to himself as consort no lesser goddess than Hera.¹ Over fifty inscriptions mention Roman or Greek deities and temples, Artemis, the city's *Τύχη*, appearing somewhat less frequently than Zeus Olympios.² The imperial cult appears again and again. The evidence seems to indicate that this strongly Greek city was slow to accept the mystery religions and also Christianity. Thirty inscriptions, not beginning until 492 A. D. and ending in 610, have to do with Christian faith and worship.

One interesting group of inscriptions, which has to do with the notorious Maiumas festival, takes one into the very heart of that great historical process by which the West assimilated the East and the East gave something of its magic and mysticism to the West. The only known inscription mentioning the Maiumas festival and the only certainly known pool and theatre for its celebration have been found at Jerash. These structures become, therefore, a standard of measurement for other structures which may be supposed to be identified with the festival. The character of the festival and the changes which it underwent in the course of half a millennium cannot be set forth here. A discussion of the somewhat complicated relationships of pool to theatre and of both to the surrounding terrain would also require too much space.³ The inscription brings Gerasa into relationship with the legal, ethical,

¹ See McCown, "A New Deity in a Jerash Inscription", *JAOS* 54 (1934), 178-85.

² See McCown, "The Goddesses of Gerasa," in *Annual A. S. O. R.* XIII (1933), 129-66. An article on the "Gods of Gerasa" is in preparation.

³ A summary of the important facts is to appear in the transactions of the Nineteenth International Congress of Orientalists, a more complete account later..

and religious evolution of western civilization and illuminates one small corner of that vast field.

In April, 396 A.D., a decree of the emperors Honorius and Arcadius had repealed a previous imperial prohibition of the celebration of the festival, on condition that chaste customs should be observed. Evidently they were persuaded that the condition was not satisfactorily fulfilled, for in October, 399, they published a prohibition of the festival, as having justified its evil name. The Theodosian Code contains both permission and prohibition. The code of Justinian, on the contrary, contains only the permission; the later prohibition was omitted. The revised, final form of Justinian's code appeared in 534 A.D. The very next year, in November, 535, the little city by the Chrysorrhoeas, which had built half a dozen churches within a decade, hastened to celebrate the heathen festival, "the most joyous Maiumas," as they called it, under the patronage of the district and provincial governors. Another, badly broken, inscription which was found years ago in the vicinity of the Maiumas pool and which mentions a "temple of Zeus the fruit-bearer" (ναὸν Διὸς Ἐπικαρπίου) may be taken as a tentative confirmation of M. CUMONT's interpretation of the festival as an ancient fertility rite.¹ On the other hand, the Maiumas closely resembles many features of mediaeval and modern harvest-home and Thanksgiving festivals in Europe and America. This crudely cut Byzantine inscription, therefore, not only has its value for the history of ancient religions, but helps bring to life the long process by which the ancient became the modern world.

¹ *Fouilles de Doura-Europos*, Paris, 1926, pp. 189 f. There is no evidence at Gerasa to connect the cult of Artemis with the Maiumas festival.

ARABIC MAGIC BOWLS

T. CANAAN

(JERUSALEM)

During the past year the present writer has had the opportunity of studying several magic bowls and plates. This study has yielded so much material that the article "The Fear Cup" which appeared in the *Journal*, vol. III, p. 122-131¹, must be supplemented greatly. The following description is based upon the study of 58 bowls, cups and plates. The description of magic bowls by WIET, ZEKY Pasha and a few others has been diligently consulted.²

Some of the 58 vessels are old and some new. The older a specimen is, the more it is esteemed by Palestinians. It should be mentioned at the outset that the belief in such cups is not a specifically Palestinian one, but is spread all over the Mohammedan world. Oriental Christians and Jews also use them.

The present Arabic names *ṭāset er-radjfeh*, *ṭāset er-raṣbeh*, *ṭ. el-ḥōfeh* and *ṭ. el-ḥaḍḍah* point clearly to their therapeutic value. These expressions imply "fear, fright, shock, terror, trembling." The appellations *ṭ. el-ḥaḍḍah* and *ṭ. el-ḥōfeh* are less used than the others. The text begins in one bowl with the words *hādīhi ṭ-ṭalsamāt*, "these

¹ The most important works about Arabic magic bowls are: ZEKI Pasha, *Coupe magique*, *Bulletin de l'Institut d'Égypte*, 1916, p. 245 ff; M. G. WIET, *Catalogue Générale du Musée Arabe du Caire, Objets en Cuivre*; T. CANAAN, *Aberglaube und Volksmedizin im Lande der Bibel*, pp. 66 ff, and *Ṭāset er-Radjfeh*, *JPOS*, III, 122 ff; J. T. RENAUD, *Monuments arabes, persans et turcs*, II, 237 ff; H. H. SPOER, *Arabic Magic Medicinal Bowls*, *JAS*, LV, 237 ff.

² These 58 magic bowls came from the following sources: 13 are the property of the author, 14 were bought by the present writer and later given to private collections or to museums, 5 belong to Mrs. Einsler (Jerusalem), 1 to Dr. Gmelin (Jerusalem), 2 to the Rev. Daxer (Jerusalem), 1 to the Rev. Harris (Jerusalem), 1 was borrowed from a Mohammedan friend in Jerusalem, 17 were borrowed from the dealer in antiquities, Mr. Ohan, 2 came from the dealer in antiquities, Mr. Nadjarian, and 2 were studied in Aleppo. 25 bowls have been already described in *JPOS*, III, 122 ff.

talismans." Another cup has three times the word *ṭalsam*, "talisman." One cup begins with *hādīhi-l-āyāt*, "these verses." Several others contain the words *as-sūrah*, "the *sūrah*," or *hādīhi-s-sūrah*. But on no condition are these expressions to be regarded as names for magical vessels, as WIET has done.⁸

The magic vessels described in this paper are all made of metal. As a rule copper is used, seldom iron. One vessel is of silver. At times parts of a cup are plated with silver. Porcelain plates, clay bowls and pitchers inscribed with magical formulae and Qor'ānic verses do not belong to this category, but are prepared in the same way as inscribed bones, eggs and pieces of wood, and are used only by the persons in whose names they were made.

According to their external form the magic vessels may be divided into two groups: cups and plates. There are two different kinds of cups, hemispherical (poison cups) and those with a flat bottom (fear cups).

1. FEAR CUPS.

Thirty-eight magic vessels belonged to this category. They always have the form of a more or less deep vessel with or without a central elevation of the bottom. The transverse sections of the most important forms are shown in fig. 1. The upper brim is in some cases simple and narrow (fig. 1, I, V), but in most cases it is more or less broad (fig. 1, II, III, IV, VI-X). This is effected by bending the brim outwards (fig. 1, II, IV, VI, VII, VIII) or inwards (fig. 1, III). The breadth of the brim is 0.3-1. cm. The newer cups have broader brims than the older vessels, which are as a rule larger. The bottom of the vessel is either flat (fig. 1, I, II) or raised inwards in a conical elevation (fig. 1, III-X). This elevation, which is sometimes rudimentary (fig. 1, V), is characteristic of most fear cups of all periods. Cups not showing it belong to an older period. The highest elevation is 4.30 cm. above the bottom level. As a rule the top of the elevation is a flat surface (fig. 1, III, VI, VII, VIII), but it may be pointed (fig. 1, IV, V). In one cup the upper surface of the elevation is covered with a silver plate. Many modern fear bowls show a small cup screwed on the top of the

⁸ *l. c.* p. 95, No. 3906.

elevation (fig. 1, VI). The brim of this small cup is proportionally broad and has many perforations, from which hang small and long metal pieces. Modern fear cups which do not possess these secondary vessels have the metal pieces hanging down from the brim of the main vessel. One modern cup with a diameter of 11 cm. and a depth of 3.75 cm. has no central elevation and no metal pieces. Older cups never show these metal pieces nor the secondary cup. While using any cup with the small metal pieces these must be kept submerged in the water, as they are engraved with holy names or phrases, such as *بسم الله الرحمن الرحيم*, *الله الله*, or one of the "Beautiful Names of God." At times they are covered with meaningless short scratches (fig. 8, a). Amongst these cups ten are modern, showing these elongated metal pieces.

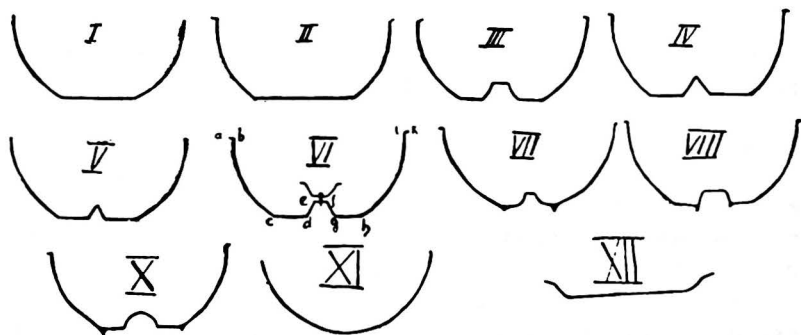


Fig. 1.

The broadest diameter of the fear cups is *b-i* (fig. 1, VI), the largest being 22–28 cm. As a rule it rarely exceeds 22 cm. In the modern cups it is only 13–16 cm. The lower horizontal part of the bottom, *c-d* and *g-h* is seldom missing, so the points *e* and *f* never coincide with *d* and *g* respectively. Some bowls show at *c* and *h* or at *d* and *g* a sharp protruding ring (fig. 1, VII, VIII, X). The central elevation serves to hold the cup better, and to prevent the fingers from touching the ritually clean water. For the water would lose its healing power if it came into contact with unclean objects.

2. POISON CUPS.

Twelve vessels belong to this group. They all have a hemispherical form (fig. 1, XI), and a characteristic inscription is found on every one of them. They do not have any central elevation nor do they possess the small elongated metal pieces. Their diameter is 10-18 cm. and their depth varies from 2.75 cm. to 5.5 cm. All poison cups are old pieces and they are no longer manufactured.

3. MAGIC PLATES.

Eight plates were examined. The bottom does not have any elevation and no metal pieces are found (fig. 1, XII). The transverse brim is broad. Magic plates have as a rule a greater diameter than fear cups, but they are never so deep. They also belong to past centuries and are no longer manufactured.

The inner surfaces of all magic bowls and plates show inscriptions. The external surfaces, on the other hand, are only sometimes engraved. In such a case the area *c-d-e-f-g-h* (fig. 1, VI) often remains free of engravings. Most modern fear cups and most magic plates are not inscribed on the outside. The engravings—inscriptions, arabesques, signs and figures—are sometimes artistically executed, often they are very primitive, and at times are engraved so badly that it is difficult or impossible to decipher them. Often, especially in modern fear cups, and not seldom in other bowls, short perpendicular oblique and horizontal dashes set in lines take the place of inscriptions (fig. 8, a).

The following remarks may be made about the writing. The letters are often not pointed. Such letters are believed to be more efficacious. Often one and the same part of a word is repeated unnecessarily, such as *العقد* of *له*, *حاسد* of *حا*, *الناس* of *الناس*, *الحنا* of *الحنا*, etc. Sometimes the words are divided, the first part being at the end of a line and the second at the beginning of the next. Many orthographic mistakes are found. Some are: *الريق* (فتح) (for *الحرىق*), *الوثقى* (الوثقا), *الصور* (الوفا), *اوفا* (الحريق).

لراد⁴ (قولنج) كولنج، (الضربان) الطربان، (حى) حى، (الطحال) الصحال (الوقه) المصروع، (يوضع) يوضع، (لرد).

The formation of some sentences even is grammatically wrong. Such irregularities are met with both in old and in new cups. WIET describes only the texts of poison cups. This explains why he finds so few orthographic mistakes. Such a description is one-sided and will not give a true picture of the different kinds of magic cups. As WIET's main purpose in his excellent work was to describe the different pieces of the Arabic Museum in Cairo, he could not go into a detailed description of other vessels not represented there.

The different kinds of engravings may be grouped in the following categories. This grouping holds true also of the texts of all talismans and written amulets,⁵ a fact which shows that the writing is not restricted to magic bowls.⁶

1. Inscriptions composed of continuous, intelligible sentences. The text is written in lines, spirals, circles or in the inner spaces of cartouches. The three first methods were also employed in Aramaic magic bowls.⁷ The text originates from one of the following sources :

a. The Qur'ān. A *ḥadīṭ* teaches *man lam yaṣfihī-l-Qur'ān falā ṣafāh allāh*, "May God not cure him who is not cured by the Qur'ān."⁸ The following verses are found inscribed on magic vessels. Those marked * are more often used than the others: Sūrah *I; II, 160; *II, 256; *III, 12, 29; VI, 94; XV, 41; XVII, 82; XXXVI, 58; XXXVII, 1-7; XLVIII, 1-20; LXI, 13; LXXVI, 21, 22; LXXXIV,

⁴ قولنج comes from قولون, and this form from the Greek *κόλον*. The last word is often written كولون (*Muḥīṭ*, 1776). This may explain why some books write كولنج instead of قولنج. *Muḥīṭ* and M. SHARAF, *An English-Arabic Dictionary of Medicine, Biology and Allied Sciences*, give it only with a ك.

⁵ CANAAN, *Aberglaube und Volksmedizin*, pp. 101 ff.

⁶ E. A. WALLIS BUDGE, *Amulets and Superstitions*, 1930, p. 39, gives a classification of magic texts which is not clear.

⁷ BUDGE, *l. c.* pp. 283 ff.

⁸ M. H. EN-NÄZIL, *Ḥazīnatu-l-ʿasrār djalīlatu-l-ʿāṣkar*, p. 67. Another *ḥadīṭ* is فاتحة الكتاب شفاء من كل شيء إلا السام والسم الموت (عن عبدالله بن جابر) "The first Sūrah is a cure to everything except to *es-sām*, and *es-sām* is death," *l. c.*, pp. 67, 100. This book will be referred to hereafter as NÄZIL.

1-4; XCIV; *CIX; *CXII; CXIII; *CXIV. At times only a part of the verse is given. Sometimes one and the same verse is repeated several times. Not seldom one finds the different words of one verse written in different cartouches and seals. In a fear cup the twenty-first versēs of the 48th *Sūrah* were written in circles running around the inner surface. The first circular row was divided by eight, the second and fourth by twelve and the third by six ornamentations into a corresponding number of fields. Such ornamentations are seen on Pl. IV, fig. 1, a, b, c, d, i.

Sometimes the beginning of a verse takes the place of the complete verse. This arrangement is characteristic of a fear cup which showed the following inscription:

سورة	سورة	سورة	سورة	سورة	سورة	سورة	سورة
ان قل اعوذ	قل اعوذ	قل يا ايها	قل هو الله	الحمد لله	سورة	سورة	سورة
برب الناس	برب الناس	الكافرون	احد	رب العالمين	الكري	؟	قل هو الله
عظيم	عظيم	عظيم	عظيم	عظيم	عظيم	عظيم	عظيم
انه سلاما	احد	احد	احد	احد	احد	احد	احد

This text is an illustration of the fact that a Qur'ān verse is regarded as a *ḥalsam*. In the above example this idea is repeated three times.

It is important to study the use and the choice of Qur'ānic verses a little more. Every verse is holy and possesses supernatural powers, but some are more efficacious and therefore more extensively used. Much has been written in Arabic about the therapeutic merits of certain verses and *sūrahs*. The most extensively used verses in written talismans in general are those named above, with IX, 130 and the whole of XXXVI. *Sūrah* CXII and CXIV are known as the *al-mu'awwadeṭān*,⁹ "the two who preserve." In the first the evil women "who blow upon knots" are mentioned. It is believed that these *sūrahs* are particularly efficacious against bodily diseases. The following verses, which are believed to be especially active, are called *آيات الحرس والحرز*, "The verses of guarding and refuge": II, 1-4; 256-259; 284-286; VII, 52-54; XVII, 109-111; XXXVII, 1-11; LV, 33-36; LIX, 21-24; LXX, 1-4.¹⁰ But the most important of all verses are the *basmalah*; and the *Fatiḥa*, which has thirty names,¹¹ of which the following

⁹ *Encycl. of Islam*, see *Ḥamd'il*,

¹⁰ AHMAD ED-DĒRABĪ, *Fathu'l-mulki-l-madḡid*, pp. 39, 40. This book will be referred to as DĒRABĪ.

¹¹ NĀZILĪ, pp. 97-101.

are the best-known: *ummu l-kitāb*, "the Mother of the Book," *ummu l-Qurʾān*, "the Mother of the Qurʾān"; *es-sabʿ el-matānī*; *sūrat er-rāqiah*, "the Sūrah of Enchanting"; *al-wāqiah*, the Protectress; *sūret es-ḥifā*, "the Sūrah of Healing"; *aṣ-ṣāfiyah*, "the Curing." Sūrah XV, 87 uses the expression *ولقد آتيناك سبعا من المثاني والقران العظيم*, "We have already brought unto thee seven verses which are frequently to be repeated and the mighty Qurʾān." It is supposed that these *السبع المثاني*, or as they are also called *السبع المثاني*, are the seven verses of the first *sūrah*. The curative action of the *basmalah* is recognized by all writers. The phrase is composed of 19 letters corresponding to the 19 spirits guarding the doors of hell (*az-zabāniyah*).¹² Its use will therefore save the person from hell.¹³ No action whatsoever should begin without the preliminary utterance of *bism allah*.¹⁴ A great advantage of the first *sūrah* is that it does not contain the letter ف (*f*), which points to *الافات*, "misfortunes."¹⁵

b. Invocations. The following invocation is found in many fear cups, never on poison cups, and only once on a plate. It is also met with on amulet cases and on non-magical vessels:

اللهم صلي (١) على المصطفى محمد والمرضى علي والتول فاطمة والسبطين¹⁶ الحسن والحسين وصل على زين العباد¹⁷ (١) علي والباقر محمد والصادق جعفر والكاظم موسى والرضي علي والتقي محمد والتقي علي والزكي¹⁸ العسكري حسن وصل على الحجة القائم الدائم¹⁹ محمد المهدي²⁰ الهادي²¹ صاحب الزمان²²

¹² *ibid.*, p. 99. ¹³ The first *sūrah* is said to be the foundation stone of the whole *Qurʾān*, and the foundation stone of the *fātiḥah* is the *basmalah*.

¹⁴ A *ḥadīṭ* says *كل امرئ ذي بال لا يدي فيه بسم الرحمن الرحيم فهو أقطع*.

¹⁵ DĒRABĪ, p. 8; AḤMAD EL-BŪNĪ, *Samsu l-maʿārifi l-kubrā*, I, 68. This book will be referred to as BŪNĪ.

¹⁶ On a non-magical vessel the word *al-muntaḥabain* followed *as-sibṭain*.

¹⁷ Every text of magic bowls examined by the author gives the wrong expression *زين العباد*, *zeinu l-ʿibād* (the ornament of people) instead of the correct *زين العابدين*, *zeinu l-ʿābidīn* (the ornament of worshippers). Cf. D. M. DONALDSON, *The Shiʿite Religion*, pp. 41 ff.

¹⁸ In one text the word *al-barri* took the place of *az-zaki*. The last adjective is often missing.

¹⁹ In some texts *al-muntaḥabain* is added after *ed-dāʾim*. In several texts the words *al-hidjdjeh*, *al-qāʾim* and *ad-dāʾim* are omitted.

²⁰ *المهدي*, *al-muhtadī* is sometimes found in the place of *المهدي*, *al-mahdī*.

²¹ Some invocations add at this point *ibn el-bahā*.

²² A variation of this text is beautifully inscribed on a plate. The inscription

"O our God, bless Mohammed the Chosen; 'Alī the Accepted; Fāṭimah the Virgin; el Ḥasan and el Ḥusein, the two Patriarchs. Bless 'Alī the Ornament of Mankind; Mohammed the Richly-endowed; Dja'far the Upright; Musa the Restrainer of (his) anger; 'Alī the Acceptable; Mohammed the Virtuous;²³ 'Alī the Pure; Ḥasan the Soldier, the Pious. Pray for the Proof, the Executant (of God's will), the Enduring, the Praised, the Guided One ('the Mahdi'), the Guide, the Friend, the (Consummation of) Time."

It is important to discuss shortly the above mentioned names. 'Alī Zain el-Ābidīn is the son of el-Ḥusein and the grandson of Fāṭimah and 'Alī. The son of Muḥammad el-Bāqir was Dja'far eṣ-Ṣādiq (80 or 83 to 148 H.). He was the seventh *'imām* and to the *sab'iyyeh* sect the last one.²⁴ Mūsā-l-Kāzīm (129-186.), the fourth son of Dja'far, was poisoned. His son 'Alī-r-Riḍā lived from 148-203 H.²⁵ Muḥammad et-Taḳī was the protégé of the Caliph el-Ma'mūn. The tenth *'imām*, 'Alī-n-Naḳī, was kept 20 years in imprisonment. His son Ḥasan el-'Askarī²⁶ (220-260) had several attributes, which with time became synonymous with his name. Some are aṣ-Ṣāmeṭ (the Quiet), al-Hādī (the Right Leader), ar-Rafīq (the Friend), az-Zakī (the Virtuous) and an-Naḳī (the Pure One). From his line is expected the last *'imām*, the long awaited leader and redeemer.

is divided by six crosses, every arm of each cross being three-leaved (see Pl. IV, fig. 1, a) into six corresponding parts. Every one is enclosed by an oblong frame, the text is:

اللهم صل على محمد المصطفى وعلى المرتضى وفاطمة الزهراء
وصل على الحسن المحيي (٥) والحسين الشهيد بلا بكر
وصل على زين العابدين ومحمد الباقر
وصل على جعفر الصادق وموسى الكاظم
وصل على موسى بن الرضى ومحمد التقي وعلى النقي
وصل على الحسن العسكري ومحمد المهدي

²³ DONALDSON, *l. c.*, p. 347. WALDEMAR FREY, *Kūt-el-'Amāra*, p. 514, gives the name Muḥammad Djawād for Muḥammad et-Taḳī, and 'Alī el-Hādī for 'Alī en-Naḳī. I have never found these names on vessels.

²⁴ *Encycl. of Islam*, article *Sab'iya*.

²⁵ IBN ḤALIKĀN says he was born 153 H. ²⁶ So-called because he lived in a military camp in Samarrā.

The Shi'ites are composed of several groups. The moderate group is the *Imāmiyyeh*. It believes that the *ḫilāfah* belongs to the descendants of 'Alī ibn Abī Ṭālib. In all there are twelve *ʿawimmah* who arrange all religious affairs of the Mohammedans. Eleven have already come. Impatiently the twelfth, the Mahdī, is expected, who will come at the end of time.

The different appellations connected with the personal names have become surnames, well known in Shi'ite literature. This inscription shows the use of fear cups by this Mohammedan sect. On one the names of the *ʿawimmah* are engraved without their attributes.²⁷ The text runs: *ṣallī ʿalā Muḥammad wa ʿAlī wa Fāṭimah wa Ḥasan wa Ḥusein wa ʿAlī wa Muḥammad wa Mūsā wa ʿAlī wa Muḥammad wa Ḥasan*. Djaʿfar eṣ-Ṣādiq and ʿAlī et-Taḳī are omitted. In another text the name of ʿAlī_r-Riḏā was wrongly substituted by Mūsā_r-Riḏā. The same mistake is found in the manuscript called "The Friendship of ʿAlī is my Fortress."²⁸

Another prayer is: يا شمعولي يا سيده يا مولاه يا ربه يا عملاه استامرت
هيا سراهيل (؟) العظمه الله السلطان الله يا الاله الرفيع الله يا امر يطيع النور
"O Šamʿalawī (the name of a good spirit), O my master, O my lord, O my god, O ye his agents. I have sought counsel. Come O Sarāhīl. God is majesty, God is ruler. O high God. God orders and the light obeys (him)." The names of God, often inscribed on *mawāsik*, namely *yā kāfi*,²⁹ *yā ṣāfi*, *yā ʿamīn* are also found in magic bowls. These names do not appear in the list of the 99 Beautiful Names of God,³⁰ although they play a very important rôle in popular medicine. In one fear cup³¹ the words *bism ʾallah* precede the same.

²⁷ The following inscription is found on the upper surface and the sides of an octagonal silver amulet case: اللهم صل على نصر من الله وفتح قريب وبشر المؤمنين. اللهم صل على النبي المصطفى محمد والمرتعى علي والبتول فاطمة والحسن والحسين زين العباد والباقر وجعفر الصادق والكاظم موسى والرضا علي والتي والتي والحسن العسكري وعلى الحجة الخلف صاحب الزمان صلوات الله عليه وعليهم اجمعين. يا الله الله لا حول ولا قوة الا بالله العلي العظيم

²⁸ DONALDSON, l. c., p. 347.

²⁹ *Muʿāfi* and *mannān* are sometimes also used on *mawāsik* (pl. of *māskeh*).

³⁰ BUNÉ, I, 54 ff.; DOUTTÉ, *Magie et Religion de l'Afrique du Nord*, p. 200.

³¹ From the collection of Mrs. Einsler.

2. Single words:

a. The names of "the holy Mohammedan family,"⁸² namely Mohammed, 'Alī, Fāṭimah, Ḥasan and Ḥusein,⁸³ generally preceded by the word *Allah* are often seen. At times each is preceded or followed by an appellation, which is for the Prophet *al-muṣṭafā*, for 'Alī⁸⁴ *al-murtadā*, for Fāṭimah *al-batūl*⁸⁵ (the Virgin) and *az-zahrā* (the fair lady) and for Ḥasan and Ḥusein *as-sibtain*. One text calls Ḥusein *aṣ-ṣahīd*, the "martyr." These different appellations are well known in Mohammedan literature. The surnames may even take the place of the proper names, as may be seen from the following verses:

لي خمسة اطفئ بها حر الوباء الحاطمة المصطفى والمرضى وابناهما والفاطمة

"I possess five with whom I quench the devouring heat of pestilence: the Chosen One, the One with whom God was pleased, their two sons and Fāṭimah."

In one fear cup the name Mūsā follows the names of the "holy family." It probably stands for Mūsā el-Kāzim. At times only some members of the "holy family" are mentioned: *yā Muḥammad*, *yā 'Alī* or *Muḥammad mawlānā*.

b. The "Beautiful Names of God," or some of them, are engraved on some magic bowls. God is said to have 99 names which are known to believers; the hundredth name is known only to Himself. The small metal pieces which hang down from the brim of the central cup of the modern fear cups are sometimes engraved with these names.

c. The following words need special discussion: العَجَل، القوة، النار، العجل،⁸⁶ الحريق، الساعة، الوحا (النار، العجل). The last two expressions will be treated later. The others occur alone or in connection with magic

⁸² The Shi'is call them the five saints, *Encyclop. of Islam*, vide *Ḥamā'il*.

⁸³ BUDGE, *l. c.*, gives on plate VIII, fig. 1, a *ṭāseḥ* which shows these names, but he does not describe them.

⁸⁴ 'Alī is called at times *waliy-Allah*.
⁸⁵ *Muḥīṭ*, p. 62 says: ومع الالف واللام اقب غلب علي رسم العذراء لا تقطاعها عن الرجال

وعلى فاطمة قيل لا تقطاعها عن نساء زمانها ونساء الامة فضلا ودينها وحسبها

⁸⁶ The three expressions *al-ʿadja*, *as-sāʿah* and *al-wahā* are well known to the books on magic, DĒRABĪ, p. 27; NĀZILĪ, p. 122; M. ER-RAHAWĪ, *al-Luʿluʿ al-manẓūm fit-talāsīmī wan-nudjūm*, p. 31.

formulae. At times one and the same expression is repeated several times. الوحا is sometimes wrongly written الوا. This orthography, الوا (*al-wāḥā*), is unknown to the Arabic dictionaries. إيماء، توحية، وحى mean "to send a messenger, to speak secretly, to hasten, to urge, to rouse." *As-sā'ah*, "the (here 'this') hour,"³⁷ stands, as the former expression, for "quick." *Al-ʿadjal*³⁸ is often found with the other two expressions, and means the same. *Al-ḥarīq* (conflagration) means, like the German expression "es brennt," i.e., it is very urgent. The repetition of one and the same idea in four different expressions increases its effectiveness. The good spirits which are called are ordered to help at once and quickly.

d. To this category we must count "the crowning words of the Qurʾān," which will be discussed elsewhere.

e. The names of supernatural powers also play an important rôle in magic. One meets them in talismans, *mawāsik* as well as in magic bowls. It is not always possible to know the origin of such expressions, or what supernatural powers they represent. Some such names taken from magic cups are: كلخ كلوخ اسرافيل ميكائيل شراها شملوي.

3. Letters are either found in magical squares or are written in continuous lines or in circles. It is impossible to go into detail in describing the whole science of letters, which is علم الحروف³⁹ "The science of letters is (one) of the secret sciences known only to the authorities in divine learning." Only such groups will be mentioned as are found in magic bowls. It is interesting to note that no letters written upside down are found in *ṭasāṭ* though they are mentioned in the book on magic.

a. Words are at times separated into their respective letters, and these written disconnectedly. Such letters are known as *ḥurūf mutafarriqah* or *mutaqattīʿah*, while the normal writing is called

³⁷ In colloquial Arabic the expression *has-sā'ah* means "quick," "at once."

³⁸ ALT B. SINA, *al-Kanzu-l-madṣūn was-sirru-l-maṣūn fī ʿilm-i-rūḥānī*, p. 12.

³⁹ YÖSIF M. EL-AWGHÂNISTÂNÎ, *ad-Djawharu-l-ghālî fī ḥawāṣi-l-mutallat lal-Ghazālî*, p. 7, gives the following verse which expresses the same idea: علم الله يدركه من كان بالكشف والتحقيق متصفا. In future references this book will be quoted as AWGHÂNISTÂNÎ.

hurūf muttaṣilah or *murtabiḥah*. Some examples are the words *نخمة*, *ماية* and *عني د* *م ا ي ه*, *خ م س ه* and *ح في ظ* respectively. In another magic cup the words *قديم*, *فتاح*, *ودود* and *عزير* are treated in the same way and their respective letters placed in 4×4 squares (fig 2).

د	و	د	و
و	د	و	د
د	و	د	و
و	د	و	د

ع	ز	ي	ز
ز	ي	ز	ع
ي	ز	ع	ز
ز	ع	ز	ي

ق	د	ي	م
د	ي	م	ق
ي	م	ق	د
م	ق	د	ي

ف	ا	ح	ف
ت	ا	ح	ف
ا	ح	ف	ت
ح	ف	ت	ا

Fig. 2.

b. The first letters of certain names of God, which play a specially important role in magic, may take the place of the word itself. This is especially true of *ف* (فرد), *ج* (جبار), *ش* (شكور), *ز* (زكي), *خ* (خير), *ظ* (ظاهر), *ث* (ثابت). These names of God begin with the letters known as *sawāqīṭu-l-fātiḥah*, for they do not come in the first *sūrah*. They are seven and constitute half of the *hurūf ez-zulmāniyeh*⁴⁰ and are known as *el-hurūf es-suflīyeh*.

c. At times the letters stand for their spiritual value (روحانية). This is especially true of the *badūḥ* seal, which is known as *muṭallat el-Ghazālī*, who made a special study of it. It is further said that the Almighty revealed it to him.⁴¹ In Arabic literature this 3×3 square seal with the numbers 1-9, which stand for the nine first letters of the *abjadīyeh*, namely the letters *a, b, dj, d, h, w, z, ḥ, ṭ*, is first found similarly arranged in *kitāb el-mawāzīn* written by DJĀBER B. ḤAIYĀN of the ninth century A.D.⁴² According to EL-AWGHĀNISTĀNĪ, known as EL-HINDI,⁴³ it was the seal of 'Aṣāf bin Baraḥiā. Some even believe that it was engraved by God on the seal stone of Adam's ring. The numerical values of these letters often take their place in the seal. The letters of *badūḥ* are written in the corners of the 3×3 square seal. The right upper square is assigned to the first letter, *b*; the left square of the same

⁴⁰ *Dā'iratu-l-ma'ārif*, VII, 8; CANAAN, *Aberglaube*, pp. 95, 110, 111.

⁴¹ *The Encycl. of Islam*, I, 770.

⁴² *ibid*, see *wafq*.

⁴³ p. 10.

line to *d*; the lower right corner to the third letter, *w*; the lower left corner for the last letter *h*. These four letters are the 2d, 4th, 6th and 8th of the *abjadīyeh*. The 1st, 3d, 5th, 7th and 9th letters, the letters of *أجهرط*, are placed in the remaining squares, in the following order: the left, middle and right squares of the second line take the third, fifth and seventh letters; then comes *a* in the middle square of the lowest, and the *!* in the middle square of the upper row (fig. 3, a).

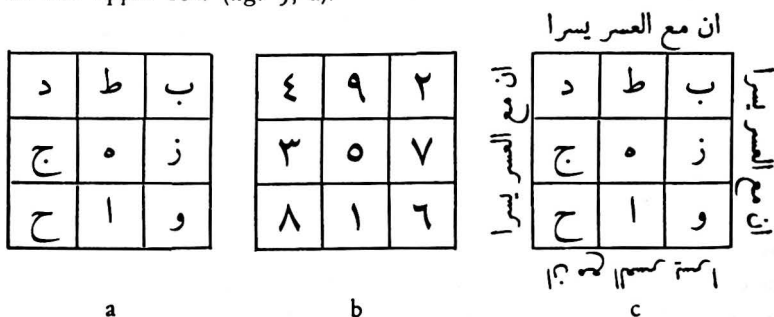


Fig. 3.

The sum of the numerical values of these letteres is 15 for every vertical, horizontal and diagonal row (fig. 3, b). Such a *hātim* is called *wafq* (*wifq*). It is found in every true poison cup and in many other magical vessels. In one magical plate the letters *d* and *h* are erroneously repeated twice. One *d* (د) takes the place of *z* (ز) and one *h* (ح) that of *dj* (ج). This is doubtless due to the negligence of the writer in not punctuating the letters. A modification of the above seal is given in fig. 3, c. Formerly⁴⁴ the *badūh* seal is said to have had the form of a triangle, as shown in fig. 4, a. In *al-lu'lu'ul-manẓūm fi-ṭalāsīm wan-nudjūm*⁴⁵ there is a combination of the letters with their numerical values (fig. 4, b). In a poison cup the numerical values of these letters are arranged in a different way⁴⁶ (fig. 4, c). The

⁴⁴ AWGHĀNISTĀNĪ, p. 10. ⁴⁵ The author is MUḤAMMAD ER-RAḤAWĪ, p. 43.

⁴⁶ There are eight different ways in which the numbers 1 to 9 can be arranged in a 3×3 square seal, so that the sum of the horizontal, vertical and diagonal numbers will be 15. W. AHRENS, *Studien über die magische Quadrate der Araber*, *Der Islam*, VII, p. 190.

addition of the horizontal, vertical and diagonal lines also give the number 15. According to EL-BŪNĪ⁴⁷ the *badūh* seal is the seal of the

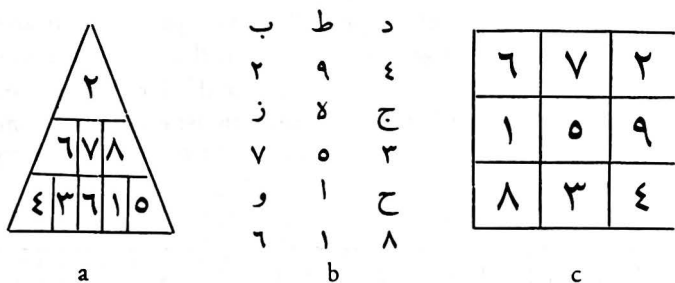


Fig. 4.

archangel 'Uzrā'il. Each one of the four archangels is supposed to have a *hātīm*, that of 'Uzrā'il being the smallest. AL-GHAZĀLĪ teaches that it contains the highest name of God, and is therefore as active as a two-edged sword.⁴⁸ This 3×3 square seal (الوقف المثلث) belongs to the planet Saturn (*zuḥal*). AL-AWGHĀNISTĀNĪ gives as a proof the fact that the numerical value of the three letters of *zuḥal* (زحل) ($z = 7 + ḥ = 8 + l = 30$) is 45, which corresponds to the numerical value of the nine letters of the seal added together. Its importance is further shown by the fact that its numerical value corresponds with that of Adam (ادم), $a = 1 + d = 4 + m = 40 = 45$. Eve's (حوا) numerical value is ($ḥ = 8 + w = 6 + a = 1 = 15$), which is the sum of the numbers of each horizontal, vertical and diagonal line of the seal.⁴⁹

A 4×4 square seal containing only the letters of *badūh* is well known to magic books,⁵⁰ although I have not seen it on magic vessels. The importance of the letters of *badūh* depends on the fact that the alphabet is divided into two groups, *ālam el-qabḍ* "the world of restriction," and *ālam el-bast*, "the world of extension." The first group comprises all letters whose numerical value is an odd number, or an odd number multiplied by 10 or 100. These letters are said to be unlucky. All other letters belong to the world of extension and are lucky. The two categories are often called

⁴⁷ I, 33.
of the seal.

⁴⁸ AWGHĀNISTĀNĪ, 10. This book makes a special study
⁴⁹ *ibid*, p. 9.

⁵⁰ BŪNĪ, V, 5.

by their first letters, and one speaks of the *badūḥ* (بدوح) and the *adjhazaṭ* (اجهزط)⁵¹ letters. The latter are used according to ED-DĒRABĪ⁵² for taking revenge upon an enemy.

The importance of *badūḥ* is seen in a *ḥātīm* of 8×4 squares, (found in *es-sabʿ uḥūd es-suleimānīyeh* (Fig. 5). The eight squares of the first and those of the third line are filled with the word الله (God), while those of the second and fourth contain بدوح (*badūḥ*).

الله	الله	الله	الله	الله	الله	الله	الله
بدوح	بدوح	بدوح	بدوح	بدوح	بدوح	بدوح	بدوح
الله	الله	الله	الله	الله	الله	الله	الله
بدوح	بدوح	بدوح	بدوح	بدوح	بدوح	بدوح	بدوح

Fig. 5.

The letter *k* plays an important role in the *ḥāsāt*. It is always represented as ك. The exact meaning of this letter is not clear. The explanation given by EL-BŪNĪ⁵³ and quoted by SPOER⁵⁴ is not at all convincing, for EL-BŪNĪ assigns some supernatural power to every letter. Many letters which play a less important rôle in magic than the *k* are given by this author greater supernatural power.

d. At times one meets with letters scattered at random among numbers and magical signs. The exact explanation of such letters and numbers is not yet known. Fig. 6 is an example copied from a fear cup.

٨٦٧٤٨١٤٩٦١
 ٣٤ ك ٣٨ ط ٩١٣٥
 ٤٩٦٨ ٧١٣

Fig. 6.

⁵¹ Not اجهزط as SPOER, *l. c.*, p. 246.

⁵² p. 32.

⁵³ III, p. 44.

⁵⁴ *l. c.*, p. 252.

3. Numbers are used in talismans as well as in medicinal bowls. They are either placed in one row or they fill the squares of seals. Examples of the latter have already been given. An illustration of the first group is the number ۱۳۲ (132), which stands for *qalb* (قلب), "heart," the 100 being the numerical value of *q* (ق), 30 of *l* (ل) and 2 of *b* (ب). It is not always possible to decipher the exact meaning of the numbers which are found in most magic bowls. The numbers which are mostly met with are ۷, ۸ and ۹, the latter having the preference (fig. 8, g). In magic books⁵⁵ we often meet it upside down, ۶.

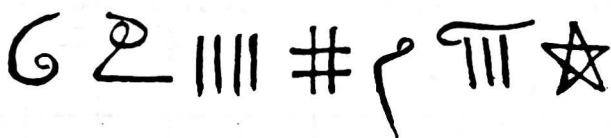


Fig. 7.

4. Certain signs are well known and wide spread in magic. These are the so called seals of various prophets, which when placed together represent the mysterious name and the seal of the Almighty.⁵⁶ They are also known as *el-ḥawātim el-djaldjūliyah*⁵⁷ (fig. 7). Although EL-BŪNĪ describes the star as a pentagram, *ḥātim ḥumāsī*, it is often represented as a hexagram, which is believed by Mohammedans to be the sign of king Solomon, while the Jews call it the shield of king David. The sides of the hexagram are at times prolonged and the ends of every two parallels united (Pl. IV, 1, k). A seal of the words *یا حنان* and *یا منان* each repeated three times and the words interwoven in each other makes a hexagram. This seal is pictured by SPOER,⁵⁸ but he reads wrongly *یا جبار* instead of *یا حنان*. Often this seal stands alone. The upper and the lower surfaces of the central elevation of fear cups (fig. I, III, VII, VIII) often show the star. These seven signs

⁵⁵ *Kitāb Abi Ma'sar el-Falaki* makes use of the inverted letters and numbers.

⁵⁶ *Aberglaube und Volksmedizin*, pp. 112 ff; H. A. WINKLER, *Siegel und Charaktere in der muhammedanischer Zauberei*, pp. 66 ff.

⁵⁷ BUDGE, *l. c.*, p. 40, gives these signs in another order. He does not seem to know *Aberglaube und Volksmedizin im Lande der Bibel*.

⁵⁸ *l. c.*, p. 238.

originate, according to EL-BÛNÎ,⁵⁹ from the three holy books. Beginning with the star the two first signs come from the Qur'ān, the two next from the New Testament and the last three from the Old Testament. This seal is known as *el-ism el-a'zam*, "The most high name," and *sūret el-ism eš-šarīf*, "The sign of the noble name."⁶⁰ Some of these signs are variously represented.

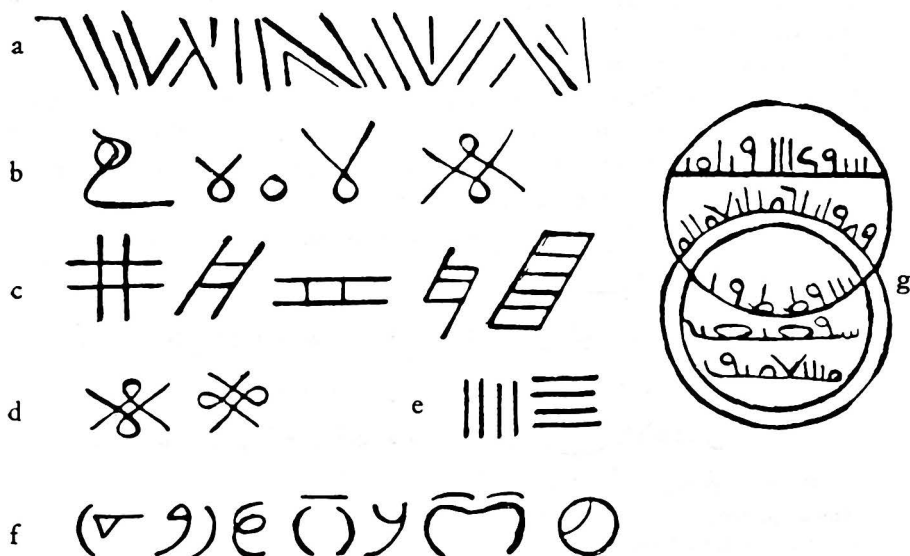


Fig. 8

Thus the *h* is represented at times as seen in fig. 8, b.⁶¹ It is described as *هَاء مشقوقة* and *هَاء شقيق*, "split *h*." The tail of the *w* is always curved upwards and to the right, whence it is described as *واو مقوس*, "Curved *w*" and *واو معظم*, "great *w*."⁶² The combination of *h* (ه) and *w* (و) makes *هو*, "He," which points to God. The letters *wāw*, *mīm* and *nūn* point to union and quiet and are the only letters which contain no other consonant *ميم واو*. The *wāw* is said to be one of the letters of the holy tablet.⁶³ The ladder is represented as seen in fig. 8, c. H. A. WINKLER⁶⁴ has

⁵⁹ I, 58.⁶⁰ I, 60.⁶¹ The last representation of this sign is seldom seen on magic cups. It is common in Sudanese and Moghrabite talismans.⁶² BÛNÎ, I, 86.⁶³ BÛNÎ, I, 41.⁶⁴ *Salomo und die Karine*, p. 10.

seen it as ||. In one book⁶⁵ it is represented as Λ. In another⁶⁶ there are the following two signs interposed between the regular signs of the *ḥātim* X and ʾ. According to R. G. ANDERSON⁶⁷ the following signs stood for the following prophets: the hexagram for king Solomon; fig. 8, d for king David; the ladder for ʾIdrīs (Enoch); fig. 8, e for Lot and the *waw* for Shīt (Seth). At times the one or the other sign may stand quite alone. This is true of magic bowls as well as of official books on magic.

AHMAD ED-DĒRABĪ gives on page 57 the following poem which is said to originate from ʿAlī ibn Abī Ṭālib. This *ḥalīfeh*,⁶⁸ according to *al-ʿimām* Abū ʿAlī ʿet-Ṭabarsī, found the signs engraved on a rock. The poem describes the signs as follows:

ثلاث عصي صففت بعد خاتم	على رأسها مثل السنان المقوم ⁶⁹
وميم طميس ابتز ثم سلم	الى كل مامول وليس بسلم
واربعة مثل الانامل صففت ⁷⁰	تشير الى الخيرات من غير معصم
وهاء شقيق ثم واو مقوس	كانبوب حجام وليس بمحجم
فهذا هو الاسم المعظم قدره	لتنجو من الافات وتسلم ⁷¹

⁶⁵ IBN EL-HADJ ET-TILIMSĀNĪ, *Kitāb sumūsu-l-anwār wakunūzu-l-asrār el-kubra*, p. 108.

⁶⁶ M. ET-TŪNISĪ-L-MAGHRIBĪ, *Sirru-l-asrār fi istiḥḍār id-djinni waṣarfi-l-ummār*, p. 25.

⁶⁷ *Medical Practices and Superstitions among the People of Kordofan. Third Report, Wellcome Research Laboratories at the Gordon Memorial College*, p. 296.

⁶⁸ WINKLER, *Siegel und Charaktere*, p. 65 gives the following quotation; ذكر الامام ابو علي الطبرسي ان الرئيس ابا البدر كتب له هذه الاشكال وذكر انه سمع من الثقة ان علي بن ابي طالب وجدها على صخرة منقوشة واخبر انها اسم الله الاعظم وفسرها بهذه الايات.

⁶⁹ In the description of BŪNĪ, I, 86, one finds also the expression *al-ʿalif el-muqauwam*.

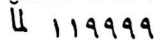
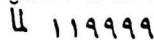
⁷⁰ In BŪNĪ, I, p. 86 we read وبالاربعة التي هي كالكف بلا معصم.

⁷¹ BŪNĪ, I, p. 84, gives the following variation which is mentioned by SPOER and WINKLER:

ثلاث عصي صففت بعد خاتم	على رأسها مثل السهام تقومت
وميم طميس ابتز ثم سلم	وفي وسطها بالجرتين قد تشركت
واربعة مثل الانامل صففت	تشير الى الخيرات والرزق جمعت
وهاء شقيق ثم واو مقوس	كانبوب حجام من السر التوت
وآخرها مثل الاوائل خاتم	خامسي اركان وللسر قد حوت
فهذا هو اسم الله جل جلاله	واسماؤه عند البرية قد سمت

"Three sticks are set in order after a seal,
 Over their heads (is placed something) like a straightened spear-head.
 Then follow a blind and maimed *mīm*, and a ladder
 (Leading) to every hoped thing, yet it is not a ladder..
 And four like unto fingertips are placed (in a line),
 Pointing unto the good deeds (and the good gifts of God), but they are
 without a wrist.
 And a slit "h" and a curved "*waw*"
 Like the tube of a camel's muzzle, but it is not a tube (or a
 cupping cup).
 This is the name whose power is exalted
 Which rescues and saves from difficulties."⁷²

These signs, which are said to have been inscribed on the door of the sanctuary el-Ka'beh,⁷³ possess wonderful powers. They are used in all kinds of talismans, on *mawāsik*⁷⁴ and in magic cups.

Besides this seal representing the holy Name there is also a *hātīm eš-šarr*,⁷⁵ "the seal of evil", which is represented by the signs .⁷⁶ In magic bowls—especially in poison cups—one repeatedly finds some of the signs of this seal, but I have never found them all together. Sometimes three  take the place of the four.

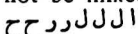
Some magic bowls show an eight, others a sixteen pointed star, (Pl. IV, r, e, f, g). These are engraved as a rule on the central elevation or on the bottom of the non-elevated vessels. They represent the sun. Beside the above described signs there are some which have not yet been deciphered,⁷⁷ such as are pictured in fig. 8, f.⁷⁸

⁷² See also WINKLER, *l. c.*, pp. 66, 78.

⁷³ BÜNI, I, 81.

⁷⁴ In ED-DĒRĀBĪ, p. 57, we read: "Du-n-Nūn said: 'I have tried the seal with the seven signs in three different ways and found it to be more active than a sword: I have never, as long as I carried this talisman, sailed with a boat which was wrecked; nor did I live in a house protected by the same which was burnt, nor were any goods, which had these signs, stolen'."

⁷⁵ WINKLER, *l. c.*, p. 77; SPOER, *l. c.* p. 241.

⁷⁶ These should not be mixed with the letters which come repeatedly in the *basmaleh*, namely  and which are much used in magic.

⁷⁷ C. H. GORDON, *Aramaic magical Bowls in the Istanbul and Baghdad Museums*, *Archiv Orientalni*, VI, 321, ff, describes also illegible signs.

⁷⁸ DOUTRÉ, p. 171, mentions all parts which may constitute a *hidjāb* with the exception of animal and human figures. This is true of written talismans. *Hudjub* printed and engraved on metal show sometimes such figures.

5. Figures. In magic cups and plates one meets symbols belonging to one of the following three categories:⁷⁹

- a. Representations of the zodiac.
- b. Human figures.
- c. Animal figures.

a. Each of the 12 signs of the zodiac is generally engraved in a circle. One also meets 12 circles, standing for the zodiac, devoid of any figure, but filled with magical formulae or Qur'ānic verses. In some such cases the figures of the zodiac are engraved between the circles. Often they are missing altogether. As a rule these representations are engraved on the inner and, exceptionally, on the outer surface of the brim and rarely on the bottom. The name of every figure is at times written beside it. While the representations of the zodiac are very common, those of the seven planets are found much more seldom. The representations of sun and moon are the only figures of the planets which are often seen. These two heavenly bodies play a great part in the superstitious beliefs of all Orientals. In some magic vessels one finds seven circles, which are either left blank or are filled with magical signs, standing doubtless for the seven planets. A decisive proof for the correctness of this theory is a cup which shows beside the twelve figures of the zodiac seven circles. In one of these the sun, in another the moon was represented.

While the sun is represented as an eight—or many pointed star, (Pl. IV, 1, e, f, g), I have seen the crescent moon only in two bowls (Pl. IV, 1, h). The magical vessel given by WIET on plate LXII shows on the inner side three rows, each of sixteen cartouches. In the outer row one cartouche represents the sun and another one, opposite it, the crescent. The cup with the Arabic text given below, under number 11, shows on its inner surface two rows each of sixteen circles. Eight of the upper row are filled with figures. One circle represents the sun as an octagram and another the moon as a crescent. In the concavity of the latter the word **الْأور** with unpointed letters is engraved.

b. Human figures are found in old cups and plates. New

⁷⁹ In no one of the magic bowls examined by the present writer is the representation of the Ka'beh to be seen. RENAUD describes the magic vessel of the Vatican Museum, which shows this representation (*l. c.*, p. 337 ff).

magic vessels show neither the representations of the zodiac nor human figures. At times these figures are made in such a primitive way that only a trained eye can decipher the scratches. The human figures shown on Pl. V, fig. 1, b, are composed of two triangles, each with a small circle representing the head. The left triangle is inscribed with الله, repeated three times and with the numbers ١٣٢ (132, s. above). The right one has الرفع الله, "The sublime one is God." Sometimes the head is represented as a simple square with nothing to indicate the mouth, nose or eyes.

Some better representations, although yet quite simple, are those of Pl. V, fig. 1, d, which show a headdress. In many cases it is impossible to decide which figure is the male and which the female. Representation of hair on the face and head indicates the male. The female figure shows no hair on the head or face. In the above described cup with the Arabic text No. 11, two circles are engraved with rough representations of human beings. It is here impossible to differentiate between the male and the female figure. The figures of Pl. V, fig. 1, i, l, m, represent persons in a squatting position.

Beside this inferior work one meets beautiful and artistic representations. In such cases it is easy to differentiate the female from the male. In some vessels the human figures are replaced by faces, surrounded by circles. In these cases it is easy to differentiate the male from the female face, for the first has a beard (Pl. V, fig. 1, e, f, g). The hair is thinly or densely represented. The female face, Pl. V, fig. 1, e, is surrounded by a radiating circle. This combination shows clearly that the female is intended to represent the sun. Other indications will be mentioned later. Some female faces show on both sides zigzag lines, which probably stand for a face shawl (Pl. V, fig. 1, e, g).

Most human figures are found in pairs, female and male. At times one figure is represented holding the hand of the other (Pl. V, fig. 1, h), or one or both hands are lifted upwards. Rarely, several pairs are engraved on one and the same bowl or plate. I have seen cups with two, and plates with four pairs. The dress—whenever shown—is an Oriental one, a *qumbāz* and a belt in the case of the male figure, and a long closed robe and a belt in that of the female one. Nowhere is a veil to be seen.

In two plates, one face only is found. In each case it is engraved on the centre of the inner surface. Both times it is a female face. One of these two faces is surrounded by a radiating circle and the other shows the lateral folds of a face shawl.

In the neighbourhood of most human representations the words, *al-ʿidjil* (the calf) and *an-nār* (the fire) are inscribed. I have never found the word *at-tōr* (the ox) connected with any human figure. *Al-ʿidjil* is masculine and stands always in connection with the male figure which represents the moon. The moon is masculine in Arabic. On the other hand *an-nār* is feminine. It stands in the neighbourhood of the female figure representing the sun, which is also feminine. These two expressions are repeated several times. At times they are inscribed in places where no human figures are to be found.

Al-ʿidjil, the calf with his horns, has been always used to represent the moon. The heads of gods and kings⁸⁰ were adorned with horns which symbolized power (Amos 6¹³).⁸¹ Horned animals played in primitive religions and mythology a more important rôle than unhorned ones.⁸² Horns are still used in the Arabic language to denote power, stubbornness and mastery. The following expressions illustrate this: *ʾilʿā grūnuh*, "his horns have grown" (i. e. "he is becoming powerful"); *kibrū grūnuh*, "his horns are getting larger"; *kull mā ʾilʿāluh qarn laʾaksirluh yāh*, "the moment a horn grows on him (i. e. he gets powerful) I shall break it." Young Bedouin allow the hair above their ears to grow in locks, which are called *qrūn* (pl. of *qarn*). They are thought to be signs of beauty, power and youth.⁸³

Fire is a gift of the gods to the human race. It was regarded as the symbol of the sun, which scorches all vegetation in the summer months. The representation of these two heavenly bodies in human form is a retrogression to primitive ways of thinking. A many pointed star surrounding a circular disk and a semicircle are old Semitic representations of sun and moon respectively. Some

⁸⁰ Num. 23²²; Deut. 33¹⁸; 34²⁰; I Kg. 22¹¹; I Sam. 21¹⁰; Ps. 89¹⁸⁻²⁶; 92¹¹; 112⁹; 148¹⁴.

⁸¹ M. H. FAIRBRIDGE, *Studies in Biblical and Semitic Symbolism*, pp. 36, 63, 185, 191.

⁸² M. A. MURRAY, *The God of the Witches*, pp. 13 ff.

⁸³ CANAAN, *Studies in the Topographie and Folklore of Petra*, p. 36.

Aramaic magic bowls show human figures with uplifted hands and fluttering hair.⁸⁴

c. Animal figures. Beside representations of the Zodiac, animal figures are to be found as a rule only in poison cups.⁸⁵ Exceptionally one may see some animal figures of this category engraved on a fear cup or magic plate. Thus in a fear bowl which shows the name of 'Alī written in a beautiful arabesque style (fig. 9, a) on

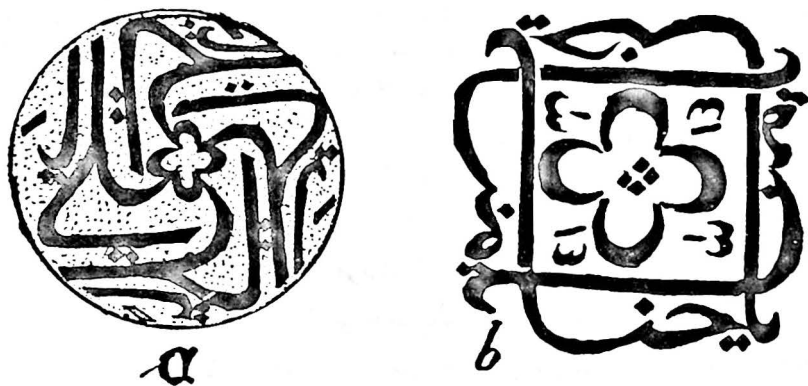


Fig. 9.

the inside of the vessel, one sees on the lower external surface two rows of animal figures, a row of three fishes and one of three ducks. Fishes still play a prophylactic rôle in popular medicine. The ducks have probably only a decorative purpose.^{86a} True poison cups show a lion,⁸⁶ a serpent, a scorpion, and two fighting dragons⁸⁷ whose bodies are interlaced. The animal which I describe as a lion has been explained by others as a dog. It is true that the heads of several of these animal figures are elongated and devoid of any indication of a mane. On the other hand the tail of every representation is that of a lion and some figures show a thick hair growth around the neck. These considerations with others given later down and the fact that lions were represented on old Arabic

⁸⁴ GORDON, *l. c.*, pp. 320, 321.

⁸⁵ WIET, *l. c.*, plate LXIII, No. 3897.

^{86a} In the 14th century birds in the form of ducks and geese played an important rôle in the Arabic decorative art of metal.

⁸⁶ RENAUD, *l. c.*, II, 337 ff, describes the animal as a dog.

⁸⁷ RENAUD, seems not to have met the representation of the fighting dragons.

amulets, as may be seen on plate XXIII of W. M. FLINDERS PETRIE, *Amulets*, have led the present author to describe this figure as the representation of a lion. Nevertheless it is doubtless true that some figures look more like a dog, and the hydrophobic dog is always mentioned in the texts of poison cups.

A characteristic poison cup, bought in Aleppo, containing the same writing, form and talismans as every true poison cup, has no animal figures whatsoever. A large hexagram takes their place. In the centre of this hexagram the 26th verse of *Sūrah* III is followed by the following inscription اللهم تباركت لا شريك (Sūrah, XXVIII, 88)

لا اله الا الله وحده لا شريك له محمد عبده ورسوله . كل شئ هالك الا وجهه
اه اه اه .
ايل ايل ايل ياه ياه ياه انوخ انوخ انوخ لك ياذا الجلال والاكرام
In the six small corner triangles of the hexagram we read .
ايل ايل ايل ياه ياه ياه انوخ انوخ انوخ لك ياذا الجلال والاكرام
Outside the star and between the rays:
88 ديعوح يعوح يعوح فيعوح

انا الله لا شريك لي تفردت بالملك والسلطان

انا الله لا اله الا انا توحدت بالقدره والابجاد

لا اله الا الله حصني (؟) من دخله أمن من عذابي

انا الله لا اله الا انا الرحمن الرحيم

انا الله خير قادر يطيعني كل شئ (؟)

انا الله قيوم لا انام . ولهم عذاب الحريق

Animal figures may also be seen in *hudjub*: Thus *hīrz el-ghassāleh* and *es-sab' uhūd es-suleimāniyeh* each show the representations of a serpent and that of a scorpion. On two silver *mawāsik* which are carried on the arms of a person we see in the upper part of each *māskeh* two human faces and in the lower part the figure of a lion.

True poison cups, as well as the cup with text 3 (see below), also show talismans, seals and Qur'ānic verses. A 3×3 square seal with the nine first letters of the *abdjadiyeh* and another with the numerical values of these letters are found in most true poison cups. The seven signs which stand for the most high name are also seen in these vessels. A verse of the poem given by BŪNĪ⁸⁹

⁸⁸ Probably the names of angels presiding over days, weeks or months.

⁸⁹ I, 84.

describes these seven signs and assigns to them the power of protecting against wild animals:

فلا حية تخشى ولا عقرب تخف ولا اسد ياتيك بهيمة

"Do not dread (any more) a serpent, and do not be afraid of a scorpion. No snarling lion will (any more be able to) attack thee."⁹⁰

It is interesting to see that this verse mentions only such animals as are engraved on poison cups. Another magic formula which could not be deciphered is written in a spiral way with unpointed letters. It runs:

سارا سارا الى سارا كالى ما نور و نور او و دوو كا ما طوطو او ما صوصو
ما كا الروما صابو سا طوما . . . ا ص ا ا ح ف ك الله

On another part of these poison cups one finds unintelligible words introduced into intelligible sentences. These last are:

ومن يتوكل على الله فهو حسبه ان الله بالغ امره والصلاة والسلام على سيدنا محمد
واله الطاهرين⁹¹

"Whoso trusteth in God, he will be his sufficient support, for God will surely attain his purpose (*Sūrah* LXV, 3). Prayer and peace be upon our lord Mohammed and his sanctified people."

Two interlaced circles are filled with unintelligible signs, mostly numbers (fig. 8, g).⁹² Circles played, and still play, an important rôle in Arabic magic.⁹³ *Et-tahwīt*, "the encircling" of a person in danger, is still used in Palestine to protect him from evil spirits and wild animals. This is either done by simply uttering words like *ḥauwaṭṭak bil-lāh*, "I encircle you by God"; *ḥauwaṭṭak bil-Qurʾān umā ḥawāh*, "I encircle you by the Qurʾān and what it contains," or the person in danger is protected by a magic circle drawn on the floor. While drawing the circle powerful verses and strong magic formulae are uttered. Such magic circles are generally drawn in the absence of the person in danger. There is a *ḥirz* called *dāʾiratu l-iḥāṭah*, which is supposed to be the best protection.⁹⁴

⁹⁰ The dragon is not mentioned in the verse.

⁹¹ The second part is written with pointed the first with unpointed letters.

⁹² Circles and spirals are also found in Aramaic vessels.

⁹³ HASTINGS, *Encycl. of Religion and Ethics*, VIII, 321.

⁹⁴ The Qurʾān describes God often with one of the words of *ḥaṭaṭa*:

The last inscription of poison cups is the following:

بسم الله الرحمن الرحيم. اذا السماء انشقت واذنت لربها وحقت واذا الارض مدت
والقت ما فيها كذلك تلقي الحامل للجنين سالماً باذن الله والله يخرجهم اخراجاً وان
مع العسر يسراً ان مع العسر يسراً. انصرف ايها القولنج يا نوح بنوح كلوخ كلخ
الم المرح مع سق ك ه ي ع ص ط ه ط س م ي س ن

"In the name of the most merciful God. When the heaven shall be rent in sunder and shall obey its lord, and shall be capable thereof, and when the earth shall be stretched out and shall cast forth that which is therein (*Sūrah* LXXXIV, 1-4), thus the pregnant woman shall cast forth her child with God's permission in a healthy condition. And God will wholly deliver them.⁹⁵ Verily a difficulty shall be attended with ease. Verily a difficulty shall be attended with ease (XCIV, 5, 6). Begone, O ileus. O Noah, Banūh, Kalūh, Kalh.⁹⁶ ALM, ALMR, HM'SQ, KHI'S, TH, TSM, YS, N."

On the outside of poison cups a characteristic inscription describing their therapeutic value is engraved. WIET has given several such texts.⁹⁷ Those mentioned below have not been mentioned:

No. 1. Property of the author. Diameter 11 cm. Height 3 cm.
وانه باذن الله تشفى هذه الطاسة المباركة من السموم كلها وقد جمع فيها منافع
مجربة السلام على مولانا السلطان الملك يرهب الدنيا والدين داوود للسعة
الحية والعقرب وللحما والمطلقة والمغلة وللكلب الكلب للعدة وللقولنج وللشقيقة
والعقرب والحما وللطلقة والمغلة والكلى والطحال والقوة وللدنم ولسائر
العلل والافات

This blessed bowl will cure with God's permission from all poisons. Proved advantages have been gathered in the same

XLVIII,28; XVII,62; LXV,12. Often while uttering a verse after the word *hawattak* "I encircle you," the hand describes a circle in the air. In mumps the enlarged salivary glands are encircled with *sihwār* of a copper trough while a verse is said.

⁹⁵ The wording resembles *Sūrah* LXXI, 17.

⁹⁶ These are probably the names of angels.

⁹⁷ SPOER, *l. c.*, p. 255 gives one such text.

..... Peace be unto our lord, the sultan, the king who respects the world and the religion, Da'ūd, (It is beneficial) for the bite of serpent and scorpion, for fever, a woman in labour, to increase milk,⁹⁸ for (the bites of) a hydrophobic dog, (diseases of) the stomach, ileus and migraine (or *qarīneh*), for (the bite of) the scorpion, for fever, a woman in labour, to increase milk, for (diseases of) the kidney, spleen and facial paralysis..... for (stopping) bleeding and for all diseases and misfortunes.

No. 2. Property of the author. Diameter 11 cm. Height 2,75 cm.⁹⁹
وبأذن الله تشفي هذه الطاسة النادرة من السموم كلها وقد جمع فيها منافع مجربة وهي للسعة الحية والعقرب والحما.... وللطلقة والفرس المغلة وللكلب وللغص وللقولنج وللشقيقة للطحال والقوة لرمي الدم ولإبطال السحر وللعين وللنظر وللرمد وللنزلة والرياح والارواح والبواسير وللخبط البارد ولسائر العلل

With God's permission this rare cup will cure from all poisons. It contains proved advantages. It is for the bite of serpent and scorpion, for fever,....., a woman in difficult labour, colic of a mare caused by eating earth,¹⁰⁰ for rabies, colic, ileus, migraine (or *qarīneh*), (enlarged) spleen, for (increasing) strength, (stopping) bleeding, annulling sorcery, for (counteracting the action of) the evil eye, improving sight, conjunctivitis, inflammations (of the respiratory organs), gases, for (driving malicious) spirits, haemorrhoids, gastro-intestinal disorders (caused by overeating) and for all diseases.

No. 3. Property of the author. Diameter 10,50 cm. Height 2,75 cm.

تنفع هذه الطاسة المباركة للسعة الحية والعقرب ولعضة الكلب الكلب ولعسر الولد ولقطع الرعاف والمغل وللقولنج يشرب بها الملسوع او رسوله ثلاث مرات يبرأ بأذن الله ولعسر الولد ماء وزعفران ولقطع الرعاف والمغل ينشق بالماء منه وللقولنج يتجرع منه ماء حار مجرب من الذخائر المنصورية. عمل محمد يونس

This blessed cup helps against the sting of serpent and scorpion, the bite of a hydrophobic dog, for difficult labour, stopping nose-bleed, abdominal pain and ileus. If the bitten person or his

⁹⁸ For another translation of this word see below.

⁹⁹ This text was already given in *JPOS*, III, 125.

¹⁰⁰ The translation of *el-maghleh* as stubborn in *JPOS*, III, 125 is faulty.

messenger drink from it three times he will be cured with God's permission. In difficult labour (use) water with saffron. For stopping nose-bleed and abdominal pain (the patient has to) snuff the water from it. (In case of) ileus he has to drink hot water in a draught from it. (Its action) is well proved. Taken (or copied) from the treasures of el-Manṣūriyeh. Made by Muḥammed Yūnis.

No. 4. Studied in Aleppo. Diameter 10.50 cm. Height 3 cm.
 ان هذه الطاسة المباركة للسعة الحية والعقرب ولعضة الكلب والكلب ولعسر
 الولد ولقطع الرعاف والمغل وللقولنج. يشرب بها الملسوع او رسوله ثلاث مرات
 يبرأ باذن الله ولعسر الولد ماء وزعفران ولقطع الرعاف والمغل ينشق بالماء منه
 وللقولنج يتجرع منه ماء حار مجرب نقلت من الخزانة الشريفة بقلعة دمشق المحروسة

This blessed cup helps against the sting of serpent and scorpion, the bite of a hydrophobic dog, for difficult labour, stopping nose-bleed, abdominal pain and ileus. If the bitten person or his messenger drink from it three times he will be cured with God's permission. In difficult labour use water with saffron. For stopping nose-bleed and abdominal pain (the patient) has to snuff the water from it. In (case) of ileus he has to drink hot water in a draught from it. It has been copied from the noble cupboard of the fortress of Damascus, the guarded (city).

No. 5. Examined in Aleppo. Diameter 10 cm. Height 2.75 cm.
 نقشت هذه الصحنه المباركة في طالع سعيد مبارك للطالقة اذا عسر عليها الولد
 ولعضة الكلب والكلب ولسائر الدبابات وللقولنج والفرس المغللة (١) يشرب ثلاث
 مرات يبرأ باذن الله

This blessed plate¹⁰¹ was engraved in a fortunate and blessed constellation. (It helps) a woman in labour whenever difficulties are caused by the coming child. (It is) for the bite of a hydrophobic dog and (the bites of) all other quadrupeds, for ileus and the abdominal pain of a mare caused by eating earth. He (the diseased) has to drink three times from it and he will be cured with the permission of God.

No. 6. Property of Rev. Mr. E. J. Harris, Jerusalem.
 هذه الطاسة المباركة للسعة الحية والعقرب. ولعظة (١) الكلب والكلب ولعسر

¹⁰¹ It was a cup, although it is called in the inscription as *aṣ-ṣahṣah*.

الولد ولقطع الرعاف والمغل يشرب بها الملسوع او رسوله ثلاث مرات يبرآء باذن الله . ولعسر الولد لقطع الرعاف والمغلة وللقولنج يتجرع من(٤)

This blessed bowl is (to be used) for the sting of serpent and scorpion, and for the bite of a hydrophobic dog, difficult labour, stopping nose-bleed, to increase mother's milk and for ileus. The person bitten or his messenger must drink three times from it and he will be cured by the permission of God. For a difficult labour, , stopping nose-bleed and increasing milk, and for ileus. He (the affected person) must drink in one draught from it

No. 7. Property of Mrs. L. Einsler, Jerusalem. Diameter 11,25 cm. Height 3,1 cm.

نقشت هذه الطاسة المباركة للحية والعقرب والكلب الكلب يشرب هو ورسوله والمغص والقولنج يجرع بها صحت والرعاف يغسل وجهه والمطلقة

This blessed bowl has been engraved (to be used as a cure) for (the bite of) the serpent, the scorpion, and the hydrophobic dog. He (the bitten one) or his messenger (have to) drink from it. In ileus he drinks from it in one draught. This is correct. In nose-bleed he washes his face. In the case of a woman in labour

No. 8. Property of Mrs. L. Einsler. Diameter 18 cm. Height 3,50.

ارصدت هذه الطاسة المباركة . تقاوم السموم كلها وقد جمع فيها منافع مجربة وهي للسعة الحية والعقرب والمطلقة والفرس المغلة والكلب الكلب وللمغص وللقولنج للريقان (٢) وللشقيقة وللظربان (١) لحما الكبد والطحال وللقوة ولرمي الدم ولوجع القلب للعين وللنظرة . . . والرياح . . . للخلط البارد . . . يسقي منها الملسوع او رسوله فانه يبرى (١) باذن الله تعالى

This blessed cup was "set to the stars." It neutralizes all poisons and in it are gathered approved advantages. It is (to be used) for the bite of serpent and scorpion, for a woman in labour, the abdominal pain of a mare caused by eating earth, for (the bites) of a hydrophobic dog, colic, ileus, jaundice (?), migraine (or *qarīneh*), throbbing inflammations, hepatic and splenic fever, for increasing

strength, bleeding, epigastric pain, evil eye, . . . flatulence . . . and for gastro-intestinal disorders. The bitten person or his messenger is given to drink (from it) and will be cured by the permission of the exalted God.

No. 9. From the collection of Mr. N. Ohan, Jerusalem. Diameter 19 cm. Height 5,25 cm.

هذه الايات المباركة تنفع لعسر النفاس ولا يبطال السجر والنزيف للطاعة والقبول وللدخول على الملوك والسلاطين ولجلب الرزق والمعاش ولحل المعقود ولافاقة المصروع

These blessed verses help against difficult labour, to annul sorcery, to (stop) bleeding, to (make others) obedient, to (make the user) agreeable (and beloved), to help in visiting kings and sultans, to bring (increase) daily income and means of livelihood,¹⁰² to loosen the bewitched person (lit. the tied person)¹⁰³ and for arousing the epileptic.

No. 10. From the collection of Mr. N. Ohan. Diameter 13,5 cm. Height 3,25 cm.

هذه الطاسة المباركة تقاوم السموم كلها وقد جمع فيها منافع مجربة وهي للسعة الحية والعقرب وللحيا وللطلق والمغلة للكلب الكلب . . . والقولنج وللشقيقة

This blessed cup neutralizes all poisons. In it are gathered approved advantages. It is (to be used) against the bite of serpent and scorpion, for fever, and a woman in labour, to increase milk, for the bites of a hydrophobic dog. . . . , ileus and migraine (or *garīneh*).

No. 11. Property of Mr. N. Ohan. Diameter 10 cm. Height 2,25 cm.

نقشت هذه الطاسة المباركة للحية والعقرب والكلب الكلب . يشرب هو او رسوله والمغص والقولنج يجرع بها . . . والرعاف لغسل وجهه والمطلقة على جنبها اليمين

This blessed bowl was engraved for (the bite of) serpent, scorpion and hydrophobic dog. He (the bitten one) or his messenger should drink from it. In (the case of) colic or ileus he (the patient)

¹⁰² Two expressions are used for "means of life," namely *rizk* and *ma'āṣ*.

¹⁰³ *ma'qūd* comes from *aqada*, "to bind a knot." See *Sūrah* 113.

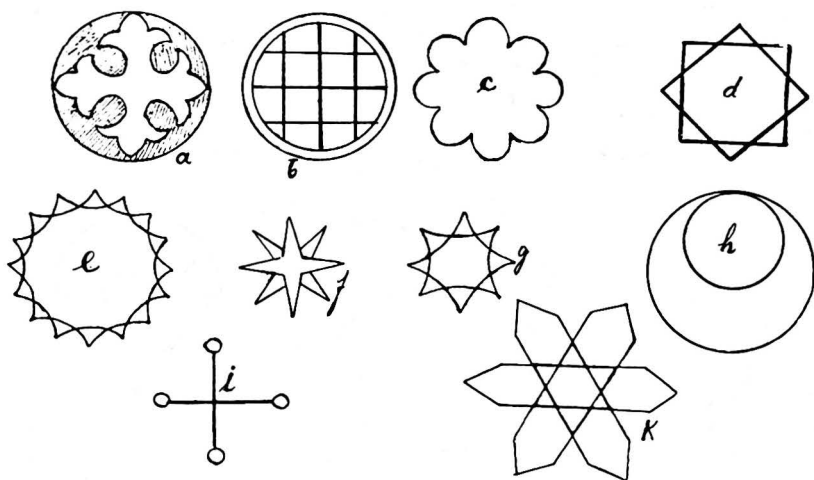


Fig. 1.

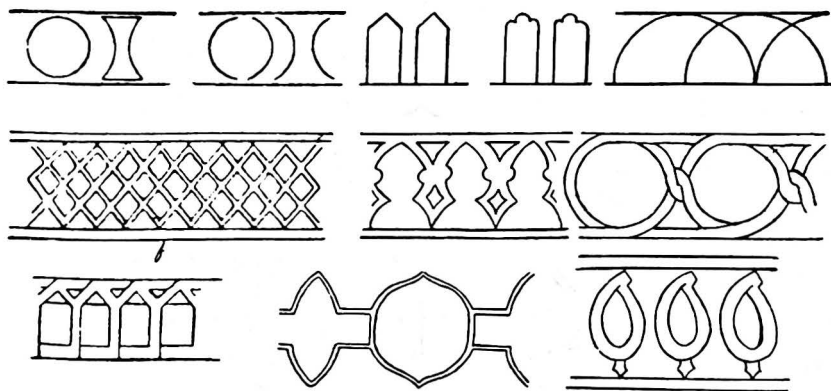


Fig. 2.

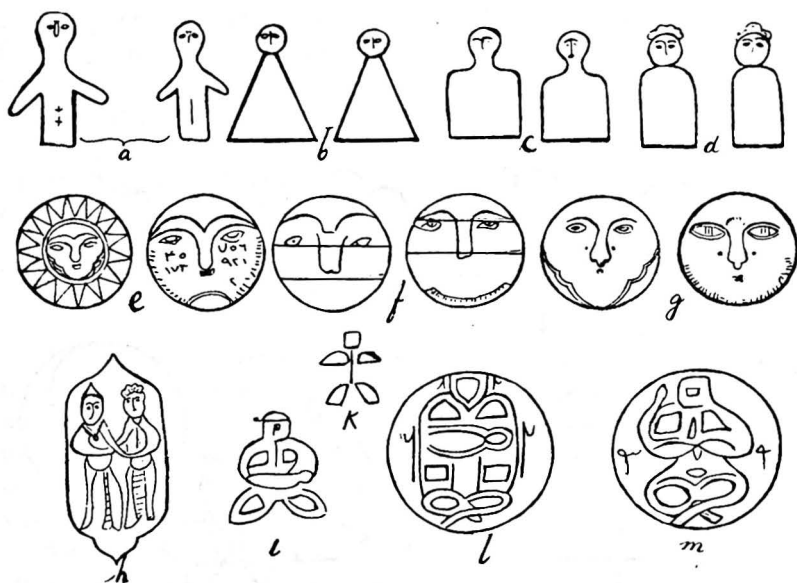


Fig. 1.

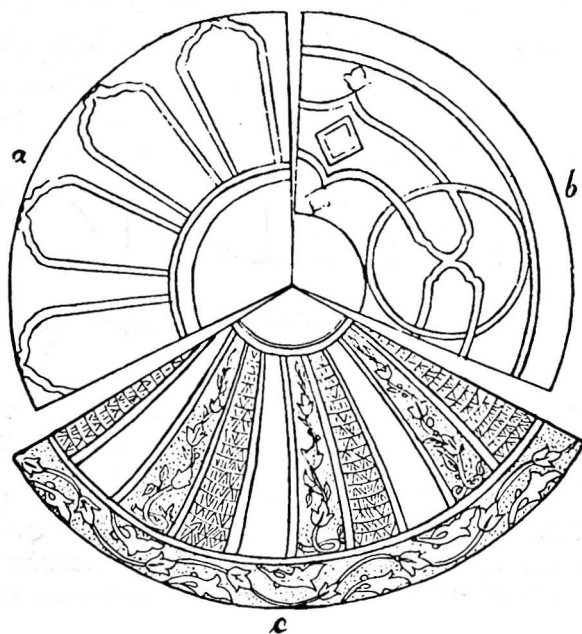


Fig. 2.

should swallow (the contents thereof) in a draught In epistaxis it is for washing his face and a woman in labour (must place it) on her right side.

No. 12. Property of Mr. N. Ohan. Diameter 13 cm. Height 3 cm.
 هذه الطاسة المباركة تقاوم السموم كلها وقد جمع فيها منافع مجربة وهي للسعة الحية والعقرب وللحما وللطفلة والمغلة للكلب الكلب وللغص والقولنج وللشقيقة والظربان (!) ولحما الكبد والطحال والقوة ولرمي الدم ولإبطال السحر ولسائر العلل والافات ويشرب فيها المسموع أو رسوله فإنه يبرئ (!) بإذن الله تعالى
 رصدت ونقلت من خزانة . . . اتفقت عليها أئمة الدين والخلفاء الراشدين لمنافع المسلمين . يشرب فيها ما حضر من زيت أو ماء أو لبن

This blessed bowl neutralizes all poisons. In it are gathered proved advantages. It is for the bite of serpent and scorpion, for fever, a woman in labour and to increase milk; for (the bite of) a mad dog, colic, ileus, migrain (or *qarīneh*), throbbing inflammations, hepatic and splenic fever, to increase strength for bleeding, cancelling sorcery, and for all diseases and misfortunes. The bitten or his messenger must drink from it and he will be cured with the permission of God—may He be exalted.

It was "set to the stars" and copied from (the model) in the cupboard of The religious leaders and the orthodox *ḥalīfahs* have agreed upon it for the benefit of Moslems. One drinks from it whatever is ready: oil, water or *laban*.

No. 13. Property of Mr. N. Ohan. Diameter 18 cm. Height 4,75 cm.
 هذه الطاسة¹⁰⁴ المباركة تقاوم السموم كلها وقد جمع فيها منافع مجربة وهو ما اتفق عليه أئمة الدين والخلفاء الراشدين لمنافع . . . (المسلمين) متفق على صحته . يروى عن رسول الله صلى الله عليه وسلم أنه قال في سبع وثلاثين وضع أم القرآن لا اله الا الله فمن هلك ادخل الله تعالى في قلبه الحلم والعلم والايمان وبركته . وشربه بماء المطر أو ماء زمزم أو ماء نيل مصر يخرج الله تعالى من عروقه وأعضائه كل ضرر وداء ومن أمسكه في خزن لم يعد عليه اسد أو ذئب ويكون بها ما في الناس (!) وقد جمع فيها . . . القرآن وسورت (!) يس بكاملها وايت (!) الكرسي وايات

¹⁰⁴ The greater part of the letters are not pointed.

