# THE VOCALIZATION OF THE EGYPTIAN SYLLABIC ORTHOGRAPHY

BY

### WILLIAM FOXWELL ALBRIGHT

W. W. Spence Professor of Semitic Languages
Johns Hopkins University

### AMERICAN ORIENTAL SERIES VOLUME 5

493,1152 493. Al 15 V Al 15 V

CAN ORIENTAL SOCIETY
W HAVEN, CONNECTICUT
1984

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1966



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# AMERICAN ORIENTAL SERIES

### **VOLUME 5**

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#AS, Shimla 493, 152 Al 15 V

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#### PREFACE

During the past seven years the writer has devoted a great deal of his time to the preparation of this monograph. Owing to the scattered nature of the material, and the fact that almost every equation here included has required a special investigation, sometimes of no little complexity, the time which it has required for completion is quite out of proportion to the length of the finished study. Numerous interruptions have repeatedly delayed its appearance, but since they have compelled fresh examination of the material, they have considerably improved the quality of the result. Some minor inconsistencies in the autographed part of the study are due to the fact that the first pages were written down in their present form over a year before the work was completed.

The writer wishes to express his very great indebtedness to the eminent Egyptologist, Mr. Battiscombe Gunn, for counsel and suggestion in a lengthy correspondence and in a number of conversations. Mr. Gunn has read the entire manuscript, including the autographed portion, in its preliminary form (which, however, included nearly nine-tenths of the material now presented). Observations of his which I have adopted, are always acknowledged as such. Since we differ in various minor details, he must not be held responsible for other statements or conclusions.

The treatment of equations in the autographed lists, will often be unintelligible to one who is not a specialist in comparative Semitic linguistics, since I have endeavored to be as concise as possible, and no space has been wasted. Further explanation of details in the lists will be found in § 62.

After mature consideration, I have decided to omit all indices. In the first place, the lists themselves, being arranged in alphabetic order, form an index. Cross-references are always to the most detailed treatment of a given word or name; such treatment is almost invariably found at the first occurrence of the word. The student who wishes to refer to my treatment of a given word, should note its spelling in Burchardt's invaluable list, and should then look it up in the lists under characteristic syllabic groups contained in its Egyptian orthography. Thus, in order to locate my treatment of the name 'qywš (employing the consonantal form only), usually identified with the name of the Achaeans, one should look up the group which comes first in alphabetic order, i. e., '3, here 'a (III, A, 17). In order to be absolutely sure that nothing is missed, it may be well to compare the other groups as well,

vi Preface

in their respective places, though additional material will only be found in those cases where new observations have been made during the year which elapsed between the beginning and the completion of the autographed portions.

It might have been useful to include indices of the vocalized Egyptian and Canaanite words treated in our lists, but since the writer expects to treat these two bodies of material elsewhere at a later date, including all the available data, it seemed better to omit them.

I wish to express our obligations to Professors R. G. Kent and G. M. Bolling, who expressed their willingness to include this study in the series of monographs of the Linguistic Society of America. The writer's decision to transfer it to the new monograph series of the American Oriental Society, was due to various practical considerations, such as the lack of Coptic and Semitic types in publications of the Linguistic Society. To the Editors of the American Oriental Society publications, in particular to Professor E. A. Speiser, I owe a special debt of gratitude for the acceptance of this study for publication.

In conclusion, the writer can only say with Scaliger, Utinam essem bonus grammaticus!

W. F. Albright.

June 7th, 1934.

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### INTRODUCTION

- 1. It is just forty years since the late W. Max Müller published his epoch-making work, Asien und Europa nach altägyptischen Denkmälern, in which he offered the first systematic solution of the problem of the Egyptian syllabic orthography. This orthography is employed in the inscriptions of the New Empire and later periods to write foreign names and words, as well as rare or ambiguous Egyptian words and names. Since the appearance of Müller's first book no further progress has been made, in spite of various attempts. In this study we shall endeavor to establish the vocalization of the syllabic orthography by a purely inductive method. We may undertake our investigation with much more hope of success, thanks to three vital factors: the great increase in cuneiform transcriptions of syllabically written words, the great increase in our knowledge of West-Semitic phonology and vocabulary in the second millennium, and especially the recent discovery of the Egyptian vocalic system of the New Empire. This new material is of decisive importance.
- 2. The early Egyptologists confused the late, corrupt form of the syllabic orthography, used for the Greek names on which their decipherment was based, with the ordinary spelling of Egyptian, which was then believed to be partly vocalic. The first scholar to make a clear distinction was Erman, whose paper appeared in ZÄS¹ XIV (1876), 38-42. Erman, who then accepted the transcription of Lepsius, supposed that the irregularities of the orthography were due to lack of precision in the Syrian language, as well as to the unaccustomed Egyptian ear.
- ¹ Note the following abbreviations: AE = Max Müller, Asicn und Europa; AJSL = Amcrican Journal of Semitic Languages; Annual = Annual of the American Schools of Oriental Research; AOF = Archiv für Orientforschung; APN = Ranke, Die ägyptischen Personennamen; B = Burchardt, Die altkanaanäischen Fremdworte und Eigennamen im Agyptischen; Bulletin = Bulletin of the American Schools of Oriental Research; CD = Crum, A Coptic Dictionary; EA = Knudtzon-Weber-Ebelling, Die El-Amarna-Tafeln; G = Gauthier, Dictionnaire des noms géographiques; GB = Gesenius-Buhl,  $Handwörterbuch^{16}$ ; GK = Gesenius-Kautzsch, Hebräische Grammatik<sup>28</sup>; HWB = Delitzsch, Assyrisches Handwörterbuch; JBL = Journal of Biblical Literature; JEA = Journal of Egyptian Archaeology; JPOS = Journal of the Palestine Oriental Society; KMAV = Ranke, Keilschriftliches Material zur altägyptischen Vokalisation (Abh. Kön. Preuss. Akad. d. Wiss., 1910); LRE = Gauthier, Livre des rois de l'Egypte; M.E. = Middle Egyptian; MVAG = Mitteilungen der Vorderasiatischen Gesellschaft; N.E. = New Egyptian; O.E. = Old Egyptian; OLZ = Orientalistische

- 3. Ten years after Erman's paper, J. H. Bondi, a pupil of Nöldeke, published the first systematic treatment of the Canaanite loan-words in Egyptian, under the title, Dem hebräisch-phönizischen Sprachzweige angehörige Lehnwörter in hieroglyphischen und hieratischen Texten (dissertation, Leipzig, 1886). Well trained linguistically, Bondi produced an excellent study. He was, however, unable to solve the question of the vocalism of the syllabic writing. Adopting the Lepsius system of transcription, with his teacher, Dümichen, he saw that this vocalization could not be a reproduction of the original Semitic vowels (p. 19 f.), and finally concluded (p. 21 f.) that the Egyptian vowels only served the purpose of determining a consonantal nuance, such as a palatalized or unpalatalized, a stop or a spirant consonant, etc.: "Die Frage der egypt. Vocalsetzung in den Lehnwörtern bleibt aber auch nach Gesagtem noch vielfach ungelöst."
- Several years after Bondi, W. Max Müller, a pupil of Georg Ebers, devoted more than thirty pages (pp. 58-91) of his work cited above (Leipzig, 1893) to the question of the syllabic orthography. He maintained that the syllabic orthography was a gradual development, beginning in the early Middle Empire (Dyn. XI), and becoming gradually transformed into the complete system of the New Empire, under strong cuneiform influence. He considered that the idea of syllabic writing and the three-vowel system (a-i-u) were both directly borrowed from cuneiform, since both were then supposed to be foreign to Egyptian. As a matter of fact we now know that the Egyptians of that date still possessed the original Semitic three-vowel system, and that the e and o had not yet come into use (except possibly in sporadic cases). The phonetic feature of Max Müller's transcription was that groups containing an 3 were invariably read as "consonant +a," thus establishing a harmonious system, since nearly all other groups contain either y or w, that is, i or u, according to Müller. The latter also discovered a number of syllabic groups which had been overlooked by

Literaturzeitung; PAR = Forrer, Provinzeinteilung des assyrischen Reiches; PJB = Palästinajahrbuch; PSBA = Proceedings of the Society of Biblical Archaeology; R = Ramesses; RA = Revue d'Assyriologie; RLA = Reallexikon der Assyriologie; RT = Recueil de Travaux; SBW = Max Müller, Die Spuren der babylonischen Weltschrift in Agypten (= MVAG 1912, No. 3); Sp = Spiegelberg, Koptisches Handwörterbuch; T = Tuthmosis; VG = Brockelmann, Grapow, Wörterbuch der Grammatik der semitischen Sprachen; W = Erman-KAS = Zeitschrift für Agyptischen Sprache; ZA = Zeitschrift für Assyriologie; mentliche Wissenschaft; ZDMG = Zeitschrift der Deutschen Morgenländischen Gesellschaft; ZDPV = Zeitschrift des Deutschen Palästina-Vereins.

previous students, who worked with much less material. In several cases he altered vocalic values of the Lepsius school: thus ba (our bi, VI, B) he read bi, the ru of Bondi (our ra, X,  $\Lambda$ ) he read ra, and ta (our ta, XIX,  $\Lambda$ ) he changed to ti.

- The discrepancies between the known vocalization of many Asiatic names and Semitic words, on the one hand, and Müller's transcription of their Egyptian form, on the other, were, however, so numerous that his system was rejected by virtually all the members of the Berlin School, led by Sethe and Erman. In Sethe's fundamental work, Das aegyptische Verbum, 1899, §§ 66, 76, etc., he denied the vocalic nature of the syllabic writing entirely, maintaining that it is only the result of a longcontinued process of consonantal "Entwertung," in which weak consonants tended to lose their consonantal value entirely. Erman, however, was at first unwilling to go so far as his pupil. As late as 1907 2 he emphasized the probability that there was some indication of vowels in the syllabic system, though he admitted that the orthography of the New Empire was so inconsistent as to make a definite conclusion difficult. As an illustration of the inconsistency he pointed to writings like hw-rw-rw (see X, C, 14) for the word which appears as 2PHPE in Coptic. As we shall see, this very illustration of Erman's has now become one of the neatest proofs of our thesis. On the other hand he called attention to such precise vocalization as that in Dy-dw-n = Heb. Sidôn, etc., and concluded that there must have been some kind of " Vokalandeutung." Erman also thought that the original system, which is lost to us, was consistent in representing the vowels, but that it became corrupt in the New Empire. We shall see that the system developed rather gradually, and reached its culmination toward the end of the Eighteenth Dynasty, so that Erman was mistaken.3 In this paper Erman referred to the studies which were being begun "von andrer Seite," alluding to the study by his pupil, Max Burchardt (see below). Burchardt's results, however, did not agree with his teacher's views, but with Sethe's, so Erman surrendered his original position, and concluded that the syllabic orthography was used only to indicate the consonants with which the groups begin (see his Ägyptische Grammatik3, 1911, § 89).
- 6. The principles of Sethe were accepted and defended at length by Burchardt, who presented them, after careful study, in a valuable work,

<sup>2</sup> ZXS 44, 106 f.

<sup>&</sup>lt;sup>3</sup> It will be suggested below, however, that several polyphonous groups were originally intended to represent one vowel, and that their ambiguity as representations of Egyptian words led to early confusion in their vocalization.

### 4 The Vocalization of the Egyptian Syllabic Orthography

Die altkananäischen Fremdworte und Eigennamen in Aegyptischen (1909), where the material has been so completely collected as to leave only gleanings. Though accepting most of the views of Sethe, Burchardt confessed himself unable to follow him the whole way  $(I, \S 6)$ , since, as he pointed out, there is rarely any interchange between different groups in spelling the same word. Such a marked rigidity of spelling, with virtually no shifting from a group containing 3 to one with y or with w, necessarily implies some system which was recognized by the Egyptians. While Burchardt did not attempt to determine what this system might be, he did distinguish between groups which represented syllables ending in a vowel and others which represented syllables ending in a consonant. As we shall see, his distinction is correct.

- 7. Egyptologists who were not members of the Berlin School continued for the most part to employ the Lepsius system of transcription. The number has grown less from year to year, but this system is still employed in the great work of Gauthier, Dictionnaire des noms géographiques (Cairo, 1925-9). The late W. Spiegelberg, who was an adherent of the school of Erman, but remained independent, published a paper in 1898 (ZA XIII, 47 f.), in which he maintained that Müller was right in utilizing the groups containing w and y as indication of Semitic u and i, but that nothing could be done with the groups which contained 3.5 He thought it quite possible that a scribe or school had a more systematic transcription of vowels, but considered it likely that different systems were employed during the period of over five centuries in which we find syllabic writing common, so that we are not in a position to utilize the latter, except in the cases mentioned.
- 8. In 1912 Müller returned to the debate in his monograph, Die Spuren der babylonischen Weltschrift in Ägypten (MVAG XVII, 3). Here he presented his theory at greater length, but hardly changed a
- The new syllabically written words which we have added, come partly from older material which Burchardt did not exhaust, but mostly from texts published since his book, such as Wreszinski's Londoner medizinischer Papyrus, Golénischeff's papyrus containing lists of Syrian envoys to Egypt in the fifteenth century. Burchardt's knowledge of the Asiatic materials was very defective, so that our corrections and additions are very numerous here. New equations or vitally altered old ones amount to one-third of our entire material.
- freue mich, dass Sie auch die syllabische Umschrift ähnlich wie Max Müller beurteilen, und wie ich es selbst vor längerer Zeit...mit gewissen Einschränkungen der Müllerschen These gethan habe." This remark was based on the published abstract of the writer's paper at Bonn. In the sense meant by Spiegelberg, our results are intermediate between Müller's system and his views.

single value. He now insisted that the influence of cuneiform was decisive from the very beginning of this script, which he traced back into the Pyramid Age — erroneously, as we shall see. Because of the inherent improbability of so great a cuneiform influence at so early a period, and on account of the artificial character of many explanations offered for strange divergences between the Asiatic and the Egyptian vocalization, this study of Müller's failed to win any new adherents to his standard.

- 9. Of late, however, the Berlin School has shown a tendency to react against the extreme scepticism shown by Erman and Sethe in earlier works. Sethe recently had to alter his point of view, owing to the discovery of the Aechtungstexte, holding (p. 29) that the truth may lie in the middle, between his own earlier view and that of Max Müller. Certain syllabic spellings, such as ny-m = Coptic NIM, and Sw-ty, Sw-t-b for the name of the god Stb, written Suta(b) in Hittite cuneiform, appeared to Sethe so exact that the coincidence could not be accidental. Curiously enough, Sethe was mistaken, as we shall see, in considering the transcription of the Aechtungstexte as partly syllabic; we believe that it is almost exclusively consonantal.
- 10. Erman says in the fourth edition of his Agyptische Grammatik (1928), § 89: "Das Bedürfnis, Worte und Namen zu schreiben, für die keine Schreibung überliefert war, hat früh zu Versuchen genauer lautlicher Schreibung geführt. Man hat dabei die Zeichen 3, w, j als Aushülfe benutzt, um Vokale anzudeuten, gerade so wie man in semitischen Schriftsystemen gelegentlich &, 1 und ' so verwendet. Doch ist dieses System früh verwildert und schon im neuen Reich kann von einer auch nur annähernd richtigen Vokalbezeichnung nicht die Rede sein." In the second edition of his Neuägyptische Grammatik (1933) he goes still farther (§§ 29-38). He now says (§ 32): "Wir nehmen heute an und im Ganzen mit Recht, dass die Zeichen . . . der syllabischen Schrift ohne Bedeutung sind. Die Zeit, wo man mit diesen Zeichen Vokale andeuten wollte, ist in der Sprache, die uns hier beschäftigt, jedenfalls längst vorüber. Indessen finden sich doch noch einzelne Schreibungen, und zwar sowohl in der syllabischen als auch in der gewöhnlichen Schrift, in denen ein vokalischer Gebrauch solcher Zeichen nicht zu verkennen ist." As illustrations he brings a number of cases in which y (both the old dual sign and the double reed-leaf) and w correspond to Coptic or Semitic  $\hat{i}$  or  $\hat{u}(\hat{o})$ . On the other hand he believes that a number of the

<sup>&</sup>lt;sup>6</sup> See his monograph, Die Achtung feindlicher Fürsten, Völker und Dinge auf altägyptischen Tongefässscherben des mittleren Reiches, Berlin, 1926 (Abh. Preuss. Akad d. Wiss., Phil.-hist. Kl., 1926, 5).

occurrences of y and w cannot possibly be regarded as vocalic, a consideration which prevents him from taking the correct equivalences too seriously. In passing we may simply observe that the cases which he cites either are late and worthless for our purpose, or are due to erroneous morphological combination. The use of 3 Erman regards as entirely obscure and irregular. He adopts Burchardt's view with regard to groups IX, E and X, D, but introduces a highly significant innovation by proposing the pronunciation no for group IX, C (our nu, transcribing Asiatic nu and no). If he had only continued to apply the method which yielded this equivalence, our study would be largely superfluous.

- 11. The writer was early convinced that the system of Max Müller was partly correct, though he later gave it up for a time, under the influence of Sethe's work. It was not, however, until 1928 (again under Sethe's influence) that he began seriously to work on this problem from a purely inductive point of view. The results were so striking that he continued to develop his theory, which was first presented at the Orientalistentag in Bonn, in August, 1928. Aside from the addition of numerous examples for the values attributed to different groups, there has been no important change in his views since the presentation of the paper at Bonn.
- 12. The present study is inductive in its method. By this is meant that all the principles which are established are induced from a body of carefully collected and sifted data. Only after our inductive work has a principle been assumed as a working hypothesis and then applied to the explanation of refractory data. The basic material will all be found, set forth, studied linguistically, and grouped according to categories, in the autographed part of our study. In the preliminary discussion and interpretation all conclusions are based on analysis of this material. We will begin with an historical sketch of Egyptian transcription of foreign names and words, after which the linguistic implications of our vocalism will be treated. We will finally describe and analyze the system of transliteration into Egyptian which we have established inductively.
- 13. Max Müller called attention to a number of orthographies from the Old and Middle Kingdoms which he considered as early cases of syllabic orthography. His treatment was, however, inadequate, since

<sup>&</sup>lt;sup>7</sup> Cf. AJSL XXXIV (1918), 89, n. 1; JPOS I (1921), 57, n. 3; II, 185 f. <sup>8</sup> Cf. JBL XLVI (1927) 167

Ounder the title, "Die Vokalisation der asiatischen Fremdnamen und Wörter in der syllabischen Schrift des neuen Reiches"; for the abstract see ZDMG 7 (N. F.) xlv-vi. There is one unpleasant misprint;  $k\tilde{a}$ 3 is printed for  $k\tilde{u}$ 3; see also JPOS VIII (1928), 229, n. 2, 255, n. 1.

there was little material for comparison. Now, thanks to the Aechtungs-texte, dating, as Sethe has shown, from the very end of the Eleventh Dynasty, about 2000 B.C., 10 we are in an entirely different position. We shall, therefore, discuss the transcriptions of the Aechtungstexte and related reproductions of Semitic names in inscriptions of the Middle Kingdom, in order to obtain a clear idea of the usage then prevailing, before taking up Müller's material.

The Semitic equivalents of the names in the Asiatic section of the Aechtungstexte have been discussed by Sethe, Dussaud, 11 and the writer; 12 other treatments add nothing new to the list of clear identifications proposed by these scholars. Since the writer's treatment is the latest, it will be referred to for a detailed discussion. are the identifications which are either certain or practically so; numerous other more doubtful combinations have been omitted from the list, which follows the order of Sethe's publication, for the sake of convenience in referring to it: 'w $\underline{i}t = Ullaza$ ; Y'nq = יענק; ''m = y (with mimation); 'kיתר (with mimation); 'ybm = 3 (with mima-(y)atar; 'mmwykn = 'Ammu-yakûn; 'shbw = Arhâbu; Ysm(w)t = Yarmût; M3k3m = Malkî-ilum; Km3m = Kamarum;= Yap'ânu; 'gtm = 'Irqatum; 'sq3nw = Asqalânu (אשקלון); M(w)t'; = Mutî-ilu; ירושלם); Yq? איני איני איני איניין); Yq? איניין איניין); Yq? איניין אייין איניין אייין איניין אייין אייין אייין איייין איייין איייין איייין איייין איייין אייייין איייין איייין איייין איייין איייין איייין איייין איייין אייייין איייין איייין איייין איייין אייייין אייייין איייין אייייין אייייין אייייין אייייין אייייין אייייין איייין איייייין אייייייין 'ammu; ' $hnw = Alh\hat{a}nu$ ;  $Ym^2w = v$ other inscriptions we have  $Skmm = Sakmum,^{14} \cancel{H}bdd$  and  $\cancel{H}bddm = \cancel{H}abadadu(m),^{15}$ 'hnm

<sup>10</sup> Op. cit., p. 15 ff.; cf. JPOS VIII, 224 ff., 254 f. Sethe's views have been opposed by Montet, Kêmi, I, 1928, pp. 19-28, and independently by Meščerskij, "Zur paläographischen Datierung der altägyptischen Ächtungstexte," in Comptes Rendus de l'Acad. d. Sciences de l'URSS, 1929 B, No. 13, pp. 253-7. The arguments of the latter are also largely palaeographical, though he stresses certain historical arguments. Both scholars place the Aechtungstexte in the early Thirteenth Dynasty, a view which seems absolutely impossible to the writer.

<sup>&</sup>lt;sup>11</sup> Syria, VIII, pp. 216-33.

<sup>12</sup> JPOS VIII, 223-56.

<sup>13</sup> It is curious that most of the names ending in w = vocalic u in the Acchtungstexte have n before; i. e., they end in the afformative element  $\hat{a}nu$ . This is true of no fewer than ten cases, and the mimation never occurs here after an  $\hat{a}nu$  ending. It probably follows that the ending  $\hat{a}nu$  was diptote in West-Semitic (Amorite) at this period. Arabic has preserved a similar diptote ending in adjectives of the form  $fa'l\hat{a}n$ , with feminine  $fa'l\hat{a}$  (written fa'lay for older fa'law;  $\hat{a} = \text{Canaanite } \hat{o}$ , older  $\hat{a}$  in 'Akkô, Megiddô, etc.); see Wright-De Goeje, Arabic Grammar, I, 241. The u in 'Arhâbu reminds one that several broken plurals are diptote in Arabic, and that all elatives are diptote (it is not impossible that we should read 'Arhabu, as an elative).

<sup>14</sup> Cf. JPOS VIII, 226, 233.

<sup>16</sup> Cf. JPOS VIII, 234 f.

- = אהל (?),  $^{16}$  'bš $^{3}$  =  $Ab\hat{\imath}$ -šar,  $^{17}$  Ypšmw' $b = Yap\hat{a}$ -šemu-abi,  $^{18}$  'bšmw= Abî-šemu. These clear cases prove conclusively that 3 was at that time employed only to transcribe Semitic res and lamed, probably only in post-vocalic (including inter-vocalic) positions, and was never employed to indicate the vocalization of Semitic names.19 Similarly the '('a) was only used to transcribe Semitic 'alef.20 On the other hand, Egyptian w is employed in numerous certain instances to denote Semitic u, evidently because the Egyptians themselves felt that the vowel u had consonantal affinities. The method of transcription then employed was not, however, hard and fast, but allowed some variation.
- 14. In the light of this abundant material, none of which was known to Max Müller, let us examine the cases from the Old and Middle Empire which he cites. The Semitic loan-word k3mw,21 meaning "orchard, vineyard," which already occurs in the Pyramid Age, was combined happily by Brugsch with Heb. kerem, with the same meaning. Müller rejected this identification, and explained the word as a loan from Heb. gan (originally gann, ginn), "garden." 22 As we have just seen, however, a Semitic karmum, karmu could only appear in the earlier stage of Egyptian as  $k^3mm$  or  $k^3mw$ . In a word borrowed by Egyptian, the nominal form without mimation, which not only was more common in actual use, but was also superficially analogous to the common Egyptian nominal ending w, was regularly employed, so  $k^{3}mv$ was the natural Egyptian form.

<sup>10</sup> Peet, Inscriptions of Sinai, No. 163. Petrie's adaptation "Yehanem" has sometimes been adopted by Semitists, who should know better. The change of l to n before m is common partial assimilation. The following name in the same list, Qn', is a hypocoristicon, probably standing for Qênâ', a Hebrew לקינא or אָקינא\* or אָקינא\*. The third name is illegible, but has nothing to do with Heb. Baasha, as thought by Petrie. The doubtful Rw? (ibid., No. 81) may stand for \*Rw'3, which would probably represent \*Lau'il, literally "client of god," a name actually found B 604 (from the reign of Ramesses III; see III, B, 7), Ra-wi-'i-ra, i. e., Lawi'il. Heb. Lewi is naturally a hypocoristicon of this name.

<sup>17</sup> Cf. JPOS VIII, 255, n. 1; the second element should be stative, not substantive; cf. the Old Accadian names Ilum-dan, "god is mighty," Ilum-dannum, " mighty god."

<sup>18</sup> Cf. JPOS VIII, 232 f.

This has been recognized in part by Sethe, more fully by Dussaud, and fully by Montet; see especially JPOS VIII, 230 ff.

<sup>20</sup> See JPOS VIII, 232 ff., passim.

For the writing (not k3nw!) cf. JPOS VIII, 231 n. 1. To the two cases there cited,  $k_3^2NW = k_3^2mw$  and  $\underline{d}_3^2NW = \underline{d}_3^2mw$ , add  $h_3^2NW = h_3^2mw$  (Copt. 20EIM).

<sup>22</sup> See SBW 69 ff.

Aside from the unintelligible cases of possible syllabic writing in the Pyramid Texts, and a few extremely doubtful instances elsewhere, none of which we accept as such, there is during the Old Empire only the name of the Syrian town  $Nd^3$ , in the Fifth Dynasty. A glance at the transcriptions in the Aechtungstexte will, however, show that the combination 3 was not yet syllabic, but expressed Semitic n or n or n; the name Probably represents a Semitic n. n-n or n-n or n or n in n or n

- 15. Turning to the Middle Empire, we find numerous apparent cases, and a very few real ones. Müller cited the names of five dogs on the stele of Wašḥ-ʻanḥ Antef, in the early Eleventh Dynasty (cir. 2100 B. C.). Unfortunately, only two of these names can be regarded as syllabic according to any theory, bhwk³ and 'b³qr; the other three, phts, tqrw, and tknrw, are consonantal. Since we have no idea what the true vocalization of these names was, in spite of attempts to explain them by modern Berber words, we are not justified in treating any of them as syllabically written.
- 16. In the Sinuhe Romance we find a few names which must be considered. The name of Sinuhe's patron is  $Nn\ddot{s}$  son of 'mmw (old 'mmwnn $\ddot{s}$ '), 25 writings which are strictly parallel to the orthography of the Aechtungstexte, and are not semi-syllabic, as supposed by Müller. 26 The word which Müller read as a place-name 'A-ku means "quarry," ikw, but the spelling with the sign 'a (III, A) is undoubtedly syllabic. 27 The name '33 may easily represent a Syrian 'll, 'rr, 'lr, or 'rl, according to the orthography of the Aechtungstexte, and need not be syllabic or corrupt. The other names cited by Müller from the Sinuhe text are purely consonantal, as is also true of the names not mentioned by him, with the one possible exception of Mn(n)ws prince of Fnhw. The latter expression seems to refer to Mediterranean lands in general (possibly including Phoenicia in some cases, with Sethe), and Mn(n)ws

<sup>&</sup>lt;sup>23</sup> Cf. the writer's observations, Annual, VI, p. 34, n. 70, and JPOS VIII, 229, n. 3. It may be added that there is a very plausible etymology, not hitherto suggested: Arab. lwd means "to take refuge," and maldd is "refuge, citadel, fortress," while laud has developed a topographical sense. The original name may have been \*Laudii, whence \*L6ziel, "my refuge is god," from which hypocoristica like \*L6zanu (Rinw), Rw-i-n and \*L6z (Massoretic Laz) could be easily derived. The places called by these names may have been different; cf. Alt, ZDPV XLVII (1924). 169 ff.

<sup>24</sup> See AE 61.

<sup>&</sup>lt;sup>25</sup> Cf. Gunn, Studies in Egyptian Syntax, p. 91; contrast Montet, Kêmi, I, 27 f., and Albright, JPOS VIII. 255 f.

<sup>26</sup> SBW 59.

<sup>27</sup> SBW 57.

may reflect Minos of Crete.<sup>28</sup> In any case the spelling is analogous to that of the *Aechtungstexte*, and is not syllabic.

- 17. The names of the princesses of  $Mn\underline{t}w$ -htpw III (cf. SBW 53, n. 3), ' $\tilde{s}yt$ ,  $S\tilde{s}dh$ ,  $K\tilde{s}w$ 't, Kms't are probably not syllabic, whatever their origin may have been. The first one might, for example, stand for \*' $Ar\tilde{s}iyatu$ ; <sup>20</sup> the second is not written syllabically, and the other two seem to have hypocoristic endings.
- 18. Müller also quoted a number of Semitic loan-words in Middle Egyptian of the Twelfth Dynasty as illustrations of partial syllabic orthography at this period. Only two have any value for us, namely  $sp^3t$ , "quiver" (West-Semitic \*aspatu  $\leftarrow$  Accad. aspatu, Heb. aspáh), and  $h^3drt$ , "necklace," which may correspond to Hebrew hadaráh, "ornament," with Müller. His third case,  $m^3gsw$  or  $b^3gsw$ , "dagger," is probably erroneous, since no such Semitic etymon is known. In any case the word may stand for a Semitic \*margasu\*, or the like, according to the analogy of the transcriptions in the Aechtungstexte.
- 19. On the other hand, Müller should have mentioned some striking examples of syllabic orthography from the Twelfth Dynasty.<sup>31</sup> One of the daughters of Amenemmes II (1932-1901 B.C.) bears the name 'A-ti (II, A, 1) written correctly on a sphinx discovered in Qatna by du Mesnil (Syria, 1928, pl. XII) and defectively ('-ti, II, A, 1b) in the pyramid of this king at Dahšûr (LRE I, p. 294). A daughter of Sesostris II (1900-1882 B.C.) bears the interesting name 'A-ti-ka-y(a)-t (II, A, 2), written in pure syllabic orthography.<sup>32</sup> To what language the name belonged is obscure, but its spelling proves conclusively that the syllabic orthography was invented before the middle of the Twelfth Dynasty. Practically all the spellings of foreign names which we have considered above are older than this, so we may perhaps infer that our new orthography was devised in the "foreign office" of the Egyptian chancellery during the twentieth century B.C. Since, as we have long

<sup>&</sup>lt;sup>28</sup> In later times Mn-nw-s appears repeatedly as the name of a people, always with Kft'w, Crete and adjacent lands. In Greek tradition the Cretans were the people of Minos. There is no basis for the identification with Mallus.

<sup>&</sup>lt;sup>20</sup> Hardly Semitic, but perhaps non-Egyptian Hamitic.

<sup>&</sup>lt;sup>30</sup> SBW 51 ff. We may add mnt3t (XX, A, 4) = Accadian namzitu, manzitu (by transposition), from  $maz\hat{u}$ , "to mix," and hence meaning "mixing bowl."

<sup>&</sup>lt;sup>31</sup> Especially since he alluded to this material AE 60. The publication of Ranke's Die ägyptischen Personennamen will add greatly to the available material. From the M. E. names cited in the first fascicle we may quote 'A-y(a)-ni (p. 11, no. 16), 'A-wi (8: 4), 'A-yi (7: 26), 'A-ni (33: 12), 'A-ra (38: 30), 'A-ri (39: 2), 'A-si (46: 4).

<sup>32</sup> LRE I, 301.

maintained,<sup>33</sup> the Egyptian kings of the Twelfth Dynasty claimed suzerainty over Palestine and Syria, and certainly exercised it during much of the period, as we know from recent discoveries at Gezer, Byblus, Qatna, and Ugarit (Râs eš-Šamrah), it is only natural that their scribes should have found it necessary to devise an orthography which would enable them to read their own records, tribute-lists, etc.

In the Second Intermediate Age we find many transcribed foreign names, some written in the archaic consonantal orthography, some either wholly or partly in the new syllabic spelling. This interesting material was only touched by Müller, so we may consider it at relatively more length. Some of our examples, drawn from scarabs, may be false, but we have tried to omit the more uncertain cases. Müller already recognized the essentially syllabic nature of the spelling of the name Hayan, H(a)-ya-na in our system (II, A, 3).34 The name Apophis, then probably 'Apapa, is also partly syllabic (II, A, 4). The same is true of the names of the Hyksos nobles 'Abd' ('A-b-d, II, A, 5),35 Hûr (Hu-r, II, A, 6),36 and Aya ('A-ya, II, A, 7).37 Other syllabically spelled names of this period, from scarabs, are Ta-ta (II, A, 8),38 'U-qa (II, A, 9),  $^{30}$  K-tu-na (II, A, 10),  $^{40}$  and Ha-m-tu (II, A, 11).  $^{41}$  Finally we have queen Ti-ta (II, A, 12)42 and the name of several Thebans of the Seventeenth Dynasty, Ti-a (II, A, 13).43 On the other hand some foreign names, like Smqn, Y'qb-hr, 'nt-hr, etc., are written in the old consonantal orthography. Müller's suggestion that the use of this older system might be due to the lack of room on scarabs (SBW 47) is not likely. We may perhaps consider it as partly due to the influence of Semitic consonantal script, just as perhaps at Byblus, since we now know that the West-Semitic script was already employed at this time in Sinai and perhaps at Gezer.44

<sup>&</sup>lt;sup>25</sup> See JPOS II, 120 f.; cf. Sellin Festschrift, 1927, p. 1 ff.; JPOS VIII, 227. Each year since has brought new evidence in support of this thesis, especially the latest discoveries at Byblus, Qatna, and Ugarit. Naturally we should not insist on a modern definition of the term "empire."

<sup>34</sup> SBW 47.

<sup>88</sup> SBW 47.

<sup>&</sup>lt;sup>36</sup> See JPOS XI, 114, n. 1; Petrie, Scarabs and Cylinders, plate xvii, BT-CE, and Ancient Egypt, 1929, p. 37 f.; Newberry, Scarabs, plate xxiii, 20-22.

<sup>37</sup> Newberry, Scarabs, plate xii, 21, etc.

<sup>88</sup> Ibid., xii, 28.

<sup>39</sup> Ibid., xv, 10; cf. U-ya, XI, 2.

<sup>40</sup> Ibid., xxiii, 28.

<sup>41</sup> Ibid., xliv, 5.

<sup>42</sup> LRE II, 1, 149.

<sup>48</sup> LRE II, 1, 157-8.

<sup>44</sup> See Butin, Harvard Theological Review, XXV (1932), 133 ff.

- In this connection we may discuss the significance of the consonantal spelling of foreign names in the inscriptions of the New Empire. This is certainly due in large part to the fact that many archaic spellings, such as Kpn for Gubla, Byblus, were preserved, though we sometimes find interchange of older and younger orthography in transcribing the same word. In other cases it may simply be due to hasty or careless "defective" writing, just as in Hebrew. It is very important to note that the older writing is found almost exclusively in the case of names of lands and gods which must have been well known to the Egyptians before the middle of the Twelfth Dynasty: Bbr = Babilu, Babylon; Ht3 = Hatti, Asia Minor; Sngr = Šangar, central Mesopotamia; 45 Rtnw = Palestine (and Syria); Rmnn = Labnanu, Lebanon; Qdš = Qidšu, etc., Kadesh on the Orontes; Qdn = Qatna (see above);  $R\check{s}p = Ra\check{s}ap$ ; 46 'nt = Anat; ' $strt = A\check{s}tart$ ; Br = Ba'al. other hand, names of new or remote countries, such as Amurrû,47 Hurru (Syria), Naharên and Mitanni (generally), Assyria, etc., or of small places are written in the new orthography. The same is true of less important divine names; such as Šulman,48 Makal,40 Tešub, etc. This interesting situation is naturally not accidental.
- When we turn to the inscriptions of the New Empire, we find the syllabic script already in ordinary use in the tomb of Amosis son of 'A-bi-na (" Ebana"), dating from the middle of the sixteenth century. This fact suggests that the developed syllabic orthography may owe something to the chancelleries of the Hyksos Empire (Hayana and Apophis I), whose intimate associations with Asia would make an intelgible system of vocalizing names highly desirable. Our first important monument of this orthography is, however, the Asiatic list of Tuthmosis III, dating from the second quarter of the fifteenth century. Here we find some irregularity in the use of the syllabic orthography, vowels not being indicated regularly. In some cases we must assume that the defective writing was due to carelessness, since the names in question were too unimportant to have a fixed orthographic tradition behind them. As Müller has observed, the syllabic orthography reaches its most elegant form about the reign of Amenophis III. However, he was

<sup>46</sup> Cf. AJSL XL, 125 f.

<sup>46</sup> For the vocalization see AOF VII, 167, n. 20.

<sup>47</sup> The name Amurrû is a Babylonian word meaning "West-land," and was not introduced into Syria until after the First Dynasty of Babylon (cf. AOF III, 126), i. e., until after the invention of the syllabic orthography.

<sup>48</sup> See AOF VII, 167.

<sup>4</sup>º Cf. Rowe, Topography and History of Beth-shan, p. 14 f.

mistaken in thinking that decadence set in under Ramesses II. On the contrary, the greatly increased use of phonetic complements in connection with syllabic groups of ambiguous vocalization make the transcriptions from this reign so exact that they are hardly inferior in vocalization to cuneiform, while the more extensive consonantal system of Egyptian insures the superiority of hieroglyphic transcriptions in many cases. Since the influence of cuneiform in Egypt probably reached its maximum in the reign of Ramesses II, owing to the extensive correspondence with Asiatic princes required by his wars and diplomatic relations with the Hittites, a slight cuneiform influence on the syllabic orthography seems not unlikely.50 It is particularly noticeable in the extensive use of phonetic complements in the case of polyphonous syllabic groups and in the vocalic endings of foreign place-names. The scribes made a special effort to be exact, as is shown by numerous precise spellings such as Pì-da-sa = Pitassa, 51 Pu-tu-hi-pa = Puduhepa, Má-sa = Masa, Qa-raqí-ša = Karakiša, Qa-ar-qa-mi-ša = Gargamiš, Ru-ka = Lugga, Qi-duwa-d(a)-na = Kizzuwadna, Di-pá-ra-an-da = Zippalanda, Hi-sa-sa-pa = Ḥissashapa, Sa-ri-su = Sarissa, Sa-hi-pi-na = Sahbina, Ḥ(a)-r-páan-ta-r-ya-sa = Hapantaliyas, etc. There is no appreciable decline in precision during the reign of Menephthes (cir. 1234-27), but in that of Ramesses III (cir. 1180-50),52 following a period of anarchy, we find a distinct change for the worse, as may be observed in the name of the Philistines. However, the transcriptions of the time of Ramesses III are still quite good, on the whole.

23. During the rapid decay of the Egyptian state, accompanied by a similar decline of its old culture, which followed the death of Ramesses III, the syllabic orthography became corrupt. In the papyri from the

ters from 'Amarnah and Boghaz-köi show unmistakable signs of Egyptian linguistic influence on the Accadian which they employ. Thanks to the now relatively extensive material, it is possible greatly to increase the number of illustrations, as the writer expects to show elsewhere. There can thus be no doubt that the Egyptian scribes of the fourteenth and thirteenth centuries actually learned cuneiform in order to write letters abroad. The discovery of numerous fragments of syllabaries, as well as of a tablet containing cuneiform transcriptions of Egyptian words, at Tell el-'Amarnah would make this conclusion probable, but would not suffice to establish it, since these texts might have belonged to Asiatics settled at the capital city.