الشفاء¹⁰⁵ من كتاب الله¹⁰⁶. وفيها منافع للسعة الحية والعقرب وللجأ والمطلقة والمغلة وللكلب الكلب والقولنج وللشقيقة والظربان (!) ولحما الكبد والطحال ولابطال السحر. للعين وللنظر (!)

This blessed cup neutralizes all poisons. In it are gathered proved advantages. It is that on which religious leaders and orthodox *halīfahs* have agreed for the benefit of the (Mohammedans). All are agreed on its merits (lit. truth). It is reported that the Prophet of God—may the blessing and the mercy of God be upon him—said: 'in thirty-seven (years?) the mother of the Qur'ān was made.' There is no God but God. To everybody who praises God,¹⁰⁷ the exalted God will bring to his heart forbearance, science, belief and his blessing. And by his drinking rain water, water from Zamzam or water from the Egyptian Nile the exalted God will remove from his veins and organs every bad thing and (every) disease. Everybody who holds it (the vessel) while in sorrow (will be assured that) no lion or wolf will turn upon him.¹⁰⁸ And it will be with it what is with men (?). There is gathered in it the Qur'ān, the whole *Sūrah* of Ys (XXXVI), the verse of the throne, and the verses of healing. (All of these are) from the Book of God. It possesses alleviation for the bite of serpent and scorpion, for fever, a woman in labour, to increase milk, for (the bites of) a hydrophobic dog, ileus, migraine (or *qarīneh*), throbbing inflammations, hepatic and splenic fever. It annuls sorcery and (counteracts the action of) the evil eye.

No. 14. Property of Mr. Ohan. Diameter 17.50 cm. Height 5.50 cm.

عز لمولانا السلطان الملك المجاهد المومن منصور ابو المظفر يوسف وجمع فيها منافع مجربة وهي للسعة الحية والعقرب وللجأ والمطلقة والمغلة للكلب الكلب وللغص والقولنج وللشقيقة والظربان (!) لابطال السحر ولرمي الدم وللعين والنظرة ولراد (!) اللوكة ولافاقة المسروع (!) ولعسر البول ولتكد الاطفال ولصلح الاقارن ويحم بها المسحور والبنت المعسرة رصدت ونقلت ونقشت في شرف

¹⁰⁵ *Sūrah* IX, 14.

¹⁰⁶ The preceding text was written with large letters and in one line. The following in smaller type and in two lines.

¹⁰⁷ *hallīl* means to say *la ʾilāhun illa llāh*.

¹⁰⁸ *يعدى* should be probably *يعدى*.

الكواكب وطوالع الاوقات وهو ما اتفقت عليه ائمة الدين والخلفاء الراشدين
لمنافع المسلمين كان ذلك بارض مكة المشرفة . لجميع العلل والافات

Honour to our lord, the sultan, the king, the fighter (in the holy war), the believer Manşūr abu-l-Muẓaffar Yūsuf. In it are gathered approved advantages. It is for the bite of serpent and scorpion, fever, a woman in labour, to increase milk, for the (bite of a) hydrophobic dog, for colic, ileus, migraine (or *qarīneh*), throbbing inflammation, to annul sorcery, (stop) bleeding, to (counteract the effects of) the evil eye. To put back a contorted face, to awaken the epileptic, for difficulty in urination, restless babies, for making peace between competitors. The bewitched, the afflicted and the girl (= woman) in laborious childbirth (must) wash themselves with it.

It was "set to the stars," copied and engraved in the glorious height of the planets and in a lucky constellation. It is that on which the religious leaders and the orthodox *ḥalīfahs* have agreed for the benefit of the Mohammedans. That (the manufacturing of the cup) took place in the honoured Mecca. It is for all diseases and misfortunes.

All poison cups have the same external form, although they differ in the execution of the fundamental idea characteristic of them. One should differentiate between the two following types:

1. Characteristic poison cups showing representations of the serpent, the scorpion, the lion and the two dragons.
2. Poison cups which more or less resemble in their execution the fear cups, but do not have these figures.

To the first category belong the bowls whose texts were described under numbers 1, 2, 4, 5, 6, 7, 8, and 11. They are the smaller. The poison cups of the second category are as a rule larger, show more verses from the Qur'ān, more magic seals and may have representations of the sun and the moon. The poison cup whose text was given under No. 13 is the best example of this group. Nowhere are animal figures to be seen. The interior and the exterior are filled with Qur'ānic verses and a great part of the text is so effaced that it cannot be deciphered. The poison cup with text 3 may be counted as the connecting link between both

categories. It has the same size, magic formulae and seals as true poison cups, but like fear cups it is devoid of the characteristic animal figures,¹⁰⁹ and is rich in Qurʾānic verses.

Several examples of the second category show some of the characteristic animals. Thus the poison cup with text No. 12 shows a scorpion and a cancer. Cup with text No. 14 has, beside the representations of the scorpion and the serpent, two other figures which could not be identified. Text 9 comes from a true fear cup.¹¹⁰ This is the only case I have found, where a fear cup was engraved with an inscription giving the therapeutic advantages of the vessel. This bowl showed the central elevation, which was 2,50 cm. high.¹¹¹ The internal and external surfaces were covered with seals, Qurʾānic verses and cartouches of different designs. Nowhere were animal figures to be seen. The text does not mention any cure from animal bites.

In analyzing the texts given above and those described by other writers one finds that the number of diseases said to be cured by these bowls is very large. In the 34 texts¹¹² thus analyzed the following diseases are mentioned; the figures that follow give the number of times the mention of the respective disease occurs. The bite of a hydrophobic dog, 33;¹¹³ the bite of a serpent, 32; the sting of a scorpion, 32; ileus (قولنج), 31; for increasing the milk of a nursing mother and the cure of abdominal pain caused by eating herbs with earth (مغلة, مغل), 27;¹¹⁴ woman

¹⁰⁹ In the centre of the cup, both on the inner and on the outer sides, there is an octagon, in which the word *allah* is engraved three times.

¹¹⁰ The brim is slightly bent inwards.

¹¹¹ The inner face of the central elevation is covered with a silver plate, which showed the words نصر من الله وفتح (قريب).

¹¹² These consist of 18 texts from WIET, one from ZEKI Pasha, one from SPOER and 14 gathered by the present writer.

¹¹³ The colloquial expression for *kalb kalib* is *kalb maṣrūʿ*. It is thought that a *djinn* inhabits the animal.

¹¹⁴ WIET translates always "pour faire monter le lait des nourrices." ZEKI Pasha puts "pour corriger le mauvais lait des nourrices." But besides this meaning the word *maghlah* stands also for "abdominal pain caused by herbs mixed with earth" (WAHRMUND, II, 857; BELOT, 720; Muḥīṭ, 1993, 1994). The present writer believes that this meaning should be the translation of *maghl*. The following considerations will explain the expression better: a. *al-maghl* and

in labour (مطلقة), 27; loss of blood (رمي الدم), 16;¹¹⁵ fever (حمى), 18; abdominal pain (منص), 13;¹¹⁶ migraine (or *qarīneh*, الشقيقة), 19;¹¹⁷ the throbbing of an inflamed place¹¹⁸ (ضريان), 16;¹¹⁹ magic spells, 13; splenic fever (حمى الطحال), 11; evil eye (العين، النظرة), 11; for increasing physical strength (القوة، القوة), 2;¹²⁰ for one-sided facial paralysis (لقوة، نكد), 4; bleeding of the nose (رعاف), 7; restlessness of babies (نكد الاطفال), 6; hepatic fever, 9; conjunctivitis (رمد), 4; difficulty in urination (عسر البول), 5; to awaken an epileptic (افاقة المصروع), 3; colds

al-maghal mean اللبن الذي ترضعه المرأة ولدها وهي حامل, "the milk a pregnant woman gives to her child." Such a milk is supposed to cause several ailments in the nursing child. It is called in colloquial language *ḥalīb ghēl*. When ever *maghl* follows the expression *el-muṭlaqah* and is connected with the conjunction "wa" it may point to the above meaning. In all other cases *el-maghlah* means as *Muḥīṭ* says مغلة الاسم مع البقل فأخذها وجع في بطنها. والاسم مغلة, "the abdominal pain caused by herbs mixed with earth." b. In texts 2, 5 and 8 we read clearly المغلة والفرس المغلة. SPOER gives والفرس والمغلة, which is probably a mistake and the "و" of المغلة should be disregarded. In his translation SPOER tried to overcome this difficulty by assigning "the pain of parturition" to "women and to the mare," which of course is not intended. c. An Oriental curse is *allah yimghalak* (or *maghleḥ timghalak*), "May God give you abdominal pain from overeating." Both explanations were given in the text, that connected with milk more often for there are several expressions in the text pointing to abdominal pain.

¹¹⁵ WIET translates this expression always with "dysenterie," but *rami damm* stands more probable for metrorrhagie.

¹¹⁶ WIET translates always with "suffocation." *Muḥīṭ*, p. 1993, says المنص الوجع المعترض في الجوف والالتواء في الامعاء. وإذا كان معه احتباس الفضلات البرازية سمى بالقولنج. On p. 1776 it is stated القولنج مرض مؤلم يعسر معه خروج التفل والريح. These two expressions show clearly that قولنج stands for ileus. M. SHARAF, *An Eng.-Arabic Dictionary of Medicine, Biology and allied Sciences*, explains قولنج only as colic and not as ileus, which is not correct.

¹¹⁷ *Aš-Šaḡīqah* is another name for *al-qarīneh* (vide CANAAN, *Dāmonenglaube im Lande der Bibel*, op. 47). As these texts mention often the evil supernatural powers one may take this expression to stand for the well-known *qarīneh*. *Ṣudā'*, headache, is mentioned twice.

¹¹⁸ See WAHRMUND, *Handwörterbuch der neu-arab. und deutschen Sprache*, vide ضربان.

¹¹⁹ This expression is still used in curses, CANAAN, *The Curses in Palest. Folklore*, JPOS, XV, p. 244.

¹²⁰ WIET, translates القوة and القوة always as he does لقوة and القوة. The two different expressions have completely different meanings.

(النزلة), 4;¹²¹ malicious spirits (الارواح), 3;¹²² difficult labour (عسر), 4;¹²⁴ gastric pain (وجع راس القلب), 12;¹²³ gastro-intestinal disorders (خلط بارد), 3; haemorrhoids (2); facial paralysis (اللقوة), 5;¹²⁵ the release of the bewitched person (حل المعقود), 3; and flatulence (ارياح), 2. The following are mentioned only once: the stomach, jaundice (ريقان), eruption, belly-ache (وجع كرش), anthrax, erysipelas and whitlow (رياح الشوكه).¹²⁷ Beside the cure of these numerous diseases the cups possess two other advantages: 1. The cure of diseases of animals. Texts 2, 5 and 8 mention the removal of noxious insects and reptiles.¹²⁸ Furthermore the removal of the pestilence (الفرس المغلة).¹²⁹ 2. Moral benefits can also be attained: the making of peace between enemies (الصلح بين الاقران), easy access to princes and kings (للدخول على الامراء والسلاطين)¹³¹ and the removal of anger.

The texts of some bowls pretend to help to attain every good thing and to protect against every disease and misfortune.¹³² Death alone cannot be prevented. Two vessels, one mentioned by WIET and the other by ZEKI Pasha, announce that they are able to

¹²¹ WIET, leaves this word untranslated. That the unpointed word of WIET, p. 175, No. 53 means النزلة is shown by text 2.

¹²² It is left by WIET untranslated (p. 174). The Text on p. 95, No. 3906 mentions ومن به خباله.

¹²³ One text of WIET mentions سباق الحبل "to become pregnant soon."

¹²⁴ WIET translates literally "somet du coeur." *Rās el-qalb* is used for the epigastric fossa, as the laymen believe the apex of the heart to lie here. The expressions *ma'i uadja' rās qalb*, *bijūdja'ni rās qalbi*, *darabni 'alā rās qalbi*, etc., are well known in this part of the Arabic speaking world, and point always to the epigastric fossa.

¹²⁵ It is sometimes wrongly written الرقة. ¹²⁶ This expression means also a one-sided dislocation of the upper jaw. Once الفالج, paralysis, is mentioned.

¹²⁷ ZEKI Pasha, *l. c.*, p. 252, footnote 1, mentions also الخبال and الفاء الجنين, and on p. 289 رمي السهام and لدغ الزبور.

¹²⁸ SPOER's text mentions also الفرس المغلة.

¹²⁹ WIET, *l. c.*, p. 167, No. 23 and p. 266, No. 536. ¹³⁰ A large lizard.

¹³¹ Text No. 9. See also WIET, p. 167, No. 23. and p. 267, No. 538.

¹³² جميع الملل — لسائر الملل والافات والاسقام — لكل شي من كل شي.

prevent houses from being robbed or burnt and ships from being wrecked.¹³³

In going through the long list of diseases enumerated above, one observes that the bite of poisonous animals takes the foremost place. Besides mentioning the bite of a hydrophobic dog 33 times and the bite of a serpent and the sting of a scorpion 32 times each we read 16 times that "it (i. e. the cup) neutralizes all poisons" (تقاوم كل السموم), and 15 times that "the bitten one will be healed by it." The healing of poisoning by Qur'ānic verses is an old belief which is also referred to in the books on magic.¹³⁴ Text No. 13 asserts that neither lion nor wolf can hurt anymore. Several vessels promise definitely that a bitten person will be cured if his messenger drinks from the bowl. This probably refers to the case when the magic bowl is in a distant place, not easily accessible to the person bitten. How the cure is transmitted from the messenger to the bitten person is not described. Besides the stings of scorpions and the bites of serpents and dogs one text mentions the stings of hornets and two the bites of quadrupeds. Eight out of the fourteen poison cups which I had the opportunity of examining show figures of poisonous animals.

Similar descriptions of therapeutic advantages are found in *hirz el-ghassāleh* and *es-sab' uhūd es-suleimāniyeh*. For the sake of comparison the text of the first talisman may follow:

وهو مجرب صحيح ان شاء الله نافع لوجع العين والراس والظهر والاعضاء
والمفاصل والصداع والضربان والسوداء ونافع للدوخة والصفراء والحمى والشقيقة
والفالج وام الصبيان وبكاء الاطفال والنزلة والدهشة والرعشة والخوف والفرع
ولمشي الليل والنهار ولسفر البر ولركوب البحر والخيول وفرسان المعجمة بالليل
ونافع لمقاومة الحكام ومبارزة الفرسان وكيد الاقران والحيل ونافع انشاء الله
الجان والريح الاحمر والبلاء الاكبر ومن جميع الارياح ولحل المعقود وايجناد
المفقود وتسهيل ولادة المولود والبيع والشراء والاخذ والعطاء وخلص المسجون
ووفاء الديون واقامة (افاقه ؟) المجنون والرمم والعمى والطرش والصم والقرينة

¹³³ WIET, p. 167, No. 23; ZEKI Pasha, p. 289.

ان كانت في مكان لا يسرق ولا يبحرق ولا ينهب او في مركب لا يغرق

¹³⁴ BUNÉ, I, 39; DÉRABÉ, p. 10.

والتوابع وللشعور... والكربة والصرع والازعاج ولتسهيل زواج البنت البائرة والخائفة من الزواج.... ولجلا القلوب الفاسدة... في غاية الوصول وسعة الرزق وتعطيف قلوب الخلق وتحسين الاخلاق ونافع انشاء الله من لسعة العقرب والحية والثعبان ومن نظرة جميع العيون ومن كل شريد وجان. وان كان في مال لا يسرق وفي بيت او متاع او حانوت لا يحرق وفي سفينة لا تفرق او في جماعة احباء لا تفرق ونافع انشاء الله لكل شي مع حسن الاعتقاد وخلوص النية ينال ببركته حامله كل امنية وانما الاعمال بالنيات وانما لكل امرء ما نوى وهذا الخاتم فيه اسماء روحانية واقسام برهانية وملوك علوية وخدام قهرية وفيه اسماء سور القرآن العظيم الذي من شك فيه كفر

A description of the therapeutic values is also found in the Aramaic magic bowls. The great difference is that these texts mention in the first place supernatural powers and their evil work.¹³⁵ Only in exceptional cases are diseases mentioned by name.¹³⁶

Most magical vessels show geometrical designs of different types. They serve one of the following purposes:

1. They divide the internal and external surfaces into circular, oval, etc., cartouches which are filled with Qur'anic verses, seals, holy names or figures (Pl. IV, 2. Pl. V, 2, a and b show the internal division of two vessels; c the external surface).
2. At times the cartouches are so small that, although they may contain a word, a letter, a number or a sign, they serve the purpose of decoration more than anything else. (Pl. IV, 2, f).
3. Some words are interwoven so artistically as to form beautiful patterns. In this way an arabesque of *يا علي* and another of *يا حنان يا منان* are made. (fig. 9).

One and the same cartouche is repeated in one and the same vessel a certain number of times, generally twelve. This number indicates the zodiac. Even when the twelve cartouches contain texts, seals or unintelligible signs, but no figures at all, the cartouches stand for the zodiac. The holy numbers 3, 5 and 7 or one

¹³⁵ G. R. DRIVER, *A magical Bowl*, *Revue d'Assyriol.*, XXVII, p. 61 ff; M. SCHWAB, *Les Coupes Magiques et Hydromancie dans l'Antiquité Orientale*, *Proc. Soc. Bibl. Arch.*, XII, 296 ff. ¹³⁶ J. WOHLSTEIN, *Über einige aramäische Inschriften auf Tongefäßen des kgl. Museums zu Berlin*, *Z. für Ass.*, VIII, 317 ff.

of their powers¹⁸⁷ are also met with. Seven stands sometimes for the planets. The use of these holy numbers in prayers, magic and superstition is spread all over the Arabic speaking countries. But there are also bowls and plates with 11, 13, 16 and 17 cartouches. The meaning of these numbers is not easy to discover.

Many bowls are of such inferior workmanship that the writing, seals, geometrical designs, cartouches and figures can be deciphered only with difficulty. They are nevertheless of great interest for the study of primitive magical ideas which have not been affected in their representation by art. All modern fear cups—for no magic plates or poison cups are any longer manufactured—are fabricated *en masse*. ZEKI PASHA¹⁸⁸ thinks they are made by the Persians and sold to pilgrims in Mecca. RENAUD believes that many are made in Mecca itself. All the modern bowls are of inferior work, and of less scientific interest. A great many vessels show artistic work beautifully executed. All vessels which bear the inscription described above, with the names of the *ʿimmā*, suggest a Shiʿite environment and are probably manufactured in Persia. Only in a few cases have I found an inscription giving the name of the manufacturer. The poison cup with text No. 3 gives the name Muḥammad Yūnus, but as these words are engraved with less care than the other inscription and work they are probably of a later date. The names of two other manufacturers could not be deciphered.

Most of the magic bowls examined by the present writer belong to the early and middle parts of the XIX century. The fear vessels with a smaller cup on the central elevation are of even later date. The most artistic bowls are of the XVII or early part of the XVIII centuries. The oldest are the poison cups, some of which belong to the end of the XVI century. Doubtless several with the simplest work are rough copies of older vessels.

Simple minded Orientals honour and respect these cups highly. They play an important role in their life, and every family possessing such a cup is proud of its treasure. If a sick neighbour desires to borrow a cup, it will, as a rule, not be lent to him until he deposits a pledge.¹⁸⁹

¹⁸⁷ For the supposed influence of numbers in magic procedures, see *Aberglaube und Volksmedizin im Lande der Bibel*, pp. 93 ff.

¹⁸⁸ *l. c.*, p. 244.

¹⁸⁹ See also ZEKI Pasha, *l. c.*, p. 224.

In order to understand the way these bowls act and how they cure diseases, one has to go back to ancient superstition. Cups for divination were already known to the old Egyptians (Gen. 44⁵). A great difference exists between cure and magical procedures produced by or made in the name of the heavenly powers and those performed by the help of powers of the lower world.¹⁴⁰ In the case of Arabic magic vessels the cure is attained by the help of the heavenly powers. Another important question is the way in which fright and fear affect the human body and the manner in which the demons attack it. The evil spirits continually follow every member of the human race awaiting an opportunity to attack him. No sooner does an occasion show itself than they attack their prey. Weakness or disease result. A pregnant woman may lose her child. Fright, by lowering the vital resistance of the human body, gives the demons an exceptionally good opportunity to attack. It is believed that fear changes normal conditions, especially the normal distribution of the fluids in the human body. The Arabic word for excitement is *sammet badan*, "poisoning of the body," and for fright *haddah*, "the shaking (of the body)." At such a moment, when the resistance is lowered, *djinn* enter the body and cause disease. All diseases were,¹⁴¹ and are still,¹⁴² believed to be caused by these supernatural powers.

The neutralization of the evil effects of fright is caused by the supernatural powers inherent to the names of God, verses of the Qur'ān, the names of the "holy Mohammedan family," of Mohammedan religious leaders, angels, and of magic seals and formulae. Their power is stronger than that of the demons. This explanation is directly supported by some of the texts engraved in magic vessels and described above. Text No. 9 begins with the words: هذه الايات المباركة تنفع, "These blessed (Qur'ān) verses help to" In text 13 one reads وقد جمع فيها . . . القرآن وسورة يس بكلماتها, "In it (the bowl) have been gathered . . . the Qur'ān, the complete *Sūrah* of YS, the Throne verse and the healing verses of God's Book." A poison

¹⁴⁰ See also J. WOHLSTEIN, *l. c.*, p. 329.

¹⁴¹ R. CAMPBELL THOMPSON, *Semitic Magic*, p. 101; WELLHAUSEN, *Reste arab. Heidentums*, p. 155.

¹⁴² CANAAN, *Dämonenglaube im Lande der Bibel*, p. 45.

cup described by WIET¹⁴³ begins هذه الطلسمات المباركة تقاوم, "These holy talismans oppose." In a fear cup (see above) the word *ṭalsam* is used as a synonym for *Sūrah*. The belief in the healing power of the Qur'ān is not confined to magic bowls, but is deeply rooted in the life of Orientals. Ancient writers already taught this as shown by the following traditions:¹⁴⁴ "The best medicine is the Qur'ān";¹⁴⁵ "the Qur'ān is the cure";¹⁴⁶ "take from the Qur'ān what you want (and use it for whom you will)."¹⁴⁷ The healing of diseased organs by reading verses of the Qur'ān and magic formulae is an old practice. The secretary of Ṣalāḥ ed-Dīn, el-Qāḍī el-Faḍl, says:¹⁴⁸

والمشكو في هذا الوقت وجع المفاصل والامها واورامها. فيدي منها في جامعة.
ورجلي منها في واقعة. واعصابي كلها قد رابني بعد صحة. وصارت لما تمّ عليها
من ايدي الراقين والذاكرين كانها خرزات سبعة

"I complain in this moment of articular disease with its pains and swellings. My hands are (motionless) from it as if they were tied with handcuffs. My feet are in terrible pain. My muscles make me doubt my health. And from what has happened to them by the hands of the magicians and those who mention (names for evil), they are become as beads of a prayer rosary."

Certain verses of the Qur'ān themselves describe the healing power of this holy book. *Sūrah* XVII, 84, runs, "We send down of the Qur'ān that which is healing . . . to those who believe." XLI, 44, "To those who believe, it (the Qur'ān) is guidance and healing";¹⁴⁹ X, 57, "O men, now hath an admonition come unto you from your Lord, and a remedy for that¹⁵⁰ which is in your breasts."

In analyzing the different verses of the Qur'ān which are

¹⁴³ p. 95, No. 3906.

¹⁴⁴ NAZILĪ, p. 67, 68, 123.

¹⁴⁵ خير الدواء القرآن (ابن ماجه)

¹⁴⁶ شكاه رجل للنبي صلعم وجع حلقه فقال عليك بقرأة القرآن. وقال القرآن هو الشفا (البيهقي عن
قال النبي صلعم خذ من القرآن ما شئت لمن شئت
وأثله ابن الاسعق)

¹⁴⁸ ZKIE Pasha, l. c., p. 255.

¹⁴⁹ SAEL gives "doubts and uncertainty" which are not found in the Arabic text nor in the German translation of HENNING.

¹⁵⁰ SAEL gives "doubts." This versé is much used in magic.

inscribed in magic bowls one finds that they belong to one of the following categories:

1. They describe God as the Protector, the Compassionate, the Helper, the Kind, and the Loving One.

2. They proclaim the omnipresence and the omnipotence of God by which He is able to overcome every work of the dark powers.

3. Some verses describe God or the Qurʾān as a healing power. At times verses are used which contain words like *اخرج*, *يسر*, *شفاء*, *سلام*, etc.

A tradition relates that once when the prophet's son fell sick the angel Gabriel ordered the prophet to write the *Sūrah* which has no "f" in it (= the first *Sūrah*) as a talisman.¹⁵¹ No sooner did the father follow the heavenly advice, than the son began to improve.

In one and the same vessel several verses are engraved at the same time since the more powerful the means used, the quicker the protection and the cure will be. The "crowning words" of the Qurʾān are also much used. Many Qurʾān commentators have left these expressions, which are believed to conceal many profound mysteries, unexplained, as they were thought by many to be the heavenly language used by the Almighty, from whom they derive their supernatural power. They are thus primarily of religious importance. This importance was the reason for their use in magic.¹⁵² The letters of which these mysterious words are formed are called the *mutaṣābihah*.^{152a} We meet the following words (the numbers in brackets point to the numbers of the *Sūrahs* which contain the words): طس (38), ق (50), ن (68), حم (40, 41, 43, 44, 45, 46), طس (27), طه (30), يس (36), الم (2, 3, 13, 29, 30, 31, 32), الر (10, 11, 12, 14, 15), طسم (26), المر (13), المص (7), كيعص (19) and جمسق (42). These words are as a rule written disconnectedly. Thus كيعص becomes ك ه ي ع ص; this corresponds to the way these words are pronounced when the Qurʾān is recited.

These mysterious words are composed of 14 letters, known as

¹⁵¹ *Sūrah* CXI has also no "f".
than others are جمسق, كيعص.

¹⁵² Those used more often
^{152a} This is a reference to *Sūrah* III, 5.

"the letters of light" (*al-ḥurūf en-nūrāniyeh*, *ḥurūf en-nūr*), while the remaining 14 letters of the alphabet are known as "the letters of darkness" (*al-ḥurūf ez-zulmāniyeh*, *ḥurūf ez-zulmah*). It is believed that the latter were written on the foreheads of idols.¹⁵³ All *Sūrahs* which begin with one of the above mentioned words are called the "Mother *Sūrahs*" (*al-ummāhāt*), i.e. the main *Sūrahs*, to distinguish them from the remaining chapters, the *tatmīmāt*.¹⁵⁴

It is further believed that every one of the names of God possesses a special power. Several names of the Almighty are therefore engraved on one and the same bowl. At times the maker has even tried to engrave all the 99 "Beautiful Names of God". The present writer has never been able to discover the complete names on one bowl. The following four names of God, which do not belong to the 99 beautiful names, are more used than others. Their meaning points to healing and protection: *يا شافي*, *يا معافي*, *يا حافظ*, *يا كافي*.

The sun and the moon exercise a very strong influence on life. They affect the well being and prosperity of living beings more than any other heavenly body. This may explain the fact that they are more often represented on magic vessels than the zodiac. Metal representations of the different phases of the moon are still worn by Palestinians as protective amulets.¹⁵⁵ The representation of the sun and moon is a very old one. Present customs show clearly how Orientals adhere to this old idea. A modern charm against the evil eye which has not yet been published and which mentions some heavenly bodies runs as follows:

عَيْنُ الْمَعْيَانِ عَوْرَتُ	اِذَا السَّمَاءُ كُوْرَتُ
عَيْنُ الْمَعْيَانِ طَيْرَتُ	اِذَا السَّمَاءُ انْفَطَرَتُ
عَيْنُ الْمَعْيَانِ دَقَّتْ	اِذَا السَّمَاءُ انْشَقَّتْ
عَيْنُ الْمَعْيَانِ تَحَوَّجُ	وَالسَّمَاءُ ذَاتُ الْبُرُوجِ

"When the sun shall be folded up (*Sūrah LXXXI*, 1), the eye of the 'eyer' will become blind. When the heaven shall be cloven in sunder (*Sūrah LXXXI*, 1) the eye of the 'eyer' will fly off. When the heaven shall be rent in sunder (*LXXXIV*, 1), the eye of the

¹⁵³ NÄZİLİ, p. 119.

¹⁵⁴ BUSTÂNİ, *dā'iratu'l-ma'ārif*, VII, 8.

¹⁵⁵ *Aberglaube*, pp. 58, 98.

'eyer' will be crushed. By heaven adorned with signs (of the zodiac, LXXXV, 1), the eye of the 'eyer' will be impoverished."

In the preparation of magic bowls, as often in the writing of talismans, making of amulets and performing of magical procedures—white as well as black—astronomical calculations have to be taken into consideration. Such considerations play a very important rôle in all books on magic.¹⁵⁶ The following texts show this idea clearly. One part of text 14 reads *رصدت ونقلت ونقشت في شرف الكواكب وطوالع الاوقات*,¹⁵⁷ "It (the vessel) was set under the stars, copied and engraved at the glorious heights of the planets and in a lucky constellation." Other texts of this kind are: *نقشت هذه الطاسة اجتماع الثيرين في طالع سعيد مبارك*,¹⁵⁸ "This bowl was engraved at the union of the two lights (sun and moon) with a lucky and blessed constellation." *نقلت في طالع الاسد*,¹⁵⁹ "It was copied in the constellation of the lion." *نقشت هذه الطاسة المباركة اجتماع الثيرين*,¹⁶⁰ "This bowl was engraved at the union of the two lights with the scorpion." Text No. 5 mentions *نقشت هذه الصفحة المباركة*, "This blessed plate was engraved in a fortunate and blessed constellation."

The mere expression *rusidat*, points clearly to the importance of the influence of the heavenly bodies. In Palestine the expression *nadjdjam*, "to set under the stars" is used instead of it.

Every human being is born under a certain constellation. The stars that rule that constellation are believed to exercise a continuous influence over him. But as very few know the constellation of the stars at their birth, they are helped by drinking from a cup containing all the twelve figures of the zodiac. It is a curious fact that in no case is the representation of all the planets found. In a few bowls two of the circles were engraved with representations of sun and moon. This was the case when the other ten circles were filled with Qur'anic verses or with magic formulae.

Magic seals and signs are known to popular medicine and to

¹⁵⁶ BÖHL, I, 6, 37; *Aberglaube*, pp. 96–99; E. BRAUER, *Ethnologie der jemenitischen Juden*, p. 363.

¹⁵⁷ The text is also found in bowls described by WIET, p. 151, No. 9420; p. 95, No. 3906.

¹⁵⁸ See also WIET, p. 267

¹⁵⁹ WIET, p. 101, No. 3981.

¹⁶⁰ WIET, p. 94, No. 3862.

sorcery. It is interesting to note that all the categories of magic signs are employed in magic cups also. The animal figures of lion, scorpion, serpent and the two fighting dragons play a different rôle from the figures of the zodiac. These two different representations are seldom found in one and the same cup. In two cups there are two figures of the animals with the representations of the sun and moon. The holy verses of the Qur'ān engraved in poison cups are thought to enchant the animals, thus holding them in ban. Their poison is neutralized and they can no longer¹⁶¹ harm any human being. The ancient Hebrews, cherished the same belief,¹⁶² as is clearly seen from Numbers 21⁹ where we read, "And Moses made a serpent of brass, and put it upon a pole, and it came to pass that if a serpent had bitten any man, when he beheld the serpent of brass he lived." An old Mohammedan friend in Jerusalem told me that a stone built into one of the gates of the Dome of the Rock showed representations of different animals. This stone prevented unclean and dangerous animals from entering the holy place. The Turkish governor Ra'ūf Pasha removed this miraculous stone and sent it to the Museum in Constantinople. Since that time noxious insects enter in great numbers into the House of God.¹⁶³

In the Aramaic cups the name of the person for whom the magical text was written was always combined with that of his mother.¹⁶⁴ This is never the case in the magic vessels described in this paper.¹⁶⁵ Therefore anybody who may need the Arabic magic vessels will derive full benefit from its use. The Aramaic vessels could help only the person mentioned in the text, for whom

¹⁶¹ HOTTINGER, *Historia Orientalis*, p. 288, writes "Les Orientaux sont dans l'usage de porter une figure de serpent sur eux croyant par là être à l'abri des piqures de cette bête malfaisante" (after RENAUD).

¹⁶² FRAZER, *Golden Bough*, II, 426, 427

¹⁶³ RENAUD, *l. c.*, p. 332, describes the same custom in Constantinople. He writes "A Constantinople le peuple est persuadé que le serpent qui orne l'hippodrome préserve la ville des ravages des bêtes venimeuses."

¹⁶⁴ J. A. MONTGOMERY, *A magical Bowl-Text and the original Script of the Manicheans*, JAOS, XXXII, 436 ff; —, *Aramaic Incantation Texts from Nippur*, Philadelphia, 1913, p. 105 ff; C. H. GORDON, *l. c.*, p. 321 ff; J. WOHLSTEIN, *l. c.*

¹⁶⁵ SCHWAB, *l. c.*, pp. 296 ff; BUDGE, *l. c.*, pp. 284, 285 each describe a Jewish magic bowl where the name of the mother is not mentioned. The latter author does not describe a single Arabic magic bowl.

it was expressly made. The texts of the Aramaic bowls resemble in this respect the talismans written and used today.¹⁶⁶ Here also the name of the patient has to come with that of his mother and never with that of his father. Besides the metallic magic bowls one finds pottery vessels which are inscribed with magic formulae to cure special diseases. In these the name of the patient with that of his mother is sometimes found. As this category of magic vessels is prepared for specified persons they never contain any names but that of the patient and of his mother. The patient has to drink ritually clean water from such a vessel.¹⁶⁷ The intrinsic power of the inscription is supposed in this way to enter into the water.¹⁶⁸ Pottery magic bowls are also used in black magic. The writing may be dissolved in milk, *leben*, broth or soup and given to the enemy who, suspecting no evil, drinks and is thus injured by the black magic.¹⁶⁹

The names of God and of angels, as well as verses of holy books, were used also in Aramaic magic bowls.

The directions for the use of the Arabic magic bowls are well known to the inhabitants of the Mohammedan world. They may differ slightly from one place to another but the fundamental idea is the same. The bowls should never be touched with unclean hands or while one is in an unclean state. If a woman has no time to wash her hands, she carries the vessel with a clean towel. Clean water is used. At times the kind of water is specified. Thus text 13 mentions rain water, and water from Zamzam and the Egyptian Nile. Palestinians who cannot get water from the two latter places use water from Siloam or Hammām eš-Šifā, for it is believed that both have a subterranean connection with the holy well of Zamzam.¹⁷⁰ If, after use, some water should remain in the cup, it must be poured out in a clean place.¹⁷¹ Many believe that

¹⁶⁶ This custom prevailed even among the old Arabs, see J. A. MONTGOMERY, *Some early amulets from Palestine*, JAOS, XXX, 274.

¹⁶⁷ CANAAN, *Aberglaube*, p. 102, fig. 37.

¹⁶⁸ This is well known to the books on magic, BÜNI, I, 87, 107.

¹⁶⁹ The cause for the use of the name of the mother in connection with that of the patient has been given by the present author in *Aberglaube*, pp. 105, 106.

¹⁷⁰ CANAAN, *Haunted Springs and Water Demons*, JPOS, I, 153 ff, and *Water and Water of Life*, JPOS, IX, 57 ff.

¹⁷¹ This custom is also practiced in the Greek Orthodox church with the water of baptism.

these miraculous vessels should never be exposed to the light except at the time of their use. One person assured me that the water of a cistern to which the rays of the sun do not penetrate is more active than water from other cisterns. Such water plays an important rôle in Oriental superstition. The water of *‘iün el-ḥaṣr*, which is said to have a curative action in cases of retention of urine, is also never exposed to the light lest it should lose its action.¹⁷² Some texts of poison cups allow the use of oil and milk.¹⁷³ Thus text 12 says *يشرب فيها ما حضر من زيت او ماء او لبن*. I was unable to ascertain if these liquids may also be used with fear cups. Two texts (3 and 4) order the water to be mixed with saffron in order to hasten the birth of the child. Whenever a magic bowl is used the patient has to recite the *fātiḥah*. In the case of a child a grown up relative must read the *fātiḥah*. According to RENAUD¹⁷⁴ the patient has to turn his face, while using the cup, towards Mecca. When the patient is suffering from fright the cup is filled three times. This also holds true with bitten persons. Texts 3, 4, 5 and 6 say *يشرب منها المسموم اورسوله ثلاث مرات*. Some believe that in some diseases the patient must drink seven times from the cup. Children who waste away without any apparent cause should use it for forty successive days.

Further directions for use are: A patient suffering from epistaxis has to wash his face with the water from the bowl *والرعا ف يغسل وجهه*, (texts 7, 11¹⁷⁵). Texts 3 and 4 order the water to be snuffed up. This direction is followed also in the case of *maghl*, *ولقطع الرعا ف والمغل ينشق بالماء منها*. A woman in labour should place the cup on the right side of the body (probably on the right iliac region), *والمطلقة على جنبها اليمين*, (text 11), or on her body, *والمطلقة على* *واللقولنج يتجرع*.¹⁷⁶ In case of ileus hot water should be taken, *جسمها*.¹⁷⁷ A bewitched house will be purified if it is sprinkled with the water of such a vessel, *اذا يرش منها البيت*.¹⁷⁸

¹⁷² CANAAN, *Dämonenglaube im Lande der Bibel*, p. 32.

¹⁷³ These liquids as well as wine were used in connection with the Aramaic vessels. ¹⁷⁴ *l. c.*, pp. 337 ff. ¹⁷⁵ See also WIET, p. 95, No. 3897.

¹⁷⁶ WIET, No. 3897.

¹⁷⁷ WIET, p. 156, No. 9937.

¹⁷⁸ WIET, p. 151, No. 9420.

ساومه السحر. Restless and nervous children will become quiet the moment a bowl is placed at the head of their bed, ¹⁷⁹ولنكد الاطفال. ¹⁷⁹يوضع عند راسه. There are three different expressions in the Arabic texts to describe the method of drinking: *yašrah*, he drinks, *yusqā*, he is given to drink and *yadjras*, he swallows in one draught. The two first are always used in connection with the bites of poisonous animals, while the third expression occurs only with *qulandj*.¹⁸⁰

Water, especially ritually clean water, played a very great rôle in Semitic cleansing and religious procedures.¹⁸¹ The Qur'ān describes water as the medium of life (XXI, 30).¹⁸² The healing power of water is increased by the powerful verses and talismans, the intrinsic power of which is imparted to the water itself. All the other regulations which have been mentioned in connection with magic bowls are also known to popular medicine and books on magic. Rain water,¹⁸³ pure water, water from Zamzam¹⁸⁴ and from cisterns to which the rays of the sun do not penetrate,¹⁸⁵ rose water,¹⁸⁶ water and salt,¹⁸⁷ milk and oil¹⁸⁸ are mentioned in such books. At times ink is mixed with spices like saffron and oil of rose.¹⁸⁹ No unclean substance, like blood, should be mixed with the ink.¹⁹⁰ Even the instructions for the use of written talismans coincide with those given for magic cups; the patient must drink the water in which the written talismans were placed, must sprinkle his body with the same, while in case of difficult labour the talismans have to be placed on the genital organs.¹⁹¹ After performing any of the procedures the patient says a short prayer. The following is much used: اللهم اكف وانت الكافي اللهم عاف وانت المعافي اللهم اشف وانت الشافي. "O my God satisfy (our needs), for Thou art the Satisfier. O my

¹⁷⁹ See also texts of WIET on p. 151, No. 9420; p. 167, No. 24; p. 267, No. 538. One of the holy books (Mohammedans and Christians) or the picture of a saint (Christians) are also placed on the head end of the bed of a sick baby.

¹⁸⁰ The Babylonian Jews have at times placed magic vessels in the foundation trenches of their buildings, WALLIS, *l. c.*, p. 283.

¹⁸¹ Prov. 10¹¹; 13¹⁴; 16²²; Ezek. 47¹⁻²; Joel 3¹⁸; Zech. 13¹; 14⁸.

¹⁸² CANAAN, *Water and the Water of Life*, JPOS, IX, 57 ff.

¹⁸³ DÉRABİ, 28.

¹⁸⁴ BÜNİ, I, 36.

¹⁸⁵ DÉRABİ, 39.

¹⁸⁶ DÉRABİ, 19, 28; BÜNİ, I, 68. JAMES ROBSON, *Magic Curses in Popular Islam, The Moslem World*, XXIV, 38 ff.

¹⁸⁷ DÉRABİ, 39; ROBSON, *l. c.*

¹⁸⁸ BÜNİ, I, 68, 69.

¹⁸⁹ DÉRABİ, 39; NÄZİLİ, 153.

¹⁹⁰ NÄZİLİ, 68.

¹⁹¹ NÄZİLİ, 83.

God preserve our health, for Thou art the Preserver. O my God heal, for Thou art the Healer."

The use of water sanctified in such a way was known to and practiced by the whole Mohammedan world. Most authorities allow the practice, though a few disapprove of it.¹⁹² If the patient, while in a clean state, uses such a cup with absolute confidence and trust, he will obtain the desired cure. This condition is found on *hūdjub* of the character similar to the cups, namely *hirz el-ghassāleh* and *es-sabʿ suhūd es-suleimāniyeh*. Here we read: مع حسن الاعتقاد وخلوص النية and ما دام على طهر ينال حامله ببركته كل امنية . ينال حامله كل امنية وانما الاعمال بالنيات وانما لكل امرى ما نوى .

We do not know exactly the origin of these cups. Some inscriptions say that they are copies of authentic and approved cups. Thus el-Maʿmūn is mentioned in some,¹⁹³ رصدت ونقشت "from the treasures of el-Manṣūr". Text 3 says من الذخائر المنصورية. Text 4 ends with the words نقلت من الخزانة الشريفة بقلة دمشق المحروسة, "It was copied from the noble cupboard of the fortress in Damascus, the guarded."¹⁹⁴ In order to assure the public of the great and sure benefits of these cups some inscriptions say expressly:¹⁹⁵ وهو ما اتفقت عليه ائمة الدين والخلفاء الراشدين لمنافع المسلمين, "This is that on which the religious leaders and orthodox Caliphs were in perfect agreement for the benefit of the Mohammedans."¹⁹⁶

The Palestinians give a mythological explanation.¹⁹⁷ It is said that the good angels employ just such cups to perform their ablutions. Once they forgot one of the vessels beside the spring where they used to assemble to bathe. A human passer-by happened to find it and picked it up. The miraculous properties of the cup were soon discovered. Copies were then made and the knowledge thus spread far and wide.

¹⁹² NAZIL, pp. 68, 123 ff. ¹⁹³ WIET, p. 121, No. 4431; p. 176, No. 60.

¹⁹⁴ RENAUD, l. c., p. 354. describes a cup which was kept in the fortress of Damascus. ¹⁹⁵ Texts No. 12, 13, 14.

¹⁹⁶ According to some *al-ḥulafāʾ-r-rāṣidīn* stand specifically for the four first *ḥulafāʾ*. ¹⁹⁷ JPOS, III, 130.

DEUX FRAGMENTS DE KHORSABAD

R. DE VAUX O. P.

(JÉRUSALEM)

I

M. G. BOSON a publié dans *Ægyptus*¹ la photographie d'un fragment cunéiforme entré au Musée de Turin en 1920. Il souhaite qu'on puisse l'éclairer sur sa provenance et son contenu. La gravure a le style magnifique des textes de Sargon et il n'est pas malaisé de reconnaître que le morceau s'encadre exactement dans une phrase que reproduisent, à de menues variantes près, plusieurs inscriptions du grand monarque: *Inscription des Taureaux*,² *Tablette de bronze*,³ *Cylindre*.⁴ En complétant d'après ces parallèles, on peut rétablir hypothétiquement le passage dont le fragment faisait partie:

[. ša eli aluḪarran šululala-šu it]-ru-šu-ma
[ki šab dAnim u dDagan išṭuru zakutsu zika—]-ru dan-nu
[ḫaliṣ namurrati ša ana šumqut nakire šut—]-bu-u iškakku-šu

«(Sargon), qui a étendu son ombre sur Ḫarran et qui selon le vœu d'Anu et d'Adad a écrit (la charte de) son affranchissement, le héros puissant revêtu de terreur qui brandit son arme pour abattre l'ennemi».

Ce débris provient certainement de Khorsabad. Il est si banal qu'il est bien délicat de préciser à quelle série de textes il se rattache. On peut cependant rappeler que, d'après les copies de Botta, le début des *Annales* dans la Salle II (plaque 2) permet, par une autre voie, de restituer la même phrase; mais la disposition de ces vestiges est telle qu'elle rend impossible que le fragment de Turin en ait été détaché. L'inscription dont il provient était répartie sur des lignes notablement plus courtes. Il peut s'agir d'une autre recension des *Annales*, par exemple celle de la Salle V, qui est très semblable et dont le commencement est perdu — ou d'un tout autre texte.

¹ XV, 1935, p. 424, No. 6.

² I. 9-12 (WINCKLER, pl. 41).

³ I. 13-17 (WINCKLER, pl. 42).

⁴ I. 6-7 (WINCKLER, pl. 43).

II

Je profite de cette opportunité pour donner une nouvelle transcription d'une autre épave de Khorsabad, qui a échoué à Jérusalem. La pièce appartient aux Dames de Sion¹ et aurait été trouvée (?), à la fin de 1859², au cours des travaux du Père RATISBONNE à l'Ecce Homo. Elle est restée ignorée jusqu'en 1890, où elle fut publiée presque simultanément par J. MÉNANT³ et par T. H. LEWIS, d'après un déchiffrement de W. BUDGE.⁴ Tous deux reconnurent qu'elle provenait de Khorsabad. Ce fragment appartient à un récit de la fondation de Dûr-Sarrukîn, qui est reproduit identique en plusieurs inscriptions: *Fastes* de la Salle XIV,⁵ *Taureaux*,⁶ où tout notre texte se retrouve. De plus, les lignes 1 et 2 seules se lisent dans les *Annales*,⁷ les *Fastes*,⁸ le *Pavé des Portes*.⁹ Les lignes 3 à 7 seules ont leur correspondant dans le *Cylindre*.¹⁰

La transcription de Ménant est très incorrecte, celle de Budge n'est pas sans faute. Voici comment peut se lire le texte, complété par son parallèle des *Fastes* de la Salle XIV:

1 as-kup-pi aban pi-li	[<i>rabûtemes dâdme kišitti qâtîia</i>]]
2 ši-ru-uš-ši-in ab-šim-	[<i>-ma usurrušun ušasšira ana tabrâti</i>]]
3 ú-ša-lik IV šarê III nerê	[<i>I šuššu I 1/2 GAR II ammate mišîhti dârišu</i>]]
4 âš-kun-ma e-li šadii zaq-	[<i>-ri nšaršid temenšu</i>]]
5 i-na ri-e-ši ar-ka-	[<i>-ti ina šili kilallân miḫrit VIII šârêmes</i>]]
6 VIII abullêmes ap-te-maḍ	[<i>Šamaš-mušakšid-irnittia dAdad-mukin-</i>]]
7 hegalli ¹¹ -i a šu-mu abul-	[<i>li dŠamaš u abulli dAdad . . .</i>]]

«Sur des grandes plaques de gypse, je reproduisis [les villes que mes mains avaient conquises et je les disposai autour de ses parois], j'en fis [quelque chose d'admirable]. De 4 sar, 3 ner, [1 sos, 1

¹ Je remercie la Mère Supérieure des Dames de Sion de m'avoir facilité l'examen de cette pièce et d'en avoir autorisé la publication.

² En 1857, d'après un autre témoignage également incertain.

³ *Recueil de Travaux* . . . , XIII (1890), p. 194-197.

⁴ *P. E. F. Quarterly*, 1890, p. 265-266.

⁵ l. 40-43, dans l'édition de WEISSBACH, *ZDMG*, LXXII (1918), p. 176-185

⁶ l. 77-84 (WINCKLER, pl. 41). ⁷ Salle V, 2, l. 4-5 (WINCKLER, pl. 24)

⁸ Salle X, 14, l. 165 (WINCKLER, pl. 36).

⁹ II, l. 39-43 (WINCKLER, pl. 37); IV, l. 120-123 (*ibid.*, pl. 39).

¹⁰ l. 65-68 (WINCKLER, pl. 43).

¹¹ *HÊ-GÂL-li*.

double canne $\frac{1}{2}$, deux coudées], j'établis [la mesure de son rempart] et sur le haut rocher [je posai son fondement]. Par devant, par derrière, [sur les deux côtés, face aux huit vents], j'ouvris huit portes: [«Šamaš-me-fait-remporter-la-victoire» et «Adad – m'assure-] l'abondance», tel était le nom de la porte [de Šamaš et de la porte d'Adad, *etc* . . .]».

Le texte n'a donc aucun rapport avec Jérusalem où il a été amené par les hasards de la brocante. Ni ce fragment ni celui de Turin ne nous apprennent rien que nous ne connaissions déjà; il valait cependant d'identifier l'un et de rappeler l'autre au souvenir des assyriologues.

SAMARITAN INSCRIPTION FROM GAZA

W. R. TAYLOR

(TORONTO)

In *J.P.O.S.*, Vol. X, pp. 18, 22, I gave an account of a Samaritan inscription which was the first in order of discovery to come from Gaza.¹ In 1934 in the course of some building-operations within the city four additional Samaritan inscriptions came to light. Through the courtesy of the Department of Antiquities in Jerusalem which put the photographs at my disposal a description of this recent discovery is now made possible.

These new inscriptions are listed in the Department's Museum Catalogue as Nos. 33.2542 and 33.2543. In the letter enclosing the photographs Mr. R. W. HAMILTON, acting-Director of the Department, kindly supplied the following information. "One of the inscriptions (33.2542) is incised upon a slab obtained by cutting a marble column lengthways. The slab is 1.42 m. long; 0.269 m. wide in the middle; 0.12 m. and 0.19 m. wide at the ends. The height of the letters is about 1.4 centimetres and the intervals between the lines measure about 1.8 cm. The other three (33.2543) are inscriptions on part of a shaft of a column measuring 1.33 m. in length and 0.33 in diameter. Two are on one side with a 14 cm. interval between them, the third is on the reverse."

"The inscriptions were found together by a certain Faig Sagallah at a depth of 4 m. while digging the foundations for shops in the Main (new) Street at Gaza. The site is close to the so-called Samaritan Bath (Hammām es-Sumara).² The stones were found lying loose."

¹ A second Gaza inscription was published by CLERMONT-GANNEAU, *Revue Biblique*, 1906, p. 84.

² See GATT, *Plan of Gaza*, *Z.D.P.V.*, Bd. XI (1888), p. 149.

No. 33.2542. Pl. VI, A.

בשם יהוה הגדול הרחום והחנון —

שמע ישראל יהוה אלהינו יהוה אחד ואהבת את יהוה —
 אליהך בכל לבבך ובכח נפשך ובכל מאודך והיו הדברים האלה —
 אשר אנכי מצוה היום עלי לבבך ושננתם לבניך ודברתם כם —
 בשבתך בבית בלכתך בדרך בשכבך ובקומך וקשרתם לאות —
 על ידך והיו לטטפות בין עיניך וכתבתם על מזוזת בתיך ובשעריך —
 ויהוה הוא ההלך לפניך ויחששו איביך לך —

This inscription reproduces the text of Dt. 6⁴⁻⁹ (lines 2-6) and Dt. 31^{8aa}, 33^{29ba} (line 7) with a preface (line 1) which points to influence from Islam. The words are marked off by a vertical line. The verse-divisions which are indicated by special signs correspond to those of the Hebrew text except at עיניך (line 6). An additional device is introduced after איביך (line 7) in order to avoid a blank and to preserve the alignment of the inscription. The text varies from the Masora in five instances, reading בכית (M. בלכתך) and בשכבך (M. ובשכבך) in line 5, ירך (M. ירך), לטטפות (M. לטטפת) and בתיך (M. ביתך) in line 6.

No. 33.2543. Pl. VI, B.

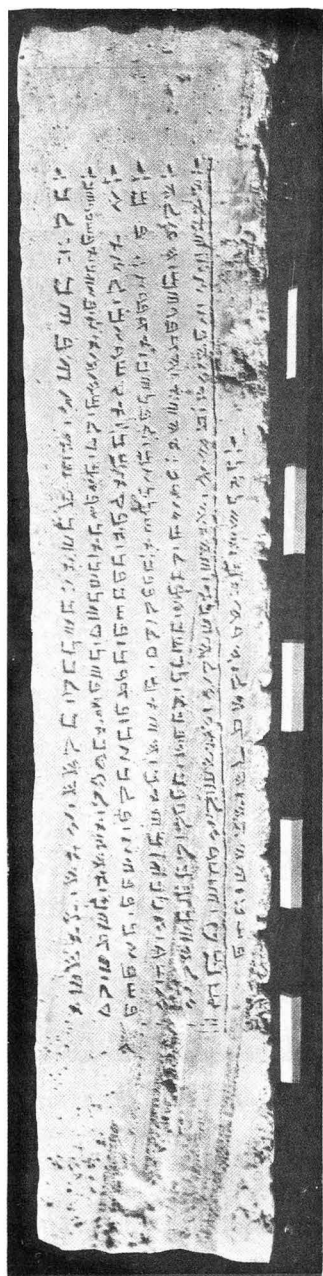
— Front (A) —

אלהים : עמך
 בכל : אשר :
 אתה : עשה

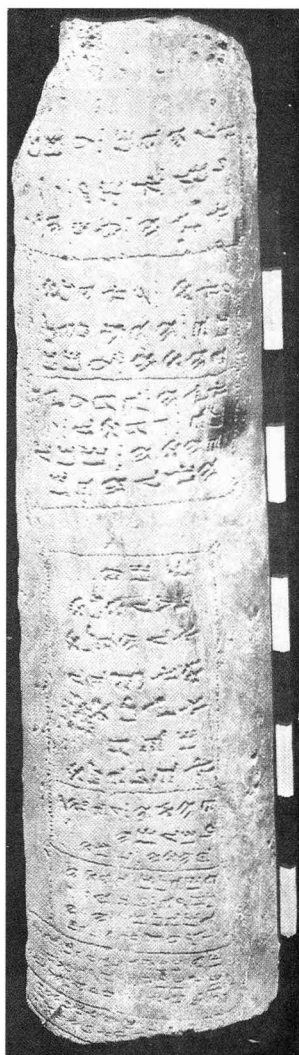
ראו : ראינו
 כי : היה כין
 יהוה : עמך

אתה : ידעתי
 כי : גדול :
 יהוה : מכל :
 האלהים

The three sections of this inscription are taken respectively from Gen. 21²²; 26²⁸; Ex. 18¹¹. The text does not differ from the Masora except in the second section where in the second line כין has been introduced. If כין is the Hebrew כן, the position of the



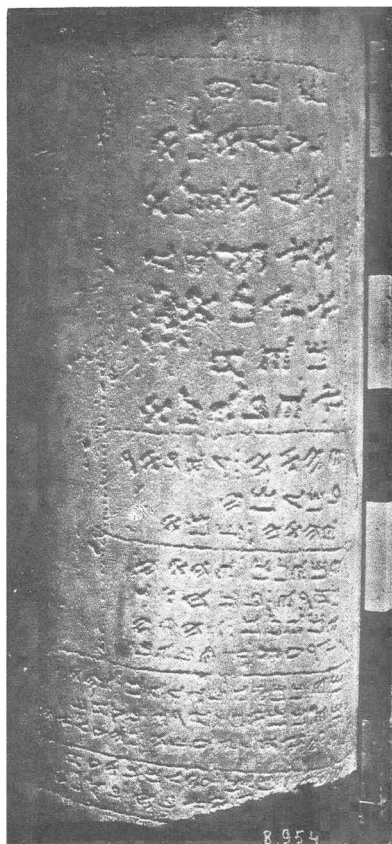
A.



B.



A.



B.

word in the sentence suggests that it is an interpolation, as well as the fact that there is no evidence for it in the Hebrew-Samaritan text. In any case the translation is "We have surely seen that so Jahweh has been with you." But if כִּין is to be read *kaen* (= כָּהֵן), then the text has been changed in the interests of Samaritan apologetics, "We have surely seen that the Priest of Jahweh has been with you."

No. 33.2543. Pl. VII, B.

Front (B)

שמע
בקלוננו
אלהינו
ואציל
אתנו
מיד
איכינו

יהוה : קיבור
במלמה
יהוה : שמו

ימינך : יהוה
נדרים : בכחו :
ימינך : יהוה
חרעץ : איביך

מי : כמוך : באלים : יהור
מי : כמוך : נורי : בקדש
נורא : רהלת : עשרה : פהעלאה

יהודה : ימלך : עולם : בוער
----- ואבר : בקפה

Ex. 15^{3,6,11,18} has supplied the text of the last four sections of this inscription with the apparent exception of the last line of the last section. The first section is a prayer of composite origin. The text agrees with the Masora except in the third section where בכחו (M. בכח) and איביך (M. אויב, LXX איביך) are read and in the fourth section where פלאה instead of פלא appears. The orthography,

however, is faulty and betrays both carelessness and ignorance on the part of those responsible for the execution of the inscription. In this respect note (a) בקליונו (l. 2) which is probably a mistake for בקולנו due to the workman's clumsiness, (b) ואציל (l. 3), properly והציל, (c) במלמה (l. 9) for נדרי במלחמה (ll. 12 and 16) for נאדרי in which the loss of the consonant has been occasioned through the failure of the gutturals to preserve their consonantal force in Samaritan. To this defect of Samaritan gutturals and their consequent pronunciation as *litterae prolongationis* must be attributed the curious form פהעלאה (l. 17) for פִּי־אֵה corruptly pronounced פִּי־אֵה. The second section (Ex. 15⁸) was a favorite Samaritan quotation¹ but the Samaritan text differs from the Masora in reading גבור for איש owing to an anti-anthropomorphic tendency such as we see in Ps. 24^{8,2}. The spelling of גבור, however, seems to have varied, גיבור in the Emmaus inscription and קיבור in the one before us. בוער (l. 18) is an interesting anomaly as a phonetic transcription of וְעַר.

Because of such orthographic irregularities the fragment of the last line presents difficulties in transliteration and translation. The fourth letter seems to be ד although it resembles also ח. A confusion of the two letters in whole or in part was an easy matter for a careless and uncertain workman. The last word בקפו is probably to be understood as בכפו. Since the text of this inscription is made up of elements taken in order from Ex. 15, and since the first half of the last section is Ex. 15¹⁸, it is probable that line 19 was a brief summary of Ex. 15¹⁹. The translation of the fragment of this line would then be, "and will perish by his hand."

¹ See (a) the Emmaus inscription published by LAGRANGE, *Revue Biblique*, Vol. II (1893), p. 114; MONTGOMERY, *op. cit.*, p. 276: (b) the Damascus inscriptions published by SOBERNHEIM, *M.D.P.V.*, Vol. VIII (1902), p. 73.

² MONTGOMERY, *op. cit.*, p. 276, footnote.

No. 33.2543. Pl. VII, A.

Reverse

אנא
גרמאנר
כתבר
אחד
עולם
יהור
יחלם
לכם
ואחתם
תחרישון
יהור : אל
רחום
וחנון
נר : גלמט
כ

Here the first section which is to be translated, "I, Garmana, have written," seems to give us the name of the person who was in some way responsible for the execution of at least this fourth inscription. The orthographic defects of the three inscriptions on the column dispose us to father them all on him. His name is to be explained as a form of the Latin Germanus just as the name Marka is the equivalent of Marcus.¹ The name circulated widely in the Byzantine period² and was held in esteem among the Samaritans because of the legend of Garman, the prefect of the Emperor Constantius.³

In the second section, which is an attempt to reproduce the text of Ex. 14¹⁴ inclusive of the last two words of v. 13, it is to be noted that אחד (= עד), יחלם (= יחלם), ואחתם (= אחם) exhibit the characteristic weakness of the inscriber. The third section, which is an extract from Ex. 34⁶, is a favorite citation for the Samaritan

¹ MONTGOMERY, *op. cit.*, p. 294.

² LUCAS, *Griechische Inschriften aus Gerasa*, M.D.P.V. 1901, p. 78.

³ MONTGOMERY, *op. cit.*, p. 101.

doctrine of the character of God as their hymns and litanies show.

As to the fourth section, I can offer no translation. It is possible that defective orthography even more than the damage which the inscription has suffered at this point obscures the Biblical sources. A reference to Gen. 9²⁰ is highly improbable.

These inscriptions were executed by different workmen and belong to different periods in the history of the Samaritan community in Gaza. The script of the first one resembles that which is met with in material of an early date¹; the other inscriptions exhibit the influences of the later manuscriptal types, i.e. down to the fourteenth century. The bad workmanship and spelling of these three also indicate that they belong to a time when, through persecution or bad fortune, ignorance and poverty were overtaking the Samaritans of that region. Beyond this it does not seem possible to be much more definite in respect to dates. Two or three facts seem to evidence that none of them came from a very late date. The depth at which they were found within that part of the city which lies within the lines of the old wall argues that they had lain there for a long time. Then, while there are references to Samaritans in Gaza in records from the fourth to the seventeenth century,² their numbers appear to have been negligible after the twelfth century. MESHULLAM of Volterra states that on his visit to the city in 1481 there were four Samaritan families.³ FELIX FABRI (1483)⁴ makes no mention of Samaritans in his list of the peoples who gave the city its cosmopolitan character. On the other hand Benjamin of Tudela (1163) found 200 Samaritans in Caesarea, and 300 at New Askalon, and 400 in Damascus; and we may infer that the Gazan community was in size comparable with the others for according to the Samaritan Chronicles some 500 Samaritan captives were returned from Damascus to Gaza ca. 1137.⁵ Finally, we have evidence that Samaritan inscriptions as early as the thir-

¹ MONTGOMERY, *op. cit.*, p. 275 and plate 13.

² MARTIN A. MEYER, *History of the City of Gaza*, 1907, p. 71.

³ *idem*, p. 93.

⁴ *Pal. Pilgrims' Texts*, Vol. X, pp. 427-452.

⁵ MONTGOMERY, *op. cit.*, pp. 137, 132.

teenth century¹ were influenced by the Mamluk naskhi type such as we see in the Arab inscriptions of the Mosques of Gaza.² Such considerations indicate that our inscriptions may be dated earlier than the thirteenth century.

Since Samaritan inscriptions have come to light at two different points in the Gaza district, the first a mile from Gaza and these from within the town, the Samaritans were not confined to one location in Gaza. That any of these inscriptions pertained to a synagogue is not clear. The marked similarity that these four bear in character to those from a house in Damascus published by SOBERNHEIM make it probable that they too belonged to a private residence.³

¹ M. SOBERNHEIM, *M.D.P.V.* 1902, pp. 70-79; I. BEN-ZEVIE, *J.P.O.S.*, Vol. X, p. 222.

² Such as those published by L. A. MAYER, *Arabic Inscriptions at Gaza*, *J.P.O.S.*, Vols. IX-XI.

³ With respect to the inscription found not far from the Hammām es-Sumara "à trois ou quatre minutes à l'est de la grande mosquée, vers l'endroit où, suivant la tradition, la Sainte Famille se serait arrivée lors de sa fuite en Egypte", M. CLERMONT-GANNEAU (*l.c.*) says "avec cette inscription ont été aussi mises à jour une certaine quantité de pierres de taille provenant sans doute d'un édifice ancien qui pouvait être la synagogue samaritaine de Gaza".

BA'LU AND HIS BRETHREN

H. L. GINSBERG

(JERUSALEM)

In *Syria* XVI, pp. 247-66, CH. VIROLLEAUD presents still another carefully edited fragment of the Ugaritic epic of Ba'lu. It consists of two columns, both inscribed upon the same face of the tablet and apparently each containing a complete episode (in the case of col. 1 perhaps only the conclusion of an episode); for at the foot of each is drawn a short double horizontal stroke, such as also serves elsewhere to mark a pause in the narrative. The account in the first column would not have filled it to the bottom were it not for the large characters employed; conversely, the story of col. 2 would have had to be carried on to another "page" had not the scribe, who began it in a somewhat smaller hand than col. 1, gone over to very small and crowded writing as from l. 12. The top of both columns and the ends of most of the lines of the second are missing. Owing to the latter circumstance, the results obtained in the interpretation of col. 2 are not nearly so satisfactory as in the other.

The orthographic peculiarities of our tablet are noted by VIROLLEAUD. Both in l. 21 and in l. 35 of col. 1, the scribe has omitted the horizontal wedge of the *d* of *mdbr*, making it *mlbr*; and in l. 11 *ibid.* he has hesitated between *trm* and (less probably) *mrn*.

Most strangely of all, he has *y!hq* (1:12) and *pi* (1:14, 19) from the verbs *shq* and *ys* of the other texts. I would observe, however, that in this latter madness of his there is a certain method: in both these roots, *!* represents Proto-Semitic *q*; which, though normally written *š* in our texts, may very well have been distinguished from Proto-Semitic *š* in speech. I used to think it might have been pronounced *z* at this period, for that would explain both its approximate notation by the sign for *š* in the Ugaritic script and its ultimate phonetic merging in *š* in Phoenician and

Hebrew; now, however, in view of these sporadic spellings *ṭḥq* and *ṭi*, it would seem that primitive *ḏ* was still articulated as a dental spirant. But perhaps both explanations are correct, and both pronunciations were known in northern Syria around the middle of the second pre-Christian millennium: analogies are not wanting in Arabic-speaking countries today.¹

The above reasoning would also account for *ṭm*, 1:24, if it were the plural of *ṭd* "tree or wood", but it is more likely from the Proto-Semitic root *ṭm* "to be mighty" (*v.i. ad loc.*); and so does *ṭr*, 2:33, represent Proto-Arabic *ṭahr* ("back"), and *ymṭa*, 1:37, *mṭa*, 2:51, 52, the Proto-Semitic root *mṭ* "to attain".² As for *ṭl*, 2:31, ALBRIGHT has connected it with Arab. *ḡalīz* (on which suggestion see *JRAS* 1935, p. 59 n. 4, and now *Orientalia* 1936, p. 173). (In *ḥrṭ*, however, 1:41, *ṭ* seems to represent an original *ṣ*; *v.i. ad loc.*)

That, as I have always maintained, our dialect also kept Proto-Semitic *ḏ* distinct from *d* in speaking and occasionally also in writing, is in all probability confirmed by *ṭḥṣ*, 2:33, 34, 36, which can hardly be anything but a form of the verb *ṭḥḏ*: *v. ad loc.* It is true that this means that I must give up the view that the various forms of the v-shaped letter all have different values: *ṣ*, *ḏ* and *ḏ* respectively; but it confirms once again that none of them ever corresponds to Hebrew *ṣ* (but only to Heb. *ṣ* or *z* [⟨*ḏ*⟩ or Hurrian *ḏ*).

Coming, now, to the content of our fragment, I have chosen the above title for this paper because col. 1 relates the birth of gods who are according to all indications children of ʾIlu by *Tlṣ*, alias *Dgmiya*, the handmaid of ʾIlu and ʾAṭirtu, and therefore half-brothers of Ba'lu; who is ʾIlu's son by ʾAṭirtu herself: and col. 2, l. 36, still speaks of these "Devourers", whilst 2:47ff (*q.v.*) speak explicitly of Ba'lu's brethren, kinsmen and companions. For all details, so far as I have been able to work them out, see the translation and commentary.

¹ In practically all Arabic dialects, (*ḏ*) and (*ṭ*) have fallen together in *ḏ*, *d* or *z*. For Ugaritic, however, I assume that original *ṭ* was still sounded *ṭ* by all speakers, and that only *ḏ* may have become *z* (but not yet *ṣ*) with some.

² I do not know what to do with *ymṣi*, text A 5:4: is it a conflation of *mṭ* and *yṣ*? (read *yḏ*)? I shall have more to say about blending in Ugaritic further on.

Column 1.

[		]m	- - - - -		
[]	- - - - -		
[		]d'arš	[		]of the earth
[		?a]ln	[		?p]ain(?)
[		]nbhm	5	[	]--in them (?)
[		]kn	[]--
[		?tn]h(?)rm.km.šhr	[		?she sh]ines like the dawn,
[		]ln.km.qdm	[		]---like the east.
[		]bdn.>il.>abn	[		]the body(?) ¹ of our father(?) >Ilu.
kbdk>iš.>ikln.	10		The (?) inward parts she devours		
			like a mole (?),		
tdn.km.t(?)rm.tqršn.			the (?) fat she nibbles like a ferret (?). ²		
>il.ylḥq.bm			>Ilu laughed in his		
lb.wygmš.bm.kbd			heart and exulted ³ in his inward parts:		

¹ See *Orientalia* 1936, p. 167.

² The subject is evidently the *Tls*, or *Dgmiya*, of ll. 14-16. Whether, assuming that is correct, this handmaid is a glutton by nature or only, owing to special causes, displays an exceptionally hearty appetite on this particular occasion is hard to say. In the former case heredity, in the latter external influences upon the embryos, account for the characteristic from which the beings whose birth is decreed in ll. 25-7 receive their names.

As regards vocabulary, *ʾiṣ* almost certainly does not mean fire. For, (1) "fire" is in Ugaritic *ʾiṣt*; cf. Akkad. *iṣātu*, Aram. *ʾeṣāt*, Ethiop. *ʾesdt*: (2) to compare any sort of eating through the mouth with the action of fire is bad poetry: (3) the simile "as fire consumes" is most natural with very dry materials like tow and stubble, least so with foods; here the most obvious eaters are living creatures: and (4) in l. 11 the comparison is certainly with an animal, as shown by the verb *qrš* (Arab. *qrḡ*, Akkad. and Talm. Heb. *qrš* "to gnaw, nip off") "to nibble." Accordingly, I prefer to compare Talm. Heb. *אִשָּׁה* which is pointed *אִשָּׁה*, in Codex Kaufmann Mishnah Mo'ed Qaṣan 1:4 and *אִשָּׁה*, in Kelim 22:1. In Gen. Rabba, ch. 53 beginning, this word is identified with *אִשָּׁה* Ps. 58⁹, where the Targum also has *אִשָּׁה*. This is also the rendering of *חֲנֻשֶּׁת* Lev. 11⁸⁰ in Onqelos. See Theodor to the cited passage in Gen. Rabba.—*t(?)rm* looks as if it might be the Heb. *tor* "turtledove," with *-ma* or the plural ending, but that is not very appropriate here.

³ Inferred from the context by V., who rightly compares Gen. 18¹² and contrasts, from an unpublished text, the interesting parallel: *tbky bm lb, tdm^c bm kbd*.—Our passage is the third example of 'Ilu's laughter in the epic, the other two being A 3-4: 14 ff and B 4-5: 27 ff. His geniality struck BAUER already in his first article on the Ras Shamra deities, *ZAW* 1933, 82f; on the other hand,

pi.ṣat.lilš
 ʾamt.yrlḥ
 ldgmy.ʾamt
 ʾatrt.qḥ
 ksʾank.hdgk

Go forth, thou, O Tlš
 15 handmaid of Yariḥu,
 O Dgmiya⁴ handmaid of
 ʾAṭirtu!⁵ Take
 thy birth-stool (?), thy baggage,⁶

I am not aware that anybody has yet pointed out that the theophorous personal name which the biblical hypocoristicon Yiṣḥaq (Isaac) presupposes could only have been inspired by this specifically Canaanite theology.

⁴ On the ending *iya*, see *Orientalia* 1936, p. 168.

⁵ There is room for doubt as to whether *yrlḥ* designates ʾIlu or ʾAṭirtu. Observe, however, that ʾIlu here plays the same part as "*Trḥ*, the New Moon", in the by now famous Terah-passage, *Syria XIV*, p. 149 n. 1, on which see *JRAS* 1935, 60ff; and that the proper name Yariḥu is masculine in form, as the Hebrew appellative *yareah* is also by use. We thus arrive at the following provisional equations and proportions:

ʾIlu (= Yariḥu = *Trḥ*-Hudṭu): Abra(ha)m, the son of Terah =

ʾIltu (= ʾAṭirtu of the Sea): Sara(i) =

Trḥ's "beloved" (= *Tlš*, handmaid of Y., *Dgmy*, hm. of ʾA.): "Hagar, Sarai's handmaid" (Gen. 16⁸).

It is suggestive that Sara(i) means the same thing as Rabbatu, the epithet of ʾAṭirtu, viz., "princess."

It will be remembered that in Gen. chapter 16 Hagar flees (in the duplicate narrative ch. 21 she is expelled) into the desert some time after becoming pregnant by Abram. In this account, she returns to her mistress's home and gives birth there to Ishmael, who only becomes a desert marauder later on; but the version of our epic, according to which the gravid handmaid goes out into the desert and is delivered there of the Devourers, or Raveners, sounds more original.—For ʾamt ʾatrt cf. B 4-5:61.

(Of course the presence of legendary traits in a tradition does not deprive it of all historical value. On the general historical background of the stories of the patriarchs, see W. F. ALBRIGHT, *Archaeology and the Bible*, 3d ed., pp. 129 ff; on the social background of the Hagar episode, see latterly S. I. FEIGIN in *David Yellin Jubilee Volume* כנרת לדוד, pp. 48-68; E. A. SPEISER, *AASOR XIII*, p. 44; C. H. GORDON, *Revue Biblique* 1935, p. 35.)

Both ʾIlu and ʾAṭirtu are marine gods: does ʾIlu's name of "Yariḥu," or "*Trḥ* the New Moon", reflect an observation of the connexion between moon and tides?

The supreme importance of the moon-god that results from the foregoing is not surprising, having regard to the considerable body of truth in the well-known theses of DITLEF NIELSEN. Cf. now A. MUSIL, *The Manners and Customs of the Rwala Bedouins*, pp. 1-4.

⁶ Arab. *ḥidj* "load, burden"; *ḥiddjat* "vehicle for women"; [further: *haudaj* (with *h*), "domed woman-litter upon a camel"⁷].

<i>hilk.wpi</i>	thy swaddling-clothes, and go forth
<i>b'aln.ikm</i>	20 into the plain ⁷ of <i>Tkm</i> (?),
<i>btk.mlbr</i> (read <i>mabr</i>)	into the midst of the steppe
<i>ilšiy</i>	of <i>ilšiy</i> (?).
<i>kry(.)amt</i>	Dig, ⁸ O handmaid, ⁹
<i>pr.ʿtm(.)yd</i>	the soil; the might of the hand(s) ¹⁰

⁷ This, or something similar, is required by the context. And it gives one to think. F. STUMMER, "Convallis Mambre und Verwandtes", *JPOS* 1932, 6—21 points out that Jerome's rendering of the Hebrew מִלְכָּן by *convallis* in Gen. 12⁶; 13¹⁸; 14¹⁸; 18¹, or by *vallis*, Dt. 11³⁰; Ju. 4¹¹, and that of מִלְכָּן by *campestris* in Gen. 14⁶, is based on Jewish tradition. Not only, he observes, have the Jewish targums מִלְכָּן in most of these passages, but in two to which the version of Aquila has been preserved, Dt. 11³⁰ and Ju. 9⁶, the word is translated αὐλών and πεδίον respectively.

I would refer to STUMMER's article for further instances and add to them:

a) on Jerome's side: *Interpr. Heb. Nom. (Onomastica Sacra* ed. LAGARDE) 6:5; 18:10; 22:14; 23:21; 24:27; 41:27.

b) on the Aramaic side:

i) the Samaritan targum to all the Pentateuch passages cited above.

ii) Gen. Rabba (ed. THEODOR p. 412) and Pseudo-Jonathan (as well as Onqelos, quoted by STUMMER) to Gen 14⁶.

STUMMER quotes from Jerome's elaboration of Eusebius's *Onomasticon* (*Eusebius Werke* III, i, hsg. von E. KLOSTERMANN, p. 15): Aulon non Graecum, ut quidam putant, sed Hebraeum vocabulum est.—I am not prepared to subscribe to this statement as it stands, but I do think that there is reason to believe that a Hebrew word *ʾelon* with very much the same meaning did exist, and was still known to the Jews of Palestine at the beginning of our Era, though it cannot have been intended anywhere by the authors of the Hebrew Bible. As STUMMER (also F. WUTZ, *Onomastica Sacra* I, p. 279) rightly points out, the Aramaic dialects of Palestine have no word resembling either the Heb. מִלְכָּן or the Greek αὐλών (Syriac at a late date borrowed the latter as *ʾaulónā*).

The difference in the first vowel of *ʾaln* and *ʾelón* is perhaps to be explained by the well known Hebrew love of dissimilation (*ʾdlān* > *ʾelón* > *ʾelón*); cf. מִלְכָּן from חֶלֶךְ etc.

Such may have been the history of our *ʾaln* in the following 2000 years.

⁸ As in Hebrew. ⁹ With "handmaid" for "handmaid of ʾAḥirtu", V. compares "lad (*ngr*)" for "lad of the sowing", C 69—70.

¹⁰ Cf. Dt. 8¹⁷. And yet the sense of the whole sentence is uncertain; for upon confronting it with Ea5, which I thought to have interpreted so convincingly in *JPOS* 1935, p. 331, one must wonder, with VIROLLEAUD, whether *pr ʿtm* does not constitute a phrase. For the present I consider this less probable than the solutions I have adopted, but it is a possibility that deserves to be recorded.

ıugrm.ḫl.lḏ
 ıaklm.tbrkk
 wld(.).ıqgm
 ıilm(.).ıyp'r
 ḫmthm
 bhm(.).grnm
 km.trm.wgbt

25 - - - - - Travail,¹¹ bear
 the Devourers, kneel¹²
 and give birth to the Ravensers.¹³
 Gods shall be called
 their names.
 30 Upon them shall be horns
 like bulls, and humps¹⁴

¹¹ The *ḫ* confirms that חוּלַי "to travail" is distinct from *ḫwl* "to go round" but cognate with חָרַי "to tremble" (akkad *ḫyl*).

On the mythology, I would note that in addition to the previously discussed affinities of our passage with the Abraham-Hagar motif, it is reminiscent of the following verse in Micah (4¹⁰): חוּלַי וְנָחַי בַּח צִיּוֹן כִּי־לִוְדָה כִּי שָׁחָה חֲצָאִי מִקְרִיָּה וּשְׁכָנָה בְּשָׂדֶה; for the last two words compare particularly *ṭskn ṣd* in the parallel Terah passage. We have here the phenomenon I called attention to in *JPOS* 1935, p. 328, of the adaptation of myth-motifs to prophecy. GUNKEL is being vindicated more brilliantly than anyone could have imagined. Cf. also H. TORCZYNER, 'Vom Ursinn der Bibel', *Neununddreissigster Jahresbericht der Hochschule für die Wissenschaft des Judentums*, pp. 21-32.

¹² Like the *qal* of *brk* in Hebrew.—*tbrkk* is the imperative of the *t*-reflexive of a corresponding quadriliteral (unless the second *k* is a dittography, which I do not consider very likely in view of the fact that the scribe wrote across the edge of the column in order to get it in). Similarly the imperative of *bšr* is *tbšr*, B 4-5:88 (*tbšr b'ḫl bšrtk yblt*—learn [cf. יִתְבַּשֵּׁר, 2S 18³¹], O Ba'lu, thy tidings which I have [or, which have been] brought; so already *Tarbiz* IV (1932-33) 380 (1-21), V. (1933-4) p. 87. It is therefore misleading to speak of a hitpael—so MONTGOMERY-HARRIS, *The Ras Shamra Mythological Texts*, p. 22—in Ugaritic, and incorrect to take *tbšr* with them—p. 92—as the third person fem. sing. imperfect of the intensive conjugation.—For the imperative of the *infix* *t*-conjugation, see below, n. 47.—For "kneel and bear", cf. 1 Sam. 4¹⁹. Prof. ALBRIGHT appositely refers me to the hieroglyphic determinant for 'give birth': a female figure standing on her knees, with a babe emerging from her womb.

¹³ Arab. *ıqq* "to rend"; V. cites Akkad. *uqququ* "(bête) brute, dont l'expression idéographique EME-DIB signifie 'celui dont on a ôté la langue'".

¹⁴ The meaning of *gbt* was correctly inferred by VIROLLEAUD from the context and from Akkad. *gab/pšu* "thick".—

Talmudic Hebrew has both a verb גָּבַשׁ "to pile up" and nouns from the same root, notably גִּבְשִׁישִׁי "mound"; but as at least the latter word is known in Aramaic as well, a borrowing from Akkadian is not precluded. But what is the Hebrew for "hump"? In the Old Testament, Isa. 30⁶, it is *dabbešet*; and the same is the name of a town in the territory of Zebulun, Jos. 19¹¹, which was no doubt situated upon an eminence. The personal proper name *Yidbat*, 1 Chr. 4⁸ will be from the same root. As for the initial *d* for *g*, it may represent a spontaneous variation, not uncommon in Greek (see LIDDELL and SCOTT or W. PAPE s. lit. *d*) and also represented in the Talm. Heb. loan-word

<i>km. ibrm</i>	like steers, ¹⁵
<i>wblm. pn. b'l</i>	and upon them shall be the face of Ba'lu. ^{15a}
<i>b'l(.y)tlk(.y)wysd</i>	Ba'lu went and roamed, ¹⁶
<i>yhp'at.mlbr</i> (read <i>mdbr</i>)	35 he wandered ¹⁷ to (on) the confines of the steppe.
<i>k(?)n.ymgý. ʾaklm</i>	Thus ¹⁸ he came upon the Devourers,
<i>wymit'a. ʿqqm</i>	and he found ¹⁹ the Raveners.
<i>b'l.hmdm.yhmdm</i>	Ba'lu coveted (them) exceedingly, ²⁰
<i>bndgn.yhrrm</i>	Dagānu's ²¹ son desired (them). ²²

by the side of (בְּצֶדֶק) *gdwssakom* (γλωσσόκομος); conversely, Aramaic has בְּצֶדֶק by the side of the more original דֹּנְבָא "tail". Another possibility is, of course, that the *d* may be due to a blending of the original *gabbaltu* with another word; cf. *JRAS* 1935, p. 53 n. 2, p. 55; and below, note 25.

¹⁵ Heb. *abbirim* (V.).

^{15a} As is well known, there are numerous Punic votive inscriptions dedicated לְרִבְחָא פְּנֵי כַּעֲבָל (VIROLLEAUD cites the formula in a different connexion). The creatures in question, be it noted again, are Ba'lu's half-brothers.

¹⁶ The verb *sd*, occurring always in parallel with *ylk* (*qtll* conjug.) can only mean something like "to roam". If a special proof were needed that this case is no exception, it would be supplied by *yh* in the following line; on which see the next note.

¹⁷ Ethiopic *wāhaya* "to wander, visit". In Arabic and Aramaic the root, if it is the same one, has acquired the sense of hastening; J. BARTH, *Wurzeluntersuchungen*, p. 13.

¹⁸ Or, "here" (Heb. *kan* [post-bibl.] and *ko*).

¹⁹ The tense corresponds to the Akkadian directive: for a tentative theory of the Ugaritic tenses see *Orientalia* 1936, pp. 176f, 181.

²⁰ *hamddu-ma hamada-ma*.

²¹ Dagānu is identical with ʾIlū. Not only because we know from text B that ʾIlū was Ba'lu's father, but also because the head of the pantheon surely had a temple in Ugarit, and thus far only two have been discovered there: one to Ba'lu and one to Dagānu. There may be more direct evidence in the *Dn'il* epic; where, according to VIROLLEAUD, *Syria* XVI, p. 257 n. 1, *bn'il* occurs in parallel with *b'l*. But before invoking this passage, I wish to see the context and make sure that parallelism there too means identity. In the case of *b'l* *bn dgn* it unquestionably does, as I have maintained for the last three years.

²² Again *-m = -ma*.—Without having seen this text, MONTGOMERY and HARRIS, *op. cit.* p. 97, connected *hr*, C 51, 56, with *harhorin* "prurient (!) thoughts", *Dn. 4²*, assigning the meaning of conceiving rather to the following *qns*. At the first blush our passage might seem to justify their view; but (1) *harhorin*

b'l.nglhm.bp'nh
wi(?)lhd.bhrt'ch

40 Ba'lu approached them²³ with his feet,
 the God Haddu²⁴ with his legs.²⁵

in Daniel certainly does not mean *prurient* thoughts, nor does it necessarily mean that either in Aramaic or Talmudic Hebrew (see the lexica *s.v.*); (2) *hnhmt*, the parallel to *hr*, *loc. cit.*, is from, or cognate with, *yhm*, which can signify both "desire" and "conceive" (*v. Gesenius-Buhl s.v.*), and (3) *hr* definitely means "conception" in RS 1929 6:31: see *Tarbiz* VI (1934) pp. 102-5; GINSBERG, *The Ugarit Texts* (Heb.), 1935, p. 71f. It is not impossible, however, that *hr*, *hrr* and *harkorin* are ultimately related words.

²³ Heb. *ngš*. It is not necessary to assume a stronger meaning for *ngt* anywhere.

²⁴ Haddu (so, not Houd) is the Syrian storm-god Hadad or Hadd (cf. *EA* Rib-Hadda [as well as Rib-Addi]) and in our epic is not the companion (so *V.*), but a synonym of the storm-god Ba'lu. That *V.*'s. statement that *Hd* occurs without *B'l* in B 6:38 is erroneous may be seen from *JRAS* 1935, p. 49 n. 2.—"The God Haddu" again in 2:6, 23. In 2:10, 45 he is apparently designated as simply "the God", and so are Ba'lu and Mōtu respectively in D 1:9, 2:13; where I translate: So he/they (the messenger[s]) departed and returned unto the God.

I suspect that Hadd(u) figures as a theophorous element in the Phoenician personal name עשדר, G. A. COOKE, *North Semitic Inscriptions*, No. 17; firstly because it is hard to explain this name otherwise (for the first component—which means to cover, i. e. protect, less probably, as in Arabic [IV], to give—compare the biblical names סרור and סחרי, the latter almost certainly a hypocoristic), and secondly because of the analogy of other Phoenician and Punic names compounded with those of deities otherwise known almost exclusively from Ugarit texts: כרנכישר, יכנשלם, עבדשור, etc.; see *JRAS* 1935, p. 58, incl. n. 2. In this connection it may be recalled that, as was pointed out by VIROLLEAUD (*Syria* XVI, the Ugaritic personal name *'bdssm* was also (like עשדר) borne by Phoenicians (several, see LIDZB., *NE*, p. 334) of Cyprus (and by a Phoenician tourist at Abydos, Egypt, LIDZB., *Ephem.* III, p. 98). [In this connection I would note here for the first time that the Ugaritic personal name *'bd'ilm* 'Table généalogique' l. 41, is likewise common in Phoenico-Punic inscriptions, as is also, to a lesser extent, the variant *'bd'lnm*. We also find Ἀβδῶνμος, Jos., C. Ap. I, 157, *Abdalonymus* (king of Tyre), Justin XI, 10,8.]

In *Orientalia* 1936, p. 178 ff., *q. v.* I argue that Ugaritic is essentially Proto-Phoenician (more exactly, ancient North Phoenician). The above onomastic data might have been cited as contributory evidence.

²⁵ *hrt'* looks like a blend of two or more vocables of kindred signification; see the comparative material adduced in Gesenius-Buhl *s. vv.* חרץ (subst.), כרעים and קרס (note: Talm. Heb. also קרצול). But I have already confessed my inability to account for the *t'* (instead of *ṭ*).

Column 2.

[]	[]
[]m(?)[]	[]
[]'n(]	[] - -[]
pnm[	]	face[]
b ^c l.n[pl?	]	5 Ba ^c lu f(?)[ell?]
'il.ha[	]	the God Haddu[]
[]	[]
'at.bl>a(?)[t>b ^c l	]	thou, surely ²⁶ th[ou(?) Ba ^c lu]
hmdm.[	]	coveted[]
'il.hrr(?)[	]	10 The God desired[]
.kb[]	- - []
ym.[]	- - []
ysh[]	- - - []
y'ikl[	]	eat(s) []
km.sp(?)[	]	15 - - - - []
q[]	- - - - []
.tt(?)[]	- - - []
[]	[]
[]	[]
b[	]	20 []
wb[	]	and-- []
b ^c l.[	]	Ba ^c lu []
'ilhd.b[	]	the God Haddu-- []
'at.bl>at.[	]	thou, surely thou []
y'isp.(?)hm.b[^c l	]	25 Ba[^c lu] gathers(?)them ²⁷ []
bn.dgn[	]	Dagānu's son []
'sbm.[	]	herbs(?) ²⁸ []
'uhyr.l[]	- - - - - []
mst.ksh.(?)[	]	thou hast drained his cup ²⁹ []
'idm.>adr[	]	30 the strong red []

²⁶ So already in A 1:48 (20), 54 (26); B 4-5: 123; 6:5. But admittedly everything is obscure here.

²⁷ The question mark in the text refers to the word-divider, which looks like an accidental scratch; cf. ll 33, 39.

²⁸ In B 4-5: 76, 99, 'sbt. If the translation is correct, s again = š. But in view of what I have said at the beginning of this paper concerning 'āhs, ll. 23, 34, 36, we may have here the root 'qb.

²⁹ Cf. Is. 51¹⁷, Ezek. 23³³⁻⁴ Ps. 75⁹.

¹ idm. ¹ rt. ¹ l[	]	the potent red ³⁰ []
¹ n. b ¹ l. ¹ a[	] q(?) [	Ba'lu's eyes ³¹ - - []
¹ rh. ¹ ahs[	].(?) [	his back they seized ³² []
¹ n. b ¹ l. ¹ ahs		Ba'lu's feet seized	
wlmt. gllm	35	and - - - - - fetters (yokes) ³³	
¹ ahs. ¹ aklm. k[n?		the Devourers seized. Th[us?]	
npl. bmsms[	]	He fell into groping darkness(?) ³⁴	
¹ anpnm. yhr[r?	]	- - - - - countenance burneth(?) []
bmtnm. yshn.(?) [	]	is hot ³⁵ in the loins(?) []
qrnh. km. gb(?) [	]	40 his horns like - - - []
h(?) wkm. hrr[	]	- - - - - burn []
snmtm. dbt(rd. dbh?)		years(?) ³⁶ he completed(?) a sacrifice(?)	
tr. tr. n. ¹ a		- - - - - There mour-	
bnt. sdm. shr(?)		ned(?) ³⁷ the earth, ³⁸ the plain. ³⁹	

³⁰ Poetical expressions for "wine"—if the translation is right.

³¹ Did this line describe the effects of the liquor on Ba'lu? And in any case, did the Devourers, or anybody else, deliberately get him drunk so as to seize him, as described in the following lines?

³² See above p. 139.

³³ Arab. *gull* "a fetter for the hands, which are chained to the nape", Heb. *okl* ("yoke"). The theme of a segolate noun regularly becomes disyllabic in the plural, as in *riš* (rd. *ra'su*) *rišim*, pl. *rišim* (= *ra'sima*, obl. *ra'sima*) **rišim* **rišim*. In the case of *riš* *rišim* I have pointed this out repeatedly in the last three years, referring to C. BROCKELMANN, *Grundriss d. vgl. sem. Grammatik* I, s. 229 A, B, for examples from the various Semitic dialects.

³⁴ V. compares Arab. *masmās* "confusion". Heb.—Aram. *mšmš* has the sense of a frequentative of *mš* "to feel, grope".

³⁵ Arab *shn* Heb. *shn* (Talm. Heb. has the verb, as well as bibl. "boils" [sbst.]).

³⁶ "Years" is ordinarily *šnt*; but see *Orientalia* 1936, p. 164.

³⁷ Arab. *bn*, Heb. *bl*. So also D 6:17, A 1:2, But everywhere uncertain.

³⁸ I have repeatedly pointed out that this is not the plural of *šd* but the Heb. *šedemah* without the feminine ending.

³⁹ Arab. *šahrā* "broad desert", Akkad. *šeru* "plain, field, open country". Cf. C. 66—7. I now take *ʿd* as the Heb. *ʿod*, and this alone necessitates taking *šm* as an ordinal. In addition I have proved in the *David Yellin Jubilee Volume* (מנחה לדוד), pp. 78—82, that the contention of F. STUMMER, *Der kritische Wert d. altaram. Ahiqartexte aus Elephantine*, 1914, pp. 58 f, 85 f, that the second number in a *zahlenspruch* was originally an ordinal (as still in the Ahiqar text of Elephantine, l. 92, and in the versions of the O. T.) is confirmed by the Ugaritic epic text B 2:1 7ff; where *ll*, to agree with the masculine *dbhm*, can only be an ordinal.—Whether *nqp(n)t* must consequently be masculine or the ordinal is masculine before a feminine noun (as in vulg. Arab. *tāni marrah*),

- šb^c.šnt.ʔil.mlʔa* 45 Seven years the God completed,
wimn.(ʔ)npnt.ʔd and the eighth anniversary as well.⁴⁰
klbš.kmlpš.dmʔa[ḫyh] When he clothed him with the blood of
his br[ethren⁴¹] as with mire(?),
km.ʔall.dm.ʔaryh with the blood of his kinsmen as with
filth(?);⁴²
kšbʔt.lšbšm.ʔaḫh.ym[ḫiʔ] as seven for his seventy brethren he
com[ple]ted],
wimnt.limnym 50 and eight for the eighty(? -)⁴³
šr.ʔaḫh.mḫah the song of his brethren reached him,
wmḫah.šr.ylyh there reached him the song of his
companions⁴⁴,
bskn.sknm.bʔdn when x-ers x-ed, when y-ers
ʔdnm.kn.npl.bʔl[ʔ]] y-ed.⁴⁵ Thus Baʿlu fell []
kmṭr.wtkms.hd.p[ʔ][ʔ]] 55 like a bull, and Haddu dropped⁴⁶[]
km.(.)ibr.(.)btk.mšmšdš[ʔ] like a steer into groping darkness....
ʔitp[ʔ].ḫawl Stop,⁴⁷ O - - - - - ,
ʔištik.lm.tlkn Cease,⁴⁸ why dost thou - - - ?
štk.mlk.dn cease the king from judgment;
štk.šibi.ʔn 60 cease the drawing (of water) from the
fountain;

time will tell. (The fact that in Ugaritic the attributive ordinal numeral always precedes its noun as in Akkadian suggests, as I pointed out *op. cit.*, that it may be a *qatul* formation like the Akkadian ordinal rather than a *qatil* formation like the corresponding South Semitic.)

⁴⁰ Heb. *ʔod*. Or perhaps a derivative (imperative?) of Arab. *ʔd* "to count"?

⁴¹ I restore *ʔaḫh* in agreement with l. 51. *ʔaḫh*, l. 49 is singular after a multiple of 10, as in Hebrew. See *Orientalia*, 1936, p. 196.

⁴² Heb. *repeš* "slime" and *ʔalal* "rotten meat", EPSTEIN *apud* GINSBERG, *Tarbiz* IV p. 113. [However, as VIROLL. points out in a private communication, Arabic has, with kindred signification, *rft* (with *ḫ*).]

⁴³ Against this explanation speaks the fact that *x to 10 x* seems to be the Ugaritic way of saying *10x + x*; cf. B 7:10f., D 5:20 f. In its favour is the fact that according to B 6:44-46 the number of Baʿlu's brothers was 70, which agrees with l. 49 of our text. But then, what are we to do with the 80 in the next line? ⁴⁴ Arab. *waliy*. ⁴⁵ For the construction cf. Ruth 1¹.

⁴⁶ Akkad. *ka-māsu*-V. ⁴⁷ *qtl* conjugation of **wḫq* = Arab *wḫf*? The double *t* would then be a scribal error induced by that of *ʔištik* in the next line, where the first *t* is the infix and the second is the second root-consonant. We have seen, note 12 *supra*, that the imperative of the prefixed *t*-conjugation has not yet developed a prothetic *ʔi*. ⁴⁸ See *Orientalia* 1936, p. 181.

štk.qr.bvil
wmslt.bt.hrs

cease the fire⁴⁹ of ʾIlu's temple,
and the din⁵⁰ of the craftsman's⁵¹ house.⁵²

⁴⁹ Akkad. *qerru* "fire", from *qardru* "to burn". ⁵⁰ See Heb., Syr., Arab. *šil* "to resound" and derivatives. ⁵¹ Heb. *ḥārḥāḥ* *ḥārḥāḥ*.—*Kṯr wḥss* is of course *hyn d hrs ydm* "Hayyinu, the master of handicraft".

⁵² The same Tammuz motif in connection with Ba'lu's absence in the Netherworld as in A 3-4: 25ff, where the same root *štk* is employed.

POSTSCRIPT

I am taking advantage of the remaining space on this page to record some further affinities between Ugaritic and Phoenician that have occurred to me since writing *Orientalia* 1936, p. 178ff., and p. 145 n. 24 *supra*.

1. *badi* for *ba-yadi*.

A. BLOCH, *Phoenicisches Glossar*, 1890, p. 19 n. 1, has already explained בַּד in CIS I, 87 269ff. ("through the medium of") and in the Diadem Inscription of Piraeus (Lat. *apud*. Fr. *chez*), whilst reserving for בַּד in such proper names as בַּדְעֶשְׁחָרָה בַּדְאַשְׁמָן, etc. the sense of the Heb. *bad* < *badd* "branch, member," i. e. "client". LIDZBARSKI, *Nordsem. Epigr.*, p. 143, n. 4, argued that the latter meaning alone was suitable in all cases. On closer examination, and in the light of Ugar. and EA (gloss) *badi* on the one hand and the proper name בַּדְאַשְׁמָן on the other — Aram., CIS II: 76, 94; Can. (perh. Heb.), D. DIRINGER, *Iscrizioni antichebraiche*, p. 176f.—Pl. XIX no. 17—this judgment will have to be reversed: Phoenician and Punic *bod*, *bud* (cuneif.), whether standing alone or in composition, means "in, through, the hand(s)". The *o/u* goes back to long *d*, which, like the single *d*, can be accounted for easily by contraction from *ba-yadi*, but only with difficulty on the assumption of an original *badd*.

2. *bin*, *bi* "from."

In *The Ugarit Texts* I have assumed that *bn*, *b* do duty for *mn*, *m*—as in South Arabic—in A 2:18, B 6:31, Ea 6, In Phoenician I know of only one passage where *m* is supposed to mean "from, of", viz., in בַּנְחֶשֶׁה, CIS I, 11 (= COOKE, NSI 13, LIDZB., *Kan. Inschr.*, 19), l. 2, and I wonder if Pococke's draughtsmanship, which is notoriously very inadequate (unfortunately the inscriptions he copied were subsequently destroyed by the Turks), can be relied on here. At any rate, another votive inscription, likewise of Cyprus (COOKE, NSI 29; LIDZB., *Kan. Inschr.*, 36, l. 7), has in a quite similar context בַּנְחֶשֶׁה; cf. בַּנְחֶשֶׁה "of choicest bronze", CIS I 5 = COOKE 11 = LIDZB. 17.*

Elsewhere בַּן, ב are supposed to have been replaced by בַּן, ב for the sake of dissimilation from the initial ב of the following word; see LIDZB., *Nordsem. Epigr.*, p. 312b. I am inclined to question this explanation; in any case, Phoenician employs *bn*, *b* "from" at least before *m*.

* JUDAS, cited in CIS I ad no. 7 (= COOKE, NSI 9; LIDZB., *Kan. Inschr.* 12), l. 3, interprets the ב of בַּנְחֶשֶׁה לְאַדְךָ as "oriundus"; which certainly seems to be required by the context, and can now be justified linguistically by our equation: *bi(n)* = *mi(n)*.

A GENEALOGICAL LIST FROM RAS SHAMRA

B. MAISLER

(JERUSALEM)

Amongst the documents found at Ras Shamra (Ugarit) in 1933 there is a tablet containing a list of names which is of special interest. This tablet was published by CH. VIROLLEAUD together with two fragments of tablets with similar contents, found in 1930.¹

The document in question reads as follows:

	<i>spr mdr</i> [. . .]		<i>bn.kdġ(?)n.ʾuškny</i>
	<i>lt. hlk. b(?)</i> [. . .]		<i>bn.lgn.ʾuškny</i>
	<i>bn. bʿyn. š</i> [. . .]		<i>bn.ʾabn.ʾuškny</i>
	<i>agltm.mʾid</i> [. . .]		25 <i>bn.ʾarz.šʿrty</i>
5	<i>bn.lšn.ʿrm</i> [y]		<i>bn.ʾibrd.mʿrby</i>
	<i>arsw.bšry</i>		<i>šdq̄n.gbʿly</i>
	<i>arpt̄r.yʿrty</i>		<i>bn.ypy.gbʿly</i>
	<i>bn.ḥdyn.ʾugrty</i>		<i>bn.grgs.ʾilštmʿy</i>
	<i>bn.igžn.ʾugrty</i>	30	<i>bn.ḥrʾan.ʾilštmʿy</i>
10	<i>tgyn.ʾarty</i>		<i>bn.ʾabdʿn.ʾilštmʿy</i>
	<i>bn.nryn.ʾarty</i>		<i>bn.ʿn.rqdy</i>
	<i>bn.ršp.ʾary</i>		<i>bn.gʿyn</i>
	<i>bn.ġlmn.ʾary</i>		<i>bn.grn</i>
	<i>bn.ḥšbn.ʾary</i>	35	<i>bn.ʾagynt</i>
15	<i>bn.sdy.ʾary</i>		<i>bn.ʾabdḥr.snry</i>
	<i>bn.klkt.mʿqby</i>		[. . .] <i>qn.šlmn</i>
	<i>bn.</i> [. . .] <i>tlḥny</i>		<i>prdn.ndb[d]</i>
	<i>b[n . . . ʾub(?)]</i> rʿy		<i>ḥ(?)rn.ḥbty</i>
	[. . . ʾubr(?)]ʿy	40	<i>ʾabmn.bn.qdmn</i>
20	<i>b[n]</i>		<i>nʿmn.bn.ʿbdʾilm</i>
	<i>bn</i> [. . . ʾuš]kny		

¹ CH. VIROLLEAUD, "Table généalogique provenant de Ras Shamra", *Syria* XV (1935) 1, pp. 244 ff.

VIROLLEAUD described the tablet as "table généalogique" (abbreviated TG); he did not, however, explain in a satisfactory way the beginning of the document (ll. 1—2).

It seems to me that Dr. GINSBERG has given the correct explanation by reading the first line: *spr.mdr*[^c], i.e. "register of families."² This reading is based on the assumption that the two similar signs transcribed by VIROLLEAUD as *s*² actually represent *d* and *š* respectively, and consequently that *mdr*... should be completed *mdr*[^c], a word corresponding to the Hebrew and Aramaic *דר* (ת), *דרע*.³

The interpretation of the second line also presents some difficulties. Should we assume that our text speaks of families of soldiers (*הלכ* = infantrymen? cf. *amēl šepi*, EA 148, 14 etc.) in the army of the King of Ugarit? Cf. *איש מן || מחרך, מחרך*, Pr. 6¹¹, 24³⁴.

In our tablet we find a large list of names of persons with the indication of their places of origin. Most of the personal names are preceded by the word *bn*, but we cannot be quite certain that this should be read in every case *בני* (sons of; cf. *bn.ḥdyn.ugrt* = the sons of Ḥadiyānu the Ugaritite). In ll. 12, 32 etc. it seems more likely that *bn* forms part of the personal name.

The majority of the personal names are undoubtedly Semitic; some are Hurrian while the rest are Anatolian or of unknown origin.

A well-known characteristic of West-Semitic names is the termination *ānu*. Names ending in *ānu(m)* are found frequently not only in the Bible (names ending in *ן* and *נ*), but especially among the Amorites in early Babylonian sources,⁴ among the *ʿmw* in Egyptian records⁵ and in numerous place-names in Syria and Palestine.⁶

In our tablet the following belong to this class of names:

² Oral communication.

³ On the Ugaritic root *dr*^c see: H. BAUER, *Das Alphabet von Ras Shamra* (1932), p. 69 f., n. 1; H. L. GINSBERG, *JRAS* 1935, p. 53 n. 2.—Cf. Esra 2⁶⁹: "ולא יכלו להגיד בית אבותם חרעם"

⁴ Th. BAUER, *Die Ostkananäer* (1926), pp. 42 ff.; 92 f.

⁵ W. F. ALBRIGHT, *JPOS VIII* (1928), p. 241; *The Vocaliz. of the Egypt. Syllabic Orthography* (1934), pp. 7—8.

⁶ Cf. MAISLER, *Untersuchungen zur alten Geschichte Syriens und Palästinas I*, p. 20; J. LEWY, *ZA N. F. IV* (1929), p. 259.

ḡlmn,⁷ *ḥšbn*, *šdq̄n*, *ḡrn*,⁸ *šlmn*,⁹ *qdmn*,¹⁰ *n'mn*,¹¹ and also it seems: *prdn*,¹² *ḥ(?)n*,¹³ *g'yn*,¹⁴ *ḥr'an*,¹⁵ and perhaps also *ḥdyn*.¹⁶

The non-Semitic names seem to terminate in *n*, for example: *ʾaḡlt̄n*, *tgyn*, *kdḡ(?)n*, and *nryn*.

The names *bn.ršp* and *bn.ʿn*, are certainly Semitic, being composed of the element *bn* ("son") and a divine name.

The god Reshef is mentioned several times in the Ras Shamra documents.¹⁷ The name *bn.ʿn* also appears in the Tell el-Amarna tablets as *Bin-A-na* (EA 170, 37). The god ʿAna is also fairly well known from personal names in "Cappadocian" tablets.¹⁸ Further

⁷ From *ḡlm* = גלם in Hebrew, غلام in Arabic.

⁸ From *ḡr* "valley" in the Ras Shamra language, غور in Arabic. On *ḡr* see: BANETH, *OLZ* 1932, p. 705; GINSBERG, *Tarbiz IV*, p. 381. — ALBRIGHT, *JPOS XIV*, pp. 104-5 differs.

⁹ The name of the god שולמן—Šulmānu, on whom see: ALBRIGHT, *AfO VII*, pp. 164 ff.; LEWY, *RHR CX* (1934), pp. 62 ff.

¹⁰ Cf. the name of the Kadmonites (קדמוני), Gen. 15¹⁹.

¹¹ The name of the god Naʿmān—Adonis.

¹² *Prd* ("mule") + *ānu*?

¹³ If the reading is correct. On the name *ḥrn* see: LEWY, *RHR* 1934, p. 56.

¹⁴ From the root *g'yn* = גני in Hebrew, like גרין (in the Ras-Shamra texts: *šryn*), *Šariyana* in Boghazkoei documents, from the root שרי = شري. Cf. H. BAUER, *OLZ* 1935, p. 447.

¹⁵ A personal name derived from the root *ḥr* is surprising at first sight, but analogies are not wanting. Dr. GINSBERG kindly calls my attention to E. LITTMANN, *Semitic Inscriptions* (1904), p. 124: "Well-known Arabic sentence-names are *Ta'abbāṣa sharran*, "he has mischief under his arm," and *Djā'a kamluhu* "His lice are hungry". Other Arabic names formed by two nouns are, e. g., . . . *Muḡattī' an-nudjud*, "the cutter of the swordbelts" (I. Dor. 220); *Muḡdarriṣ al-ḥidjārah*, "efficiens ut saxa pedant". A very characteristic name of this sort was mentioned to me by Count Landberg, viz., *Khara baḡar*, "cow-dung", by which a family in Šaida is called. The last name, with its odd significance, agrees singularly with the Somali names *Ḥār-warāba*, "hyena-dung", and *Ḥār-damēr*, "ass-dung"; these are mentioned by Professor Reinisch in his "Somali-Sprache," I, p. 110. Their origin also has been explained by him in vol. II, p. 226, of the same work, where he says that it is believed ugly names protect against demons, and that they are given especially to a child which is born after another one has died. Similar names in Safaltic are probably חרמא . . . צמקת . . . "

¹⁶ From the root *ḥdy* = חדי in Aramaic and Hebrew, خدي in Arabic?

¹⁷ Cf. VIROLLEAUD, *ibid.*, pp. 244-6; BAUER, *ZAW* 1933, p. 98, and on the god Reshef in general: VINCENT, *RB* 1928, pp. 528 ff.

¹⁸ Pu-zur-A-na (*BJN IV*, No. 61, 29) etc. Cf. LEWY, *ZA N.F. IV*, p. 272.

traces of this element are found in the Biblical name אֲנָה (Gen. c. 36) and perhaps in the name of the town Ḫana-ʿAna on the Euphrates. J. LEWY has rightly assumed that ʿAna is the male counterpart of the goddess ʿAnat.¹⁹

It may further be supposed that the god ʿAna figures in the personal name ʿabdʿn²⁰ (l. 31) which is compounded, like ʿabdḫr (l. 36), with the element of kinship אב.

In the *d* in both names we recognise the element *d*, which appears frequently at Ras Shamra,²¹ and apparently corresponds to the Arabic ذر, the Southern Arabic *d*, the Aramaic ד and the Amorite zū.²² This element also enters into the composition of one of the epithets of ʿIl-dpʿid and also in the name of the Arab god دوسرا-Dusares.²³

אב likewise occurs in the name ʿabmn (l. 40), which reminds us of Ahiman, the name of one of the sons of ʿAnaq (Nu. 13²² etc.) and, in later times, of one of the porters of the Temple (I Chr. 9¹⁷).

I am inclined to see the name of a god in the element *man*. It is worth while to point out that in the times of the dynasty of Akkad one of the men of Gasur (Nuzi) is called Šu-ma-na ("He of Mana").²⁴ Cf. also the personal name Mānum (Ma-a-nu-um) in a seal from Bethshan.²⁵

Other Semitic names are: bn.ʿabn, bn.ʿarz, bn.sdy, bn.ypy and of course ʿbd.ʿilm²⁶; perhaps also bn.lgn.²⁷ The name *kikt* (l. 16) suggests כִּכְת "laugh" and כִּכּוֹת "chick." Possibly it should be connected with the geographical name כְּחִים-Kīḫim.

¹⁹ It is not clear whether ʿAna is the basis of the name עֲנַמֶּךְ (II Kings 17⁸¹).

²⁰ The name is also mentioned R.S. 1929 No. 10 l. 9.

²¹ Cf. GINSBERG, *Tarbiz IV*, p. 112; H. BAUER, *Das Alphabet von Ras Shamra*, p. 70.

²² E.g. in the name Zu-i-la: Th. BAUER, *Ostkanaanäer*, pp. 42, 75, 81. Cf. T. J. MEEK, *Old Akkadian, Sumerian, and Cappad. Texts from Nuzi* (1935), p. XIV.

²³ Ḫr (in the name ʿbdḫr) seems to be the name of a Semitic god (cf. the name of the god חֲרִן, חֲרִין; MONTET-UCHER, *RB* 1935, pp. 153 ff.) and has, in my opinion, no connection with the Egyptian god Ḫr-Horus.

²⁴ MEEK, *ibid.*, No. 155, II 11.

²⁵ A. ROWE, *The Topography and History of Beth-Shan*, pl. 34 No. 3 and DHORME apud ROWE, p. 23.

²⁶ On all these names see: VIROLLEAUD, *ibid.* On ʿabdʿilm in particular, see now GINSBERG, above p. 145, n. 24.

²⁷ *lgn* = Akk. *lignu*, Aram. לִגְנָא, names of vessels.

Of Hurrian names, the most obvious are *tgzn* and *tgyn*, which are compounded with the well-known Hurrian element *tag/k*.^{27a} The first name is transcribed by VIOLLEAUD—*tgš²ⁿ*. The third sign is, however, undoubtedly the "two wedged š", which in Hurrian words has the value of *ž*.²⁸ The name can be explained as Hurrian *Tagišen(ni)*,²⁹ as was first suggested by SPEISER.³⁰

ʾArsw and *ʾarptir* also seem to be Hurrian names containing the common element *ar*. The second name, however, does not seem to correspond to the well known Hurrian name *Aripšar*, as the Hurrian word *šar* is in the Ugaritic script transcribed as *zr*.³¹

It is further likely that *ʾagynt* is a Hurrian name composed with the common element *ag/k*.³²

Of non-Semitic names other than Hurrian the two following merit special attention: *ʾibrd* and *grgs*.

ʾIbrd reminds us of the name of *Abirattas* the King of Barqa (a country in the neighbourhood of Ugarit), a vassal of Muršil II.³³ The difference in the first vowel of the name (i/e—a) is strange, but it is possible that the two names are identical.

Grgs seems to be an Anatolic name, reminding us of the name of the town of Kirkesion (Circesium) in Asia Minor;³⁴ it does not, however, appear to be connected with the Phoenician personal names *Grgš*, *Grgšm* or the name of the people of the Girgashites (גרגש).³⁵

Of the towns mentioned as the places of origin of the persons named in our tablet, one is well known indeed, viz. *Ugarit*, the ruins of which are being excavated at Ras Shamra.³⁶

^{27a} See GUSTAVS, *ZDPV* 1927, pp. 9f.; *PJB* XVI (1930), p. 8.

²⁸ See GINSBERG-MAISLER, *JPOS* XIV, p. 244. Cf. Z.S.HARRIS, *JAOS* 55 (1935), pp. 95ff.

²⁹ It should be compared with the name *Ta-kil-še-en-ni* (CHIERA, *BE* XV, No. 198, 26), but the sign *kil* can be also read *hap*.

³⁰ apud HARRIS, *ibid.*, p. 98.

³¹ *ʾiwrzr*—GINSBERG-MAISLER, *ibid.*, pp. 244, 250 f.

³² On the element *ag/k* see: A. GUSTAVS, *ZDPV* 1927, p. 8; GINSBERG-MAISLER, *ibid.*, p. 255 n. 53; MAISLER, *PEFQSt* 1934, p. 192.

³³ KBo III, No. 3; KUB XIX, No. 41 ff. Cf. A. GÖTZE, *RLA* I, p. 10.

³⁴ Cf. *Qrgš*; M. BURCHARDT, *Die altkan. Fremdwörter ... im Ägypt.* II, 47.

³⁵ Cf. MAISLER, *ZAW* 1932, pp. 86–7.

³⁶ The first to suggest this identification was Prof. ALBRIGHT (*AfO* VII, p. 165 n. 9; *BASOR* No. 46, p. 20). The identification has now been confirmed by many documents in the Ugarit script and in the Akkadian cuneiform.

Another town has been correctly identified by VIROLLEAUD, viz. *ʿrm* (l. 5), now *ʿAreime*, south of Laodicea.

VIROLLEAUD was unable to find parallels to the names of the other towns; it seems, however, that a few more could be tentatively identified.

Four persons with Semitic names are inhabitants of a town *ʾar* (ll. 12-15). A Syrian town called *ʾAra* is mentioned in the List of Thothes III (No. 132), together with *Ni* (No. 134) and other towns in northern Syria.³⁷ ALBRIGHT³⁸ has identified the town *ʾAra* with *Arā* mentioned in the documents of Tiglathpileser III³⁹ and with *Arra* in Hellenistic sources.⁴⁰ The exact site of this town is at present unknown.⁴¹

Gbl (ll. 27-8) has been identified by VIROLLEAUD with Byblos. The text of our document, however, points to *gbʿl* (= 𐤂𐤁𐤏), while Byblos is written in Hebrew 𐤁𐤁𐤏, in Akkadian—*Gubla* and in Egyptian—*Kbn*. I would suggest that the town meant here is *Γάβαλα* near Laodicea, the modern *Ğible*.⁴² The modern name seems to have its origin in a popular interpretation of the Greek one.

The identification of *bšr* (l. 6) is more difficult. It is, indeed, possible to interpret this as a reference to *Bostra* on the Bostrenos, now *Bişre*, north of Sidon.⁴³ Its great distance from Ras Shamra, however, makes this identification improbable.

ʾArt (ll. 10-11) might be identified with *Ardā* in Unki (North Syria), mentioned by Tiglath-Pileser III,⁴⁴ but only very tentatively.

In conclusion it may be noted that the majority of the places mentioned in our tablet have clearly Semitic names, such as: *bšr*, *yʿrt*, *mʿqb*, *lhn*, *šrt*, *mʿrb*, *gbʿl*, *ʾilštm*,⁴⁵ etc.⁴⁶

³⁷ *Ni* is, perhaps, Qalʿat el-Muḍīq, as has been first suggested by H. WINCKLER. S. YEIVIN, *JPOS* XIV, pp. 218ff. differs. Cf. also MAISLER, *Untersuchungen* I, p. 29.

³⁸ W. F. ALBRIGHT, *The Vocalization of the Egyptian Syllabic Orthography* (1934), p. 33.

³⁹ Ann., l. 128; Kl. Inschr. No. II, l. 45 apud ROST, *Tiglathpileser*, pp. 20, 85.— Cf. E. FORRER, *Die Provinzeinteilung des Assyrischen Reiches*, p. 59.

⁴⁰ Cf. HONIGMANN, *ZDPV* 1923, p. 165 No. 73. ⁴¹ The identification with Maʿarrit in-Noʿmān (E. LITTMANN, *ZfS* I, p. 176) does not seem likely.

⁴² Cf. HONIGMANN, *ZDPV* 1923, p. 186 No. 180; DUSSAUD, *Topographie historique de la Syrie antique*, pp. 136 ff. ⁴³ HONIGMANN, *ibid.* p. 173 No. 116 C. ⁴⁴ ROST, *Tiglathpileser*, p. 84, pl. XXVII, l. 38.

⁴⁵ On this name see J. A. MONTGOMERY, *JBL* 1935, p. 61.

⁴⁶ For the explanation of the Semitic names see VIROLLEAUD, *ibid.*

There is nothing astonishing in this fact, considering that prior to the Hyksos conquest Syria had a densely settled Semitic population, as is proved by the Early Akkadian and Egyptian sources and especially by the "Achtungstexte" of Sethe.⁴⁷ There are but few non-Semitic place names. Examples are: *hbt* (l. 39), the name of the Hurrian goddess *Hebat*,⁴⁸ and also *ndbd*⁴⁹ (l. 38) and *snr* (l. 36). It is worth noting that in the 'Al'iyân-Ba'al epic also we find non-Semitic geographic names such as *Trgzz*⁵⁰ and *Trmg*.⁵¹

There can be no doubt that such names were introduced into the country after the invasion of the Northern peoples in the first half of the second millennium B.C.

NOTE

The recent number of *Syria* contains two notes on *TG* by T. H. GASTER and R. DUSSAUD respectively.⁵²

GASTER renders the first two lines: "Legal register concerning he (pay)ment of immigration tax in . . .," equating *hlk* with official Aramaic ܠܬܝܠܟ = Akk. *ilku*.

The combination is hardly plausible, if only because the two persons recorded in ll. 8 and 9 are specifically designated as Ugaritites and therefore cannot have been subject to an immigration tax in Ugarit.

I must also take issue with most of GASTER's suggestions regarding the nomenclature.

The interpretation of the *n* of *Ġlmn*, *Ṣḏqn* etc. as "characteristic nunation" is to be dismissed at once as preposterous. The equation 'Abd'n = biblical אבירע + nunation is untenable both for the same reason and because the *y* of אבירע was originally consonantal.⁵³

⁴⁷ K. SETHE, *Die Achtung feindlicher Fürsten, Völker und Dinge*, etc. 1926; cf. ALBRIGHT, *JPOS* VIII (1928), pp. 223 ff.

⁴⁸ See B. HROZNÝ, *Archiv Orientální* IV (1932), p. 121.

⁴⁹ HROZNÝ, *ibid.*, p. 120.

⁵⁰ II-AB 8:246; cf. GINSBERG-MAISLER, *JPOS* XIV (1934), p. 253.

⁵¹ II-AB 8:3; cf. GINSBERG-MAISLER, *ibid.*, p. 251, n. 25.

⁵² *Syria* XVI (1935) 2, pp. 225-8.

⁵³ As in אבירע; cf. S. Arab. אבירע. Similarly שמיירע, which in the Samaria ostraca must be read *šemyada'*, has become שמיירע in Masoretic Hebrew.

The solution ʾ*Abdhr* = prothetic ʾ*a* + Phoen. *bd* + Egypt. *Hr* (HORUS) is no less reprehensible, as is also ʾ*Ibrd* = *Biridia*. The latter, by the way, is probably not Hurrian but Indo-European; cf. *Biridašwa* (according to PORZIG old Indic *pyd.aśva* "Kampfsrosse besitzend"). *Nryn* cannot have anything to do with Hurrian *neri* "child" in view of *Nu-ri-ia-nu* in an Akkadian fragment from Ugarit, which has just been published.⁵⁴

On the other hand I accept GASTER's equation of ʾ*Agltu* with Hurrian *Ahliten(ni)* and regard as probable his identification of the first two characters in the name ʾ*Agyt* with the common Hurrian element *ag*. I also acknowledge his priority in pointing out the resemblance between ʾ*Abmu* and the biblical ʾ*Ahiman*.

DUSSAUD's note contains some very interesting remarks on the geographical names in *TG*. He already has the equivalence ʾ*Ar* = the ʾ*Arā* of Tiglathpileser, but he fails to mention the ʾ*A-ra* of Thutmosis. DUSSAUD also locates the native town of ʾ*Ibrd* the *Mrbite* very plausibly at *Maʿrab* near Byblos; and that of the four ʾ*Ušknites* less cogently but still attractively at *Ašhani*, a city in North Syria mentioned by Tiglathpileser III. — *Hbt* = חובה, *Ubi*; *Snr* = שניר (so also GASTER), and *Tlhn* = *Za-al-ḫi* of the *EA* tablets are less happy.

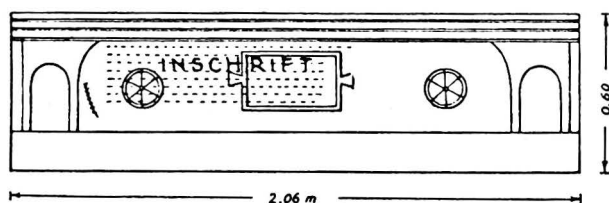
⁵⁴ DHORME, *Syria XVI*, p. 194.

EIN GRIECHISCHES GRABEPIGRAMM AUS TIBERIAS

M. SCHWABE

(JERUSALEM)

Bei den Ausgrabungsarbeiten an den heißen Quellen von Tiberias im Winter 1935/36, die die Neufassung der Quelle bezweckten und ihre Freilegung von antiken und späteren Fassungen nötig machten, wurde ein beschrifteter, steinerner Sarkophag gefunden, dessen Schmalseiten ausgebrochen waren und der offenbar an einer Stelle der Leitung als Rohrsatz gedient hatte. Der Deckel fehlt. Der Sarkophag ist aus dem Kalkstein von Tiberias hergestellt. Seine Länge ist 2,06 m, seine Höhe 0,60 m, seine Tiefe 0,66 m. Die Vorderseite ist mit einem Flachrelief verziert, das rechts und links



eine Arkade zeigt. Neben der linken befindet sich ein Palmenzweig — auf der rechten Seite ist er nicht zu sehen; (es ist zweifelhaft, ob er vorhanden war), weiter nach innen sind auf beiden Seiten zwei sechsteilige Rosetten oder Räder zu sehen, zwischen denen sich eine Tabula Ansata befindet. Auf ihr sollte ursprünglich gewiß die Grabinschrift Platz finden. Sie konnte kein Epigramm sein. Dafür reichte der Raum der Tabula kaum aus. Ob die Verwandten des Toten ihre Absicht geändert und eine größere Grabinschrift statt der auf dem Relief vorgesehenen haben anbringen lassen, oder ob der Sarkophag zum zweiten Male benutzt worden und dabei eine für den vorhandenen Raum und die Verteilung der Verzierungen nicht passende Inschrift eingemeißelt worden ist, läßt sich nicht feststellen. Jedenfalls geht die achtzeilige Inschrift über die linke Rosette und die Tabula Ansata hinweg. Die erste Zeile steht höher als der obere Rand der Tabula und geht über die rechte Seitenleiste hinaus. Die

übrigen Zeilen enden innerhalb der Tabula.¹ Die Buchstabenhöhe ist 3 cm. durchschnittlich.

ΕΝΘΑΔΕΚΕΙΜΕΑΜΑΝΔΟΥΤΡΥΦΗΣΠΑΧΗCOMETACΧΩΝ
 ΙCΘΘΕΩCΖΗCΑCΠΟΥΔΥΝΕΤΩΝΑΡΙΘΜΟΝ
 ΕΝΔΟΞΟCCCΤΡΑΤΙΑCΑΡΞΑCΔΕΚΑΤΑΡΧΙΑΙΤΕΙΜΗ
 ΚΑΙΜΕΤΑΤΟΝΘΑΝΑΤΟΝΖΩCΑΝΕΧΩΝΑΡΕΤΗΝ
 5 ΤΙCΓΑΡΤΟCCΕΤΡΥΦΗΣΕΝΕΝΑΝΘΡΩΠΟΙCΟCΕΓΩΠΕΡ
 ΗΤΙCΥΠΟΠΑΤΡΗCΤΟCCΗΝΕCΧΑΓΑΠΗΝ
 ΓΝΩΡΙΜΟCΕΝΠΟΛΛΟΙCΙΝΥΠΑΡΧΩΝΑΝ. ΡΑCΙΝΑΙΕΙ
 ΟΝΠΟΘΕΕCΚΕΠΑΤΡΗΗΤΕΚΕΝΕΥ

In Transkription ergibt sich folgendes.²

ἐνθάδε κεῖμαι Ἀμάνδος τρυφῆς πάδης ὁ μετασχών,
 ἰσοθέως ζήσας ποτὶ λὺν ἐτῶν ἀριθμόν,
 ἐνδύξας στρατιᾶς ἄρξας δεκατάρχιδι τέλει,
 καὶ μετὰ τὸν θάνατον ζῶσαν ἔχων ἀρετήν.
 5 τίς γὰρ τόσος ἐτύφρησεν ἐν ἀνθρώποις ὅς' ἐγώ περ;
 ἢ τίς ὑπὸ πάτρης τόσῃν ἔοχ' ἀγάπην,
 γνῶριμος ἐν πολλοῖσιν ὑπάρχων ἄν[δ]ραδιν αἰεὶ,
 ὃν ποθέεσκε πάτρην, ἣ τέκεν εὖ ;

„Da liege ich, Amandos, der ich teilhatte an allem Wohlleben, der ich göttergleich gelebt habe eine große Zahl von Jahren, der ich ruhmvoll das Heer befehligt habe im Rang des Chefs einer Zehnschaft und noch nach dem Tode die Arete lebendig erhalte. Ja, wer hat soviel Wohlleben genossen unter den Menschen, wieviel ich (genossen habe), oder wer hat von seinem Vaterlande soviel Liebe erfahren, der ich immer unter vielen Männern bekannt war, nach dem das Vaterland sich sehnte, das ihn gebar. . . (?)“

Das Epigramm enthält die Poetisierung des üblichen Formulars

¹ S. beigegebene Zeichnung, die ich der Liebenswürdigkeit meines Kollegen Sukenik und seines Gehilfen, Herrn Avi-Gad, verdanke. Dr. Sukenik hat mir auch freundlichst den von ihm hergestellten Abklatsch der Inschrift zur Verfügung gestellt. Herrn Dr. Lachmann, dem um die Erschließung und Rennaissance der Tiberianischen Quellen hochverdienten Chef der Bäder, der den Stein vorsichtig gereinigt hat, und besonders Herrn Ingenieur Gustav Landau von der Stadtverwaltung Tiberias, der mir mehrfach mit Abklatschen und Aufnahmen behilflich war und bereitwillig auf alle Anfragen antwortete, spreche ich hier meinen Dank aus. Ich habe den Stein auch an Ort und Stelle mehrere Male untersucht.

² Ich benutze von nun an das Leydener Klammersystem (cf. *Gnomon*, 1935, p. 625,3), das jetzt auch von I. G. angenommen worden ist.

eines Prosaepitaphs. Es beginnt mit der *ἐνθάδε κεῖμαι*-Formel, der das n.p. folgt. Statt *καλῶς βιώσας* oder ähnlichem wählt der Dichter einen epischen Ausdruck, an den die Angabe des Alters des Toten angeschlossen ist. Sie wird mit einer homerisierenden Phrase allgemein gegeben. Dann folgt Beruf oder Rang; am Schluß stand der Geburtsort.

Lassen wir zuerst alle weltanschaulichen Momente des Gedichts beiseite und beschränken uns auf knappe Kommentierung des Sprachlichen und Sachlichen. V. 2. ist wohl an dem Adverbium *ισοθέως* festzuhalten, obwohl *ισόθεος* syntaktisch denkbar ist und eine Verschreibung von *ω* statt *ο* anzunehmen nicht ausgeschlossen ist. Aber die Parallele zu *καλῶς βιώσας* und ähnlichem spricht für die adverbiale Form. Der Ausdruck *ζήσας . . . ἐτῶν ἀριθμόν* entspricht dem epischen und klassischen Gebrauch des Verbs in Verbindung mit *βίος*; cf. ο 491: *ζῶεις δ' ἀγαθὸν βίον*; Soph. El. 599; dazu mit einem Adverbium cf. Philemon CAF (Kock) 213, 5: *τὸν βίον ἀσφαλῶς*, in Verbindung mit Adv. allein cf. Soph. Phil. 505 (*εἰ ζῆ*) und ib. OC 799 (*κακῶς . . . ζῶμεν*). Das Adjektiv *ισόθεος* kommt bei Homer nur in dem stereotypen Versschluß *ισόθεος φῶς* vor (B 565, α 324), so auch in Aesch. Pers. 80, wird aber auch in Verbindung mit Sachen gebraucht (cf. Isocr. 5, 145), Epicur. frg. 165 (Us). Eine Parallele zur adverbialen Verwendung habe ich nicht gefunden.³ V. 3. Das *ω* kann als sicher gelten, nachdem ein überflüssiges *σ* erkannt ist. Das Adverbium ist in Inschriften häufig, z. B. SIG. 442.7. Bei Epicur. (Sentent. 7, bei Baley p. 96) *ἐνδοξοὶ καὶ περιβλεπτοὶ τινες ἐβουλήθησαν γενέσθαι*. Das Adjektivum *δεκάταρχος* ist bisher unbelegt, und wir gewinnen so ein neues griechisches Wort. Der bombastische Ausdruck steht zu der bescheidenen Charge in schreiendem Widerspruch. Denn der *δεκάταρχος*, das Haupt einer zehnköpfigen Zeltgemeinschaft (decurio)⁴ im alten römischen Heer, einer Zehntel Centurie, die in späterer Kaiserzeit manipulus heißt (Veget. II, 13), ist griechisches Aequivalent für decanus, der ein contubernium befehligt, also ein Unteroffizier.⁵ Ein *δεκαδάρχος* εἴλης

³ Bei JALABERT et MOUTERDE, *Inscr. Gr. et Lat. de Syrie. I. Commagène et Cyrrh.* 1929, no. 153 E. bietet der Stein: *φίλον πατέρα ἡδ' υἱὸν καὶ . . . ἡδ' ἄλοχον καὶ . . . ἔρνος . . . οθεους*. Es ist zu ergänzen [*ισοθέως*].

⁴ cf. JOSEPHUS, *Bellum* I. 2, 20, 7.

⁵ cf. P.W. VIII 2245 s. v. *decanus* und die dort angeführten Quellen; s. auch ib. VII 1164 sq. s. v. *contubernium*, cf. MARQUARDT, *St.-V.* II² 1876, p. 586.

ist auf einer Inschrift in Ägypten vom Jahre 116 n. Chr. belegt,⁶ ein anderer ohne nähere Angabe vom Jahre 117 mit Namen *Ιηλιμέντιος Ουερεηκοῦνδος* ebendort.⁷ Der Ausdruck *στρατιῶς ἄρχειν* als Bezeichnung für den Militärdienst hat eine schöne Parallele in dem Epigramm der Anth. Pal. (= *AP.*) VII 678, 3⁸: *ἦρξα δ' ἐν ἱππίῃσσι*. Daß die Verse 2 und 3 topischen Charakter haben, beweist *A. P.* VII 307 des Paulus Silentiarius:

*οὐνομά μοι . . . τί δὲ τοῦτο; πατρίς δέ μοι . . . ἐς τί δὲ τοῦτο;
κλεινοῦ δ' εἰμὶ γένους. εἰ γὰρ ἀφανροῦτάτου;
ζήσας ἐνδόξως ἔλιπον βίον. εἰ γὰρ ἀδόξως;
κεῖμαι δ' ἐνθάδε νῦν . . . τίς τίνι ταῦτα λέγεις;*

Der späte Epigrammatiker, der wohl nach hellenistischen Vorbildern arbeitet,⁹ spottet über den banalen Formel- und Gedankenbestand der Epitymbia und erweist gerade die in unserm Epigramm vorhandenen phraseologischen Elemente als die üblichen. Der Dichter unseres Epigramms hat wohl variieren wollen und ein anderes pathetisches Adverb (*ισοθέως*) mit *ζήσας* verbunden, um das triviale *ἐνδόξως* in dieser Verbindung zu vermeiden. Doch die Tradition und Übung der Epigrammdichtung zwingt ihn scheinbar, es doch zu gebrauchen, wenn auch in anderer Verbindung. Die Stellung der beiden Adverbia am Anfang zweier auf einander folgenden Hexameter — beide kopuliert mit Participia — scheint ungeschickt genug. V. 4 ist eng mit v. 3 verknüpft. Die *δόξα* seiner militärischen Leistungen, seine *ἀρετή*, lebt auch nach dem Tode. Das Fortbestehen einer Leistung oder Tugend — *μετὰ τὸν θάνατον* oder ähnliches — ist ein Topos der sepulkralen Epigrammatik. *A. P.* VII 255: *ζῶν δὲ φθιμένων πέλεται κλέος* bietet eine vollkommene Analogie, ib. 251 *οὐδὲ τεθνᾶσι θανόντες, ἐπεὶ σφ' ἀρετὴ κτλ.* cf. auch ib. 258; 730,8; 673,8 *Ἀνδρέα, σὺ ζῳεῖς, οὐ κἀτιθανες*. Man muß

⁶ PREISIGKE, *Sammelb.* 4383,4.

⁷ *ib.* 4117,1. Andere zahlreiche Beispiele für *δεκαδάρχης* (die Schreibung schwankt zwischen dieser und *δεκατάρχης* in den Papyri; auch die Form *δεκάδαρχος* ist häufig belegt) cf. in PREISIGKES *Wörterb. z. d. gr. Papyrusurk.*, Bd. 3, Abschn. 10 (Militär) s. v. Alle dort angeführten Beispiele stammen aus der Zeit vom 2.—4. nachr. Jahrh., einer für unsere Inschrift passenden Zeit.

⁸ Näheres über dieses Epigramm siehe unten. Ich zitiere übrigens die *Ant. Pal.* nach der unzureichenden Ausgabe von Tauchnitz (1872), da ich keine andere hier zur Hand habe.

⁹ cf. SCHMIDT-STÄHLIN *Lit. Gesch.* II, 1, p. 119.

bis zu der großartigen Stelle der sophokleischen Antigone hinauf gehen, wo von den ewigen νόμιμα die Rede ist, die αἰεί ποτε ζῆ (456), um für die ζῶσα ἀρετή dieses schönsten Verses des Epigramms eine Parallele zu finden. V. 5.6. Rhetorische Fragen im Epigramm sind häufig und passen gut zu den übertriebenen Formulierungen, zu denen die versifizierte Grabinschrift neigt. Zur Übertreibung cf. z. B. *A. P.* VII 679. Die Nebeneinanderstellung der *τρυφή* und der *ἀγάπη*, die ihm von der Heimat zuteil wurde, befremdet. γάρ an der Spitze von Fragesätzen mit affirmativer Bedeutung ist attisch (cf. KÜHNER-BLASS³ II,2 p. 336). ἀγάπη hat hier die Bedeutung "Liebesbezeugungen", die ihm seine Vaterstadt und wohl auch einzelne Mitbürger erwiesen haben. Das Wort darf an dieser Stelle, einige Zeilen nach *ισοθέως* und der *ἀρετή*, nicht überraschen. Jedenfalls ist es kein Beweis für Christentum. ἀγάπη ist im außerchristlichen und außerjüdischem Sprachbereich belegt, bei Philodem. *π. παρρησίας* p. 52 (Olivieri); Schol. Thuc. 2,51,5; in Papyri und Inschriften freilich selten (cf. PREUSCHEN-BAUER, *Wörterb. z. N. T.*, s. v.). Zu unserer Stelle vgl. CLEMENS, *Rom.* I, 55: δι' ἀγάπην τῆς πατρίδος. V. 7. γνώριμος bedeutet bekannt und angesehen, cf. Dem. 19, 259: οἱ ἐνταῖς πόλεσι γνωριμώτατοι. Neben seine Beliebtheit in der Vaterstadt tritt seine Geltung unter den vielen Menschen, mit denen er im Heer oder in den verschiedenen Standorten seines Kontingents gelebt hat. *ὑπάρχων* = ὤν, wohl aus metrischen Gründen gewählt, cf. *A. P.* VII 179 σοὶ καὶ νῦν ὑπὸ γῆν, καὶ δέσποτα, πιστὸς ὑπάρχω. Daß wir es hier und im vorigen Vers mit einem Topos zu tun haben, läßt z. B. PREISIGKE, *Sammelb.* III, 1 6235, 5 (ὥς καὶ γὰρ φιλάделφος ἐὼν καὶ πᾶσι πολίταις χρηστός) annehmen. αἰεὶ am Hexameterschluß häufig bei Homer, z. B. *φ* 69; *ι* 74, vergl. auch WADDINGTON 2113 (aus der Batanea): κλέος ἄφθιτον αἰεὶ. V. 8. πόθέεσκε: das iterative Imperf. ist homerisch *A* 492. Zur richtigen Interpretation des Verses hilft WADDINGTON 2321 (aus Soueida in der Batanea), v. 5: οὐκ ἔφθης μετὰ τοῖσι πάτρην φίλους τε συναίμους Ἀντιόχειαν ἰδεῖν γενέτην θ' ἄμα τὸν σε ποθοῦντα. Also ist auch unser Amandos außerhalb seiner Vaterstadt gestorben; cf. ib. 2082 (auch am Schluß des Epigramms): πεποθημένον πατρίδι κῦδος. In der Sehnsucht der Heimat nach dem Toten könnte eine bewußte Umkehrung der homerischen Heimatssehnsucht liegen, auf die in der Epigrammdichtung nicht selten angespielt wird (cf. *A. P.* VII 263). ἦ τέκεν . . . das

fehlende Wort war der Name der Heimatstadt, wirksam ans Ende gestellt. Ohne ihn war das Gedicht unvollständig, wie das oben zitierte *A. P.* VII 307 und das übliche Formular beweisen. Ähnlichen Bau des Abschlusses in Form eines Relativsatzes zeigt *A. P.* VII 125 'Επίχαρμον, ὃν πατρίς ἐστεφάνωσ' ἄδε Συρακοσίων. Eine Analogie auch im Verbum — freilich nicht am Gedichtsschluß — bietet *A. P.* VII 417 (Meleager) πάντα δέ με τεκνοῖ Ἀτθίς ἐν Ἀσσυρίοις ναιομένα Γαδάροις. Nach τέκε ist der Stein so stark beschädigt, daß jeder Entzifferungsversuch umsonst war. Da das *EY* ganz unsicher ist, wage ich keine Ergänzung. Er muß weit von Tiberias geboren sein. Es ist müßig Stadtnamen, für die außer dem Metrum kein Anhaltspunkt da ist, einzusetzen. Der Name Amandus (cf. *Theol. Ling. Lat.* s. v.) hilft auch nicht. Es ist ein häufiger Sklavename oder im niedrigen Stand gebräuchlich, besonders in der Gallia Cisalpina und Illyrien, auch als Christenname und meistens in späterer Kaiserzeit belegt.

Zur näheren Bestimmung des Epigrammschemas, das durch unser Gedicht hindurchschimmert, kann ein ἀδέσποτον aus der *A. P.*, nämlich VII 678, ein Soldatenepigramm, dienen.

Πληρώσας στρατιὴν Σωτήριχος ἐνθάδε κείμει
 ὄλβον ἐμῶν καμάτων γλυκεροῖς τεκέεσσιν ἑάσας.
 ἦρξα δ' ἐν ἱππύεσσι, Γερήνιος οἶά τε Νέστωρ.
 ἐξ ἀδίκων τε πόνων κειμήλιον οὐδὲν ἔτευξα.
 τοῦνεκα καὶ μετὰ πότμον δρῶ φάος [ἀγνὸν] Ὀλύμπου.

Wir finden die ἐνθάδε κείμει-Formel mit zwei Participien verbunden am Anfang. Das Leben — in Analogie zum Beruf des Toten als Feldzug aufgefaßt — hat Soterichos glücklich durchgeführt. Amandos faßt sein Leben zusammen durch das Selbsttöten ἰσοθέως ζήσας. Er resümiert indem er sein Wohlleben betont, Soterichos seinen den Kindern hinterlassenen Reichtum. Dann folgt Charge und Waffengattung, bei beiden mit Hilfe des Verbums ἄρχειν ausgedrückt. Während unser Epigramm vier Participia mit dem Verbum κείμει verbindet, beginnt das Adespoton mit ἦρξα einen neuen Satz. Die Rangangabe geschieht mit Hilfe einer homerischen Analogie und ist allgemeiner. Seine Leistung wird durch den Vergleich mit Nestor, der zugleich eine höhere Charge andeuten kann, ins Große gehoben. Die Parallele von καὶ μετὰ πότμον und καὶ μετὰ τὸν θάνατον ist augenfällig. Die 5 Hexameter des

Soterichosepigramms entsprechen deutlich v. 1–4 unseres Epigramms. Wir dürfen annehmen, daß ein literarisches Schema, nach dem beide abgefaßt sind, dahinter steht. Daß in beiden Epigrammen ein Moment aus dem Leben des Toten im Anfang betont ist, in dem einen der *ἄλβος*, in andern die *τρύφή*, und dann nach einer Unterbrechung durch die Erwähnung der Charge auf dasselbe Moment zurückgegriffen wird, ist auffällig und könnte auch für das Vorbildschema charakteristisch sein. Im Soterichosepigramm kommt ein neues Moment hinzu, die gerechte Erwerbung des Reichtums, in unserem wird der Wiederholung sein Bekanntsein unter Vielen und die Liebe zur Heimat hinzugefügt. Die doppelte rhetorische Frage hat nicht genügende Verknüpfung mit dem Vorhergehenden und wirkt ungeschickt. In v. 6–8 besonders 7–8 scheint der Verfasser unter dem Einfluß eines anderen Epigrammtypus zu stehen, als dessen Reflexe vielleicht auch die oben gebrachten Beispiele gelten können.¹⁰

Und nun zu dem weltanschaulichen Element des Gedichtes. Die doppelte Hervorhebung der *τρύφή* könnte als Bekenntnis eines Epikureers erscheinen. Aber v. 6–7, besonders die *ἀγάπη*, verlangen durchaus nicht eine solche Interpretation. Ein Vergleich mit einem aus wahrhafter epikureischer Anschauung verfaßten Grabepigramm aus Apameia in Phrygien hilft zum rechten Verständnis.¹¹

τὸ ζῆν ὁ ζήσας καὶ θανὼν ζῆ τοῖς φίλοις.
 ὁ κτώμενος δὲ πολλὰ μὴ τρυφῶν σὺν τοῖς φίλοις,
 οὗτος τέθνηκε πε[ρ]ιπατῶν καὶ ζῆ νε[κροῦ βίον?],
 ἐγὼ δὲ ἐτρύφησα Μονογένης ὁ καὶ Εὐσταθίης,
 μετέδωκ[α] ἑμαυτ[ο]ῦ πάντα τῇ ψυχῇ καλὰ.
 ἀμίχως ἐβίωσα μετὰ φίλων καὶ συγγενῶν.¹²

Der lehrhafte Ton der Maximen in ihrer kräftigen Antithetik ist wirklich Ausdruck einer Anschauung. Mit dem Übergang zur ersten Person wird das Gedicht zum individuellen Bekenntnis. Übereinstimmung zwischen Epikurfragmenten und unserem Epigramm

¹⁰ Eine Untersuchung aller versifizierten Soldatengrabinschriften könnte für die Topik und Form dieses speziellen Genos Wichtiges ergeben.

¹¹ W. M. RAMSAY, *The Cities and Bishoprics of Phrygia*, Oxford, 1897, p. 476, No. 343. ¹² Vergl. auch *ib.*, p. 386, No. 232, besonders die v. 11, 19–24, der Ergänzung RAMSAYS von v. 3 ist ζῆ νε[κροῖς] entsprechend dem ζῆ φίλοις v. 1, oder ζῆ νε[κρός] vorzuziehen.

(siehe oben z. B. ἐνδοξος) im Wortbestand beweist nicht die epikureische Gesinnung unseres Amandos. Die Antithese v. 4. θάνατον ζῶσαν ist durch obige Beispiele als topischer Bestandteil des Genos erwiesen. Die Betonung des Wohllebens war in Grabgedichten nicht selten; cf. z. B. eins aus Antince in Ägypten (3. Jahrh.): πάντων τυχόντα τῶν βροτοῖσιν ἡδέων.¹³ Es ist also denkbar, daß ein topisches Element in unserem Epigramm unter dem Einfluß epikureischer Ideen und ihrer populären Reflexe mit Anklang an epikureische Begriffe formuliert worden ist. Aber ein Epikureer ist Amandos deshalb nicht.

Verstöße gegen die Gesetze des Verses sind in geringer Anzahl vorhanden. Die Endsilbe von Ἀμάνδος ist kurz gemessen trotz der beiden Konsonanten am Anfang des nächsten Wortes. Aber hinter das n. p. fällt die Cäsur; bei Eigennamen ist man nicht streng. Die zweite Silbe von ἀριθμός ist falsch gemessen. Bei Homer (δ 451 λ 449 π 246) ist sie immer lang. V. 6. ὑπὸ πάτρης ist das betonte ο lang. Homer bot dem Dichter einen Anhalt, denn er gebraucht in bestimmten Fällen, meist vor liquida, aber auch vor andern Konsonanten (K 376 ὑπὸ δειούς), sogar vor Vokal (O 275 ὑπὸ ἰαχῆς) die kurze Form, wenn Iktus auf sie fällt.¹⁴ Hiatus findet sich einmal, und zwar in der Cäsur (v. 8).

Die Zeit des Epigramms näher zu bestimmen, ist schwierig. Charge und Stil sprechen für die ersten Jahrhunderte der Kaiserzeit. Auch der paläographische Befund paßt ungefähr für das dritte Jahrhundert.

¹³ J. GEFFKEN, *Griechische Epigraphik*, no. 371, 18 p. 151.

¹⁴ cf. KÜHNER-BLASS. *Grammat.*³ I, 2, p. 250.

JÜDISCHE LAMPEN

A. REIFENBERG

(JERUSALEM)

Die letzten Jahre haben unsere Kenntnisse über die Entwicklung der jüdischen Kunst in nachbiblischer Zeit außerordentlich bereichert.

Während früher eine mehr oder minder starke Lücke zwischen der Kunstentwicklung etwa zur Zeit des zweiten Tempels und der mittelalterlich-jüdischen Kunst klaffte, haben neben Funden in Katakomben ganz besonders die zahlreichen neuentdeckten Synagogenruinen aus spätrömisch-byzantinischer Zeit (3.–6. Jahrhundert) gezeigt, daß die mittelalterliche jüdische Kunst, zum Mindesten was die verwandten Motive anbelangt, eine geradlinige Fortentwicklung der antiken darstellt. Es hat sich gezeigt, daß sowohl in Palästina wie in der Diaspora nicht nur die antike Tradition aufrechterhalten wurde, sondern daß die spätrömisch-byzantinische Epoche geradezu eine besonders reiche Periode jüdischen künstlerischen Schaffens darstellt.

Dies an einem Beispiel — den jüdischen Lampen der römisch-byzantinischen Zeit — aufzuzeigen ist der Zweck der vorliegenden Arbeit. Wir sind uns dabei im Klaren, daß diese erste Bearbeitung eines bisher völlig vernachlässigten Gebietes natürlich nur einen Versuch darstellen kann, dem viele Mängel anhaften werden. Hoffentlich wird es einmal gelingen eine vollständige Ikonographie der jüdischen Lampen aufzustellen.

Die Tonlampen, von denen wir im Folgenden handeln werden, weisen sämtlich — neben anderen jüdischen Symbolen — das wesentliche Charakteristikum des antiken Judentums, den siebenarmigen Leuchter auf. Wir sind uns dabei bewußt, daß auch andere Lampen jüdischen Ursprungs sind,¹ wir wollen uns aber vorläufig auf die Behandlung solcher Lampen beschränken, bei denen der jüdische Charakter durch den siebenarmigen Leuchter klar erwiesen ist. Die Ansicht, daß der siebenarmige Leuchter hier auch als christliches Symbol verwandt wurde, kann als unbegründet zurückgewiesen werden, zumal der Leuchter in den meisten Fällen von anderen,

¹ A. REIFENBERG: *J.P.O.S.* XI, 1931, 62 ff.

rein jüdischen Symbolen begleitet wird (Schofar, Ethrog, Lulabim usw.). Als Motiv tritt uns der jüdische Leuchter — dies entgegen der Ansicht von KOHL und WATZINGER¹ und LIETZMANN² — schon auf Münzen des letzten Makkabäerkönigs Antigonos Mattatias entgegen.³ Aus späterer Zeit kennen wir seine Darstellung auf dem Titusbogen, mehreren Goldgläsern, Synagogenruinen, Glasmedaillons, Sarkophagen usw.

Es sei darauf hingewiesen, daß keiner der auf den Lampen abgebildeten siebenarmigen Leuchter den achteckigen Unterbau aufweist, den wir von dem Leuchter des Titusbogens her kennen; diese oktagonalen Platten waren möglicherweise ein Zusatz des römischen Künstlers. Auch im talmudischen Schrifttum wird das Fußgestell so beschrieben, wie wir es auf unseren Lampen erblicken.⁴ Eine Andeutung der Knäufe finden wir dagegen auf vielen Darstellungen des Leuchters (Abb. 3, 4, 8–14, 20, 22), während die aufgesetzten Öllampen auf Abb. 11, 13, und 23 besonders deutlich zu erkennen sind. Auf einer Anzahl Lampen sind die Schaftenden des Leuchters (Abb. 4, 9–12, 18,) durch einen Querbalken verbunden.

Auch die anderen, auf den Lampen dargestellten Gegenstände sind uns von Synagogenruinen, Goldgläsern usw. her bekannt. Lulab und Ethrog wurden am Laubhüttenfest gebraucht, der Schofar besonders am Neujahrsfest und das ungesäuerte Brot (Abb. 12) am Passahfest. Ungeklärt ist bis heute ein rechteckiges Objekt mit langem Stil, das verschiedenartig gedeutet worden ist. Wir finden es u. a. auf mehreren palästinensischen Synagogenmosaiken^{5 8 9} dargestellt, auf einem Kapitell von Kapernaum,⁶ einem behauenen Stein der Synagoge von Peqin,⁷ sowie einer von mir schon früher publizierten Lampe (Abb. 21; vgl. ferner Abb. 9–11, 15).

CROWFOOT und HAMILTON⁸ wollten in ihm einen Thoraschrank

¹ KOHL und WATZINGER: *Antike Synagogen in Galiläa*, S. 102.

² BEYER und LIETZMANN: *Die Katakomben von Torlonia*, 1930, S. 17.

³ HILL: *Catalogue of Greek Coins*, Bd. Palestine, S. 219, No. 56.

⁴ S. KRAUSS: *Synagogale Altertümer* (Berlin-Wien 1922).

⁵ E. L. SUKENIK: *The ancient Synagogue of Beth Alpha*, Jerusalem, 1932.

⁶ G. ORPHALI: *Capharnaüm et ses ruines*, Paris, 1912.

⁷ E. L. SUKENIK: *Quart. Stat.* 1931, pp. 22 ff.

⁸ J. W. CROWFOOT and R. W. HAMILTON: *Quart. Stat.*, 1929, S. 215 ff.

⁹ M. AVI-YONAH: *The Quarterly of the Dpt. of Antiquities in Palestine*, Vol. III, No. 3.

erblicken, SUKENIK früher eine Thorarolle¹ und jetzt ein Lesepult,² während KLEIN³ es als Almosenbüchse deutet, womit KRAUSS⁴ übereinstimmt. ORFALI hatte es schon 1922 als Räuchergefäß erklärt, während NARKISS⁵ in ihm eine zur Bedienung des Leuchters verwandte Schaufel sehen will.

Wir glauben, daß ORFALI mit seiner Deutung im Recht gewesen ist, worin uns auch eine Abbildung desselben Gegenstandes auf einem christlichen Bronzekreuz bestärkt.⁶ Damit ist aber die kultische Bedeutung des Gegenstandes nicht geklärt. Bisher ist nicht beachtet worden, daß diese Räucherschaukel fast ausschließlich in Begleitung des Schofar auftritt. Sind gleichzeitig andere Gegenstände dargestellt, wie z. B. auf den Synagogenmosaiken, so befindet sie sich immer in allernächster Nähe des Schofar. Wenn nun der Schofar besonders am Neujahrsfest verwandt wurde, so liegt an sich schon die Vermutung nahe, daß die Räucherschaukel eine besondere Rolle am Versöhnungsfest spielte. Tatsächlich finden wir auch einen Hinweis darauf in der Mischna. Die am Versöhnungstag verwandte Räucherschaukel war aus besonders gutem Golde, leichter als die sonst gebrauchte und mit einem längeren Stiel versehen (*Yoma*, 4,4 ff.). Dies würde natürlich ausschließen, daß es sich bei den dargestellten Gegenständen nur um solche handelt, die in der Synagoge gebraucht wurden. Dagegen, und gegen die Ansicht, daß es sich nur um Gegenstände des Tempels handelt, spricht aber auch schon die Verwendung der Mazza-Scheibe als Motiv.

Unsere Darlegungen führen zu dem Schluß, daß die dargestellten Gegenstände die jüdischen Feiertage symbolisieren sollen, und zwar Lulab und Ethrog das Laubhüttenfest, die Mazzascheibe das Passahfest, der Schofar das Neujahrsfest und die Räucherschaukel den Versöhnungstag.

Bevor wir uns nun den jüdischen Lampen selbst zuwenden, seien der Verwendung von Lampen im Altertum überhaupt einige Worte gewidmet.

¹ E. L. SUKENIK: *The Ancient Synagogue of Beth Alpha*, Jerusalem 1932.

² E. L. SUKENIK: *J.P.O.S.* XIII, 1, 1933.

³ S. KLEIN: *Zion*, II. p. 19.

⁴ S. KRAUSS: *Revue des Etudes Juives*, 1930, p. 412.

⁵ M. NARKISS: *J.P.O.S.* XV, 1935, 14.

⁶ O. M. DALTON: *Cat. of Early Christian Ant. in the British Museum*, London, 1901, No. 559.

Nach WALTERS¹ wurden Lampen von den Römern zu folgenden Zwecken verwandt: 1) zur Beleuchtung in Privathäusern, öffentlichen Gebäuden und bei Freudenfesten; 2) als Opfergaben für Tempel; 3) als Grabbeigaben. Alle diese Verwendungsarten finden wir auch im antiken Judentum wieder. Für die Beleuchtung von Synagogen vergleiche man die Ausführungen von KRAUSS.² Öllampen als Weihgeschenke werden (*Bar b. Arakh.* 6 b) ausdrücklich bezeugt und sowohl die palästinensischen Gräber wie auch die römischen Katakomben der römisch-byzantinischen Zeit enthalten fast immer Lampen als Grabbeigaben.

Wenn wir uns jetzt den Lampen mit Darstellungen des siebenarmigen Leuchters zuwenden, so können wir folgende Haupttypen unterscheiden: a. den alexandrinischen, b. den karthagischen, c. den palästinensischen, d. den ephesischen und e. den zyprischen Typus. Dabei sei ausdrücklich hervorgehoben, daß im Allgemeinen der „Typus“ nur nach dem ausschließlichen oder überwiegenden Vorkommen einer Lampenart an einem bestimmten Ort festgestellt werden kann; neue Funde werden vielleicht detailliertere Lokalisierungen ermöglichen.

A. ALEXANDRINISCHER TYPUS.

Die Berechtigung einen speziellen alexandrinischen Typus aufzustellen, ergibt sich daraus, daß allein schon das Museum in Alexandrien etwa ein halbes Dutzend Lampen des Typus Abb. 1 und drei Lampen des Typus Abb. 2 aufweist. Diese Lampen wurden teils bei Ausgrabungen an der Pompejussäule (Inv. Nr. 19812), teils in Moharrem Bey (Inv. Nr. 14093, 14097–14099), teils bei Ausgrabung des Serapeum (Inv. Nr. 19810, 19812) und schließlich bei den Ausgrabungen des alten Canopus³ gefunden. Fernerhin weist das Britische Museum⁴ zwei derartige Lampen auf, von denen die eine bestimmt aus Alexandrien stammt. Eine weitere derartige aus Alexandrien stammende Lampe besitzt der Verfasser, während eine zweite zwar in Palästina auf dem Karmel gefunden wurde,

¹ H. B. WALTERS: *Cat. of Lamps in the British Museum*, 1914.

² S. KRAUSS: *Synagogale Altertümer*, 1922.

³ BRECCIA: *Monuments de l'Égypte Gréco-Romaine I. Le rovine ed i monumenti Canopo*. Bergamo 1926, p. 77. Tav. XLI, 1.

⁴ O. M. DALTON: *Cat. of early Christian Antiquities in the British Museum*, London 1901, Nos. 816, 817.

aber sicherlich einen Import aus Alexandrien darstellt. BRECCIA (*a. a. O.*) setzt, in Analogie zu ähnlichen Lampen mit christlichen Symbolen, ihre Herstellungszeit in das vierte Jahrhundert.

Die Lampen sind aus einem feinen gelblichen Ton verfertigt. Der siebenarmige Leuchter nimmt den ganzen Spiegel ein und ist von den Attributen des Laubbüttenfestes (Ethrog und Lulab) begleitet. Die Leuchterarme und der Schaft werden in Strichzeichnung gegeben. Zwei kleine Öllöcher über der dreifüßigen Basis des Leuchters dienen zur Einfüllung des Öls. Die Lampen haben einen Griff, der ausnahmslos (Töpfermarke?) zwei kreuzähnliche Zeichen aufweist. Die Flammen steigen direkt, ohne daß aufgesetzte Öllampen erkennbar wären, aus den Leuchterarmenden empor. Eine Abweichung vom Typus Abb. 1 stellt Abb. 2 dar, bei dem die Leuchterarme geradlinig sind und im spitzen Winkel vom Schaft ausgehen. Für diese Art der Darstellung sind in erster Linie die Fresken von Dura-Europos¹ einer Synagoge des 3. Jahrhunderts zu vergleichen. Der Schulterstreifen ist unverziert, wenn wir von einem Exemplar (Mus. Alex. Inv. Nr. 10149) absehen, das außer einem palmbblattähnlichen Ornament nur ein Ölloch aufweist. Sowohl bei dieser Lampe wie bei Inv. Nr. 19810 sind Leuchterarme und Schaft nicht in Strichzeichnung gegeben. Bei der letztgenannten Lampe erkennt man Kugeln innerhalb der Leuchterarme, die wohl Knäufe darstellen sollen (Abb. 3).

Es erscheint uns fraglich, ob auch die unter Abb. 4 wiedergegebene Lampe als typisch für Alexandrien anzusehen ist, da von dieser Gattung nur das eine Stück aufgefunden worden ist (Alex. Mus. Inv. Nr. 14092). Hier ist der Leuchter bedeutend eleganter modelliert, die Leuchterenden sind durch einen Querbalken verbunden, und neben Ethrog und Lulab ist auch ein Schofar dargestellt. Der Ton der Lampe ist rötlich, die Töpfermarke (?) auf dem Griff fehlt und die ganze Arbeit ist bedeutend sorgfältiger als bei den anderen Lampen. Beide Arten des Leuchters (mit und ohne Querbalken) kommen übrigens in Ägypten auf einem jüdischen Titulus der ersten nachchristlichen Jahrhunderte, der den hebräischen Namen Yudan aufweist, vor.²

¹ CLARK-HOPKINS: *The Illustrated London News*, Vol. 183, 1933. No. 4919, pp. 188 ff.

² L. A. MAYER und A. REIFENBERG: *Annales du Serv. des Antiquités de l'Égypte*, Bd. 33, 1934, pp. 81 ff.

Unzweifelhaft im Anklang an die alexandrinischen (man vergleiche besonders die in Strichzeichnung ausgeführte Darstellung des Leuchters) sind zwei andere in Palästina aufgefundene Lampen angefertigt worden, von denen die eine vom Karmel,¹ die andere aus Caesarea (Abb. 5) stammt, obwohl beide keine Griffe, die auf dem Karmel gefundene sogar nur den Leuchter (ohne Ethrog und Lulab) aufweisen. Beide Fundplätze liegen übrigens in der Nähe von Häfen, wo den einheimischen Töpfermeistern am ehesten Gelegenheit gegeben war, ausländische Typen kennenzulernen.

Wir ersehen jedenfalls aus diesen Lampen, daß im vierten nachchristlichen Jahrhundert noch eine ansehnliche jüdische Gemeinde in Alexandrien bestand. Dies ist ja auch vielfach literarisch bezeugt, indem wir z. B. wissen, daß noch zu Anfang des 5. Jahrhunderts in Alexandrien Kämpfe zwischen Juden und Christen ausgefochten wurden, bis schließlich 414 eine blutige Judenverfolgung einsetzte.² Immerhin war seit dem 2. Jahrhundert die Bedeutung Alexandriens als eines geistigen Zentrums für das Judentum immer mehr und mehr zurückgegangen. Ein großer Teil der Juden wanderte aus, vornehmlich nach den benachbarten Kolonien an der nordafrikanischen Küste. Zwischen dem zweiten und vierten Jahrhundert entstehen neue jüdische Gemeinden mit Synagogen, eigenen Nekropolen, mit Archonten und synagogalem Amtspersonal in den Städten Karthago, Utica, Naro und dem mauretanischen Caesarea.³ Bei dieser Lage der Dinge ist es kein Wunder, daß einerseits der alexandrinischen Lampentypus z. B. in Palästina aufgefunden, bzw. auch nachgeahmt wurde und — wie wir später sehen werden — andererseits auch in Alexandrien eine Lampe des karthagischen Typus aufgefunden wurde. Es bestanden eben enge kulturelle Beziehungen zwischen den Ländern der Diaspora.