<sup>&</sup>lt;sup>51</sup> Hittite cuneiform § was pronounced s, as is well known; cf. JEA XI, 20, n. 1; Forrer and Ed. Meyer, passim.

For this date, which is twenty years later than the one commonly assigned, see *Annual*, XII, p. 50 f. (the date is printed 1080-1050 instead of the correct 1180-1150).

latter part of the Twentieth Dynasty (Harris A, Abbott, Amherst, Mayer, etc.), there is still some good tradition, together with corrupt forms: Ba'al-mahar (II, B, 1a) and Mahar-ba'al (II, B, 1b) are excellent orthographies; Ni-'i-ya (II, B, 2) shows the correct sequence of i vowels, followed by y, though the name is not otherwise known; 3a, however, undoubtedly represents the common Canaanite name Gēr-ba'al, though it would be pronounced Kur-ba'al according to the old rules; 3b gives two diametrically opposite spellings of the corresponding hypocoristicon, Can. Gērâ, which would be read in the old system Ka-ra and Ku-ra, respectively.

The corruption of the syllabic orthography becomes still greater in the early Twenty-first Dynasty, as appears from the Report of Wen-Amôn, which dates at least a generation after the papyri just discussed. Here the name  $D\hat{o}r$  (דור ,ראר) is spelled Di-ir (using the old values), Sîdôn is spelled Dd-d-n-na (II, B, 5), Lablân 53 (Lebanôn) is spelled Ir-bi-ir-na (II, B, 6), Can. yam, "sea," appears as yu-m(a) (II, B, 7),54 the name Zakar-ba'al becomes Ti-ku-ru-ba'al (II, B, 8). The Golénischeff Glossary, which dates from about the same period (perhaps a little later),55 is even more corrupt, though, like the Report of Wen-Amôn, it contains some spellings based on correct tradition. Among cases of bad orthography in it we may mention: Can. 'Ašqalôn spelled 's-si-qaal-na (cf. II, B, 9), ' $A\dot{s}d\hat{o}d$  = 's-si-di-di (II, B, 10), 's markabat(a) = m(a) - ru - ka - ba - ta' (II, B, 11), magdal = m(a) - ki - di - ru - t (II, B, 12), Nah(a)rên = N-ha-ru-ya-n, i. e., Naharayn or Nahareyn (II, B, 13), \*hums, "vinegar" (Heb. hómes), whence Coptic 2Ax, ha-m-da (II, B, 14). To judge from the spelling alone, it seems likely that this glossary is not earlier than the middle of the Twenty-first Dynasty. By the beginning of the Twenty-second Dynasty the corruption becomes still worse, if possible, as we know from the ample material at our disposal in the Shishak List (cir. 920 B.C.). Among numerous equations we may select the following as illustrations: Heb. Rehôb = Ru-hu-bi-i,

 $<sup>^{53}\,\</sup>mathrm{The}$  same form, Lablana, is found in the Hittite texts of the fourteenth century B. C.

<sup>&</sup>lt;sup>54</sup> The writing yu-m(a) appears already in the Astarte Papyrus, etc., and may have a different explanation.

in B, cf. ZÄS XL, 101 and Gardiner, Late-Egyptian Stories, p. xi.

<sup>&#</sup>x27;s-di-di = CTOT already appears in Dyn. XX. This suggests that the infinitive of pi'el type was replaced by the Coptic form before the time of the Glossary, which employs the historical writing of the verb to spell the homonymous placename.

Heb.  $Hapar\hat{e}m = Hu-pu-ru-m$ -'i, Heb. ' $Ad\hat{o}r\hat{e}m = 'A-d-ru-ma$ , Heb. Gab' $\hat{o}n = Q-bi$ -'a-na, Heb.  $B\hat{e}t$ - $h\hat{o}r\hat{o}n = Bi$ -ta-h-wa-ru-n, <sup>57</sup> Heb. ' $Ayal\hat{o}n = 'a(!)$ -yu-ru-n, Heb. \* $Yard\hat{o}n$  <sup>58</sup> or  $Yord\hat{a}n = Yu$ -ru-d-n, etc. Such illustrations make it clear that the syllabic orthography became almost completely amorphous by the tenth century B. C.

25. In 1923 it was proved by Sethe 59 and the writer 60 that an almost complete shift in the quality of Egyptian vowels took place between the thirteenth century B. C. and the seventh. Numerous cuneiform transcriptions in the Amarna and the Boghaz-köi tablets, which have been studied by Ranke 61 and the writer,62 among others,63 prove that the Egyptian vocalism of the fifteenth-thirteenth centuries was essentially the same as the Egypto-Semitic vowel-system from which it sprang. A most important transcription from Egyptian into cuneiform appears in a text of the tenth century, quoting from an older Assyrian source of the reign of Tiglathpileser I (cir. 1109-1082 B. C.).64 Here (col. IV, line 30) is listed, along with other animals sent to the Assyrian king from Egypt as curiosities, a "nam-su-hu of (?) the river, a beast of the great sea." It has been generally recognized that both name and description apply only to the crocodile (so by Meissner and Max Müller, among others). Eg. msh, "crocodile," appears in Coptic (S, B) as MCA2. From Copt. fem. \*TEMCA2 is derived Arab. timsâh. Our namsuhu is clearly identical with Copt. (S) NEMCOO2, quoted by Crum (CD 187b), and meaning literally "the crocodiles." The Coptic singular form would be \*MCO2, if it were not for the final laryngal. Here then we have a certain case of the change from  $\check{a}$  to  $\check{o}$  (see below) documented for the period about 1100 B. C.

The next vocalic transcriptions which we have, come from Assyrian texts of the seventh century, closely followed by Babylonian documents of the sixth and by Greek literary works of the fifth century B. C. All these sources show the same stage of vocalic development, which is almost identical with that of Coptic. Thanks to the new material provided by

This spelling reflects the pronunciation  $B\hat{c}t$ -haurôn, preserved also in the  $Haur\hat{o}n\hat{c}n$  (or  $Haur\hat{a}n\hat{c}n$ ) of the Mesha Stone.

<sup>58</sup> For this form see IV, 6.

<sup>50</sup> Die Vokalisation des Ägyptischen, ZDMG 77, 145-207. Cf. Gardiner, Egyptian Grammar, pp. 422-7.

<sup>60</sup> RT 40 (1923), 64-70.

<sup>61</sup> In KMAV, as well as in several papers in ZAS.

<sup>62</sup> JEA XII, 186-190, and scattered papers.

<sup>&</sup>lt;sup>es</sup> Cf. Maspero's detailed study, RT 37, 147 ff., which failed to yield satisfactory results, because of the author's lack of linguistic training.

<sup>64</sup> See Budge and King, Annals of the Kings of Assyria, I, p. liii, etc.

our study of the syllabic vocalism, we are able to show that the latter remained consistent down to about 1150 B. C., with only a few hints of decadence during the preceding half-century, but became rapidly chaotic thereafter, especially during the Tanite Dynasty (cir. 1070-940 B. C.). We must naturally allow for a certain period during which scribes reacted against a changing pronunciation, which they naturally must have considered as vulgar in the extreme. This period may already have begun before the reign of Ramesses III, when we note the first signs of decadence of the syllabic orthography. In any case, we must date the effective change somewhere in the twelfth century B. C. 65

26. The following rules for vowel-change were set up by the writer in the paper mentioned above. All were established by Sethe in his slightly later monograph, aside from the change of u to e, which he afterwards accepted. "After 1300 the following transformations took place,

In a closed accented syllable,  $\dot{a} > \dot{o}$ ,  $\dot{i} > \dot{a}$ ,  $\dot{u} > \dot{e}$ . In an open accented syllable,  $\hat{a} > \hat{o}$ ,  $\hat{i} = \hat{i}$ ,  $\hat{u} > \hat{e}$ .

- 27. We have in our syllabic list many illustrations of the change of  $\acute{a}$  to  $\acute{o}$ , from which we select the following ten clear cases: 1.  ${}^{i}\acute{a}h(a)ya > 026$ , 0026 (III, A, 14); 2.  $s\acute{a}p > CO\Pi$  (III, A, 18); 3.  ${}^{i}ag\acute{a}l(a)ta > \lambda \delta O\lambda Te$  (V, A, 10); 4.  $sa^{i}\acute{a}r(a)ta > COPT$  (V, A, 13); 5.  $b\acute{a}l(la) > BO\lambda$  (VI, A, 2); 6.  $\check{s}an\acute{a}\check{s} > \psi NO\psi$  (IX, A, 7); 7.  $k\acute{a}p > \delta O\Pi$  (XVII, A, 3); 8.  $g\acute{a}w(a)na > \delta OOYN6$  (XVIII, A, 7); 9.  $g\acute{a}n(i)sa > \delta ONC$  (XVIII, A, 9); 10.  $i\acute{a}(b)wi > TOOY6$  (XIX, A, 13). We also have seven clear cases of  $\acute{a}$  becoming  $\acute{o}$ : 1.  ${}^{i}\acute{a}haya > {}^{i}\acute{a}haya > \psi 26$  (III, A, 14); 2.  $mark\acute{a}bata > mark\acute{a}bata > Bepes \omega OYT$  (VI, A, 4); 3.  $\check{s}\acute{a}bat > *\check{s}\acute{a}bat > *\psi BET > \psi BET$  (VI, A, 5); 4.  $q^{i}r\acute{a}ra > *KPWP > KPOYP$  (X, A, 20); 5.  $gas\acute{a}ru > *KCWP > KCOYP > \psi \delta OYP$  (XIV, A, 16); 6.  $g\acute{a}fi > *q\^{o}fe$  (XVIII, A, 8); 7.  $t\acute{a}wi > -\psi OYI$ (B) (XIX, A, 13).
- 28. The change of i to a is illustrated by three clear cases, besides a few which are not certain: 1. bi(a)ya > Bael (VI, B, 9); 2. rin > Pan (IX, A, 3); 3. tit > xax: 6ax (XX, A, 16). The perma-

<sup>66</sup> Müller thought that the rapid decay of the syllabic orthography after the close of the Nineteenth Dynasty was due to the abandonment of cunciform as the vehicle of international correspondence. Not understanding the transformation in Egyptian vocalism, he drew material for his study from the Shishak List, which naturally increased the confusion.

<sup>66</sup> See his Nachschrift, p. 207.

nence of  $\hat{\imath}$  is illustrated by three certain cases, besides some doubtful ones: 1.  $n\hat{\imath}mu > \text{NIM}$  (IX, B, 5); 2.  $s\hat{\imath}mu > \text{CIM}$  (XIV, B, 3); 3.  $mah\hat{\imath}ru > \text{MEXIP}$ ,  $\tilde{\textbf{M}}\omega\text{IP}$  (XIII, B, 3).

When we turn to the change of  $\dot{u}$  to  $\dot{e}$  and of  $\hat{u}$  to  $\hat{e}$ , we are on ground which has more recently been broken, and which is not yet Since the writer has been intending for utilized by some students.67 years to publish a more detailed discussion of this material, we may be pardoned for taking the opportunity to give a complete list of cases known to us now; most of them have not been published before. The total number of illustrations amounts to over a score, nearly all of which are certain. In our list below there are two cases showing the evolution  $\dot{\tilde{u}} > \dot{\tilde{e}}$ : 1.  $m\dot{\tilde{u}}$ rha  $> \text{MEP2}^{68}$  (VIII,  $\Lambda$ , 22); 2.  $\dot{\tilde{s}}$ n $\dot{\tilde{u}} > \omega$ NE (IX, C, 4). There are three clear additional equations, not found in our list: 1.  $m\mathring{u}^{3}a(t) > ME$ ; 00 2.  $\mathring{u}ms$ , "vinegar"  $> \overline{2MX}$ ; "apple" (= N. E. tph, not spelled syllabically) > \*tampūh > XΜΠ6?  $(\check{g}emp\check{e}h \text{ for } \check{c}emp\check{e}h)$ . For  $\hat{u} > \hat{c}$  we have eight clear examples and one doubtful one, together with eight additional cases from outside our list: 11 From the list note: 1. pûya > THI (VII, D, 2); 2. kinnôra > \* $knn\hat{u}ra$  > 61NHPA (IX, C, 6); 12 3.  $har\hat{u}ru$  > 2PHPE (X, C,

<sup>&</sup>lt;sup>67</sup> It is accepted by Sethe, Ranke, Gardiner, and von Calice, whose important paper (ZÄS 63, 141-3) contains a number of additional examples. On the other hand, Worrell is disposed to reject it; see *Coptic Sounds*, I, p. 58.

<sup>68</sup> So also von Calice, ZAS 63, 142.

<sup>\*\*</sup> The Bohairic form, quoted below, is due to quiescence of the 3 in the preceding short vowel, which is lengthened.

<sup>&</sup>lt;sup>70</sup> Cf. von Calice, ZAS 63, 142, n. 5, whose hesitation was not warranted; see Worrell, Coptic Sounds, p. 52.

There are two possible exceptions, neither of which seems to be valid. N. E. ra-wi-ha (B 625, Dyn. XIX), for older rwh3, whence Coptic POY2E, "evening," appears occasionally in the defective writing r-w-ha, which does not indicate a pronunciation ru-ha, since it is never written with the sign ru (X, C), but = consonantal rwh3. The Coptic form stands for \*PW2E from rāwiha3, as in the cases already cited where ô becomes û under the influence of P, or it may represent \*POOY2E, for \*rāwha3, where the unaccented short vowel has been lost. The second case, if correct, is serious. Loret has suggested that the plant hi-ti-na (B 757, Dyn. XX) is Coptic WXHN: W6HN, "garlic" (Sphinx, VIII, 141; cf. Sp. 216 and W III, 354). His arguments for the identification rest, however, entirely on the similarity of name. Our material seems to disprove it, so we may return to the old explanation of the name as a kind of vine (the next word in the most important passage is "3rrt," grape-vine." The consonants of the Coptic forms are too ambiguous etymologically to make Loret's etymology plausible unless there are strong arguments of another kind.

<sup>72</sup> This case, advanced by the writer ZAS 62, 64, and opposed by von Calice,

14); 4.  $sarûtiy(a) > CPHT > CPIT (X, C, 17); 5. tannûru > tarûru > * TPHP > TPIP (X, C, 18); 6. <math>Til\hat{u} > CEAH$ , CAH (X, C, 19); 7.  $d \circ lalûya > \delta AH$  (X, C, 20); 8.  $h(\hat{u})basa > 2HBC$  (XIII, A, 4); 9.  $S\hat{u}t(a)h > \Sigma\eta\theta$  (XIV, D, 3). The eight other cases are: 1.  $m\hat{u}^3a(t) > m\hat{u}^a > MHI$  (B); 2. \* $d\hat{u}ba^a$ , "finger" > \* $d\hat{u}ba^a$  > THHBE (compensatory lengthening); 73 3.  $kil\hat{u}bu$ , "basket" >  $\delta AHB$ ; 74 4.  $m\hat{u}tew$ , "ten" > MHT; 75 5. \*(e)  $h\hat{u}ne(w)$ , "wretched" > \* $h\hat{u}n\hat{u}$  (whence Heb. ' $h\hat{u}$ ) >  $h\hat{u}$  (whence Heb. ' $h\hat{u}$ ) >  $h\hat{u}$  (corresponding to Aram.  $h\hat{u}$ , Arab.  $h\hat{u}$ ) >  $h\hat{u}$ ) >  $h\hat{u}$  +  $h\hat{u}$  (Sp., p. 75); \* $h\hat{u}$  +  $h\hat{u}$  (d't), "underworld," written later  $h\hat{u}$  (i. e., \* $h\hat{u}$ ) >  $h\hat{u}$ 

30. The importance of our material for the history of the Canaanite (Hebrew) language is just as great as it is for Egyptian. Since this will be included in the province of a paper in the Semitic field, we need not prolong illustration of its bearing on Hebrew phonology. A few characteristic points must suffice here.

The Hebrew case-endings were still in use during most of the period

loc. cit., is questionable, since another possible evolution of the Coptic form is: **δ ENHPE** (Gr. κιννύρα (Phoenician \*kinnûr (Can. kinnûr.

<sup>73</sup> Cf. RT 40, 68.

" Cf. GB, s. v. כלוב.

75 See JEA XII, 188 f.; JAOS 47, 199 ff.

7° The identification of the Coptic word with the Hebrew has long been made; cf. GB and lately von Calice, loc. cit. However, the word has an excellent Egyptian etymology, while it is wholly devoid of Semitic cognates. It is impossible to date the borrowing later than the twelfth century, because of the vowel. The Amarna Tablets and the Ugarit texts have proved that many Egyptian words were borrowed by the Canaanites of the Late Bronze Age; cf. JPOS XII, 197, n. 47.

This equation is correctly given by GB, s. v. In , while Sp 196 erroneously combines the Coptic word with Heb. \*\*\delta mer, "lees," with which it has no relation at all, semantically. In this connection it may be observed that the Coptic word **GBHP**, "friend," can hardly be derived from Hebrew  $hab\bar{e}r$ , "companion," since the **G** cannot be derived from original h. The spelling h-bi-ir in Wen-Amôn is just as worthless as the other spellings of this late text. The probable derivation of the word, in the combination n hbr, "belonging to the trading company of," is Heb.  $h^ab\bar{e}l$ , "pledge" (ultimately from Accadian hubullu, "obligation, debt"); the expression just cited then means primarily "pledged to (the trading company of)." The Accadian etymology proves that the word was pronounced approximately \*huball(l)u in Canaanite of the Amarna period. This is then another case of  $a > \ell$ , but I have not included it in my list, because of its uncertainty.

<sup>78</sup> Cf. Sethe, ZÄS 47, 18 (below).

under consideration, as is proved both by the vowels in the last syllable of the Canaanite loan-words, and by Coptic vocalization, which nearly always presupposes a vocalic ending, lost in Coptic, but proved by the presence of a long vowel in a closed syllable. In the Tuthmosis III list nearly all the Canaanite place-names close with u. A final a occurs practically always after preceding on (Eg. u-na), owing to a dissimilatory tendency in Canaanite itself, as is shown by the Amarna Tablets, which write, e.g., Ayalûna, Ašqalûna, Batrûna, Burkûna, Gadašûna, Hinnatûna, Mušihûna, Šamhûna, Šarûna, Sîdûna, and also Hazûra. After fem. at, the Tuthmosis list always writes u, showing that the nominative was still regularly atu in the early fifteenth century. By the Nineteenth Dynasty we find a considerable amount of irregularity in Egyptian transcriptions; the accusative ending prevails. It is evident that, just as indicated by the orthography of the Amarna Tablets, the case-endings were still used more or less correctly in the Amarna period, but they became confused by the Ramesside period. In the Ugarit tablets, dating from not later than the beginning of the fourteenth century B. C., we seem to have correct use of the case-endings, though they may have been retained as literary archaisms.79

31. The Canaanite verbal system as illustrated by forms in our body of material is identical with the corresponding system illustrated by the Canaanite glosses in the Amarna Tablets. Numerous infinitives are found, but it is very difficult to determine whether they preserve the Canaanite forms qătôl, qătăl, qattěl, etc., or have been made to conform to Egyptian \*sâdăm, \*sădăm, \*qâda, etc., 80 especially since New Egyptian may well have kept archaic infinitive forms which were lost in Coptic. The intransitive preterite (stative) is illustrated by 'abi(d)ti (III, A, 1a), "I perish." The participle qôtel (older qâtil, later qôtel) is illustrated by eight examples, only two of which have been recognized hitherto. Since the participle was the regular form for nouns of occupation in Canaanite (preceding the use of the form qattāl), 81 the abundance of participial forms is to be expected: 1. yudi'a (IV, 17), 2. 'udir (V, C, 1), 3. 'ubil (VI, B, 1), 4. dubi' (VI, B, 20), 5. tupir (VII, A, 14), 6. tuhir (XI, B, 1), 7. kuti (XVII, C, 8), kutin (XVII, (C,9), corresponding, respectively, to דוהָר הופֵּר אוֹבֵל אוֹבֵל אוֹבֵל אוֹבָל אוּבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוּבָל אוּבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוּבָל אוּבָל אוּבָל אוּבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוּבָל אוּבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוּבָל אוּבָל אוּבָל אוּבָל אוּבָל אוּבָל אוֹבָל אוֹבָל אוּבָל אוּבָל אוּבָל אוּבָל אוֹבָל אוֹבָל אוֹבָיל אוֹבָל אוֹבָיל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוֹבָיל אוֹבָיל אוֹבָל אוֹבָל אוֹבָל אוֹבָל אוּבָל אוֹבָיל אוֹבָיל אוֹבָיל אוֹבָיל אוֹבָיל אוּבָל אוּבָע אוֹבָיל אוּבל אוֹבל אוֹבל אוּבל אוּבל אוּבל אוּבל אוֹבל אוֹבל אוּבל אוּבל אוּבל אוּבל אוּבל אוּבל אוּבל אוּבל \*כּיִםֶן, כּוֹםֶה

<sup>&</sup>lt;sup>70</sup> See JPOS XII, 205 f., XIV, 110 f.

so For the original vocalization of the infinitive forms cf. RT 40, 69.