B. KARTHAGISCHER TYPUS.

Nicht früher als im vierten Jahrhundert treten in Nordafrika Lampen einer besonderer Form auf, die vielfach christliche Symbole und in einigen Fällen auch den siebenarmigen Leuchter aufweisen.

¹ L. OLIPHANT: *P.E.F. Quart. Statement*, 1886, p. 8.

² DUBNOW: *Weltgeschichte des jüd. Volkes*, 1925, Bd. 3, 248.

³ DUBNOW, *op. cit.*, pp. 179 ff.

Man vergleiche in erster Linie den Katalog von BLANCHÈRE und GAUCKLER,¹ in dem ungefähr 150 in Karthago gefundene derartige Lampen besprochen werden, sowie die Monographie von DELATTRE.² Selbstredend finden sie sich auch in anderen Gebieten des Mittelmeerbeckens (Sizilien, Italien, Ägypten usw.). BRECCIA nennt diesen Typus „afrikanisch“.³ Wegen der außerordentlich großen Zahl dieser Lampen, die in Karthago gefunden wurden, haben wir dort wohl das ursprüngliche Fabrikationszentrum zu suchen.

Die Lampen dieses Typus sind von grober Ausführung, der Ton von rötlicher bis leuchtend roter Farbe. Die Form ist länglich mit langausgezogener Dochtschnauze, die wohl eine bessere Dochtführung gestattete. Der Spiegel ist zumeist von einem Palmblattornament umrahmt, das zu dem Schulterstreifen überleitet. Charakteristisch ist für die karthagischen jüdischen Lampen, daß auf ihnen nur der siebenarmige Leuchter dargestellt ist und nicht die Attribute des Laubhüttenfestes (Abb. 6).

Eine derartige Lampe wurde in der jüdischen Nekropole Karthagos, Gamart, gefunden und von DELATTRE² beschrieben. Zwei weitere derartige in Karthago gefundene Lampen befinden sich im Museum Alaoui.^{1b} Auch bei der Ausgrabung des Synagogenmosaiks von Hammâm el-Lif⁴ in der Nähe Karthagos wurde dieser Typus gefunden.

Besonders interessant ist es nun, daß die von DELATTRE² beschriebene Lampe auf der Rückseite die Töpfermarke „I“ aufweist; genau dieselbe Töpfermarke findet sich auf einer analogen Lampe, die in Alexandrien ausgegraben (Mus. Alex. Inv. Nr. 14096) und von BRECCIA^{3b} beschrieben wurde. Von dem Herstellungszentrum Karthago aus muß also eine Lampe des Töpfermeisters „I“ ihren Weg nach Alexandrien gefunden haben.

Eine Lampe desselben Typus befindet sich in der vatikanischen Sammlung in Rom (Abb. 6). Noch interessanter aber ist es, daß eine solche Lampe sogar bei Ausschachtungsarbeiten in Trier in der

¹ LA BLANCHÈRE et P. GAUCKLER: *Cat. du Musée Alaoui*, Paris 1897.

(b) Nos. 589, 590.

² R. P. DELATTRE: *Lampes Chrétiennes de Carthage*. Lyon 1880.

³ BRECCIA: *Le Musée Gréco-Romain au cours de l'année 1932/33*. Alexandria 1924. (b) p. 31.

⁴ R. P. DELATTRE: „Gamart ou la Necropole Juive du Carthage.“ Extrait des „*Missions Catholiques*,“ 1895.

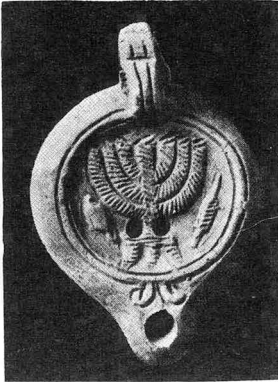


Abb. 1 Alexandria



Abb. 2 Alexandria



Abb. 3 Alexandria

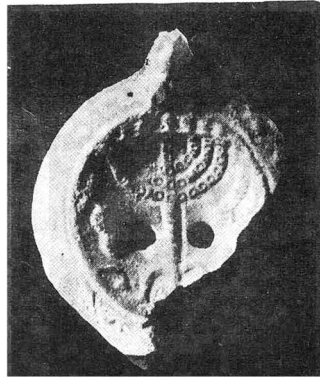


Abb. 4 Alexandria

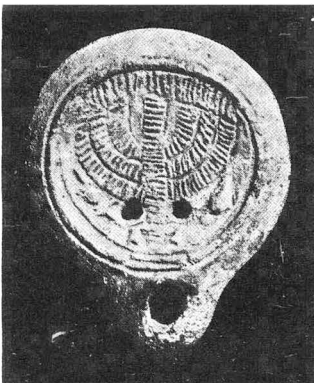


Abb. 5 Caesarea

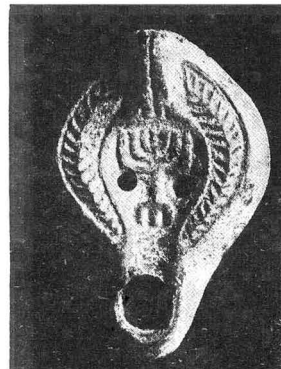


Abb. 6 Rom (Herkunft Karthago?)

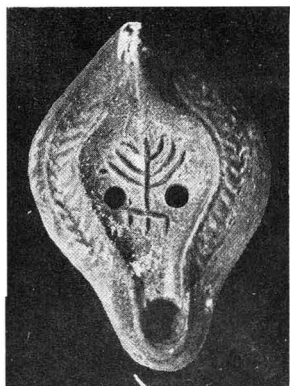


Abb. 7 Askalon (Herkunft Karthago?)

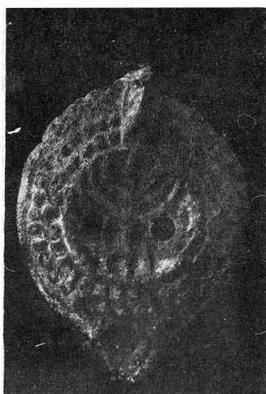


Abb. 8 Karthago

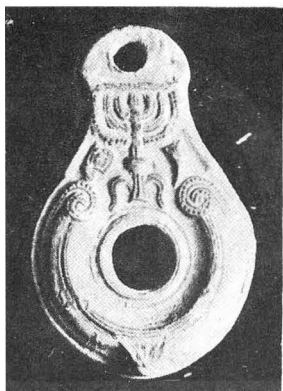


Abb. 9 Palästina (Qubāb)



Abb. 10 Palästina



Abb. 11 Palästina



Abb. 12 Ephesus

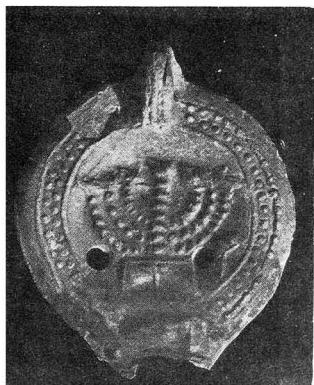


Abb. 13 Ephesus

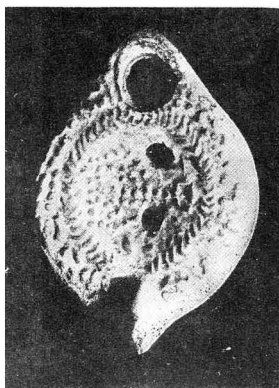


Abb. 14 Zypern



Abb. 15 Syrien



Abb. 16 Syrien

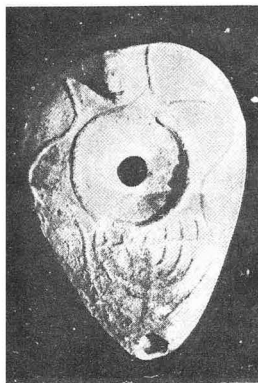


Abb. 17 Syrien



Abb. 18 Palästina

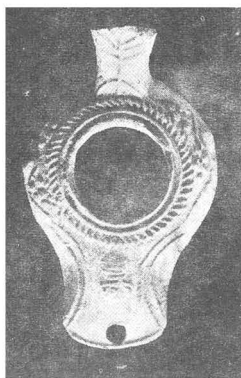


Abb. 19 Palästina (Nazareth)

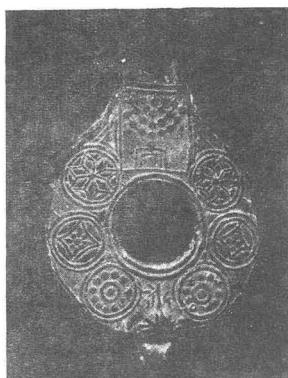


Abb. 20 Palästina

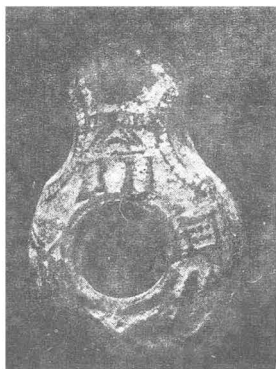


Abb. 21 Palästina



Abb. 22 Syrakus



Abb. 23 Rom

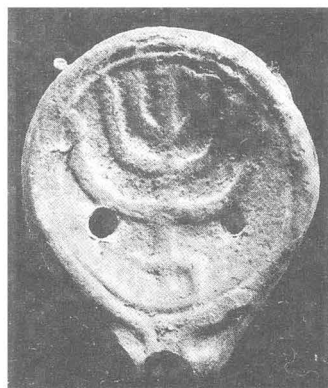


Abb. 24. Rom

Nähe der alten Judengasse entdeckt wurde.¹ Es steht ja fest, daß die Juden schon früh begonnen haben sich den römischen Handelsorganisationen anzuschließen. Von Italien, bzw. Südgallien und Spanien, führte der Weg zu den römischen Kolonien am Rhein und nach Trier. Man vergleiche dazu ALTMANN,¹ nach dem es im vierten (und vielleicht sogar schon im dritten) Jahrhundert Juden in Trier gab.

Eine weitere Lampe ähnlichen Typus wurde in Askalon gefunden und befindet sich im Besitz des Verfassers. (Abb. 7).

Abgesehen von diesen existiert noch ein anderer karthagischer Lampentypus, (Abb. 8), von dem sich ein Exemplar im Britischen Museum² und ein anderes im Museum Alaoui³ befindet.

Jedenfalls zeigen die vorstehenden Ausführungen, daß in Karthago eine Werkstätte jüdischer Lampen bestand, die nach Alexandrien und Palästina einerseits und über Italien nach Deutschland andererseits ihre Produkte schickte. Die äußere Form der Lampen ist der christlichen und heidnischen Umwelt entlehnt worden, indem an Stelle des christlichen oder heidnischen Symbols der siebenarmige Leuchter gesetzt wurde. Mangels exakter Fundberichte lassen sich diese Lampen nicht genau datieren; sie dürften später als die alexandrinischen sein und etwa dem vierten bis sechsten Jahrhundert angehören.

C. PALÄSTINENSISCHER TYPUS.

Wir haben schon oben von zwei Lampen berichtet, von denen die eine sicherlich einen Import aus Alexandrien darstellt, während die beiden anderen Nachahmungen des alexandrinischen Typus zu sein scheinen (Abb. 5). Auch der karthagische Typus wurde nach Palästina importiert (Abb. 7). Charakteristischerweise sind alle diese Lampen in der Nähe von Häfen gefunden worden (Karmel, Caesarea, Askalon).

Andererseits sind aber auch in Palästina Lampen gefunden worden, die charakteristische Besonderheiten aufweisen. Der siebenarmige Leuchter nimmt nicht mehr den Spiegel der Lampe ein, sondern ist — mit Ausnahme von Abb. 11 — zur Dochtschnauze hin verschoben. An die Stelle des Spiegels tritt ein großes Loch zum

¹ A. ALTMANN, *Das früheste Vorkommen der Juden in Deutschland* (Trier 1933).

² DALTON, Fußnote 4, S. 169, No. 756, Abb. 7.

³ LA BLANCHÈRE et P. GAÜCKLER: *Cat. du Musée Alaoui*, No. 591.

Einfüllen des Öls. Eine weitere Besonderheit dieses Typus besteht darin, daß neben dem Leuchter nicht mehr Lulab und Ethrog figurieren, sondern Schofar und Räucherschaukel. Bei dieser Gelegenheit sei ein Irrtum SUKENIKS¹ berichtigt: die von ihm herangezogene Lampe meiner Sammlung weist neben dem Leuchter nicht Lulab und Ethrog, sondern einen Schofar auf.

Jedenfalls gehört diese Räucherschaukel nach dem heutigen Stande der Wissenschaft vorwiegend zum palästinensischen Bilderkreis. Demgemäß kommt sie auch vorwiegend auf in Palästina bzw. Syrien hergestellten jüdischen Lampen vor.

In einfacher Ausführung finden wir sie auf einer Lampe in der Sammlung der Dormitio in Jerusalem, wo sie neben einem Schofar den siebenarmigen Leuchter flankiert. Auf einer Lampe der Clark'schen Sammlung (jetzt in der YMCA in Jerusalem) ähnelt ihre Form mehr der eines Altars. Ein anderes Exemplar derselben Sammlung, das in Qubâb gefunden worden ist, zeigt den Leuchter sowie Schofar und Räucherschaukel in ganz besonders schöner Ausführung, Abb. 9. Von ganz ähnlichem Stil und ähnlicher Ausführung ist eine Lampe in der Sammlung des Flagellatio-Klosters in Jerusalem, Abb. 10. Die Datierung gerade dieser Lampen ist durch eine Arbeit von BARAMKI² ermöglicht worden. Eine ähnliche Lampe wie die unter 9 und 10 abgebildeten wurde zusammen mit anderen Lampen und Münzen des 3. Jahrh. in Beit Nattif (Palästina) ausgegraben. Eng verwandt mit diesen Darstellungen ist eine von mir in Beirut erworbene Lampe, die angeblich aus Palästina stammen soll. Hier beherrscht der Leuchter mit seinen Attributen die Lampe vollständig, sodaß der Eindruck entsteht, daß dem Töpfer nicht so sehr daran gelegen war, eine Lampe zu schaffen, wie den siebenarmigen Leuchter und seine Attribute zur Darstellung zu bringen (Abb. 11). Bei allen diesen Darstellungen des Leuchters sind übrigens die Leuchterarme durch einen Querbalken verbunden, auf dem man z. T. die aufgestellten Tonlampen erblickt. (So auch auf palästinensischen Synagogenmosaiken, mehreren Goldgläsern, dem Relief von Priene usw.)

Weitere in Palästina gefundene jüdische Lampen mit Darstellungen des siebenarmigen Leuchters werden wir unten behandeln.

¹ E. L. SUKENIK: *J.P.O.S.* XIII, 1, 1933.

² D. C. BARAMKI: *Quart. of Dep. of Antiquities in Palestine*, V, 1935, pp. 3 ff.

D. EPHEBUS.

Die Ausgrabungen des Österreichischen Archäologischen Institutes haben in Ephesus mehrere Lampen mit Darstellung des siebenarmigen Leuchters zu Tage gefördert. Zwei davon zeichnen sich dadurch aus, daß neben den üblichen Symbolen (Ethrog, Lulab und Schofar) noch ein kreisförmiges Gebilde erkennbar ist, das u. E. nur das zum Passahfeste gebrauchte ungesäuerte Brot (Mazzah) darstellen kann, (Abb. 12). Damit wären Darstellungen auf Goldgläsern¹ zu vergleichen. Als Töpfermarke erscheint auf der Rückseite dieser Lampe die Darstellung eines Fußes. Auf einer anderen Lampe, (Abb. 13), sind die auf den Leuchterenden sitzenden Lämpchen besonders deutlich erkennbar.

Ephesus war bekanntlich eine der ältesten jüdischen Gemeinden der Diaspora; die dortigen Juden erhielten schon in der Diadochenzeit das Bürgerrecht (Literatur hierzu und dem Folgenden bei SCHÜRER).² Die Synagoge der Juden von Ephesus wird in der Apostelgeschichte erwähnt.³ Zwei jüdische Grabinschriften des 2.-3. nachchristlichen Jahrhunderts befinden sich im Britischen Museum (SCHÜRER, *a. a. O.*). In einer Urkunde aus dem sechsten Jahrhundert, im Hirtenbrief des Bischofs Hypathios, werden die Juden von Ephesus erwähnt.

E. ZYPRISCHER TYPUS.

Die auf Zypern gefundenen Lampen, von denen sich eine im Museum zu Nikosia, eine im Jüdischen Museum in Berlin und eine im Besitz des Verfassers befindet, unterscheiden sich von allen übrigen jüdischen Lampen dadurch, daß hier der Leuchter quer zur Dochtschnauze steht. Neben dem Leuchter befinden sich Ethrog und Lulab (in der Form eines Palmzweiges, Abb. 14). Eine weitere Lampe mit Darstellung des siebenarmigen Leuchters beschreibt M. THEDENAT.⁴ Der Freundlichkeit von Prof. L. A. MAYER verdanke ich Photos von Lampen desselben Typus, die im Metropolitan Museum (New York), bzw. im Museum of Fine Arts (Boston) aufbewahrt werden. Die Lampen selbst sind aus einem weißlich grauen Ton.

¹ GARUCCI: *Storia dell'arte cristiana* VI, Tafel 490 (Nr. 6). DALTON: No. 615.

² *Apg.* 198. ³ E. SCHÜRER: *Geschichte des jüd. Volkes* III³, S. 128 und 717.

⁴ THEDENAT: *Bull. de la Soc. nat. antiqu. de France* 42. 1881, 225.

Bekanntlich wurden auf Grund eines Ediktes von Trajan sämtliche Juden aus Zypern verbannt. Andererseits konnten wir¹ zeigen, daß Ende des 3. Jahrhunderts wieder Judengemeinden auf Zypern existierten. Die Synagoge von Golgoi z. B. dürfte aus dem 3.-4. Jahrhundert stammen. Weitere Nachrichten über Juden haben wir aus dem 5. und 7. Jahrhundert. Während wir früher die zyprischen Lampen in das 3.-4. Jahrhundert datierten, möchten wir heute eher das 4.-5. Jahrhundert für ihre Herstellung annehmen.

F. VERSCHIEDENE, NICHT-TYPISCHE JÜDISCHE LAMPEN.

Im Folgenden seien Lampen beschrieben, die infolge Fehlens analoger Beispiele keinem spezifischen Typus zuzurechnen sind.

a. SYRIEN.

Zwei Lampen mit Darstellungen des siebenarmigen Leuchters befinden sich im Museum der amerikanischen Universität in Beirut. Die eine (Abb. 16) zeigt neben dem Leuchter einen Lulab und auf dem Schulterblatt ein Palmettenmotiv. Möglicherweise ist der Hersteller dieser Lampe vom alexandrinischen Typus beeinflusst worden. Die andere Lampe (Abb. 15) weist, neben siebenarmigem Leuchter, Ethrog, Lulab, Schofar und Räucherschale noch die Darstellung einer Weinrebe und einer Amphora auf. Derartige Reben und Amphoren kommen auf jüdischen Münzen des zweiten Jahrhunderts, sowie auf späteren Synagogenruinen und Lampen vor. Vgl. dazu die Arbeit des Verfassers.² Eine weitere jüdische Lampe früher in der Sammlung des Herrn I. Saraffian in Beirut (Abb. 17) zeigt den Leuchter in der Nähe der Dochtschnauze. Die Linien des Leuchters gehen allmählich in die Verzierung des Schulterblattes über.

b. PALÄSTINA.

Im Archäologischen Museum der palästinensischen Regierung in Jerusalem befindet sich eine Lampe, die einen roh auf der Rückseite eingekratzten siebenarmigen Leuchter aufweist (Abb. 18).

Eine in Nazareth gefundene, jetzt im Besitz des Verfassers befindliche Lampe, zeigt den siebenarmigen Leuchter auf dem Henkel,

¹ A. REIFENBERG: *J.P.O.S.* XII, 1932, 1.

² A. REIFENBERG: *J.P.O.S.* XI, 1931, 51.

und nahe der Dochtschnauze einen Korb mit Früchten (Abb. 19). Schon früher¹ haben wir diesen Korb mit Darstellungen von Körben mit Erstlingsfrüchten(?) auf makkabäischen Münzen verglichen. Zwei weitere jüdische Lampen, von denen der Verfasser, dank der Freundlichkeit der American Colony Stores, Jerusalem, die Photographien erhalten konnte (die Originale befinden sich jetzt in Amerika) sind von uns schon früher beschrieben worden.¹ Die eine Lampe (Abb. 20) zeigt den Leuchter in der Nähe der Dochtschnauze, während auf dem Henkel eine Palme dargestellt ist. Das Schulterblatt weist geometrische Verzierungen auf. Die andere Lampe (Abb. 21) zeigt an der Dochtschnauze die Darstellung eines Thoraschreines; auf der rechten Seite befindet sich die obenerwähnte Räucherschale, auf der linken ein primitiv dargestellter Leuchter (von SUKENIK² erkannt).

c. MALTA.

Bei der Ausgrabung einer römischen Villa in Rabato³ wurde eine Lampe gefunden, die auf der Vorderseite einen Altar und zwei Schlangen aufweist, auf der Rückseite, roh eingekratzt, einen sieben-armigen Leuchter mit Ethrog und Lulab.

d. SIZILIEN.

ORSI⁴ hat einige in Syrakus ausgegrabene jüdische Lampen beschrieben. Die hier abgebildete befindet sich jetzt im Museum des Vatikans in Rom (Abb. 22.) Der Typus ähnelt in Manchem dem karthagischen. Neben dem Leuchter befinden sich zwei schwer erkennbare Objekte (Lulab und Ethrog?). Das Schulterblatt ist mit geometrischen Motiven verziert.

e. ROM.

Völlig einzigartig in der Form und (vielleicht den ältesten Typus jüdischer Lampen darstellend) ist eine im Vatikanischen Museum aufbewahrte Lampe (Abb. 23). Auf den Armen des Leuchters erkennt man deutlich die aufgestellten Tonlampen.

¹ A. REIFENBERG: *J.P.O.S.* XI, 1931, 62 ff.

² E. L. SUKENIK: *The ancient Synagogue of Beth Alpha*. Jerusalem, 1932.

³ P. F. BELLANTI: *Studies in Maltese History*, p. 149. Valetta, 1924.

⁴ P. ORSI: *Röm. Quartalsschr. f. christl. Altertumskd.*, Bd. 14, 1900, 187.

DE ROSSI beschreibt¹ eine auf dem Palatin gefundene jüdische Lampe, bei der die Leuchterarme rechteckig geformt sind. Fernerhin beschreibt MUSELLI² eine in einer römischen Katakomben gefundene Lampe, die uns auf Grund seiner Zeichnung mit einer im Kaiser-Friedrich-Museum zu Berlin aufbewahrten Lampe identisch zu sein scheint (Abb. 24). Die Museumsautoritäten konnten leider keine Auskunft über die Herkunft der Lampe geben. Nach O. WULFF³ gehört sie dem dritten nachchristlichen Jahrhundert an.

SCHLUSSWORT.

Immer mehr zeigt es sich, daß die spätrömisch-byzantinische Epoche eine Glanzperiode jüdisch-künstlerischen Schaffens gewesen ist. Deutlich sprechen dafür auch die allenthalben in Palästina und der Diaspora verbreiteten jüdischen Lampen mit dem Symbol des antiken Judentums *kat exochen* — dem siebenarmigen Leuchter. Daneben finden sich aber auch andere jüdische Symbole wie Schofar, Ethrog, Lulab, eine Räucherschäufel, sowie das ungesäuerte Brot des Passahfestes, die Mazza.

Wir konnten vorläufig fünf Fabrikationszentren dieser Lampen und zwar Palästina, Alexandrien, Karthago, Ephesus und Zypern wahrscheinlich machen. Von diesen Zentren aus haben sich die Lampen über die gesamte Diaspora verbreitet, sie wanderten von Karthago z. B. nicht nur nach Alexandrien, sondern sogar über die Alpen nach dem deutschen Trier.

Unsere Arbeit stellt einen ersten Versuch dar, das größtenteils völlig unbekannte Material zu sichten; eine lückenlose Ikonographie der jüdischen Lampen muß der Zukunft vorbehalten sein.

Der Verfasser dankt folgenden Personen und Institutionen für die Überlassung von Photographien bzw. für die Publikationserlaubnis und Aufnahme der Lampen: Direktion des Musée Gréco-Romain in Alexandrien (Abb. 1-4); Dr. Schwarz vom Jüd. Museum in Berlin (Abb. 5). Direktion des Britischen Museums in London (Abb. 8); Direktion des Y.M.C.A. (Sammlung Clark) in Jerusalem (Abb. 9); Dem Kloster der Flagellation in Jerusalem (Abb. 10); Dr. Noll vom Kunsthistorischen Museum in Wien (Abb. 12, 13). Dr. Harald Ingholt von der American University in Beirut (Abb. 15 und 16); Direktor des Dept. of Antiquities, Govt. of Palestine (Abb. 18); American Colony Stores, Jerusalem (Abb. 20, 21);

¹ DE ROSSI: *Bull. di arch. crist.* 1867, No. 7, p. 12.

² I. MUSELLI: *Antiquitates reliquiae*. Tav. CLXIX. Verona 1756.

³ O. WULFF: *Altchristl. Bildwerke*, S. 244, Taf. LIX.

Direktion des Museums in Malta (durch die Freundlichkeit von Dr. Theodor, Direktion des Vatikanischen Museums in Rom (Abb. 6, 22, 23); Direktion des Kaiser-Friedrich Museums in Berlin (Abb. 24). Die übrigen Lampen befinden sich im Besitz des Verfassers.

MASSE.

Soweit feststellbar sind Folgende die Maße (Durchmesser) der hier abgebildeten Lampen: No. 1 (8,7 cm), No. 4 (8 cm.), No. 5 (6,7 cm), No. 7 (12 cm.), No. 8 (11,7 cm.), No. 9 (11 cm.), No. 10 (10,5 cm.), No. 11 (8,8 cm.), No. 12 (8,3 cm.), No. 14 (7,7 cm.), No. 15 (8,5 cm.), No. 17 (11,4 cm.), No. 18 (8,4 cm.), No. 19 (11 cm.), No. 24 (7,8 cm.).

ON THE GEOLOGY OF THE GAZA-BEERSHEBA DISTRICT

L. PICARD and P. SOLOMONICA.

(JERUSALEM)

NOTE. Between 1928-32 I published, mainly in the "*Zeitschrift des deutschen Palästina Vereins*" several monographs dealing with the large depressions in Northern Palestine and with the Jordan valley.

The following paper is the first of a new series dealing with the Coastal Plain which I am planning to publish from time to time in collaboration with my assistants at the Geological Department of the Hebrew University.

The field survey in this case was undertaken during May and June 1935 by P. SOLOMONICA, while the control of the more important regions, the working up of the material and the following account of our research has been carried out in close cooperation. In order to obtain a clearer picture of the general structure I have added with plate III a cross-section running from the Mediterranean to the Dead-Sea. In this Section the portion East of Hebron is the representative of my research hitherto unpublished. I am much indebted to Dr. P. SOLOMONICA for his able and faithful work, the more so since it was executed under climatic and technical conditions which would have been difficult even for those better acquainted with that part of the country.

The appearance of BLAKE's "*Stratigraphy and Building Stones*" after the paper had been completed has led us to note our opinion, where it differs from his, in a footnote but has not necessitated any alteration in the text. Mr. M. GOLDSCHMIDT, at the beginning of our work, very kindly put at our disposal certain petrographic and hydrologic data, which he has himself subsequently published.

Although most of the localities referred to in this paper are named on the usual maps we would advise the reader to consult Palestine and Transjordan 1:250,000 sheet Jerusalem, Geographical section, General Staff, London 1931.

In concluding, we wish to express our particular thanks to Dr. M. B. HEXTER to whose constant help and encouragement throughout the course of the work we owe its achievement.

Jerusalem, 1936.

L. PICARD.

A. MORPHOLOGY.

The investigation here submitted was carried out over an area of c. 700 qkm. which from a morphologic aspect falls into 3 large separate divisions: coastal plain, mountain border, Beersheba basin.

1. THE COASTAL PLAIN

We designate as coastal plain the lowland extending from the sea on the west to the mountain border on the east, the course of which is fairly covered by the points Tell es Safi, Iraq el Menshiye, Tell el Hesi, Tell esh Sheriah. The plain continues towards the north; this northern section will be treated in a separate report later. To the south the plain widens out, taking in Wadi Ghazze, and passes on into the North Sinai coastal desert. Our investigations did not extend beyond the Egypto-Palestine boundary.

The landscape designated as coastal plain is not a plain in the morphologic sense, but undulated hilly territory consisting partly of depressions and partly of elevations.

A distinction must be made between a belt of recently formed coastal dunes and a much wider connected zone of sand dunes and *Kurkār* of older formations. These run right into the zone of red sand between Ramleh-Rehoboth. The third element (in this scenery), which is confined to the south in its characteristic form, is the Loess landscape.

a. RECENT BELT OF DUNES

Towards the sea, the belt of dunes inclines steeply for the most part. Towards the inland, the line of dunes is distinctly marked off as far as Khan Yunis; the border, however, is not in a straight line, but shows deep inlets at the mouths of the big wadis (W. Ghazze, W. el Hesi, etc.).

The dunes from Nahr Rubin to W. Ghazze are thus, on an average, 4-5 kms. broad. W. Ghazze compels a temporary narrowing near Deir el Belah, but in Khan Yunis again the dunes penetrate inland and unite with the large desert dunes of the so-called Shalluf, the sandy desert north of the road Asluj-El Auja. This Shalluf is nothing but the northernmost spur of the great trail of dunes from El Arish. We would like to call the whole of this huge sand basin the *Sinai coastal desert* in contrast to the *Palestinian coastal dunes*, as RANGE does.

The morphology of our coastal dunes should undergo a thorough and special examination, all information hitherto acquired on that score being totally insufficient.

The varying height of the coastal dunes as well as their distribution are mainly conditioned by the presence below the surface of older dunes and *Kurkār* hills.

Thorough investigations should also be made as to the shifting velocity. This appears to be greater in the south than in the north and is the cause, for example, of the difficult conditions encountered in the laying of the railway track from Khan Yunis to Rafa.

b. OLD DUNES AND KURKAR RANGE

This complex extends over a wide surface here in the south, its largest diameter being in the latitude of Gaza as is seen on the map. In this neighbourhood the *Kurkār* are most strongly developed. In contrast it is noticeable that the further westward they extend, the more do they take on the form of long ranges running parallel to the coast.

One such narrow strip of *Kurkār* is situated right on the edge of the dunes and runs from Khan Yunis to beyond the limit of our area at Sdud.

This long bordering range to the west of the old dunes is characterised by a steep dip on the west side and a gentle eastern slope. The second *Kurkār* range at el Huleiqat does not stand out in the relief of the landscape to the west as it does to the east near el Huleiqat itself. This range is divided up in many places by small depressions. The *Kurkār* massiv of Huj-Nejed is a particularly uniform and compact block in a landscape presenting an impassable expanse with steep slopes on all sides and is torn up by deep ravines. At many other points, smaller portions of *Kurkār* are interspersed among the old sand dunes which, however, are not of particular morphological interest.

The area of sand dunes proper displays either big gently waving undulations (e.g. east of Gaza) or well-developed hills in which one recognizes what might well be the old dunes (especially in the northern portion of the investigated area). A particular morphological phenomenon (see Plate I) is to be observed in the dune-complex of Ruhama (Wadi Jemmame) and in the neighbourhood of the sulphur works (area of W. Nukhabir). This section is precisely

similar to "badlands" in character, and in this respect shows great similarity to the Loess landscape discussed in a later chapter; it was therefore included in the latter by various investigators. Towards the south this dissected landscape passes over without any sharp boundary into a plateau. Finally, the sand dunes of this plateau amalgamate with the Loess steppe to the south.

c. THE LOESS AREA

It will be seen from the map that we, in contrast to RANGE (1922), place the boundary between Loess and the old dunes much further south, in the region where it runs into the Wadi esh Sheriah; we do not consider the assumption of an actual loam zone between the two areas to be justified (see p. 216).

The morphologic character of this sediment is only to be detected in the deep ravines of the wadi. The significant morphology of the Loess is best developed along Wadi Ghazze. Here on the border between the plateau and the steep incline towards the bed of the wadi is a belt, more than 100 m. wide, of countless bizarre-shaped loam cones.

2. THE MOUNTAIN SLOPE

The coastal plain, as defined above, continues to the west in a clearly defined gradient of hills called by us the zone of "hilly foreland" (pre-hills). These consist mainly of dome-shaped hills of an almost equal height which are a characteristic of the Eocene landscape of Palestine appearing to the onlooker from the coastal plain as a horizontal top-line. (see cross-section, Plate III).

Thus, taken as a whole, the zone of "hilly foreland" forms in effect a step from which a second steeply-rising gradient ascends. The latter is that big anticline known in literature as the Hebron anticline which, in its turn, shows a profile of uniform heights which PICARD designates the Judaeen denudation-plain.

On climbing down from the Judaeen highland to the sea, after a steep descent of the mountain gradient, one reaches the considerably lower rounded, hilly foreland. Continuing from here on a much more gentle incline, one finally reaches the coastal

plain itself. The latter shows an even surface inclining towards the sea; its disintegration into hills and depressions is due to the countless winter rivers which find, in the loose material, a suitable element for selective erosion.

The mountain wadis are deeply embedded in the harder rocks and show a narrow cross-section. In the coastal plain, similar conditions are found only where the little wadis force their way through the harder range of *Kurkār*, whereas, on the other hand, the large brooklets, comparable to small rivers in winter, have made broad depressions in the course of their frequent meanderings.

3. THE BEERSHEBA BASIN

About 10 kms. before reaching Beersheba, on the road from Gaza, one sees the mountains of the North and the South approach each other; in the place of the plain which runs up to this point in broad and gentle undulations, groups of low hills are seen to rise. Beersheba itself is situated at the point where the mountains come closest together; further to the east they recede again, making place for a wide basin.

It is impossible to give a sharp eastern boundary line to the Beersheba basin; it gradually fades away into the mountains. In this eastern section we distinguish two plains separated from each other by protruding groups of hills: the southern section, which is the larger of the two, extends about 20 kms. in the direction of the Wadi el Milh; the northern and shorter section runs about 15 kms. in the direction of the Hebron road.

From West to East the ground of the Beersheba basin rises steadily. The map shows a sea-level of 190 m. at Bir Abu Irgeig. Beersheba is situated at a sea-level of c. 300 m., Tell el Milh and Bir Arara at c. 420 m. The dip is nevertheless in no way even and at the eastern limit it is considerably bigger than in the middle section. This is explained by the fact that the final sections in particular belong already to the mountain formations, geologically speaking, and it is only on the surface that they show a thin cover of more recent deposits.

The width of the basin west of Beersheba, in the latitude of Bir Abu Irgeig, is about 10 kms., at Beersheba about 2.5 kms.,

east of the town in the northern section about 10 kms., and in the southern 3-5 kms.

The main drainage artery is the Wadi Ghazze into which all the other wadis flow either directly or indirectly; from its source to Beersheba it is known by the name of Wadi el Milh; from there onwards it is called Wadi es Seba, and only in its final section after its union with Wadi el Khelasa is it known as Wadi Ghazze.

Summing up, we may say that in the Beersheba basin we have before us a depression sunk in the Cretaceous-Eocene mountains. This was already established at the beginning of the Neogene and therefore contains all formations from Miocene till recent times.

B. THE DIVISION OF THE FORMATIONS

The oldest formation within the compass of the map is the Upper-Cretaceous. Its extent is in the main confined to the western border of the Beersheba basin and it embraces mainly the stage of the Maastrichtian and the so-called Danian. The next stage in order of date is the Eocene, forming the western border of the coastal plain. The expansion of Oligocene coincides with its extension of Eocene. The Miocene only occurs in occasional exposures. The Pliocene, which forms the complete underground of the coastal plain, appears on the surface in scattered outcrops at the edge of the mountains. The main part of the coastal plain, however, is taken up with the recent dunes and Loess formations.

TURONIAN-SANTONIAN

This constitutes the eastern mountain slope near Tel el Khweilfe and was not submitted to closer investigation.

SENONIAN

The Senonian is present in our area in the same facies as in the Judaeian desert (PICARD, 1930).

MAASTRICHTIAN

The formation extends over the Hebron road from around Tell el Khweilfe to Bir Imshash where it bends right back

eastwards in consequence of a disturbance running in an east-westerly direction.

Maastrichtian is a series of white, thinly banked limestone—sometimes red-streaked—overlaid by a bank of phosphate with the typical facies of the Maastrichtian of the Judæan desert, which, in its turn, has been covered by a thick-layered flint of breccious structure.

The fauna of the following localities includes:-

<i>Pecten orbicularis</i> Sow.	Hebron road
<i>Baculites</i> of the <i>vertebralis</i>	" "
Group	
<i>Protocardium</i> cf. <i>hillanum</i> Sow.	" "
<i>Gryphaea vesicularis</i> Lmk.	Bir Imshash
<i>Lamna</i> sp.	" "
<i>Otolith</i>	" "
<i>Dentalium octocostatum</i>	NE of Tell el Milh
<i>Baculites palestinensis</i> Pic.	Wadi Qalat

An interesting occurrence is the appearance of a *Baculites* aff. *palestinensis* Pic. which was found in a pure limestone amidst bituminous chalk. These belong therefore also to the Maastrichtian.

DANIAN or "Mottled Zone"

Just as in the Judæan desert, there appear near Bir Imshash, bright-coloured, silicated lime-stone such as has hitherto always been found overlying the Maastrichtian. These rocks occur here within the syncline of the Wadi el Milh. Continuing their course towards the south they are found on the southern edge of the Beersheba basin north of Wadi Arara. Near Bir Imshash, in the Wadi el Milh to the east of the well, there was found an interesting reef of entirely decomposed coral which today only display hexagonal contours without inner structure.

Most of the rocks are pink, silicated rocks often lined with green and also dark silicious limestone with asphalted spots.

In the Judæan desert this whole complex was provisionally grouped by PICARD in the Danian or "Mottled Zone."

As the "Mottled Zone" at Bir Imshash runs up against a fault which raises the limestone of *Gryphaea vesicularis* to the same level, the lower limit of the former is not exposed. In the course of our

casual visit we likewise did not find the limit of the Eocene, but the latter is very likely to be found north of Bir Arara.

The mountain formations in these chalky limestones have a very striking appearance as they nearly all bear a protective cap of thick-layered flint; certain of the mountains even have table-shaped summits in contrast to the steeply sloping flanks of soft, chalky limestone lying under the flint.

EOCENE

Large blocks of Eocene are frequently met with in the investigated area, marking out the actual mountain border.

The Eocene consists mainly of a lower section of white limestone, with alternating bands or lumps of flint, which RANGE (1922, p. 7) took for Cretaceous, and an Upper series of soft, often chalky limestone, sometimes marly and frequently containing glauconite. The Lower series is mainly met with in the neighbourhood of Beersheba (group of hills north of Beersheba with Abu Jerwal and group of hills south of Wadi es Seba); the Upper series is found from Tel es Safi to far south of Tel Nejile in Wadi el Hesi which however may belong already to the Oligocene (see the latter). On our map we have not marked the two series as separate, as there are not sufficient indications of a bordering region in the Beersheba district; and further North where such indications exist only the Upper series falls within the scope of our map. The "Eocene of Wadi Baha" (beyond the mountain slope) expressly designated by BLANCKENHORN (1910, p. 424) as outcropping, in contrast to the gravel of the neighbourhood, has been already emended shortly by RANGE (1926, p. 62). BLANCKENHORN's recent remark therefore 1935, p. 152) „von Sandsteingeröllen im Südosten von Gaza, wo anstehendes Eozän heute unbekannt ist" is incomprehensible. We should like to add that throughout the whole district only Abu Hareira sandstone of Pliocene age is exposed, corresponding petrographically to the sandstone described by BLANCKENHORN from which he specifies *Num. variolaria* L. As *Amphestegina* and *Polystomella* frequently occur in these rocks, one naturally suspects that in this case it was a question of confusion in the matter of fossils.

The statements of BLAKE about the Eocene of our area in his

reports of 1928, 1930 are somewhat vague.¹ At all events he speaks of Eocene "chalky beds with bedded or nodular flints" (1930, Tab.) in the coastal zone of the Gaza-Beersheba district. We were not able to distinguish whether the flinty *Nummulities* observed by him 1 km. west of Beit Jibrin were to be included in the Oligocene or the Eocene.

AVNIMELECH (1936) separated a complex of soft sponge-bearing limestone from amidst the flinty limestone in the district of Ramleh-Artuf near the Jerusalem main road, which he places in the basis of the Eocene. On top of it are layers of flint. Higher horizons were not discovered in this district. As in our area a series of soft chalky limestone of a similar petrological character is to be found above the flinty limestone, we might confirm a tripartite section¹ of the Eocene: *lower chalky layers* (Idnah-Terkumije), perhaps identical with the sponge-layers of AVNIMELECH, on top of which are *flinty limestone* superimposed by *upper chalky layers*. We must point out the fact, however, that within the range of our geological map we only met with the two upper stages, flinty limestone and a top chalky layer; whereby, as we shall presently show, the top chalky layers turn into Oligocene rock of similar facies without any definite bordering limit near Beit Jibrin (Beit Jibrin Series). In the lateral wadi turning out of Wadi en Nas, near Bir Makhaz, dolomite also is found in the midst of the flint. Dolomites were not observed in the Ramleh district. On the other hand we meet with them in middle and northern Palestine (PICARD, 1929), where they belong to Middle Eocene. It is therefore probable that the flint layers of Wadi en Nas belong to the highest part of the flint complex, which is overlain by glauconite-bearing limestone in the neighbourhood of Bir el Makhaz. Very striking is the analogy to the series of the Megiddo syncline (AVNIMELECH, DONCIEUX & PICARD, 1936). Apart from occasional sponge remains converted into limonite (e.g. Bir Khweilfe) from the limestone of the chalky series no macrofauna were found.²

¹ The microfauna given recently by HENSON (1936, BLAKE's *Report*) includes *Nummulites* with the exception of those of the Middle Eocene, and these have remained hitherto specifically indeterminate.

² The succession of microfauna (BLAKE, 1936) stated by HENSON, however, is quite in accordance with the stratigraphy of Eocene obtained by us independently in the field.

OLIGOCENE.

Oligocene has only very recently become known in Palestine. BLAKE mentioned it first as Miocene of Ramleh, outside the bounds of our mapped area, and also of Qubeibeh near Beit Jibrin. After much controversy COX (1934) finally placed it in the Oligocene. BLAKE (1928) mentioned soft chalky limestone with *Pecten*, *Nummulites* and *Lepidocyclina*. COX (1934, p. 337) mentions: "On the road from Beit Jibrin to el Qubeibeh, where a slightly sandy detrital limestone with foraminifera is overlain by a marly or chalky limestone with hard beds, which contain abundant foraminifera, together with mollusca and other fossils".

Of the fauna referred to by BLANCKENHORN only *Cardita arduini* Brong. is determined by COX (1934).

AVNIMELECH (1936) describes a further occurrence in the Ramleh district and divides the Oligocene of this area into a more sandy facies of Aquitanian and a more chalky one of Stampian age mainly on account of its fauna.

On a visit to the district of Beit Jibrin—el Qubeibeh and Zeita (September 1933) AVNIMELECH came to the conclusion (1936, p. 88ff) that the prevailing chalky limestone of that district was to be included in the lower Eocene or base of the middle Eocene and that Oligocene (Rupelian-Aquitania) follows unconformably thereupon. DONCIEUX, in possession of the material, was able to diagnose more or less as follows:

1) From Qubeibeh and Zeita out of yellow-whitish limestone and sandy limestone and sandstone.

Heterostegina depressa D'Orb.

Operculina complanata Defr.

Nephrolepidina tournoueri Lem. and Douv.

Eulepidina dilatata Micht.

Nummulites bouilei de la Harpe

" *tournoueri* de la Harpe

Algae and *Crinoidea*

He takes the rock to be Stampian-Aquitania.

2) Limestone with similar fauna but without *Nummulites* from two localities in the neighbourhood of Iraq el Menshiye are placed in the Aquitanian-Burdigalian group

In the one case (situated, according to a verbal communication

of M. AVNIMELECH, near Khirbet Sh. Shaleha) we think we can explain the lack of nummulites by the interchange of the facies; in the other case—east of Iraq el Menshiye—we have the same Oligocene rock as at Zeita. We have visited most of the localities ourselves and we think we can recognize the following section:—(see cross-section, plate III.)

Proceeding along the new road Hebron-Beit Jibrin, until about 45 kms. before the end, i.e. before Terqumie, the road remains in the cretaceous (Cenomanian, Turonian, Senonian). On the steeply inclined and very thin strata of Senonian (Flint-beds of Maastrichtian) there follows the chalky limestone of Eocene. The latter strata are first bent to a monocline and then gradually flatten out. At 45 kms. they are formed of glauconite and globigerina as well as other foraminifera-bearing flintless limestone (*Basis series*). On top of these there follows at 48 kms. partly bitumen-grey chalk with flint and larger foraminifera. At 51 kms. there appears white chalk with occasional big flint-lentils and glauconitic limestone; and finally the road at 54 kms. (Deir Nakhas) runs through white, unstratified, flintless common chalk which we include in the *Beit Jibrin Series*. The *nāri* formations extend over this whole area in unlimited stretches and prevent us therefore from obtaining a complete Eocene section on this area. Nevertheless, we can clearly recognise as a provisional division the fact that a flintless limestone series overlays the Senonian which can be placed in the Danian—Lower Eocene; and that on top of the latter there follows a series of a softer limestone, partly flint-bearing which, in the main, corresponds to *Middle Eocene*; and that finally, as top strata, there follows that compact white chalky complex of Beit Jibrin. We call the latter Beit Jibrin series which may perhaps belong to the Upper Eocene or may even extend into the Oligocene. In any case we lack clear, paleontological proof enabling us to decide for one of the periods. We are inclined to concur with BLAKE's opinion (1935) in this matter, accepting an Eocene-Oligocene age for related rock from the quarries north of Wadi Surar station and from Shireir (S. of Gaza) outside our area.¹ Meanwhile it seems doubtful to us whether the limestone from

¹ However, BLAKE now (1936), together with the Oil-geologists of the Iraq Petroleum Co., places this series in the Middle Eocene.

the great quarry 2 kms. N. of Beersheba, mentioned by him, belongs to this category. The facies are much more reminiscent of the limestone of the Middle-Upper Oligocene, now to be discussed.

These *Middle* and *Upper Oligocene* layers have become known from El Qubeibeh, as we have already mentioned. If one follows the road from Beit Jibrin to El Qubeibeh about 1 km. from the latter one finds quartzitic sandstone with an immense wealth of foraminifera and lithotamniae limestone like those mentioned in the aforementioned list of AVNIMELECH (1936).

Much better exposures are found in Tell Duweir near Qubeibeh (c. 281 m). There, on the western wall of the Tell, exposed by the excavations of the archaeologist STARKEY, we are aware of the following section from 245-265 m. hight.¹

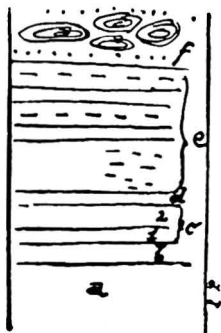


Fig. 1. Tell Duweir section

¹ Our detailed section of Tell Duweir differs from that of STARKEY in the BLAKE Report 1936. The main difference lies in the fact that we were not in a position to discover any conglomerates. We assume that the "conglomerates" are confused with the transitional layers (between Beit Jibrin series and the Foraminifera series) sometimes appearing in irregular forms in the white limestone (see our Zeita section). White patches of limestone within the foraminiferal sandstone might appear deceptively to be "blocks of foreign stones" (STARKEY) and "large blocks of stones and hard cristalline limestone" (BLAKE, 1936, p. 28). Only thus can we explain the fact of BLAKE's arriving at a conception of a transgression-conglomerate and his assuming "the near presence of an old sea-cliff." Nor do we follow AVNIMELECH (1936, p. 89) who postulates a big transgression discrepancy between Lower Eocene and Middle Oligocene as a result of putting the Beit Jibrin series on a part with the Lower Eocene layers of Sara (near Artuf).

- h. Debris of the Tell
- g. Lithotamniae calcareous sandstone with quartz, flint and green patches
- f. 3-5 m Soft sandstone with bothryoidal concretions 1 cbm. big
- e. 5-10 m Chalky limestone and marls, very rich in *Operculina* (Jibrinfazies)
- d. 1 m Yellowish and more chalky marl
- c₁, c₂ 2 m Yellowish marl, c₂ with *Orbitoides*
- b. 1 m Brownish, fine sandy limestone
- a. Chalk in Jibrinfazies. Basis.

Opposite to the west of the Tell there are found in the circus-like closed wadis, a "nāri"—covered white limestone and sandy coarse limestone with *Pecten* and fragments of sea-urchins as well as with countless *Operculina* and other foraminifera. These might correspond to strata "g" of the aforementioned Tell section.

On the road from Beit Jibrin leading to Qubeibeh, below Khirbet el Fuheidi, the variety of the facies is particularly great; however, the slope being cultivated it was impossible to obtain a clear section. Besides the rocks of Oligocene, already mentioned, we would make special mention of a brownish-grey limestone with scattered big foraminifera (mainly *Lepidocyclina*) in a compact matrix. Here the base is exposed in the form of Beit Jibrin limestone with green patches of clay.

Continuing our section (from Khirbet el Fuheidi) towards the west, we find in the upper course of the Nahr Suqreir (the section of which between el Qubeibeh and Iraq el Menshije is called Henu Kumsh)—a long succession of outcrops showing the same foraminifera—and chalky-marl (*Ramleh-facies* of Oligocene) up to the mouth of Wadi el Ruqreiq, at the point where the road from Jibrin also meets the Wadi.

A particularly interesting spot is Bir Ghai below Khirbet Furut. In samples taken at the well sinking there was found grey, glauconite-bearing marl with enclosures of *Lithotamnium* and foraminifera (see list). Further up in a quarry there was exposed yellowish limestone of the Ramleh facies.

Finally c. 1½ kms. further down in the quarry of Araq el Kharab (c. 2 kms. east of Iraq el Menshije) we meet with white, chalky limestone in part well-stratified, with numerous *Nautilidae* on the west well and occasional flint lumps reminiscent in their facies of the compact chalky limestone of Beit Jibrin. In the quarry it is seen that the strata are dome-shaped.

The relation of the limestone of Arak el Kharab to Oligocene

can be indicated in two ways. It represents either the overlying stratum of the whole Oligocene series, or a reappearance of the Beit Jibrin limestone which is the base of, or underlies, the Oligocene. In the first case, the whole Oligocene series sinks down in the normal way towards the west. In the latter case it would probably rest as a synclinal core over the Beit Jibrin chalk, for there is no indication of a disturbance between the Beit Jibrin chalk and Arak el Kharab. The Arak el Kharab series appears for the last time on the surface between Iraq el Menshije and Faluje, a little lower down, where the Beit Jibrin road crosses the Wadi Henu Kumsh; here it appears well-bedded with green clay-patches under the Pliocene in the same facies as the Basis strata near Qubeibeh. Further westward we only meet it in certain wells in the neighbourhood of Faluje.

Unfortunately we only have tests of the deep borings west of Faluje from 87 m. downwards and these therefore do not ensure us any reliable parallels.

The second locality mentioned by BLAKE, Bir Zeita (182 m), was carefully examined by us. We were able to secure the following section in the quarry opposite the Bir:-

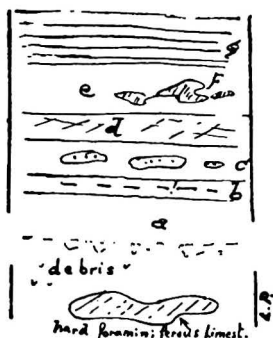


Fig. 2. Bir Zeita section.

- ca. 4 m. {
- f. Chalky marl
 - e. White chalk with (f) enclosures of larger clumps of foraminifera
 - d. Calcareous sandstone
 - c. White chalk and sandstone
 - b. Greenish marl with *Operculinae* and *Lepidocyclinae*
 - a. White chalk
 - Talus
 - Foraminifera-limestone

In the wadi, further down, this compact foraminiferous limestone is found in great thickness dipping to the west on the northern bankside. There the rock disappears. About 3 km. further down the wadi, we meet with well-bedded, fossil-bearing Oligocene limestone of the *Ramleh facies* (with coral, bivalves, gastropods) again showing a western dip. (These sediments are covered by a Pliocene conglomerate of true transgressive nature). This is another case of the same overlay of foraminifera limestone with Ramleh limestone as in the Wadi Henu Kumsh near Bir Ghai.

It is particularly noticeable at Bir Zeita that the distribution of foraminiferous limestone and calcareous sandstone is conditioned by the facies and frequently occurs in irregular forms within the rock.

It is further noticeable that on top of the chalky limestone of Beit Jibrin there follows a quite normal overlay of Qubeibeh-Zeita facies. The transition is completed near Qubeibeh in the form of a thin layer of sandstone and marl which, in its turn, is again covered by a bank of chalky limestone in the typical Jibrin facies. In this case, it is therefore a matter of normal Jibrin chalk sedimentation and the successive transition to a litoral marl-foraminifera facies. We were nowhere able to ascertain a serious interruption of the sedimentation or even the appearance of a transgression-conglomerate.

We therefore come to the following conclusions as regards our Oligocene:—

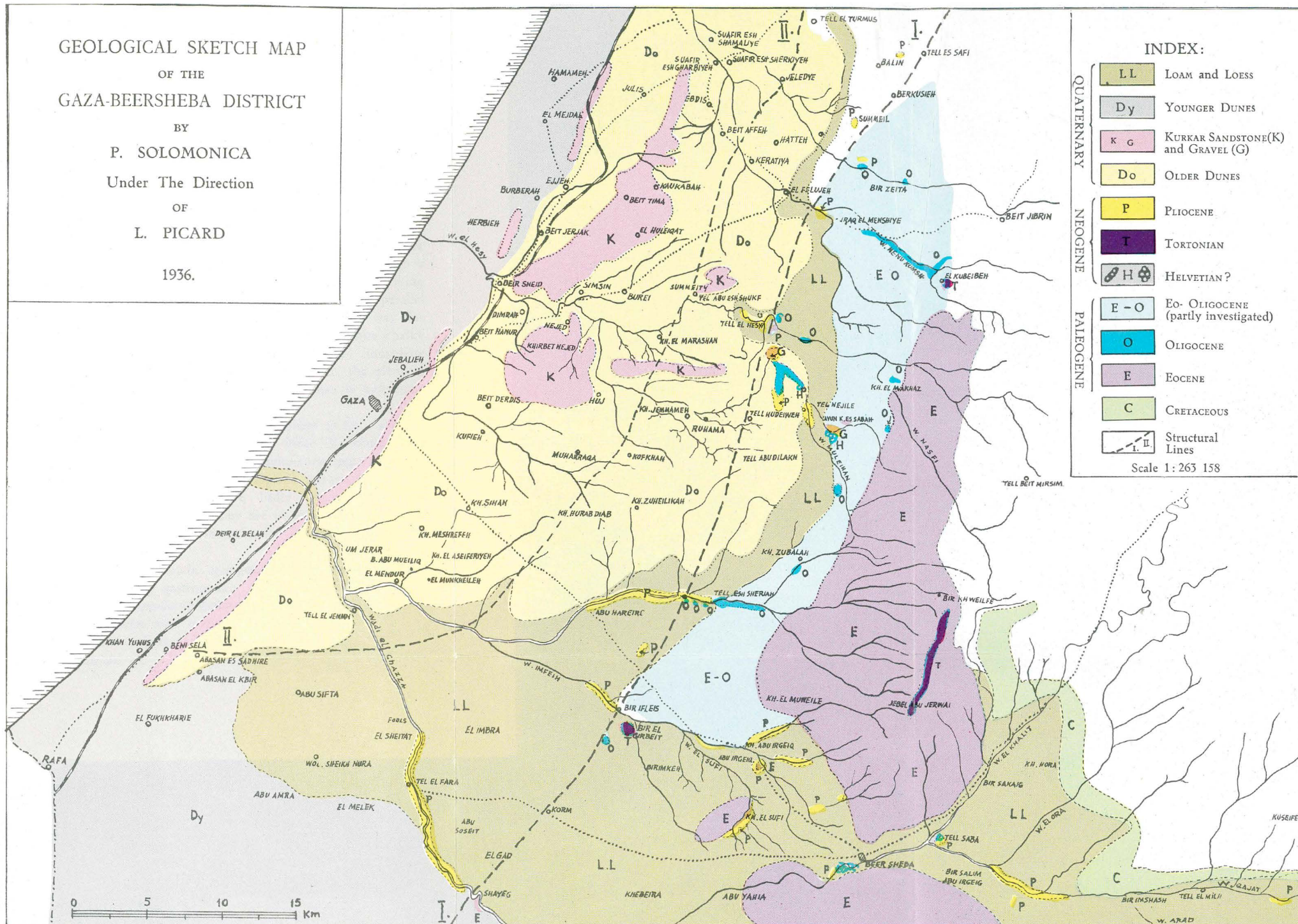
The basis is a series of compact fine-grained chalky limestone, poor in fossils, characteristic of the Beit Jibrin neighbourhood which we designate as the *Jibrin series*. It probably belongs to the *Upper Eocene—Lower Oligocene*, and probably constitutes a part of that great chalk series, designated by us, as in the section on Eocene, as the superincumbent beds of the flinty limestone.

On top of the Beit Jibrin series there follows indisputable Oligocene of the *Stampian-Aquitanian* age. This Oligocene appears in twofold facies: a lower one, in part marly, in part quartzitic sandy, rich in foraminifera (*Nummulites* amongst others), but mostly as a chalky developed series which we call the *Zeita-Qubeibeh facies*. And, secondly, an upper facies consisting of embedded, compact and slightly sandy limestone which we call *Ramleh facies*. This petrologic distinction may perhaps correspond to the division between Stampian and Aquitanian.

GEOLOGICAL SKETCH MAP
OF THE
GAZA-BEERSHEBA DISTRICT

BY
P. SOLOMONICA
Under The Direction
OF
L. PICARD

1936.



An uncertain position is occupied by the limestone of Arak el-Kharab with Nautilids. This either corresponds to the Jibrin series, or it may be a substitute of the Ramleh-facies or even the super-incumbent strata of the latter.

MIOCENE.

HELVETIAN?

In a very few spots in our district we come across yellowish-grey, thin-shaley, chalky marl with characteristic brown spots frequently filled with little foraminifera. The three most important appearances are in Wadi el Hesy north of Tell Nejile (c. 180 m.), in Wadi Kussaba near Ayun Kussaba (c. 200 m.) and in Wadi es Seba, 2 km. below the town of Beersheba (280 m.).

Wadi el Hesy north of Tell Nejile. On the western bank of the Wadi there is to be seen in an outcrop about 5 m. high a very uniform series of brown-spotted sandy marly limestone. Striking is the decomposition into little square prisms caused by the parallel fissures running perpendicular to the stratification. In this way this marl differs fundamentally in appearance both from the white chalky limestone series of the Eo-Oligocene present in its immediate vicinity, as also from marl of Plaisancian. Moreover, the plentiful if somewhat monotonous fossil content distinguishes it essentially from the soft limestone of the Eo-Oligocene.

Stress must further be laid on two peculiarities of the rock:—

There are found concretions in the form of round discs (*Septaria*) and irregular spots with a fine granulation (separate grains of the size of a pin's head) possibly of organic growth (algae?).

The few recognizable fossils are badly crushed and only preserved in the form of casts. They are in general covered with a rust brown crust. A specific identification is therefore extremely difficult.

The fauna includes certain sponges, mainly sea-urchins and bivalvae and occasionally gastropoda:—

Pecten cf. *denudatus* Reuss

Amussopecten with 9 ribs

Nuculana aff. *lecointrea* Dollf. and Dautzenbg.

Solarium sp.

Brissopsis aff. *ottnangensis* R. Hoern.

Pteropod-like tubes with concentric ribs

Echinidae indet.

Crab-remains

The substratum of the marl is not exposed. The top layer is covered with debris: nevertheless, in the background there stand out above the talus the Pliocene conglomerates and sandstone of the Astian in indubitable transgressive position.

Ayun Kussaba. Here the marl is developed in similar facies to those of Wadi el Hesi, overlying white chalky limestone of the Eo-Oligocene with an obvious conformity. Thereupon follows the gravel 3-4 metres thick of the Diluvium. The rare fauna is confined to *Corbula*-like forms and gastropod remains.

Wadi es Seba, 2 km. below Beersheba. Below the second big bend of the Wadi es Seba there rises abruptly from the gravel of the Wadi bed, on the northern side of the Wadi, steep walls of chalky marl 5-6 m. high with varying sandy content (Plate II, Fig. 2).

Apart from a big variety of very small Foraminifera we only found indefinite impressions of Bivalvae from the group of *Nucula*.

The wadi-bed conceals the underlying strata of our marl-limestone; but as the flint limestone of the Eocene is present in the immediate vicinity we may assume that the substrata consists of the latter.

The Question of Age. The rare and sporadic outcrop of our formations makes it very difficult to ascertain definitely the position of the strata. The following is recognizable:—The chalky marls are certainly older than the sandstone of the Astian sea. They are undoubtedly younger than the upper white limestone series of the Eo-Oligocene. They vary petrologically and faunistically from the Plaisancian marl. The question of a Pontian age for these formations hardly arises, the Pontian being developed, if at all, mainly in terrestrial facies. The second Mediterranean stage (Vindobonian) is developed in our area in the calcareous sandstone and riff facies, to be discussed later and is included by us provisionally in the Tortonian. Our formation shows likewise no features of relationship to the Oligocene hitherto known (Stampian and Aquitanian of Ramleh and Qubeibeh etc.) with its abundance of big foraminifera (*Orbitoides*, *Nummulites* and *Lithotamnium*

and their characteristic mollusca fauna). As, however, it must be younger than the white series of Jibrin, as we said above, we are forced for the present to include the limestone marl in the Burdigalian or Helvetian.

If we now consider the fauna (Wadi el Hesi) we are struck by the fact that in spite of its bad state of preservation, it bears a certain resemblance to the Schlier fauna of Ottmang from the upper Austrian Molasse zone, described by R. HOERNES. The latter is today placed in the Helvetian. For the reasons mentioned above, one of the authors (SOLOMONICA) is inclined to place our chalky marl in the Lower or Middle Miocene, probably *Burdigalian* or *Helvetian*.

TORTONIAN.

The sediments conceived by us to be Tortonian include both sand and calcareous sandstone with its characteristic reddish colour, as well as genuine riff limestone very rich in corals. To-day, however, there is only a very slight distribution of this sediment.

The calcareous sandstone frequently contains well rounded pebbles of limestone of the mountain formations up to a diameter of 5-7 cm.

The following localities are known: the Miocene limestone from Bir Khweilfe to Khirbet Um er Rumamin, 16 kms. N.N.E. of Beersheba, which extends a further 6 kms. towards the south, and was first mentioned by BLAKE (1935), was observed by us at its final point at Jebel Abu Jerwal. This Miocene appears as a minor syncline of the western Eocene flank of the Hebron anticline, at an average height of 500 metres above sea-level. It represents the highest situated occurrence hitherto known.

At Jebel Abu Jerwal, we observed pinkish, spathic calcareous sandstone with foraminifera, yellow shelly limestone with *Ostrea* sp. and cellular limestone with well rounded quartz grains. This rock has a complete lithologic resemblance to the Miocene from the neighbourhood of Latrun described by AVNIMELECH (1936) and placed by him in the Vindobonian on the basis of a *Clypeaster* cf. *imperialis* Gy. At Jebel Abu Jerwal, this rock has a thickness of about 10 metres. The fauna of this area mentioned by BLAKE

is, according to him, not quite definitely Miocene. Its state of preservation is too poor to allow of a definite verdict.

At the second locality, El Girheir (147 m.) 27 kms. S.E. of Gaza, also discovered by BLAKE, there is to be found, according to him, "shelly and reef-coralline limestone". On visiting this locality we were able to testify to the profusion of various species of coral; we refer to the fauna mentioned by BLAKE (1935, p. 141). The base is apparently formed of the stratified, yellow, clay sand, exposed in the cave near the former Turkish post. Below this stratum lies the white soft limestone of the Eo-Oligocene which, as we have already mentioned, represents a facies originating in still deeper water and we therefore hold, in opposition to BLAKE, that it does not denote a coast-line.

A yellowish oyster limestone, slightly modified to *nāri* occurring right on the road Faluje-Bir Zeita, near the Bir on a low hill about 180 metres above sea-level, belongs also, perhaps, to this Miocene.

A further occurrence of the Miocene limestone, always strongly modified to *nāri*, is to be found above the village of Qubeibeh (c. 300 m.) where the road runs in the direction of Ed Dawaineh. Miocene blocks in a *nāri* matrix are also found on the opposite heights between the two roads leading to Jibrin. Here perhaps, the rock is not in situ.

Although we are not able to set a definite date to the above mentioned occurrences, on account of the scarcity and the bad presentation of their fauna (with the exception of the Corals which are not particularly good guiding fossils), we are inclined to believe that this chalky coralline facies with the transgressive character is to be ascribed to the Tortonian.

The fauna stated by DOUGLAS (in BLAKE 1935, 1936), allow of no clear inference on the Helvetian Age. It is certain that the fauna are older than the Pliocene and younger than the Burdigalian. Most of the forms mentioned are to be found from the Helvetian to the Astian. They are however, neither pure Helvetian nor pure Astian forms. On the other hand the general character is younger than the Helvetian fauna of other countries usually indicates. We think therefore we are not far wrong in placing this rock in the Tortonian. AVNIMELECH (1936) places the same in the more general stage of the Vindobonian.

We are well aware of the provisional nature of the chronology of these Neogene occurrences. One might in fact, as matters stand, see in them mere facies variations, phenonema in parallel relationship to the Pliocene. In this case the deeper deposited limy marl facies of our Helvetian would correspond to the facies of the Plaisancian and the transgressive calcareous sandstone facies of our Tortonian to the conglomeratic sandy facies of the Astian sea (PICARD).

PLIOCENE

The great basins in the coastal plain and at Beersheba are filled out with sediments of the Pliocene Sea. These may be divided into two groups; first, a younger formation of not very thick conglomerates and sandstone, and second, the marl-series very thick for the most part, which lies below the former.

The deeper marl series probably corresponds to the Plaisancian (Sakie beds); whereas the sandy conglomerate series belongs to the Astian stage. The outcrops of the Pliocene are best seen along the mountain edge and mainly in the form of coarse-clastic sediments of the Astian stage; whereas the deeper clay of the Plaisancian is known to us outcropping in two localities only. All other observations are derived from the various borings. The highest part of the Pliocene is formed of brackish-continental deposits.

HISTORICAL SURVEY

LARTET (1869) and FRAAS (1867) do not express their views on the subject of Pliocene sediments. The first remarks on the calcareous sandstone, described by us above as Astian, came from HULL (1886 p.64, 74). It is true the latter thought it should be ascribed to Eocene; moreover he considered the older formations (Eocene, Pliocene) to be identical with the younger Diluvial calcareous sandstone (*Kurkār*) similar in appearance found between Gaza and Jaffa. Later scientists down to the present time have frequently been led astray by this error.

The first locality in which HULL described these formations was Tell Abu Hareira in the Wadi Sheria (our Abu Hareira sandstone).

BLANCKENHORN defines his attitude many times to the occurrence described by HULL and further adds his own remarks. In his summary (1917) he places the sandstone of Abu Hareira in the Old Diluvial likewise the formations of Khelasa from the locality near Wadi el Milh (mouth of the Wadi Arara) already mentioned by us and near Khirbet-Futeis by Wadi esh Sheriah.

RANGE (1922, p. 77), it is true, refers to the limestone pebbles and calcareous sandstone of Wadi el Hesya, but he includes those together with the *Kurkār* sandstone of Shephela in the collective term "marines Diluvium". KOERT's references (1924) to Diluvial calcareous sandstone near Tulkarem likewise belong to the Astian.

PICARD who had in hand small pieces from BLANCKENHORN's locality which he compared with similar sediments from northern Palestine, placed them at first in the Upper Pliocene (1928 a, see p. 21) (1928, b. p. 329, 334) and finally in the Middle Pliocene of the Astian stage, although a year before BLANCKENHORN (1927, p. 321) had allowed them to extend "in part into the upper Pliocene."

LOEWENGART (1928, p. 502 f.), a short time later, placed the calcareous sandstone in the Upper Pliocene, a part of the pebbles in the Lower Diluvium, together with similar deposits, which, however, distinctly belong to the Middle and Later Diluvium. We shall refer in detail to these conditions in a separate work on the adjoining northern section of the coastal plain.

In the same year there appeared BLAKE's "*Geology and Water Resources of Palestine*." In this he describes in the chapter on Pliocene the occurrence of coarse sand in Asluj and Khelasa, iron-bearing calcareous sandstone and gypsum layers in the north of Kurnub more than 600 m. above sea-level and on the heights of Ras Zuweira.

Unfortunately BLAKE gives no further comments on these localities, nor on the sediments; so no conclusion can be drawn as to whether it is a question of marine Pliocene on the possibility of which BLANCKENHORN cast doubts already in 1929.

BLAKE refers to an old coastal line, characterised by calcareous sandstone and conglomerate running alongside the localities of ed Dhenebbe—Tell es Safi—Bir Kussieh which apparently is in keeping with a number of occurrences described by us. It was however, not possible to say from the fossils which COX produced from el

Buggar and Tell esh Sheria "whether the age was Pliocene or Pleistocene." He expresses the same doubt (Plio- or Pleistocene) in the question of the age of the Andromeda rock of Jaffa, and the hard shell sandstone of Jaffa, Tel Aviv, Gaza, which, however, should surely be placed in the Diluvian.

BLANCKENHORN again voices an opinion on this question in 1931, this time agreeing with PICARD in placing his Beersheba occurrences in the Middle Pliocene.

In 1932 RANGE still placed all the marine sandstone of the coastal plain in the Old Diluvian.

As the Plaisancian only makes sporadic appearances and in general has only been revealed by the numerous borings for wells in the coastal plain, it is obvious that the first dates of its appearance are to be found in the war-time borings (RANGE, 1922). The latter placed the marl described by us as Plaisancian in the Senonian. In 1928 two works, of PICARD and LOEWENGART respectively appeared almost simultaneously placing the marl in the Pliocene. Shortly after, BLAKE expressed himself in the same opinion.

LOEWENGART, who dealt more intensively with the subsoil of the northern coastal plain, places what he calls the "Sakie beds" in his chronological table in the Lower to Middle Pliocene Age. (= 3rd Mediterranean stage).

According to BLANCKENHORN's latest theory (1929-32) these deposits are to be compared with the marine equivalents of the Pontian.

RANGE (1932) likewise concurs with the Pliocene nature of the Sakie-bed. But precisely the two borings mentioned by him (p. 61, note 1) did not meet with Pliocene; that of Suafir cannot have reached the Pliocene as it lies much deeper at this spot; and that of Falujeh seems to have hit on the Miocene, Eo-Oligocene.¹

PLAISANCIAN.

Plaisancian is known to us from the following localities: Et Tine, el Kheime, ed Dhenebbe, Tell et Turmus, Mesmiye Kbire and Saghire,? Wadi Fuilis (Boring see RANGE),? Kofakha (Bir Ahmed

¹ The continuation of this work, dealing with the northern coastal plain, (to be published later by PICARD and AVNIMELECH), demonstrates the same division of the Pliocene (Plaisancian and Astian). In the meantime a short description of their results concerning the Pliocene appeared in AVNIMELECH, 1936 p. 102, 103.

Mohammed el Haddad) upper part of the Wadi Imleih,[?] Kurnub-road (crossing with Wadi Arara), Government well on the Gaza-Beersheba road, El Melek (Bir Abu Issa Shaad) Bir Abu Auje, Bir Gaa, Bir Salami Abu Amra.

To judge from the samples of the above mentioned borings Plaisancian is a series of a uniform grey marl and blue clay penetrating to a great depth.

In the northern part of the area near ed Dhenebbe (c. 140 m.) at a depth of 19 m. yellowish and grey sandy marl are formed in the well where the roads from Wadi Surar and Et Tine cross.

In the neighbourhood of ed Dhenebbe there are other wells where Plaisancian is to be met with.

Near Et Tine (c. 90 m.) nearly all the wells contain this bluish grey sandy marl at an average depth of 10-20 m.

Near Tell et Turmus (c. 70 m.) there was found in the Bir Ahmed Abd el Meshid, amidst Pliocene sandstone blue marl with small fauna known in the north from the Sakie beds (BLAKE, LOEWENGART). The uppermost layers of these marls are certainly more than 44 m. from the surface of the well.

In el Kheime (c. 110 m.) the Schneller well shows exactly the same conditions (blue clay at a depth of 32 m).

The last signs of the blue clay towards the west of this northern area were found in the neighbourhood of Mesmiye el Saghire (= Sherkiyeh).

From this we gather that the uppermost layer of the blue clay runs gradually deeper and deeper towards the west; in consequence the numerous wells near Kastineh no longer strike this horizon. Analogous conditions have been already pointed out in the northern part of the coastal plain.

Definite traces of the Sakie-bed are only met with again in the south near Beersheba and south of Khan Yunis. In the whole intermediate area, genuine Sakie-beds are not met with; this is to be accounted for by the fact that there are here no sufficiently deep wells to give us indications of the same. It therefore remains questionable whether a projection of the old coast line should be assumed, in order to explain the lack of Sakie-beds in this area.

RANGE's references (1922) to a boring in Wadi Fuilis where besides 2 m. of chalk, marls and shales were discovered at a depth between 78-120 m., are to be taken as a possible indication of Sakiebeds.

In Kofakha (c. 184 m.) a 50 m. deep boring in the well of Ahmed Mohammed el Haddad only revealed white marl. Here also it is not clear whether Sakiebeds or perhaps Oligocene-Eocene rock is meant. We consider the former as the more likely.

In the Government borings¹ on the Gaza-Beersheba road at 27.5 and 35 kms. (depths 1170 and 375 feet) we again meet with Sakiebeds. The depth of the uppermost layer is 20 m. below the surface in the case of the wells at 27.5 kms., and c. 17 m. in the case of the wells at 35 kms. The total thickness of the Plaisancian cannot be estimated, notwithstanding the deep borings, as the main part of the sediments represents a chalky *globigerina* marl with occasional intercalations of silified *globigerina* limestone which might from their nature be equally well taken for old tertiary sediments.

In the direction of Rafa, a few wells have struck on Sakiebeds. In the level area between Wadi Imleih and Wadi Ghazze are situated the wells of El Gaa and somewhat further north, that of Bir-Salami Abu Amra in the neighbourhood of Im Siri. The wells lie c. 150–180 m. above sea-level. Marl formation starts here at a shallow depth of the section. In the well of Salami Abu Amra banks of it were found containing an excellently preserved foraminifera fauna among which the species *Polystomella* and *Amphistegina* were easily distinguished.

The wells further towards the southeast which penetrate into the Sakiebeds are El Melek (c. 150 m.) and west of this, Bir Abu Auje, on the road from Tell el Fara to Rafa about 10 kms. distant from the Tell.

The marl is here sandy and near Bir Abu Auje contains fish-scales, *Foraminifera* and *Globigerina*. These occurrences are remarkable for their proximity to the coast (their upper edge lies at? 45 m.).

In the surrounding district of Beersheba, we meet with marl,

¹ We owe our view of the boring samples of these wells to the kindness of Mr. G. S. BLAKE, geological adviser to the Palestine Government. In the meantime he has published the sections (1936 p. 30 ff.), micropalaeontologically examined and chronologized by HENSON. He brings the Pliocene to an end at 90 feet. Oligocene as well as the main part of Miocene, are lacking, thus accounting for the presence of a very big gap in sedimentation, which corresponds to an unconformity. [It is to be noted here that there is a discrepancy between BLAKE's comments and HENSON's section No. 4, p. 31, BLAKE writing "that the Upper Eocene marls have been eroded to the east before the Miocene was laid down: whereas HENSON (p. 29, 31) speaks also of Upper Eocene sediments]. The question of an unconformity at 90 feet in Log. 1 must depend on the question whether the blue grey marls or shales with foraminifera (D₁, D₂) are in fact Upper Eocene and not perhaps Mio-Oligocene sediments. According to BLAKE's quoted words there occur cretaceous Foraminiferas in the whole sequence of strata showing therewith the uncertainty of the stratigraphy on a micropalaeontological basis. If the strata are of the Mio-Pliocene age (and there is no evidence to contradict this) there is no need to suppose such a great discordance. This would explain also why the uppermost layer of the assumed Middle Eocene lies much deeper westward, with a corresponding increase of thickness of the Mio-Pliocene sediments towards the west (corresponding thickness of Log. 2—Log. 1).

with facies similar to the marl of Plaisancian of the coastal plain at a relatively great height and far inland.

At the top of Wadi Imleih, at a height of about 230 m., marl appears at the basis of sandy formations of Pliocene abounding in fossils. These marls probably also belong to Plaisancian.

Where the road from Wadi Arara crosses the Kurnub road, there is found at about 300 m. high grey, shaley marl underlying conglomerates of the Pliocene.

In the well of el Muhawasa, over 300 m. high, a few kms. north of Tell es Seba on the other side of the Hebron road, there was found a clay rich in foraminifera.

The marls in the first two occurrences might conceivably be included in the Miocene.

The fauna of the Plaisancien marl is confined to the following forms

<i>Arca diluvii</i> Lk.	Tell et Turmos, Bir Ahmed Abdul Meshid
<i>Leda fragilis</i> Chemn.	"
<i>Corbula gibba</i> F.	"
<i>Nassa</i> cf. <i>transitans</i> Bell.	"
<i>Natica</i> sp.	"

Towards the west there is noticeable a general increase in thickness of the Plaisancian marl; towards the east it thins out completely. Unfortunately the basis can in no place be definitely identified so that nothing can be said about the occasional increasing degrees of thickness in the direction towards the sea.

ASTIAN.

The sandstone and conglomerates of the Astian sea are the most wide-spread formations of the Younger Tertiary. We meet with them on the surface along the whole mountain border from the north near El Kheime beyond Faluje-Tell esh Sheria, to the south as far as the Beersheba basin; all bigger borings approximately in a line towards the west, running from Mesmiye el Gharbiye to Abasan el Kbire, have likewise struck on Pliocene.

We distinguish two groups of rock:—

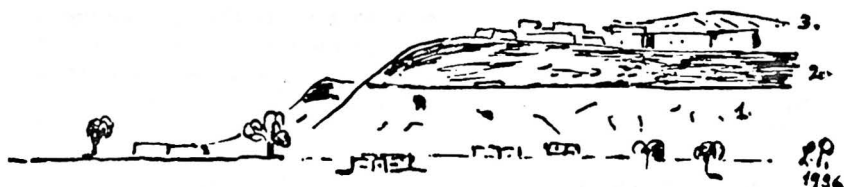
1. A complex of conglomerates with components of an average diameter of 3–5 cms. alternating with yellow soft fine sandstone with a limy matrix (e. g. Tell el Hesy)
2. A hard, cross-bedded sandstone often rich in glauconite.

We suggest the name of *Abu Hareira sandstone* for the latter on account of its characteristic formation and wide distribution;

for it was described for the first time by HULL (1885) as from Tell Abu Hareira in Wadi Sheria on the Gaza—Beersheba road; it is moreover particularly typically developed here and well exposed.

One of the most splendid exposures in our area is to be seen right above the village Tell es Safi on a steep N. W. wall above which is situated the debris of the actual Tell.

Es. Safi



1. Eo-Oligocene 2. Astian 3. Tell

Fig. 3. Pliocene (Astian) rests unconformably on Eo-Oligocene.

In this exposure (c. 180 m) there are seen above the base conglomerate some few metres thick (components: cretaceous limestone, flint, reddish chalky sandstone, probably Miocene) a *Pectunculus*-bed in a white calcareous sandstone; overlying these there rises the Abu Hareira sandstone. This whole series of layers rests unconformably on a series of white, chalky limestone of the Eo-Oligocene.

Moreover in the fields west of Tell es Safi near the crossroad leading to Summeil Abu Hareira sandstone is found with small pebbles (flint, limestone) and foraminiferas; there is also found an Abu Hareira sandstone very rich in glauconite (the glauconite grains are weathered to a brown colour resembling iron-oolith) which causes the characteristic colouring of the soil in this region. A blackish colouring due to the oxydation of manganese is further observed in these rocks. Small foraminifera such as *Polystomella* and possibly *Amphistegina* are found in abundance.

The same kind of weathering, may be seen in the Abu Hareira sandstone (also rich in small foraminifera), in the neighbourhood and the wells of et-Tineh (c. 90 m.).

The wells of Khirbet-Istas (110 m.) reach the Abu Hareira sandstone a short distance below the surface.

The wells of Tell et Turmus (c. 70 m.) situated to the west of Tell es Safi meet with this overlying grey sandstone full of *Donax*-cast before entering in the sakié-beds. It is doubtful whether the Nagelfluh-resembling banks of conglomerate above the sandstone should be referred to the Pliocene.

An unfinished well in the village of Summeil (c. 155 m.) was drilled from the beginning in typical Hareira sandstone. According to BLAKE (1928, p. 44) this is underlain by Eo-Oligocene limestone.

The limy crust or *nāri* which so frequently covers the mountain-formations is also found in the Young Tertiary rocks. The Astian sand-stone is entirely altered by *nāri* over wide areas to such an extent that only by careful examination under the microscope can the sand-components of the former Pliocene sandstone be recognized. One such region extends from ed Dhnebbe west of Tell es Safi—Summeil, to Ijseir, at an average width of 5–10 kms. forming a gentle hilly undulation which might easily be confused with that of the Eocene on account of the *nāri*, were it not that the calcareous sandstone is occasionally free of this incrustation.

In Wadi Zeita (c. 120 m.) the Pliocene conglomerates are again exposed on top of the Oligocene. We have already mentioned this fact in the chapter on Oligocene (see p. 194).

We conclude herewith our discussion of the northern region and now turn to the middle portion of the region along the mountain border.

In the outcrop of the Wadi 2 kms. east of el Falujeh (103 m.) where the road to Iraq el Menshiye crosses the Wadi the following section is exposed:—

- | | |
|--------------|---|
| Pleistocene: | 5.) Gravel 1–2 m. |
| Pliocene: | 4.) Yellowish sandstone with knobby concretions 60 cm.—1 m. |
| | 3.) Conglomeratic shell bank of which 3–7 cm. long sandstone plugs stuck into the white marl (the plugs are apparently filling of bore holes from lithophagic animals). |
| | 2.) A band 5 cm. in thickness consisting mostly of small pebbles intermixed with larger boulders. |

Eo-Oligocene: 1.) White marl with green clay patches 1.5 m.

Directly west of Tell Abu esh Shukf in the Wadi el Hesy about 140 m. high there is an outcrop of Abu Hareira sandstone.

At the foot of Tell el Hesy, right under the debris on the left side of the wadi (c. 120 m.) yellow, soft sandstone alternates with layers of fine conglomerate and also a bank of harder sandstone.

In the upper Wadi el Hesy, somewhat above where the old railway line crosses the Wadi 84 kms. to the south of Tell Nejile and then again much further down the Wadi (at an average height of 200 m.) there is to be seen soft, white sandstone with sandstone plugs stuck in the white marl lying under it (the biggest measure 15 cm. long by 3–4 cms. wide). Above this is Abu Hareira sandstone weathered out in small flutes. The height of the exposures is rather considerable here, measuring c. 20 m.

At the mouth of Wadi Kuneitra opposite Tell el Hesy (130 m.) there is at the base of the lowest bank of Pliocene sandstone a pavement mainly of larger *Veneridae*, but also *Cardium*, *Pecten* and other fossils. Most of the shells are transformed into Calcite. The strata are unconform above the usual white limestone with flint (Eo-Oligocene).

In the Wadi Sidd near Ayun Sidd (180.) and in the parallel wadi to the west with its mouth 2.5 kms. southeast of Tell el Hesv are to be observed conglomerates and Abu Hareira sandstone with *Pectunculus*. In the former wadi the basis stratum is exposed and shows here again countless boring plugs (one of these with concentric stripes on the rounded tops) of varying character.

In the Jewisli colony Ruhama the well has met with Abu Hareira sandstone at ground level.

In Kofakha (140 m.) a thin shaley whitish grey chalky sandstone was brought to light in a well construction at the depth of c. 69 m.

Where the Beersheba road crosses the Wadi Baha, c. 13 kms. east of Gaza at a height of c. 103 m. there was found a fine grained sandstone with foraminifera and rich in muscovite.

In the upper Wadi esh Sheria at the foot of Tell esh Sheria (160 m.) there is typical Abu Hareira sandstone in part conglomeratic with *Pectunculus* lentils. Amidst the conglomerate, pebbles of fine sandstone may be distinguished; above the Hareira sandstone there follows the debris of the Tell. The underlying white limestone is unfortunately covered (cf. also BLAKE 1928).

About 2 kms. further down, where this Wadi is crossed by the road coming from Muharraqa, there are clear indications in the sandstone complex of a difference between (1) a lower series of alternating layers of light conglomerate and yellowish sandstone—without fossils in this case—and (2) a higher complex of conglomerate sandstone with glauconite of the Abu Hareira type with an abundance of *Pectunculus* and *Cardium* etc.

Genuine Abu Hareira sandstone is also exposed in the incision of the old railway Wadi esh Sheria—Beersheba, which leads past Bir Abu Irgeig near the former experimental dam on the road Gaza—Beersheba.

Very good outcrops¹ of the Pliocene are seen in the Wadi Ghazze:

The latter begin near Shellal and extend in part uninterruptedly till above Ain Shanaq. In Tell el Fara on both sides of the wadi (100 m. high) conglomeratic sandstone with mica and calcareous sandstone pebbles is found intercalated; in the latter there is also found coarse grained sandstone. Somewhat further up there appears the typical Abu Hareira sandstone as far as the well el Gamli. After an interruption of outcrops we meet again with conglomerate and chalky sandstone with *Pholades* about 4 km. from Ain Shanaq. Further up still there is again cross-bedded Abu Hareira sandstone; 2 kms. from Ain Shanaq (160 m.) there is abundance of fossil-bearing sandstone. The latter shows at its base intercalations of coarser gravel becoming finer towards the top (here there are also found pebbles with boring marks): above follows white, fine sandstone, which easily decomposes into sand. At the

¹ Observations made by the oil-geologists (WELLINGS, DANIEL and DAMESIN), on certain exposures here referred to, are to be found in BLAKE's Summary, 1936.

base towards the Eo-Oligocene marl the large sandstone plugs are particularly noticeable.

In the Wadi Imleih, especially in the section below Bir Abu Irgeig, $1\frac{1}{2}$ kms. distant from the Bir, there is found sandstone of the Abu Hareira facies in great thickness with fossils consisting mainly of large *Veneridae* and *Pectunculus* (at a height of about 190 m).

Moreover in the section below Bir Ifteis (125 m.) less than 100 m. distant from the latter there are seen Abu Hareira sandstone and conglomerates with numerous *Pectunculus* referred to by BLAKE (1935) as "middle Pliocene conglomerates and shelly limestone."

Opposite the spot where Wadi Hanafish runs into Wadi Imleih (1 km. from Bir Ifteis) this sandstone is very well exposed in a small lateral wadi and in the main wadi.

Southwest of Wadi Ghazze, a few wells met with the Pliocene, whereas exposures in this region are unknown to us.

Right at Tell el Fara in the well Hussein el Arji, a grey, muscovite bearing sandstone with Foraminifera and Bivalves was reached.

About 6 kms. distant from the Wadi, at the place el Melek, there is found in the well Ishtewe Gastropode-sandstone with pebbles consisting mainly of flint.

About 4 kms. still further west, the well Salami Abu Auje shows genuine Abu Hareira sandstone, with Foraminifera and shells at a depth of 41 m.

The biggest variety of sedimentation of the Pliocene is to be found at the mountain borders enclosing the Beersheba basin.¹

In the Wadi es Seba below the town of Beersheba about 2 kms. down from the crossing of the Wadi and the Asluj road, a "reef" c. 20 m. high with abundant fauna is observed. (280 m.) The facies are here very reminiscent of the rocks of Yajur near Haifa described by PICARD in 1928. It is a white, porous, coarse limestone abounding in the shells and casts of gastropodes, Bivalves and Corals. This limestone contains abundant head-sized perforated pebbles of Eocene limestone and flint. The coarse limestone would seem here to indicate the old coast line.

At Tell es Seba (300 m.) which is situated about 3 kms. towards the east of the village of Beersheba, at the point where Wadi el Khalil joins with the Wadi el Milh, on the side towards the Wadi el Khalil, one finds only blue clay with brown spots, overlain on the side towards Wadi el Milh by a series very varied in its facies of fossil-bearing Pliocene sandy limestone. In detail it consists of a reddish (in the main quartz-bearing) fine sandstone with a clay matrix, with dark brown *Ostrea* and *Pecten* marl at the base. Overlying these beds there follows a compact, fine-grained, white sandy limestone. The whole series dips southeast.

The upper Wadi el Milh, about 10 kms. from Bir Hamame (Abu el Khuf)

¹ Here again compare the comments on this site: Wadi es Seba—Beseisowell, Beersheba—Great Quarry Beersheba, in BLAKE, 1936.

east of Beersheba (350-360 m.) near Bir Imshash el Malih, cuts in to light yellow calcareous limestone containing innumerable prints mainly of gastropods (preeminently *Cerithium*) and faintly of bivalves. Limestone and flint pebbles are scattered amidst the sandstone. The former are admirably cross-bedded. This locality is the Sheikh el Ghurra in Wadi el Milh, often mentioned by BLANKENHORN, most recently in 1932, and finally placed by him in the middle Pliocene. We draw attention further to the examination of samples of this locality made by PICARD 1928 (p. 21 f.)

Further east, reference may be made to yet another two exposures of Pliocene:

At the cross-point where the Khurnub road crosses Wadi Arara on the western side of the valley, just before the big bend of the wadi at Bir Arara, there is found coarse pudding conglomerate on top of grey shaley marl bearing foraminifera. The height is about 420 m.

At about the same height, in the top section of Wadi el Milh, known as Wadi Qalat, some kms. distant from Tell el Milh is found the same reddish sandstone as at Tell es Seba.

In the neighbourhood of Beersheba (c. 300 m.) wells have in many cases reached down to the Pliocene:

Thus, for example, in a new well on the left side of the road to Hebron, some 100 m. past the last houses in the town, we find very sandy marl with bivalves, reminiscent of the Yajur facies.

Excellent exposures are also found N.W. of Beersheba in the wadis running down from the mountain slope.

In the Wadi Baghut c. 4 kms. north of Beersheba, on both sides of the crossroads towards Bir Khweilfe near Bir Sahle ibn Orfan we see chert bearing Eocene limestone, overlaid by cross-bedded white sandstone with pebbles. The latter are somewhat chalky at the base and with fossils. Further down the Wadi there are seen the boring plugs at the base layers towards the Eocene. The cross layered sandstone continue a short way down the Wadi. It is not until 3 km. further down, near a group of trees, that a fossil bearing outcrop about 2 m. high is again to be observed with the following section:

- (c) Pliocene sandstone of the Abu Hareira type with flint pebbles at the base. Transgression-border.
- (b) Clayey sandstone passing into fossil bearing calcareous sandstone.
- (a) Sandy clay with small fossils.

About 3 kms. further down this wadi, on a road coming from Beersheba (c. 4 kms. N.W. Beersheba) one meets with fossil bearing, very clayey sandstone with a rich fauna of *Veneridae*, *Pecten* (reminiscent of the Yajur facies.)

The locality "Great Quarry" pronounced by BLAKE (1935) to be probably Miocene, 2 kms. due north of Beersheba Mosque, we consider to be Pliocene (fossils kindly shown to us by Mr. G. S. Blake).

In Wadi Imleih (c. 250 m.) about 2½ kms. higher up than Bir Abu Irgeig there is exposed soft sandstone with many shells (Yajur facies).

1 km. further up where the wadi leads to Khirbet el Muweile there is found white, coarsely-banked sandstone very calcareous, with an intermediate layer of fossils. Some 100 m. further up, grey marl, presumably Sakiebeds, is observed in the big river bends forming the basis of the sandstone, outcropping on both sides of the wadi as cliffs. The strata dip towards the south. Immediately afterwards the Eocene series begin to appear.

A slight upwarping of the underground is to be observed in a cut of the Beersheba-Gaza road c. 8 kms. west of Beersheba where we have exposed the cross-bedded Abu Hareira sandstone above Eocene rock.

The Fauna of the Asti stage determined by us consists of the following:

<i>Hinnites crispus</i> Brocchi	W., S.
<i>Pecten erythraeensis</i> Sow.	B. S., W.B., W.B.
<i>Pecten pes felis</i> Lin.	B. S., B. S. T.
<i>Pecten (Chlamys) scabrellus</i> Lam. var.	
<i>bollenensis</i> May. Eym.	B. S., B. S. T.
<i>Flabellipecten flabelliformis</i> Brocchi	O., F.
<i>Ostrea cucullata</i> Bornm.	W.B., W.M.
<i>Ostrea cochlear</i> Poli	B. S. T.
<i>Ostrea edulis</i> Lmk.	A. S.
<i>Callista pedemontana</i> Ag.	O. F., T. H.
<i>Lucina</i> sp. ?	W. B.
<i>Venus (Amianthis) islandicoides</i> Lam.	W. B.
<i>Venus plicata</i> (Gmel.) var. <i>pliocenica</i> (de Stef.)	W. I.
<i>Venus?</i> <i>multilamellata</i> Nyst.	W. B. B.
<i>Tellina (Peronaea) nitida</i> Poli	W. B. B.
<i>Pectunculus</i> sp.	A. S.
<i>Arca</i> sp.	W. B.
<i>Cardium multicostatum</i> Brocchi	B. S.
<i>Cardium paucicostatum</i> Sow.	W. I.

B. S. Beersheba reef. B. S. T. Beersheba—Tell es Seba. W. B. Wadi Baghut trees. W. B. B. Wadi Baghut near Beersheba-Gaza road. O. F. east Faluje Wadi Henu Kumsch. A. S., 2 km. down from the Wadi Ghazze towards Ayun Shanaq. W. M. Wadi el Milh. T. H. Near Tell el Hesy. W. I. Wadi Imleih.

UPPER PLIOCENE.

In Wadi Ghazze (c. 140 m.) between Tell el Fara and Ain Shanaq we find above the Astian sandstone a sequence of bluish grey marl

with intercalations of limestone with clay particles and an abundance of fossils (mainly *Cerithium*, but also bivalves), typical brackish facies such as are known to us from the north, in the Esdraelon plain. In addition there is found here green clay intermixed with gypsum. To these inland sediments belong presumably marl and clay with gypsum in Wadi Qalat, some kms. east of Tell el Milh (almost 500 m. high) near Beersheba and in the Wadi el Milh (c. 390 m.) here likewise containing gypsum.

It is without doubt that the gypsum-bearing marl and sands in Wadi Ghazze overlay the Astian Pliocene; likewise it can be ascertained that the sandstone of the Astian in Wadi el Milh are overlain by marl and gypsum in the neighbourhood of Bir Hamame.

Here also probably belongs the sandstone west and east of the police station Kurnub (c. 40 km. S.E. of Beersheba) as well as that in the upper section of Wadi Arara.¹

In the former occurrence (500 m.) it is a case of coarse quartzitic sandstone with much flint, as well as calcareous sandstone weathering out in spherical concretions. The formations of Wadi Arara which occupy the wadi about 5 kms. from Bir Arara, are for the most part of sandstone with similar facies to those of Kurnub; white sandstone, however, occurs, as also grey-reddish sandy marl, the latter with small flinty pebbles.

Although it would be tempting to compare these formations with the North Palestinian Pontian, we are forced, in view of the relation of the strata to one another, to consider the above mentioned occurrence as later than Astian and to conclude the Pliocene with this uppermost series.

SUMMARY

We chronologize the Pliocene in 3 stages:

The lowest stage or Plaisancian, consisting of grey marl and blue clay (the Sakiebeds of former writers) with more or less sandy content, with a typical small-fauna of molluscs and a great abundance of foraminifera (especially *Amphistegina*, *Polystomella*, *Cristellaria*, *Nodosaria*). It is 100 m. and more thick towards the middle of the basin, but thins out towards the edge of the mountain (upper Wadi Imleih, about 1 m. in thickness).

¹ BLAKE, 1936, refers here to "fossil wood."

These beds are followed by the Astian. The deeper layers of the Astian consist of coarse conglomerate alternating with yellow fine-grained sandstone containing a fairly various fauna of gastropods, pectinids, and other bivalves. In the Beersheba district the lower part very much resembles in its facies those rocks known to us from the northern Carmel border as *Yajur facies*.

A higher horizon of the Astian consist of cross-bedded glauconite sandstone sometimes containing pebbles and characterised by a very monotonous fauna noted particularly for the prevalence of *Pectunculus* and *Cardium*: we call this *Abu Hareira Sandstone*.

The Astian in this facies is distributed over a big area as can be seen both from borings as well as from exposures.

On the surface, the Abu Hareira sandstone in particular is very intensively alternated to *nāri* which often renders the mother rock quite unrecognisable.

The greatest thickness of the Astian known to us is c. 20–30 m., the least thickness c. 2–3 m.

Whether or not we consider like GIGNOUX (1926) the Astian and Plaisancian as stages differing only in facies or varying in age, in any case both stages are followed by a brackish terrestrial formation marking the end of the Pliocene series.

The latter consists of grey, green and red marl with gypsum and intercalations of sandstone and limestone of a brackish nature (Wadi Ghazze). The further we advance eastward (Kurnub) the more terrestrial becomes the facies.

QUATERNARY

The Quaternary occupies by far the greatest space on our map. It consists of gravel and clay, calcareous sandstone, loam, so called Loess, dunes.

PLEISTOCENE

GRAVEL and CLAY.

Here we must distinguish between two kinds of deposits:

1) Gravel which exists in connection with sandstone beds and fine shaley clay: this is of limnic origin. 2) True Wadi gravel.

a. The former group is of less significance and is found along the mountain slope at various places, for instance in Wadi el Hesya (1 km. lower than the mouth of Wadi Sidd, height about 130 m.) also near the mouth of Wadi Kusseiba (about 190 m. above sea level). Perhaps the heaps of gravel in the neighbourhood of Tell el Fara (c. 100 m.) also belong to this group.

In Wadi el Hesya there can be seen in close relation one to another greyish-green sandy clay, snow white pure quartz sands and sandstone, bearing abundant fragments of *mammalia* bones. The sandstone contains coarse gravel.

These sediments represent the deposits of a lake into which rivers conducted their gravel material. For this reason the bones are only preserved in fragments.

The formations of Wadi Kusseiba are in the main coarse and fine gravel, intercalated by a sandy limestone bank of limnic character and by diverse beds of conglomerate. Here we found no kind of fossil. The base consists of Eo-Oligocene and Helvetian (?) marl.

At Tell el Fara there occurs likewise diverse coarse and fine gravel interbedded with a bank of uniform fine-grained sand. The components of the gravel are predominantly limestone and flint of Cretaceous-Eocene rocks, further Pliocene sandstone and also reddish Miocene calcareous sandstone.

The relation of the limnic sediments is unconform to the older formations of the mountain range. Although there is no actual covering up by the old dunes, the similar composition and gradation of size as well as the lateral transition to genuine Wadi Gravel and mountain loam are arguments in favour of placing them in the Lower Pleistocene.

b. The Wadi Gravel. The Wadi gravel is also exposed along the big wadis at the point where they leave the mountains. Thus, for example, in Wadi Museijid (c. 600 ft.) near Tell Abu esh Shukf in Wadi el Hesya (462 ft.), in the topmost Wadi esh Sheria (c. 600 ft.), Wadi Imleih (565 ft. high). There is scarcely a single wadi coming from the mountains that has not met with great masses of gravel.

The wadis running into the Beersheba basin from all sides have contributed to a plentiful gravelling up of this basin.

In borings in the coastal zone, the conglomerates reach the

wells of Tell et Turmus (200 ft. 70 m.) at about 33 m. depth, on the road Qastine—Mesmije el Sherkiye, the Bir Hamazali (c. 60 m.) at about 40 m. depth, in Suafir esh Shamaliye, Bir Shaqir (44 m.) at about 65 m. depth, at Simsim in the wadi bed the well of Ahmed esh Sheikh (c. 48 m.) at about 25 m. depth. In Bir Sarawil (on the road Baikat Abu Mueilik—Tell el Fara) about 23–40 m. above sea-level the gravel appears immediately before the Pliocene which is reached at about 46 m.; in Bir Abu Tabit S. of Khan Junis (about 50 m.) we find it at about 50 m. depth.

As to the stratigraphical position of this gravel, all one can say is that it is for the most part intercalated between Pliocene and the base of the older system of dunes and has an average thickness of 3–6 m. Hence we may be justified in placing the strata in the Lower Pleistocene.

THE DUNE SYSTEM.

There are numerous references in literature to *old dune systems* in the coastal plain. Stress however must be laid on the fact that no satisfactory explanation of the history of the dunes has yet been forthcoming. Until KOERT published his paper (1924) the older dunes were taken to be a compact unit; except where, in individual cases, they, together with the *Kurkār* ranges with which they are intimately connected, were considered as marine deposits and separate from the actual dunes. KOERT (1924, p. 34) distinguished between a generation of red, loamy inland dunes and the yellowish brown-light yellow dunes lying above the former. It remains an obscure point, however, that a red-loamy sand near Karkur appeared to him to be "in part genuine sea sand, in part dune sand originating in beach sand," which he places in the Marine Diluvium.

In the same way LOEWENGART (1928) distinguishes between 3 generations of older dunes which he thinks can be separated from each other, on the ground of their various grades of decomposition in terra rossa. The older dunes which are said to have decomposed to the very core in terra rossa, are furthest inland. These are followed in a seaward direction by dunes, the core of which has not yet changed to terra rossa; while nearest the sea the landscape is occupied by a belt of coastal dunes without any terra rossa.

RANGE both in his work of 1922 and in that of 1932 admits only one older generation of dunes.

To the zone of old dunes, which, in our area, do not stand out nearly as sharply in the landscape on account of their colour as they do further to the north, there belongs the greater part of the coastal plain. We have sketched their distribution in the morphological chapter.

The dune formations are not very varied: in the main we find variously coloured sand and sandstone.

Sand: The colour of the sand presents nearly all shades of yellow to red and, more rarely, brown. Petrologically speaking by far the main constituent of the sand is quartz, frequently mixed with abundant minerals of the Hornblende-Augite group, as already frequently mentioned (RANGE 1932, PICARD 1935).

It is an open question how far it is possible to divide the generations of dunes according to these varying colours. In no case would we go as far as LOEWENGART who established his generations on the basis of such red horizons.

Sometimes one finds brownish-black loam horizons interspersed among the dunes, which we may set down as products of an intensive decomposition in part in stagnant water. (Bir Hadj esh Shakura on the road Qastine-Mejdal near Mejdal; Bir Kamal Batar south of Sdud; Bir Shaqir, in the village Suafir esh Shamaliye, bir Hashem beg Hussein north of the sulphur works, Bir Suleiman ibn Selah in the Wadi Laki east of Bureir).

Calcareous Sandstone (Kurkār): Under this oft recurring title there is understood a diagenetic, hardened sand which can be sometimes of a marine, sometimes of a terrestrial origin. Unfortunately this name is used in the literature also for sand containing loose *Kurkār* concretions, for which Arabs use the name *Yarual*.

The main part of the *Kurkār* introduced by us on the map refers to hardened dunes. In our area we did not come across any hardened marine sandstones.

A few remarks on the sulphur deposits near Gaza investigated by PICARD in 1930 on behalf of the Palestine Mining Syndicate and given in a report to this company may be added here. The sulphur which occurs in the strongly diagenetic *Kurkār*-sandstone is always connected with Gypsum. The richer parts of the sulphur sandstone were moreover mingled with bituminous matter. These facts and other reflections on the structure of this area gave PICARD

reason to associate the origin of the Gaza Sulphur with the presence of bitumen, in contrast to BLANCKENHORN (*Zeitschr. f. prakt. Geologie* 1930 p. 183), who considered it to be of a volcanic origin.

THE LOESS.

RANGE was the first to deal with these younger deposits of the Beersheba basin. He considers the Loess which occurs here to be a genuine aeolic originating sediment, only in part redeposited by running water. He dealt again with these deposits recently (1932), merely confirming his former conclusions and adding a few soil analyses.

In literature, the Loess of Beersheba has often been united with the products of decomposition of the dunes, in part also with the desert sands and loam of the mountain slopes. The distribution of the actual Loess, however, is confined to the narrower district of Beersheba and to restricted zones along the banks of the big Wadis.

North of Wadi esh Sheria we soon reach the old dunes; west of the Wadi Ghazze, only a small area belongs to the actual Loess (see map). North of the Beersheba-basin, Loesslike formations do not occur on the mountain slope, but instead, dark brown, fatty loam which only thinly covers the hard rock lying beneath it. We cannot agree with RANGE when he speaks of a line Gaza-Huj, along which Loess and loam are said to notch into each other (1922, p. 11) as this whole district already belongs to the old dunes (see map).

It is difficult to clear up the relationship between so-called Loess and loam. We can only add a few observations on this point, as it lies beyond the scope of our programme to make closer investigations with regard to the Quaternary formations.

An important difference between loam and Loess is the varying thickness. Loess, which never attains the thickness of 30 m. as asserted by RANGE (1922, p. 9.), is, nevertheless, with its average thickness of 8-15 m. considerably thicker than the loam. As we have already mentioned in the chapter on the old dunes, the latter are in a state of far-going decomposition and are confused with Loess by many writers, e.g. RANGE; in his list, for instance, of the various thicknesses of Loess, many localities are included which really belong to the zone of the old dunes (Kufieh, Fuilis, Muharraqa, etc.)

In the area between Wadi Ghazze we find a big undissected plateau in part covered by gravel fields or sandy stretches. Here nothing can be ascertained as to the thickness or origins of the Loess. On approaching the big wadis, one immediately becomes aware of the actual Loess landscape with the conic shaped hill-tops such as we have described in the morphologic section. One has the impression that the main part of the afore-mentioned plateau has a very thin Loess or loam layer mingled with certain gravels; and that the main mass of Loess is to be found in the big wadi valleys. It is not until we reach the actual basin between the Eocene ranges in which Beersheba also lies, and somewhat further eastwards on both sides of the middle Wadi el Milh, that the so called Loess has accumulated. From this distribution it is perfectly clear that the basin may, on the one hand, be looked upon as a particularly suitable depression to be filled up. On the other hand, the Loess accumulated also along the big wadis west and east of Beersheba. In the latter it penetrates far into the area of the old dunes; in Wadi Ghazze actually down to the sea.

Greater masses of Loess are therefore only found in the main wadis and in the basin of Beersheba.

In this distribution of the Loess one may perhaps find an indication as to its genesis (PICARD). Beforehand, we would deal with the distribution of the older sediments. Peculiarly enough one observes, at the present time, white sandy clay Pliocene sediments in the underground of the Beersheba basin and of the foreland from Tell el Milh nearly as far as Ayun Shanaq in Wadi Ghazze the drifting of which sediments should provide excellent material for the formation of Loess-like products.

The present day Loess may therefore very well be a product arising from the fluvial redeposition of such sediments; the accumulation along the big wadis and in the depression of the Beersheba basin points to this, although the further distribution may be accounted for later by frequent scattering by the wind over the flat plains between the wadis.

Further arguments for this opinion are the manifold intercalations of gravel belts with a stratification occasionally observed.

The fact that we found fragments of Arabic pottery of the last century (we owe their identification to Prof. ALBRIGHT) in deposits

of gravel at the base of the Loess, in Wadi esh Sheria below Baikat Abu Mueilik—proves that a fluviatile redeposition is possible even in recent times. Together with the potsherds we found:-

Melanopsis laevigata Lmk.

Melania tuberculata Mül.

Helicogena (*Pseudofigulina*) *cavata* Mouss.

Xerophila (*Xerocrassa*) *sinulata* Fer.

Leucochroa (*Albea*) *candidissima* Drap.

Helix (*Euparypha*) *Seetzeni* var. *alta* Germ.

Ungulate—tooth

In Wadi el Mihwar, in a pebble layer, Arabic potsherds were found together with artefacts and *Melanopsis laevigata*.

The following recent forms have been observed from the following localities:

In a wadi near Beit Deras—*Xerophila*, *Pectunculus*, *Donax*, *Melanopsis*. In Tell el Fara—*Kurkar* with young *Xerophila*. On the Beersheba-Gaza road, exactly at km. 32, on the northern roadside, *Xerophila sinulata* Fer.

RECENT (ALLUVIUM).

Alluvium was frequently touched on in the foregoing pages. The loam and Loess of the basin undoubtedly belong in great part thereto, as was shown elsewhere (RANGE). Certain comments on the distribution and characteristics of the *coastal* and *inland dunes* have already been made in the morphological chapter.

The formation of a limy surface crust, the so-called *nāri*, which is typical of Palestine, hinders investigation of the subsoil particularly in the area of the mountain slopes of Summeil, Jibrin, Kubeibeh, Beersheba, etc. This is distinctly seen on the map, where we have indicated the zone of *nāri* covering the Eo-Oligocene subsoil by the general term Eo-Oligocene. In certain wadis in the Beersheba district, the occurrence of conglomerates and gravel with a calcareous cement (e.g. near Khan Omri) may also be placed in the Recent.

C. TECTONICS.¹

The main part of the mountain district in the Beersheba—Beit Jibrin area, investigated by us, represents a smooth syncline

¹ The paleogeographical conclusions will be published later in a separate paper.

resting up against the steep declivity of the Cenomanian-Turonian strata of the so-called *Hebron anticline*. There is indicated on the map a strip of Cenomanian—Turonian in the western limb of the anticline extending from Bir Imshash over Wadi Khulil to Tell el Khweilfe. These formations are met with in the continuation towards the north of the mountain declivity on the road Hebron—Beit Jibrin, in the region east of Terqumie, already described in the chapter on Oligocene. The strip denoted as Eocene on the map is therefore always inclined westward; in the region of Jebel Abu Jerwal, however, and in the surrounding of Beersheba it is much more tilted.

The formation indicated by Eo-Oligocene (on the geological map) joining on to the Eocene in the area of Kubeibeh, Ayun Kussaba, Bir Zubala, Bir Abu Irgeig, shows a smoother dip. Taken on the whole, these Eo-Oligocene formations are slightly undulated, so that an observer not well acquainted with the conditions might confuse the sharp dip of strata belonging to these *minor folds* for a fault or even a major fold, whereas in reality it is only a case of a minor arch.

Proceeding further west, these Eo-Oligocene sediments gradually disappear below the coastal plain in a line extending approximately from Tell el Safi—Tell el Hesy—Tell es Sheria to Ain Shanaq. This line is marked in the map as *structural line I*. It represents a somewhat more pronounced *flexure*, tectonically speaking; in general it is also the boundary line between the Younger Post-Tertiary covering and the appearance of Older Tertiary sediments.

Thus the more or less smooth west limb of the Hebron main anticline no longer bends towards the west in a main Syncline but passes over with a slight undulation or flexure along the structural line I into the wide basin of the coastal plain.

On the basis of the material received from the different well borings demonstrating the relationship between Pliocene and Pleistocene sediments, a second *structural line II* was drawn further towards the west. West of line II the Quaternary sediments increase noticeably in thickness.

The structure of the *Beersheba basin* is of tectonic origin. The Hebron arch here dips towards the south and disappears in the neighbourhood of the town Beersheba amidst the Eocene limestone.

From the S. E. the layers of the big anticline of Zuweira—Maghrun—Kurnub dip in a northwesterly direction, i.e. in the direction of the Beersheba basin. The small saddle of Kanaan Aseifa, south of Yutta likewise disappears in the direction of the Beersheba depression i.e. towards the south-east. On account of the pronounced Alluvial covering it is hard to ascertain how far faults play a part in the structural features of the basin. Only in the area near Bir Imshash west of Tell el Milh, is a *fault* distinctly recognisable. Somewhat to the west, where the road crosses the wadi, one observes in the bed of the river strongly tilted Pliocene. Further on there is to be seen somewhat eastward of this crossing in the chalky limestone of the Maastrichtian cracks (2–3 finger spans broad) filled up by calcite. Still further up the wadi the “Mottled Zone (Danian?)” with a southern dip terminates at the fault. Hence the downthrow is on the southern side. The fault line runs fairly accurately east-west. It was not possible to follow it up towards the east but this should be feasible towards the west.

Thus the Beersheba basin originates in an all-round trough caused by the juxtaposition of the Hebron and Kurnub folds. It has broken in, at least along one fault, during a later more tensional phase of the Post-Pliocene.

D. SUMMARY

The oldest formations are developed at the mountain-slopes in the neighbourhood of Beersheba. They represent the Cretaceous. We distinguish hard *Nerinea*-bearing limestone of Turonian age and series of chalk, breccious flint and phosphatic limestone belonging to the Campanian-Maastrichtian. As in the Judean desert these formations are overlain by the so-called Danian or Mottled zone.

With true conformity, the Eocene follows as soft chalky limestone without any noticeable organisms. Flint (in nodules and in strata), intercalated with limestone and followed again by chalky limestone, terminates the Eocene. The latter facies may even partly represents the Lower Oligocene. [Near Beit Jibrin the Eocene flint series are less developed].

Middle and Upper Oligocene (Duweir and Zeita section)

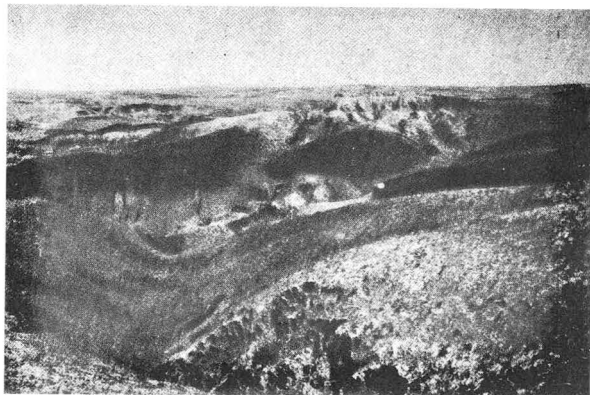


Photo P. Solomonica

Fig. 1. "Badlands" of the old Dunes near Ruhama showing dissected Landscape.

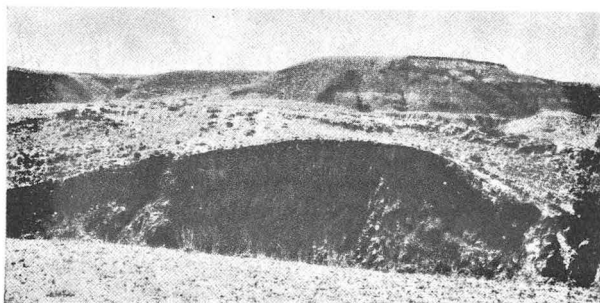


Photo P. Solomonica

Fig. 2. "Badlands" of the old Dunes near Ruhama
with strongly dissected wadi in the foreground.

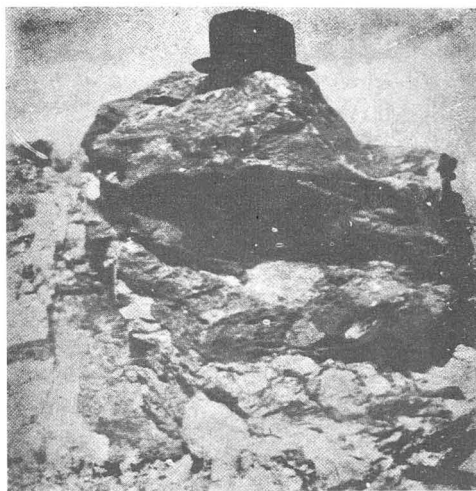


Photo L. Picard

Fig 1. Oligocene strata corresponding to layer e, f of Text. fig. 2. and section page 193 exposed in the quarry opposite Bir Zeita.

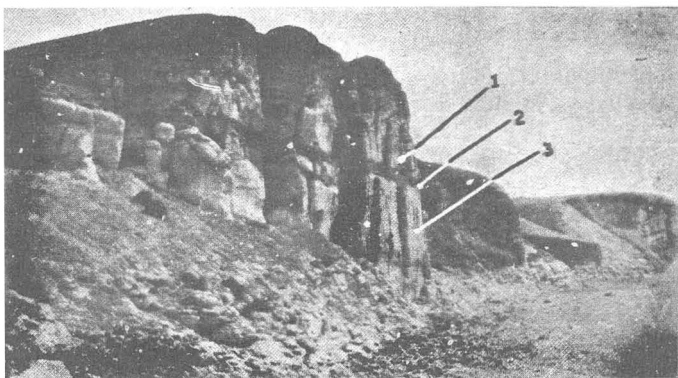


Photo P. Solomonica

Fig. 2. Outcrop of Helvetian(?) (Miocene?) at the northern flank of Wadi es Seba, c. 2 km. west of Beersheba.
1. marl, 2. sandy layer, 3. marl

appear again without any noticeable unconformity. We distinguish a quarzitic chalky marl series with great abundance of foraminifera of Stampian age and a series of hard limestone, poor in foraminifera with single corals and gastropods belonging to the Aquitanian.

The Miocene rests unconformably above the older formations. Certain limy marl deposits from the Wadi el Hesy (with a fauna resembling that of the Upper Austrian "Schlier") were regarded as Burdigalian? or Helvetian? Reddish littoral limestone containing abundant reefs of coral were considered Tortonian. The Miocene is generally very sporadically exposed.

A new transgression is represented by the Pliocene. We make distinction between the Plaisancian marl with a diminutive fauna and the Astian sandstone with its bigger forms (*Cytherea*, *Ostrea*, *Pecten* etc.).

In the neighbourhood of Beersheba the facies resembles the sediments of Yajur in Northern Palestine (*Yajur facies*). Within the Astian sandstone we distinguish provisionally a lower part consisting of sandstone and conglomerates and a higher part consisting of the cross-bedded so-called *Abu Hareira sandstone*. The Pliocene concludes with a brackish series (W. Ghazze, W. Qalat).

The Pliocene in the East (Kurnub area) is developed in the facies of terrestrial sandstone.

The big heaps of gravel on the mountain slope and all the older dunes of the coastal plain belong to the Pleistocene. The older dunes have been decomposed to a great depth forming a dark brown soil, which investigators have often taken for Loess. The Loess, being probably more of fluvial than of subaerial origin, is mainly formed in the true Beersheba basin.

In the north a fatty loam covers the zone of the mountain border. Limnic deposits with mammalia-remains from the Wadi el Hesy likewise belong to the Pleistocene. The calcareous crust or *nāri* and certain conglomerates are the most Recent in age.

The tectonic structure of our region consists in gentle undulations submerging below the coastal plain. Several anticlines of the Judæan mountain (mainly the Hebron arch), dip towards the south forming the basin-structure of Beersheba. The dislocation of Bir Imshash originates in the Pleistocene.

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THE ISRAELITE TRIBE OF HALF-MANASSEH¹

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ANALYSIS OF THE DOCUMENTS WHICH PRESENT THE ORIGIN AND GENEALOGIES OF HALF-MANASSEH

Concerning the origin of Manasseh, the Biblical information is rather cryptic. It states that Manasseh was born to Joseph, a son of Jacob, in Egypt, who gave the boy the name Manasseh because, "God made me forget all my hardships and all my father's home."² He was the first-born; but for some obscure reason, a fate equally shared by other first-born in the Biblical narrative,³ he is placed second to Ephraim⁴, who is henceforth the most important of the two. Indirectly, we hear that the ancestor of Manasseh, Joseph,

¹ Sincere acknowledgements are hereby expressed to Professor W. F. ALBRIGHT for his painstaking reading of the manuscript and for his valuable suggestions, all of which are duly noted in the body of the text. The writer wishes also to thank Professors F. R. BLAKE and J. LEWY for their kind cooperation and willingness to discuss with him a number of general problems connected with this article.—Note the following abbreviations used in this paper: *AASOR*=*Annual of the American Schools of Oriental Research*; *AB*=W. F. ALBRIGHT, *The Archaeology of Palestine and the Bible*³ (New York, 1935); *AJSL*=*American Journal of Semitic Languages and Literature*; *BASOR*=*Bulletin of the American Schools of Oriental Research*; *DZA*=M. TH. BÖHL, *Das Zeitalter Abrahams, Der Alte Orient*, 29, 1 (1930); *EA*=J. A. KNUDTZON, *Die El-Amarna-Tafeln* (Leipzig, 1915); *GA*=ED. MEYER, *Geschichte des Altertums*,² hersg. von Dr. HANS ERICH STIER (Stuttgart, 1931); *HSAT*=*Die heilige Schrift des Alten Testaments* (Tübingen, 1922–23); *IN*=ED. MEYER, *Die Israeliten und ihre Nachbarstämme* (Halle, 1906); *JAOS*=*Journal of the American Oriental Society*; *JBL*=*Journal of Biblical Literature*; *JPOS*=*The Journal of the Palestine Oriental Society*; *PEF. Qu. St.*=*Palestine Exploration Fund, Quarterly Statement*; *PJB*=*Palästinajahrbuch*; *RB*=*Revue Biblique*; *System*=M. NOTH, *Das System der zwölf Stämme Israels* (Stuttgart, 1930); *ZAW*=*Zeitschrift für die alttestamentliche Wissenschaft*; *ZDMG*=*Zeitschrift der Deutschen Morgenländischen Gesellschaft*; *ZDPV*=*Zeitschrift des Deutschen Palästina-Vereins*.

² Gen. 41⁵¹.

³ For possible explanations, cf. GORDON, *JBL* 54 (1935), 227, n. 25.

⁴ Gen. 48¹⁸ ff. Cf. *PEF. Qu. St.* 61 (1929), 231 ff. and a critical answer by NOTH, *System*, p. 23 f.

associated with the children of his father's Aramaean concubines, and that he was hated by his brothers.⁵ We also learn of some hatred and a hope for superiority over his brother in Gen. 49²² ff., a hope which was apparently fulfilled in Dt. 33¹³ ff.

The first problem to be raised is that of the meaning of the name. Manasseh is explained by the Bible as derived from a root נָשָׁח meaning "to forget." This view is generally accepted by most scholars,⁶ though EHRLICH⁷ explains the name as the Piel of נָשָׂא.⁸ The last suggestion, while attractive,⁹ cannot be definitely established and we must conclude that the name מְנַשֶּׁה is a hypocoristicon for מְנַשֶּׁה-אֵל, a name whose analogical formation is to be found in names like יִרְחֵם-אֵל (properly יִרְחֵם-אֵל (?); יִרְחֵם = יִרְחֵם-אֵל (?); יִרְחֵם אֵל, and others.¹⁰ The meaning would be "God causes to forget"—some evil, trouble, etc.¹¹

As a son of Joseph, Manasseh belongs to the tribe or clan Joseph, a descendant of Rachel and Jacob. Since he was "born" in Egypt, Manasseh was adopted by Jacob, i.e., he was brought into the confederacy of Jacob.¹² This, apparently, was not easily

⁵ Gen. 37² ff.

⁶ So GUNKEL, STRACK, HOBERG, SKINNER, and others. The unusual form is explained by GESENIUS, *Hebräische Grammatik*, 52 § m, an explanation, incidentally, already pointed out by IBN EZRA in his commentary *ad loc.* ED. MEYER (IN, 515 f.), calls attention to the fact that the name is borne by an individual and consequently must have lost its tribal designation very early. Cf. also his discussion of the Greek form of the name, *ad loc.*

⁷ *Randglossen zur hebräischen Bibel*, I (Leipzig, 1908), p. 211 f.

⁸ MAHLER's eccentric suggestion, *ZDMG* 61 (1907), 628 f. is not to be taken seriously.

⁹ A name מְנַשֶּׁה or מְנַשֶּׁה-אֵל would be very appropriate in the family of Joseph. Moreover, such a name formation is not uncommon in Semitics. Cf. *Nabu-reš-i-ši*, "Nabu, lift up my head" (TALLQVIST, *Assyrian Personal Names*, Helsingfors, 1914, p. 157), or *Sin-na-ši*, "Sin lifts up" (RANKE, *Early Babylonian Personal Names*, Philadelphia, 1905, p. 162). But the sibilant seems to be against it.

¹⁰ The form מְנַשֶּׁה appears in Assyrian as *Menasē* and *Mi-in-si-e*. It could have developed in the same way as from מְנַחֵם we have *Me-na-ḥi-me*, *Me-ni-ḥi-in-me*, *Mi-na-ḥi-mi* and *Min-ḥi-im-mu* (TALLQVIST, *op. cit.*, p. 136, 138).

¹¹ NOTH's elaborate interpretation (*Die israelitischen Personennamen*, Stuttgart, 1928, p. 211, n. 1 and p. 222), is unnecessary. The meaning of the root appears in the Assyrian *Mi-i-nu-la-an-ši* "how should I forget?" (TALLQVIST, *ad loc.*). For general remarks concerning names with *El* see ALBRIGHT, *JBL* 43 (1924), 371 f.

¹² It is impossible to mention all the theories concerning Joseph: his

accomplished, for many sources continue to speak of a "House of Joseph", a tribe Joseph, rather than of its two subdivisions. Thus the Blessing of Jacob (Gen. 49)¹³ and of Moses (Dt. 33)¹⁴ refer to Joseph as one entity, and not divided into one or more clans.¹⁵ Consequently, both these blessings concerning Joseph must belong either to a period when Joseph as an entity or one ethnic group was known among the people, or to a time so remote from such a condition that a poet could speak about the group almost in legendary terms. It seems to me that the poems could not be a fanciful invention of a roaming troubadour, but a powerful, almost epic representation of a contemporary situation. It is also possible that with the beginning of a more conscious national existence under Samuel and Saul such epics began to receive definite shape in the literature of the people and formed more and more a part of the life of the nation. They probably received their final form, and were put in writing, during the peaceful and rich reign of Solomon. For after the disruption of the consolidated monarchy it is doubtful whether any such creations could suddenly spring up. If this view is correct, these epics developed during or immediately after the event, just as, according to the view now generally held, the Song of Deborah did.¹⁶

We find then that in these old documents there is mention only of a 'Joseph', who in the Song of Deborah is already divided into Ephraim and Machir, while Manasseh is not mentioned at all.¹⁷ The latter's origin remains still obscure, but so much seems certain: he originated in a foreign territory, is not mentioned in some of the older documents dealing with the 'Joseph' settlement, and his name appears later in Israel as a personal name. More cannot be

migration, mythological character, relationship with the Hyksos, date of the story, etc. Cf. *AJS* 37 (1920-21), 101 ff.; 47, 83 ff.; *JBL* 35 (1916), 167 f.; 37, 111 ff.; *ZAW* 3 N. F. (1926), 94 ff.

¹³ For the date, cf. SKINNER, *Genesis* (New York, 1910), p. 533 and, PROCKSCH, *Die Genesis* (Leipzig, 1934), p. 282.

¹⁴ We follow the date of König, *Das Deuteronomium* (Leipzig, 1917), p. 228 f. Cf. also PHYTHIAN-ADAMS, *JPOS* 3 (1923), 158 ff.

¹⁵ *ZAW* 7 N. F. (1930), 295. (Dt. 33^{17b} is obviously a gloss).

¹⁶ So, for example, MOORE, BURNEY and others.

¹⁷ But he appears at about the same time, in the story of Gideon in the West, Jud. 6¹⁵, and in the story of Jephthah in the East, Jud. 11²⁹. See below.

said until an analysis of our remaining documents is completed.

Of these documents the one which seems most complete is Nu. 26²⁸ ff. It has been recently discussed by NOTH.¹⁸ He has there brilliantly defended the thesis that Nu. 26 is an "einheitliches Stück", a few additions excepted, of course. Now, if Noth is correct in eliminating v. 28 etc. in chapter 26, then, in Joshua 17, verse 1 should also be eliminated. We thus get a homogeneous genealogy of Manasseh,¹⁹ which is the basis for the other documents such as Nu. 27¹ ff., 36¹ ff. Of this genealogy, Machir is the only name to be found in 1 Chr. 2¹⁸⁻²⁴ while in 1 Chr. 5^{23f.} there is no mention of any at all. The other document which mentions Manasseh is 1 Chr. 7¹⁴⁻¹⁹, in which part of the above-mentioned genealogy can be detected, but where also remnants of some other list or lists can be seen. The question immediately arises, whether these genealogies refer to the same clans and tribes of Manasseh, and if not whether they can be identified with a certain degree of probability. The answer to the first question is in the negative, while to the last one it is in the affirmative.

For when we observe the documents in Numbers and Joshua, we note that the names represented in these lists are also found as place names in Western Palestine, in the territory allotted to Manasseh in the central highland of Mt. Ephraim.²⁰ This fact has been definitively proven by the discovery and interpretation of the ostraca of Samaria.²¹ The ostraca date, apparently, from the reign of Ahab in the middle of the ninth century B.C. (874-852) and show that "those tribal subdivisions have become administrative units."²² When did this development begin? It is very likely that it began during the time of Solomon, for Solomon, as is well-known,²³

¹⁸ *System*, p. 122 ff. ¹⁹ Note however the slight variations in the order of the names in Numbers and Joshua.

²⁰ We disregard for a moment the mention of Gilead, but preserve the reference to Zelophehad and his daughters, which NOTH omits from Nu. 26.

²¹ A complete discussion is to be found in DIRINGER, *Le iscrizioni antiche ebraiche Palestinesi* (Florence, 1934), p. 21 ff. His bibliography is up-to-date except for NOTH, *System*, p. 125 ff. and MAISLER, *JPOS* 14 (1934), 96 ff.

²² OLMSTEAD, *History of Palestine and Syria* (New York, 1931), p. 372 ff. Recent investigations may require, perhaps, the lowering of the age of the ostraca to the eighth century.

²³ 1 K. 4. See *The Administrative Divisions of Israel and Judah*, by ALBRIGHT, *JPOS* 5 (1925), 17 ff.

reorganized the districts of Palestine and divided the whole country into administrative units. Therefore if Nu. 26 still reflects the tribal and clan organization, it would have to go back to a period preceding the time of Solomon. Indeed, NOTH²⁴ dates the whole of Nu. 26, excluding a few verses, noted on page 124 of his book, to the period between the Song of Deborah and the reign of David, i. e., between the 12th and 10th centuries B.C. At such an early date we have in Western Palestine clans known to be Manassite.²⁵ Consequently, the documents of Jos. and Nu. should be differentiated from those of the Chronicler. The latter will be shown to contain a more complete genealogy of Eastern Manasseh. The analysis of the documents, however, is extremely difficult.²⁶

Verse 14 of 1 Chr. 7 begins as follows: בני מנשה אשריאל אשר יורה. There does not seem to be any doubt that this verse preserves the same genealogy credited to Manasseh in Nu. 26 and Jos. 17. Originally the verse probably had: בני מנשה, חפר, וג' : שכם, חפר, וג' : בני מנשה אשריאל, שכם, חפר, וג' (אשריאל is dittography of the preceding אשריאל influenced by the יורה of the next clause).²⁷ Some of the remaining names of this genealogy (the western one) are to be found in vv. 18 f. (see below). Our verse (v. 14), however, proceeds to tell us that out of some relationship of Manasseh with an Aramaean concubine (country, clan, or tribe?) there was born Machir, father of Gilead.

There follows then a list of names unlike any other Manassite genealogy, and whose meaning is anything but clear. A discussion of these names, therefore, will appear in its place. From it, it will be observed that the names show a preponderance of Arabic etyma, a fact which while not of primary importance yet can be noted in our discussion. It has been pointed out by HALÉVY²⁸ and stressed by MONTGOMERY²⁹ that there was a continual influx

²⁴ *Op. cit.*, p. 129 f.

²⁵ Cf. also Gideon's clan אביעזר in Jud. 6-8 and see our discussion below.

²⁶ This analysis, nevertheless, must be undertaken. The information in the Book of Chronicles can no longer be dismissed as purely fictitious. Its historical importance has been repeatedly stressed by ALBRIGHT, NOTH and KLEIN.

²⁷ This was first suggested by RICHTER, *ZAW* 34 (1914), 133ff., who, however, gave it up later (*ibid.*, 1932, 134). ALBRIGHT, *JPOS* 5 (1925), 28, n. 28 reads the verse as we do. He did not, however, know of RICHTER's reading.

²⁸ *Essai sur les inscriptions du Sufa* (Paris, 1887), p. 120.

²⁹ See his *Arabia and the Bible* (Philadelphia, 1934), *passim*.

of Arabic tribes into Palestine from the earliest times. If such a theory is correct, then Transjordan, on the border of the desert, would certainly be the first recipient of such an influx. The fact that our names show exactly such an influence, strengthened by the fact that since this Manassite genealogy does not refer to the west,³⁰ it must consequently refer to the eastern half of the tribe, and especially since these genealogies are connected with Gilead and Aram, terms designating territories or peoples belonging unquestionably to Eastern Palestine—all this seem to prove that the genealogy of 1 Chr. 7¹¹ ff. cannot but refer to the Half-Manasseh of *Eber hay-Yarden*.

This genealogy is found in a document which is obviously corrupt.³¹ To discuss all the views of scholars as to the original text, will require too much space and will be of little value.³² I modestly propose to read the text as follows:

V. 14^a בני מנשה אשריאל, שכם... וגו', אשר אשתו ירדה³³

V. 14^b פיגשו הארמיה ירדה את מכיר אבי גדעד

V. 15^a ומכיר דקח אשה ושם אשתו³⁴ מעכה.

V. 16³⁵ ותלד מעכה אשת מכיר בן ותקרא שמו פרש ושם אחיו שרש ובניו אולם ורקם

V. 17^a (וגו') . . . ובני אולם בן . . . Here must have followed the list of the genealogies of the other ancestors, a list unfortunately missing.³⁶ The section closes with v. 17^b אלה בני גדעד בן מכיר בן מנשה. V. 18 then resumes the western genealogy to which v. 15^b probably belongs. How to account for this mixture in the text escapes us.

³⁰ Cf. above.

³¹ MELAMED's attempts (*Turbiz* V [1934], 123 ff.) to keep the text intact are not convincing. For his general thesis cf. already CLERMONT-GANNEAU, *Archaeological Researches*, Vol. II, p. 80, and ALBRIGHT, *AASOR* IV [1922-23], 47.

³² Besides the standard commentaries, see *ZAW* 34 (1914), 133 ff.; 6 N. F. (1929), 104 ff.; 9 N. F., 134 ff.; *JPOS* 5 (1925) 28, n. 28 and p. 43, n. 62; NOTH, *System*, *passim*.

³³ The only addition here is the word אשתו. The *athnah* in the Masoretic text after ירדה seems to bring to a close the thought expressed in v. 14^a. Originally it contained the genealogy of Western Manasseh. Having disposed of them, the text proceeds to describe the eastern branch.

³⁴ Or perhaps the original אחרו is correct. I omit the words חסם ושפים as a gloss, following the commentators.

³⁵ V. 15^b was probably inserted from a lower verse, possibly v. 18.

³⁶ Perhaps to be found in 1 Chr. 5²⁴. See below.

Our text seems to be correct, however, in representing שכם as a son of שמירע.³⁷

To what period does our text belong? The *terminus a quo* must be the relationship with the Aramaeans; the *terminus ad quem* could be the age of the ostraca of Samaria where שכם appears as a subdistrict of שמירע, i.e., the middle of the ninth century B.C.³⁸ The Aramaeans have had a long history,³⁹ yet the real immediate contact with the Israelites was during the time of David, who successfully checked their advance from the north and repulsed them.⁴⁰ But the Aramaeans remained in Syria and, during the reign of Solomon and immediately after the disruption of the monarchy, their advance southwards continued. It would be only natural for the Transjordanian tribes to seek alliances with the enemy who was threatening to annihilate them. Such a situation might account for Machir's association with Maachah. If so, the *terminus a quo* of our document would be about the tenth century B.C. which would coincide also with its *terminus ad quem*. For it is possible that the subdivisions which appear on our ostraca go back originally to the reign of Solomon. If so, we have narrowed the age of our document to about the middle of the tenth century B.C., to which 1 Chr. 7¹⁴⁻¹⁹ belongs.

The Chronicler has preserved two more documents which we must consider: 1 Chr. 5²³ f. and 2¹⁸⁻²⁴. We begin with the first. The text presents many difficulties and the commentators have offered just as many reconstructions.⁴¹ But the reading of the verse seems to me exceedingly simple, viz.: v. 23^a וּבְנֵי חֲצִי שֶׁבַט מְנַשֶּׁה יִשְׁבּוּ

³⁷ ALBRIGHT, *JPOS* 5 (1925), 43, n. 62, calls attention to this fact.

³⁸ That the administrative divisions of Israel continued in the same manner after the death of Ahab is not improbable. However, in view of the political decline of the state and the continual attacks by Assyria and Aram, a new organization might have been introduced. Cf. also n. 22. It is possible, however, that the ostraca date from the reign of Jeroboam II.

³⁹ Cf. *Reallexikon der Assyriologie*, p. 131 ff.; UNGER, *Forschungen und Fortschritte*, 4 (1928), p. 226 ff.; ALBRIGHT, *JPOS* 12 (1932), 207 f., and *AJSL* 44 (1927-28), 35.

⁴⁰ 2 Sam. 8⁸⁻¹¹; OLMSTEAD, *op. cit.*, p. 323 ff.; ED. MEYER, *GA*, 11, 2, 252 f.

⁴¹ The latest (*ZAW* 9 N. F. [1932], 133) is the wildest. RICHTER also sins against Hebrew idiom when in v. 18 he emends יִצְאֵי צֶבֶא, a perfectly good Hebrew expression, to the barbarism יִצְאֵי צֶבֶא.

מבשן עד כעל-חרמון, ושניר והר חרמון, ובלכנן המה רב⁴³ v. 23^b; בארצם⁴². In v. 24 it seems that ועפר (note the conjunction) is really in the middle of the sentence, the beginning of which might have had a few more names now missing. I believe that the solution can be found if we compare this text with that of Chapter 7, where as I have already pointed out, v. 17^a seems to be cut off and a number of names missing there. The continuation of this verse I see in v. 24. That even so the text is far from complete is quite obvious, for it is impossible to assume that the whole list in v. 24 represents the descendants only of Ulam. More than that cannot, however, be deduced at present.⁴⁴

The date of our document is not easy to determine. If our reading of v. 23 is correct, the time then must have been a period of general conquest in Israel. We inevitably turn to the age of David and Solomon. The "sons" of Manasseh, having already established themselves, are now seeking new conquests. Such a desire could materialize only if it were facilitated by a strong military advance on the part of the state. Such advance and assistance could be expected during the time of David, who on the other hand, could not succeed, unless supported by precisely the same tribesmen desirous of conquest. That the tribes were eager for war, can be seen from the account of the war with the Hagarenes which precedes v. 23 in our chapter.⁴⁵ Our document

⁴² Note the *athnah* after בארץ. The מ of בארצם could have fallen out through haplography. V. 23^a thus informs us of the fact that the tribe dwelt in his own land (literally, "the sons of the tribe—in their land"). But as a result of some expansion perhaps, the settlement of the tribe extended further north, and that is what v. 23^b aims to tell, viz., that the Manassites had extended their territory to the northwest.

⁴³ Following Codex B.

⁴⁴ The suggestion can be made, of course, that the list represents successive generations. If so, we have eight generations. Counting twenty-five years a generation, we have 200 years, which if added to 732 B.C. (the year of the fall of Damascus and the approximate date of Tiglath-Pileser III conquests in Transjordan), gives the date of c. 932. This coincides well with the date we have ascribed to the document in 1 Chr. 7¹⁴⁻¹⁹.

⁴⁵ Cf. IN, 326 ff.; LUCKENBILL, *Ancient Records*, I (Chicago, 1926), p. 283, etc.; GAUTHIER, *Dictionnaire des noms géographiques*, IV (Cairo, 1927), p. 7 and 223; MONTGOMERY, *op. cit.*, p. 35, n. 16. If the reference in 1 Chr. 5¹⁰ is correct, and there is no *a priori* reason to doubt that it is, then also the reference in vv. 18–22 is correct, and these wars would have taken place during the eleventh-tenth centuries B.C.

would then refer to such conquests and victories of the Transjordanian clans under the leadership of David. If so, our document belongs to the early tenth century B. C.

There is one more document in the book of Chronicles which is of interest to us, chapter 2¹⁸⁻²⁴. For our purpose, we shall deal only with v. 21 ff. Hezron, the well-known Judahite patriarch (cf. v. 5 and 9) is associated with a sister of Gilead, who bears Segub, the father of Jair.⁴⁶ ED. MEYER suggested⁴⁷ that Hezron is here really the descendant of Reuben (cf. Chap. 5⁸) and not of Judah. Following this suggestion⁴⁸ we conclude that vv. 21 f. reflect an association of a Reubenite clan with a "daughter of Machir".⁴⁹ The "offspring" of that relationship was Segub whose more famous descendant was Jair.⁵⁰ The latter, who unlike Segub probably

⁴⁶ The possibility that Hezron, the Judahite, represents here a post-exilic community (BENZINGER, *Die Bücher der Chronik*, Leipzig, 1901, p. 9) is out of the question. This suggestion is a possibility to CURTISS (*The Books of the Chronicles*, New York, 1910, p. 91 f.). The latter's suggestion that Segub is an error of transcription for Argob is better, but improbable.

⁴⁷ IN, 519, n. 1. This view is supported by ROTHSTEIN, *Das erste Buch der Chronik* (Leipzig, 1927), p. 92 f.

⁴⁸ NOTH has shown (*ZDPV* 55 [1932], 103) that v. 24 in our chapter belongs to the genealogy of Judah; and while he disclaims v. 19, yet both v. 19 and 20 (see his reconstructed list on page 106) show relationship to that genealogy. We are thus justified in accepting ROTHSTEIN's view (*op. cit.*, p. 24) that vv. 21-23 are an interpolation reflecting a genealogy other than Judaeen.

⁴⁹ The text is difficult. As a possible construction, I offer the following suggestion: ואחר בא חצרון אל בן מכיר אבי גלעד והוא לקחה וחלד לו את שגוב, ושגוב: ואחר בא חצרון אל בן מכיר אבי גלעד. הוליד את יאיר ויהי לו עשרים ושלוש ערים בארץ הגלעד. Something seems to be missing here. This section then concludes; but אלה בני מכיר אבי גלעד. Something else is then missing, at the end of which comes the closing statement: ויקח (ויקחו): גשור וארם את חות יאיר מאחם (or ואחם, cf. end of n. 50), את קנה ואח בנוחיה - i. e. — שששים עיר.

⁵⁰ The association between the two clans can be explained according to MORGENSTERN (*ZAW* 6 N. F. [1929], 91 ff.) who pointed out the existence of *beena* marriage in ancient Israel, especially before the time of David. Whether we adopt this view without reservation or not is immaterial at present; but that movements from tribe to tribe whether for the sake of marriage, war, or even for feeding the cattle in time of famine (note, in passing, that the territory of Reuben is a war-ridden one, while Gilead is a land practically unsettled) must have taken place is quite obvious. As a result of such movements and associations new clans and new tribes which traced their descent to either or both of their dual parentage, must have developed. In such a

achieved success and secured importance in Gilead came, as a result of that, to be recognized as the son of Gilead proper and, consequently, as the son of Manasseh (Nu. 32⁴¹, Dt. 3¹⁴).

Having completed the analysis of our documents, we may add one more word about the complete genealogy of Eastern Manasseh. We shall now also take account of the verses we omitted in Jos. 17 and Nu. 26. From Nu. 26²⁸; Jos. 17¹; 1 Chr. 7^{14,17} (we disregard the genealogy of Segub and Jair, since its development, as has been explained, is of a different nature) there appears invariably this genealogical line: Manasseh-Machir-Gilead. In Nu. and Jos. this is preceded by Joseph. One cannot but come to the following conclusion: Gilead, a land, was conquered by Machir, a son, or major clan, of Manasseh. The latter, too, was a son, or clan, of Joseph. In the course of time the land Gilead assumed human form in the eyes of tradition. Hence, the genealogical lists, which represented the subsequent occupation of Gilead by various other clans, have been attributed to Gilead as the "land-ancestor", whose descendants they became. Thus developed the genealogical lists of 1 Chr. 7¹⁴⁻¹⁷ and 5²⁴ on the one hand, and that of 1 Chr. 2²¹ f. on the other. The process of settlement and the eventual fate of these clans belongs to another chapter. We first turn to the story of the settlement.

way, the existence of Segub (of whom we know nothing) and Jair, as well as of Nobah (Nu. 32⁴²), must be explained. At what time did this development begin? It seems impossible to answer this yet, but if our analysis of Nu. 32³⁹ ff. (see below) is correct, this event would have to precede that of Nu. 32⁴¹. Consequently, before the 13th-12th century B.C. Our document, however, cannot be dated with any degree of probability. The difficulty of the number sixty cities (Jair had only twenty-three) is cleared up by RICHTER's emendation (ZAW 34 [1914], 110 f.). Incidentally, RICHTER has changed his views (*ibid.*, 1931, p. 261 f.).

ANALYSIS OF THE DOCUMENTS WHICH REFLECT THE PROCESS OF THE SETTLEMENT OF HALF-MANASSEH.

Chapter 32 in the Book of Numbers presents more problems than one. The writer hopes to discuss it at a future date. Now, however, he will deal with v. 39 ff. only, for this section has no apparent connexion with the preceding, and must have been part of the annals which specified the advancement of the clan. It is perhaps to be connected with the whole cycle of documents to which Jud. I belonged.¹ V. 40, as has been seen by most scholars, is an insertion in this section for the purpose of conforming it to the whole tendency of the chapter. For scholars generally agree that the chapter originally dealt with two tribes, Reuben and Gad, and that Manasseh represents a later addition.² This view is probably correct, but the historical significance of this fact has not been seen by the scholars, as will be pointed out.

Vv. 39 ff. attempt to describe, in military fashion, the process of the advance of clans of Manasseh into the land of Gilead, whence they drove the Amorites out.³ The term Gilead is an exceedingly flexible one. Here, however, it appears that the northern section between the Jabbok and the Yarmûk is referred

¹ GRAY, *Numbers* (New York, 1903), p. 438. The footnotes will be renumbered in each section of the paper.

² GRAY, *op. cit.*, p. 427 points out that the usual order is here reversed to Gad and Reuben, a fact which may reflect the situation at the time of the composition of the chapter when Reuben had already deteriorated. I may add that if we compare this fact with the information in the Mesha inscription, we can get the approximate date for the whole chapter about the beginning of the 9th century B.C., or even earlier.

³ HOLZINGER, *Numeri* (Leipzig, 1903), p. 158 reads אמרי for אמרי, but this is unnecessary. It has been demonstrated that Biblical tradition is probably correct in designating the population of Palestine and Transjordan before the arrival of the Israelites as Amorites; cf. the work of LEWY, especially *Zeitschrift für Assyriologie* 4 N.F. (1929), 243 ff., and see *JPOS* 8 (1928), 250 ff. as well as *RB* 40 (1931), 161 ff. (the last instalment of DHORME's articles), and references there. The problem involved is really of a different nature. For we have pointed out (*JAOS* 54 [1934], 175 ff.) that the clans of Manasseh settled in a territory not previously inhabited by a sedentary population. If so, how shall we interpret the verse וַיִּרְשׁוּ אֶת הָאֲמֹרִי אֲשֶׁר בָּהּ Two possibilities can be considered.

to.⁴ Somewhere in this territory Jair too made his conquests. This clan, who did not belong to the descendants of Machir, as has been already shown, went and conquered the *hawwôt* of Ham (following my reading in *JAOS* 54 [1934], 176) and called them *hawwôt Jair*. In other words, Jair, having conquered the hamlets of the district of Ham, occupied these *hawwôt*, settled in them, and proceeded to live there, for a while at least, the semi-nomadic existence of his predecessors. Thus the "father" of the clan appears to have been "born" in Gilead proper. In Nu. 32⁴¹ he is a son of Manasseh. This means that our document represents the tradition that Jair has been already incorporated among the Manassite clans and possibly become one of the major ones. At what time? Before answering this question, let us study the information in Jud. 10³⁻⁵.⁵

If we take the verse literally, i.e., the Israelites actually drove out the Amorites, then these latter were the nomadic or semi-nomadic population of the hills of 'Ajlûn, who had to leave the country as the result of the approach of the Israelites. The latter settled the country and became eventually its sedentary population. The second alternative is that actually there were no settlements in our territory, and consequently no expulsions; but since tradition had it that the Amorites dwelt in the whole land, it was only natural to assume that also in 'Ajlûn the Amorites had to be driven out in order to give room for the coming Israelites. Of the two possibilities, I prefer the first, which is strengthened by the fact that Jair, in v. 41, has to conquer the *hawwôt* of Ham—the settlement of semi-nomadic people. It should be pointed out, however, that while the term *אֲמֹרִי* seems to presuppose the disappearance of these Amorites, it would be more accurate to say, as shall be shown later, that, actually, there was here only a normal process of assimilation. The document, written at a time when the Amorites no longer existed, assumed, what seemed most logical, their complete extermination.

⁴ Cf. *JAOS* 54 (1934), 174 f..

⁵ In Nu. 32⁴² Nobah, whose ancestry is unknown, went to conquer Kenath, modern Kanawât, whose name he changed into "Nobah". (The name has not been preserved probably because the territory was reconquered afterwards by the Aramaeans—cf. I Chr. 2²⁸—who restored to the city its ancient name). One is immediately reminded of Nobah in Jud. 8¹¹. ED. MEYER (*IN*, 518; *GA*, II, 2, 232) suggested that Nobah there is really the new name of Kenath, as our document would have it. Gideon's march was thus towards the east to Kenath or Nobah and then to the south, by the *hajj* route to Yoghbehah (modern el-Ajbehât). This attractive theory, however, disregards the fact that Gideon spoke to the people of Succoth and Penuel (on the western side of Gilead) and that Kanawât is too far out of the way of the pilgrim route which

MOORE⁶ has pointed out that the judge Jair, like the other minor judges, is really a personification of the whole clan. Now the information in Jud. 10³⁻⁵ is, that this judge has thirty sons who ride on thirty donkeys and own thirty עִירִים called *hawwôt-Jair*. When Jair died he was buried in Kāmôn. This is a brief paragraph seething with problems. V: 4 is somewhat confused. I suggest reading it as follows: וַיְהִי לוֹ שְׁלֹשִׁים בָּנִים וְרִכְבִּים עַל שְׁלֹשִׁים עִירִים, וְשֹׁלָשִׁים וַיְהִי לוֹ עִירִים לָהֶם (אֲשֶׁר בְּאֶרֶץ הַגִּלְעָד). לָהֶם יִקְרָאוּ חֹת־יַאִיר עַד הַיּוֹם הַזֶּה. Our verse, while not completely smooth, is at least now intelligible. Still, the word עִירִים seems to present difficulties.⁸ But there are none.⁹ The paronomasia is obvious and it would be a crime to "correct" the text.¹⁰ These *hawwôt* are in I Chr. 2²² twenty-three; here thirty. This discrepancy might have arisen either from a mistake by analogy with Jud. 12¹⁴, as most commentators believe, or, which is more plausible, because of a scribal error arising from the omission of the twenty in twenty-three and then increasing the number three to thirty, as FEIGIN suggests.¹¹

runs through Edre'i to Gadda and 'Anmân. Furthermore, while it is true that an attack from the rear might be unexpected and therefore successful, yet such strategy would require a greater effort than Gideon was probably able to make. If, in spite of our objections, ED. MEYER is right, then our document must go back to before Gideon's time, before 1100 B. C.

⁶ *Judges* (New York, 1895), p. xxviii.

⁷ The transposition might have easily occurred to a scribe misled by the לָהֶם of the last clause. When he discovered his error he probably added, in the margin, or at the end of the sentence, the words he had left out.

⁸ BUDDE, *Das Buch der Richter* (Leipzig, 1897), p. 79; BURNEY, *Judges* (London, 1920), p. 292, read עִירִים for עִירִים. But this is wrong, for it sins against the law of *difficilior lectio*. That some versions have עִירִים is the result of their ignorance of the Hebrew construction.

⁹ Already RASHI (see his commentary *ad loc.*) pointed out that this is the form commonly found in its feminine עִירֹת, "little cities or hamlets" which, incidentally, fits the term *hawwah* perfectly.

¹⁰ Cf. also OETTLI, *Das Deuteronomium u. d. Bücher Josua u. Richter* (München, 1893), p. 265; YELLIN, *לשוננו* 5 (1933), p. 291 f. The question is really of a different nature: Why the thirty ass-colts, and why should the sons be riding on them? Prof. ALBRIGHT suggests, that the thirty ass-colts are aetiological in origin, being invented to explain the עִירִים (people said, why did the sons own thirty עִירִים—hamlets?) and answered, probably because they rode on thirty עִירִים—ass-colts).

¹¹ *JBL* 50 (1931), 195 f. This is his best suggestion in that article. The assumption that Jephthah is the son of a person Jair-Gilead is out of the question.

What are the sons? The combination of the views of MOORE¹² and NOWACK¹³ seems to be the correct one, i.e., the "judge" Jair, his twenty-three (or thirty) "sons", the twenty-three (or thirty) ass-colts and the twenty-three (or thirty עִירִים) reflect a period of superiority in this clan, of advantage over the other clans, and of conquest and victory. If so, two questions arise: Where and when.

The answer to the first question takes us to v. 5 where it is stated that Jair was buried in Ḳamôn, modern Ḳamm.¹⁴ Was that the ancient seat of the tribe or a new center? If our reading in Nu. 32⁴¹ (חֹתָם) is correct, then the second alternative is the right one. In other words, when the various clans moved northward to conquer new territories, Jair went too and conquered Ham. He then continued further north and northwest, to the district of Ḳamôn and where some of the twenty-three (or thirty) hamlets were.¹⁵ Nobah, too, moved north, but went northeast to the conquest of Kanawât.

The answer to the second question involves the chronology of the minor judges, which has not been solved yet.¹⁶ It is evident though that during the time of the Judges in the twelfth-eleventh centuries B.C., the Jairites and their *ḥawwôt* or עִירִים, played an important rôle in the history of the territory. It is possible that their advances and wars of conquest in the north weakened the remaining clans of Gilead, and thus enabled Ammon to gain in force and attack the land. This fact, the absence of their important clan, will account for the Gileadites' demand for assistance from the brigand Jephthah. If this supposition is correct, then Jud. 10³⁻⁵ would have to precede the time of Jephthah; in other words, some time during the twelfth century. Especially would it be so if we would assume that the weakness of the Gileadites was caused, on the other hand, by Machir's movement to the west (cf. Jud. 5¹⁴).

¹² *Op. cit.*, p. 273.

¹³ *Richter, Ruth u. Bücher Samuelis* (Göttingen, 1902), p. 97.

¹⁴ Cf. *IN*, 517; BURNEY, *op. cit.*, p. 293. The site is described in *PJB*, I (1905), 61. I do not know, however, whether it possesses Bronze Age and Iron Age remains.

¹⁵ Dt. 3¹⁴ extends the northern boundary up to Geshur and Maachah and includes the land of Argob.

¹⁶ See now some pertinent remarks by ALT, *Die Ursprünge des israelitischen Rechts* (Leipzig, 1934), p. 31 ff.

If we return now to our text in Nu. 32^{39,41} f., and if the analysis of Jud. 10³⁻⁵ is 'correct, then the former document would reflect an age preceding the latter. MOORE,¹⁷ KITTEL¹⁸ ascribe to it great antiquity. One cannot escape the same conclusion. Older than Jud. 1, our section would be placed at the end of the thirteenth century B.C.¹⁹

The next document under consideration is Dt. 3¹ ff. esp. 1⁸ ff., which is the most complete account of the Transjordanian conquest we have. In it it is stated that Moses conquered Transjordan of which Bashan²⁰ and יַחַר הַנְּגֶדֶר was given to Half Manasseh, while Jair, son of Manasseh, took חֶבֶל אֲרֶנֶב and Machir received Gilead. What situation does the text represent? In order to attempt an answer, we must be permitted a slight digression.

In I Kings 4, Transjordan is divided into two districts whose capitals are Ramoth-Gilead (v. 13) and Mahanaim (v. 14).²¹ A comparison between this document and Dt. 3 reveals that the district of Ramoth-Gilead corresponds to that given to Machir, Jair, etc. But of these territories we know that only Gilead was in the hands of the Israelites and that even during the time of David, Jaulân and Haurân were occupied by the Aramaean tribes of Geshur and Maachah.²² Furthermore, in I Kings 4 the capital of the district is Ramoth-Gilead, south of the Yarmûk. No mention is made there of Astaroth and Karnaim, the mighty cities of the traditional 'Og and Bashan. It will appear impossible that had these cities been in the hands of the Israelites they would not have been mentioned.

¹⁷ *Ibid.*, p. 274. ¹⁸ *HSAT*, 1, 389.

¹⁹ The idea of REUBENI (שֵׁם חָם וְיִפְתָּי [Tel-Aviv, 1932], p. 64 f.) identifying Jair both with Egyptian Yaa (יָאָא) of the Sinuhe story and Assyrian Ya'uri of the fourteenth century B.C. is wrong. The first identification is phonetically difficult (should be יָאָא not יָאָא), and historically impossible. The second is both historically and phonetically impossible.

²⁰ The best geographical discussion of these territories is to be found in ABEL, *Géographie de la Palestine* (Paris, 1933). For Argob see also n. 24, below.

²¹ Ramoth-Gilead is to be identified with Tell el-Huşn (*BASOR* 35, 11). Mahanaim is still unidentified, though DALMAN thinks it is Tulûl ed-Dahab (*PJB* 9 [1913], 68 ff.).

²² The identification of these tribes has not been made yet. From our investigation, however, we have concluded that they lived in territories which would have to be placed not much farther than the northern bank of the Yarmûk.

We must deduce, therefore, that even at the height of the Israelite empire, in the time of Solomon whom tradition credited with a rule extending up to the Euphrates,²³ the northern boundary of its Transjordanian possessions did not extend further than the Yarmûk (though it might have incorporated southern Ḥaurân, up to Salkah, modern Salḥad, in Jebel ed-Drûz).

This fact is extremely important. For even though we do not know where Argob was,²⁴ yet it, too, was not further north than 'Aštaroḥ and Ḳarnaim. Now if we follow this line of thought, we notice that it is nowhere stated that these two cities were conquered (for Jos. 13, see presently). Moses' battle took place at Edre'i. Og's cities, according to Dt. 3¹⁰, were also limited to a territory south of Edre'i. Solomon's governor was in Ramoth-Gilead, again not far from Edre'i. Ahab's aspirations also did not extend farther than Ramoth-Gilead (I Kings 22). Even Jeroboam II, the last great king of Israel before the fall of Samaria in 722/1, while defeating Aram (cf. II Kings 14²³⁻²⁹; Amos 6¹³), and perhaps subjugating them for a while, could not establish a lasting rule in northern Transjordan and his territories were lost to Israel after his death (II Kings 15 f.). Besides these facts, the Aramaeans during the first centuries of the first millennium B.C., continually pressed southward. The deduction from these statements would warrant, it seems to me, the conclusion that the Israelites perhaps never reached much farther than the Yarmûk to the north, and Salkah to the east. Yet tradition is invariable in giving the Israelites

²³ I Kings 5¹ ff. Possibly this only means that he controlled the trade and caravan routes, just as perhaps the Reubenites did (I Chr. 5⁹).

²⁴ Argob cannot be el-Lejâh, for the Israelites probably could not have conquered this naturally fortified and impregnable territory. Furthermore, it seems incredible that the Israelites would conquer a land whose sole importance lies in its ability to harbor criminals. The Israelites were seeking territory for a sedentary occupation. Argob could not refer to Ḥaurân either, for the land is usually referred to as Bashan. Neither to 'Ajlûn, for the land is known as Gilead. Jebel ed-Drûz is then the only possibility left. But were there sixty cities? Possibly. The whole territory of the upper Yarmûk basin reveals ancient settlements. However, it will be better to suppose that Argob was a general administrative term designating this whole territory or parts of it, in which the imposing remains of the Rephaim and their mighty cities were to be seen. (Cf. Dt. 3⁴ f.). If this supposition is correct, an exact identification cannot, and perhaps never will be, definitely established.

Bashan, the territory of 'Og who ruled in 'Aštaroṭh (e.g., Dt. 3¹⁸, Jos. 13⁸¹). It was a mighty kingdom with mighty cities which tradition connects with Moses' victories. How can we account for such a tradition when the facts seem to oppose it? The answer I give is a complicated one, but nevertheless it is clear. It includes the Ḥabiru and the Amarna period.

Early in the career of the Ḥabiru we hear of their conquest, or occupation, of 'Aštaroṭh.²⁵ How much more they conquered and what happened to their conquest, we do not know. We find Ḥabiru, or reference to them, also in central Transjordan.²⁶ If they once conquered or occupied 'Aštaroṭh they would not have difficulty in conquering the land of Gari²⁷ and then proceeding further south. That these Ḥabiru did not disappear entirely can be safely surmised. Any people who would come to occupy their territory would, by necessity, come in contact with them. It is logical to assume that part of their tradition and lore would be adopted by the new conquerors.²⁸ Such must have been the case both in Western and Eastern Palestine. The documents which we have thus preserve a mixed tradition of the early Ḥabiru as well as that of the late Israelites. That is precisely what happened in Dt. 3.

In Dt. 3¹³⁻¹⁵ there is a clear distinction between Half-Manasseh, Jair, and Machir. How did such a distinction develop? It does not seem to me to have been a development at all. Rather, I see here a preservation of an old tradition, remnants of a pre-Israelite one, which has become mixed up with later traditions. In this later one, Bashan appears to have been conquered. So it was. But this conquest goes back to the time of the Ḥabiru and not the Israelites, as has been already shown. This fact notwithstanding, in Israelite lore the conquest appeared as having been accomplished by Moses. The second step was then an attempt to account for the settlement of the land. Some of it was probably occupied by the ancient Ḥabiru—the oldest layer of the Hebrew population which we can trace. In our document this layer appears under the general and unspecific term of Half-Manasseh. This Half-

²⁵ *EA*, letter 197. ²⁶ *EA*, letter 256.