<sup>\*1</sup> The form qattāl for words denoting "craftsman" is an analogical extension from a group of Sumerian loan-words showing this form, as the writer has pointed out elsewhere.

- 20
- The Egyptian transcriptions prove that the accent still fell on the syllable corresponding to the accent-syllable in Accadian, and had not yet moved forward to the penult (ultima, if we omit the caseendings). The best example is markabata for Can. markabatu, Accad. narkábtu, Heb. merkabáh.82 The position of the accent in Egyptian is certain from the Coptic vocalization BEPESWOYET, which can only represent markábata (markábta would become \*BEPESOOYT).
- 33. While this is not the place to enter into elaborate morphological discussions, or to study dialectic peculiarities, a few observations may not be uninteresting. The vocalization Yasir'el for later Hebrew Yiśra'el (see III, B, 3) may seem strange, but the writer had already shown that the former must be assumed as original at a time when he considered the Egyptian syllabic orthography as purely consonantal.88 The vocalization Yardôn for later Hebrew Yardên (see IV, 6) is the only possible original one.
- Some cases are elusive. So, e.g., it is with Eg. 'U-ta-ra-'a (B 182) = Heb. 'Edre'î (GB: Εδραειμ), Gr. Adraa, Arab. 'Adra'ât, 'Adri'ât, modern Dera, which is too doubtful to be included in our list, though the identification is practically certain. We may perhaps assume an original form  $*\check{U}dr\check{a}'ai$  for  $*\check{D}\check{u}r\check{a}'ai$  (there is a form  $d\check{u}r\check{a}'$  which refers to the first three nights of a lunar month in Arabic), but we cannot show conclusively that such an original form existed. So again, for example, we cannot explain the form 'a-pu-q-n in the Tuthmosis list (B 38) for \*'Apĕqôn, or the like, Heb. 'Ăpĕq,84 unless we suppose either that the u has been transposed by the scribe (for ' $\Lambda$ -p- $q\acute{u}$ -n), or that we should read 'Apuq(u)n for ' $Apuq\hat{q}\hat{o}n$ , the u being due partly to the labial p and partly to the influence of the following  $\hat{u}$  (vocalic assimilation). Since neither alternative can be made probable, we have omitted this case, as we have a few others, for similar reasons.
- 34. As an illustration of the gain to other branches of linguistic science, we may take the list of Kft'w names, 86 and especially the famous Kft'w incantation, published by Wreszinski, 87 neither of which has been

<sup>82</sup> Cf. JPOS XII, 206.

<sup>83</sup> See JBL XLVI, 167.

<sup>84</sup> For this name cf. JPOS II, 186.

<sup>85</sup> It is also possible that the w was intended to be read in both syllables, by graphic convention; cf. JPOS VIII, 230, note.

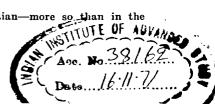
This list was originally published by Max Müller, MVAG 1900, 1, 6 ff., and has now been reëdited by Peet in Essays in Aegean Archaeology (Evans Anniversary Volume), pp. 90-99.

<sup>&</sup>lt;sup>87</sup> Der Londoner medizinische Papyrus, Leipzig, 1912, No. 32, p. 151 f.

included in our list, because of their hypothetic character. The Kft'w list, which has recently been studied anew by Peet, and which seems to belong to the middle of the Eighteenth Dynasty (fifteenth century) was written by a school-boy, and contains problematic spellings. The foreign names in it may be vocalized 'f-ša(i,u)-ha-ra (which must be Semitic, because of the h), \*8 Na-su-ya (which is probably Hurri), 'f-ka-šu, B(i)n-da(i,u)si (or bi)-ra, 'f-di-na (i?), Pi-na-ru-ti, Ru-sa.\*9 The magic spell may be vocalized Sa-an-ta ka-pá(?)-pi-wa-ya 'a-ya-ma(i, u)-a(i,u)-ta ra-ku-ka-ra.\*9 Our vocalization is favorable to Bossert's interpretation of the first word as the name of the god Santa(s), but does not support his identification of the second word with the name of the goddess Kupapa, though the latter is not impossible.

35. Our list does not utilize the difficult material provided by Egyptian hypocoristica written in the syllabic orthography, though some interesting suggestions may be made. The only cases which we have included are Maya (VIII, A, 1a), Haya (XII, A, 3), and Tutu (XIX, F, 7), where exact cuneiform transcriptions are found. The name Teye occurs repeatedly in cunciform dress, always in the same spelling, but there are two Egyptian variants of the name, Ta-i-ya and Ta-ya-i, which occur almost equally often,91 and make intrepretation difficult, so that we have not included it in our study. Part of our difficulty comes from our ignorance of the origin of the great queen's name, which may not be Egyptian at all. The situation is worse with respect to the names of her parents, to which Gunn has kindly directed my attention. The name of her father, which is naturally given in hypocoristic form, is written in the following ways on objects found in his tomb (using our system of transcription): 'A-'i, 'I-'i, Yu-'i, Yu-'u, 'I-'u, Ya-'u, 'I-ya, without mentioning several unclear writings. It is obvious that these spellings are not attempts to render the same phonetic original, since we should then have absolute freedom of interchange between y and '. The solution to this puzzle is apparently that all possible forms of the name were given on objects in the tomb, in order that there might be no error in the determination of their ownership in the other world. 92 Happily, the

<sup>&</sup>lt;sup>92</sup> Hypocoristica are exceedingly common in Egyptian—more so than in the



<sup>&</sup>lt;sup>88</sup> Cf. possibly Heb. ' $A \tilde{s} h \hat{u} r$ . The latter, however, may be partly Egyptian; Nöldeke and Spiegelberg (OLZ 9, 109) have explained it as ' $I\tilde{s}$ -II- $\tilde{g}$ ,' "man of Horus," which would have been pronounced ' $I\tilde{s}h \hat{a} r(a)$  in the Late Bronze Age, in remarkable agreement with the syllabic spelling.

<sup>\*\*</sup> These names have been studied last by Wainwright, JEA XVII, 30 ff., whose material for comparison is too conjectural to be of value for our present purposes.

<sup>&</sup>lt;sup>90</sup> See Wainwright, JEA XVII, 27 ff., and especially Bossert, OLZ 1931, 303 ff.

<sup>&</sup>lt;sup>91</sup> Cf. LRE II, 331 ff.

mother's name is written in only two different spellings (disregarding variations which do not affect the pronunciation): Tu-'u and Tu-'i; her name is always written with tu, never with tu, and was thus certainly pronounced Ču'u, or the like. Whether the original names were Egyptian or not cannot be determined with certainty. The strangeness of the hypocoristica, and the many possible variations of the father's name certainly suggest a foreign origin (Libyan?). A number of pure Egyptian hypocoristica have been studied by Erman 93 and Sethe,94 and many more will be solved by the publication of Ranke's dictionary of Egyptian personal names. Sethe showed that the name Ma-ya represents 'mnw-m-hb, then pronounced approximately 'Amânemhab, where we have a in the expected place. Ha-ya stands for mnw-htpw, cuneiform Amanhatpa (i); the a again occurs in the expected place. The name 'Amâne-m-'nt appears as 'A-ni-ya, and 'Amâne-m-'pt Amanappa) as 'A-pi-ya, both absolutely natural, according to our system.

#### THE SYSTEM OF SYLLABIC ORTHOGRAPHY

- 36. The appended pages in autography give all the material from which our phonetic values have been inductively derived. gives the values themselves, while sections III-XXII list all pertinent examples, nearly all from the New Empire, between 1600 and 1150 B. C. After an examination of the entire material, a number of questions immediately present themselves. What is the phonetic theory underlying the system? Has the system developed without definite planning, by gradual accretion, or does it represent a homogeneous structure? What is the nature of phonetic complements? In our discussion of the early material, antedating the Eighteenth Dynasty, we have touched on the first two points, but without attempting a solution. We can now attack them with hope of success.
- 37. If we examine the groups employed in the syllabic orthography, we shall find that most of them are certainly or probably independent words (nouns or pronouns, as a rule; the pronunciation of the verb was too varied), which contained only one vowel, followed generally by the weak laryngal 3, less frequently by '(i) or w. Since the pronunciation of this word was fixed, the word could be used to indicate the vocalization

Semitic tongues of Asia. For their nature and abundance in the latter cf. Lidzbarski, Ephemeris, II, 1-23. The name Mohammed (not mentioned by him) appears in nearly a dozen hypocoristic forms.

<sup>93</sup> ZAS 44, 105 ff. o ZAS 44, 87 ff.

of a syllable elsewhere. Let us examine the groups in detail, in order to establish their origin and pronunciation, where possible.

- We have distinguished five groups beginning with '(i). III, A is used in O. E. and M. E. as an interjection, the pronunciation of which could not be established hitherto. Spiegelberg's identification with the Coptic A, employed before imperatives, is out of the question; Erman, Sethe, and Steindorff identify the latter with N. E. ir(i). We can now give III, A the pronunciation 'a. III, B, '3, is another interjection, found in O. E., and perhaps appearing in N. E. as  $y^2$ , which becomes Coptic (B) in in (WI, 25). This would give us the pronunciation is, to which our inductive result corresponds. III, C, 'w, is the word for "island," which appears as î in Coptic TILAK?, Philae, and was borrowed in Hebrew as i, with the same meaning. The pronunciation thus recovered, iw, agrees with our inductive i. III, E is perhaps an artificial formation, of a type which we shall call alphabetic, to indicate its composite character, consonant + vowel, as in Greek and its daughter Gunn, however, thinks that it may be the word 'w (Copt. 6). III, D may be formed with a phonetic complement, i, as in many cases mentioned below.
- 39. The syllabic group y (IV) is properly consonantal, as is shown by occasional cases where it is equivalent to yu, as well as to ya; the latter equivalent, however, preponderates to such an extent that the other (as well as a possible yi) becomes unimportant. After a vowel i, y indicates the pronunciation  $\hat{e}$ , that is  $\check{e}$ -y (without following vowel) =  $\hat{e}$  (pronounced actually ey);  $^{95}$  as we shall see, there is no distinction in writing between  $\check{i}$  and  $\check{e}$ .
- 40. There are three groups beginning with '. V, A is the word 'a's, "great," Coptic O, in strict agreement with our inductive 'a. On the other hand, V, B and C are almost certainly alphabetic.
- 40a. The group Va, A may perhaps represent the word  $w^3$ , "cord," the only simple substantive with these consonants. Va, B, however, is evidently alphabetic in origin.
- 41. The consonant b has three groups. VI, A, bw appears invariably as ba, under such circumstances that there can be no doubt as to the correctness of the equivalence. Since, however, VI, D is also bw, but must be read bu, this equation seems very strange. As was first pointed

<sup>°</sup> There is a curious parallel in the Old Babylonian writing (Code of Hammurabi) ri-ya-um for  $r\hat{v}$ 'um, li-ya-um for  $l\hat{v}$ 'um. That this orthography is not a reflection of a more archaic stage of the words in question has been shown by Ungnad.

out by Borchardt and Steindorff (ZÄS 29, 45 ff.) the character found in VI, A is simply the hieroglyphic form of the hieratic simplification of the ordinary hieratic equivalent of hieroglyphic w. However, after the first differentiation, late in O. E., there is a clear tendency to distinguish the two characters more and more in use, especially in N. E. Our group A is probably the word for "not," which is generally written with the abbreviated w, and which was presumably vocalized  $b\bar{a}w$ . The Coptic equivalent Me is proclitic, and thus cannot be used to fix the early vocalization. VI, D may possibly be the word for "place," which must then have been vocalized buw; the word bw, "place," is usually written with the unabbreviated character for w. We are, however, inclined to prefer the alphabetic explanation of this group, since bw, "place," is usually identified with Copt. Ma, an equation which would exclude the possibility of an original vocalization buw. Group VI, B, with numerous variations in spelling, is unquestionably the word b; "bird" (Copt. BAI), and "soul" (Gr.  $\beta \omega$ ). The original vocalization was preserved in the (originally) plural form biw, i.e., bilew; cf. the royal name  $B_{i\nu\omega}\theta_{\rho is} = B_i^2 w - n - n t r$  and the Gr. transcription  $\beta_{iov}$  of the constellation-name biw. Gunn correctly observes that "3 can hardly have become y before i became d, as it is most unlikely that biy would become  $b \check{a} y$  rather than  $b \hat{i}$ "; the change of  $\dot{i}$  to y is, therefore, posterior to the twelfth century B. C. VI, C is clearly alphabetic.

- The consonant p (VII) has four groups. The first is the demonstrative pronoun p3, which later became the article, pronounced either indistinctly or variously, as we know from the Amarna transcriptions pa, pi, pu, in the same name P3-H3rw, written Pahura, Pihura, Puhuru. Transcriptions like Heb. Pînehás for Pinhsw seem to indicate an original pronunciation pi, which agrees with the fact that the majority of inductive cases require the pronunciation pi. On the other hand note the M. E. spelling '-s- $p^3$ -t for \*aspatu (see above). The value pi is indicated occasionally by the phonetic complement i. Group B is the demonstrative pw, later enclitic, which also varied in pronunciation in N. E.; the original pronunciation may have been paw. The values pa, pi are established; pu is more doubtful. In the name Zip(pa)landa pw has the phonetic complement 'a, to make the pronunciation pa clear. Group C, pi, is certainly alphabetic, and D, pu, is perhaps so.
- 43. There are only two groups beginning with m. VIII, A is probably the interrogative word "who, what?," 96 but may be the interjection,

To judge from Semitic cognates this interrogative was pronounced mi or ma. Since there are other groups for ma and probably for mu, the former is preferable, if this derivation of the group is correct.

- "behold." The original pronunciation may have been mi, but the group later developed all three values, ma, mi, mu, the latter two of which are often fixed by phonetic complements. Group B, m3, is perhaps the word m3, "new" (as suggested to me by Gunn); we must vocalize m3.
- 44. The consonant n (IX) has again five groups. A,  $n^3$ , is evidently the neutral demonstrative, pronounced, therefore,  $n\check{a}^3$ ; in N.  $\check{\mathbb{E}}$  it became the article, but was preserved from the fate of  $p^3$  by the following n, later lost (cf. the cuneiform transcription na-msuhu, § 25). Group B, ni, is probably alphabetic, but it may also be the particle ny. Group C, one of the most enigmatic of all, is presumably the interrogative ni ii (iin iin), in which the first weak consonant was lost, leaving the pronunciation  $n\check{u}w$ . In D we have the demonstrative ni, "this." iin is perhaps the conjunctive pronoun for "us," which was then pronounced without a following vowel in N. iin. (Gunn prefers to consider it as the suffix).
- 45. Four groups containing r are distinguished. A, r3, is the word for "mouth," pronounced r $\alpha$ 3, Coptic  $\rho$ 0, in accord with our inductive ra. B, ri, is alphabetic. C, rw, is the word for "lion," for which our inductive ru would yield a pronunciation r $\alpha$ w. The origin of group D, "ir²," escapes me completely, though its syllable-closing function is universally accepted.
- 46. Group XI, A, h3, is probably the interjection, which was then pronounced ha3. Groups B and C, hi and hu, are evidently alphabetic.
- 47. The values of the first three groups of XII are by no means what might be expected, a priori, but they seem to be proved by our inductive method. A is probably the word for "command," evidently pronounced hāw, in accord with our ha. Group B is alphabetic. C is the word hw, "to strike," Coptic 21046, old hîwe. If we may assume that the infinitive or the later imperative derived from the infinitive is meant, we have strict agreement with our inductive value hi. Group D is presumably the preposition h3, "around," which was then vocalized hū3.
- 48. Group XIII, A may have been originally the word for "thousand,"  $h\vec{a}$ , whence Coptic  $\mathbf{wo}$ . Later it was confused with homonyms, and so received the alternative value hu, which is occasionally written with the phonetic complement u. Group B is probably alphabetic.
- 49. All four groups of s (XIV) may be fixed deductively as well as inductively. A is the word  $s\check{a}\check{s}$ , "back," Coptic CO. B is the conjunctive pronoun of the third person feminine, Accad.  $\check{s}\hat{i}$ ; cf. Arab. hiya, Heb.  $h\hat{i}$ , etc. C, which only occurs in Dyn. XIX, is  $s\check{i}\check{s}$ , "son,"

- Assyr. -siya-, Gr. - $\sigma\iota$ -. D is the masculine corresponding to B, and its writing proves that the latter is not merely alphabetic; it corresponds to Accad.  $\dot{s}\hat{u}$ ; cf. Arab. huwa, Heb.  $h\hat{u}$ , etc.
- 50. Group XV, A, 33, offers a number of possibilities; its ambiguous origin is quite in keeping with its polyphony. The phonetic complement i is sometimes added.
- 51. The consonant q (XVI) offers three groups.  $\Lambda$ ,  $q^3$ , is just as ambiguous as  $\S^3$ , and is equally polyphonous; the phonetic complement u occurs. B and C are alphabetic.
- 52. In the case of k (XVII) we again have three groups. A is probably the conjunction k3, then presumably vocalized k $\check{a}$ 3, in keeping with our inductive value ka. B is alphabetic. C is the word for "genius, double," then vocalized  $k\check{a}$ 3, as we know from the three cuneiform transcriptions of Egyptian compound words containing this element (XVII, C, a-c).
- 53. We have no suggestion to offer for group XVIII,  $\Lambda$ , g, which may have been polyphonous, though we have only established the equivalent ga. The group gi (B) is alphabetic. It would seem that qu was employed for foreign gu.
- 54. Under t (XIX) we list six groups, the first four of which are certainly words. A, t, is probably the particle, which we should then pronounce  $t\ddot{a}$ . B,  $t\ddot{s}$ , is  $t\ddot{a}\ddot{s}$ , "land," Coptic  $T_{\mathbf{O}}$ ; the vocalization ta is also proved by the Hittite cuneiform transcription nib tawi for nb  $t\ddot{s}wy$ . C is the feminine demonstrative  $t\ddot{s}$ , originally pronounced ta (?—see above, on  $p\ddot{s}$ ). D is  $t\ddot{s}$  (or t?), "bread," which should be vocalized  $t\ddot{s}$ . E is alphabetic, as is perhaps also F (which may, however, be the feminine demonstrative tw, or the indefinite pronoun).
- 55. In dealing with  $\underline{t}$  (XX), we are faced by the curious fact that with twenty equations, we have not a single example of  $\underline{t}a$ , which may have been lacking in Egyptian. To Group A seems only to represent  $\underline{t}i$ , which is evidently derived from the word for "young animal, bird, child," presumably vocalized  $\underline{t}i$ . B is alphabetic.
- <sup>07</sup> If this is correct, as seems clear, it follows that the Egyptians only palatalized k in the presence of an adjoining i-vowel (possibly also u), since there is no longer any doubt that  $\underline{t}$  represents the palatalized  $\check{c}$ . This is the first evidence that Egyptian followed the same phonetic tendency as nearly all other languages which palatalized k. Since  $\underline{d}$  represents all three Semitic s-sounds as well as  $\check{g}$ , it offers no parallel here.
- This vocalization may be supported by Semitic, if this word is the same as Accad. kirru, lamb, Heb. kar for older \*kirr. The consonantal equations  $\underline{t} = \text{Sem}$ .

- 56. The consonant d (XXI) has three groups. The first, d3, is just as obscure as g3, etc. B and C are alphabetic.
- 57. The group  $d^3$  (XXII, A) offers the same ambiguity as  $q^3$ , and has consequently developed the same polyphony. The pronunciations di and du are not infrequently fixed by the aid of the corresponding phonetic complements. XXII, B is alphabetic.
- Sometimes the principle of employing Egyptian words with fixed vocalism as phonetic elements in the transcription of foreign words was extended to words containing two strong consonants. There are several clear cases. In the Tuthmosis list the name Aksap (with the N. Can. pronunciation (see III, A, 18) is spelled with the word sp, "time," which was vocalized  $s\tilde{a}p$ , as we know from Coptic **CC** $\Pi$ . About two centuries later, in the Story of the Doomed Prince, the name Naharina (Naharên, see IX, A, 3) is spelled with the word rn, "name," then pronounced rin, as we know from Coptic PAN. Gunn has also pointed out to the writer that the spelling of the Hittite names Zithariya (III, C, 3) and Hapantaliyas (IV, 14), where the group hr is used with the pronunciation ha, is in agreement with the Coptic pronunciation ψλ: 2λ, so it may belong to our category. There are a few other instances; e.g., the place-name Sangar (see B 787) is occasionally written in the Nineteenth Dynasty with the word sn, "brother," then vocalized săn, as we know from Coptic CON: CAN. In other cases signs with two consonants simply indicate the consonants in the transcribed name, just as in the archaic orthography of the Old and Middle Empires; e.g., the sign qd was pronounced qid in the name Qidšu and qad in the name Qatna.
- 59. The material which we have analyzed in the foregoing pages shows that there were two independent principles involved in the syllabic orthography. First in importance comes the practice of employing short Egyptian words, generally nouns or pronouns with fixed vocalization, as phonetic elements in transcription of foreign words or of ambiguous Egyptian words. This practice may be traced historically back to the twentieth century, as we have seen above; before the twentieth century it cannot have been used to any extent, as we know from its entire absence in the Aechtungstexte. The second principle is the use of the sign of the dual (y) and the consonant w, in both hieratic forms, to represent the vowels i and u, respectively. The practice is common in the

k and  $\beta = \text{Sem. } r$  are among those best established by comparative Egypto-Semitic linguistic science.

<sup>&</sup>lt;sup>99</sup> The vowels  $\tilde{i}$  and  $\tilde{c}$ ,  $\tilde{u}$  and  $\tilde{o}$  are hardly distinguished in most Semitic languages. There is also so close a relation between  $\hat{u}$  and  $\hat{o}$  that foreign  $\hat{o}$  is always transcribed  $\hat{u}$  in Accadian and Arabic.

Aechtungstexte, and there is reason to believe that it was employed sporadically at a considerably earlier date. The syllabic orthography continues the old practice in the slightly modified form of phonetic complements, where the complementary function of the y and w is the same as in the Aechtungstexte, though restricted to a limited group of signs. The syllabic orthography introduces, however, a modification by the creation of alphabetiform groups, containing simple consonants, followed by y and w in the strictly alphabetic function of vowels. This modification is not found in our available material until the Hyksos period, and does not become common until the Tuthmosid age. It does not follow that it was invented later than the first principle, however, since it is so closely related to the use of y and w as phonetic complements.

- As will have been seen, our principles are radically different from those of Müller, whose cunciform theory we must reject entirely, though it is very possible that the continued use and further systematization of the syllabic orthography in the late Eighteenth and the Nineteenth Dynasties were partly due to the parallel offered by cuneiform. Müller was wrong in considering the 3 in syllabic groups as being an artificial device for the representation of the vowel a. He was also wrong in assuming the existence of a "rückweisendes Prinzip," i.e., that many vowels in syllabic groups do not reflect the vocalization of the syllable in which they are placed, but rather that of the preceding syllable.100 This is not the same principle as that illustrated by XIV, A, 12 and 15, where we have sa-ra-qu (s as in N. Can.) for Can. \*šălg (construct probably \*šálag, as in Accadian), Heb. šéleg, and Sa-ka-ma for Can.  $\check{S}akm(a)$ , Heb.  $\check{S}\acute{e}kem$  (later  $\check{S}^ck\check{e}m$ ). In such segholate forms we find a constant shift within Semitic between forms qutl and qutal, so there is nothing remarkable in the Egyptian transcription.
- 61. Our material consists almost entirely of examples belonging to three main categories, Egyptian words and names, Semitic names and words (mostly Canaanite, but occasionally Amorite or Accadian, which may have reached the Egyptians through West-Semitic channels), and Hittite of Hurrian names (which often reached the Egyptians through Semitic intermediation). In dealing with the Egyptian material, we have only utilized cases in which we have cuneiform transcriptions, or where a Coptic equivalent fixes the vocalization of the accented vowel; unaccented vowels are useless for our purpose, since they were almost invariably lost or reduced to  $\check{e}$  ( $\check{a}$  with laryngals). In the treatment of Semitic words we must generally disregard the final vowel, since, as has

been pointed out above (§ 30), the three Semitic case-endings, u, i, and a, might each appear in a given Egyptian transcription. Since there are three corresponding Egyptian vocalic groups, it is obviously difficult to decide in a given case which vowel was intended by the Egyptian scribe. However, the situation is not quite desperate. In loan-words the accusative generally prevailed, while in our earliest list of place-names, the Tuthmosis III list, we have feminine names almost invariably reproduced in the nominative, while masculines appear either in the nominative or the accusative, in the former as a rule when the penult has a vowel other than u, but in the accusative when the penult has an u(§ 30). Whether this last peculiarity is Canaanite or Egyptian is hard to say, since the Canaanite case-endings were in the process of being lost, and were often confused with one another, as we know from the Amarna Tablets. The genitive is very rare. There is a tempting case in the Papyrus Anastasi I, 19, 1, where we read r Qd-ši hn' Du-bi-hi, "To Kadesh and Tubih," where two genitives follow prepositions, as is the rule in Semitic. However, we look in vain for additional instances of genitives following prepositions in this papyrus, so the case is presumably fortuitous. In any event, we cannot safely employ the final vowels of Semitic names or words for our purposes. Medial vowels are certain when they are accented, a circumstance which is nearly always easy to determine in dealing with Semitic loan-words or names. When they are not accented, caution in dealing with them is necessary, but since they are usually transcribed correctly into Egyptian, it is evident that the official Egyptian ear was surprisingly good — at least as accurate as the Assyrian, where we find an appreciable amount of variation in the transcription of unaccented vowels. In the case of Hittite and Hurrian names, we also find a remarkably close agreement between the cuneiform and the Egyptian vocalization (cf. above, § 22). In most cases this agreement extends to the final vowel, and some of the exceptions may indicate that the name reached the scribe through Canaanite channels, where the ending was confused by being treated as though it were a Canaanite case-ending. This explanation is particularly reasonable, since most of the equivalences of this class date from the thirteenth century and later, when the Canaanite case-endings were in any case confused, if not lost entirely.

62. In the following autographed lists all new equations, not found in Burchardt's compilation, or containing a new factor of vital importance for the equation, are indicated by a superscript circle. Where the equation is due to the writer, the circle is solid black. This new material amounts to just one-third of the total number of cases, so it will be seen

that our study offers a material supplement to Burchardt's monograph. The abbreviations are indicated in note 1, above. The hieroglyphic groups are dated wherever the date is certain, but no distinction between hieroglyphic and hieratic writings is made, since we are convinced that Burchardt exaggerated the importance of this graphic criterion, which seldom has more than a palaeographic importance. The determinative is omitted in nearly all foreign place-names. Since the autographing of the lists was spread over a period of fifteen months, owing to circumstances beyond the writer's control, there are some inconsistencies in the treatment, notably of the dialectic interchange of sibilants within the group of Canaanite dialects. In the first part we speak of "Amorite" where we refer to "North Canaanite" or "Canaanite dialects" in the second part of the lists. Since this is not the place to discuss the question of the sibilants in detail, we shall only refer to our latest discussion elsewhere (JPOS XIV, 107-8), and observe that the discrepancies between the Egyptian and the Canaanite expression of the sibilants are only apparent, not real. In Hittite, as we have already observed, there was no  $\check{s}$ , so we transcribe every Babylonian  $\check{s}$  which appears in Hittite texts as s. In North Mesopotamian (Assyrian, Mitannian), the values of Babylonian s and š were interchanged. However, until the exact status of the sibilants in Hurrian dialects is known, we shall have a source of uncertainty and ambiguity there.

## I. VALUES OF THE SYLLABIC GROUPS

(Parentheses indicate Rare Values)

III. り= ' A. 4分= 'a B. 4½= 'ル C. 日, 芸= 'ん

(D. 月以 = 以) E. 引, 10 = ル

IV. 99 = y = ya,(yi, yu .are rare)

V. →= ' A. ≅, ∴, →= 'a B. √= 'i C. ~ = 'u

Va. } = w A. A. = wa B. § \= wi

VI. J= f A. Je = fa B. 於, J於, 白於, J於 = J然 k, 添, 古知 = hi

C. J = hD. J h = h

VII.  $\Box = b$ A.X(k) = pa,  $pi(X_{ij} = pi)$ 

B. = pá, pí, pú( = pá, pí, pá)

C.  $\Box = pi$ D.  $\Box \hat{x} = pu$ 

**VIII.** ♣= m

A. 1, 1, 5, etc. = ma, mi,

mi; & [e], 5}

B. 5k = má

 $X. \quad m = n$   $A. \quad m = n$ 

B. ~= ni C. 4~e, 4~4 }, etc. = nu

D.  $\widetilde{\wedge}$   $\widetilde{o}(\underline{\hat{a}}) = m\widetilde{u}$ E.  $\widetilde{\cdots}$ ,  $\forall i = \alpha n$ , in(un)

 $X. \bigcirc = x$  (after = l) A. = sa

B.  $\leqslant = si$ C.  $\Leftrightarrow = su$ 

D. Si=ar, ir, ur (al, etc.)

XI.  $\Pi = h$ A.  $\Pi k = ha$ 

 $\mathbf{B}. \square = hi$ 

C. □\ = hu

XII.  $\S = h$   $A : \Xi = ha$ 

B. = hi

C. (1) = hi

D. \(\forall (\forall ) = hu

XIII.  $\emptyset = h$ A.  $\mathbf{I}(h) = ha$ , hu( $\mathbf{I} h \circ = hu$ )

mu(-18,5 = XIV. 1, += s

A. ♥= sa

B. = hi

B. M, \*= si C. \*= si

 $D. \ \ \} = su$ 

 $XY. \Box = \mathcal{S}$ 

A. 巡(法)= ša,ši, šu(巡法~=ši)

XVI.  $\Delta = q$ 

A. 1 = ga, qi, qu(1 = gu)

B. Δ = qí C. Δ \(\frac{1}{2}\)(e) = qú

XVII. ∽=k

A. □k = ka (also □k &)

B. = ki

 $C. \ \ \overrightarrow{\downarrow} = ku$ 

B. a = gi

 $XX. \ \ 0=t$ 

A.  $\mathfrak{I}(4) = ta$ 

B. = td(C. = ta)

D. 智品=ti

F. 03 = tu

XX. = t

A. 3, 3k = ti B. 3k, 2 = tu  $XXI. \simeq = d$ 

A. ⇒ k=da B. ⇒ «= di

C. 当至(e)= du

XXII. =d

KII. 9 = 12 A. l. k., l = da, di, B. \ = dí

du (lik = di, lik = du)

# II. Selected Miscellaneous Orthographies

## A. Archaic (before Dyn. XVIII)

1. 12 8 (Qatna),

4 8 (Dahšūr) 2. 4₺ 8 5 5 490

3. 044 2 ....

4. 42 日 4

5. 00 JA

7. 92.99

8. 7474

9. 43.44

12. 00 74

13. 4品经,

etc.

# B. Decadent (rafter 1150 B.C.)

Fromb Robbery Case

日本 ころしん 一日 はる

(B487)

2. ~~ (B 555) 3.a. リンゴーン (B 1003) よったりは、リー路 (B 999)

Report of Wen-Amôn (Gardiner edition)

4. 🛪 🖦 (I.8)

5. 7 == m (I.59)

6. 01 1 01 (II. 14, 24)

8. 多りかんのういまり Lea (I,) #)

Golenischeff Glossary

9. 411 ~ A A TOTO > TOTO (B 142

10. 阳小会会 (B 146)

11. 1 30 0 1 Je 7977 (B 41

12. M-つ当党 宇 st, 口(B 530)

13. 7 k 3 4 11 2 11 (B 57;

14 = 1 (B 679)

## $\Pi$ . 4=

#### A.42 = 'a

- L. 시원 삼 는 세시트 (B 20), stallion 'a-bi-ir-ya = Can. 'abfr (Heb. יַאַרָּיר; cf. \*יִדְאָלָי, stallion, to which the N.E. collective ending y (Erman, Neuaeg. Gram., 2nd. ed., §157) has been added. Dyn. XIX.
- 2. The find (B 32) 'a-bi-ti = Can. \*'abitti < \*'abidti (Heb. 'ATLE),
  I perish. The Canaanite passage in Anastasi I. 23. 5 should be read 'a-bi-ti
  ka-m(a) 'i-ir ma-ha-ar n(a)--u='abitti kam(â) '81, mahar na-em(u),'I perish like a lamb, O good mahar!' The first word is the Can. stative-intransitive
  (like nasirta, Ebeling, Das Verbum der El-Amarna-Briefe, p. 58) preterite,
  first person sing.; for the other words see on the respective entries, below.
  Dyn. XIX.
- 4. 18 (B 90) 'A-ra Assyr. Arâ, Latin Arra, name of a town in N. Syria (PAR 59). T III.
- 5. 12 (B 93) 'A-ri-ya, a common Hurrian hypocoristicon (cf. Gustavs, zXs 64.55). Early Dyn. XVIII.
- 6. 16 (B 102) 'A-rn-na = Hit. Arinna. The spelling either indicates a pronunciation Arina, as in the corresponding Lycian name Arnna, Arina, or stands for \*12-2 (see below, X.B. 3), 'A-rin-na. R II.
- 7. 18 7 117 > (B 105) 'A-ra-an-t = Assyr. Arantu, Arante. R II.
- 8. (B 108) 'A-rr-pa-ba = Accad. Arrapha, also written Arpaba (Ar-baha), a non-Semitic name which the Egyptians heard through Hurrian instrumentality. Dyn. XVIII.
- 9. 42 (B 108) 'A-ra-rh = Hit. Alalha, name of a place in N. Syria (Forrer, RLA I. 67a), hitherto supposed to be the same as No. 8. T III.
- 10. (B 111) 'A-ra-sa = Amarna Alašiya, Alasiya (cf. Gr. Apollo A-lasiotas, Jensen, ZA 10. 380); the ending in (1)ya is probably the Anatolian genitive suffix (i)wa, (1)ya. Dyn. XVIII-XX.
- 12. (B 125) \_\_\_ 'A-ra-ta-tu = \*Ardatu, nominative of Amarna Ardat(a). The Semittic etymology is probable, but no explanation has been proposed. T III.
- 15. It is possible that the Egyptian spelling represents \*Arzaw, \*Arzô. Dyn. XIX.
- '14. 12 12 (W I.118) 'a-ha-ya(t), for older 'hw, 'hy, fold, enclosure, camp. The S. forms(CD 258 a) 02 e and 002 e are derived from a secondary \*ahya,

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- 15. 12 1 7 = 11 1 7 (B 140) 'A-su-ra & 's-su-ra = Assûr, the Assyrand Hurrian pronunciation of the name which appears in Bab. and Heb. as Aš-bûr. Dyn. XVIII.
- 16. 42 A A (B 157) 'A-qi-ya Akiya, a common Hurrian hypocoristicon (cf. Gustavs, ZAS 64.55). Early Dyn. XVIII.
- \*17. 4 \$\frac{2}{3}\$ \$\frac{1}{4}\$ \$\frac{1}{3}\$ \$\frac{1
  - 18. (Δ □ □ (B 168) 'A-k-sap = Can. 'Akšap (Amarna Akšapa, Thureau-Dangin, RA 19. 99; Heb. ∇Ψ΄). The final hieroglyphic group was pronounced \*sap, Coptic COπ. T III.
  - 19. 42 NII C (B 171) 'A-ki-ta-s-ba = Hurrian Aki-Tesub, one of the commonest Hurrian personal names. The transcription of the divine name cannot yet be explained. Dyn. XIX.
  - 20. 42 3 (R 195) --- 'a-ti-ra = Can. 'asir(a)(Amarna asiru, Heb. つでが).
  - 21. 42 (B 196) 'A-du-m(a) = W. Sem. \*'Adôm (Heb. Di TN, Assyr. Udu-mu, Adumu). Late Dyn. XIX.
  - 22. The latest of the control of the

## B. 4 = i

- 1. (B 88) i-i-ir = Can. iel (Heb. : Note that diphthongs were already contracted, just as in later Phoenician and N. Israelite. Dyn. XIX.
- 2. 44 (B 212) Ya-'qb-'i-ra = W. Sem. \*Ya'qub-'il(a), Heb. \*Ya'qob'el.
- e3. אוריבין (B 258) Ya-si-r-'i-ra = Heb. \*Yasir'el, the original pronunciation of the name איניין, as shown in my paper JBL 46(1927). 165 ff., where, however, I rejected the Egyptian material as useless; see now my observations ZAW 1929, 13, n. l. Late Dyn. XIX.
- •4. 仰面 只有 (B 259) Ya-ĕu-pí-'i-ra = Can. \*Yašûp-'il(a), for which see AOF 3 (1926). 125 b, JPOS 1928, 249. T III.
- 5. Mariting cf. B 175; the determinative is, I would suggest, derived from the Can. homonym 11, 181, to, toward (Heb. > ).
- 6.  $\sqrt[4]{1}$  (B 398, twice) Pi-1-ya = Amarna Pi'eya (spelled Pi-e[i]-ya), name of a robber chieftain near Gezer in S. Palestine, about 1400 B.C.

m

- °7. € 1 1 1 1 (B 604) Ra-wi-'i-ra = W. Sem. \*Law(i)-'il(a), for which see n. 15, above. R III.
- 9.  $\Longrightarrow \overline{\mathbb{Q}} \stackrel{\sim}{\mathbb{Q}} \stackrel{\sim}{\mathbb{Q$

C. □, \= ''

- 1. I P (B 141) I = a-hi-ra = Hit. Ishara(s) from Accad. Ishara. The Egyptian transcription probably reflects a Hittite pronunciation like ishra, since, as is now known, Hittite often exhibits three consonants together, expressed in cuneiform by writing a vowel either after or before the middle consonant.
- 2. 玉龙龙(B 189) 'f-ti = Can. \*'ê-zê, or the like, Heb. バパパ, which? Dyn. XIX.