²⁷ We accept ALBRIGHT's identification (*AASOR* 6 [1924-25], 40 f.) as against that of ALT and NOTH (*JPOS* 12 [1932], 126 ff.; 1935, 42 ff.).

²⁸ Cf. also BARTON, *JBL* 48 (1929), 144 ff.

Manasseh thus designated not only that older layer of the population, but also the newcomers, the little clans who were not large or important enough to be called by a special name. Together these went to compose in later tradition the tribe Half-Manasseh. However, among the conquering and settling tribes there were those who had achieved greatness and importance either before settling, or after their settlement when strengthened with some of the original clans who had not become Half-Manasseh. Such a one was Jair, who received "Argob"—the territory around the Yarmûk basin, including northern Gilead. This group might have been a second layer of the population. Another one was Nobah, further east. Another one was Machir, who settled in Gilead proper.²⁹ Whether these groups present consecutive settlements or a contemporary development cannot be determined. Some were contemporary, others probably followed each other. For tradition preserved only fragments of their past, as for example in Dt. 3.

Before proceeding to another document, there is one more fact to consider in order to unravel the apparent confusion of our text. This is the topography of David's wars. These wars carried David well into Transjordan up to the Yarmûk. It would be inevitable that these wars and victories, which mark the highest peak in Israel's military achievements, should be noticed by tradition. Whether handed down in Transjordan proper or in western Palestine, the new tradition appeared in the course of time side by side with the older one. Possibly, as time passed by, parts of it became incorporated into the original one. When finally tradition was put into writing the document presented anything but a uniform picture. Thus, from an original conquest of Bashan and part of Gilead by the Hâbiru in the fourteenth century B. C.; from further tribal movements in the following century or two; from the decisive conquest and settlement during the thirteenth century and from David's wars—there arose a tradition represented in our document.

²⁹ The view that the Joseph tribes were already in the country in the fourteenth century B. C. (see recently ALBRIGHT, *BASOR* 58, 14 ff.) will be mentioned later. If this view is correct, then our cautious conclusion may become much bolder. The conquest of Transjordan in the fifteenth-fourteenth century B. C. was actually already that of the tribe known by its later name of Half-Manasseh.

Nowhere else is Prof. ALBRIGHT's warning³⁰ to be heeded more: here is the oldest tradition in the youngest document.³¹

Our next document is Jos. 13. Contrary to the current opinion of scholars,³² this section with its tribal divisions seems to be an unified one. It is a clear summary of tradition which the redactor of Joshua took great pains to preserve. The various traditions were incorporated into one text not so much to present a homogeneous picture of what the redactor thought it should be, but to preserve the tradition as it was handed down, without tampering with it. The traditions, at times, conflicted with each other: the fact that they still do so speaks for their primary origin. The heterogeneous documents were preserved at the expense of an uniform tradition and a clearly reconstructed history. It is indeed a tribute to the historical sense of our redactor. Furthermore, we must note that whether J, E, JE, P, etc., of which we have been accustomed to speak, really ever existed or not, yet a land like Transjordan must have had its own tradition. That tradition has been lost. For our documents probably represent mostly the western recension. Wherever possible, the little preserved of the eastern tradition was introduced. It knew of two and a half tribes which settled in Transjordan. The information concerning them appears with the least confusion in Jos. 13, which it is now our duty to interpret.

Our section begins in v. 7 with a slight difficulty. Following the Septuagint, the Peshitta, and some of the commentators,³³ we add *כי חצי שבט* to v. 7 (before the last word) which probably fell out of the text through *homoeoteleuton*. The rest of this section offers no difficulties, but v. 29 is slightly corrupt. I think it can be easily reconstructed if we compare it with v. 15 and v. 24. Thus we get: v. 29 *ויתן משה לחצי מטה בני מנשה למשפחתם*. V. 30a, following the Syriac version and by comparison with v. 16 and v. 25,³⁴ would

³⁰ *Proceedings of the American Philosophical Society*, 1930, p. 460, n. 1.

³¹ The date of the document cannot be determined. The reason is obvious from our discussion.

³² See e. g., HOLZINGER, *HSAT*, I, 350 f. NOTH's discussion (*ZDPV* 58 [1935], 185 ff.) is of interest, but his conclusions (esp. p. 230 ff.) seem untenable to me.

³³ E. g., STEUERNAGEL, *Deuteronomium u. Josua* (Göttingen, 1900), p. 201.

³⁴ Naturally, if scholars reject the unity of the chapter, such comparison becomes idle.

read: ויהי להם הנבול ממחנים. Vv. 30^b and 31 are more difficult. The following suggestion is very tentative. Now, the מ of מחנים could be a dittography, and vv. 30 and 31 seem to repeat each other. Consequently it is possible that we had originally some such statement as: ויהי להם הנבול מחנים וחצי הגלעד וכל חות יאיר ומשתרת ואדרעי ערי ממלכות ענ בבשן, ששים עיר — זאת נחלת בני מכיר (מנשה) למשפחתם (הערים וחצריהם).³⁵

What period does the whole chapter represent? The date of vv. 8–28 can be easily ascertained by a study of the cities allotted to each tribe. Reuben here occupies the territory between Wâdi 'Ayûn Mûsâ and the Arnon, a land later conquered by Moab. Gad was settled further north, roughly speaking, between Wâdi 'Ayûn Mûsâ and the Jabbok.³⁶ This situation reflects the early occupation of the tribes, when Reuben was in his prime (Gen. 49³; Jud. 5¹⁶). This must have been in his earlier history for later, in the ninth century, Reuben seems not to have existed any more. Mesha did not find him, and in the territory once occupied by the first-born of Jacob now lived Gad.³⁷ It seems that by that time Reuben was already incorporated into Gad.³⁸ Now this process must have taken a few generations, for Mesha says מעלם, an expres-

³⁵ It is possible that originally in vv. 30 and 31 there was the same distinction concerning the territories and the tribes as that found in Dt. 3. If so, the original text perhaps was ויהי להם הנבול מחנים וחצי הגלעד מכיר למשפחתם (כל הבל ארגב?) וכל חות יאיר לבני יאיר למשפחתם. ומשתרת ואדרעי, ערי ממלכות ענ בבשן, כל הבשן, כל ממלכות ענ מלך הבשן, ששים עיר, לחצי בני מנשה למשפחתם. This reading, while appearing radically different from the given text, is not really so. Our reconstruction reproduces practically the complete text of our document, only in a different arrangement. The corruption in the text could have arisen from the numerous similarities in its component parts. If our reading is correct, then our document, like Dt. 3, would represent also an exceedingly old tradition which incorporated within it more than the purely Israelite ones.

The fact that we offer two different reconstructions, need not be held against us. The student who attempts to reconstruct texts cannot afford to be dogmatic. His work is admittedly tentative.

³⁶ The fact that in v. 27 Gad's boundary is extended to כנרת is puzzling. Perhaps it means to say that Gad's authority extended northward only in the Jordan Valley, up to the Sea of Tiberias.

³⁷ Cooke, *A Text-book of North-Semitic Inscriptions* (Oxford, 1903), p. 1. Cf. above, p. 234, n. 2.

³⁸ See, *JAOS* 54 (1934), 174.

sion which must represent at least three or four generations. Another generation or two, at least, should be allowed for the process of incorporation of one tribe into the other. Roughly speaking then (accuracy is here difficult to obtain) a minimum of about five generations, or 125 years, separate our document from Mesha's time. By a simple method of addition, we reach the approximate minimum date of 1000 B.C. This date coincides with David's expansion northwards and southwards, at a period when both Reuben and Gad could enjoy territorial expansion and peaceful internal settlement.

The document of v. 8-28 reflects then the events of the eleventh century B.C. Whether the remaining verses of the chapter belong to the same period is doubtful. If our reconstruction in note 35 is correct, then our view coincides with that of most scholars, who believe that "Half-Manasseh" is an insertion in the text. But contrary to their views, our theory reverses their deduction, viz., "Half-Manasseh" is an insertion in the text not because it is the youngest settlement in Transjordan, but because it is the oldest! There was preserved an independent tradition concerning a tribe which was known to have been living in northern Transjordan since the days of old (see above). Another independent tradition told of the settlement of Reuben and Gad in southern Transjordan.³⁹ Only the desire to give a complete picture of the Transjordanian occupation was the cause for the incorporation of the older tradition with the younger one. They were never unified nor was there an attempt to make them so. Even in our text they are still independent. It is only in this light that Jos. 13 and Nu. 32 can be understood.

The next document in the Book of Joshua is Chapter 17. Vv. 1-6 have been discussed, vv. 7-13 belong to the western tribe. We turn to vv. 14ff. V. 14 is somewhat corrupt, but the sense is nevertheless clear. The tribe was great and was not satisfied with the lot it received. The rest of this section, except for v. 18, does not offer many problems. In that verse I follow Codex B of the Septuagint and read *כי חזק ממני*; and the *כי* before *ברך*

³⁹ This settlement could not have begun before the middle of the thirteenth century B.C. This was proven by GLUECK's work in Transjordan. His latest publication is *AASOR* 15 (1934-35).

is כִּי concessive—"in spite of." Thus we get a logical sentence whose meaning will appear presently. But first let us see how this passage is generally interpreted.

EWALD⁴⁰ spoke well when he said that "we have here preserved some of the oldest historical material," which perhaps has no equal and might well go back to the time of the beginning of Hebrew prose. But other scholars thought differently, and consequently vv. 14 ff. have given rise to some of the most fanciful ideas and theories yet expressed. Following BUDDE and STEURNAGEL, HOLZINGER⁴¹ concluded that the Josephites were sent to conquer the eastern side of the Jordan even though "auch wahrscheinlich die jetzige Textgestalt es anders meint!"⁴² He further did not understand כִּי תוֹרִישׁ—"eigentlich sinnlos"—and read לֹא תוֹרִישׁ. The whole idea of the passage, including its historical significance, as well as its epic grandeur was missed by HOLZINGER. Likewise by BURNEY when he offered his reconstruction.⁴³ For our section does not indicate defeat but rather victory. The leader is not discouraged but rather impatient. He is here to spur the people to conquest and victory, and to stimulate them to a further advance high up into the mountains—a request expressed in the most dramatic fashion.

Indeed, we have here one of the few fragments of early Hebrew poetry and prose which could have belonged to the סֵפֶר מִלְחָמוֹת יְהוָה or סֵפֶר הַיִּשָּׁר. The people are here represented as a bewildered group disappointed and discouraged. They complain, just as they did in the desert. But the leader, young and courageous, urges them to go and cut down the trees of Mt. Ephraim. Again the people retort, "We cannot do it. Neither can we attack and defeat the enemy—." The leader becomes impatient and intolerant. Using their own argument, he raises his voice and calls: "Indeed thou art a large congregation," then he draws the only conclusion possible, "and (therefore) hast great strength." Consequently, "thou shalt not have one lot, for thou shalt conquer the mountain because

⁴⁰ *Geschichte des Volkes Israel*, I (Göttingen, 1864), p. 99 f.; so also DILLMANN and OERTLI, the latter even connecting this section with Jud. 1.

⁴¹ Lastly, in *HSAT*, I, 354.

⁴² "Es anders meint"! A greater contradiction than this is hardly possible. In spite of the documents, says this scholar, his theory is right!

⁴³ *Op. cit.*, p. 134 ff.

it is a forest. Thou shalt cut it down." Not only that, "thou shalt also have its outskirts (תצאיות), for thou *shalt* eradicate the Canaanites, in spite of the fact that they have chariots." How? "Because thou *art* stronger than he."⁴⁴

This is the essence of Jos. 17¹⁴ ff. It is the call of the leader to battle, victory and conquest. Probably long after Joseph and Joshua were dead and forgotten the troubadours of the Ephraimite hills chanted the sagas of their ancestors' victories. Among these sagas there was one which represented the cowardice and dissatisfaction of the tribe which went forward and conquered the seemingly unconquerable Mt. Ephraim, after being spurred on by the leader. The saga then proceeded to tell how the House of Joseph after cutting down the trees and defeating the enemy, finally succeeded in settling in their acquired territory, just as their leader had assured them that they would. "And in place of those woods," the troubadour would continue, "arose the mighty state of Ephraim and Manasseh—our ancestors." And the new generation of Mt. Ephraim would then dream of these conquests and perhaps of ones to come. But nowhere is it hinted that the conquest refers to any Transjordanian territory. To deduce such a fact would be to do injustice to the text and commit a sin against the spirit of the Hebrew saga. Our poem—a fragment of a cycle unfortunately lost—would then, if our view is correct, reflect the time of the conquest of central Palestine under the leadership of Joshua. The people perhaps had not started their advance yet, and were still encamped at Jericho. Long before Deborah sang her song of victory, our epic was composed; contemporaneous with the events it describes, it goes back to the thirteenth century B.C.^{44a}

⁴⁴ It has been called to my attention that a similar interpretation has been already given in *PEF. Qu. St.* 50 (1918), 104 ff. The theory that Machir moved from the west to the east is ingeniously and ably attacked. For the conquest of Mt. Ephraim cf. also МEEK, *BASOR* 61, 17 ff.

^{44a} ALT's brilliant exposition in *Werden und Wesen des Alten Testaments* (*Beiheft 66 zur ZAW*), p. 13 ff., reached me only while reading the proofs of this article and, consequently, could not be utilized.

THE RECONSTRUCTION OF THE HISTORY OF THE TRIBE.

Scholars who have discussed the problem of Manasseh—and practically every Biblical scholar has—can be divided, roughly speaking, into two schools: those who accept the Biblical tradition and those who reject part or most of it. EWALD,¹ STADE,² WELLHAUSEN,³ insisted on a relatively late settlement of Manasseh in Transjordan. BUDDE developed this theory fully⁴ and was followed by such scholars as MOORE,⁵ NOWACK,⁶ GRESSMANN,⁷ BURNEY,⁸ NOTH,⁹ AUERBACH,¹⁰ LODS,¹¹ and DUBNOW.¹² The scholars who oppose it are not numerous. RENAN¹³ accepted the traditional Biblical view as did SAYCE.¹⁴ STEUERNAGEL,¹⁵ followed by KITTEL,¹⁶ refused to see

¹ *Op. cit.*, p. 423 ff.

² *Geschichte des Volkes Israel*, I (Berlin, 1887), p. 148 ff.

³ *Sketch of the History of Israel and Judah* (London, 1891), p. 33, n. 1; *Israelitische und jüdische Geschichte* (Berlin, 1914), p. 39.

⁴ Lastly, in *Das Buch der Richter* (Leipzig, 1897), p. 17 f. His theory is briefly this: the House of Joseph, which settled in central Palestine in the hills of Mt. Ephraim, was too large. So Machir, who in the middle of the twelfth century B.C. was still in the west (Jud. 5¹⁴), moved eastward and settled in the mountains and forests of Gilead.

⁵ *Op. cit.*, p. 150 f.

⁶ *Op. cit.*, p. 50 f.

⁷ *Mose und seine Zeit* (Göttingen, 1913), p. 316 f.

⁸ *Op. cit.*, p. 47 ff. and 104 f. Also his *Israel's Settlement in Canaan* (*The Schweich Lectures*, 1917, London, 1921), p. 20 f. and 32 f.

⁹ *System*, p. 36.

¹⁰ *ZAW* 7 N.F. (1930), 290 f.

¹¹ *Israël* (Paris, 1930), p. 384. He also believes, as do many others, that Reuben was originally in the west. This view is based on the *אֶבְרֹן* of Jos. 15⁶. This is possible. But why not suppose that *אֶבְרֹן* is a remnant of the continual cross-movement of tribes from one territory to another? Certainly Jos. 22 is a clear indication of such movements and of the result that sometimes ensued. Similar movements can be traced in Jud. 12, as well as in II Sam. 17²⁴, at a later period.

¹² *Weltgeschichte d. jüd. Volkes*, I (Berlin, 1930), p. 34.

¹³ *Histoire du peuple d'Israël*, I (Paris, 1887), p. 214 f. and 248 f.

¹⁴ *The Early History of the Hebrews* (London, 1897), p. 227.

¹⁵ *Op. cit.*, p. 220 f.

¹⁶ *Geschichte des Volkes Israel*, I (Gotha, 1916), p. 602 f.

in Jos. 17 an indication for a movement eastward, while ED. MEYER¹⁷ continued to be skeptical about the whole problem. DESNOYERS,¹⁸ accepted the traditional view with rather superficial arguments. It would appear then from this summary that the view which does not accept the Biblical tradition, has many adherents and is well defended.

Is this view correct? "Nichts im Texte deutet darauf hin!" said ED. MEYER back in 1906. The first opposition then is based on textual grounds; and if our analysis of the documents is correct, this opposition becomes an extremely valid one. For I have shown that Jos. 17, the mainstay of the west-to-east theory, goes back to the thirteenth century B.C., before Deborah.¹⁹ I have further pointed out that Dt. 3 preserves extremely ancient material and that both Nu. 32^{39,41} f. and Jos. 13²⁹ ff. precede the thirteenth-twelfth century. Our objection based on these texts would by itself be sufficient to disprove the view held by most scholars. That view becomes groundless if unsupported by the documents. Half-Manasseh could not have moved (unless we disregard entirely all our documents) to the east from the west. But this is not all. We have historical objections also.

Towards the end of the twelfth century B.C., Gideon of the clan Abiezer of Manasseh summoned the 300 men²⁰ of his clan and defeated the Midianites, after having pursued them well to the border of the desert. Is it logical to suppose that a clan which only a few years before was left behind, while the majority of the tribe—Machir—moved eastward, would be able to gather so much strength, as to take the initiative in a battle against a superior enemy and defeat him? And later, dismiss the Ephraimites with a simple, clever proverb? Is it logical to suppose that an army would be greeted in Succoth and Penuel by clan-brothers of only a few years back with animosity? It is reasonable to imagine that a tribe of half-Bedouins leaving one territory after c. 1130 would

¹⁷ *IN*, 513; *GA*, II, 2, 223.

¹⁸ *Histoire du peuple hébreu*, I (Paris, 1922), p. 141.

¹⁹ ALBRIGHT now dates the Song of Deborah to c. 1125 B.C. (*BASOR* 62,29). Though this date is too low it could not very well be very far from the truth (we would prefer a date closer to 1140). This fact will make the theory of the west-to-east movement (after 1130!) most unlikely.

²⁰ Jud. 6-8. Cf. TOLKOWSKY, *JPOS* 5 (1925), 69 ff.

have already established, a few years later, strong cities and a tower at Penuel? The answer seems to me definitely in the negative. If so, Machir, if it ever moved eastward could not have done so after the time of Deborah.

Our next historical objection is based on evidence preserved in Jud. 10^{17f.}, 11 and 12. This, the story of Jephthah,²¹ is one the most beautiful episodes of the Bible, and is wholly Transjordanic, having its background, development and end in the land of Gilead. In that story, Jephthah informed the Ammonites (or Moabites as most scholars believe) that "Israel" had been living in that territory for 300 years. Whether this number is correct as we believe, or incorrect as others think,²² is immaterial at present. The important fact here is that Jephthah is not speaking of Machirites, but of Israel. Had Machir crossed the Jordan some twenty or thirty years before, would we not expect his name to appear either in the mouth of the king of Ammon, or Jephthah himself? Would a chieftain disregard an authentic tradition one generation old for a mythical "Israel"? And would not the king of Ammon use Machir's late conquest as additional proof to the claim he was making? Further-

²¹ The fertility myth in the story is well presented by LODS, *op. cit.*, p. 402 ff. So is the problem and the summary of the preceding works in *JBL* 50 (1931), 186 ff. But the solution is unsatisfactory. I may offer the following observation: The story represents a slight mixing up of the situation by postulating what really preceded, i.e., Jephthah was originally a *persona non grata* with the Gileadites *because* of his banditry and lawlessness. Therefore he was banished. He had to be called back, however, because he became indispensable, precisely on account of those characteristics for which he was expelled. Knowing the Gileadites as he did (cf. in passing, the case of the inhabitants of Ziklag, who were ready to deliver David into the hands of his enemy in spite of the fact that he had saved them) Jephthah insisted upon complete subjection. When they agreed, he returned to his home and property in Mispeh, which he had left, possibly in the care of his daughter, when he was exiled. Our observation thus explains away the difficulty of his owning a home, his banishment, (his "brothers" are to be explained by the same tendency found in the Bible elsewhere to combine clans, tribes, etc. into one family) as well as the fact that he belonged to another woman, a statement which really represents the result of the banishment and not the cause.

²² The arguments presented by MOORE, *op. cit.*, p. 296 f., and followed by BUDDE, BURNEY, SMEND and others against the authenticity of this number should be considered. Yet I cannot agree that the number is a mere invention of the compiler. Cf. also BÖHL, *DZA*, 47 f.

more, in chapter 11, v. 29²³ the term Manasseh appears. It does not seem reasonable that if Machir had just settled in the country, he would have already so much lost his identity, as to be incorporated in the greater Manasseh.²⁴ Moreover, since the name Manasseh appears in our text as a geographical designation is it not reasonable to suppose that a few generations should be allowed for a name of a tribe to appear as that of the land? This proof would necessarily carry the settlement of Manasseh to a period before the thirteenth century B.C. I cannot but conclude that the evidence herewith presented is overwhelmingly in favor of the view that Machir did not move eastward after the time of Deborah nor at any other time; and that Biblical tradition is right in assigning the territory of Transjordan to the two and half tribes.

At this point we are prepared to attack the problem of the origin of Half-Manasseh and of its historical development, taking into account both the problems of the Habiru and the Exodus. The Habiru appeared in Transjordan and Palestine in the fifteenth-fourteenth century B.C.,²⁵ and were an element with which any later immigrants would have to reckon. The equation *habiru*-*pr-עברי* seems now probable,²⁶ yet the ethnic character of the Habiru is still unknown.²⁷ But the Bible informs us that during the early

²³ The verse is difficult. Manasseh here represents probably the most important part of Gilead and its usage would correspond to something like "I passed through Palestine and Judah." The *athnah* after Manasseh brings to a close that part of the sentence, just as the *zakef* closes the next one: "and then he passed through Mišpeh-Gilead." This site has not been identified yet, but the view connecting it with Ramoth-Gilead (e.g., *ZAW* 22 [1902], 155 ff.) has not been proven. The city must have been further south. Cf. Gen. 31⁴⁶ ff.

²⁴ In fact BURNEY himself says (*ibid.*, p. 318 f.), "we cannot be sure that clans from west Manasseh had by this time crossed the Jordan and made their settlement in the east (they had not done so in the time of Deborah)". This scholar would reject the documents because they do not agree with his theory! Such treatment of the text does not commend itself.

The fact that Machir is not mentioned in later documents in the west does not speak against our view. He was probably superseded in the course of time by such clans as Abiezer and was cast into oblivion, while the more aggressive Ephraim gained in power and importance.

²⁵ C. *EA*, letter 197; *AASOR* 6 (1924-25), 19 ff.; above, p. 240 f.

²⁶ Lastly, NOTH, in *Festschrift Otto Procksch* (Leipzig, 1934), p. 99 ff.

²⁷ It is true, as NOTH points out, that the Habiru of Asia Minor, Mesopotamia, Palestine, do not represent one ethnic group. However, there is no

part of the second millenium B.C. there were Hebrews in Transjordan, either as permanent settlers or only transients.²⁸ The problem of these Hebrews has been discussed by many scholars²⁹ but it is still problematic how many of the Ḥabiru³⁰ and the Manassites were among them. For we first hear of Manasseh, designating a people, only during the time of the Exodus. And the date of the Exodus, in spite of the extensive literature on the subject, has not, as yet, been definitely ascertained.³¹ Nevertheless, with the help of recent archaeological discoveries, a more or less plausible view can be presented. This view claims that the Israelites left Egypt in the early thirteenth century B.C.;³² that they could not have conquered southern Transjordan before c. 1250³³ and consequently, could not have entered Western Palestine before c. 1240.³⁴ Our evidence concerning southern Transjordan is archaeological and cannot be refuted,³⁵ nor can the similar evidence for northern Transjordan.³⁶ And in Ajlūn, where we have no positive proof, the negative one shows that the land was not occupied by a sedentary population before about the twelfth century.³⁷ It is a striking coincidence, one which was evident to me only towards

evidence that one of these groups, say one entering Palestine, either entered the land already as an ethnic entity, or in the course of a few generations, by close and restricted intermarriage, developed into such a one.

²⁸ E.g., Gen. 12⁴ f.; 14¹⁵; 31²¹ ff.; 33; 50¹⁰ (not to mention, of course, the twelve tribes of Israel). Cf. ED. MEYER, *GA*, 11, 2, 222; for the Age of the Patriarchs, cf. LEWY, *Revue de l'Histoire des Religions*, 110 (1934), 55 ff.

²⁹ Cf. WEINHEIMER, *ZDMG* 66 (1912), 365 ff. and more recently BÖHL, *DZA*, 31, 47 f.; ALBRIGHT, *BASOR* 58, 15 ff.

³⁰ Cf. recently, SPEISER, *AASOR* 13 (1931-32), 52 ff.

³¹ The latest discussion on the subject, *Le Monde Oriental*, 28 (1934, published at the end of 1935), p. 1-16, fails to present the problem properly, or to offer satisfactory conclusions.

³² ALBRIGHT, *BASOR* 58, 16.

³³ Cf. above, p. 244, n. 39.

³⁴ The fall of Jericho and Ai complicate, of course, the problem, which will be taken up elsewhere. Cf. at present ALBRIGHT, *ibid.*, 10 ff; *JPOS*, 15 (1935), 193 ff.

³⁵ In spite of Canon PHYTHIAN-ADAMS, *PEF. Qu. St.* 66 (1934), 181 ff.

³⁶ Bronze Age sites are found extensively, but it seems that the Ḥabiru had conquered what the Bible credits Moses with having done (above, p. 238 ff.).

³⁷ Cf. *JAOS* 54 (1934), 171 f., 175 f. During the time of the Judges we find cities with towers already established (e.g., Jud. 8⁹).

the end of my study, that the results of our analysis of the genealogies of Manasseh agree so well with those of the archaeological investigation. Basing our deductions on these results, we present the following tentative summary and conclusion.

Recognizing the importance of the Habiru incursions in northern Transjordan during the fifteenth-fourteenth century B.C., accepting the Biblical tradition concerning the "birth" of Manasseh in Egypt (i.e., the development of the tribe in Egypt),³⁸ and basing ourselves on the archaeological evidence for the date of the Exodus, we maintain the view that the Half-Manasseh of Eastern Palestine, who appears so prominently in the documents of the chronicler belonging to the tenth century B.C. or earlier,³⁹ was not one ethnic entity. The moment he entered Transjordan he lost whatever homogeneity the tribe possessed. For the Half-Manasseh known to us from the Biblical documents (those of Genesis excepted) is the product of a history of four hundred years and of many peoples. In other words, to the original peoples who wandered in Transjordan, the Aramaeans,⁴⁰ Habiru, Benê-Ya'qôb and the many unknown to us by name, there was joined at about the middle of the thirteenth century B.C.,⁴¹ a new group of conquerors from the desert—a group of Israelites who, having left Egypt, were seeking the Promised Land. Among them was one clan or tribe, the half of whom preferred to stay in Transjordan, while the other half went on to the west. Many were the nomadic clans already scattered through-

³⁸ Where the tribe came from is problematic. If the Biblical tradition is correct, Manasseh was formed of clans which came originally from Palestine and Syria, settled in Egypt, and intermarried with some of the Egyptian clans, living, probably, near the border. For the location of Goshen, see the latest discussion in *BASOR* 58, 16 and cf. WELL's objections to the identification of Avaris with Tanis, *The Journal of Egyptian Archaeology*, 21 (1935), p. 10 ff.

³⁹ Cf. our discussion of the tradition preserved in the Book of Chronicles.

⁴⁰ Attention is hereby called to Gen. 31²⁵ ff.; Dt. 26⁵; 1 Chr. 2²⁸; 7¹⁵, and many other references which point to a definite relationship between Israelites and Aramaeans, even to the extent of making Jacob completely an Aramaean (Dt. 26⁸).

⁴¹ ALBRIGHT places "the House of Joseph already in its later home" at about 1415-1380 (*BASOR* 58, 17) but he does not explain the Biblical tradition of the origin of the tribe as being in Egypt. Perhaps he still adheres to the theory of two Exodus, *JBL* 37 (1918), 138 ff.

out the land of Transjordan and the new arrivals only increased that number. The large confederacy of Half-Manasseh, which included primarily clans of purely Israelite origin, lost many of its members, who left the mother tribe and dispersed throughout the land of Gilead. To these were probably joined some of the existing semi-nomadic clans, just as some of the smaller Israelite ones must have united with the older clans. Thus were created clans and families whose prominence gave them a foothold in Biblical tradition, Machir,⁴² Jair, Nobah, Segub, "Gilead".⁴³ The strongest among them led for a long time an independent existence, as Machir and Jair did. The others either returned to the fold of the mother tribe, "Half-Manasseh", and thus lost their identity, or became assimilated by the neighbouring tribes. As time passed, and as clan differences became less and less acute, and as national and administrative demands required it, the more important and independent clans also joined in the greater confederacy. Eventually, in the course of development, the whole population became more and more uniform and acquired the name of its greater original subdivision—Half-Manasseh. Whether, *de facto*, or only in the eyes of tradition, the population of 'Ajlûn and southern Haurân invariably came to be regarded as "Half-Manasseh". It was not a homogeneous group. At first consisting of purely Israelite descendants of the House of Joseph, it later incorporated the older population around the Yarmûk basin, and finally, by the tenth century B.C., also the other clans of the land of Gilead—northern 'Ajlûn.

Once settled, what happened to Half-Manasseh? Unfortunately, our information is exceedingly fragmentary, and we can add only a few remarks. The clans must have remained semi-nomadic for

⁴² The great clan Machir must have moved westward later, completely or in part, with the remaining clans of Half-Manasseh. The reason for the tribe's migration can only be conjectured.

⁴³ The fact that Gilead—a land—appears in the genealogies, shows that the population did not represent a tribal group. (Note that Jair was called a Gileadite, just as Jephthah was.) It became incorporated, however, in Half-Manasseh. As time passed, the Gileadites became identical, both ethnically and culturally, with their conquerors. This process must have been accomplished by the tenth century B.C. Cf. our discussion of the genealogies preserved in the Book of Chronicles.

some time.⁴⁴ Eventually, cities were established⁴⁵ and an organized government set up.⁴⁶ The social organization of the tribe was probably akin to that in Western Palestine, with its *zḵēnim*, *rāše ham-maṭṭōt*, and *gibbôrê hail*.⁴⁷ The character of the people seems to have been one of contradictions: courageous and belligerent,⁴⁸ yet seeking assistance in time of need;⁴⁹ ready to assist those in trouble,⁵⁰ yet refusing such aid when requested;⁵¹ faithful to the point of sacrifice,⁵² yet rebellious and unjust;⁵³ civilized and literate,⁵⁴ yet believing in human sacrifice;⁵⁵ diplomatic with an enemy,⁵⁶ yet impatient with their clan-brothers;⁵⁷ henotheistic in their beliefs,⁵⁸ yet producing the first prophet of YHWH⁵⁹—Elijah was another link connecting the East with the West.⁶⁰

⁴⁴ One remembers, of course, the *ḥarwōt* of Jair. Following HAUPT, NOTH (*System*, p. 83) wants to see in the "Leah tribes" a sedentary population, while in the "Rachel group" a nomadic or semi-nomadic one. If he is right, then Half-Manasseh, who belonged to the "Rachel tribes", must also have been of a nomadic or semi-nomadic character. And if NOTH is further right in his theory in *ZDPV* 55 (1932), 99 f., our genealogies show exactly the nomadic character we have learned to ascribe to them by virtue of the territory they occupied.

⁴⁵ In the time of the monarchy we have such cities as Jabesh-Gilead, Ramoth-Gilead, Mispheh-Gilead, Mahanaim, Succoth, Penuel.

⁴⁶ Cf. Jephthah, Saul, Solomon's governors, etc.

⁴⁷ Cf. Jud. 8^{14,16}; 11⁵⁻¹¹. *GA*, II, 2, 223 f. Also LODS, *op. cit.*, p. 447-64.

⁴⁸ Cf. Jud. 11⁸³; I Sam. 31¹¹ ff.; II Sam. 2⁵⁻⁹; I Chr. 5¹⁸⁻²².

⁴⁹ Jud. 10¹⁶; 11⁴⁻¹¹; I Sam. 11.

⁵⁰ I Sam. 31¹¹ ff.; II Sam. 17²⁷ ff.

⁵¹ Jud. 8⁵⁻⁹.

⁵² I Sam. 31¹¹ ff. Further, when Saul died and David hinted that he had been appointed king (II Sam. 27), the Gileadites refused to acknowledge him. They fought for the house of Saul, to whom they had sworn allegiance. When their cause was lost, however, they became in turn faithful to David. Cf. II Sam. 17^{24,27} ff., etc.

⁵³ II K. 15²⁵; Hos. 12¹²; 6⁸.

⁵⁴ Even a youth could write (Jud. 8¹⁴).

⁵⁵ Jud. 11³⁴ ff.

⁵⁶ Jud. 11¹²⁻²⁸.

⁵⁷ Jud. 12¹⁻⁶.

⁵⁸ Jud. 11²⁴.

⁵⁹ It is true that even Elijah placed a possible alternative between YHWH and Baal (I K. 18²¹); nevertheless, with him, YHWH begins His existence as the monotheistic God of Israel. (Cf. also *AB*, 163-169.)

⁶⁰ The vicissitudes that befell the country during the time of the monarchy, the wars with the Aramaeans, the rôle that the land of Transjordan played in the history of Israel are all reserved for another chapter. We may note now that the independence of Half-Manasseh came to an end with the victories of Tiglath-Pileser III in 732 (II K. 15 f.; I Chr. 5²⁵ f.) The country then became an Assyrian province (cf. OLMSTEAD, *op. cit.*, p. 453).

BOOK REVIEWS

Biblisches Reallexikon (Handbuch zum Alten Testament, erste Reihe, 1). Bogen 1-10. Von KURT GALLING. Cols. 1-320. Tübingen, Mohr, 1934.

With these two fascicles Professor GALLING of Halle has launched a new type of Old Testament handbook, a biblical cyclopaedia based almost exclusively upon the results of Palestinian and Near-Eastern archaeology. Twelve years ago JIRKU published his *Altorientalischer Kommentar zum Alten Testament*, in which he collected all literary and documentary material from the Ancient Orient known to him and considered by him to bear directly on the Old Testament, arranged in the form of a running commentary. Here we have something different, an archaeological commentary arranged under a selected number of captions, mostly of places and objects. Except in the description of extra-Palestinian places, little non-Palestinian archaeological material is utilized. This does not mean, however, that GALLING fails to draw on material from the Egyptian monuments or from the excavations in Syria and Mesopotamia, etc., when necessary to elucidate the subject; it simply means that he stays in Palestine as much as possible, exhausting the data available here before turning elsewhere for aid.

For more than a decade GALLING has devoted himself mainly to the interpretation of archaeological data bearing, directly or indirectly, on biblical antiquity. In collecting and studying this material he has familiarized himself with it to an extent unequalled by any other professional Old Testament scholar of our time. He is, therefore, admirably fitted for this undertaking, which promises to become indispensable when complete. Together with WATZINGER's *Denkmäler* GALLING's work will form the indispensable companion of every Old Testament scholar. If a list of all biblical passages illustrated in the *Reallexikon* is given at the end, its value will be still further enhanced, and there will be no excuse left for ignorance of the bearing of archaeology on biblical realia.

The first two fascicles show astonishingly wide reading and control of the archaeological source-material; they also show a keen critical faculty and remarkable independence of judgment. No archaeological affirmation or chronological statement is accepted without careful examination. The chief weakness of the author is a certain carelessness in verifying names, titles, and references, and he seems occasionally to depend unduly upon his memory—a habit which may become more dangerous in a scholar with an excellent memory than in one with a mediocre one. This weakness is, however, of little significance when set against the qualities just listed by us previously.

If we are to single out particularly good articles, we may mention *Altar*, *Ausgrabung*, *Axt*, *Dolch*, *Färberei*, *Götterbild*, *Grab*, *Keramik*; a number of others are perhaps equally admirable, though they may not have caught the reviewer's fancy so strongly. Some articles are naturally antiquated already by the rapid progress of knowledge, e. g. *Bethel* (by the excavations in 1934), *Brief* (by the discoveries of Canaanite letters at Ugarit and Israelite letters at Lachish). We must emphasize the fact that the author is not only well acquainted with all the literature, but is also remarkably up-to-date; WATZINGER's *Denkmäler* (1933) and the reviewer's *Archaeology of Palestine and the Bible* (1932) are constantly used.

We look forward eagerly to the continuation and completion of this valuable *Reallexikon*, and trust that a second, enlarged edition may follow within five years. Professor GALLING must be congratulated on his success and thanked for his important contribution to biblical archaeology.

W. F. ALBRIGHT

Einleitung in das Alte Testament unter Einschluss der Apokryphen und Pseudepigraphen; Entstehungsgeschichte des Alten Testaments von OTTO EISSFELD, un vol. in-8° de XVI-752 pp. Tübingen, Mohr (Paul Siebeck), 1934. RM 15 50, rel. 17 50.

L'ouvrage nouvellement publié par M. Otto EISSFELD inaugure une nouvelle collection. un *Handbuch*, qui veut être pour l'Ancien Testament ce que le Manuel de LIETZMANN est pour le nouveau. Des Introductions! il y en a tant et elles se ressemblent tellement qu'on pourrait être tenté de "classer" celle-ci sans lui accorder beaucoup d'attention. Ce serait grand dommage! Car précisément l'Introduction de M. E. ne ressemble pas à la plupart des autres. Il suffit déjà pour s'en douter, de connaître par ailleurs la brillante carrière et la forte personnalité du professeur de Halle. Mais quand on a pris contact avec le livre, qu'on s'est rendu compte de sa valeur propre, de sa manière de poser les problèmes, de sa prise de positions dans les discussions en cours depuis quelque trente ans sur les questions de méthode, on a nettement l'impression d'être en face d'un événement littéraire. Qu'on relise après l'Introduction de M. E., celle de BAUDISSIN ou de CORNILL par exemple et l'on se rendra compte, de l'évolution des idées dans le domaine de la critique au cours de ces dernières années. Le livre porte le millésime 1934. On ne pourra pas lui reprocher de n'être pas de son temps. Tel quel il ne pouvait être écrit qu'après certaines pages de GUNKEL, KITTEL et GRESSMANN et les découvertes de Ras Shamra. Et pourtant dans ses lignes essentielles il garde un aspect traditionnel. Non pas "histoire synthético-créatrice de la littérature" comme le voulait GUNKEL, mais introduction critique et analytique, selon le modèle classique depuis EICHHORN. Et pourtant il y a lieu de tenir compte du bien fondé de certaines observations de GUNKEL. Il est vrai que dans la littérature d'Israël, surtout aux débuts de son évolution, l'élément conventionnel et typique est beaucoup plus en relief que l'élément individuel et personnel; il est vrai encore que l'étude systématique des genres, leur découverte et leur classification dans l'A. T., par ce que l'on appelle la "stoffliche Kritik", par la comparaison avec les autres littératures en particulier celles de l'Orient Ancien apparentées à celle d'Israël nous aident souvent à découvrir ce qui demeure caché à l'analyse littéraire. A travers la littérature ces méthodes nous mettent en contact plus direct avec la vie et la religion de ce peuple. Au delà des formes du livre tel que nous l'avons, elle nous font connaître les formes orales élémentaires antérieures à la tradition écrite et les situations et besoins de la vie réelle qui leur ont donné naissance. Aussi bien est-elle particulièrement neuve et captivante toute cette première partie du livre où M. E. avec moins de chaleur et d'élan poétique que GUNKEL, sans doute, mais avec une impeccable rigueur scientifique étudie le stade pré littéraire de l'A. T., les formes mineures du discours, prédications, prières, lettres, légendes, anecdotes, chants, oracles, proverbes, etc., et ce qu'il appelle, d'un mot dont la traduction ne rendrait pas toute la force expressive leur "Sitz im Leben".

La méthode préconisée par GUNKEL est donc précieuse pour la distinction des unités mineures. Sous les divisions artificielles en chapitres et en versets ou en *Parashot* elle nous aide à retrouver les articulations naturelles et les unités organiques. Mais les livres ou groupes de livres de l'Ancien Testament ne sont pas une enfilade incohérente de ces unités mineures. Entre l'état actuel et le stade pré littéraire se place une phase intermédiaire, durant laquelle se sont constituées des unités de moyenne grandeur, recueils de chants, recueils législatifs, groupes de récits. Il y a eu une formation, une *composition* successive au cours de laquelle apparaît plus en relief l'élément personnel et individuel qui demeure caché à l'examen systématique des genres et ne se révèle qu'à l'analyse critique. Tâche ardue entre toutes que celle de déterminer les limites, le genre, l'époque, la patrie, la tendance de ces "sources" qui sont la base immédiate des livres bibliques tel que nous les avons, mais tâche nécessaire

pour comprendre cette unité majeure qu'est le livre et déterminer le lieu historique de chacune de ses parties ou les principes qui ont présidé à sa formation : histoire pré littéraire, pré histoire littéraire, et analyse critique des Livres de l'A. T. tel est bien l'ordre que doit suivre un traité qui veut être une "histoire de la formation de l'Ancien Testament."

A suivre M. E. dans le détail de ses analyses littéraires, conduites avec une incontestable maîtrise on se rendra compte du renouvellement profond que la découverte des civilisations et des littératures de l'Orient Ancien, a provoqué depuis WELLHAUSEN dans l'esprit, les méthodes et les résultats de la critique biblique. La théorie documentaire en particulier a beaucoup évolué. On se dégage des schèmes trop rigides et trop exclusivement littéraires de WELLHAUSEN. On distingue mieux de la forme littéraire actuelle parfois relativement récente les éléments souvent très anciens qu'elle recouvre. Un examen plus approfondi des faits amène à reconnaître que si l'hypothèse d'une addition de plusieurs fils parallèles explique mieux la physionomie des parties narratives du Pentateuque, les parties législatives supposent plutôt un écrit fondamental, sur lequel se sont greffés des compléments successifs. On sait que M. E. à la suite de SMEND a donné à l'hypothèse documentaire sa forme la plus récente. Il a cru discerner dans les parties narratives de l'Hexateuque une source plus archaïque que J, et plus affranchie d'influences sacerdotales, qu'il désigne par le sigle L (= Laienquelle) dont il retrouve le fil jusque dans les Livres de Samuel. L'addition successive des principales sources aurait été faite dans l'ordre suivant : L — J — E — B (= Bundesbuch) + D + H (= Heiligkeitgesetz) — P. Dans les récits relatifs aux patriarches on semble faire très large — à notre avis trop large — la part de l'interprétation ethnographique. Les récits d'aspect individuel seraient originellement des légendes tribales progressivement individualisées. Mais M. E. est un observateur trop perspicace pour ne pas percevoir la possibilité d'autres interprétations, et puisqu'il se réserve le Commentaire de la Genèse dans la nouvelle collection, il ne lui échappera certainement pas que la manière ondoyante de l'auteur biblique dans cette matière, ne s'accommode pas d'explications trop uniformes. Pourquoi n'y aurait il pas au fond de plusieurs de ces récits, le souvenir de quelques grandes personnalités religieuses de mahdis, comme l'Orient en a toujours produit ? Mais nous ne pouvons énumérer ici, ni, à plus forte raison, discuter chacune de positions prises par M. E. : car M. E. ne se dérobe jamais au devoir de prendre position, et il le fait toujours en homme qui a une connaissance personnelle et approfondie des problèmes envisagés. Qu'il nous suffise de signaler, à titre de spécimen, quelques unes de ses manières de voir sur des points sensibles du domaine critique : Pluralité d'auteurs pour Isaïe 55-66 ; Composition du Livre de Daniel d'après deux sources, l'une araméenne, remontant sous forme des récits isolés à l'époque perse, à la base de 1-6, l'autre, à la base des ch. 7-12, écrite en hébreu à l'époque macchabéenne ; analyse littéraire des livres d'Esdras-Néhémie, différente de celle de VAN HOONACKER et maintien de la succession traditionnelle Esdras, Néhémie, etc.

M. E. rejette à bon droit la suggestion de GUNKEL, de substituer au type classique de l'Introduction celui de l'histoire de la littérature juive ; mais mieux inspiré que BAUDISSIN, il fait une place aux apocryphes et pseudépigraphes dans son Histoire du Canon.

Mais encore plus significatifs que les solutions de détail, nous semblent l'esprit et la méthode qui inspirent ce travail. Tandis qu'à l'époque de CORNILL et de BAUDISSIN on s'en tenait trop exclusivement à la critique littéraire et à l'étude interne du livre, aujourd'hui bon nombre d'auteurs, las des excès de l'école wellhausienne, manifestent un scepticisme, parfois exagéré vis à vis de ses méthodes, et veulent résoudre toutes les questions par l'archéologie et la méthode comparative. La vérité nous semble être dans la *via media* choisie par M. E. : Garder les deux méthodes, les appliquer à bon escient, ne demander à chacune d'elles que ce qu'elle peut donner ; ne pas risquer des synthèses sans leur donner comme base de consciencieuses et pénétrantes analyses. A propos

du livre de M. E. nous avons prononcé quelques uns des grands noms de la critique; c'était insinuer que pour nous il se place parmi les meilleurs; il est, d'un bout à l'autre, de main d'ouvrier.

FR. M. L. DUMESTE O. P.

RIVLIN, J. J., *Gesetz im Koran, Kultus und Ritus*. Jerusalem, 1934, Bamberger & Wahrmann Verlag. viii + viii + 124 + 3. Price 8 sh.

This is a scholarly piece of work based on the researches of NOLDEKE, WELLHAUSEN, SNOUCK HOUGRONJE, GOLDZIEHER and HOROVITZ. The author, a former student of HOROVITZ, is resident in Jerusalem and has completed a translation of the Qur'ân into Hebrew, of which the first part has appeared.

The following subjects are dealt with in the order given: Sacred Seasons and Festivals, the Calendar, Fasts, "Leilatu-l-Qadr", the Day of Assembly, Pilgrimage, Vows, Laws relating to Foods, Wine, Laws of Ritual Cleanliness, Prayer, the Qibla, Idolatry, Sorcery and Poets, Asceticism.

The author traces a good many Arabic or Islamic institutions, customs and beliefs to Jewish origins, without considering the possibility of independent usage in pre-Islamic Arabia, or Christian origin (e.g. the removal of shoes upon entering a sanctuary, p. 27, practiced even nowadays throughout the Near East), and Samaritan parallels (genuflexion and prostration during prayer).

The following suggestions concerning the translation of Qur'ânic passages may not be out of place:

1) p. 102, bottom (Sūra 29:16) "Begehret von Allah die Besorgung (!) und dienet ihm und danket ihm; zu ihm kehret ihr zurück" should read: "Suchet euren Unterhalt bei Allah, dienet ihm und seid ihm dankbar: zu ihm werdet ihr zurück gebracht".

2) p. 18, Sūra 62:9 is translated thus: "O, ihr, die ihr glaubt, wenn zum Gebet des الجمعة *يوم الجمعة* gerufen wird, so eilet zur Lobpreisung Gottes hin und lasset den Handel. Dies ist gut für euch, wenn ihr es nur wüßtet. 10. Und sobald das Gebet zu Ende ist, so zerstreut euch über das Land und suchet Gottes Gnade. Und preiset Gott viel vielleicht werdet ihr Erfolg haben. 11. Und sobald sie Handel und Spiel sahen, wandten sie sich dem zu und ließen sich stehen; spricht: Was bei Gott ist, ist besser als Spiel und Handel. Und Gott ist der beste der Versorger." This should rather be:

"O ihr, die ihr glaubt, wenn am Freitag zum Gebet gerufen wird, so eilt zum 'Gottesdienst' (Baidāwi: *khuṭba* or prayer) und laßt den Handel (beiseite). Dies ist euch gut, wenn ihr es (nur) wüßtet. Wenn das Gebet beendet ist, so "zerstreut" euch im Land und trachtet nach dem Überfluß Allahs. Und denkt häufig an Gott, damit ihr erfolgreich seid. Wenn sie nun Handel oder Spiel sehen, wenden sie sich dahin und lassen sich stehen. Sprich: Was bei Allah ist, ist besser als Spiel und Handel. Und Gott ist der beste Unterhalter (= Versorger)."

3. p. 69, Sūra 6:119, Man übersetze: "Was soll euch noch zurückhalten, daß ihr nicht esset, auch nachdem Gottes Name darüber genannt worden ist." This should be: "Warum wollt ihr durchaus nicht das essen, worüber Allahs Name genannt worden ist."

The abbreviations for references quoted are more often than not unintelligible. Such are *h* for *hijra* (pp. 9, 10), *s.S.* for "siehe Seite" (p. u.); *S* (followed by figures) for Sūra, *M.* for Mohammed. More serious is the missing table of references to works quoted, where single letters stand for words, (especially pp. 38; 39, note 1; 47, note). In line 9, p. 38, t.p.q. stands for *terminus post quem*, while S.W.R. on p. 18 means, "Siehe WELLHAUSEN, *Reste altarabischen Heidentums*."

The Arabic transliteration is inconsistent: *Alṣafa* and *Almarva*, *tawwaf* for *tawāf* (p. VI, correctly spelt p. 43 § 6); ALMUBARRAD, *Mufaḍḍaliyyāt* p. 35, note; *Kibla* p. 114, note 1, while p. 109 contains four mistakes in two lines.

The Arabic text of Verses 17–19 of Sūra 9 is a classical example of how type should *not* be set. (p. 37). The setting of Arabic types throughout should have been done more carefully; in particular the vowelings of Qur'ānic passages should have been considered. The long list of corrigenda (which could be easily doubled) is a serious drawback to the use of this otherwise interesting and useful book.

It is to be hoped that a second edition will eliminate these mistakes and the book be produced in a form more worthy of the trouble which the author has taken.

ST. H. STEPHAN.

BELLE D. MAZUR: *Studies on Jewry in Greece*, I. Athens, 1935. pp. I and 35. 5 fig. in the text, 5 plans.

Miss MAZUR's study meets a real requirement, especially in the archaeological field. Much has been written on synagogues in Greece, whereas the actual monuments have been comparatively overlooked, or in any case, not studied with the necessary thoroughness. The historical notes, which fulfil one of the principal aims of the pamphlet from the author's point of view, give a useful collection of facts, but the chief value of the work is the clearing up of two important points. One is the proof that the so-called synagogue in Delos, treated as such also in SUKENIK's book, *Ancient Synagogues in Palestine and Greece*, London, 1934, is not a synagogue, but a place of worship of Theos Hypsistos, whose votive offerings are related to those of the sanctuary of Zeus Hypsistos on the Pnyx. The other is Miss MAZUR's success in tracing for the first time the ground plan of the synagogue in Aegina. It had an apse turned towards Jerusalem, and was therefore in accordance with the latest type of synagogue orientation. Buildings of earlier types of synagogue orientation have their façade directed towards the East, as did the Temple in Jerusalem, or else towards Jerusalem itself.

There is an indication that a pulpit (*bema*) stood before the apse in Aegina, a fact which supports the writer's view that it was only by exception that a *bema* stood in the middle of the synagogue of Alexandria (Cp. *Der Morgen*, 11, 1935, pp 59–62). It is to be hoped that the sites of Priene will be elucidated with the same methodical thoroughness, for the remains excavated by WIEGAND and SCHRADER make it likely that there was a synagogue there.¹ The evidence of a candlestick with seven branches on a pillar is conclusive, and the sole argument which WIEGAND-SCHRADER find against it, namely that a candlestick of the same type has been found on a slab in a church, infers only that there must have been a synagogue near the site of this church. Such a fact is by no means unusual, as can be shown in Jerash, where the church is built on the remains of the synagogue, and at many other places. Evidence of this practice can also be found on p. 30 of Miss MAZUR's study, where an epistle of Pope Gregory is quoted which sanctions the destruction of a synagogue, located in the neighbourhood of a church.

Miss MAZUR's methodical clarity and brevity are especially to be recommended on a subject which has too often been treated with dilettante good will rather than with serious criticism.

HELEN ROSENAU

¹ TH. WIEGAND and H. SCHRADER (*Priene*, Berlin, 1904, p. 481.)

H. H. ROWLEY, *Darius the Mede and the Four World Empires in the Book of Daniel*. A Historical Study of Contemporary Theories. Pp. XXXIV + 195. Cardiff: University of Wales Press Board, 1935. Price 12/6.

The author has already demonstrated his fitness to deal with the peculiar and difficult linguistic problems of the book of Daniel by a volume entitled *The Aramaic of the Old Testament*. He has also published several articles on various phases of the book of Daniel. In the present study he concentrates his efforts on the two problems mentioned in the title. He says the result is "to reaffirm the views of what has been called above the critical orthodoxy of the beginning of the present century" (p. 175).

The four empires are identified as the Neo-Babylonian, the Median, the Persian, and the Greek (Alexander and his various Diadochi viewed as a whole) up to the time of Antiochus Epiphanes. As the author says (p. 73), this is one of the most common views of modern times. Hence no new discoveries have been made on this point; but the various reasons are well summarized, and the weaknesses of rival views are clearly shown. A review of the findings of leading scholars shows that this interpretation really represents "critical orthodoxy". This involves the view that the book of Daniel was put together in its present form in the time of Antiochus Epiphanes as an aid in encouraging the Jews who were fighting this monarch for the very existence of their religious and national life. "Uncritical orthodoxy", on the other hand, holds the book "to be from the pen of Daniel himself, a courtier of Babylon in the Exilic age" (p. 2).

The difficulty that a Median world empire never existed, except as a part of the dominions of the Achaemenians, is very sensibly explained along the lines already laid down by MONTGOMERY (*I. C. C.*, *Daniel*, p. 62) and CHARLES (*Commentary on Daniel*, p. 141 ff.). Isa. 13¹⁷, 21² and Jer. 51^{11,28} had declared that Babylon would be overthrown by the Medes. In the age of the composition of Daniel predictive prophecy was believed to be inspired and infallible. Therefore the might of Babylon *must* have been destroyed by the Medes. However, the historical fact of the Persian overlordship is also allowed for by making the theoretical sway of the Medes very short and bringing in the Persian rule immediately thereafter.

If a Median empire overthrew Babylon then that empire must have had a head. Thus it is that "Darius the Mede" comes into the picture. ROWLEY reaches the conclusion that there is "no evidence of his existence" by a process of elimination: (1) Darius the Mede is not Cambyses, (2) nor Gobryas, (3) nor Astyages, (4) nor Cyaxares. This is all very well, but the following chapter, entitled "Darius the Mede is a conflation of confused traditions," is inadequate. It is stated positively only that "for his creation the author of the book of Daniel appears to have used some traditions belonging to Darius Hystaspis and some belonging to Cyrus, but all confused and distorted." CHARLES (*op. cit.*, pp. 145-6) has shown that there are also elements of Gobryas and Cambyses in the picture. He goes farther and points out the probable source of the name of the mythical Darius in Darius Hystaspis, who had rendered himself celebrated in Palestine and Egypt by circulating Aramaic translations of the Behistun Inscription (see COWLEY, *Aramaic Papyri*, pp. 248 ff.). ROWLEY also thinks that the author of Daniel could "transfer some of the things that properly belong to Darius Hystaspis to his Darius the Mede without removing Hystaspis from his own place as a successor of Cyrus" (p. 59). He has overlooked or disregarded the fact that TOKREY, by taking the data of Ezra 4¹⁻⁷ and Daniel together has made it appear probable that both the author of Daniel and the Chronicler *did* omit Darius Hystaspis after Cyrus in favour of Darius the Mede before him (*AJSL*, XXIII, p. 178).

ROWLEY believes that the weight of the evidence favours the theory of single authorship (pp. 176 ff.). In this he has surely departed from "critical

orthodoxy" although perhaps not from "the critical orthodoxy of the beginning of the present century." Since the beginning of the century an important group of scholars, including PREISWERK, DALMAN, TORREY, HÖLSCHER, MONTGOMERY, BAUMGARTEN, and EISSFELDT have expressed the belief that the book should be divided into two parts coming from different authors. As ROWLEY himself admits (p. 5) the combined weight of these opinions cannot be ignored.

On the whole this study will be very useful in clarifying certain puzzling questions in regard to one of the most interesting books in the Bible. It is an evidence of the scholarly interest in Daniel and a tribute to ROWLEY's industry that the bibliography accompanying his volume lists nearly 500 titles.

W. F. STINESPRING.

Journal of the Jewish Palestine Exploration Society (Qoveš ha-hevrah ha-ivrit le-haqirat Eretz Yisrael [III]), dedicated to the memory of Dr. A. Mazie. Edited by N. SLOUSCH. Jerusalem, Rubin Mass, 1934, pp. xlii, 367, xxiv.

The impressive size of this volume speaks well for the progress achieved by this Society since its foundation fifteen years ago, especially in view of the current economic situation. The generous number of illustrations shows, moreover, a real appreciation of the special requirements of archaeological publication. The twenty-four Hebrew articles and the two in French represent substantially all the ramifications of the study of Palestine, and the former may be said to mark a milestone in the development of a scientific prose in the reborn language.

1. The biography of Dr. MAZIE (1858-1930) by the editor, pp. v-xxiv, deals with a career in the intellectual centres of Europe, followed by over forty years of medical practice and research in Palestine. In the bibliography of his writings we note with interest that he had prepared an edition of the ancient medical treatise of ASSAF, a source of importance for the flora of Palestine, which, it is to be hoped, MAZIE's heirs will not allow to remain unpublished.

2. The editor, pp. 1-3, introduces the joint report on the excavations near Ramat Rachel, but neglects to edit the two articles which comprise it, thereby permitting them to overlap.

3. B. MAISLER, "Ramat Rachel and Kh. Sālīh," pp. 4-18, gives a topographical study of the site and its vicinity. The place is listed in *SWP*, III, 104, as *Kh. Abu Brāk*, its name having since changed. He identifies it with Mt. Perazim (Is. 28²¹), as a corollary to his hypothesis that the neighboring *Bir Qadismū* is the site of Baal Perazim. The latter suggestion derives from the probability that the modern name represents the *Kathisma* of Mary, which was marked by a church in the 5th c.¹ and the possibility that the sacredness of the well and stone go back to Canaanite days. Another identification suggested here is *Kh. Umm Tūba* = Byzantine *Melōpa* = Biblical Netophah.

3. M. STEKELIS, "The Jewish tomb-cave at Ramat Rachel," pp. 19-40, gives a detailed description of the *kokim*, the ossuaries, the pottery, etc.

4. E. L. SUKENIK, "The synagogue of Hammath-by-Gadara," pp. 41-61, constitutes the preliminary report of this work, which has been especially rich in epigraphic results. The author has made a brief description of these 5th c. remains more widely available in his recent Schweich Lectures,² and in the final report which appeared in this *Journal*, XV, Nos. 1-2.

¹ See *Dict. d'Arch. chrét. et de Lit.*, III, 255, as a supplement to ABEL, *RB*, 1924, 617 f. As for SCHNEIDER, *JPOS*, XIV, 230 f., it is unnecessary to add to the editorial comment, *l. c.*, 237.

² *The ancient Synagogues of Palestine and Greece*, 81 f.

5. *IDEM*, "A Jewish tomb-cave on the slope of Mt. Scopus," pp. 62-73. Four of the ossuaries found are inscribed, *viz.*, Marthas, Matithiah and its hypocoristicon, Matiah, Garidā (a new name), and Simeon BWTWN. The last is, despite its orthography, taken by the writer to stand for *βοηθῶν*, i. e. the same name as that of the family from which came Mariamne, Herod the Great's queen.

6. *IDEM*, "The Synagogue of *Kh. Kanf*," pp. 75-80. A re-study of the remains with a revised reading of the inscription.

7. S. KLEIN, "The cities of the Priests and Levites and the Cities of Refuge," pp. 81-107, 367. The writer discusses in turn both the pre-exilic and the Second Temple period. He attempts to show the specific existence in the time of David of five such cities without, however, carrying research much further in this respect.⁸ In the second part the discussion becomes more significant. An excellent interpretation of *Tos. Makkot*. III, 2, is given, showing that the conquering in question there has to do with the Maccabean period, during which Kiryath-Jearim and Gamla had to serve as cities of refuge, as substitutes for Shechem and Kedesh, which were in Samaritan and Phoenician hands. But with the arrival of Pompey, who freed the larger cities of Palestine, the ancient institution disappeared. Incidentally, the writer discusses a new Hebrew text bearing on Gerasa (Cf. *JBL*, LIII, 167-9.).

8. I. BEN ZVI, "A Samaritan inscription of the 5th c. A.H.," pp. 108-112. The dedication of a synagogue, A.H. 430 = A.D. 1038-9, provenience unknown. The writer neglects to specify the museum in which the stone is now kept.

9. *IDEM*, "Three Samaritan Torah-scrolls," pp. 113-6. These date from the 14th to 16th Centuries, and are in Nablus.

10. J. LEIBOVITCH, "Midian and Midian," pp. 117-44. The writer subscribes to the dating of the Sinaitic inscriptions in the XVIII Dynasty, and considers the language to be non-Semitic. He attributes the writing to the Midianites, whom he believes to be designated in *Mjyu* = *Mdyu*. He holds the Hebrew Midian to be a plural form.

11. S. YEIVIN, "The Annals of Thutmosis III," pp. 145-74. The third of a series of translations of Egyptian documents bearing on Palestine. This particular one is based on SETHE'S revised text, and is accompanied by a very detailed commentary.

12. A. Z. ESHKOLI and M. NARKIS, "Catalogue of objects found during the excavation at Tiberias (*el-Hamme*), 1920-1," pp. 175-96. The material, which is now in the Society's museum, consists of lapidary, ceramic, and glass objects of the Byzantine and Arabic periods. The cataloguers might have referred to *RB*, 1921, Figs. 3, 7, and Pl. 7, where illustrations of some of these are given, as well as in SLOUSCH'S report. The Christian Arabic inscription (p. 182) has been dealt with by CLERMONT-GANNEAU.⁴ On the wreathed cross (No. 13), see FITZGERALD, *QS*, 1931, p. 67. The word for candelabrum (No. 88) is apparently an error for *lychnia*.

13. N. SHALEM, "The Breast plate of the High Priest," pp. 197-215. The writer attempts to identify the various stones of the *hoshen* with the aid of midrashic material, and believes that the influence of the Egyptian pectoral and the color-scheme of the Egyptian friezes are reflected in it. For its etymology he refers to *hoshen*. He tends to be somewhat uncritical in handling certain sources. He, e.g., fails to appreciate that Josephus' confusion between Urim and Tumim and the breast-plate (*Ant.* III, 215-7) is due to the fact that the latter had fallen into disuse before his time. (Cf. BLAU, *Jew. Enc.*, XII, 380).

⁸ Consider, e.g. his attempt to read into Amos 6⁸ an allusion to Gilead, on the basis of Gen. 31⁴⁸ f. Equally infelicitous is the notion that *Ḥamon* is the older form of *Hammoth-Dor*, on the theory that the former points to local sun-worship (*hamman*).

⁴ *Compte-Rendu de l'Acad. des Inscr. et des Belles-Let.*, 1922, 58.

Certainly it is rash to cite that passage as proof of the original identity of the terms.

14. I. PRESS, "Topographical Studies," pp. 215-26. The river *Kipros*, which figures in certain Haggadic contexts of the early 2nd century is connected by the writer with Herod's fortress, *Kypros* which he still supposes to have been located on the modern Kh. *Beit Jabr*, although it is ten years since ALT observed that the ruins there are mediaeval, and suggested that it stood on *Tell el-Aqabe*.⁵ The "river" in question is thought by PRESS to be the *Wādi el-Qelt*. The valley of Rimmon, mentioned in the same context, is identified with the *W. er-Rummāneh*. The writer also re-opens the problem of *B'īnah* and *B'īmah*. He takes the former as going back to *Bē'Anah* and connects it with *Baīan*, 1. Macc. 5⁴. His identification of the names with *el-Aīnah* and *el-Aīmah*, southeast of the Dead-Sea has no philological support.

15. D. SALITERNICK, "Strabo, Geography, XVI, 2", pp. 227-56. An accurate translation of this well-known source, fully annotated.

16. H. TORCZYNER, on Ezek. 13¹⁸⁻²¹, pp. 257-60, offers a very ingenious solution for this obscure passage: the witches "hunt souls" for a price, by pretending to induce skin-diseases through sympathetic magic. The etymology of *mispaḥot* as a form of *sapaḥat* seems irresistible.

17. J. KLAUSNER, "The towns 'Arab and Gabara in Galilee," pp. 261-3, endorses the view that both names represent the same town, emending the latter to *Garaba*, for which DALMAN has suggested the modern 'Arrābe. The writer erroneously spells the word with *ghain*. It seems, however, that the Arabic name goes back to 'Arabah in the sense of "willow" (cf. Jos. 18¹⁸). Is 'Arab then a secondary form?

18. B. MAISLER, "Syria and Palestine in the geographical treatise on the empire of Sargon the Great," pp. 264-9, gives his reasons for considering the document a copy of an inscription of the Akkadian ruler (2637-2582 B.C.), and discusses the portion dealing with "the land of the Amorites."

19. M. NARKIS, "Edomitica," pp. 270-80. An exposure of a large group of forgeries now in the Bezalel Museum, Jerusalem.

20. J. BRASLAVSKI, "The Jewish Agricultural Population of Palestine in the 16th cent. and the question of its antiquity," pp. 281-308. A sober and adequate treatment of a subject which might lend itself to abuse at the hands of a romanticist. The sources attest a considerable variety of activity: grain-growing, fruit-orchards, apiculture (especially in Tiberias), sericulture, viniculture (especially in Gaza), as well as indirect agricultural business. In several instances the existing situation may be traced back two centuries, and with respect to 'Alma (upper Galilee), to the late 12th, with hints as to the pre-Crusading period. Note, however, that one of the sources drawn on for the 14th c., viz., ISAAC CHELO, has now been proven to be one of CARMOLY's forgeries.⁶

21. S. ASSAF, "A group of letters," pp. 309-22. Four business letters of Palestinian and Egyptian provenience, 16-17th cent. The third is the first autograph of the famous Kabbalist, ISAAC LURIA of Safed.

22. N. SLOUSCH, "The (Jewish) Population of Palestine and Syria in the 16th cent. according to a Portuguese source," pp. 323-38. Extracts from P. DE AVEIRO, *Itineraria da Terra Sancta*, first published in 1587, and re-published in 1927. The author was apparently a Marrano, and his remarks, insofar as

⁵ PJB, 1926, 36; l.c., 1925, 23 f.

⁶ G. SCHOLEM, *Siyon*, VI, 39 ff. M. ISH-SHALOM, *Tarbiz*, VI, 197-209.

⁷ The common confusion between *Sychar* and *Sichem* reappears in this source; the former properly refers to the modern 'Askar. See THOMSEN, *Loca Sancta*, p. 108.

⁸ In connection with the remarks on the local Samaritans, see the contemporary material given by A. GALANTE, *Documents officiels turcs concernant les juifs de Turquie*. Sтамбул, 1931. pp. 170 f.

they refer to Jews, are concerned with these refugees. The material assembled here relates to Jerusalem, Nablus,⁷ Tiberias, Safed, Meron, Damascus,⁸ and Tripoli, but is not remarkably interesting.

23. M. AVIMELECH, "The Distribution of Levantina (*Helicidae*)" pp. 339-46 with English abstract. A study of the two sub-species of Palestinian land-snails and their several local types.

24. D. ASHBEL, "The Evaporation of water in Palestine," pp. 347-64. A valuable hydrographic investigation with statistical tables.

25. L. H. VINCENT, "Jérusalem Ville Sainte (Jér. 31³⁸⁻⁴⁰)," pp. iii-xvi, offers a well-considered solution of the problems involved in the topographical terms of this passage.

26. R. NEUVILLE, "Les Débuts de l'Agriculture et la Faucille préhistorique en Palestine," pp. xxii-xliii. In this very interesting survey the writer points out that, whereas in Europe and Egypt agricultural traces are not found before the Neolithic Age they occur in this country from the dawn of the Mesolithic. Thus this art arose earlier than those of pottery-making and flint-polishing, a situation which accords well with the phenomenon of wild wheat, which was found by AARONSOHN near Safed in 1906, and which has since been found also in Transjordan. The writer reviews the sickleflints of the various ages, and shows how the pursuit of agriculture fluctuated during the seven periods preceding the Early Bronze Age.

The wealth of material in this volume is unfortunately marred by certain external defects. Several of the contributors make bibliographical references of the vaguest sort, a tendency which it is the duty of an editor to check. The typographical errors are unnecessarily numerous, while the style of the occasional English portions is quite unworthy of that of the bulk of the book. In general, the editing is inferior to the contents, and the editor's ubiquitous foot-notes are an unfortunate feature of the volume.

JOSHUA STARR.

STUDIA ORIENTALIA EDIDIT SOCIETAS ORIENTALIS FENNICA IV, 1. *Songs of the Druze*. Transliterations, Translations and Comments by AAPELI SAARISALO. Helsinki, 1932. The Academic Bookshop. VII, 144 (4) and 32 pp. Arabic texts. Price Fmks. 70.—

DR. A. SAARISALO, who is well-known as a student of Palestinian prehistory and topography, collected these songs in the intervals of other work in Upper Galilee. The text of about seventy songs is given, mostly *atāba*, (pp. 1-105) followed by a commentary (pp. 106-138). An interesting feature is the Druze origin of some of these songs. The author intends to deal separately with any traces of their secret tenets in these texts. The index of words discussed is a welcome addition to the work. The last two pages are taken up with bibliographical notes. Certain articles of the *JPOS* which have been utilized are not mentioned.

The present reviewer was privileged to see the book before publication and to make certain suggestions. Not all of these have been accepted. The author has made certain errors which would have been avoided if he had discussed the whole beforehand with a competent native of the country.

The songs are not divided into *atāba*, *marwāl*, and the other more or less wellknown forms of vernacular Palestinian poetry (vide the introduction to DALMAN'S *Palästina'scher Dīwān*); but songs of different types are found under one heading, e. g., No. XXVII, where a *zaghūrūt* verse (1. 2.) is followed by "*dal ʿōna*" (3. 4.); while Nos. 5. 6. are *ṣōbās*; 9. 10. again a *dal ʿōna* (with an

impossible metre; especially 9, which should read "yalli b-titmašat bi-'azm-l-ḥamām(i)". This juxtaposition of incongruous "song" is very objectionable from the oriental point of view; No 31 should have been printed in "quatrains", as the metre demands.

In attempting a critical rendering of Arabic folksongs Dr. SAARISALO has tackled a subject in which no amount of pains will make up for an insufficient knowledge of vernacular Arabic. Nevertheless, the translation is generally accurate, though one would sometimes expect a different rendering. On the other hand the influence of written Arabic on the author is sometimes apparent, such as his writing *qītaru* (Song II, 3a) for beduin *gōṭar*; *ḥawetihu* (II, 3) for *ḥawētī(h)*. *biḥdīni* (XXII, 19) for *be-ḥdēni*.

The following corrections may be noted:

- VII, 21,2 *ʿAšinnuh* pro *ʿala šaʿnihi* was originally *ala šān inno* (still vernacular), (p. 113).
- X, 7,1 If the classical is meant, *yaʿlu* should be inserted instead of *yaḡū*.
- XVII, 11,2 *Yā kās il-fikir, ḥallik tinsifi* (*hall-*) being used only with the aorist while *taḡha* is also classical.
- XVIII. *Il ʿuṣṣāq bi-hubbik sāḥu* "The lovers became restless pilgrims for your love" should be "The lovers were devoted to your love."
13. "How many blind saw her? She left them and they were able to see," should be "...She made them look and see;" *ḥalla* = to cause.
16. *Karras*, "to dedicate" (cf. the introitus of the Mass).
17. Cf. Psalm 45¹.
18. *Ḥalli nazarak ʿalayyi* is an Arabism, requesting continued favour.
20. "She ordered to weave for the feast," should read "It was handmade to order." *Tuṣāy tithayyak ʿa-l-ʿid*. *Tuṣāy* is *marra* and not passive form of IV (p. 121).
25. *Yom(in) libisto u ḥalaṣ w-iḥtašdit ʿa-ṣ-šīrāni* (pl. of *šīr* crevice of the door). "When she put on (cf. 23) and finished and they (i.e. the people) gathered at the crevices of the door, (sc. to admire her in the head dress).
30. *Arḡat* "let hang down"; a style of hair cutting is *qaṣṣa* not *qīṣṣa*.
37. *Daḡlak, ya rabbi tāmihni ḥēs in-nās bala la-n-nās*, is not "I beg you, my Lord, forgive me (here) where the people cause suffering to others" but rather "I implore you, my God, to forgive me, for people are (a cause of) affliction to one another."
42. *Ruṣṣhum* for *ruṣṣha ʿala-l-mayyit biḡib* is not "Their sprinkling on the dead will make him fragrant" but "Sprinkle it (i.e. the water) on the dead and he will be restored to life" (*tāb*: to recover, come to life again).
50. *Ya . . . yamma* is "either . . . or" and not "to . . . and."
54. *Yitwāza(n) lōno fihun*, His (white) colour may be compared to theirs.
- 55-56. These lines are badly corrupted, as are 4 and 9 of XIX.
- XIX, 15 *Amān, ya nasīm in jīt habbēt habbēti-l-hawa, qull-ha ḥabbik* "Help, O wind, when you came to blow, I loved the beauty, tell her: He loved you" should be "Alas (Turkish!) O wind, should you come to blow a breeze, tell her: He loved you."
18. *Nafsi ʿan durūb il-jahl tābat* (not *tāyib*) "I myself am penitent concerning the ways of wrong doing" should be "My soul has repented from (following) the paths of foolishness."
- 22,1 *Mil* is Latin, not Greek.
- 27,4 Cf. the Dream of Joseph (Gen. 37⁹).
- XXI, 3 *Wajʿat talāqik bi-qīṣrit lēmūna* is the correct version and gives the meaning "I shall divorce you for a trifle" (lit. the peel of a lemon).
- XXI, 10 *Daḡil rabbik, ya-mmi-l-iʿūn* is not "I beg your Lord, O thou, the mother of the eyes (beautiful girl)" but, "for the love (or sake) of

thy God, O thou with the beautiful eyes." *Imm* and *abu* here and in similar expressions denote the outstanding quality cf. XXVII, 10, 12.

XXIV, 4 *W-ibnayya zinit-ha 'ijbat*. "And the beauty of the daughter is a wonder" should be "And a girl, whose beauty was pleasing." The metre here is defective.

14. *Ya hawa-z-zēnāt cinn* (= *ka-innahu*) *nassam 'alayyi* is not "O, the love of beauties—a demon breathed on me" but "O, the breeze (or wind) of the beautiful ones, as if it had breathed on me". For the use of *nassam*, cf. III, 5 *la-tla' 'a-rās ij-jabal w ašrif 'ala-l-wādi wa'ul ja munyati*, *nassam hawa blādi* "I will climb to the top of the mountain, look down on the valley and say, "O my heart's desire, the wind of my country has blown," (from the forgotten *gharib maskin* song, also used in another song known as *'a-l-yādil*). Against p. 129.

18. *'ūd it-tib* "Tree of perfume", means the aloe.

XXIV, 26 *Qaranful* (= *hu'rūnful*), carnations (not cloves in this case) is not a Greek but a Persian loan word. In the sense of cloves it occurs in verse 8.

XXVI, 10 *Min šadriha kinn fazz* (cf. XXIV, 14) "like to jump from her breast."

14. *Wuma tamluk yadāya* "and with all that my hand governs" simply implies possession, no idea of covering. It is a variant of the Qur'ānic expression *mā malakat yaminuka*, Sūra 33:52.55

22. *Wašbur 'alayya ta-radḍi' ibni* "Be patient with me till I can suckle my son" should be rather "Have patience with me till I have given my son to suck." It reminds one on the same situation depicted by Imru'u-l-Qais, *Mu'allāqa* vv. 19-20:

فثلك حلي قد طرقت ومرضع
فألهيتها عن ذي تمام محول
إذا ما بكى من خلفها انصرفت له
بشق وتحنى شقها لم يحول

This section, too, is a mixture of several kinds of song.

XXVII, 5 *Hannīni* "make us happy" should be simply "congratulate me."

XXVIII, 2 *Ya furqati-l-hayy qat'atna 'ani-l-ladīn mātu* (1 line) "Ah, the departure of the living did put us apart, more than those who died" should be "The departure of the people (or tribe sc. of the beloved one) has made us even more desolate than those who died."

14. 15. This refers to the person who has written the sad news (and not God); the explanation of *ya rēt* is wrong.

17. *Yā bēn, qalbi 'alēk rādi šammatt biyyi-l-'ida w-išhāb l-ighrādi*, "O enmity, my heart is pleased with you. My enemies and my followers made merry over me in my day of evil, to my hurt." The negation (*miš*) should be inserted between *'alēh u rādi*, and the English should read "O separation (or death), my heart is not pleased with you, for you have made my enemies, and those who have a grudge against me, rejoice."

XXIX, 15 *Ah, batil hēf* "Ah, bad injustice" should be "Alas, what a pity . . ."

XXXIII, 3 *Madhch* is not religion, but a religious "school" of which there are four in orthodox Islam.

XXXII, 38.3 Cf. II Samuel 13¹⁹.

With regard to the words in the Index, *yamm* (the side of) is not derived from *am* (p. 139); nor does *az'ar* (an Aramaic loan word, now used in Syria) come from *da'ara*; p. 141 *šauwart*, the root is *šwr* and not *šār*; among the so-called colloquial words we notice *bandar* (cf. Bender Bu Shehr, and Bender Abbas in the Persian Gulf) which is Persian and obsolescent (though in Bills it used to figure before the War in the sentence *'imla dārija bandar al-quḍs* (money current in the "town" of Jerusalem); while *nammūra* and *tiqša'* are Aramaic (still used in Syria); *qallim*, *sijām*, *tuḡha* are classical, and *qalamji* (professional calligrapher) Turkish. Against REDHOUSE it may be maintained that *māhūl* is

also Aramaic and not Persian, as a good number of Arabic loanwords from Aramaic are formed on the theme *fāʿūl*.

In conclusion, we have to express our gratitude to Dr. SAARISALO for undertaking this difficult work which makes it possible for the English reader to gain an idea of the folk songs of Northern Palestine.

ST. H. STEPHAN

The Bible, An American Translation, Popular Edition, Edited by J. M. POWIS SMITH and EDGAR J. GOODSPEED, pp. 247. The University of Chicago Press, United States of America, and the Cambridge University Press, Great Britain and Ireland, 1935. Sh. 9 net.

The demand for a popular edition of the SMITH and GOODSPEED English translation of the Old and New Testaments has now been met by the publication, in October 1935, of a single, inexpensive, and well-printed volume.

The beginning of this work goes back to 1923, when Professor EDGAR J. GOODSPEED of the University of Chicago issued his English translation of the New Testament. This was based upon the Greek text of WESTCOTT and HORT, which was followed throughout, save for a few emendations that had been suggested by Dr. HORT himself, together with some modifications in seven additional verses. This version was widely known before the appearance, in 1927, of the companion English translation of the entire Old Testament.

In the previous year (1926) the late J. M. POWIS SMITH, of the University of Chicago, had published his English translation of the Psalms. This attractive volume had two appendices, one giving a brief account of the dates, the poetry, and the religion of the Psalter, as well as of its development as the hymn book of the Second Temple, while the second was devoted to textual notes. This translation, in revised form, together with the textual notes, was incorporated in the larger work of the following year.

In the case of this new English version of the entire Old Testament, Dr. SMITH had the editorial responsibility, and was the translator of the minor Prophets, Job and Ecclesiastes, as well as the Psalms. His associates, for the remainder of the translation were Professor THEOPHILE J. MEEK of the University of Toronto, Professor ALEX R. GORDON of the United Theological College of McGill University, Montreal, and Professor LEROY WATERMAN of the University of Michigan. An appendix of some 90 pages contained a list of passages where comment was felt to be necessary regarding the official Massoretic text, particularly in the matter of vocalization.

Next followed in 1931 an English version of the entire Bible, published by Dr. SMITH and Dr. GOODSPEED. This was made up of the translations named above, and this it is that now appears in popular form. The translation of the New Testament remains unchanged, while the Old Testament rendering has been revised throughout by Dr. MEEK, with the aid of Dr. WATERMAN. It is stated that their aim has been to take account of the most recent investigations in the interpretation of doubtful passages, and likewise to secure a greater degree of uniformity of style and expression in the work of the four translators. As is fitting this latest volume has no appendixes, or explanatory notes. Previously Dr. GOODSPEED has referred those who may desire some aid in their reading to his *Story of the New Testament*.

In any work of translation there will always be differences of opinion as to most suitable renderings, but apart from such considerations it remains true that the version before us merits the high commendation it has received for scholarly care in its preparation, for its worthy diction, and for the effort to secure a literary quality that will be in harmony with the style of the Greek and Hebrew originals.

WARREN J. MOULTON.