 $D. A \ddot{\lambda} = \ddot{i}$ 

ol. And (B 21) — 'I-b-ra = Accad. Ibla, a city in N. Syria, often mentioned in texts of the third millennium. T III.

E. 43, 40 = 'u

- 1. 4e K k (β 35) 'U-pi = Amarna Upi (Ú-pí), Ube. Dyn. XIX.
- 2. [ ได้ [ --- ] ไ [ B 63] --- 'U-nu = Can. \*'ônô (Heb. ว่าห่). T III.
- •3. (C) (APN 18a; C = ") 'U-r(a)-hi-ya = Urhiya, a common furrian hypocoristicon.
- 4. [[] Accad. Istar-ummî, in the N. Mesopotamian pronunciation Istar-ummî. Early Dyn. XVIII.
- 5. [A= A (B 190) 'U-tu = Amarna Uzu, Assyr. Usû (written Ú-ĕu-ú); the Can. pronunciation 'Û\$\overline{0}\$ is fixed by the Greek transcription of the name of the Phoenician hero 0000005: Dyn. XIX.
- 6. 今日祖の日音 (B 605) Ru-'u-\*(a)-qdš = Can. \*Rôš-Qidš. The Egyptian transcription reflects a Can. back-formation \*Rŏ'(ŏ)š, formed from rôš on lectic.

# IV. QQ = y

ya

- 1. [] (B 214) Ya-b-ra-'a-m(a) = Can. \*Yἄbǐl-'am(ma)(Heb. ロゾニニ, Gr. Ιεβλααμ), for which see JBL 46. 161-3. Τ III.
- 2. 44 0 % (B 215) Ya-pu = Can. \*Yapô (Amarna Yapu, Heb. 157, Assyr. Yappû). T III.
- 4. 4 (B 219) Ya-mu-'a-m(a) = Can.\*Yanô-'am(ma) (Amarna Ya-nuamma; see Annual, 6.22 f.). Dyn. XVIII-XIX.
- 5. 们 ::: 也 张 》 (B 224) --- Ya-an-ḥm = Can. \*Yánḥam (Amarna Yanḥamu, etc.).
  Late Dyn. XVIII.
- 6. A h (B 230) Ya-ar-du-na = Can. \*Yardôn(a), whence Aram. Yardôn (Heb. ) The hold heb. \*Yôrdân (Gr. Iqoòdv 15), like Sômerôn = Sâmerên (cf. JPOS 5. 38, n. 50). \*Yardôn is parallel to Old Heb. \*Yôrdân (Gr. Iqoòdv 15), which is probably an Amorite form; see JPOS 8. 238, n. 2 and AOF 7. 168. Dyn. XIX.
- 7. 引息 版 (B 234) Ya-h-m(a) == Can. \*Yalm(â), a name identical with Heb. "2页", S.A. Yalma (in Yalma-iil), and Amorite Yalma (in Yalma-Dagan), all derived from lumw, to protect. T III.
  - 8. 14 5 (1) (B 237) Ya-sa-an-ta = W. Sem. (Amorite) \*Yasan(a)t(a), Can. \*Yasant(a)(Heb. 714). R III.
- °9.  $\iint \mathbb{R}^{n} (B 238) \longrightarrow Ya-si-r-'i-ra = Heb.*Yasir'el (see III.B. 3).$  Late Dyn. XIX.
- \*10. 4 = (B 259) --- Ya-Zu-pí-'i-ra = Can. \*Yašûp-'il(a) (see III.B. 4).
- 12. (B 556) Ni-ya = Hit. Niya (Amarna Ni-i, i.e., contracted: Ni). T III.
- °13. (B 671) Ha-ya = Amarna Haya (KMAV 9; the identification is certain).

  Many other Egyptian hypocoristica end in ya; cf. Maya, VIII.A. 1. Late XVIII.
- 15. كَالْ ( B 1162) \_\_ ti-ir(ra)-ya-na, coat of mail = W. Sem. (Amorite ?) \*siryân(a)(Assyr. siriam, Heb. אָרָריוֹן). Dyn. XVIII-XIX.
- °16. In b 1 8 3 (B 1200) \_ Di-'1-t-ba(r)-ri-ya = Hittite Zithariya(s). For

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the orthography, etc., see III.C. 3. R II.

yi

The group 11 only occurs once (T III.), but without an equivalent to control its value; see B §33.

yu

- 17. [] [] [] (B 232) Yu(?)-ra-da = Amarna Yurşa. It is, however, possible that the Egyptian spelling reflects a dialectic Camaanite form, as in the case of Yordân-Yardôn-Yardôn, etc. T III.
- 18. 4 (B 243) yu-di-'a = Can. \*yôdǐ(č)' (Heb. y Ti'), one who knows. Dyn. XIX.

The group (1) Ale is very rare in our period, only two cases being known (B §32). Later, when it had lost its old value, it becomes very common.

After a preceding i (e) the group  $\Pi$  stands for Can. ey, e, as in 'en (V.B), bet (VI.B. 6-8), qen (XVI.B. 2).

A. ~, = 'a

- 2. 41, (B 219) Ya-nu-'a-m(a) = Can. \*Yanô-'am(ma). See IV. A. 4. Dyn. XVIII-XIX.
- 3. (B 251) 'A-bd = Can. 'Abd(u) (hypocoristicon). Late Hyksos.
- 4. MA (B 261) 'A-m-qu; cf. Amarma Amqi and Arab. 'Amq. T III.
- 5. ニール リカ (B 271) ニー 'A-na-ta = Can. \* 'Anat(a)(ouneiform Hanata, Heb. アナシ.), a hypocoristic name of an early Hyksos king in the Turin Papyrus. Dyn. XIX.
- 6. (B 273) 'n-qn-'a-m(a) = Can. \*'Ên-qne'am(ma) (Heb. אייָרָנְעָם);
  for the vocalization see JBL 46. 174). T III.
- °7.  $\stackrel{\frown}{\longrightarrow} \stackrel{\frown}{\longrightarrow} \stackrel{\frown}{\bigwedge} \stackrel{\frown}{\bigwedge} (B 276) \stackrel{\frown}{\longrightarrow} \stackrel{\frown}{\bigwedge} -ru-na = Can. * \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} (a), Gr. \stackrel{\frown}{\upalpha} \rho \circ \widetilde{\upalpha} \circ (now Tell <math>\stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} \circ (now Tell \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} \circ (now Tell \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} \circ (now Tell \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} \circ (now Tell \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} \circ (now Tell \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha} \circ (now Tell \stackrel{\frown}{\upalpha} r \stackrel{\frown}{\upalpha$ 
  - 8. 14 1 1 16 (B 284 and reference) 'A-s-ta-ra-bu-ru = W. Sem. 'Astarof Hurru (for which see XIII. A. 6), i.e., the Hurrian Istar. The masculine form of the name of this goddess (who has been treated recently by Ranke in the Griffith Studies) is also found in texts from Ugarit, Taanach, and Moab (cf. JPOS 12. 194 f.). Dyn. XVIII.

- 9. Assyr. Akkû). Dyn. XVIII-XIX.
- 10. Early (B 295) 'a-ga-ra-ta = Can. \*'agal(ă)t(a), Heb. 1722).

  In view of the comparatively late date (R III), it may well be that the orthography is corrupt, and that we should have Early 194-, '(a-ga-ar-ta, in agreement with the derived Coptic AGONTE, for \*agalta.
- 11. 中華 (B 765) sa-'a-ru, thicket = Can. \*fa'ar, hair, thicket (cf. Heb. C. フタツ, hair, and Arab. Ed'ar, ši'ar, hair, ša'ar, thicket, and cf. Miller, GB, ad ファル, against Burchardt, ad voc. For the equivalence of Eg. s and Heb. w see B §107.A.1). Cf. No. 12. Dyn. XIX.
- 12. (B 766) Sa-'a-ar = W. Sem. \*Sa'ar, lit., woods, thickets, the original form of the name Serr (Heb. 7.9 W, Amarma Se'eri is a diminutive form, as long since recognized), as pointed out, in strict accordance with the ancient character of the district in question, by Nbldeke (ZDMG 40. 165, n. 2). The true form is preserved in Assyr. Sa'arri (pronounced Sa'ar), mentioned in a text of Assûrbânapal after Haurân and Moab. Late Dyn. XIX.
  - 13. 7 ) Am (B 767) sa-'a-ra-ta, hair = Can. \*sa'ar(ă)t(a) (Heb.
  - 14. (Heb. 794), gate, gateway.

    The date of this group (Ramesses IX) is so late that this example is dubious.

  - 16. [ A ] [ (B 1203) da-'a-qa-ta = Can. \*pa'aq(a)t(a) (Heb. 77 );
    outcry.

This group occurs four times (B 27), always before \$\int\_1\$, i.e., i-ya. In B 247, \$\int \( \frac{1}{4} \) the \$\int\_1\$ represents \$\hat{c}\$, as also in B 249, \$\int \( \frac{1}{4} \) \( \frac{1}{4} \) which stand for Can. (or other W. Sem.) \$\hat{E}\text{n(a)}\$ and \$\hat{E}\text{n@n}\$ (lit., two springs), respectively. For \$\int\_1 = \hat{c}\$ see above, IV, end.

1. e la (B 303) — 'u-di-ir, helper (so correctly W I. 204, against B) = Can. \*'ôzĭ(ĕ)r, helper (Heb. Tiy). Dyn. XIX.

$$V_a$$
.  $\S = w$ 

$$A.Rk = wa$$

- - 2. 4 1 (1) (B 957) Qi-du-wa-d(a)-ra) Hit. Kiz(zu)wadna. R II.

B. & , & = wi

- °1. C \\ \\ \( \)
- 2. الما آ (B 655) Ra-wi-sa = W. Sem. \*Láwiš < \*Láwit (Heb. الأبنى, Gr. مرات (B 655) , Arab. مرات مرات (B 655), Arab. مرات مرات (B 655), Arab. مرات مرات (B 655), Arab. مرات (B 655)

# $VI. J = \mathcal{A}$

### A. Je = fa

- 1. 川口(野人) (B 236) Ya-sa-ba-ḥu = W. Sem.\*Yasbaḥ(u) (Heb. 口立時; in verbs primae laryngalis the vowel of the second syllable in the imperfect is regularly a. Early Dyn. XVIII.
- 2. 」 (\*\*) 1 (\*\*) (\*\*) 557) ba-ar-q(u) = Can. \*barq(u) (cf. the Can. town-name which appears as Banai-barqa, Heb. アフラー、in Assyr.; Aram. barqâ, Arab. barq, Heb. アフラ, Assyr. berqu). This form would become \*BOPK in Coptic; EBPHO'E is not a direct derivative, but is evidently derived from an old collective (?) form \*brûke(t) (fem.), just as ENTHP must be derived from a collective \*ntûre(w) (mas.). Dyn. XIX.
- 3. leiii ? 并入(B 345) ba-nra (la) = \*bal(la), outside, a word of obscure origin, whence Coptic BON is derived. The rare spelling 人证 等外 is perhaps due to a confusion between le and la. Dyn. XVIII—XX.
- 4. エラファ, Accad. narkabtu, for \*markabatu). The final t is often erroneously introduced at the end of a word ending in a. Hence S. Βερεσωογτ,, B. Βερεσωογτς, for \*berkôbet (by dissimilation) < \*merkôbet < \*markabata.
- \*5. 上 A c (B 842) ša-ba-t, staff = Can. \*šābt (Heb.\* ビュヅ, in pause ヒュヅ, for the usual later ヒュヅ, GK, ed. 28, 529 s; Aram. šabtá). Coptic MS か must stand for \* M の 下, from \*šābāt, by vocalic transposition (a phenomenon which I hope to discuss elsewhere; cf. JEA 12. 189). Dyn. XIX.

# B. A, JA, JA, JA, OA, OA, OA, etc. = Si

- 1. (B 19. o-d) 'u-bi-ra = Can. \*'ôbǐ(ĕ)l, Aramaized as 'Âbēl (Heb. ΣΙΝ, Assyr. Abil in Abilakka, Gr. Αβίλα, mod. Arab. Âbīl). The meaning of the name is not "meadow," as has been assumed without evidence, but "brook, running stream," ultimately identical with Heb. who (vocalization unknown), Arab. wabil, torrent, stream. The latter also occurs in the Golenischeff Glossary (B 213) as (21) (yu-bi-ir), a writing which, if based on correct tradition, as sometimes in this late text, reflects Can. \*yôbel. The change of initial y to ' is not uncommon in Hebrew. T III.
- 2.  $4b^{\frac{1}{4}}$  (B 20) (a)-bi-ra, stallion (cf. the variant III.A. 1) = Can. \* ablr(a), stallion. T III.
- \*3. 日記 1 元 日 (B 32) \_\_\_ 'a-bi-ti = Can. \*'abittî (see III.A. 2). Dyn. XIX.

- 4. 位为行识(B 113) 'a-ar-qa-bi-sa = W. Sem. \*'algabis(a) (see III. A. 11). Dyn. XIX.
- 5. 分配 字 14 (B 328) Bi-'-ru-ta Can. \*Be'rôt(a) (Heb. 河口及立 for \*Bö'rôt, Amarma Bôrûta). The same name occurs again in the Tuthmosis III list as 文 知 2 , Bi-'a-ru-tu, where the 'a is due to the a coloring which the Hebrew Yewa receives with an aleph (especially before r!).
- 6. בית־ענת (B 329) Bi-ya-ta-'-n-ta = Can. \*Bêt-'anat(a) (Heb. אָבִית־עַנָּת, of. the cunciform transcription Hanata). For i-ya = ô see above, IV, end. Early Dyn. XIX.
- - 8. 1111 (B 331) Bi-ya-ta-da-qú-na = Can. Bêt-dagôn (Heb. ) ロステール ラ). R III.
- 9. 11 (B 332; W I. 446) bi-'a-ya(t), palm-branch = \*bi'(a)ya > \*ba'ya > s. Baei, Ba, B. Bai(CD 27 a).
- 10. 1 11 11 11 120) & (B 343) Bi-in-'-n-ta = Can. \*Bin-'Anat (Heb. 37; 27-73). Dyn. XIX.
- 11. The same element to kill appears in the two Semitic names B 341-2. Dyn. XIX.
- 12. Φ πλιιθιιμώ (8 346) Bi-in-ti-'-n-t = Can. \*Bint(i)-'anat (Daughter of 'Anat; Can. bint=Heb. bat). R II.
- \*13. Acad. birtu, bond, Heb. berît, contract, for \*bi-ir-ta = Can. \*birt(a), Accad. birtu, bond, Heb. berît, contract (for the relation between \*birt and berît cf. that between Can. qart, town, and Heb. \*qaryat, 7778). Dyn. XX.
- 14. 1 50 1 (B 366) Bi-ru-ta = Can. \*Be'rôt(a)(Amarna Bêrûta). This is a defective spelling of No. 5. Dyn. XIX.
- (Armenian version); cf. JBL 37. 121. Dyn. XIX.
- 17. 1 1 (B 388) Bi-ta-ša-'-ra = Can. \*Bêt-ša'al (see No. 7). XVIII.
- \*18. ] This is the shortened form of Nos. 7 and 17; for the etymology of the name of. Annual VI. 34 f., 37, n. 79. Dyn. XIX.
- °19. ் (B 1185) Ju-bi-bi = Can. \*Ţûbib(a) (Amarna Jubibi, Heb. Пபம). The determinative shows that the Eg. scribe knew the meaning of the name, "Slaughterer"(a Can. popular etymology?), Heb. Пபம். Т III.

C. In = fi

41

VI

- °1. ⟨\dag{\alpha} \cdot (B 19. a-b) = ⟨\dag{\alpha} \dag{\alpha} (B 19. c-d) -- 'u-bf-ra; see VI. B. 1.
  TIII.
- \*2. The group \( \) , bi also occurs in two Semitic hypocoristica from the early part of Dyn. XVIII: \( \) \( \) \( \) \( \) , Ra=bi-i, and \( \) \( \

D. 1 & = bu

- 1. 1 (B 566) Na-bu-ra = Nabula in Mitanni. R. III.
- 2. בל אור (B 971) -- Ka-bu-ra = Kabûl(a) in western Galileo (Heb. אביב).
  R III.

A.X,X=pa,pi

pa

- °1. 2 , 2 | 6 (B 402) Pa-bh, Pa-bu-h = cun. Paphi, Papahhi, Babanhi, a name of probably jurrian origin (Forrer, RLA I. 255). Dyn. XIX.
- 2. 11 (B 431) Pu-tu-hi-pa = Hit. Pud(t)uhipa. The second element is the name of the Anatolian goddess Hepat, Hip(b)a, so the a is certain. R II.
- °3. % (B 737) H(a)-ar-pa == Hit. Halpa(s), the name of a city in Asia Minor (not Aleppo). R II.
- 5. Will (B 747) Hi-sa-sa-pa = Hit. Hisashapa(s). The second h has been lost by discimilation. R II.
- 6. RAB' (B 778) Si-pa-ti-ra = Hit. Sippaziti(s) (Sippa-LU-iš; for this reading of the name see below, XIV. C. 4 ). There is a variant writing \$\phi \mathbb{X} 2' \gamma \mathbb{A}\$, which has evidently been influenced by the spelling of No. 12. R II.
- °7. [ β 791; cf. W IV. 195) s(a)-(a)r-pa-ta, \*sarpate > sarpate > sarpate > δ (coptic Capπor, lotus (leaf) (CD 356 b).
- 8. \(\sum\_{\text{M}}\) = Ki-r-gi-pa = Hurrian G(K)iluhepa. The second element here appears with initial \(\overline{g}\) (gh), presumably reflecting the Hurrian pronunciation (cf. JEA 10. 6). Late Dyn. XVIII.

pi

9. 4 1 (B 35) - U-pi = Amarna Upi (U-pí, U-be). Dyn. XIX.

- 10. A (B 414) Pi-ir-qa, which must be in Asia Minor, and cannot therefore be N. Syrian B(P)arga of the Hit. and Assyr. texts. Note the phonetic complement i. R II.
- \*11. χ δ λ ι χ δ λ ι (Β 422) Pi-hi-ra = Can. Pihǐl(a), of doubtful ety-mology (Amarna Pihili<sup>m</sup> [Annual VI. 40 f.], Aram. ΣΠΕ, Gr. Πέλλα, Arab. Fihìl, Fáhìl). Dyn. XIX.
- 12. The School (B 776) Sa-pi-ru-ru = Hit.\*Suppiluliu, hypocoristicon of Suppiluliuma(s). The initial sa may suggest a Hit. pronunciation Soppiluliuma (cf. the Late Hit. name Sapalulme). Early Dyn. XIX.
- 13. 中 (B 806) Sa-hi-pi-na = Hit. Sahpina(s). B offers the erroneous equation with Zahabuna(s). R II.
- 14. c 🖟 🔭 [6] ½ (B 1147; cf. B 390) tu-pi-ir = Can. \*sôpǐ(8)r, scribe (Heb. ¬ԸրԾ). Dyn. XIX.