A. G. BARROIS, O. P., *Précis d'archéologie biblique*, in—16 de 197 pages. Bloud et Gay, Paris, 1935.

Le domaine de l'archéologie biblique est si vaste qu'il faut regarder comme un vrai tour de force d'avoir condensé en ce petit volume non seulement ce qui concerne les institutions mais encore tout ce qu'on entend par le monument: aussi bien «les productions les plus variées des techniques ou des arts, les objets courants et les plus humbles réalités de la vie journalière que les réalisations architecturales grandioses ou mesquines», et cela chez les différents peuples qui ont occupé la Palestine dans l'antiquité, en dépassant la cadre israélite. L'exposition est conduite avec une méthode rigoureusement scientifique et sous une forme très agréable à lire. On sent dans l'auteur un homme qui possède son sujet pour l'avoir enseigné et surtout qui dans un long séjour dans la Terre de Canaan s'est trouvé en contact direct avec la réalité antique en visitant les chantiers de fouilles, en explorant le pays et en se livrant lui-même à des entreprises d'excavations sur les confins du Sinaï et de l'Arabie et dans la vallée de l'Euphrate. Aussi, la comparaison, qui est le procédé le plus habituel de l'archéologie, est-elle plus facile à la connaissance expérimentale qu'à la science purement livresque. On écouterait plus volontiers un témoin oculaire nous parlant de la vie nomade, de l'activité rurale, de la société et des coutumes religieuses d'une contrée dans leurs rapports avec les usages antiques, nous esquisant la ville sémitique, ses fortifications, ses édifices privés et publics, la cité gréco-romaine et ses temples, la grotte préhistorique avec ses outils de pierre exhumées ou déblayées par les récents travaux des sociétés d'Archéologie qu'un érudit lointain au cerveau bourré de lectures comme un catalogue d'antiquariat. Les sujets abordés par le P. BARROIS ne sont pas seulement ceux qu'on vient d'énumérer. L'auteur a touché aussi aux métiers, aux arts libéraux, à la métrologie et à la numismatique, faisant ainsi de son livre qui tient un bon rang dans la «Bibliothèque catholique des Sciences Religieuses» un excellent manuel pour l'étudiant en Écriture Sainte et une introduction suffisante pour le profane désireux d'avoir des clartés sur la vie des Anciens en Palestine.

F. M. ABEL

PRÄHISTORISCHE KLIMAFRAGEN UM GHASSÜL

ROBERT KÖPPEL

JERUSALEM.

Unsere Ausgrabung von Telēlat Ghassül im Jordantal liegen so verlassen in der Ghörebene, daß viele unserer Besucher sagen, damals, als diese Stadt blühte, müsse doch „ein ganz anderes Klima“ geherrscht haben. Auch in dieser Zeitschrift¹ wurde dieser Meinung Ausdruck gegeben.

Die schwierige, oft behandelte Klimafrage und zwar nur des unteren Ghors, wollen wir hier nur einseitig vom geologischen und morphologischen Standpunkt erörtern. Von den atmosphärischen Bedingungen des Klimas, der Temperatur, der Feuchtigkeit, des Niederschlages, des Windes, der Verdunstung kann der Geologe nur den Niederschlag und, hier am Toten Meer, ein wenig auch die frühere Verdunstung am Wasserspiegel des früheren Toten Meeres zu erfassen suchen. Die übrigen Faktoren muß er anderen Wissenschaftlern mit deren Methoden überlassen. Meteorologie, Botanik, Chemie mögen auch ihre Beiträge zur Klimafrage liefern.²

Es sollen zuerst die Arbeitshypothesen und Voraussetzungen mitgeteilt und die Begriffe klar herausgestellt werden. Dann wollen wir einen Ausflug nach Ghassül unternehmen und uns dort umsehen.

¹ JPOS. XV, 1935, S. 204. ALBRIGHT, 'Palestine in the earliest historical Period': "Teleilat Ghassül carries us back into the past, to a time when climatic conditions in Palestine were decidedly different from what they are now. Then the Jordan had not cut its channel so deep into the Zōr, lateral watercourses were more numerous and formed perennial brooks more frequently But six thousand years ago conditions of climate and hydrography were certainly different in Palestine, just as in Europe and northeastern Africa"

² Um den Optimismus anzuregen, sei z. B. nur auf den Aufsatz von E. GEHRCKE (Berlin) hingewiesen, der in „Forschungen und Fortschritte“ /IX (1933), 489“ erschien. Er schreibt über „Braunfärbung der Wüste“: „Man wird aus der Dicke der braunen Kruste für bestimmte Gesteinssorten geradezu die durchschnittliche Anzahl der Regenfälle und damit auch das Alter der Gesteinsoberfläche bestimmen können.“

I.

1. In seinem *Traité de Géologie* 1927, II, 3, pag 1769 schreibt ÉMILE HAUG: "La période qui correspond au maximum d'extension glacière dans le Nord et dans les Alpes est un point de repère si commode qu'il est légitime de la placer à la base du quaternaire moyen."

Einen ähnlichen bequemen Ausgangspunkt haben wir hier im Ghör. Die auf die Lisantone des Ghörs aufgeschütteten „Deltas," besonders die ganze Morphologie am Austritt des Wādi Siāla aus dem Gebirg, können nicht später als in das Letztpluvial gelegt werden, demnach die Trockenlegung der Lisantone in das Interglacial, das in Europa „Riss-Würm" genannt wird. Also entsprechen die unter den Tonen liegenden obersten Gerölleinschüttungen noch dem vorhergehenden Pluvial oder dem Beginn des Rissglazials, also HAUG's Grenzlinie zum Mittelquartär, oder dem Mittel- und Jungdiluvium der deutschen Autoren.

Alle über den ausgetrockneten Lisantonen liegenden Schotter, alle diesbezügliche Geländeformung muß die Arbeit des Jungdiluviums — Europ. Würmeiszeit, Pluvial „C" — und des Alluviums sein.

Gemessen mit der herrschenden Ansicht der europäischen Geologie stehen uns also mindestens 25000 Jahre zur Verfügung.

Um 20000 hätten wir den Schluß der Vergletscherung in Deutschland, um 10000 den Schluß des Magdaléniens und Jungpaläolithikums mit dem Stand des Anzylus-Sees und praeborealen Klimas in Mittelschweden. —

Warum greifen wir soweit aus? HENRI BREUIL gibt die Antwort in der *Anthropologie* XXXVII (1927), 558: "La méthode géologique seule tient la clef de ces évaluations et c'est dans les dépôts du finiglaciaire sudscandinave que se trouve le seul élément solide de réponse au problème."

Diese Mindestmaße bis zur Höhe des Letztglazials Europas um und vor 25000 Jahren ist die erste Arbeitshypothese in unserer Klimafrage. Wir heben sie eigens hervor, da man sich sonst nicht verständigen wird.¹

¹ Als Beweis sei nur hingewiesen auf die Tausende von Polleanalysen in Finnland, Schweden, Dänemark, Nord- und Süddeutschland, die die Klimareihenfolge im allgemeinen übereinstimmend belegen, auf die Niveauveränderungen in Schweden, auf den 20 m tief (in Granit) eingeschnittenen Ablauf

Eine zweite Arbeitshypothese betrifft die geologische Auffassung des unteren östlichen Ghöres, wie sie aus der Karte und dem Profil des Wādi Barakāt erhellt. Die Hügel der untersten Lisantone in der Nähe des Toten Meeres, auf deren Parallelstellen anderwärts die Gerölldeltas des Letztpluvials liegen, müssen ausgetrocknet sein bei einem gewissen Tiefstand des Toten Meeres, etwa mindestens 40 m über dem heutigen Spiegel. Im Pluvial „C“ (Würmeiszeit) muß aber das Tote Meer einen höheren Wasserspiegel gehabt haben. Einmal beeinflußt, wie T. J. SALMON vom Survey in *Quarterly Statement Pal. Expl. Fund*, 68, I (1936, 105) zeigt, der Regenfall den Spiegel des Toten Meeres, also erst recht ein Pluvial. Dann beweist es die Morphologie des Ghörs. Die Schotterdeltas des Wādi Dscharafa, Tarafa, Siāla, Umlālije, ‘Adēme enden lange vor dem Ufer des Toten Meeres. Damals muß das Meerufer in der Nähe gewesen sein. Die Mittelterrasse, Quëllenaustritte, Vereinigung der Wasserabläufe, andere Landschaftsform mit lockerem Sand auf den untertauchenden Kiesen, weite Mulden, wie sie nie das Flußwasser bildet usw. zeigen diese Nähe des Meeres an. Daraus folgt, daß die Hauptarbeit nach dem Pluvial C in der Geländeformung dem Rückzug des Toten Meeres d. h. der dadurch tiefergelegenen Erosionsbasis zuzuschreiben ist. Diese Arbeit der Natur kann man schematisch auf die Zeit 20000–10000 v. Chr. ansetzen. Auch das allmähliche Einschneiden des Jordans fällt in diese Zeit, lange vor 4000 v. Chr., wenn diese Arbeit auch heute noch fortgesetzt wird. „Andere Wasserläufe“ als die heutigen sind aber nach der Karte, d. h. nach der Richtung, Lage und Masse der schon im Letztpluvial gebildeten Schotterdeltas ausgeschlossen. Nur kleinere Biegungen können verlegt worden sein. Die große Linie der Wasserführung war schon durch die Schotterdeltas des Letztpluvials vorgezeichnet. Die Gerölldhalden selbst sind nicht im Meerwasser, sondern terrestrisch abgelagert worden. (Abb. unser *Ghassül-Werk*,¹ Bd. I, Tafel 7). Demnach lag

des Anzylussees bei Degersfors (beim Vener-See). HENR. MUNTHE, *Studier över Ancylusjöns Avlopp*. Stockholm, 1927, pag. 96. Die Rückzugstadien der verschiedenen großen Gletscher sind schon genau kartiert. Sie zeigen langsames Zurückweichen mit Halten und Toteisbildungen. Über das Anienne-Tal bei Rom mit den Neandertalschädeln von Saccopastore schrieb ich in der *Rivista di Antropologia*, XXX (1935).

¹ *Teleilat Ghassül*, I, Compte rendu des fouilles de l'Institut Biblique Pontifical 1929–32., par A. MALLON, R. KÖPPEL, R. NEUVILLE. Rome, 1934.

das Tote Meer unter — 300. M.M., vielleicht 70–90 m über dem heutigen Spiegel.

2. Wichtig ist es, klare Begriffe vom „Klima“ zu haben. Die Alten hatten ja nur eines, das „mathematische“, nach der „Neigung“ der Sonnenstrahlen, woher der Name „Klima“ kommt, die heutigen Geographen zählen 8–12 verschiedene „physische Klimata“ auf. Als Untergruppen hat die Karte von W. KÖPPEN 1:60 Mill. gegen hundert „klimatische Provinzen“. Für uns kommen nur vier in Betracht, alle übrigen können wir übergehen und den Meteorologen überlassen.

a) das erste Klima ist das „humide“. Immer fließende Gewässer, „perennial brooks“, sind das Hauptkennzeichen. KÖPPEN gibt noch an „größere Niederschläge als 600 mm im Jahres-Durchschnitt“.¹

Als Nebenkennzeichen füge ich noch bei: Lehm Boden, Verwitterung, Humus, Farbenänderung der oxydierten Stellen, Grundwasserhorizont mit gleicher Höhe der Quellaustritte, zusammenhängende Pflanzendecke. Haben wir all dieses im Ghôr um 3–4000 v. Chr.? Das ist unsere Hauptfrage. Viele denken an solche „Klimaänderung“.

b) Das zweite Klima ist das „aride“. Es hat keine immerfließenden Bäche. Dafür kommen seltene, aber mächtig wirkende „Schuttregen“ oder Katastrophen.

SUPAN gibt S. 241 folgende Zahlen für den mittleren jährlichen Niederschlag:

bei 25 mittl. Jahrestemperatur	350 mm
bei 20 „ „ „	300 mm.

Leider besitzen wir im ariden Klima so wenig meteorologische Stationen. Dr. B. ASHBEL gibt in seiner Zusammenstellung *Die Niederschlagsverhältnisse im südlichen Libanon, in Palästina und im nördlichen Sinai* (Berlin 1930, T. 12) nur fünf Orte an mit Angabe der Zahlen der mittleren Jahresniederschläge:

en-Naḥel	25 mm
Maʿān	45 mm
el-ʿArīsch	102 mm
Ḳaṣr Hadschla	100 mm
Jericho	190 mm.

¹ ALEXANDER SUPAN — ERICH OBST: *Grundzüge der physischen Erdkunde*, 1927, Bd. I, 240.

Ghassül dürfte etwas weniger als Kasr Hadschla Niederschlag haben. In unserem meteorologischen Regenschirm sah ich selten eine zusammenhängende Wasserschicht am Boden des Gefäßes.

Nun können wir einen wichtigen Schluß ziehen: Selbst eine 3—4fache Steigerung der Niederschläge braucht noch nicht außerhalb des Rahmens eines „ariden Klimas“ zu gehen. Man könnte dies schon eine „Änderung des Klimas“ im alltäglichen Sprachgebrauch bezeichnen, nicht aber in der wissenschaftlichen Terminologie. „Mehr Wasser“ in der Wüste bedeutet „mehr Entsalzung“, dieses aber ist, bei der feinen Anpassung der Pflanzenwelt an die Umgebung gleichbedeutend mit „mehr Pflanzen“.

Bei Kulturen besagt es auch „mehr Wasser“ zur Berieselung einer Oase oder Halboase. Das wäre eine „Änderung“ des Klimas, aber innerhalb des ariden Klimas; also nur eine kleine Welle in der gleichbleibenden Kurve.

c) Oft wird ein drittes Klima vom zweiten getrennt: das „Wüstensteppenklimate“. Dabei darf man ja nicht an die Grassteppen des humiden Klimas denken, sondern nur an die Wüste. Nur ist die Pflanzenbedeckung nach ROBERT GRADMANN¹ etwa über 50%, während die Wüste noch 30–50% Pflanzenbedeckung haben kann. In dem Werk GRADMANN's sind auch 90 Pflanzengruppenuntersuchungen, darunter auch solche um Ghassül.

Strauchwuchs

Calitropis procera, Sudan
Lycium arabicum, Wüste-Sudan
Zizyphus lotus, Steppe-Wüste.

Unterwuchs

Adonis dentatus, Steppe
Anabasis articulata, Wüste
Erodium hirtum, Wüste
Salsola rigida, Steppe-Wüste
Stipa tortilis, Steppe-Mittelmeer.

Weitere Beispiele ebendort S. 24–30.

Die Feinheiten des Kampfes zwischen Mittelmeer-Flora, Steppen- und Wüstenflora, die die Gradmannschen Proben enthalten, muß ich den Botanikern zur weiteren Beurteilung überlassen.

d) Das vierte Klima, das für uns in Frage kommt, ist das „Mediterranklima“. Es herrscht im Westgebirge Palästinas und würde bei Steigerung der Niederschläge noch mehr herrschen. In der erwähnten Arbeit will ROBERT GRADMANN gerade in der „Karstheide“,

¹ PENK-KREBS, *Geographische Abhandlungen* Reihe 3, Heft 6: *Die Steppen des Morgenlandes*.

wie er sie nennt, einen früheren vorgeschichtlichen Wald oder Macchien-Bestand herauslesen.

Doch ist die Mediterranflora so an das Kalkgebirge angepaßt, daß es schwerlich für das sandig tonige Gebiet des Ghōr in Frage kommt. Falls man die Dauer des ariden Klimas im Ghōr beweisen kann, muß man auch bei zunehmenden Niederschlägen ein Mediterranklima da unten im Jordantal ablehnen.

So drängt alles auf die Hauptfrage: Hat um 4000 v. Chr. im Ghōr das „aride Klima“ die Herrschaft gehabt? Wir antworten: Ja. Zum Beweise machen wir nun einen Ausflug in das Ghōr bei Ghassül.

II.

Von Jerusalem fahren wir gleich bis zum Nebi Mūsa-Plateau in der Wüste Juda. LEO PICARD hat die Gegend in seinen „*Geological Research in the Judean Desert*“ beschrieben und kartiert (Jerusalem 1931). Aus dieser Karte ist leicht zu ersehen, wie auf den Spornen des Gebirgsrandes gegen die Ghōrebene sogenannte „Oolithkalke“ liegen. Sie müssen einmal mit einander in Zusammenhang gewesen sein, wurden aber später von der Erosion durchschnitten. PICARD verlegt die Kalke (S. 63) an die Grenze von Pliocän zu Pleistocän. Jedenfalls ist die Erosion schon im Altpleistozän (Altdiluvium) geschehen. Diese Gegend ist sehr geeignet, das Ausmaß der Erosion im unteren Pleistozän abzuschätzen. Wir fahren durch ein solches Tal mit verbogenen Kreideschichten hinunter ins Ghōr. Der Hang zur Linken ist nicht tectonisch, d. h. eine Verwerfungslinie, sondern morphologisch. Es ist die Grenze des mitteldiluvialen Ghōrsees, der über 200 m höheren Wasserspiegel hatte als das heutige Tote Meer. Damals wurden die obersten Gerölle und Tone der sog. Lisanformation eingeschüttet, jene dünnblättrigen, gipshaltigen, weiß-grauen Tonbänder, die nach langsamem Verdampfen des Toten Meeres das ganze untere Ghōr zwischen den beiden Gebirgsrändern bedeckten. Alles, was darauf geschüttet ist an gelben Kiesen und Sanden, alle morphologische Formung dieser Oberfläche, gehört also zur folgenden Zeit, dem Pluvial C und dem Alluvium. So können wir diese gesamte Arbeit der Naturkräfte dieser Zeit abschätzen und mit anderen Gegenden vergleichen. Es ist herzlich wenig geleistet worden. Kaum eine Schlucht, wie sie so leicht bei humidem Klima

in die Töne hätte eingeschnitten werden können! Kein weithin sich ziehender Schutt und Sandfächer! Keine oberflächliche Abtragung von größeren Ausmaßen. Das Tal war „faul“ in seiner Arbeitskraft. Als Entschuldigung dient nur: es war eben in aridem Klima nicht mehr Aufschüttung an dieser Stelle möglich. Das Klima war, wie heute, arid.

2. Mit großen Erwartungen fahren wir zum Aquädukt und der Brücke über das Wādi el-Kelt. Hat dieses Tal doch ein Einzugsgebiet, das bis zu er-Rāme und el-Bīre reicht und in dem Wādi Fāra und Šuwēnīt tiefe Schluchten bildet. Eine Steigerung der Niederschläge oder gar ein humides Klima muß sich am Talausgang bei Jericho an der Oberfläche verraten. In der Tat sehen wir auch Gerölle an der Straße und jenseits des Wādi. Man kann sich den ganzen auf den Lisantonen ruhenden Schuttkegel des Letztpluvial geometrisch vorstellen. Welch ein Zwerg ist er gegenüber seinen Zeitgenossen von der transjordanischen Seite! Bei letzteren werden wir gleich nachweisen, daß sie im ariden Klima entstanden sind. Um so mehr gilt dies von den Schottern am Wādi el-Kelt.

Die alluviale Eintiefung des Tales ist so, daß der Schotter an der höher gelegenen Straße nur enddiluvial sein kann.

3. Enttäuscht fahren wir zur Jordanbrücke (Allenby Bridge). Jenseits derselben kommt auf den Gipfeln der erodierten Lisantonhügel der gleiche rotgelbe Sand, der auch im Westen aufliegt. Nur kann man hier besser sehen, daß er schon aufgelagert wurde, ehe die Erosion zu Ende war. Ein Gewitterregen hat am Wege nach Ghassül November 1935 deutliche Spuren hinterlassen. Das Gelände sieht wild zerrissen aus. Man erkennt die Strudel des Wassers an den unregelmäßigen Eintiefungen. Denken wir uns einen dreitägigen Sandsturm kommen, so wird er alle Wirkungen des Wassers eindecken, sodaß man nichts mehr erkennt. Wie viel mehr Zeit oder Wasserkraft muß zur Verfügung gestanden haben, um die ganze große Mulde, durch die der Weg sich hinaufzieht, zu bilden!

In dem folgenden Wādi Ghārbe erkennt man, daß die Hochfläche des Ghōrs mit den auflagernden rotgelben Sanden schon gebildet war, ehe die Eintiefung der Täler vor sich ging. Es muß das gleiche Pluvial C gewesen sein, das auch die übrigen transjordanischen riesigen Schuttfächer auf den hellen Tönen gebildet hat.

Wir halten die Bildung für enddiluvial, weil das folgende Allu-

vium zwar auch große Wassermassen liefern kann, aber nicht mehr in solcher Höhe, nicht soweit vom Gebirgsrand entfernt, wie sie das Wādi Nimrīn, Kefrēn, er-Rāme, Dscharafa, Ṭarafa zeigen. Die allmählich vor sich gehende Eintiefung kann man beim Wādi Siāla gut beobachten. Oben laufen noch die ältesten Rinnen mit Schottern auf der Lisantonhöhe, dann folgt das Einfressen in diese, in gewaltiger Schleife des Wasserlaufes; dann zuletzt die alluviale Rinne mit Gräbern der Megalithzeit am Hang.

Daß im heutigen ariden Klima eine große Wasserführung möglich ist, sollen zwei Beispiele zeigen. November 1931 hatte es im Gebirge viel geregnet, nicht aber in der Ghōrbene. Ich ging abends zum Wādi Ṭarafa, wo ich das Wasser 30 cm hoch herankommen sah mit gewaltigem Getöse. Beim Rückweg war im nördlicheren Wādi Dscharafa kein Tropfen Wasser. Das nur 1 km noch nördlichere Wādi Hesbān-er-Rām hatte einen Wasserstrom vom 80 m Breite und in der Mitte von 3 m Tiefe, sodaß eine Frau samt Ziegenherde hier mitten in der Wüste ertrank. Alles im ariden Klima!

Noch klarer spricht die Suēme-Katastrophe (November 1932). Ich habe sie in unserem Ghassülwerk abgebildet (Tafel 9).

Ein großes Wādi, das bis zur Gebirgskante vor Madeba geht (Dsхудēde und 'Afrīd, später Knējese und Seil el-Heri genannt) kommt bei Wādi 'Aḏēme aus dem Gebirge (Plate XII, B & XIII).

In zwei Stunden füllte sich der Wasserlauf so mit Wasser, daß ich an der Enge des Seil el-Heri 6 m schätzen konnte. Weiter unten wurde alles Geröll (bis zu 2 m Höhe) ausgefegt, eine Rampe an einer Biegung gebaut, dann meterhohe Blöcke auf die Ghōrebene vor Suēme gewälzt: 70 m breit und mehrere km lang mit abnehmender Geröllgröße. Diesen Blockstrom in aridem Klima konnte ich deutschen Geologen 1933 zeigen und er wird noch Jahrhunderte so offen liegen bleiben. Wäre die ganze Ghōrebene so im Alluvium entstanden, so müßte sie ebenso verworren aussehen. Nun ist sie aber ganz eben eingedeckt mit Lösssand; also ist sie älter als alluviale Großkatastrophen. Weitere Belege hierfür sind die Mittelerrassen, die oben auf der Hochebene beginnen und an der Geländeschwelle verschwinden. Die Biegung der anfangs nach NW gerichteten Wasserläufe nach Südwesten muß mit dem allmählichen spätdiluvialen Rückzug des Toten Meeres zusammen hängen. Wenn das Tote Meer sich aber zurückzog, können wir nicht von vermehrtem Regen



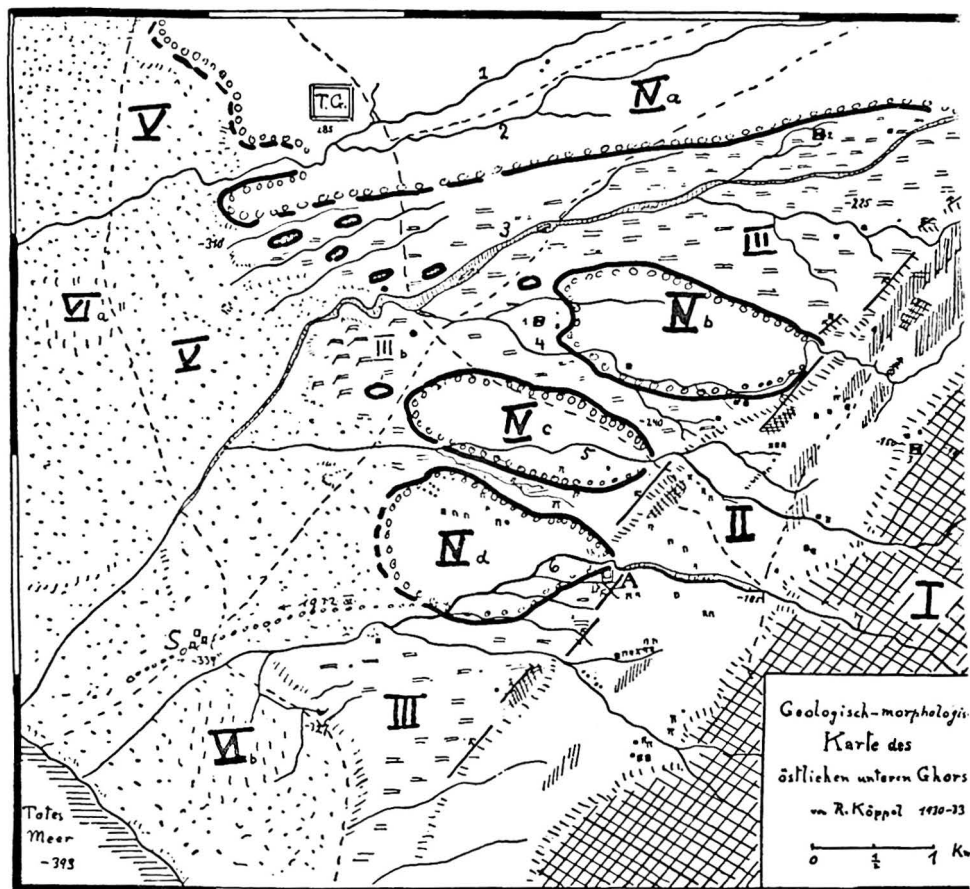
A DELTA BEI EL-GHUVÉR AM OSTRAND DES TOTEN MEERES
zeigt alluviales Ausmaß



B SUÈME — KATASTROPHE NOV. 1932. Unterlauf



SUÈDE — KATASTROPHE NOV. 1932. Mittellauf (in Karte Pl. XIV eingezeichnet)



KARTE UM GHASSÜL (= T.G.)

- I Steilanstieg des „nubischen Sandsteines.“
- II Vorstufe der Trias mit alten Uferterrassen des Toten Meeres (unterer Muschelkalk nach GEORG WAGNER)
- III Weißgraue Lisantone (vor Pluvial C trockengelegt.) III b. stark erodiert.
- IV Schwemmkegel des Pluvial C mit gelbem Sand und eingedeckten Geröllen.
- V Lockerer Sand westlich der Geländeschwelle epipluvial-postglacial).
- VI Alluvialer Sand mit Gebüsch und Kulturen.

Beachte die Verknüpfung der Schotterdeltas mit Gebirgsrand und Verlauf der Wadis sowie die Erosionsreste des ursprünglich zusammenhängenden Schwemmkegels. Dazwischen Mittelterrassen, die bei V aufhören.

- 1. W. Ghassül
- 2. W. Dscharafa
- 3. W. Tarafa
- 4. W. Siäla
- 5. W. Umlälije
- 6. W. 'Aqēme

- ☒ Nekropol
- π Dolmen
- Gräber

fall in humidem Klima reden. Der Höhepunkt der Niederschläge war Pluvial C und selbst dies war noch arides Klima, nur mit stärkeren und häufigeren Niederschlägen als heute.

Ein anschauliches Beispiel dessen, was das Wasser an Schotter seit 20000 v. Chr. verfrachten konnte, haben wir in dem großen Delta, mit dem das Wādi ed-Dib oder Mschabbet-el-Ghuwēr in das Tote Meer einmündet (Plate XII A.).

Das Einzugsgebiet ist sehr groß, fast bis Ma'in hinauf. Schon im Mitteldiluvium sind Deltaschotter am Gebirgsrand in Höhe von 200 m über dem Toten Meer angelagert worden. Diese wurden wieder durchsägt und dann, nach Pluvial C, das ganze unter 40 m (T. M.) befindliche kleinere Schotterdelta aufgebaut. Trotz dieser günstigen Bedingungen, trotzdem das Delta mir bei Faltbootfahrten Schwierigkeiten machte, ist die landschaftliche Wirkung gering. Zwar kann man von Ghassül das Delta gut sehen, aber keine Karte verzeichnet diesen Halbkreis der Küstenlinie. Wenn solch günstige Bedingungen nur so kleine Wirkung hervorgerufen haben, wenn dies im ariden Klima möglich war, dann ist kein Grund zur Annahme einer größeren Änderung des Klimas zu humidem beim Anblick der übrigen Schotterdeltas auf den Lisantonen. Seit 25 000 Jahren ist nur arides Klima herrschend.

Eine weitere Bestätigung sehen wir in den Grabstätten rings um Ghassül und am Gebirge. In unserem *Ghassülwerk* haben wir (S. 8) eine Karte veröffentlicht mit 30 Rundgräbern, 44 Dolmengräbern, 23 rechteckigen, kleineren Grabanlagen mit je 3–20 Gräbern und 3 großen Friedhöfen mit über 50 Einzelgräbern. Nr. 2 ist jener, an dem P. MALLON sich die Todeskrankheit zugezogen hat. Nr. 1 jener von STEKELIS 1935 veröffentlichte (*Les Monuments Megalithiques de Palestine*, Paris 1935). Nr. 3 ist einsam hoch im Gebirge. Bei diesem Reichtum kann man sehen, daß seit Anlage der Gräber keine größere Umformung der Täler stattgefunden hat. Nur wenige (gerade die von STEKELIS) sind fast eingedeckt bis auf den oberen Rand. Am Hang ist Anschwemmung leicht möglich. Die meisten Gräber aber sitzen mit ihren senkrecht gestellten Steinen so, daß sie weder von Anschwemmungen eingehüllt, noch von Abspülung zum Umfallen gebracht worden sind. Ein humides Klima hätte aber bald das eine, bald das andere hervorgerufen. Also war kein solches humides vorhanden, sondern das semiaride und aride von

heute. Selbst größere Niederschläge als heute sind nicht bewiesen, doch wären sie noch denkbar innerhalb des ariden Klimas.

Mögen weitere Studien und Beobachtungen die Klimafrage noch schärfer beleuchten.

EXCAVATIONS AT 'AUJA ḤAFĪR: THE GREEK INSCRIPTIONS

G. E. KIRK

(CAMBRIDGE)

'Auja Ḥafir, a frontier post on the Palestinian side of the Palestine-Egypt boundary, lies on the main road from Jerusalem to Egypt, 75 km. by road from Beersheba and 162 km. from Jerusalem. Its Byzantine remains have been visited and described by the following travellers:-

1870. E. H. PALMER and C. F. TYRWHITT DRAKE.

1896. Members of the Ecole d'Etudes Bibliques, Jerusalem.

1897 and 1902. ALOIS MUSIL.

1909. ELLSWORTH HUNTINGTON.

1914. C. LEONARD WOOLLEY and T. E. LAWRENCE,¹ from whom the following paragraph is quoted:

"El Auja, when visited by Palmer, was still a comparatively imposing ruin, and even in 1909 Mr. Huntington saw two parallel streets, 600 feet long or more, with the masonry bases of their colonnades still visible. But now the ruins are only less melancholy than those of Khalasa. An attempt has been made to establish there the seat of a Kaimmakamlık, and the ancient site has been ruthlessly plundered to provide material for the new buildings which an altered government has failed to complete. At the base of the old acropolis stand three stone houses, tile-roofed and untidily pretentious,² whose upper storeys are government offices and their ground floors starveling shops; a corrugated iron roof covers the low walls of a monastery-church that was destined to be a guest-house; on the hill-top the gaunt walls of the serai, standing window high, rise from a wilderness of stone heaps and broken tiles,

¹ PALMER, *The Desert of the Exodus* (1871), II 366 ff.; *Revue Biblique*, VI (1897), 613 ff.; MUSIL, *Arabia Petraea, II (Edom)*: 1 (1907), 205 f., 2 (1908), 88 ff.; HUNTINGTON, *Palestine and its Transformations* (1912), 121 ff.; WOOLLEY and LAWRENCE, *The Wilderness of Zin*: 1st ed., (Palestine Exploration Fund. Annual. 1914-1915), 117 ff.; 2nd ed. (1936), 136 ff.

² Our expedition found quarters in one of these.

more desolate than the ruins out of which they are built."

In 1914-1915 'Auja was the base for the projected German-Turkish attack on the Suez Canal. The serai was converted into a hospital, the railway was brought down from Beersheba and a station and other buildings erected. In these circumstances it is not surprising that the Byzantine remains suffered further damage, for which the German authorities scarcely deserve the severe condemnation of the R. P. F.-M. ABEL.³ A number of Greek inscriptions, found in the church at the north end of the citadel during the war, were published by the German chaplain, Father HEINRICH HAENSLER, and a fuller report on the site was made by TH. WIEGAND, the inscriptions being finally collected by A. ALT.⁴

A preliminary clearance was begun for the Colt Expedition of the British School of Archaeology in Jerusalem (Director, Mr. H. DUNSCOMBE COLT) by Mr. T. J. COLIN BALY in October 1935, and in December the entire expedition began work at 'Auja; excavation continued till April 1936, and will be brought to an end next season. The Byzantine fort and church at the north end and the church at the south end of the citadel have been cleared, and a beginning made of the excavation of buildings lying under the North Church which contain pottery dating back to the second century B.C. The discovery of some forty rolls of papyrus in the North and South Churches has already been reported in the Press in Palestine and England, and has been described by Mr. COLT in a broadcast talk. It must be said at once that the Greek inscriptions and graffiti, of which there are about 150 including fragments, throw no light on the history of the period such as is hoped for from the papyri. However, these prosaic monuments do provide some information about the inhabitants of this remote provincial town. There are also a few Arabic inscriptions which will be published separately.

³ *Revue Biblique*, XXIX (1920), 107 ff. Of the inscriptions from 'Auja published in this paper, all except No. 8 were published by HAENSLER in *Das Heilige Land*, loc. cit., and are included in ALT, *op. cit.* (see next note).

⁴ *Das Heilige Land*, 1916, 155 ff., 198 ff.; 1917, 12 ff.; *Wissenschaftliche Veröffentlichungen des Deutsch-Türkischen Denkmalschutz-Kommandos*: Heft 1. WIEGAND, *Sinai* (1920); Heft 2. ALT, *Die griechischen Inschriften der Palaestina Tertia* (1921), emendations and additions ZDPV, 1923, 63f. (ALT); RB, XXXVI (1927), 95 ff. (TONNEAU); *Biblica*, VIII (1927), 253 (MOUTERDE). The inscriptions published by ALT are here quoted with the prefix A.

Many of the Greek inscriptions are Christian stelae, dating from 359 to 525 of the era of Provincia Arabia⁵ which begun in 106

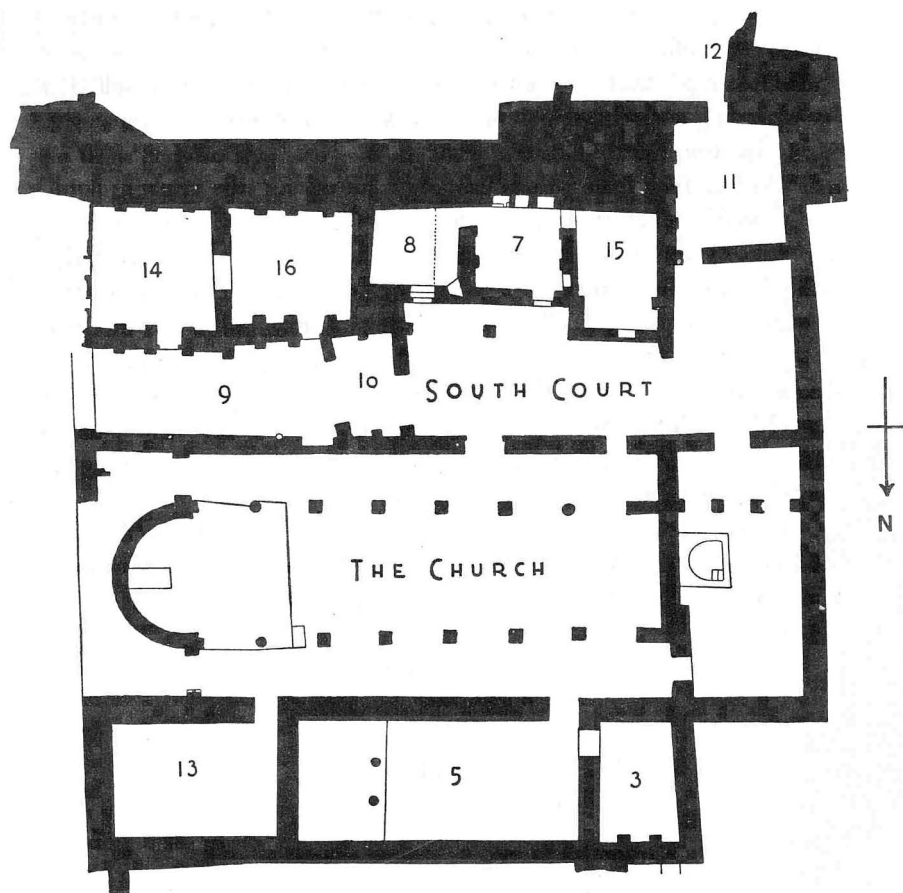


Fig. 1.

A.D., i.e. from 464 to 630 A.D.⁶ The two earliest belong to the presbyter *Θωάμος*^{6a} and the deacon Palladius, who died in 359 A.A.—464 A.D. and 370 A.A.—475 A.D. respectively, and were buried in Rooms 16 and 14 of the North Church complex (Fig. 1). These

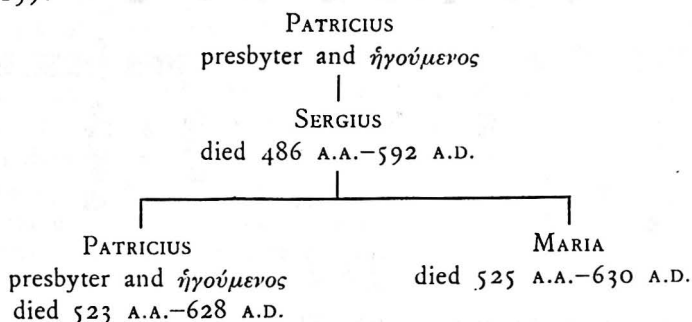
⁵ Hereafter abbreviated to A.A. for *anno Arabico*.

⁶ The Arabs conquered the South Country in 634 A.D., cf. ALT, *op. cit.*, 57 f.

^{6a} *Θωάμος*, Arab. *Tawām*, *توام*. Princeton University Archaeological Expedition to Syria, III. A. No. 204.

rooms, which are actually one room divided at some time by blocking one of the great arches, are called the *martyrium* and ἅγιος τόπος (holy place) in these two inscriptions. It is evident from the exclusively religious character of the graffiti from the other rooms of this group⁷ that the entire group was closely connected with the church; what its exact purpose was is not clear. The earliest burial in the North Church itself is A. No. 132 of 436 A.A.—541 A.D. No building inscription has been found for the church, which was probably dedicated to St. Sergius,⁸ since he is invoked by no less than eleven inscriptions and graffiti, four times in association with St. Stephen and once with St. George. The *Theotokos* is invoked on an abacus from the South Church, and a graffito from N. 7 contains the phrase εὐχή τῆς θεωτόκου Μαρίας (prayer of the Mother of God, Mary). The Holy Martyrs are invoked in a graffito from N. 7. The invocations are in the usual forms βοήθησον τοῦ δούλου σου, μνήσθητι (variously spelt) τοῦ δούλου σου (help thy servant, remember thy servant).

Of the personal names Sergius, Stephen, Patricius, Abraham (Ἀβραάμιος), and Victor (Βίκτωρ, never Οὐίκτηρ) are commonest.⁹ It is possible to reconstruct a short family-tree from A. Nos. 137 and 139:



⁷ Hereafter referred to as, e.g., N. 16.

⁸ Cf. H. C. BUTLER, *Early Churches in Syria* (1929), 253. The most favored saint among the Syrian Christians was their own Sergios... There are no less than a dozen easily found inscriptions from churches that were dedicated to Saint Sergios.

⁹ The name Patricius is found six times at 'Auja; the persons referred to perhaps all belonged to the same family (see below), since the name is not at all common in the prosopography of Palestine and Syria.

The *ἡγούμενος* George, son of Patricius, (A. No. 121) was probably a member of the same family, which apparently had a hereditary right to priestly office. Besides Christian names, there are a number of traditional Semitic names, e.g. Zonainos, Baracheas, Zebinas. Obathos is perhaps, like Obed-, a variant of Obodas, the Nabataean hero-king who was buried at Eboda, the modern 'Abda, a few hours' journey to the east.¹⁰

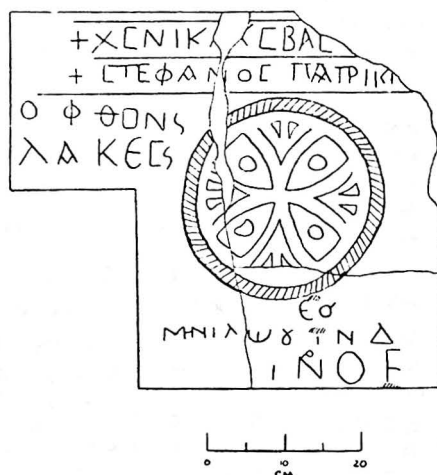


Fig. 2.

It is surely more than a coincidence that of 18 dated burials covering 166 years no fewer than four belong to the same month, Dios 436 (October-November 541). While the era of the dated inscriptions is regularly not stated,¹¹ one of these four stelae has *ἔτους τῆς πόλεως* (year of the city). The existence of the other three stelae of the same date makes it probable that the fourth also is

¹⁰ WOOLLEY and LAWRENCE, *op. cit.*, 1st ed., 95, 140 No. 15; 2nd ed., 111, 154 f. No. 15.

¹¹ The only other exception at 'Auja is ABEL, *loc. cit.*, No. 6 (= A. No. 131), where ABEL reads *κατὰ Ἀραβας*. It is difficult to get this reading from the only copy, SCHUMACHER's in ALT, *loc. cit.* The stone seems to have disappeared.

using the ordinary Arabian era.¹² It is not possible to use the year of the indiction as a check, as none is given.

The inscription on a stela in the form of a T-cross (Fig. 2) includes the words *O ΦΘΩΝΣ|ΛΑΚΕCS*.¹³ I am unable to explain the phrase, which is repeated on an inscription at 'Abda: *ΟΑΦΘΟ|ΝΩΝ|ΛΑΚΗCΙΟ*?¹⁴

One inscription stands in a class by itself. It is a letter square, 23 letters square, so constructed as to read *ὁ Χριστὸς συνοδεύσων ἡμᾶς* (Christ will be our guide) by any path from the centre to the corners. We have four fragments, rather more than half of the whole (Fig. 3).

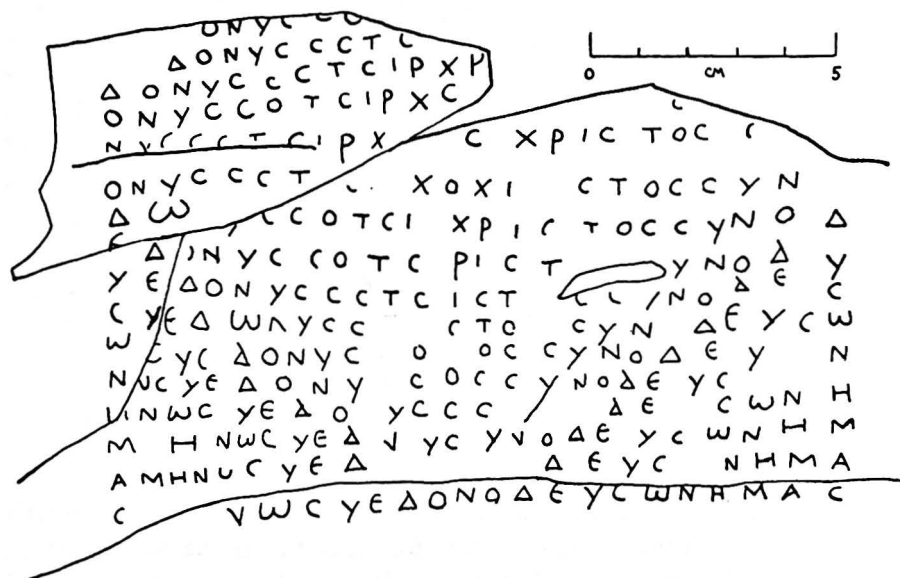


Fig. 3.

The stelae are generally good yellow limestone; the wall-blocks on which most of the graffiti are written the soft and flaky local chalk. We have a few fragments of marble inscriptions from

¹² cf. WOOLLEY and LAWRENCE, *op. cit.*, 1st ed., 143 f. No. 34; 2nd. ed., 158 f. No. 34 (= A. No. 149), where the "era of Elusa" (modern Khalaṣa) is in all probability identical with the Arabian era.

¹³ S is the regular sign of abbreviation.

¹⁴ *Revue Biblique*, N. S. II (1905), 78 f.; but contrast ALT's reading (*op. cit.*, No. 147c); βοήθεισ(ν) ἀφ' ὁδῶν φ[υ]λακῆς.

the two churches and of inscriptions painted on plaster, and a fragment of a mosaic inscription is *in situ* in the floor of the North Church baptistery. Spelling is marked by the usual iotacism, and by the development of the stress accent and the consequent failure to distinguish between long and short E and O; the most striking example is *EAHEΣΩN* for *ἐλέησον*. *βοηθῶ* is always constructed with the genitive, and Presbyter Thoamos's stela has *ἐν τούτου τοῦ ἁγίου μαρτυρίου*.¹⁵ Lettering is rarely careful, often slipshod.

¹⁵ J. HUMBERT, *La disparition du datif grec*, (1930), shows that the true dative remained in general use longer than the locative and instrumental datives. The genitive with *ἐν* is not found elsewhere, as far as I know, and seems to be an error of the stone-cutter.

HESEKIEL KAP. 16 ALS GESCHICHTSQUELLE

OTTO EISSFELDT

(HALLE/SAALE)

Im *Palästina-Jahrbuch* 27 (1931), S. 58–66 ist davon die Rede gewesen, daß die Worte Jahwes in Hes. 16²⁷: „Da streckte ich meine Hand gegen dich aus und verringerte deinen Anteil und gab dich preis der Gier deiner Feindinnen, der Töchter der Philister“ die 701 v. Chr. von Sanherib vorgenommene Abtrennung judäischer Gebietsteile und ihre Zuweisung an die ihm treu gebliebenen Philisterstädte im Auge haben, und angedeutet, daß derartige Angaben wohl einem Propheten vom Anfang des 6. Jahrhunderts v. Chr., nicht aber einem nachexilischen Redaktor zuzutrauen seien, daß also die neue Deutung von v. 27 das Vertrauen zur Echtheit wenigstens des Hauptbestandes von Kap. 16 und darüber hinaus des Hesekiel-Buches überhaupt festige. Das ist nun aber keineswegs der einzige Punkt, in dem sich Kap. 16 als Niederschlag zuverlässiger geschichtlicher Erinnerung ausweist, vielmehr stellt es auch sonst eine wertvolle Geschichtsquelle dar. An einer weiteren — diesmal nicht profanhistorischen, sondern religions- oder kulturgeschichtlichen — Einzelheit soll das im folgenden dargetan werden.

Daß in der bildhaften Schilderung Jerusalems oder Judas als einer Dirne, wie sie Kap. 16 bietet, v. 23: „Und es geschah nach aller deiner Bosheit — wehe, wehe dir! — Ausspruch Jahwes . . .“ einen Einschnitt bedeutet, daß also das v. 24–35 beschriebene hurerische Treiben eine andere Sache ausdrücken will als v. 15–22, liegt auf der Hand und ist allgemein anerkannt. R. SMEND gibt dafür diese Erklärung: „v. 23–25. Am Allerschlimmsten wurde es endlich unter und seit Manasse, wo heidnische Culte in solcher Menge eindringen, daß fast an jeder Straßenecke ein Götzenaltar stand. Wirklich kamen damals zum ersten Mal eigentlich heidnische Culte in größerem Maßstab auf, und diese ‚Sünde Manasses‘, die auch nach Jeremia Jerusalems Untergang wesentlich verschuldete, erklärt

das „Wehe, Wehe!“ hinreichend“.¹ Ähnlich A. BERTHOLET: „Nach diesem kleinen Ruhepunkt v. 22, wo Jerusalems Bosheit erst recht in grelles Licht trat, geht es unaufhaltsam weiter mit Vorwürfen noch schlimmerer Art. Man begnügt sich nicht mit den inländischen abgöttischen Kulte, man ergibt sich selbst allerlei auswärtigen, ägyptischen (v. 23–27), assyrischen (v. 28), chaldäischen (v. 29ff.), die unheilvolle Frucht der Verbindungen mit Fremden“.² Etwas anders R. KRAETZSCHMAR: „23 setzt die Strafpredigt mit neuer Kraft ein. Waren vorher mehr die ländlichen Kulte ins Auge gefaßt, so jetzt die städtischen, insbesondere hauptstädtischen“.³ Noch wieder anders J. HERRMANN: „Weiterhin scheint aber nicht mehr von kultischen Dingen, sondern von der Ausländerei in Kultur und Politik die Rede zu sein“.⁴

Der Unterschied zwischen v. 15–22 und v. 23–35 läßt sich aber noch viel schärfer erfassen. In v. 15–22, wo anerkanntermaßen der mit allerlei unzüchtigen Bräuchen verbundene Kultus auf den von den Kanaanäern übernommenen Höhen gebrandmarkt wird, ist *זנה* „huren“ deutlich doppelsinnig. Einmal bedeutet es, bildlich gebraucht, den Abfall zu anderen Göttern, sodann aber, nun ganz wirklich gemeint, die im Kultus dieser anderen Götter auf ihren „Höhen“ übliche sakrale Prostitution. Hes. 16^{15–22} gleicht in dieser Hinsicht Hos. 2^{4–15}, wie überhaupt zwischen den beiden Abschnitten ganz enge Beziehungen bestehen⁵ und man wohl annehmen muß, daß Hesekiel hier von Hosea abhängig ist. Fraglich kann nur die genaue Bedeutung der „gefleckten Höhen“ (*במות טְרוֹמֹת*) in v. 16 sein. Die einen⁶ erklären sie unter Hinweis auf Hes. 23⁴; Ex. 33⁷; Hos. 9⁶; 2. Reg. 23⁷ als „Höhenzelte“, die anderen⁷ denken unter Heranziehung von Am. 2⁸; Jes. 57⁷ an Decken, die auf den Höhen ausgebreitet werden, um als Unterlage für das unzüchtige Treiben (*על* „auf“) zu dienen. Genauere Beobachtung des Aufbaus von v. 16–21 ermöglicht — so scheint es — eine sichere Entscheidung, und zwar

¹ Kommentar zu Hesekiel, 1880, S. 95 f. ² Kommentar zu Hesekiel, 1897, S. 82 f. ³ Kommentar zu Hesekiel, 1900, S. 150.

⁴ Kommentar zu Hesekiel, 1924, S. 100.

⁵ Cf. Hes. 16^{10–13} mit Hos. 2^{10–11}, Hes. 16¹⁷ mit Hos. 2¹⁰. — Zum doppel-sinnigen *זנה* Hesekiels cf. auch Hos. 3⁸; 4¹⁸ f. und zur *במה* von Hes. 16¹⁶ etwa Hos. 10⁸; Am. 7⁹.

⁶ SMEND, a. a. O. und — freilich unter Nennung der anderen Möglichkeit — BERTHOLET, a. a. O. ⁷ KRAETZSCHMAR, a. a. O.

zugunsten der zweiten von den beiden eben genannten Möglichkeiten. Die Verse 16, 17, 18 und 19, 20 und 21 zählen — mit wuchtig wiederholter Voranstellung von וַתִּקְחֵי „Und du nahmst“ — die einzelnen Geschenke auf, die Jerusalem von Jahwe empfangen und zu abgöttisch-unzüchtigen Zwecken mißbraucht hat. Aus dem Gold und Silber sind Götterbilder oder Göttersymbole verfertigt (v. 17) und denen dann die Kleider angezogen (18a), die Spezereien und Lebensmittel dargebracht (18b–19) und die Kinder geopfert (v. 20–21). Wie hier jedesmal von einer dem Gegenstand entsprechenden, aber der Absicht des Gebers entgegengesetzten Verwendung der einzelnen Geschenke die Rede ist, so muß das auch bei dem ersten Geschenk, bei den in v. 16 genannten Decken, der Fall sein. Eine allgemeine Aussage wie die, daß aus den Decken „Höhenzelte“ gemacht worden seien und daß sich in oder vor ihnen der abgöttische Kultus abgespielt hätte, ist ganz und gar nicht am Platze. Vielmehr muß hier die Verwendung der Decken zu Unterlagen für das unzüchtige Treiben gemeint sein, „du hurtest auf ihnen“ also nach Am. 2⁸ von der Ausbreitung der Decken zu sakraler Prostitution verstanden werden. בָּמָה „Höhe“ ist hier demnach nicht wie sonst allgemeiner Ausdruck für Höhen-Heiligtum, sondern, etwa mit „Hoch-Lager“ wiederzugeben, Bezeichnung für das der kultischen Begattung dienende Lager, also dasselbe, was Jes. 57⁷⁻⁸ geradezu „Bett“ (מִשְׁכָּב) heißt, wie denn 57⁷ gesagt wird, daß dies Bett auf hohem und erhabenem Berge aufgestellt sei.¹ בָּמֹת וְזָנוֹת sind nach alledem deutlich die aus Decken gefertigten bunten Polster.

So ist in v. 15–22 nicht nur „Huren“ (זֹנֵה) doppelsinnig gebraucht, sondern auch „Höhe“ (בָּמָה), indem beide Ausdrücke einmal den Abfall von Jahwe im Auge haben, dann aber ganz prägnant Art und Ort des Kultus kennzeichnen, dem man sich nun ergibt. Man darf von vornherein annehmen, daß dem auch in v. 23–35 so ist, und daß, wie זֹנֵה, so auch זָנָה und זָנָה, auf denen nach v. 24, 25, 31 das זֹנֵה vor sich geht, ebenfalls im doppelten Sinne verwendet sind: Dieser Erwartung steht auch die ja am Tage liegende Tatsache nicht im Wege, daß — anders als in v. 15–22, wo höchstens

¹ Jes. 57⁷⁻⁸ darf auch darum zur Erklärung von Hes. 16¹⁶⁻¹⁷ herangezogen werden, weil dort wie hier erst vom kultischen Lager, dann von männlichen Gottesbildern die Rede ist; übrigens ist Jes. 57⁷⁻⁸ wohl von Hes. 16¹⁶⁻¹⁷ abhängig.

das „und gossesst deine Hurerei aus auf jeden Vorübergehenden“ in v. 15 so verstanden werden könnte — in v. 23–35 wenigstens hauptsächlich von politischen Verbindungen Jerusalems mit den Nachbarstaaten, nicht wie dort vorab vom Abfall zu fremden Göttern die Rede ist. Denn politische Verbindungen brachten in der Antike auch immer kultische Beziehungen mit sich, und zwar so, daß der abhängige Teil, wie ihn Juda Ägypten und Assur-Babel gegenüber darstellte, dem Kultus der überlegenen Macht Eingang bei sich gestatten mußte. Man braucht, um das bestätigt zu sehen, nur auf Manasses assurfremdliche Politik einerseits (2. Reg. 21¹⁻¹⁷) und auf Josias national-religiöse Reform anderseits (2. Reg. 22–23) zu blicken. So ist denn die überwiegende Mehrheit der Hesekiel-Erklärer auch der Meinung, daß 16²³⁻³⁵ sich nicht nur auf politische Bündnisse bezieht, sondern auch auf kultischen Synkretismus, und selbst HERRMANN, nach dem von v. 23 ab wenigstens scheinbar nicht mehr von kultischen Dingen die Rede ist, gesteht zu, daß neben der Ausländerei in der Politik auch die in der Kultur getroffen werden soll.

Die beiden wohl synonymen Ausdrücke גַּב und רִמָּה¹ müssen also, ebenso wie בִּמְהָ in v. 16, Bezeichnungen für einen Ort oder einen Gegenstand darstellen, auf dem die kultische Begattung vorgenommen wurde. Die übliche Erklärung der Worte als „Buckel, d. i. kleine Altäre, die öffentlich an den Straßenecken und Wegen standen und“ — weil der Göttin der Fruchtbarkeit, der „Astarte“, geweiht, — „die Unzucht stark beförderten“² oder als „künstliche Aufschüttungen oder selbst gemauerte Unterlagen, auf denen die Altäre wahrscheinlich standen, und vielleicht auch diese selbst“³ genügt kaum, da sie wohl die Möglichkeit, daß die Altäre Göttinnen der Fruchtbarkeit geweiht waren und so mittelbar die Unzucht

¹ Die gelegentlich vorgeschlagene Änderung von רִמָּה in בִּמְהָ ist ganz unbegründet. Auch 1. Sam. 22⁶, wo רִמָּה wie hier in Hes. 16 als Appellativum gebraucht ist, wird man es stehen lassen und wie Hes. 16 als höckerartiges Gebilde, hier genauer als „Thron“ auffassen müssen. Die Situation von 1. Sam. 22⁶ ist ähnlich wie die von 1. Reg. 22¹⁰, nur daß dort der „Thron“ primitiver zu sein scheint als hier. Die freilich auffallende Tatsache, daß יָשָׁב „sitzen“ hier nicht wie sonst gewöhnlich mit שָׁב, sondern mit אָב konstruiert wird, erklärt sich vielleicht daraus, daß שָׁב gleich darauf im Sinne von „über“, „vor“ gebraucht ist.

² H. EWALD, *Die Propheten des Alten Bundes* II, 1841, S. 268.

³ SMEND, *a. a. O.*, S. 96; ähnlich BERTHOLET, *a. a. O.*, S. 83 und KRAETZSCHMAR, *a. a. O.*, S. 150.

förderten, erwägt, aber nicht die Forderung erfüllt, daß sie ganz unmittelbar Stätten oder Werkzeuge kultischer Prostitution gewesen sein müssen. Andererseits genügt auch die von HERRMANN¹ und anderen erneuerte Auffassung der alten Übersetzungen nicht, von denen גב und רקה mit „Hurenhaus“, „Hurenstand“, „Hurengewölbe“, „Bordell“ oder ähnlich wiedergegeben werden. Denn dann wäre einfach von profaner Unzucht die Rede, während der Zusammenhang es doch wahrscheinlich macht, daß kultisches Treiben gemeint ist. Zudem können גב und רקה wohl „Buckel“, „Erhöhung“, „Altar“ bedeuten, aber schwerlich „Gewölbe“ oder „Haus“.

Die Richtung, in der die genauere Bedeutung der beiden Worte gesucht werden muß, wird nun durch zwei Merkmale bestimmt. Zunächst handelt es sich um einen gemauerten Gegenstand. Denn es ist offenbar nicht zufällig, daß im Gegensatz zu den בָּמוֹת, von denen nur das allgemeine עֲשֶׂה „machen“ ausgesagt wird (v. 16), die Herstellung von גב und רקה in v. 24, 25, 31 als ein „bauen“ (בָּנָה) beschrieben wird.² Für die Zerstörung von גב und רקה werden denn in v. 39 auch die Verba הָרַס „einreißen“ und נָתַן „niederreißen“ gebraucht, die mindestens vornehmlich die Vernichtung von Mauerwerken bezeichnen. Sodann macht das, was eingangs über den Unterschied von v. 15–22 und v. 23–35 gesagt worden ist, es sehr wahrscheinlich, daß גב und רקה von auswärts eingeführte Gegenstände sind. Da in v. 26 zunächst von Hurerei mit den Ägyptern die Rede ist und — nach der deswegen über Juda verhängten Strafe v. 27 — erst in v. 28, 29 der Umgang mit Assyriern und Chaldäern erwähnt wird, könnte man geneigt sein, an Import aus Ägypten zu denken. Aber notwendig ist das keineswegs. So scharf Hesekiel zwischen dem den Kanaanäern entlehnten Kultus einerseits und dem von auswärts eingeströmten andererseits unterscheidet, so wenig ist eine Verschiedenheit in der Art des Umgangs mit Ägyptern, Assyriern und Chaldäern kenntlich gemacht. Worauf es Hesekiel ankommt, ist dies, daß es sich um eine aus der Fremde entlehnte Sitte handelt; woher sie gekommen ist, bleibt ihm dem gegenüber gleichgültig. Nun wissen wir von kultischer Prostitution bei den Ägyptern wenig oder nichts, und Herodot II,64 erzählt

¹ a. a. O., S. 93.

² Das in v. 24, 31 dem בָּנָה hinzugefügte עֲשֶׂה ist entweder damit synonym oder drückt die weitere Ausstattung von גב und רקה aus.

von ihnen gar, daß bei ihnen kultische Begattung unerlaubt gewesen sei. Bei Assyriern und Babyloniern hingegen war nach Ausweis der klassischen Schriftsteller¹ wie der dem Boden entrissenen Dokumente² sakrale Prostitution nur allzusehr im Schwange. So liegt es doch näher, bei der auf גַּב und קִרְיָה geübten kultischen Unzucht an Einfluß aus Assur-Babel zu denken, um so mehr, als — aufs Ganze gesehen — auf das Juda des ausgehenden 8., d:s 7. und des beginnenden 6. Jahrhunderts assyrisch-babylonische Kulte offenbar stärker eingewirkt haben als ägyptische.

Diese aus immanenter Interpretation von Hes. 16 für die Auffassung von גַּב und קִרְיָה und das mit ihnen verbundene קִרְיָה gefolgerten Postulate finden nun, wie es scheint, ihre Bestätigung durch einige bei den deutschen Ausgrabungen in Assur gemachten und unlängst von WALTER ANDRAE³ veröffentlichten Funde. Auf Bleireliefs und einer Bleiplakette sind nämlich Begattungsszenen dargestellt, bei denen der Mann vor dem auf einem wohl 80 cm hoch und 40 cm breit und tief gedachten Ziegelstein-Sockel liegenden und die Beine spreizenden Weibe steht. „Diese Gruppe kleiner, zum Teil höchst sorgfältig ausgeführter Reliefbildwerke ist durch Fundorte auf der Ruine des Alten Palastes und in Kar-Tukulti-Ninurta . . . mit der Zeit um Tukulti-Ninurta I.⁴ verbunden. Mit dem Tempel der Aschuritu oder der Dinitu gibt es keinen örtlichen Zusammenhang, es sei denn, man ließe die nahe nachbarliche Lage gelten. Daß sie nur in Verbindung mit den erotisch-orgiastischen Kulturen einer weiblichen Gottheit zu denken sind, scheint mir außer allem Zweifel zu sein. Sie gehören nicht ins Leben des Alltags, sie waren als Bilder dem Kult vorbehalten . . . Die Szenen und Stellungen sprechen für sich selbst. An den beiden Stücken Tafel 45 a und b, zu denen sich die lineare Zeichnung der großen Bleischeibe Ass. 9240, Tafel 46 gesellt, ist man geneigt, in dem schmalen Ziegelpfeiler, der durch Fugenteilung bezeichnet ist, einen einfachen ‚Altar‘ zu sehen, wie wir ihn zwar nicht aus den Ishtar-Tempeln in Assur, aber aus babylonischen Tempeln . . . kennen. Auf diesen

¹ HERODOT, I, 199.

² B. MEISSNER, *Babylonien und Assyrien* II, 1925, S. 68 f. 435 f.

³ *Die jüngeren Ishtar-Tempel in Assur* (58. Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft), 1935, S. 103–106; Taf. 45. 46.

⁴ Mitte des 13. Jahrhunderts v. Chr.

Altären opfern sich die Tempelfrauen im Dienste der Göttin“.¹

Eine treffendere Veranschaulichung der Worte Hesekiels in 16²³⁻³⁵, als sie jene Darstellungen geben, kann man sich kaum denken. Wie seit dem Ausgang des 8. Jahrhunderts v. Chr. andere assyrisch-babylonische Kulte — der des Schamasch (2. Reg. 23¹¹) und der des Tammus (Hes. 8¹⁴) etwa — nach Juda eingedrungen sind, so ist das auch mit dem der Ishtar geschehen, und wie die anderen Götter ihre besonderen Kultgegenstände und Kultbräuche mitgebracht haben — Schamasch seine Rosse und Wagen, Tammus seine Traueritten —, so hat das auch Ishtar getan. Zu den Bräuchen ihres Kultes gehörte die Hingabe der Keuschheit. Dergleichen hatte das von der kanaänischen Religion beeinflusste Israel auch schon früher geübt, aber die jetzt aus Assur einströmenden Sitten waren eben doch besonderer Art und sind von den älteren Bräuchen immer unterschieden worden. Das zeigt sich, wenn G. BOSTRÖM² mit seiner Auffassung von Prov. 7¹⁴ ff. als Einlösung eines Gelübdes auf Preisgabe der Keuschheit recht hat, auch noch darin, daß es „fremde“ (זָנָה), „ausländische“ (נְכָרִיָּה) Frauen sind, die der Liebesgöttin zu Ehren solche Gelübde auf sich nehmen und zu ihrer Erfüllung israelitische Männer zu verführen trachten (Prov. 2¹⁶; 5²⁰; 7⁵ ff). Von den älteren kanaänischen Bräuchen hob sich der aus Assur eingedrungene insbesondere dadurch ab, daß hier die kultische Preisgabe auf Altarsockeln vorgenommen wurde, und Hesekiel glaubt das mit dem Ende des 8. Jahrhunderts v. Chr. beginnende Werben Judas um die Gunst der benachbarten Großstaaten und ihrer Götter nicht anschaulicher darstellen und brandmarken zu können, als wenn er es mit einem dieser Kultsitten entlehnten Bilde beschreibt. Das verstehen — dessen ist er gewiß — seine Volksgenossen, die jene Bräuche kennen und wohl gar mitgemacht haben, ohne weiteres.

¹ a. a. O., S. 103.

² *Proverbienstudien*. Die Weisheit und das fremde Weib in Spr. 1–9 (*Lunds Univ. Årsskrift*. N. F., Avd. 1., Bd. 30, Nr. 3), 1935.

LE GISEMENT GHASSOULIEN DE TELL-EŞ-ŞŌMAʿ.

R. P. JOSEPH NAŞRALLEH

(JERUSALEM)

I. LE SITE.¹

A l'est du village de Chaʿfāṭ, la Maspha biblique de certains auteurs, pour d'autres la Gabaʿa de Benjamin,² ou même Nob,³ se dresse une colline que les gens du pays appellent *Tell-eş-Şōmaʿ*,⁴ "*Waʿar-eş-Şōmaʿa*", "*Qoubbat-eş-Şōmaʿa*", "*Khirbet-eş-Şōmaʿa*", ou même "*Karm-el-Ḥarīqa*".⁵ Ses pentes occidentales et méridionales sont douces; les petites maisons des paysans de Chaʿfāṭ, les gagnent de plus en plus. Par contre, le versant nord et nord-est, est raide et couvert de gros blocs de rochers.

Les quelques ruines qui couronnent le tell, ont été signalées par les Guides de Palestine: "grande citerne, des tombeaux taillés dans le roc, . . . et quelques vestiges de constructions d'apparence moderne".⁶ Ce n'est donc pas au sommet, que réside l'intérêt archéologique du site; il faut le chercher ailleurs, sur les pentes. Le versant occidental nous a fourni quelques silex taillés pouvant se rattacher à la culture tahounienne;⁷ sur les pentes orientales s'étend une belle station que nous avons attribuée provisoirement

¹ Nous sommes heureux d'exprimer notre reconnaissance à Mr. M. RENÉ NEUVILLE; il a bien voulu revoir le texte, y faire quelques corrections et mettre au point les dessins.

² *Dictionnaire de la Bible*, t. IV, voc. *Maspha*, col. 846; et t. III, voc. *Gabaʿa*, col. 8 et 9. ³ *Palestine et Syrie* par K. BAEDER, Leipzig, 1893, p. 214.

⁴ Corruption de "*Tell-eş-Şōmaʿa*", "colline de la cellule".

⁵ Certains Guides de Terre Sainte, comme celui du P. BARNABÉ MEISTERMANN, réservent ce dernier nom aux ruines qui se trouvent dans le village même de Chaʿfāṭ (*Guide de Terre Sainte*, 2^e édit., p. 448); les paysans l'appliquent aussi au tell en question. ⁶ B. MEISTERMANN, *loc. cit.*

⁷ Sur cette industrie cf. R. NEUVILLE, "Notes de préhistoire Palestinienne. — III. Les Industries lithiques de l'Age du Bronze", *JPOS*, vol. X, n. 4, p. 210—214; cf. aussi A. MALLON, "Les dernières phases de l'âge de la pierre et les premiers temps historiques en Palestine" dans *Biblica*, 1933, fasc. 2, p. 201—202.

au Mésolithique.¹ Le versant sud offre plus d'intérêt encore. A une trentaine de mètres du sommet on aperçoit sur un rocher, à même le sol, une cupule, dans laquelle se déversent trois rigoles venant de l'ouest. Plus bas encore, une grande jetée coupe le tell à sa base; en son centre se trouve un monument mégalithique.² A partir de la jetée, s'étendent, vers le sud et le sud-est, des champs aménagés pour la culture. C'est là que sont éparpillés les débris de l'activité humaine. Les murs de clôture, nous ont fourni la plupart des instruments du gros outillage: moulins et broyeurs; le petit outillage est dispersé dans les champs; peu d'instruments ont été recueillis au delà du mégalithe.

Il y a une trentaine d'années que la station de Tell-eş-Şōma' a été découverte par un Père Professeur du Séminaire de Sainte-Anne. Le R. P. L. FÉDERLIN la signala au R. P. H. VINCENT; ce dernier la porta sur le "diagramme des stations aux divers âges de la pierre en Palestine", publié dans "*Canaan*."³ Mais jusqu'à ces dernières années, elle n'avait jamais été méthodiquement explorée; on se contentait d'y recueillir les plus belles pièces: haches et herminettes, négligeant le reste de l'outillage.

Sur l'indication du P. MULLER, des Pères Blancs, M. R. NEUVILLE a consacré au gisement quelques lignes, dans son article "Additions à la liste des stations préhistoriques de Palestine et Transjordanie".⁴ Depuis lors, une série de visites à la station nous ont permis de recueillir de nouveaux documents archéologiques. Nous avons consigné sommairement ces données dans notre article: "Nouvelles additions à la liste des stations préhistoriques de Palestine et Transjordanie".⁵ Nous voudrions faire connaître davantage ce

¹ J. NAŞRALLEH, "Nouvelles additions à la liste des stations préhistoriques de Palestine et Transjordanie", *JPOS*, 1934, p. 55.

² Sur la cupule et le monument mégalithique, cf. *infra*.

³ "*Canaan d'après l'exploration récente*", 1907, p. 394. Nous devons ce détail à l'obligeance du R. P. VINCENT. ⁴ *JPOS*, 1929, p. 120.

⁵ *JPOS*, 1934, p. 55. — L'article était déjà rédigé lorsque parut le compte-rendu des fouilles de Teleilat Ghassoul: "*Teleilat Ghassul I. Compte-rendu des fouilles de l'Institut Biblique Pontifical 1929-1932*", par A. MALLON, R. KOEPEL, R. NEUVILLE, Rome, 1934. Aussi n'avons-nous pu utiliser l'ouvrage que dans de rares notes.

La station de Tell-eş-Şōma' y est mentionnée à deux reprises, p. 64 et surtout p. 157.

riche gisement qui a fourni à notre collection plus de trois milles pièces, sans compter les nombreux tessons de poterie et les instruments en basalte et en calcaire.

Comme nous sommes devant une station de surface, la possibilité de mélanges est à envisager. Et en effet, Tell-eş-Şōmaʿ a livré une série de pièces qui n'ont rien de Ghassoulien,¹ mais qui appartiennent soit au Paléolithique, soit au Bronze I initial et final. Cependant ce contingent est relativement faible, en comparaison de ce qu'offrent certaines stations palestiniennes, telle que celle du Scopus, voisine de la nôtre. Nous consacrons plus loin, quelques lignes à ces pièces; pour le moment nous ne nous occupons que de l'industrie ghassoulienne.

II. L'INDUSTRIE.

Le gisement de Tell-eş-Şōmaʿ est une station atelier, c'est-à-dire, que la tribu qui l'occupait y avait son habitat, comme le prouvent les tessons de poterie, les moulins et les broyeurs; et son atelier de fabrication, comme en témoignent le grand nombre de percuteurs, de nucléi, et les milliers d'éclats résultant de la taille.

La matière première employée dans l'outillage est surtout le silex, dans toute ses variétés. Quelques pièces, pics, hachettes et herminettes sont en dolomite et en une autre variété de calcaire. Le calcaire entre aussi dans la composition du mobilier: mortiers, moulins et vases; la plupart de ces dernières pièces cependant, sont en basalte. Deux polissoirs sont en quartzite.²

De nombreux instruments montrent une patine qui atteint parfois 8 mm d'épaisseur.

En plus des instruments en pierre, nous avons recueilli un bon nombre de tessons de poterie; ils fourniront matière à une note du regretté P. MALLON.

Quant à l'outillage en os, nous n'en avons trouvé aucun spécimen. Rien d'étonnant à cela: les multiples agents de destruction ont dû le détériorer et en venir à bout.³

¹ Sur cette industrie cf. *JPOS.*, 1930, *art. cit.*, p. 202-205.

² Nous devons ces renseignements d'ordre minéralogique à l'obligeance du Dr. L. PICARD, de l'Université Hébraïque de Jérusalem. Qu'il veuille bien trouver ici l'expression de notre gratitude.

³ On sait que l'industrie osseuse est très développée dans la culture ghassoulienne. Pour Oumm Qaṭafa cf. *Syria*, 1931: "Les débuts de l'âge des

La tribu de Tell-eş-Şōma^c connaissait-elle le métal ? Selon toute vraisemblance elle devait le connaître. Moins isolés que leurs contemporains du Ouadi Kharitoun, et plus rapprochés qu'eux des grands centres, les habitants du tell ont dû l'employer comme eux.¹ En tout cas, ici encore, le résultat de nos recherches est négatif. D'ailleurs en Palestine—comme en Europe et partout ailleurs—le Br I initial ne possède que de rares objets en métal.² A cette rareté primitive, ajoutons cette judicieuse remarque du R.P. VINCENT: "plus précieux que l'outillage en pierre celui du cuivre a dû être pillé aux époques suivantes; plus fragile d'ailleurs, il a moins résisté aux multiples agents de destruction".³ Cela est vrai, surtout pour les stations de surface.

A. INSTRUMENTS EN PIERRE.

1) PETIT ET MOYEN OUTILLAGE.

HACHES: La hache, soit en silex, soit en d'autres roches, est relativement rare à Teleilāt Ghassoul; M. NEUVILLE va même jusqu'à généraliser, et dire que "la hachette est extrêmement rare"⁴ dans la

métaux dans les Grottes du désert de Judée" par R. NEUVILLE et A. MALLON, p. 32. Pour Teleilāt Ghassoul dont "l'outillage en os est des plus remarquables", cf. "La civilisation de III^e millénaire dans la Vallée du Jourdain. Les fouilles de Teleilāt Ghassoul" par le R. P. ALEXIS MALLON, in *Syria*, 1932, p. 339-340.

¹ L'outillage "énéolithique" d'Oumm Qaṭafa comprenait en effet, une bague qui "ne manquait pas d'élégance" (*Syria*, 1931, art. cit., p. 32, fig. 2, 3). Les objets en métal exhumés des ruines de Teleilāt Ghassoul sont plus abondants (il est vrai que ces pièces furent recueillies au niveau IV), cf. *Syria*, 1932, art. cit., p. 338, et *Biblica*, 1933: "Les dernières phases de l'âge de la pierre et les premiers temps historiques en Palestine" par A. MALLON, p. 208-209; "Teleilāt Ghassul I...", p. 77.

² "Bien que connu, le bronze, dit le Dr. ALBRIGHT, fut peu utilisé jusqu'au second millénaire" (*BASOR*, 48, p. 12, (cité par le P. MALLON in *Biblica*, 1933, art. cit. p. 209, note 2).

G. GOURY le fait remarquer pour l'Europe: "Les objets en métal du Chalcolithique sont très rares.... Objets de grande valeur et partant de grand luxe, les instruments en cuivre sont donc rares" (*L'Homme des Cités lacustres*, p. 301-302).

³ *Revue Biblique*, 1930, p. 443.

⁴ *JPOS*, 1930, p. 204. Cf. aussi R. NEUVILLE: "L'industrie lithique de Teleilāt Ghassoul", dans *Bulletins et Memoires de la Societe d'Anthropologie de Paris*, 1931, p. 4, note 1.

culture ghassoulienne. A Tell-eş-Şōma' cet instrument prédomine encore au même titre que l'herminette.

La hache est abondante dans des stations où l'industrie de Teleilāt-Ghassoul n'a pas été trouvée dans toute sa variété, par exemple, à Etam. Ce serait, peut-être, un indice pour reculer l'âge de notre gisement, et le mettre comme point de transition entre la civilisation typique du Br. I initial, telle que nous la donnent Teleilāt Ghassoul et Oumm Qāfa, et la culture ghassoulienne à l'état d'ébauche, d'Etam et de quelques autres stations de surface.

La hachette de Tell-eş-Şōma' se présente sous plusieurs formes:

1. Taillant et talon, avec deux variétés: certaines pièces ont les bords parallèles, leur taillant n'est pas plus large que le talon; d'autres ont les bords convergents vers le talon et partant ont un tranchant évasé (Pl. XVII, Fig. 1). Ce talon garde souvent son cortex naturel, cependant des pièces l'ont fortement martelé.

2. Deux taillants, ou mieux, pour ne pas préjuger de leur emploi, deux extrémités travaillées en forme de taillant; généralement l'une est plus large que l'autre.

3. Un taillant et une pointe mousse. Les bords de la pièce convergent régulièrement vers le talon pour former la pointe. Seule la Fig. 2. (Pl. XVII) fait exception et se présente sous une forme hétéroclite (forme spatulaire) qui n'est sans ressemblance avec les haches en métal. C'est l'unique pièce de ce genre que nous ayons recueillie.

La Fig. 3. (Pl. XVII) nous offre une autre forme de hache peu abondante dans ce gisement, instrument plat très finement travaillé sur les deux faces.

La pièce la plus longue mesure 150 mm., et la plus petite 60 mm. La longueur du plus grand nombre oscille entre 80 et 120 mm.

Tous ces instruments dérivent de la technique ghassoulienne ordinaire; c'est-à-dire, que leur taillant est obtenu par enlevures longitudinales; les bords cependant sont souvent, attaqués par enlevures latérales. De très nombreux spécimens n'ont subi que cette préparation, sans aucune trace de polissage intentionnel. Pour d'autres pièces, l'ouvrier ghassoulien ne s'est pas contenté de cette étape préliminaire, il a passé et repassé son instrument ainsi ébauché, sur un aiguisoir, jusqu'à polir son taillant, ou tout au

moins faire disparaître les aspérités de son corps. Il faut croire qu'il n'aspirait pas à une haute perfection dans son travail, car nous n'avons trouvé aucune hachette entièrement polie.¹

De nombreuses pièces ont les bords latéraux fortement martelés pour faciliter l'emmanchement.

"TYPE CISEAU": Comme on devait s'y attendre, le type ciseau se trouve représenté par toutes ses variétés: herminettes, gouges, ciseaux proprement dits.

HERMINETTES: L'herminette est la plus abondante. La plupart ont les bords convergents vers le talon, et par conséquent le bout actif évasé (Pl. XV, 5). Quelques unes ont les bords parallèles. Les pièces de l'un et de l'autre type ont la face inférieure, soit totalement plane et sans nulles retouches, soit légèrement bombée (mains toujours moins que la hachette) et travaillée. Comme pour les hachettes, le polissage intentionnel, quand il existe, ne dépasse pas le taillant.

De nombreuses pièces montrent au talon les traces de l'emmanchement, lustré de l'usage causé par le frottement et bords martelés.

La pièce la plus longue que nous ayons recueillie mesure 132 mm., et la plus petite 70 mm.

Un type d'herminette que nous ne trouvons pas à Teleilât-Ghassoul est un type trapu et large, à arrêtes parallèles et à faces planes.

Après l'herminette vient la gouge (Pl. XV, 4). Mais cet instrument se rencontre en plus petit nombre.

CISEAUX: Par contre le ciseau proprement dit est abondant; comme l'herminette, il prend plusieurs formes: Un certain nombre se rapprochent plutôt, par leur section lenticulaire, de la hache. Mais ils s'en distinguent facilement, par leur taillant droit et de faible largeur (Pl. XV, 2). Parmi ceux-ci mentionnons une belle pièce de 82 mm. de longueur, ayant les deux bouts taillés et légèrement lustrés.