- 1. C → M, C → M (B 412) Pá-ra-sa-ta, Pá-ar-sa-ta = Aegean \*Pelas-té?— cf. JPOS 1. 57, n. 2), which appears in Hebrew as \*P(a)last (M ການຂອງ, [D] ການ ກຸ Gr.B Φυλιστιείμ, following late tradition), Assyr. Palast (Palastu) or Pilist (Pilistu), Gr. Παλκιστίνη. The original tribal name is probably identical with Gr. Πελασγ, as is supposed by an increasing number of scholars. The remarkable variation of the vowels, both in Egyptian and other transcriptions, suggests an Aegean prototype \*Plst-. R III.
- 2. In the life (B 1210) Di-pat's ra-an-da = Hit. Zip(pa)landa. It is difficult to escape the conclusion that a serves as a phonetic complement, since the shorter Hit. writing shows that the a between p and 1 was at best short. R II.
- 3. [ ] [ ] (Β 1235) pa-ar-pd-ta = Can. \*Ṣarpăt(a) (Hob. תַבַּרַ , As-syr Ṣariptu, Gr. Σαρεπτο). Dyn. XIX.

pí

"4. De Oi (B 252) = 0 (P) (B below, C. 4) — '-pi-ir, '-pi-ru = Accad. Hapir(u) (Amarna, Boghazkoi Ha-pi-ru, etc.), for W. Sem. \* 'Apir(u); see Albright, Archaeology of Palestine and the Bible, p. 206 f. Dyn. XIX-XX.

pú

- 6. Line A, Communication of the stole from Ugarit published in Syria, 1951, pl. VI) da-pú-na in B'r-dpn Can. Ba'al-gapôn, Lord of the North (Ba'al-qpn in the Ugarit texts, Assyr. Ba'al-gapuna, Ba'li-ga-pu-na, Sapun in Gir-gapunu/i, Heb. Jipy シュ).

VII

- °1. 0 (Rowe, History of Beth-shan, p. 30; the ru rests on my own collation) '-pl-ru = Accad. Hapiru for W. Sem. \* apiru; see VII.B. 4. XIX.
- 2. 4 1 1 2 (B 398) Pl-'i-ya = Amarna Pi'eya; see III.B. 6.
- 5. (B 419) Pl-ra-ti = Amarna Pirezzi (Pi-re[i]-e[i]z-zi). The name, which is probably Hurrian, apparently shows a typical Hurrian vacillation between a and e in accented (?) position. Late Dyn. XVIII.

D. □ \ = pu

ma

- 1. 44 1 (B 215) \_\_\_ Ya-pu = Can. \*Yapô; see IV. 2. T III.
- °2. □ \$ \$ \$ \$ \$ \$ \$ (TI. 502) \_\_\_ pu-ya, floa = Copt. ΠΗΙ: φει<\*pûya:\*pŭya. Dyn.XVIII.
- 3. \(\frac{1}{2}\) \(\frac{1}\) \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\) \(\frac{1}{2}\
- 4. 1 1 (Syria, 1931, pl. VI) pa-pu-na = Can. Sapôn; see VII.B. 6.

## 

 $A. \#, \blacksquare, \subseteq, etc. = ma, mi, mu$ 

- 9. 54 (KMAV 12) = Amarna Maya, an Eg. hypocoristicon. Dyn. XVIII.

- 5. 1 1 1 2 1 2 (B 482) ma-ar-ka-ba-ta(t) = Can. \*markabata); see VI.A. 4. Dyn. XVIII-XIX.
- 6. Maria Mag[k]id[d]a, Heb. コマスカ, Assyr. Magidû). The alternation of the (Amorite) ending â with the Can. ending ô, derived from older â, is common; cf. 'Akkâ = 'Akkô (V.A. 9). T III.

#### $\Delta III$

- 8. ి మెగ్ గ్లెస్ (B 535) ma-ga-ra-ta = Can. \*māgārāt(a) (Arab. magārat, Heb. గాల్లు). Dyn. XIX.
- 9. In All (B 552) ma\_d\_q-ta = Can. \*massiq(a)t(a), decanter, or the like (Amarna maziqda), from a disused stem nsq, to pour, parallel to Hebrew Pu and Ply. This is proved by the Eg. variant k = 177 h 14 5 , ma\_an\_d\_-ta. The form is maqtilatu; cf. No. 4, above. Dyn. XIX.
  - 10. \_\_\_\_\_\_ k (B 558) N(a)'-ma-na = Can. Na'man, well-known as a divine and a personal name (Ugarit N'mm = Na'man, Heb. ) \(\frac{1}{2}\frac{1}{2}\). T III.
- - 12. [ ] ] ] [ B 144) 's-tá-ra-'u-m(i) = N. Accad. Istar-mmî; see III.E. 4. Early Dyn. XVIII.
  - 13. \_\_ N | (B 542; of. G III. 26) \_\_ Mi-ta-an-ni = Mitanni. Dyn. XVIII.

  - "16. אבר (B 1006) Ka-ra-mi-ya-m(a) = Can. \*Kar(a)mêm, lit., Two
    Vineyards (for the form, Heb.\* בְּבָבִים or \* בָּבָבִים, כּרָּבִים, בּרָבִים, בּרָבִים, בּרָבִים, כּרָּבּים, בּרָבִים, כּרָּבִים, כּרָּבּים, בּרַבִּים, כּרָּבּים, בּרַבִּים, בּרַבְּיִם, בּרָבִּים, בּרַבְּיִם, בּרְבִּים, בּרַבְּיִם, בּרַבְּבְּיִם, בּרְבִּבְים, בּרָבִּים, בּרַבְּבִּים, בּרְבִּבְים, בּרְבִּבְים, בּרְבִּבְים, בּרָבִּים, בּרָבִּים, בּרְבִּים, בּרָבּים, בּרַבְּים, בּרְבִּים, בּרִבּים, בּרַבְּים, בּרַבְּים, בּרִבּים, בּרַבְיבִּים, בּרַבְּים, בּרְבַּים, בּרַבְּים, בּרִבּים, בּבּרְבִּים, בּרִבּים, בּבּרְבִּים, בּבּרְבִּים, בּבּרְבּבּים, בּבּרְבִּים, בּבּרְבִּים, בּבּרְבַּים, בּבּרְבַּים, בּבּרְבַּים, בּבּרְבַּים, בּבּבְּבְּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּבּים, בּבּבּבּבּים, בּבּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּבּים, בּבּבּבּבּים, בּבּבּבּבּבּים, בּבּבּבּבּים, בּבּבּבּבּים, בּבּבּבּבּים, בּבּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּים, בּבּבּבּים, בּבּבּבּבּים, בּבּבּבּים, בּבּבּבּבּבּים, בּבּבּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּבּבּים, בּבּב
  - 16 a. Kar(a)mên(a) (for the form see No. 16 and the parallel Nah(a)rên(a), IX. A.

    3). Dyn. XIX.
    - 17. Note such spellings as (B 782) and = (B 678, 1009, 1219), all = mi.

      Mu
  - 18. 12 14 (1, 5) 12 2, 5) (8) (8 52) 1A-mu-ra (ur) = W. Sem. 1A-mu-ra (ur) =
  - °19. I A C (W II. 53) mu-ya-t (perhaps simply myt for older mwyt), urine = Copt. MH < \*mfya(t).
  - 20. M Sto VV (B 463) mu-ru = Copt. MHP, on the other side, yonder < \*miri.

  - 22. Το Οι Ε΄ D (Β 477) mu ur-ha = Can. \*rŭmh(a)(Heb. ΠΣ΄), Aram. rŭmhâ, Arab. rŭmh), lance. From \*mirhă is derived Copt. ΜΕΡΖ . Dyn. XIX.

VIII

- 23. It (B 478) Mu-ra-s-ra = Hit. Mursili(s). The Hit. names ending in li(s), such as Hattusili(s), Muttalli(s), Sipaziti(s), have perhaps been assimilated by the Egyptians (or their non-Hittite intermediaries) with the usual Hit. nominative ending a(s). R II.
- 24. # 0 (B 543) Ma-t-(a)n-ra = Hit. Mawat(t)al(1)i(s), Martalli(s). For the ending of. No. 23. R II.
- 25. [ א במר (B 1218) Du-mu-ra = Amarna Ṣumur(a) (Heb. אמר, Gr.Σιμυρα).
  Τ ΙΙΙ.

B. 5 = má

- 1. 52 M(B 454) má-ni-ni = Amarna maninni/u/a, necklace.
- °2. グネ中 (B 496) Madea = Hit. Masa (Götze, Kleinasien zur Hethiterzeit, p. 23)。 R II.
- 3. クトム (B 518) --- má-qi-ra = Can. \*máqqi(e)l(a) (Heb. ラッル), starf. Dyn. XX.
- 4. In (B 740) Hu-ur-má = Hit. Hurma in N. Syria. While this word appears in the late Golenischeff Glossary, it seems to rest on good tradition.

# $\prod$ . m = n

A. ~ \} = na

- 1. (B 102) \_\_\_ 'A-rn-na = Hit. Arinna; see III.A. 6. R II.
- 2. 1 (B 566) Na-bu-ra = Nabula; see VI.D. 1. R III.
- 3. A T k, A T k T k, T k, T k, T k, T k K (B 578) Na-h-rina, etc. (the second spelling, to which Mr. Gunn has kindly called my attention, is to be transcribed Na-ha-rin-na; cf. above, \$58) = W. Sem. (Amorite)
  \*Nah(a)rên(a), the Two Rivers (Amarna Can. Nahrima for \*Naharêm, Heb. D: 771).
- 5. 71 = 1 (884) Sa-ta-r-na = Mitannian Sut(t)arna. Dyn. XVIII.
- 7. W. R. Copt. W Now < \* sanáš. Dyn. XIX.
- 8. Δ τ τ τ τ (B 920) qu-ur-na-ta = Can. \*gurlat(a), foreskin (see Ley-er, Geschichte des Altertums, II. 1. 558, n. 2; Sommer, Die Ahhijavā-Urkum-den, p. 395 f.), Heb. π τ τ γ γ, Arab. gurlat; the n for normal r or nr is due

to dissimilation. R III.

- 9. Van A, etc. (B 950) Qt-na = cun. Qatra in the texts of Amarna, Bo-shaz-kbi, and el-Mišrifeh. The name is certainly non-Semitic, though the t seems to show that it has reached the Egyptians by Semitic channels. TIII.
- 10. Wilder A. ,etc. (B 957) Qi-du-wa-d-na, etc. = Hit. Kiz(zu) wadna (cf. Va.A.2). R II.
- 12. Amarna Damuna. The frequently supposed connexion with Gr. Advací is very doubtful, and the name is probably Anatolian. R III.

B. m = ni

- •2. 5 m M (B 454) ma-ni-ni = Amarna maninni/a/u; see VIII.B. 1.
  - 3. \_\_ Nii \( (B 542; of. G III. 26) Mi-ta-an-ni = oun. Mitanni. Dyn. XVIII.
  - 4. ~ (B 556) Ni-ya = cun. Niya; see IV. 12. T III.

  - 6. NIA (B 573) Ni-ra-b = cum. Nôrab, NÎrab (Aram. 171; for later Assyr. conformation to the word nôribu, pass, with which it had originally nothing to do, cf. Dhorme, RA 25. 54; Arab. Nôrab). T III.
- 7. Will Max (B 584) Ni-Sa-p(a) = mod. Nisab (Dussaud, Topographie, p. 509). This equivalence is very doubtful. T III.
  - 8. 1 (B 1095) Tu-ni-p(a) = Amarna Tunip. T III.

C. I.I. II, etc. = nu

- 1. ปุรูป ปุรู (B 65) 'U-mu = Can. 'Ônô (Heb. ว่าห). T III.
- 3. 加州社区(中 (B 595) Nu-ga-sa = cum. Nuhašše, pronounced Nugas(e) (so first Dhorme, who identified the name with Aram. 以为; cf. Albright, JEA 10.6, n.3). Cf. D.2. Dyn. XVIII—XIX.
- 4. Lo La (B 857) šn (see above, No. 2)-nu = \*šmi > Copt. WNE.

  Dyn. XIX.
- 45. Δλη η λ (B 905) Qa-mu = Can. \*Qānô (Amarna Qa-nu-u, modern Qânā, UG). ΤΙΙΙ.

7. 3 4 4 (B 1188) — Da-nu-na = Amarma Danuma; see IX.A.12. R III.

D. mo o & etc. = nú

1. 4. (B 219) - Ya-mi-'a-m(a) = Can. \*Yanô-'am(ma); see IV.4.
Dyn. XVIII-XIX.

2.  $\overline{\sigma}$  (B 595) — Nú-gs = cum. Nuhašše, pronounced Nugas(e); see C.3. Dyn. XIX.

3. Tannûrîn (lit. "ovens"), now Tell Tuneinîr (diminutive of Arab. tananîr, ovens)

—Can. \*timnûr, whence Aram. tannûrâ, is a loan from Accad. tinûru, oven. T III.

 $E. \stackrel{\text{res}}{\longrightarrow} , \stackrel{\text{d}}{\leftarrow} = (a)n, (i)n, (i)n, (i)n$ 

The following examples form only part of the relevant material.

1. (B 105) - 'A-ra-an-t = Assyr. Arantu; see III.A.7. R II.

2. 41. ... Ukly ) & (B 224) --- Ya-an-hm = Can. \*Yanham (Amarna Yanhamu); see IV.
5. Late Dyn. XVIII.

Names beginning in → Min. (B 341-5), bi-in = Can. bin, son (construct without ending in personal names); see VI.B. 10-11. Dyn. XVIII-XIX.

4. 17 (B) (B) 346) — Bi-in-ti-'-n-t = Can. \*Bint(i)-'anat; sec VI.B.12. R II.

°5. R II. (see IV.14) — Ha(r)-pa-an-ta-r-ya-sa = Hit. Hapantaliya(s).

6. Final (B 787) — Sa-an-ga-ra = W. Sem. (Amorite) \*Sangar, Amarna (and Hittite) Sanhar(a), later Heb. Sin'ar; see AJSL 40. 125 f. Dyn. XIX.

7. Tu-un-du-ra = Amarma Zinzar, which may have been pronounced, with dissimilation, Spzor by the South Canaanites. T III.

8. 1 1 1 1 2 1 (B 1210) — Di-pa( a) ra-an-da = Hit. Zip(pa)landa; see VII.

$$X. \bigcirc = i, (\ell)$$

A. = ra,(la)

1. A (B 80), R (B 80), R (C ZAS 69. pl. V. 31) — 'An-ra-t(i), Wa-an-ra-t(i) = Ullaza, etc. (Amarna). The value 'an for the first sign also appears in C. 1, below; see above, \$58. Dyn. XVIII-XIX.

- X
- 2.42 (B 90) -- 'A-ra = Assyr. Arâ, Latin Arra; see III.A.4. T III.
- 3. 12. 1 (B 103) 'A-ra-ra-m(a) = Assyr. Anlama (Rost, Die Inschriften Tiglatpilesers III, p. 85), with transposition of 1 and n. Dyn. XIX.
- 4. 12 (B 105) 'A-ra-an-t = Assyr. Arantu; see III.A.7. R II.
- o5. 13 (B 108) 'A-ra-rh = cun. Alalha, Alatha (see Ugarit letter to be published by Virolloud); see III.A.9. T III.
  - 6. 12 7 (B 111) -- 'A-ra-sa = cun. Alasiya; see III.A.10. Dyn. XVIII-XX.
  - 7. 급 숙 게(B 412) --- Pá-ra-sa-ta = Heb. \*P(e)lašt, Assyr. Palast; see VII. Bel. R III.
  - 8. Marim). T III.
  - 9. \$ ס\$ר אָר װוֹ (B 555) --- ma-ga-ra-ta = Can. \*magarat(a)(Arab. magarat, Heb. מֹנְצְרָה). Dyn. XIX.
  - 10. (B 575) Ni-ra-b = Nêrab; see IX.B.6. T III.
  - 11. (B 633) Ra-wi-sa=W. Sem. \*Lawis; see Va.B.2. T III.
  - "12. אור (B 616) -- Ra-bi-tu= W. Sem. \*Rabîtu (lit., great[city]), Heb. \*Rabît(אַ. אַרַאַר), with vocalization like Accad. rabîtu for \*rabiy(a)tu.
  - 13. The Ra-pu-ha (also A Ra-ph) Assyr. Raph(1), Gr. Pageta, Arab. Rafah. The promunciation heard was evidently Raph(a). Dyn. XIX.
  - 14. [ 2 (B 618) Ra-m(a) = Heb. Râm. For other occurrences of the name see APN 222 a; it is possible that the name is also an Egyptian hypocoristic.
  - 15. (B 628) Ra-ḥa-bu (this spelling is found on the Sethos I stela of Beth-shan; otherwise we have -ba) = Amorite\*Raḥāb, cun. Raḥabi (Taanach letter), Heb. Reḥāb (G. Ρωάβ), Arab. Riḥāb. Dyn. XIX.

  - 17. [ ] (B 755b) Ha-ra-bu = Halab, Aleppo. Dyn. XVIII.
  - 18. 1 1 1 1 (B 767) sa-'a-ra-ta = Can. \*sa'ar(a)t(a); see V.A.13.
  - 19. [ (B 853) Š'-ra-ra = Amarna Sehlali, which, if this equation is correct, stands for \*Seglal. Both places are in northern Syria. T III.

  - 22. 11. Pi-pa('a)-ra-an-da = Hit. Zip(pa)landa; see VII. B.2. R II.

X

- 23. [ ] (B 1231) Qu-ra-b = Hit. Zulabi, Zulapa (Forrer, RLA 1.260). T III.
  - B. ≈ = si
- °1. 42 ~ 49 (B 93) 'A-ri-ya = Hurrian Ariya; see III.A.5. Early Dyn. XVIII.
- 2. 42 1 (B 167) 'A-ku-ri-ta = S. Can. \*Agôret(a), N. Can. Ugârit(a) (cunciform Ugarita, Ugarit, alphabetic 'U-g-r-t). The relation between the two dialectic vocalizations would be analogous to that of Sulmân: Salmôn, ulmân: almôn, etc. (see JPOS, 1934, 133, n. 172a). It is also possible that we have here a simple vocalic transposition, like that in Gr. ITU Ky=Lat. Utica. Dyn. XVIII-XIX.
- \*3. (B 511) Wi-ri-m(a) = Urima (Gr. O'Opux, Syr. Ûrim, Arab. Ûrim, the modern Ûrum; for places by this name see Honigmann, No. 477, ZDFV 47. 50), the name of four places in northern Syria listed by Yaqût. T III.
- °4. ☐ À CAA(B 479) bu-ri-qu = modern (Tell) Mûriq, northwest of Hamā (so already Tomkins, TSBA IX. 254). T III.
- 5. 1 1 (B 578) --- Na-h-ri-na = Amorite Nahrên; see IX. A. 3. Dyn. XVIII-XIX.
- 6. 1 × 1 (B 800) Sa-ri-su = Hit. Sarissa(s). R II.
- 7. 13 13 3 16 1200) Di(11)-t-ba(r)-ri-ya = Hit. Zithariya(s); see IV. 16. R II.
  - C. 50 (50) = ru(lu)
- 1. Δ' Δ' (B 76) 'An(an)-ru-na = Can. 'allôn(a), Heb. 'allôn. Dyn. XIX.
- 3. A (B 276) 'A-ru-na = Can. \* Arôn(a); see V. A. 7. T III.
- 4. 分子(おうな)(B 28) Bi-'a-ru-tu = Can. Be'rôt (Heb. バフバラ), Amarna Beruta. T III.
- 5. 1 14 (B 366) Bi-ru-ta = Amarna Beruta; see No. 4 and note that the may have quiesced in the interval of two centuries. Dyn. XIX.
- 6. 1 (B 559) na-'a-ru-na = Can. \*na'rôn(a), group of young men (for the collective form and meaning see AOF VI. 221). Dyn. XIX.
- 7. IMAN, etc.(B 605, 636) —ru-lu-s(a) = Can. rôs, head; for the phonetic form see above, III. E. 6. Dyn. XIX.
- 08. Some State (B 622) Ru-un-ru = cuneifors Lullu (on which of Speiser, Mesopotamian Origine, p. 88 ff.). Dyn. XIX.
- 9. Fill (B 638) Ru-ša-qdš = Can. Rôš-qidš(a); cf. No. 7 for the form with . T III.
- 10. 等点 1 1 (B 639) = 今 四 1 (B 645) Ru-qi-di, Ru-ga(gi?)-di = Amarna

X

- Ruhizzi (for Rugizzi; cf. JEA X. 6, n. 3). B is entirely wrong in combining Ruhizzi with No. 630, \(\sigma \subseteq \begin{array}{c} \begin{array}{c} \begin{array}{c} \chi & \begin{array}{c} \chi & \chi &
- 11. Shy, St., etc. (B 640) Ru-ku = Amarna Lukki, Hit. Lugga, etc., Gr. Aukici. For references to recent discussions of the name see Friedrich, MVAG 34. 1. 95. Dyn. XIX.
- \*13. (C 56) (B 687) Hw-ru-na = Can. \*Haurôn(a), Gr. Avplivas, 77111; see the writer's forthcoming paper on the subject in AJSL. Dyn. XIX.
- 14. (B 691) ha-ru-ru, flower = hurûru, the necessary source of Copt. 2PHPE: 2 AHAI. Eg. harûru is probably borrowed from a Can. \*harûru, flower, lit., bright thing; cf. Arab. zahr, flower, and Heb. zohar, brightness; Accad. âru, flower, and N. Can. ar, Heb. 3r, light (JPOS XIV. 116, n. 54).