¹ Cette pénurie de haches polies en silex n'est pas particulière à Tell-es-Sōma⁶, elle est commune à toute la civilisation ghassoulienne. Teleilât Ghassoul qui a fourni la culture du Br I initial, dans toute sa beauté et sa richesse, n'a fourni que quelques rares pièces en silex entièrement polies. Cf. "Les Fouilles de l'Institut Biblique Pontifical, dans la Vallée du Jourdain. Rapport préliminaire de la 2^e Campagne". Par AL. MALLON dans *Biblica*, 1930, p. 138.

La plupart ont une face plus plane que l'autre (Pl. XV, 3).

Les ciseaux polis intentionnellement, ne fût-ce qu'au taillant, sont assez peu nombreux; mais la plupart portent le lustré de l'usage.

La pièce la plus longue mesure 135 mm., la plus petite ne dépasse pas 60 mm.

Pics: Le pic triédrique à facture "chalossienne", abondant à Teleilāt Ghassoul,¹ est très rare dans notre gisement. Jusqu'ici nous n'en avons recueilli que quelques exemplaires. Les pics de Tell-eş-Şōma' prennent la forme allongée. On y distingue deux sortes:

1. Type se rapprochant du ciseau, à section trapézoïdale ou triangulaire. La face inférieure est peu ou point retouchée. Ils sont généralement longs; quatre pièces dépassent 160 mm: (Pl. XV, 1, 3). Le no. 1, en plus de l'écrasement des bords, porte des traces de martelage sur sa face supérieure, sans doute en vue de l'emmanchement.

C'est parmi les instruments de ce type, que doivent se trouver les pièces ayant pu servir de poignards.²

2. Le second type, plus petit que le précédent, est à section lenticulaire. Sauf deux pièces qui ont deux pointes (Pl. XVI, 3), ces instruments possèdent une pointe et un talon (Pl. XVI, 4).

La plupart des pics de l'un et de l'autre type portent le poli de l'usage.

En dehors des pics complets, nous avons recueilli une quantité de fragments. En effet, de l'outillage déjà décrit, c'est le pic qui a fourni le plus grand nombre de débris; sans doute, son corps long se brisait facilement au travail violent, auquel il était destiné.

PERÇOIRS: Nous pourrions employer ici, comme plus tard pour les couteaux, les scies, et les éléments de faucille, les mêmes termes par lesquels M.R. NEUVILLE décrivait les pièces de Teleilāt Ghassoul, tant l'identité est grande entre les instruments de Tell-eş-Şōma' et ceux de la Grande Ruine de la Vallée du Jourdain.

Comme le faisait remarquer ce préhistorien "la plupart de ces perçoirs présentent une face plane".³ Une dizaine de pièces seulement ont les deux faces bombées et retouchées.

Parmi les poinçons à face plane, nous pourrions distinguer deux catégories: ceux de la première ont le corps allongé et finement travaillé sur tout le bord (Pl. XX, 4, 5). Il sont les plus élégants.

¹ "L'industrie lithique de Teleilāt Ghassoul", p. 7.

² *Loc. cit.*

³ *Op. cit.*, p. 6.

Les autres offrent un talon plus large que le corps de la pièce; mais un bon nombre d'entre eux présentent une pointe fine et allongée, et ne le cèdent pas en beauté aux premières (Pl. XX, 2). Dans d'autres pièces la pointe n'est pas aussi bien dégagée. D'une façon générale, ces dernières sont plus épaisses que les précédentes et d'une taille moins fine (Pl. XX, 3).

Teleilât Ghassoul a fourni des perçoirs doubles et même triples,¹ en petit nombre il est vrai.² Ces derniers sont totalement absents à Tell-eş-Şōma³; quant aux premiers ils le sont aussi, si on entend par là des instruments qui en plus du talon, ont deux pointes actives. Mais nous avons recueilli trois pièces du type allongé, ayant les deux extrémités appointées.

La plupart des perçoirs ont la pointe droite, cependant les instruments à pointe incurvée du côté gauche ou du côté droit ne font pas défaut.

Les gens de la tribu ont également utilisé comme perçoirs un certain nombre d'éclats plats qu'ils ont retouchés vers le bout.

La pièce la plus longue atteint 87 mm, et la plus petite 23 mm.

TARAUDS: Comme à Teleilât Ghassoul, le taraud est assez fréquent à Tell-eş-Şōma⁴ (Pl. XX, 1). Cependant dans ce dernier gisement, ces pièces n'ont pas toujours la pointe à retaille alterne.⁵ Un seul taraud est à double pointe.

COUTEAUX: C'est le couteau du type ghassoulien, c'est-à-dire, le couteau à "dos rabattu" qui domine. Parfois la retouche a dévoré tout le tranchant, jusqu'à l'épine dorsale, la section de la lame est alors triangulaire (Pl. XVIII, 2, 7, 8, 15); d'autres fois l'ouvrier s'est contenté de l'entamer seulement, dans ce cas la section est trapézoïdale (Pl. XVIII, 4, 5). Il arrive même, à Tell-eş-Şōma⁶, comme à Teleilât Ghassoul et à Oumm Qaṭafa⁷ "que la retouche est à peine ébauchée ou même complètement omise".⁸ Comme le signalait M.R. NEUVILLE pour les couteaux de Teleilât Ghassoul,⁹ la plupart des lames de Tell-eş-Şōma¹⁰, qui dérivent de la technique ghassou-

¹ "La Civilisation du III^e millénaire dans la Vallée du Jourdain. Les fouilles de Teleilât Ghassoul", p. 338, et Pl. LXVI, f.

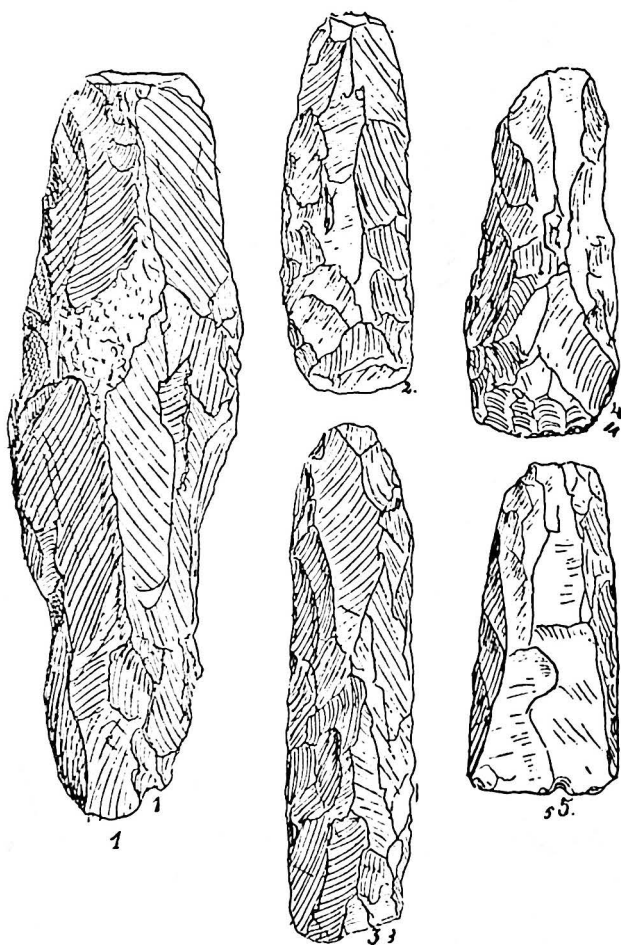
² "L'industrie lithique de Teleilât Ghassoul", p. 6.

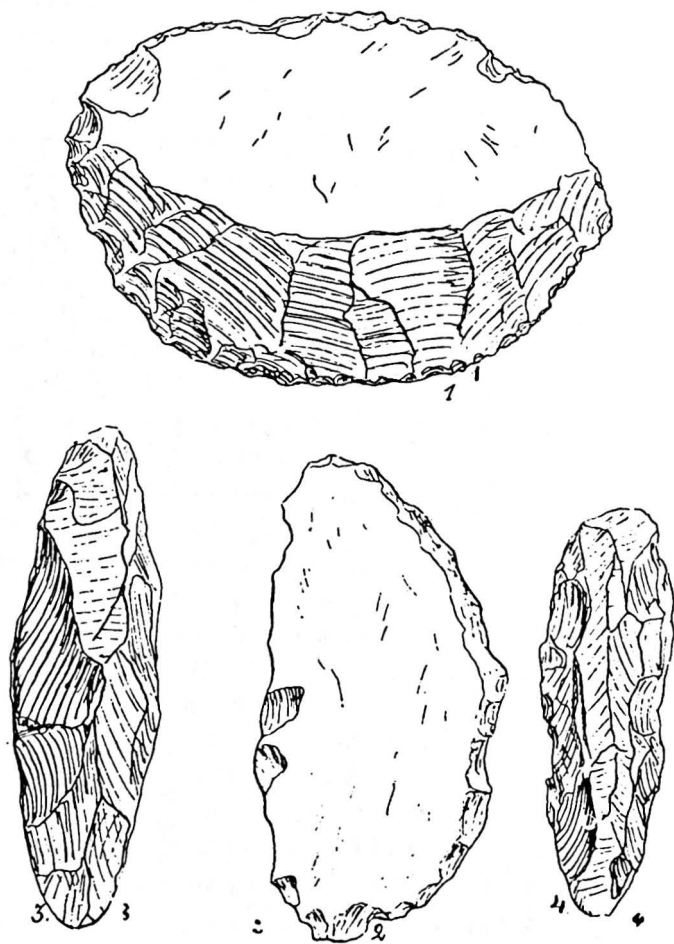
³ *Op. cit.*, p. 7.

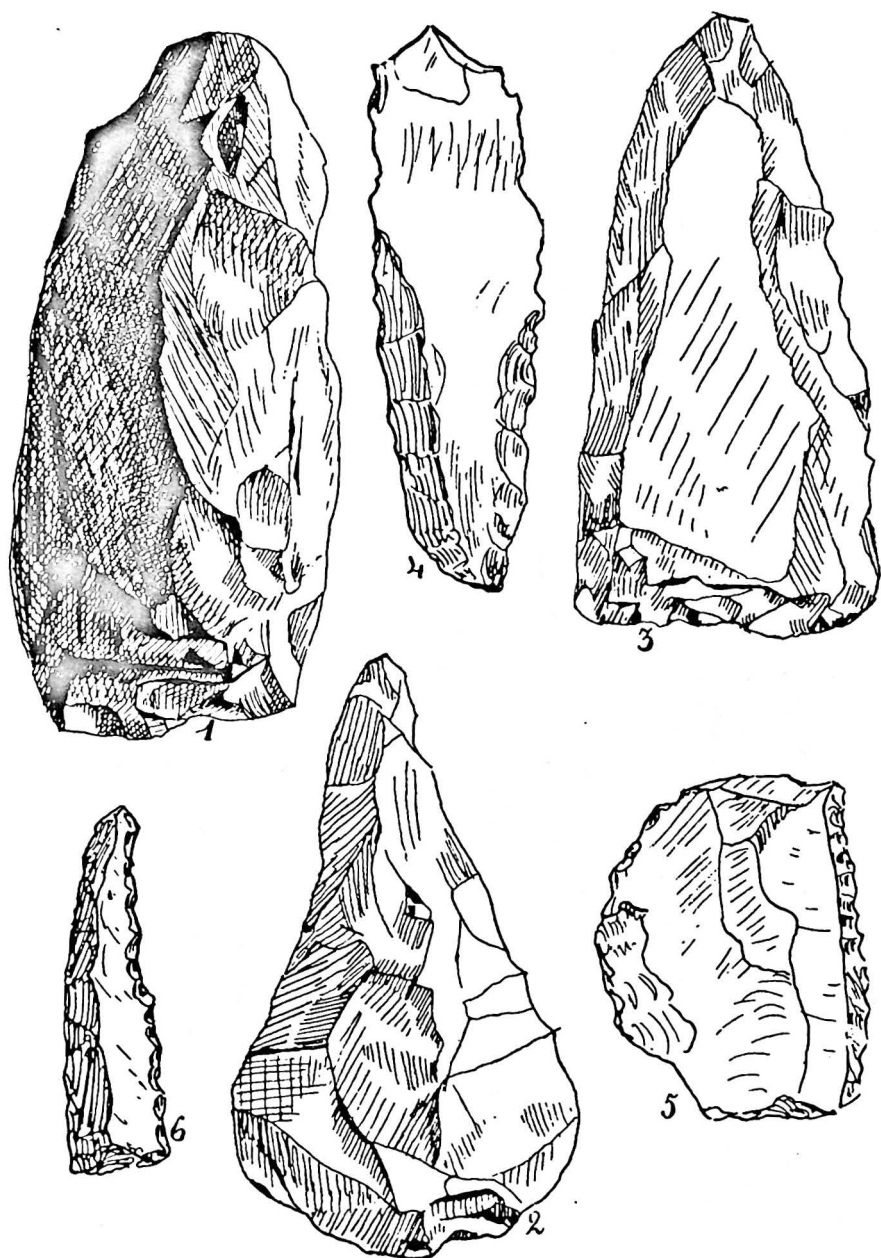
⁴ *Syria*. 1930, art. cit., p. 31.

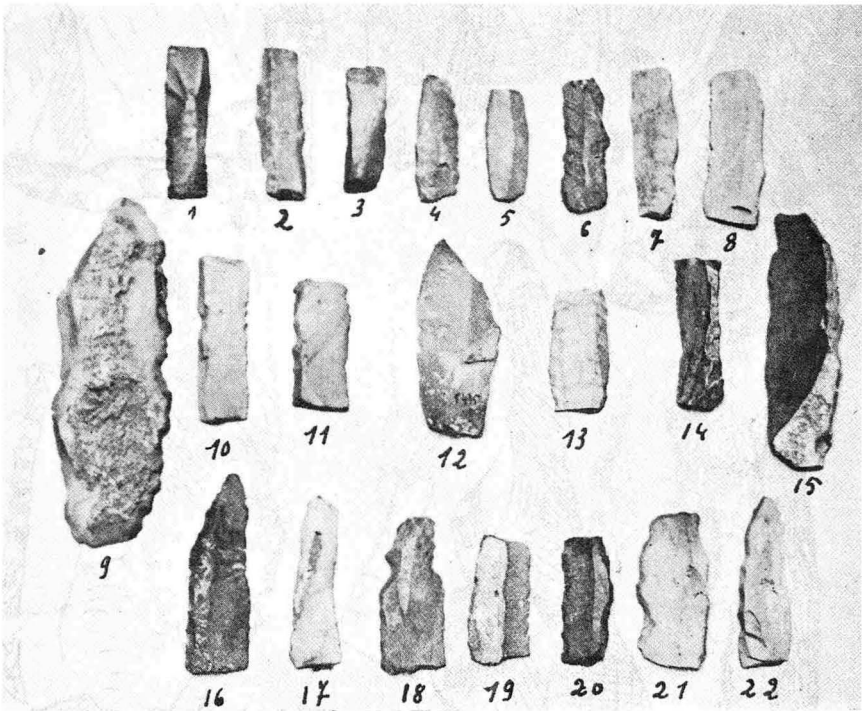
⁵ "Les Fouilles de l'Institut Biblique Pontifical dans le Vallée du Jourdain. Rapport préliminaire de la deuxième Campagne" par AL. MALLON dans *Biblica*, 1930, p. 139.

⁶ "L'industrie lithique de Teleilât Ghassoul", p. 6.









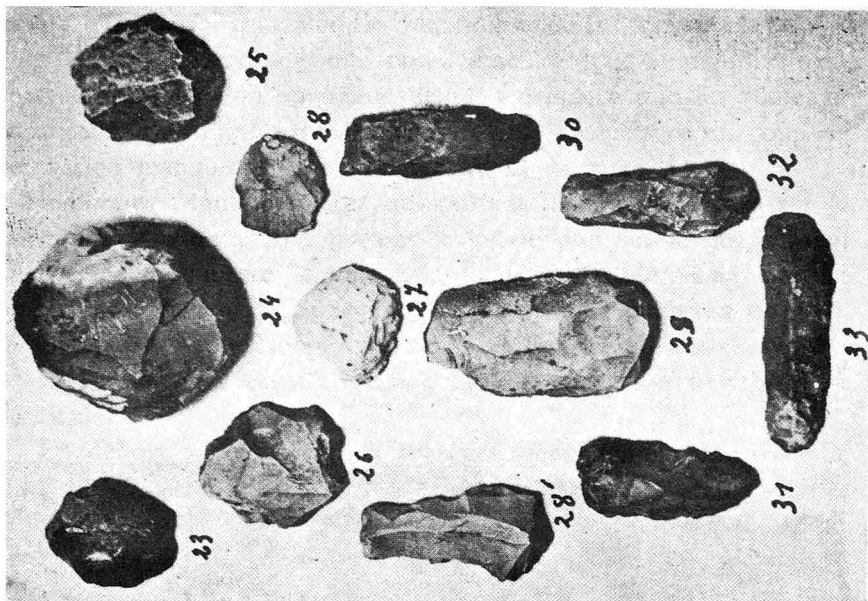
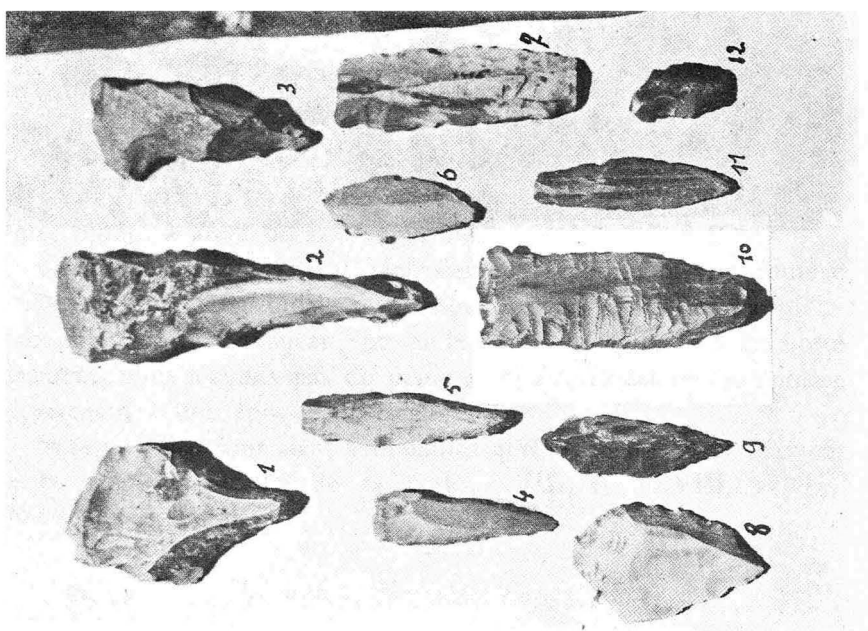
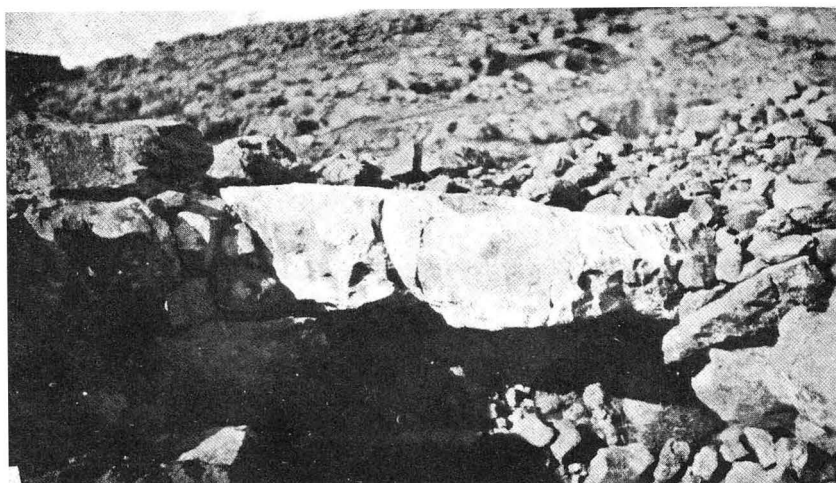


Plate XX





lienne n'ont pas l'arête dorsale intentionnellement supprimée. Quelques rares pièces cependant, ont l'épine centrale si régulièrement enlevée, quoique non au même degré d'élégance que les couteaux cananéens, que l'on peut douter si "cela provient d'un coup de percussion manqué lors de l'éclatement de la pièce".¹

Nombreuses sont les pièces qui portent le poli de l'usage sur le tranchant. Quelques unes portent le même poli sur le dos, résultat du frottement contre le manche. La plus grande lame mesure 80 mm. de longueur. D'une façon générale les couteaux de Tell-eş-Şōmaç sont moins longs que ceux de Teleilât Ghassoul.

Nous n'avons recueilli qu'une lame à soie; son tranchant est denticulé.

En dehors de ces couteaux typiques, généralement courts et de faible largeur, les gens de la tribu se servaient de grandes lames atteignant parfois 120 mm. de long, sur 40 mm. de large. C'étaient ou bien des éclats, comme à Teleilât Ghassoul⁸, dont le côté opposé au tranchant est vierge ou parfois retouché; ou bien des pièces voulues pour elles-mêmes, comme l'indique le bulbe de percussion supprimé. Certaines de ces pièces dérivent de la même technique de taille que les petits couteaux.

Ils ont utilisé aussi, pour le même usage, les éclats de débitage présentant une certaine régularité. Les uns n'ont qu'un tranchant, les autres sont bifides, quelques uns ont l'arête dorsale grossièrement supprimée.

Les véritables couteaux à double tranchant ne manquent pas dans notre station (Pl. XX 7). Nous avons même recueilli quelques lames bifides à arête dorsale supprimée.

Cependant comme il est généralement reconnu que le couteau bifide, à section trapézoïdale ou triangulaire, ne fait son entrée qu'au Tahounien et au Cananéen,² et vu le caractère de surface de notre gisement, nous n'avons pas de peine à considérer ces pièces comme appartenant à une époque postérieure.

SCIES: Elles sont aussi abondantes que les couteaux et dérivent de la même technique de taille (Pl. XVIII, 10, XVIII, 13, 14). Une seule est bifide.

¹ *Loc. cit.* "L'industrie lithique de Teleilât Ghassoul", p. 6.

² *JPOS*, 1930, p. 206-207, 211.

Les scies polies par l'usage sont en proportion plus grande que les couteaux. Sur une pièce ce lustré atteint 10 mm. de largeur.

ÉLÉMENTS DE FAUCILLE: Ils sont du même type que les pièces précédentes, sauf que le tranchant des faucilles est concave (Pl. XVIII, 16-22).

GRATTOIRS: La série des grattoirs est assez riche. Toutes les formes que peuvent prendre ces sortes d'instruments sont représentées:

1. *Grattoirs ronds*: (Pl. XIX, 24-28). La plupart sont unifaces, leur pourtour est retouché soit en entier, soit en partie. Un certain nombre ont le bout actif surélevé (Pl. XIX, 25, 27).

2. *Grattoirs sur lames* qui ne dépareraient pas une série de pièces du paléolithique supérieur. Trouvées seules la plupart de ces instruments seraient attribuées au dernier stade du paléolithique, D'ailleurs, la parenté entre la culture ghassoulienne et certaines industries appartenant à l'archéolithique, a été remarquée par M. R. NEUVILLE¹ et par d'autres après lui.

Le bout de la lame se termine parfois en pointe (Pl. XIX, 30, 31); le plus souvent il est large (Pl. III, 28, 29, 32, 33). Quelques pièces de cette catégorie ont la partie active surélevée (Pl. XIX, 28, 29, 32).

Cette dernière forme de grattoir caréné, nous la trouvons dans de grandes pièces, trop épaisses pour être appelées grattoirs sur lames et qui pourtant appartiennent au même type. Ainsi une pièce atteint 110 mm. de longueur, avec 75 mm. de largeur à la partie formant grattoir.

Les grattoirs en forme de "ciseau" ne manquent pas.

3. *Les grattoirs nucléiformes* sont relativement peu nombreux. Ces pièces sont certainement contemporaines de l'outillage ghassoulien, étant façonnées dans la même matière que celle des autres pièces "énéolithiques" et non dans le silex jaune qui a fourni les instruments paléolithiques décrits plus loin. Ainsi l'instrument le plus parfait du type (Pl. XIX, 23) est taillé dans le même silex noir qui a fourni un bon nombre de couteaux, de scies et d'éléments de faucille.

4. La série se complète par des grattoirs rectangulaires, de petits grattoirs en arc de cercle se rapprochant de la forme en éventail, et par d'autres spécimens, à forme non définie et atypiques.

"RACLOIRS EN ÉVENTAIL": Le "racloir en éventail" est la "caracté-

¹ "L'industrie lithique de Teleilat Ghassoul", p. 10-11.

ristique de l'industrie lithique de Teleilāt Ghassūl"¹; par suite il est devenu l'une des pièces typiques de la culture du Br I initial. Ce genre d'instrument est encore à ses débuts à Tell-eş-Şōmaʿ. Les pièces arrivées au type parfait sont relativement peu nombreuses; nous avons recueilli par contre un plus grand nombre du type lourd et épais, c'est le racloir précurseur de celui en éventail.

Ce fait serait un confirmatur de ce que nous avons dit plus haut, sur la date possible du gisement.

Cependant dans le petit nombre que nous avons trouvé, les variétés de "racloirs en éventail" de la Grande Ruine de la Vallée du Jourdain, sont représentées. Le n. 1 de la Pl. XVI, vu sa grandeur et sa robustesse, se présente en couperet, le n. 2 en couteau.

Le type lourd nous offre quelques couperets, et surtout de véritables racloirs. Une pièce atteint 150 mm. de large sur une épaisseur moyenne de 25 mm.; elle n'est pas sans analogie avec les hachoirs du paléolithique moyen.²

FLÈCHES: A se rapporter à ce que dit M. R. NEUVILLE au sujet de la rareté de la flèche ghassoulienne: "les têtes de flèches sont extrêmement rares, une à Oumm Qaṭafa, deux entières et une fragmentaire à Teleilāt Ghassūl, une dans la station de surface de Kefr Tas",³ le gisement de Tell-eş-Şōmaʿ est celui qui a livré le plus de ces pièces: 5 indiscutables, dont une fragmentaire (Pl. XX, 6, 9, 11, 12), 7 éclats retouchés ayant probablement servi d'armature de trait, sans compter une série de petites pointes (Pl. XX, 8).

Cependant puisque nous sommes devant une station de surface, il se peut que ces flèches ne soient pas toutes contemporaines du Br I initial.

Le n. 11 a la pointe retouchée, sur 8 mm. de longueur de la face inférieure et sur une partie de la face supérieure. La retaille affecte aussi une grande partie du côté gauche de la première face. Le pédoncule est bien dégagé, il porte sur le dos une retaille légère. Quant aux ailerons, ils paraissent timidement et seulement d'un seul côté.

¹ "La Civilisation du III^e millénaire dans la Vallée du Jourdain. Les fouilles de Teleilāt Ghassūl", p. 338.

² Cf. P. DUVIGNAU: "Une industrie acheuléo-moustérienne en Palestine" (*R. B.*, octobre, 1930) p. 10 et fig. 26 de l'extrait.

³ *JPOS*, 1930, p. 204-205. Depuis cette date, deux autres flèches ont été recueillies dans la Grande Ruine, cf. Teleilāt Ghassūl I..., p. 62.

Le n. 6 est plus simple encore. Il n'a été retouché que sur une partie des bords de la face inférieure; la retaille n'affecte ni la pointe, ni le semblant de pédoncule. Remarquer cependant la dentelure des côtes.

Rien n'empêche d'attribuer ces deux pièces au Ghassoulien. Il n'en va pas de même pour les ns. 9 et 12. Le premier est d'un type assez simple. La face supérieure en plus de l'écrasement de l'arête dorale, est légèrement retouchée vers la pointe et sur l'embryon de pédoncule. Par contre, du côté de l'autre face, qui est plane, une fine retaille plate couvre la pointe, sur une longueur de 11 mm. Le reste de la face est vierge.

La deuxième pièce nous offre un fragment d'instrument achevé, avec ailerons développés et belle retouche oblique sur les deux faces.

Il est communément admis que cette retaille est caractéristique de la culture finale du Br. I.¹ Cependant les deux principaux sites ghassouliens fouillés jusqu'ici, ont donné chacun une pièce pourvue de cette retouche. Oumm Qaṭafa a fourni "un fragment de tête de flèche",² et Teleilāt Ghassūl, la pointe de javelot dont nous parlerons bientôt, ainsi qu'un fragment de pièce analogue, mais plus petite.³ Est-il nécessaire de rattacher au Cananéen nos deux pointes de flèches⁴?....

POINTE DE JAVELOT: Nous avons déjà fait allusion à la belle pointe de javelot recueillie à Teleilāt-Ghassūl.⁵ Tell-es-Ṣōma' lui aussi a fourni une pièce semblable; malheureusement elle est brisée aux deux bouts. Cette pièce, à section triangulaire, a, à l'encontre de celle de la Ruine de la Vallée du Jourdain, la face plane entièrement recouverte par la retouche plate et parallèle, longue par

¹ Cf. *JPOS*, 1930, p. 207 et *JPOS*, 1933 "Notes de préhistoire syro-palestinienne: VII.—L'industrie dite solutréenne de Minet-Dālieh—VIII. La Station de l'Ouādi Hallāoueh (Liban)" par R. NEUVILLE, p. 132, 135.

² *Syria*, 1931, p. 31 et p. 32 fig. 2, n. 4.

³ *Biblica*, 1930, p. 140.

⁴ D'ailleurs M. R. NEUVILLE a bien voulu nous faire savoir que "ses dernières recherches lui ont prouvé que la retaille plate, parfois oblique, est employée en Palestine dès la fin du Mésolithique." cf. à ce sujet, ce que dit l'éminent préhistorien, dans son article "Le Préhistorique de Palestine" in *R.B.*, 1934, p. 251.

⁵ Voir la reproduction de cette belle pièce dans "L'industrie lithique de Teleilāt Ghassūl", Pl. VIII, n. 5, et dans *Biblica*, 1930, p. 140.

endroit de 13 mm. Cette retouche est complétée sur le côté gauche par une autre plus serrée et beaucoup plus petite. Le côté droit ne porte cette seconde retaille que sur la pointe. La même opération a été pratiquée sur la moitié du bord de la face supérieure opposée au côté entièrement retaillé (Pl. XX, 10).

Dans son état actuel la pièce mesure 54 mm.; entière, elle atteignait peut-être 75 mm.

Pointes: Nous en avons recueilli près de 90. La plupart des pièces se rapprochent de la forme triangulaire. Mais même dans cette catégorie on peut distinguer deux variétés:

a. Une première comprend des instruments allongés; quelques uns sont vierges de retouches, d'autres ont été taillés sur un bord, ou même sur les deux. Parmi ces derniers une pièce porte la retaille alterne, et deux autres possèdent un début de pédoncule.

b. La seconde variété est celle des pointes à base plus large et à taille moins élancée. Ici encore, la retouche, quand elle existe, affecte les deux bords — ce qui est assez rare — ou un côté seulement ou même une partie de ce côté.

Les pièces des deux types ont généralement la pointe droite, cependant, quelques spécimens l'ont légèrement incurvée, vers la gauche.

Une autre catégorie de pointe est celle des pièces à forme presque ronde. Elles sont peu nombreuses. La retouche chez elles, affecte tout le pourtour. L'un de ces instruments porte un pédoncule très marqué, cependant sa pointe est légèrement surélevée et taillée en grattoir plutôt qu'en arme perforante. D'ailleurs les grattoirs sur pointe ne manquent pas dans le gisement.

Les pièces de l'une et de l'autre catégorie, ont le plan de frappe uni; quant au bulbe de percussion, il est assez souvent supprimé.

La pointe la plus longue mesure 96 mm., et la plus petite 26 mm.

Pièces à encoches: Ce sont pour la plupart des lames. Elles portent le plus souvent une seule échancrure, soit sur le côté gauche, soit sur le côté droit. Parfois les encoches sont doubles, sur un même bord, ou même sur les deux, se faisant vis-à-vis. Une seule pièce en porte trois.

La plupart de ces coches servaient probablement de grattoirs concaves pour les instruments en os ou en bois.

MICROLITHES: Dans un de ses premiers rapports sur les fouilles

de Teleilat Ghassûl, le P. MALLON disait en signalant ces pièces : "étudiés dans le détail, les microlithes fourniront sans doute plusieurs variétés".¹ En effet cet outillage pygmée renferme un certain nombre de types.

En premier lieu signalons quelques couteaux et éléments de faucille du type ghassoulien ordinaire : une pièce de ce genre ne dépasse guère 20 mm. de longueur sur 5 mm. de largeur moyenne. Puis viennent des pointes et des grattoirs latéraux. Mais l'élément prédominant est assurément la lamelle ; lamelle à fine pointe sans retouches, lamelle à double tranchant, conservant son épine dorsale ou l'ayant supprimée, lamelle dont le bout est finement retouché en grattoir ; c'est le plus grand nombre.

Cet outillage microlithique est accompagné des nucléi correspondants.

Percuteurs et Nucléi : Les percuteurs sont extrêmement nombreux, notre collection en possède une centaine, sans compter les fragments et les pièces complètes laissées à la station. Ils affectent pour la plupart la forme sphérique. Leur long usage les a couverts "sur un point, parfois sur leur pourtour, ou même sur toute leur surface, des étoilures produites par des chocs répétés".² Le plus grand nombre possède des surfaces encore vierges, réservées probablement pour la préhension.

Le plus grand percuteur atteint 75 mm. de diamètre, et le plus petit 50 mm.

Quant aux nucléi, ils sont plus nombreux que les percuteurs ; ils affectent toutes les formes. Certains ont été tellement utilisés, qu'ils ne présentent qu'un petit rognon à facettes, de la grosseur d'une noisette.

PIÈCES DIVERSES : En premier lieu signalons une belle pièce, du genre pic à section triangulaire, mesurant 95 mm. de longueur. Elle est taillée sur les trois faces, les bords et la pointe en particulier, ont subi une retouche très fine. Un léger poli couvre la pointe, par contre le talon garde son cortex naturel. Elle a probablement servi de pointe de lance.

Nous avons recueilli aussi une autre pièce du même genre—à destination différente, peut-être. Elle est plus épaisse, sa section est lenticulaire. Sa longueur atteint 102 mm.

¹ *Biblica*, 1930, p. 140.

² G. GOURY, *op. cit.*, p. 122.

Signalons aussi une lame épaisse, retouchée sur les deux bords de la pointe. Malheureusement elle est brisée; dans son état actuel elle mesure 99 mm. (Pl. XVII, fig. 4)

Un genre d'instrument, que nous ne trouvons ni à Teleilāt Ghassoūl, ni à Oumm Qatafa, est une large lame de silex, de forme à peu près rectangulaire retouchée ordinairement sur le grand côté (Pl. XVII, fig. 5). Son bulbe de percussion très proéminent, est souvent supprimé. La pièce provient d'une technique de taille qui n'est pas sans analogie avec celle des "racloirs en éventail"; par ailleurs elle ressemble beaucoup aux larges éléments de faucille du Bronze II.

Quant à la destination de ces instruments, elle nous est complètement inconnue. L'outillage du gisement se complète par quelques disques, quelques rabots, de rares burins, des retouchoirs en petit nombre, deux pièces qui se rapprochent beaucoup du tranchet, et un grand nombre d'instruments de fortune et d'éclats retouchés, difficiles à ranger sous les rubriques classiques.

2. MOBILIER

MEULES DE MOULIN: Une dizaine de pièces complètes, sans compter les fragments abandonnés au gisement. Elles représentent soit la partie dormante, soit la molette.

Quant à la matière première dont elles sont tirées c'est le basalte, pour le plus grand nombre, ensuite vient le calcaire et le silex.

MORTIER: Un grand mortier cylindrique, en calcaire, mesurant 150 mm. de hauteur. La partie creuse atteint 145 mm. de diamètre et 70 mm. de profondeur.

De ce grand mortier rapprochons deux autres pièces encore en calcaire. La plus grande a trois côtés en fer à cheval, et le quatrième une ligne droite de 80 mm. de long. L'épaisseur de la pièce est de 50 mm. En son milieu s'ouvre une cupule, presque régulière, de 48 mm. de diamètre et 30 mm. de profondeur. La seconde, de forme plus irrégulière, a en moyenne 35 mm. d'épaisseur; sa cupule se rapproche du V et mesure 44 mm. de diamètre et 21 mm. de profondeur centrale.

PILONS: Quatre, dont deux complets en dolomite. De ces deux instruments, l'un est un cylindre parfait, de 70 mm. de long sur

30 mm. de diamètre; l'autre, plus grand, prend la forme d'une poire allongée; la partie protubérante est criblée d'étoilures.

VASES: Nous n'avons recueilli aucun ustensile complet, mais 9 grands fragments dont un en calcaire et les autres en basalte. Quatre d'entre eux représentent des bords. Les vases auxquels ils appartenaient devaient être très simples, sans nul décor. D'après l'ouverture de la circonférence, ils devaient avoir comme diamètre 135 mm., 120 mm., 100 mm., et 95 mm. Sur l'une des pièces on remarque des traces de polissage.

Un autre fragment offre la moitié d'un fond de vase avec la naissance des bords. Il garde par en-dessous, deux protubérances, qui devaient servir de support. A 8 mm. de la base, un cordon très régulier de 6 à 7 mm. de large, fait le tour de la pièce. Son diamètre extérieur est de 90 mm., celui du godet, de 67 mm.

POLISSOIRS: Deux polissoirs en quartzite, l'un à grain blanc, l'autre à grain rouge.

PIÈCES DIVERSES:

Un broyeur ayant la face inférieure couverte par le lustré de l'usage, signe de son long service.

Quelques boules en silex ne portant point les étoilures particulières aux percuteurs, et certaines autres en calcaire trop peu résistantes pour la taille des instruments, ont peut-être servi de poids.

Pour finir, signalons une plaque en calcaire, de forme triangulaire ayant 130 mm., 150 mm. et 105 mm. de côté, et 36 mm. d'épaisseur minima. En son milieu s'ouvre une cupule ronde, très régulière, ayant 48 mm. de diamètre et 31 mm. de profondeur. Tant Oumm Qatafa, que Teleilat Ghassul¹ ont fourni des pièces semblables. Nous-même, nous en avons recueilli une dans le gisement ghassoulien de Che'eb-Abou Farkha.²

B. CÉRAMIQUE.

Nous citons la note que le regretté P. MALLON avait bien voulu rédiger: "Un bon nombre de petits tessons ont été recueillis à la surface de la ruine. On y remarque:

1. 19 fragments de bords: 5 droits, assez fortement épaissis

¹ Cf. *Syria*, 1931, *art. cit.*, p. 38.

² Cf. *JPOS*, 1934, *art. cit.*, p. 35.

avec le sommet plat ou légèrement arrondi; 4 à sommet arrondi sans épaississement; 10 épaissis et légèrement évasés;

2. 3 petits fragments de parois avec cordons à empreintes mousses;

3. 5 fragments d'anses: 8 plates dont l'une annonçant une rainure médiane, type assez fréquent à Teleilāt Ghassūl inférieur; les autres à section circulaire;

4. 1 oreillette trièdre perforée au moyen d'une tige;

5. 1 oreillette horizontale;

6. 7 fragments de fonds plats;

7. quelques fragments de parois sans caractère.

Pour tous ces tessons, la pâte est grossière et mêlée de particules de calcaire et de silex. L'épaisseur moyenne est de 5 à 8 millimètres. Les bords lippus atteignent un centimètre et demi.

Autant qu'on en peut juger, ces fragments annoncent une vaisselle de dimensions moyennes.

Avec ces quelques données il ne semble guère possible de se faire une idée de la céramique de cette installation. On en peut cependant tirer deux conclusions.

La première est que cette poterie, surtout si on la considère dans son milieu, avec l'outillage en silex qui l'accompagne, appartient à la civilisation de Teleilāt Ghassūl. On peut même préciser davantage. La ruine de Teleilāt Ghassūl a plusieurs niveaux. A mon avis, nous avons à Kh. Sōmaʿa la poterie des niveaux inférieurs. Du moins, je n'y trouve aucune des caractéristiques du niveau supérieur.

La seconde considération qui s'impose concerne la comparaison avec les stations tahouniennes, dont une, celle de Tell-el-Foul, se trouve à un kilomètre à l'ouest de Kh. Sōmaʿa. Le Tahounien ne possède pas de céramique. Cette simple remarque, sans parler de celles qui regardent les constructions et l'outillage lithique, suffit à démontrer qu'il s'agit de deux civilisations différentes."

C. PIÈCES DIVERSES.

Sous ce titre, nous rangeons deux rondelles en céramique du genre de celles recueillies à Teleilāt Ghassūl et à Oumm Qatafa,¹ et un objet hémisphérique, en hémâtite, ayant la forme des boutons

¹ Cf. *Syria*, art. cit., pl. XIX, 1-2.

trouvés en Europe, dans les palaffites, les grottes et les dolmens du Chalcolithique.¹ Sa face supérieure fortement bombée, est polie; elle est de plus recouverte par endroits d'une forte couche de patine. Quant à la face inférieure, elle est légèrement convexe, mais ne présente pas le poli de la face précédente. De son milieu deux petits canaux à découvert descendent à gauche et à droite. Les bords de la pièce ont été lissés par le polissage.

Nous ne croyons pas pouvoir identifier cet objet avec les boutons des palaffites. Il semble être plutôt, une moitié de petite massue (tête de sceptre) brisée au moment de la perforation,² convertie en petit broyeur pour les couleurs, comme en témoigne l'ocre adhérent à la partie polie.³

CONCLUSION GÉNÉRALE

L'outillage lithique et la céramique concordent pour classer le gisement de Tell-eş-Şōma' dans la culture ghassoulienne. Bien plus le P. MALLON, se basant sur la poterie, voit dans l'industrie de Tell-eş-Şōma' l'industrie des niveaux inférieurs de Teleilāt Ghassūl. L'outillage lithique conduit, semble-t-il à la même conclusion. L'abondance des hachettes d'une part, et le petit nombre de véritables "racloirs en éventail" de l'autre, nous incline à mettre la station de Tell-eş-Şōma', comme transition entre la civilisation des sites à "ciseaux polis mais toutefois sans le racloir en éventail,"⁴ et celle d'Oumm Qaṭafa et de Teleilāt Ghassūl.

Ce n'est qu'une hypothèse que nous avançons; car malgré les brillantes fouilles de l'Institut Biblique Pontifical dans la Vallée du Jourdain, la culture du Br I initial nous est encore mal connue. Plus l'exploration méthodique du Pays de Canaan se poursuit, plus la liste des stations à allure ghassoulienne s'allonge; et si ces gisements ont des points communs qui les rattachent au Br I initial, ils se différencient par ailleurs nettement les uns des autres. Ainsi—

¹ Cf. J. DECHELETTE, *Manuel d'Archéologie Préhistorique*, I, 1924, p. 578-579; G. GOURY, *l'Homme des Cités Lacustres*, p. 653-654.

² La ruine de Teleilāt Ghassūl a fourni de petites massues en hématite, cf. "Teleilāt Ghassūl I...", p. 71.

³ Il mesure 42 millimètres de diamètre sur 22 millimètres à sa plus grande épaisseur.

⁴ *Syria*, 1931, *art. cit.*, p. 47.

pour nous borner à la Judée—les types de l'industrie d'Etam et des gisements de Ouadi-es-Sarar, de Tell-eş-Şōma^c et de Kefr Tas, d'Oumm Qaṭafa enfin, se distinguent de l'industrie encore ghassoulienne de Cheṭeb-Abou-Farkha.¹ De son côté le gisement d'Abou-Gosh offre un outillage "montrant des affinités bien marquées avec les cultures..... nommées Ghassoulien et Cananéen".² Le site de 'Ain-Abou-Tabigh, à l'ouest de 'Ain-Karim,³ a livré des pics polis du genre ghassoulien en mélange avec des instruments qui se rattachent au Tahounien. Attendons donc avec patience que les fouilles nous apportent des précisions que ne peuvent fournir les recherches de surface; et si la préhistoire palestinienne continue à marcher de son pas actuel, la lumière ne tardera pas à se projeter sur ces civilisations disparues.⁴

APPENDICE.

A. MONUMENT MÉGALITHIQUE. (PL. XXI)⁵

Au pied du tell, sur toute la largeur du champ supérieur, s'étend une grande jetée de cailloutis, haute par endroits de 3 mètres sur une largeur de 8 à 10. Sur ses limites nord, apparaissent

¹ JPOS, 1934, art. cit. p. 53.

² R. NEUVILLE, "Quartiers d'orange de Palestine" in *Bulletin de la Société Préhistorique Française*, n. 5, 1931, p. 3 de l'extrait.

³ Une étude est en préparation sur les stations préhistoriques de Aïn-Karim; de Ouadi-es-Sarar et des régions environnantes.

⁴ Notre hypothèse semble être confirmée par la classification des industries ghassouliennes que donne M. NEUVILLE (cf. *Le Préhistorique de Palestine*, en *R. Biblique*, 1934, p. 256). Il distingue en effet deux phases: ghassoulien I, dont le gisement typique est celui de Kefr Tās; ghassoulien II (de Oumm Qatafa et de Teleilāt Ghassūl). Or l'industrie de Tell-eş-Şōma^c est identique à celle de Kefr Tās (cf. JPOS., 1929, p. 120).

Cependant nous nous abstenons de nommer cette culture Ghassoulien I; car on pourrait, peut-être, distinguer une industrie antérieure à faciès ghassoulien.

⁵ Les monuments mégalithiques ont toujours été l'objet de légendes et de croyances superstitieuses. Le folk-lore palestinien a devant lui un vaste champ d'étude presque inexploré et dont l'exploitation est fort attrayante. Le mégalithe de Tell-eş-Şōma^c, a, lui aussi, sa légende. En essayant de la recueillir, nous avons constaté toute la justesse de la remarque du R.P. VINCENT: "Il n'est pas rare qu'une même pierre de ce genre soit l'objet de plusieurs versions

par ci par là des blocs de rochers équarris, appartenant probablement à un ancien mur. A peu près au milieu de la jetée se trouve un monument mégalithique.

Ce monument n'a jamais été signalé jusqu'ici; M. NEUVILLE, qui a mentionné la station lithique, n'a aucun mot à son adresse. Il est unique à Tell-eş-Şōma, cependant il se peut que l'amas de pierres en cache d'autres.

Le monument mégalithique de Tell-eş-Şōma¹ est du même genre que la plupart des "sépultures en pierres brutes" de la Judée; c'est-à-dire "que les gros orthostates du dolmen font place à deux ou plusieurs dalles de couverture, celles-ci plus considérables d'ordinaire que les murets".¹

Le caisson, d'une forme rectangulaire à peu près régulière, mesure 2 mètres, 19 sur 1 m. 13. De la couverture il reste en place deux beaux blocs, mesurant respectivement 1 m. 85 et 1 m. 80 de longueur, sur 0 m. 88 et 0 m. 98 à leur plus grande largeur. Une troisième dalle devait compléter la couverture, mais elle n'existe plus.

L'intérieur du caisson est rempli de pierres et de terre.

A 20 cm de la sépulture, on aperçoit tant du côté occidental que du côté oriental, des blocs de grandeur moyenne formant un début de cercle.

Quant à l'orientation du mégalithe, elle est sud-nord.

A quelle date attribuer ce monument? Est-il le fait de la tribu ghassoulienne? De fouilles seules peuvent nous dire cela d'une façon certaine. En effet, pour le classer, nous ne pouvons nullement nous baser sur sa forme, ni le comparer à d'autres mégalithes,

d'une même légende, nuancée à l'usage du conteur et de l'auditeur, suivant la condition extérieure de chacun." (*Canaan...*, p. 415, note 2). En effet, des quelques paysans de Cha'fât que nous avons interrogés, d'aucuns ignorent l'existence du monument; d'autres en font le tombeau d'un chef puissant du temps des Beni Israil (cf. *Canaan, loc. cit.*), nommé "Cheikh Antoun?". Quelques-uns, sans faire remonter le mégalithe à une si haute antiquité, le donnent comme la sépulture d'un vieux santou propriétaire du champ, qui s'étend au sud. A ce qu'il paraît, tous les vendredis l'âme du défunt rôde autour du monument, sous forme de flamme. Si nous avions continué nos investigations, nous serions arrivé probablement à tout un cycle de légendes, inventées peut-être uniquement pour la circonstance!

¹ "Monuments Mégalithiques de Palestine", par F.M. ABEL, in *R.B.* 1928, p. 420.

chronologiquement datés, car l'étude proprement dite des monuments en pierre brute est encore à ses débuts en Palestine: "peu (de monuments mégalithiques)...ont fait l'objet d'observations susceptibles de fournir des indications sur la destination réelle et la date de ces monuments".¹

Cependant s'il fallait avancer une hypothèse, la plus vraisemblable serait de voir dans ce monument une sépulture de la tribu ghassoulienne qui a occupé les pentes du tell. Ainsi *Tell-eş-Şōma'* comme *Teleilāt Ghassūl*, aurait sa nécropole mégalithique.²

b. CUPULE RITUELLE.

A une vingtaine de mètres au nord de la sépulture mégalithique, un rocher possède en son centre une cupule de grandeur moyenne, ayant 250 mm. de diamètre et 80 mm. de profondeur. Dans cette cupule se déversent trois petites rigoles venant de l'ouest et unies à leur point de départ. Ce point de jonction est à 190 mm. du godet. La largeur moyenne des rigoles est à peu près 30 mm.

Nous n'avons rencontré que cette cavité circulaire. Ici encore il se peut que d'autres criblaient les bancs de rochers qui s'élevaient au nord de la jetée. Mais les travaux de carrière ont supprimé une grande partie de ces bancs, de sorte que le contrôle est impossible.

Les rochers à godets sont très nombreux en Palestine; les uns sont creusés par la nature, les autres faits par l'homme. Notre cupule, vu la présence des rigoles, entre dans cette dernière catégorie. A quelle époque a-t-elle été utilisée? Quoique la cupule rituelle ait, semble-t-il, existé au Paléolithique, elle n'a eu sa grande vogue qu'au Néolithique et à l'Enéolithique.³ Jusqu'à maintenant

¹ "La nécropole mégalithique d'el-'Adeimeh" par R. NEUVILLE, in *Biblica*, 1930, p. 249. Si les fouilles de M. STEKELIS "nous ont appris beaucoup depuis" le moment où M. NEUVILLE écrivait ces lignes, nous ne savons pas à quelles conclusion est arrivé l'heureux explorateur. [See now: *Archives de l'Institut de Paléontologie Humaine*, Mémoire xv, "Les Monuments Mégalithiques de Palestine", par M. STEKELIS, Paris, 1935, (ED.)].

² cf. *Biblica*, 1933, "Les Fouilles de l'Institut Biblique Pontifical dans la Vallée du Jourdain—Rapport préliminaire de la Campagne (1932-1933)", p. 297-299.

³ cf. G. GOURY: "L'Homme des cités lacustres", p. 600, 607. cf. du même auteur: "l'Origine et l'Evolution de l'Homme." p. 139.

aucun godet paléolithique n'a été signalé dans le pays de Canaan; et les vestiges de l'homme quaternaire de Tell-eṣ-Ṣōma¹ sont si négligeables, qu'il ne semble pas qu'il ait élu domicile sur les pentes du tell.

Cette cupule avait-elle un office propre ou bien a-t-elle été creusée en vue du monument mégalithique?

C'est un fait souvent constaté que les godets se présentent la plupart des fois en groupe, qu'ils ne sont seuls que sur les dolmens ou sur les rochers près des dolmens, et donc, semble-t-il, en relation avec eux. De là nous concluons que la cupule de Tell-eṣ-Ṣōma¹ a dû être creusée ou du moins utilisée lors de l'érection du monument mégalithique.

Les cas de cupules sur les dolmens ou sur les sépultures mégalithiques se présentent assez souvent en Palestine. M.R. NEUVILLE en signale en Transjordanie, dans la nécropole d'El-ʿAdeimeh.¹ En Cisjordanie, nous avons les cas des mégalithes de Tell Sandaḥannah, de Beitin, de Anathoth, des Qobour Israil² et de Deir-es-Saʿideh.³

Quant à l'usage de ces cavités, en relation ou non avec des sépultures, diverses hypothèses ont été émises à leur sujet.⁴ Qu'elles soient creusées pour elles-mêmes, c'est-à-dire en vue de leur signification propre, pour protéger le défunt, ou en vue de recevoir les aliments présentés au mort, les cupules ont toujours un but religieux et concernent le culte des morts. Ces deux hypothèses peuvent se soutenir, comme les deux peuvent s'appliquer au godet dont nous nous occupons.

C. PIÈCES À L'ÉTAT DE MÉLANGE.

I. OUTILLAGE PALÉOLITHIQUE.

L'outillage paléolithique entièrement en silex, le plus souvent de couleur jaune, compte une trentaine de pièces. Il comprend :

3 coups de poing de grandeur moyenne, un nucléus moustérien, 3 pointes dont deux portent le plan de frappe à facettes. L'une de ces dernières a les bords légèrement retouchés et le bout aménagé en grattoir. Le reste de l'outillage est composé de grattoirs, pour

¹ *Biblica*, loc. cit., p. 252.

² cf. H. VINCENT : "Canaan....." p. 97 et les références qu'il donne.

³ *R.B.* 1928, loc. cit., p. 423.

⁴ cf. H. VINCENT, *op. cit.* p. 252-254 et GOURY : "l'Homme..." p. 603, sq.

la plupart de forme ronde, dont M. NEUVILLE pense "qu'ils pourraient appartenir au Paléolithique supérieur".¹ Quelques uns sont sur bout de lames, d'autres latéraux.

En somme nous avons une série de pièces qui chevauchent entre le moustérien final et le paléolithique supérieur.

Les Ghassouliens s'en sont-ils servi? Aucun indice positif ne nous permet de pencher vers l'affirmative ou la négative. Aucune pièce ne porte des traces de retaille postérieure.

2. OUTILLAGE DE L'AGE DU BRONZE.

L'outillage "énéolithique" est lui aussi entièrement en silex. Il comprend une cinquantaine de pièces appartenant à plusieurs industries: le Tahounien, le Cananéen et même le Br. II.

a. Tahounien:

Au Tahounien se rattachent deux hachettes à section lenticulaire et à taillant obtenu par enlevures latérales, quelques pics dérivant de la même technique de taille, peut-être, de rares couteaux et un des énigmatiques croissants, particuliers à cette industrie.²

b. Cananéen:

Quant à l'industrie cananéenne, nous lui attribuons quelques larges éléments de faucille et, peut-être la fig. 6, (Pl. XVII) une armature de faucille du genre étroit. Son dos est couvert de belles retouches, et son tranchant denticulé porte le lustré de l'usage.

Nous avons déjà parlé des couteaux bifides gardant leur arête dorsale ou l'ayant supprimée, ainsi que des pièces à retaille oblique.

Pour finir signalons un véritable élément de faucille du Br II.

Comme l'outillage lithique, la céramique offre des mélanges. Ce sont deux tessons peints: "A mon avis, dit le P. MALLON, ces tessons n'appartiennent pas à la ruine ancienne et sont de beaucoup postérieurs. La pâte est différente et ce genre de décor peint ne se trouve pas à Teleilat Ghassul. Il est au contraire commun plus tard".

¹ JPOS, 1929, p. 120.

² Sur ces croissants cf ALEXIS MALLON: "Quelques Stations Préhistoriques de Palestine"; Mélanges de l'Université de St Joseph, Vol. 10, fasc. 6 (1925) p. 14-15 et D. BUZY: "Une industrie mésolithique en Palestine (Ouâdy Taḥūneh)" in R.B., 1928, p. 563-565.

ON THE IMPORTANCE OF DEW IN PALESTINE.

D. ASHBEL

(JERUSALEM)

THE FORMATION OF DEW.

Dew is formed when water vapour condenses on cold bodies. As to the source of the atmospheric humidity required for dew formation, there are two, seemingly contradictory, opinions. The first claims that dew forms when the humidity of the free atmosphere cools upon coming in contact with cold solids; while the second says that dew forms when air escapes from the soil, cools and reaches the dew point, giving up simultaneously its excess of humidity. These two points of view are not really contradictory when one considers the environmental and local conditions. Moist soil (as in subtropical countries in the winter or in the summer after irrigation) may have dew produced from the air escaping it, this being frequent during a number of nights which lack the first type of dew. In Palestine, frequent dew-creation of this type occurs in the winter. However, in dry localities, where the soil is arid at a depth of one metre and more, the dew cannot possibly form from the air of the soil. It is clear that under these conditions the formation of dew from the external air is the only way to be considered.¹

Air, when descending, generally lowers the relative humidity and reduces the cooling by giving up heat. And on the contrary, the relative humidity rises in the ascending air since the air cools owing to its expansion. We can thus draw the important conclusion that on the windward-side of mountains, where the air rises

¹ It is easy to determine whether dew on plants is from the one source or the other. If the dew has formed from the air escaping the soil, the underside of the leaves near the ground is covered with water-drops. If, on the other hand, the dew has formed from the free atmosphere, the upper side of the horizontal plants is covered with drops. It often happens, especially in the winter, that both ways of dew formation occur simultaneously.

continually, conditions favour the cooling and condensing of water vapours in the air, whereas on the lee-side of mountains, where the air descends, there are no such conditions for condensation.

The above rules enable us to determine the geographical zones of minimum, or zero, dew condensation. Such are the eastern slopes of the mountain chain of Palestine towards the Jordan Valley. The eastern Yesreel valley and the entire Jordan valley, except for the marshes of Huleh, are also poor in dew. Rich in dewfall, however, are the western slopes of the mountain chain. Dew abounds also in the Negeb and in the Beer-Sheba-Kurnub desert. The Carmel and the western Yesreel valley are extraordinarily rich in dewfall.

Different bodies cool unequally. The degree of cooling of some bodies approaches that of a black body, whereas that of others is lower. The plant-tissue belongs, as a rule, to the kind of ideal radiating bodies, cooling nearly to the point of a black body. However, neither do all plant-tissues cool equally, nor all the different species of plants mentioned in Table 1.

The amount of dewfall varies greatly with different heights from the ground. On a dewy night, the atmospheric temperature is lower on the surface of grass than on bare ground; as a rule, it is lower on the ground than above it. We are in a position to state that a height of half a metre from the ground is a certain minimum limit of dew formation from both free air humidity and air from the soil,¹ since both higher and lower than this limit the quantity of dew formed is larger. The formation of dew may be interrupted or entirely stopped by descending vertical air streams in the middle of the night and begin anew once or oftener at dawn or in the middle of the night. Accordingly, there are various types of dewy nights: 1) Nights of continuous dewfall, from the beginning to the end. 2) Nights in which either at the beginning, or at the end, or at a certain hour in the middle of the night, the atmospheric humidity reaches the dew-point, whereat dew is being formed for an hour or so. In many cases, conditions are repeatedly favorable for dew formation in one and the same night, at intervals. In cases, where the formation is interrupted due to a descending

¹ E. LEICK, *Der Tau als Standortsfaktor*, Bericht d. Deut. Bot. Ges., 1933.

air stream getting warmer, the dew does not necessarily dry out and entirely disappear. It happens quite often, though, that dew disappears entirely until again renewed. In Palestine the west wind from the Mediterranean helps in the summer, bringing along a great deal of humidity in the afternoon hours. In days in which the west wind is absent or substituted by an eastern stream, even at night, in Khamsin periods for instance, the formation of dew is not possible at all. An important requirement for dew formation, even in the presence of west wind, is either the rise of air on the windward-side of mountains, or motionlessness following this rise. Moreover, in localities where the west wind moves downward the formation of dew is impossible. Palestinian conditions also showed that in summer nights, in which clouds float across the mountain zone from twilight on throughout the night, at a height of some hundreds of metres and at a high rate of 40–60 km. per hour from the north-western direction, a great deal of dew forms on the ground. The clouds when approaching the earth and floating over mountain-tops, also play an important rôle in the supply of liquid humidity on all bodies with which they come in contact.

THE AMOUNT OF WATER YIELDED BY DEW.

The methods of dew measurement are only at the beginning of their development. There are methods of weighing hygroscopic material (such as hair, paper and infusoric earth mixed with gypsum) before and after the formation of dew.¹ The figures are, like those of rainfall, in millimeters. In Palestine, 0.2–0.5 mm of dewfall per night are the mean maximum, the majority of nights having 0.1 mm dewfall.

The number of dew nights is greater in the dry months than in the winter months. The following table which indicates the number of dewy nights in the mountains (Jerusalem) and in the Yesreel Valley (Merchavia) points out the difference between the above two zones, which are by no means typical. (See table 2.)

¹ F. ZATTLER, *Agrarmeteorolog. Beiträge zum Tauprobem auf Grund von Messungen im Hopfengarten*. Wiss. Arch. für Landwirtschaft, Abt. A, Pflanzenbau, 1932. F. ZATTLER, *Über die Bildung des Taues und seine physiol. Wirkung auf die Pflanze*. Prak. Bl. für Pflanzenbau, 1932. E. LEICK, *Zur Methodik der relat. Taumessung*. Beihefte d. Bot. Centralbl., Bd. XLIX, 1932.

DEW FORMATION ON PLANTS

The amount of dew actually forming on the plants is a great deal larger than the measured amount. Dew forms not in accordance with the surface area which the plant occupies on the ground, but with the sum of surface areas of its leaves. It is true, that the surface of all the leaves differs with the different ages and families of various plants. In the maize-plant, for instance, the ratio of the surface area of all the leaves to that occupied on the ground is several times larger than that of the leaves of the potato or beet, and of course than that of the rosette plants, the leaves of which lie on the ground. In the plants whose leaves do not lie on the ground, the minimum of the sum of the surface areas of all the leaves is three to five times larger than the surface area covered by the plant on the ground. In a great number of plants the ratio exceeds this number. The 0.1–0.3 mm dewfall in midsummer nights and towards the end of the summer covers all the leaves, at least the outward ones, inside and outside, and amounts therefore to 0.3–1.5 mm.

Dewy localities, which excel in dew nights and in the amount of water formed, yield in summer nights about 20–40 mm water in one month. The total amount of dew-water yielded on plants during the entire dry period of 7 months would thus amount to 200 mm and more.

At sunrise, everything glistens with dew-drops. In localities exposed to sun-rays these drops evaporate rather rapidly. In the fields, on the other hand, the moisture stays among the plants for several hours after sunrise. In shady places, the dew keeps till noon or even later.¹ We can actually say that in the daily period of 24 hours only a few hours are dry, whereas during the rest of the hours of dewy days the plants remain moist, which reduces their transpiration to a minimum. This fact gave rise to view points stressing the passive importance of dew and doubting its active value. However, we are now in possession of numerous proofs which prove the active rôle of dew in plant life.

¹ When plucking oranges, one must wait till the dew dries out (in the winter) so that it is sometimes necessary to wait until 3:00 p.m. to begin plucking.

CAN THE PLANT PROFIT FROM THE DEW?

Classical physiology has taught us that plants derive their liquid food from the ground through their roots. It is true that certain plants were known to possess a hairy apparatus for taking in moisture from the air by special devices. The question arises: what profit has the vast plant world from the dew? The dew-water reaches the soil only sparsely. Only in very dewy nights may part of the water reach the soil after dropping along the leaves and the stem and then it is doubtful whether the bit of water, having reached the ground, also reaches the sucking roots which, in the summer, grow deep in the earth! The farmer in Palestine—which belongs to the sub-tropical zone, lacking rainfall in the summer—does not need lengthy explanations as to the importance of dew in this country in the summer. The situation can be summed up as follows: Success in growing summer crops (such as sesame, maize, durrah and all kinds of melons) in a locality rich in dewfall is almost certain. The growth of summer plants and unirrigated plants will not succeed in dewless localities, or in dew-poor years unless the latter are irrigated.

If the dew does not penetrate the soil and is not absorbed by the leaves, where then lies its value? Is it only in the reduction of evaporation during those hours in which evaporation is anyhow very low and approaching zero compared with its extent in the dry hours especially in the summer? At present, after a great deal of research has been done on this problem (see literature), it is certain that plants can drink by means of leaves. The point which needs to be cleared is: how much dew-water enters through the upper cuticle and whether water vapours contained in the respiratory air condense in the intracellular spaces of the leaves, due to their considerable cooling, and then as water drops enter the liquid cycle in the plant-tissue?

TABLE I

PLANTS AS DIFFERENT DEW PRODUCERS

Abundant dew on leaves: Grasses, Maize, Durra, Lily family, Iris family, Agave, Jucka, Laurus (bay tree), Trifolium, Rose

family, White acacia, Pomegranate, Beet, Sesame, Stone crop, Geranium, Gourd family, Nightshade family.

Some dew on leaves: Carob, Myrtle, Citrus family, Oak, Fig, Pine, Ephedra, Olive, Tuia.

No dew on leaves: Cypress.

TABLE 2
NUMBER OF DEWY NIGHTS

	Jerusalem.			Merhavia (Jezreel plain)		
	1933	1934	1935	1933	1934	1935
January		5	11		7	10
February		4	15		8	11
March		4	13		7	25
April		3	13		13	17
May		3	2		10	10
June		8	10		11	20
July		5	17		28	19
August		13	16		26	20
September	5	20	13		15	14
October	7	19	6		20	14
November	3	11	12		25	18
December	9	16	11	4	20	20
Year		111	139		190	198

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BOOK REVIEWS

SOCIETAS ORIENTALIS FENNICA. *Studia Orientalia*, V, 1. *Waqf Documents from Sinai*, by Dr. APPELI SAARISALO. Helsingfors, 1934.

In this brochure Dr. A. SAARISALO has published two Arabic MSS dated 988 A.H. (1580 A.D.) from St. Catherine's monastery on Mount Sinai. The first is the certificate of sale of a plot of land adjoining the citadel of the monastery; the second the official certificate issued by the Sharia judge in Egypt authenticating the sale and the dedication of the site as a Waqf. The two MSS. are reproduced in photographic facsimile, to which has been added a transcription in Arabic printed type, an English translation, a useful commentary and an index.

In discovering, printing and translating these two documents Dr. SAARISALO has accomplished a useful task which deserves our thanks. The following corrections may be noted:—

1. MS. 1, line 12 بِتصديقها على ذلك التصديق shall read بِتصديقها على ذلك التصديق "with the approval of the two parties upon that legal affirmation."

2. At the beginning of the second MS. الحمد لله رب العالمين should appear at the top, not in the second line.

Line 17. يصح الوقف Line 24. يقول من قال بالزوم shall read بصح الوقف المذكور ولزومه

There are also a few minor errors such as the confusion in the use of *hamzat qat'* and *hamzat wasl*, which do not, however, seriously detract from the value of the work.

OMAR SALEH EL BARGHOUTI

Annuario di Studi Ebraici, diretto da UMBERTO CASSUTO, Volume I, 1934, (Collegio Rabbinico Italiano-Roma) In 8° de 211 pp.; 1935.— In vendita presso F. le Monnier, Firenze. Pr.: L. 25.

Le Collège Rabbinique Italien avait pour organe avant la guerre la *Rivista Israelitica*. En place de cette publication disparue, il inaugure une série annuelle, dont le premier volume est dédié à la mémoire de S. H. Margulies, qui fonda la *Rivista*. La direction de l' *Annuario* est assumée par U. CASSUTO, qui donne ici deux contributions très intéressantes. Dans *La creazione del mondo nella Genesi* (p. 9—47), il cherche à prouver, par manière de complément à son gros livre sur la Genèse, que le récit de la création attribué à P n'est pas un décalque de mythologies païennes mais reflète certaines traditions des cercles sapientiaux, que le morceau a une belle unité littéraire et ne peut pas être, comme on le dit souvent, la refonte d'un texte plus ancien. Dans *Saggi delle antiche traduzioni giudeo-italiane della Bibbia* (p. 101—134), il conclut à la probabilité de plusieurs traductions complètes de la Bible en dialecte judéo-italien au cours du Moyen Âge, et il publie comme types deux traductions du Livre d'Amos, l'une qui paraît avoir existé dès le XIII^e siècle, l'autre qui date de la fin du XVI^e. On ne peut que signaler brièvement les autres études de ce Recueil. E. S. ARTOM,

L'origine, la data e gli scopi dell' Epistola di Geremia (p. 49-74): l'Épître de Jérémie a été écrite en hébreu vers le milieu du IV^e s. av. J.C. par un Juif résidant probablement en Babylonie et qui voulait mettre ses congénères en garde contre l'influence du paganisme.— I. ETBOGEN, *La preghiera nell' ebraismo* (p. 75-92).— I. ZOLLI, *Tefillah*, (p. 93-100): le sens fondamental du mot, dérivé du verbe *pillel*, serait "jugement sur soi-même, qui a pour conséquence la condamnation de soi-même, qui conduit ensuite à la réconciliation avec Dieu".— J. TEICHER, *Intorno a due libri citati da Hillel da Verona* (p. 135-146): citations du *De Anima* de Themistius et du Commentaire d'Avempace sur la *Physique* d'Aristote. En réalité il s'agit, dans le premier cas, de Thomas d'Aquin, et dans le second, du commentaire d'Averroès, utilisant lui-même Avempace.— A. FREIMANN, *Menachem ben Zerah* (p. 147-168): notice sur sa vie et ses oeuvres.— V. COLONNI, *Note per la biografia di alcuni dotti ebrei vissuti a Mantova nel secolo XV* (p. 169-182).— I. SONNE, *I dati biografici contenuti negli scritti di Shelomoh Molcho riesaminati alle luce di un nuovo documento* (p. 183-204): met sérieusement en doute la réalité du voyage de Molcho en Palestine et de son séjour à Safed.— R. PACIFICI, *Le iscrizioni dell' antico cimitero ebraico a Venezia* (p. 205-211): inscriptions des XVII^e — XVIII^e siècles.

R. de VAUX O. P.

Prince P. H. MAMOUR, *Polemics on the Origin of the Fatimi Caliphs*; in-8° de 230 pages. Luzac, London, 1934.

Les Fatimites sont-ils vraiment les descendants de Fatima, fille de Mohammed et femme d'Ali? La question ne paraît pas avoir été nettement tranchée par les savants occidentaux versés dans l'histoire arabe. Beaucoup ont laissé en suspens leur décision devant les nuages accumulés à dessein autour de ce sujet par les écrivains sunnites influencés par l'esprit de parti. De plus, peut-on faire fond sur la littérature officielle des orthodoxes musulmans pour arriver à une juste idée du shiisme? Cette doctrine n'aurait-elle pas été défigurée par la plume passionnée des adversaires? L'ensemble de ce problème a tenté l'esprit critique du Prince MAMOUR et sa discussion mérite d'être suivie de près. Il s'en prend d'abord aux énormités du manifeste abbasside de Baghdad lancé en 1011 contre la secte maîtresse de l'Afrique du Nord, lequel déclarait que les ascendants du calife Hâkem tiraient leur origine de Deisân, fils de Saiyid, fondateur de la secte Deisanites et qu'ils étaient des imposteurs, des hérétiques, des manichéens déshonorant l'Islam. Or ce Deisân, nommé par d'autres Ibn Deisân (par exemple par Mas'ûdi en 947, entre Mani et Marcion) n'est autre que Bardesane, le dualiste syrien *Bardaisan* dont *Ibn Deisân* n'est que la transcription arabe. Ses disciples «Deisanites» sont connus dans l'histoire littéraire sous le nom de Bardesanes. Nous insistons sur cette équivalence de noms qui semble avoir échappé à l'auteur (p. 32). Or comme Bardesane est mort en 222 de notre ère, on touche du doigt l'anachronisme du manifeste que les subterfuges d'O'LEARY ne réussissent pas à évincer, encore moins l'identité d'Ibn Deisân et de Meimûn, surnommé *el-Qaddâh*, adoptée par les anciens Sunnites qui ont écrit sur l'origine des Fatimites. Ce personnage nébuleux de Meimûn dont les enseignements sont ceux même des Ismaïliens, le Pr. MAMOUR a de bonnes raisons pour l'identifier à Moḥammed el-Makhtûm, fils d'Ismâïl, petit-fils de Ja'far eṣ-Ṣâdiq et que les généalogies fatimites placent dans la lignée ancestrale de Obeydallah qui établit l'indépendance de la dynastie.

Mais comment se fait-il que Meimûn ait été considéré comme hérétique par des historiens pro-Fatimites tels que Ibn Khaldûn et Maqrîzî? Ici notre controversiste fait valoir la confusion qui s'est produite entre Ismâ'îli et Qirmîṭî. La note d'hétérodoxie que la doctrine d'Ḥamdân Qarmâṭ portait au sein même du

shiisme contamina la réputation de l'Ismaélisme. A vrai dire ce dernier demeurait la pure doctrine mise en système et développée par le fils de Meimūn, Abdallah, le promoteur des fameux «traités des Frères de la Pureté» qui furent achevés par Ahmed, fils d'Abdallah. Avant 840, la foi ismaélienne avait trouvé sa formule et ce n'est que cinquante ans plus tard que germa l'erreur des Karmates réprouvée par les Ismaéliens bien qu'elle fût un rejeton de leur propre conception. Ce fut pourtant en vue de mettre les Fatimites en dehors de l'Ismaélisme tenu pour suspect que certains chroniqueurs établirent une généalogie reliant Obeidallah à Ja'far eš-Šādiq non plus par Ismaël mais par l'intermédiaire de son frère cadet Musa. L'auteur soutient contre BLOCHET l'inauthenticité de cette seconde généalogie et ses arguments méritent d'être pris en considération. Signalons également la légende israélite à laquelle est consacrée une revue rapide. La tentative maligne de donner aux Fatimites une origine juive paraît être une nouvelle machination pour déprécier cette dynastie. Il serait trop long d'entrer dans le détail du chapitre sur l'aspect incertain des généalogies fatimites et l'argument qu'on en tire contre la descendance de cette dynastie par rapport à Fatima. Sous forme de plaidoyer très convaincu l'ouvrage s'achève sur des observations générales qui ne sont rien moins qu'une critique des témoignages pour ou contre la légitime revendication de la qualité d'Alides pour les Fatimites. L'auteur fait un grand cas de l'opinion de trois savants historiens sunnites, Ibn Khaldūn, Maqrizi et Abul Feda, qui écrivirent en dehors de toute influence de parti. En dépit du manifeste de Baghdad, ces historiens soutinrent les prétentions fatimites. Leur impartialité confirme le Prince MAMOUR dans la conclusion à laquelle aboutit sa critique qui pense avoir eu raison de tous les opposants anciens et modernes: Les Fatimites étaient les descendants directs d'Ali et de Fatima. On peut se demander pourtant si la documentation trouble qui enveloppe cette question permet une décision aussi nette.

F. M. ABEL.

כחבי אנגריה, ערך ופרש ד"ר ה. א. גינזברג. *The Ugarit Texts*. Edited and Interpreted by H. L. GINSBERG, B. A., Ph. D. Published by *The Bialik Foundation of the Jewish Agency for Palestine* through *Vaad Halashon*. XV+158 pp. Jerusalem, 1936.

The author having already distinguished himself by many publications on the Ras Shamra texts now offers us a complete collection and translation of all those inscriptions already in print.¹ The book, which begins with a selected bibliography and introduction, consists of the five Baal poems (p. 17-76), the INY myth (p. 77-86), numerous smaller texts (p. 87-128) and two appendices (*nispahim*). The book closes with an index of the Biblical and Rabbinic references and a dictionary of Ugaritic.

For the readers of this *Journal* no recapitulation of the Ras Shamra finds is needed. The uninitiated will find ample material in the introduction and the bibliography.² DIRINGER's good account in *Aegyptus*, 1934 will be missed, how-

¹ Of the new texts that have since been published, Dr. GINSBERG has commented on *Syria* XVI, p. 247-66 in *Bull. Jew. Pal. Expl. Soc.* III, p. 138 f. and in this *Journal*, vol. XVI, p. 138 ff. *Syria* XVII, p. 150-173 and VIROLLEAUD, *La légende phénicienne de Danel* (Paris, 1936) appeared in July of this year.

² This bibliography is now enriched by several new contributions, notably: JAMES A. MONTGOMERY and ZELIG S. HARRIS, *The Ras Shamra Mythological Texts* (Philadelphia, 1935); GINSBERG, *Orientalia* V, p. 161 ff., *Haaretz* of May 26, 1936; ALBRIGHT, *JPOS*, vol. XVI, p. 17 ff.; OBERMANN, *JBL* 55, 21 ff.; MONTGOMERY, *JAOS*, 56, 226 ff.; MAISLER, *JPOS*, p. 150 ff.; GASTER, *OLZ* 39, 401 ff. See also *JRAS* 1936, 225-235 and 271-277, and *Revue d'Histoire et de Philosophie religieuses* 16, p. 101 ff. This brings the bibliography up to August 1936.

ever, by those who prefer reading Italian. The map on p. 2 shows the location of Ugarit, but the site should have been marked in red. The introduction contains a good general survey, though one might wish a longer discussion of the grammar than the brief paragraph on p. 12 f. Dr. GINSBERG's qualifications for this task are evidenced by the many pearls scattered in the commentary to the text. The author still maintains BANETH's view concerning the narrative function of the imperfect and adheres to his theories of the verb in spite of the galaxy of authorities (ALBRIGHT, MONTGOMERY, HARRIS, SPEISER) who oppose them. The reviewer cannot accept without reservation the statement that "no *ʾašel* or *hišil* has been shown to exist in Ugaritic" (p. 58, n. to l. 46). This statement thrice repeated near such forms as *ʾašel* *ʾašel* *ʾašel* could be modified to say that "though the standard causative formation in Ugaritic is with a *š* prefix, other forms are also present."

Our author deserves much praise for accomplishing a difficult task and the following minor comments are an indication of the scarcity of the flaws.

The author assumes throughout the correctness of the reading *g* for letter 23 (p. 13) and he is confident of having established the fact "beyond doubt" in *Orientalia* V, p. 173. While, in the main, this reading is satisfactory, mention should have been made of the difficulties involved in the etymologies of such words as *xm*, for example.

The author follows his own arrangement of the Baal poems without referring to the numbering of the *éditiones principes*. It is particularly essential in Baal (p. 57. ff.) where Dr. GINSBERG includes a welcome addition to the text at the beginning of the poem which had hitherto been thought to begin at l. 29. We would also wish a more complete discussion of the mythological aspect of our texts, notwithstanding their elusiveness. Mention should be made of the work of ALBRIGHT, MONTGOMERY, and others in that direction. While the author is perfectly right in disregarding DUSSAUD's fantastic theories, reference to them should none the less be given in the text, as well as in the bibliography. As a whole, Dr. GINSBERG's caution is praiseworthy.

The typographical mistakes are not more than were to be expected in a work of such a nature printed in Palestine. On p. 12, l. 5 (above) read 1933 for 1993; p. 15, for *מקבילים* read *מקבילים*; p. 22, last line, for *נח* read *נח*; p. 24, n. to l. 4-5, for *נצונה* read *נצונה*; p. 32, l. 95, for *נח* read *נח*; p. 38, l. 7, for no. 5 read 4; for 40, 41; 50, 52, etc. (cf. *Syria* XIII, pl. XXVIII, col. VII); p. 55, l. 16, read *ראש* for *ראש* (cf. l. 17); p. 81 instead of 35, read 34 (this mistake is corrected in the following page); p. 99, second paragraph, instead of "the horses...in...the first half of the third millennium" read "...second millennium".

Our other remarks may be limited to the following:— The divergent reconstruction of MONTGOMERY and others (p. 37, l. 47 ff.) should be noted, though the reviewer is convinced that GINSBERG is right (cf. l. 53 and 59 in VIROLLEAUD's cuneiform). The author is not aware of the reviewer's suggestion (*BASOR* 50, 16, n. 30) and apparently connects *dʿš* (p. 33, l. 83) with the Syriac. If BROCKELMANN's etymology (see his *Lexicon Syriacum*) is correct, then GINSBERG's should be dropped, for we would expect a *g* in Ras Shamra as well (the *š* which in the Syriac should become *ʿ* is explained by dissimilation). While the difficulty can be explained away by making *dʿš* a blend of *nʿd* (Heb. *nʿd*) and *dʿš*, grammatically at least our suggestion is preferable. The explanation of *špn* as the name of a mountain (p. 28, l. 19) is not likely, and its identification with *Jabal el-Akra* (after EISSFELDT) even less. We prefer to translate *gp* (p. 80, l. 30) "interior, heart" with ALBRIGHT. The word *ערתם* (p. 65, l. 4) is left untranslated. Already VIROLLEAUD connected it with Jud. 5: 10, but I think it is preferable to regard it as referring to the nobles who ride on the white animals, rather than the animals themselves. For *ʾihil* on p. 127 see my remarks in the forthcoming number of the *Journal of Biblical Literature*.

That *Iwrishar* is the Hurrian *Ewiri-shar* (p.93) was first noticed by A. SACHS (*BASOR* 54, p. 26, quoted by ALBRIGHT).

A word must be said on the dependence of Hebrew upon Canaanite. Much has been made of this in certain quarters. A note of warning, therefore, should be sounded against hurried treatment of the subject which may be misleading. When scholars of Dr. GINSBERG's calibre tackle such problems, however, we may rest assured that the treatment is as sound as it is critical. Scattered throughout the book are references to Biblical parallels, and appendix A is a convincing demonstration that Ps. 29 is descended from an ancient Canaanite, probably North-Canaanite, hymn. We again congratulate and thank our author and the *Bialik Foundation* for their offering.

A. BERGMAN