  Dyn. XIX.
- 15. The Egyptian form is probably derived from an abbreviated form lacking the final syllable, like the Hittite hieroglyphic form, which seems to end in li (see Meriggi, OLZ, 192, 661, n. 1, and Dhorme, Syria, XIV. 362). R II.
- 16. TSb k (B 794) Sa-ru-ra = Amarna Saruna, Hob. Saron. T III.
- 17. Shall all (B 805) sa-ru-ti-ya(t), to glean = surfit, the necessary source of Copt.CPHT, which is listed by Peyron after Zoega, and is thus more correct than the usual CPIT. The substitution of i for a after p seems to be found elsewhere; cf. No. 18, below.

  Dyn. XIX.
- \*TPMP. The 1 for 6, as in No. 17, is probably due to the influence of p. Eg. tarûru is naturally borrowed from Can. tannûr, Aram. tannûrâ, oven, ultimately from Accad. tinûru; see the treatment of IX. D. 3, above. Dyn. XIX
- 19. 3 So (B 1158) Ti-ru = Amarna Zilû, reflecting Can. \*Sillô. From Eg.
  Tilû is derived Roman Selē, Silē, Gr. Σίλη, Copt. CAH, CEAH, as has been
  shown by Khthmann and Gardiner. On the whole subject see JEA X. 6 ff. Dyn.
  XVIII-XIX.
- °20. Lk···· ; Sold fi (B 1224) d(a?)-(a)n-ra-ru-ya = d-lalûya, a collective of the diminutive (\*d3rr) of d3rt, scorpion (W V. 526, 577), whence, by haplology, Copt. 6 λ Η frem.). For the diminutive formed by doubling the third radical cf. Ranke, ZÅS 60. 83 and n. 4-5 (hprr, '3ff, wněž), and for the fem. collective in y (ûya), which becomes H in Coptic, see Erman, Neukgyptische Grammatik, 68, § 157. Dyn. XIX.

D. 3 = bar, bir, bur, bal, etc.

- 1. (B 113) 'a-ar-qa-bi-ea = W.Sem. \*'algabîš(a); see III.
  A. 11. Dyn. XIX.
- 2. 42 5 (B 125) 'A-ar-tu = Arzawa; see III. A. 13. Dyn. XIX.

51

- 3. 11 (B 230) Ya-ar-du-na = Can. \*Yard8n(a); see IV. 6. Dyn. XIX.
- 4. Ξ΄ Σ΄ Μ΄ & Β΄ 277) 'a-ar-ði-na = 'arðîna, lentils, whence Copt. ΔΡ-ΨΙΝ. Dyn. XIX.
- 5. -11 % 110 W(B 285) 's-ta-ar-ta(t) = Can. 'Aštart(a), Amorito 'Astar-t(a). Dyn. XIX.
- 6. 10 357) ba-ar-q(u) = Can. \*barq(u); see VI. A. 2. Dyn. XIX.
- 7. 1 (accus.) maryanna; cf. VIII. A. 3. Dyn. XIX.
- 9. A. A. 4. Dyn. XVIII-XIX.
- 11. (B 737) H(a)-ar-p(a) = Hit. Halpa(s), a city in Asia Minor, not Aleppo, as supposed by B. R II.
- 12. 13. 15 15 16 (B 740) Ju-ur-ma = Hit. Hurma; cf. VIII. B. 4.

- 15.12 12 Marie 1926) \_\_\_ Qa\_ar-qa-mi-ša = Qarqamiš; see VIII. A. 15. Dyn. XIX.
- 16. Δ ~ 14 de (B 929) \_\_ Qa\_ar\_ta\_'n\_ba = Can. \*Qart(a)\_'anab. For the pronunciation qart of the Can. word for "city" of. the Assyr. transcription Qart(i) hadast(i), lit., New-town, Gr. καρθ in Μελκαρθ, etc. Dyn. XIX.
- 17. A Carlina D = A Carlina D (B 934) qa-ar-di-na, qa-ra-di-na, axe, adze-can. \*garzin(a), which seems to be somehow related to N. Can. hrsn, adze, a dissimilation of Accad. haseinu (cf. Heb. qardom, adze = Aram. \*qaddomâ > Arab. qaddom, adze). Eg. qardona may be derived from a form\*g(q)arsin(a). Dyn. XVIII-XIX.
- 18. 本 い な い (B 1020) ka-ar-ka-ar, meaning approximately "heaps of stone into which mountains may be cut up" = Heb. galgal (las. シストス LXX 「ベンタル), heap of stones. Dyn. XYX.

 $XI. \square = h$ 

 $A. \square \lambda = ha$ 

$$A. \square = ha$$

XI

- 1. The second of the second of
- 2. □ k (B 659) ha-ra = Can. har(a), mountain. T III.
- 3. 口入る Record (B 669) ha-d-mu = Can. \*hắdum, footstool (Heb. construct ローゴ」), N. Can. hdm. The Eg. may reflect a promunciation \*hadmu.

 $B. \square = hi$ 

1. The state of Asiatic chariot-warrior = Can. \*dôher, properly chariot-racer. This word will be discussed elsewhere; cf. provisionally and old, racing horse (Nah. 5: 2), [7] A hariot-racing of stallions (Jud. 5: 22). Can. \*dähr may have meant primarily turn, lap of a chariot-race like the stallions. chariot-race, like the Indic loan-word wartanna in Hittite; of Arab. danr, turn of fortune. R II, etc.

C. □ 3 = hu

1. Da (B 655) — Hu-m(a) = Can. \*Hom, Heb. Di, Arab. Ham (Bulletin, No. 55. 10). The off for Heb. a is not infrequently found in fairly early Can. forms; of the clearly identicf. the mountain-name Hor, which occurs several times, and is clearly identical with har (cf. above, A. 2). T III.

# XII. $\S = h$

A. = ha

- 1. The All (IA)(B 480) ma-ra-qi-ha-ta, plunder = Can. \*malqinat(a);
- 2. (B 628 and X. A. 15) Ra-ha-bu = Can. \*Rahâb, cun. Rahabi. Dyn.XIX.
- 3. = 11 % (B 671) Ha-ya = Amarna Haya, an Eg. hypocoristicon (ZAS 44. 89 f.,
- 4. = 01 @ D (B 686) ha-ar-pu = Can. •hárbu, sword; cf. X. D. 10. Dyn. XIX.
- 5. (B 706) Ha-ti-ya-na = Can. \*Hazyan(a), probably identical with This (B 706) — Ha-ti-ya-na = Can. \*Hazyan(a), probably lagnification of the father or of the paternal town of Tabrimmon, king of Damascus. As a common noun, \*hazyanu, the word means "overseer, governor, whence Accad, haziâmı.
- 6. (B 707) Ha-da-sa-t = Can. \*Hadaš(a)t(a), Phoen. Hadašt, Heb. תעידה, Aram. Hadattâ (Accad. Hadatu), lit., New-town. R III.
- 7. 10 (B 708) Ha-di-ta = Heb. Hadid.
- 8. = Lin(h) = (B 709) Ha-du-ra = Amarna Hazura, Hob. Haçõr. Dyn. XVIII-XIX.

XII

## B. $\S N = hi$

- 1. 1. (B 422), 28 (Sethos Stele, Beth-shan, line 17) Pi-hi-r(a) Can. Pihil(a); see VII. A. 11. Dyn. XIX.

1. 🔏 🛱 🦳 (B 422) — Pi-hí-ra = Can. Pǐhǐl(a); see above, B. 1. Dyn. XVIII.

- 1. Pho 10 (B &8) Rain-ba = Can. \*Rahôb(a), Heb. In, the Amorite equivalent of which is Rahâb; cf. A. 2 above. Dyn. XIX.
- 2. \$\frac{1}{4}\$ \square (B 678) \square Hu-mi-t = Can. humitu, wall (Amarna), for \*humiyatu, properly a participle of huw, protect, meaning that which protects, Heb. Thin. The same place-name appears as \$\frac{1}{4} > \frac{1}{4}\$ in Pap. Anastasi I and as \$\frac{1}{4} \frac{1}{4}\$ in the new Sethos stele of Beth-shan; the former writing seems to represent \*Homat, like the protetype of the Hebrew form. Dyn. XIX.
- 3. [[] (B 874) Š)-ra-hu-na = Can. \*Š'r(a)hôn(a), Heb. [Π τω (with false vocalization); the name is etymologically equivalent to Arab. Sirhan, in all probability, and should appear as Š'rhôn in Can. Early Dyn. XVIII.

# XIII. Ø = f

$$A. I(k) = ha, hu$$

- 1. 1 (B 735 b) Ha-ra-bu = cun. Halab; see X. A. 17. TIII.
- 2. [1] [1] A (B 749) Ha-ba-bu Amarna Hababu. T III.
- \*3. 13 19 (B 756) Ha-ti-ya = Amarna Hazi (probably with the Hurrian ending wa, contracted from\*Haziwa to Haziya). TIII.

hu

- 4. [ இட்டு (B 717) நட-ba-sa, lamp = நமிம்க , the necessary source of Copt. 2HBC. Dyn. XIX.
- 5. בל בל בל (B 751) hu-ru, narrow street, alley = Can. \*hurru (Heb. hor, Accad. hurru, hole, cave, narrow passage); for the development of meaning cf. Accad. harrânu, street, road, and Arab. hârah, street, quarter, from Aram. א אַרְיוֹת, hole, cave. The writing above, V. A. 8, proves the pronunciation

#### $\mathbf{XIII}$

huru, as pointed out by Ranke (Griffith Studies, p. 418, n. 2). Copt. 21P: b) p evidently stands for \*2HP, and is influenced by p just as in the cases cited above, X. 0. 17-8. Dyn. XIX.

- 6. 13 % (B 752-5; cf. B 283-4 and V. A. 8, above) Ju-ru = cun. Jurru/1, Syria. For the vowel cf. Hit. Jurl-, Mitannian Jurw-, and Heb. ¬¬π, Gr. Χορραίος. The correctness of this pronunciation is established by Amarna Pi(a,u) Juru(a) for Eg. X113-> 18. Dyn. XVIII-XIX.
- •7. \$ \$ \$ 15 \$ (B 740) Hu-ur-ma = Hit. Hurma; see VIII. B. 4.

#### B. & = hi

- 1. 10 (€) 11, 12 ? ((2) 11(APN 18 a) --- U-r(a)-hi-ya = Hurrian Urhiya, a common hypocoristicon.
- 2. 12 (B 451) Pu-tu-hi-pa = Hit. Putuhipa; see VII. A. 2. R II.
- 3. 米 (中) (B 492) M(a) hi-ru = Gr. Mexip, Copt. 所以ip: MEXIP.
- 4. 🍀 🏂 (B 747) Hi-sa-sa-pa = Hit. Hissashapa (by dissimilation). R II.
- 5. © 1 (B 1185) Du-bi-hi = Amarna Tubihi (always with final i); see VI. B. 19. Dvn. XIX.

# XIV. 1, -- = 4

# A. = sa

- 1. Hamild (B 257; so also Nelson, Medinet Habu) Ya-sa-an-ta = Can. \*Ya-san(a)t(a), whence Heb. Tive. R III.
- 2. Since the name appears also as 'A-k-sap (III. A. 18), we must consider the as due to conflation with A-k-sap (III. A. 18), we must consider the in a document of III (6 I. 111) are possibly collectives of the 'Akisipa >'Akisepa'. Dyn. XIX.
- O<sub>3</sub>. (B 457) Pl-da-sa = Hit. Pitassa(s); see VII. C. 4. R. II.
- 4. 9 9 ж (В 747) Hi-sa-sa-pa = Hit. Hissashapa(s); see XIII. В. 4. R II.
- 5. The State of the same of the control of the same of
- %. 中令 W - 1(B 766) — Sa-'a-ar = \*Śa'âr, Assyr. Sa'arri; see V. A. 12. Dyn. XIX.
- 7. The (B 767) sa-'a-ra-ta = Can. \*śa'árāt(a); see V. A. 13. Dyn.
- 9. 7 (B 787) Sa-an-ga-ra = cun. Sanjar(a); see IX. E. 6. Dyn. XIX.

XIV

- 10. 🌣 🔀 🏃 (B 794) Sa-ru-na = Amarma Šaruna, Hob. Šaron. T III.
- 12. \*\* A Till (B 801) sa-ra-qu, snow = Can. \*\*Salg(u), Heb. 2 ti, Accad. Salgu, Aram. talga, Arab. talg. Dyn. XIX.

- 15. בּבּל (B 815) Sa-ka-ma = Amarna Šakmi, Heb. בּעִי (for šakm), בּעִי (an Aramaizing form). Dyn. XIX.
- 16. ፲፰፮ 🗘 (B 1066) ga-sa-ru, ring = g sar, whence Copt. KCoyp: שַנּסֹיץף (the û instead of normal ô is probably due to p, as above, X. A. 20). The word must be related to Heb. אָלְיִי, bond, Aram. קּשִׁירָבָּא, girdle. R III.
- 17. It is (B 1232) D(i)-ra-bi-sa-na = Amarna Ziribasani; the Eg. form is clearly due to vocalic transposition. Late Dyn. XIX.

B. 1, # = si

- 1. Mari (B 238) Ya-si-r-'i-ra = Heb. \*Yasir'el; see III. B. 3. Late Dyn. XIX.
- 2. I k (B 652) --- Ra-ba-si-na-Hit. Lipzina(s). The unusual equivalence of β and Hit. z may be due to partial assimilation, or it may indicate that something is wrong with the equation. R II.
- Gopt.CIM(of. Erman, Nowlgyptische Grammatik, §33). Dyn. XIX.
- 4. 10 N (B 1128) Ta-h-ci = Amarna Tahši. T III.

C. 🕏 = si

- 1. (a) A(1) a(18 478) Mu-ra-ef-ra = Hit. Mureili(s). For the vocalization of the ending cf. either the explanation offered above, VIII. A. 23, or that given below, No. 3. R II.
- 2. (B 739) H(a)-ar-pa-si-ra = Hit. Halpasilis (for the name cf. Hit. Halpamuwas and Halpazitis, Friedrich, Kleinasiatische Forschungen, I. 362 f., and No. 4, below). For the ending cf. below, No. 3. R II.
- 3. a) 1 1 2 (8 754) --- H(a)t(u)-si-ra = Hit. Hattusili(s). It is possible that the suggestion offered above, VIII. A. 23, may be correct, but of. the discovery recently made that the ending of the name in Hittite hieroglyphic is la, just as in Eg. (Dhorme, Syria, XIV. 360-2, after Bossert). R II.
- 4. \*\*\* (B 778) Si-pa-ti-ra = Hit. Sippazitis (Sippa-LU-is; for the roading Sippa-zitis see Cotze, Mursilis, p. 210 f.); for the equivalence

ΧN

t-1 cf. the interchange of these consonants in other Anatolian names such as Labarna - Tabarna, Alalha - Alatha, Kullimeri - Kutmar, etc. The scribe may also have been influenced by the writing of the royal names ending in silis (sira), just as the variant of our name,  $\psi_{\mathcal{K}}$ -(B 776) was perhaps influenced by the spelling of the name Suppiluliums. R II.

#### D. \$\frac{1}{2} = su

- 1. If \$\frac{1}{2} \cdot (B 140) \rightarrow 's-su-ra = cum. Assûr (pronounced so in Assyrian and probably in Amorite, but Abbûr in Babylonian and Hebrew). Dyn. XVIII-XIX.
- 2. \$\frac{1}{2}\cdot (B 789) \ \to Su-ra = Mitannian Stri(a), pronounced Stri(a); cf. PAR 19, 21, 109). T III.
- 3. ♣ 1 2 2 (W IV. 345) Su-th = cun. Sûtah (Hittite spolling Sutah; see Ranke, ZAS 58. 135-7), whence, according to rule, later Sêt-h, Gr. Σηθ. Dyn. XIX.
- \*3a. \*\*\Δ) (Gauthier, Livre des rois, III. 138, No. XXXIX) Su-ta-ya = Sûtûya, whence, by rule, \*Setôy, Gr. Σεθως. This form is a hypocoristicon of a name beginning with that of the god Sôth; a still further clipped caritative is reflected by Amarma Sûta. Late Dyn. XIX.
- 4. Arth (B 938) Qi(a)-su-na = Can. Qišôn(a), or perhaps better Qišyôn (perhaps for \*Qašyôn>Arab. Qaşyûn, by Philippi's law); the names are ultimately variants, like Şidôn and N. Can. Sdyn, mêrôm and N. Can. mrym (JPOS XIV. 121, n. 92). T III.
- 5. a la k, Silam, Silam (B 1037) Kt-su-sa, Ki-ta-su-na = Amarra Gud- is less likely. T III.
- 6. The god Trough, whose home was in the same region. R III.
- 7. 1133) Ta-su-ra-ta = Can. \*T(a) súl(a) t(a), Amarna Tušulti.

## XV. □= &

A. Ш = ša, ši, šu

ša

- \*ak); see PAR 19. The correct form of the name is presumably \*Amaršak, or the like. R III.
- "2. 」全证 「,」全证 (B 588) Bi-ta-ŏa-'-ra, Bi-t-ŏa-ra = Heb. Bêt-ŏan (ĕe'an), Amarna Bît-sani; cf. VI. B. 18. Dyn. XVIII-XIX.
- 3. [ Ha-ša-bu = Amarna Hašabu. T III.
- 4. What is a sale in the sale

- 5. When a paper Harris 501, rev. I. 7; cf. B 832) sa-a-ar, fangs (of a wolf), Arab. tagr, fangs, incisors, from the stem of Heb. Mar, gate. For this meaning see the writer's forthcoming paper on the god Haurôn in AJSL. Late Dyn. XIX.
- 6. III 2 (B 834) Ša-wa, a mountain in Syria = Assyr. Saue, pronounced Ša-we). Dyn. XIX.
- 7. MA-III (a) (B 854) Sa-m()-si-'-ta-u(tu)-m(a) = Can. Samé-(cf. Ass. Samei-muruma, originally a personal name meaning "Samě is our lord"). T III.
- 8. Ψ (Β 855) Ša-m()-šu-na = Can. \*Šamšδn(a) = Heb. \*Šamšôn (Mas. γινής Gr. Σαμψων). Dyn. XIX-XX.
- 9. What is a-ra-ma (B 866) Sa-r-m(a) = Can. \*šalm(a), hail, peace! This word, also written sa-ra-ma (B 866 a and 867), corresponds phonetically to Heb. D.W., pl. D.D.W., offoring to a god, though a reading su-r-m(a) and identification with the Can. phonetic equivalent of Accad. Sulma) is also possible. In no case can this Eg. loan-word be identified with later Heb. Salôm (Aram. Selâmâ), which is properly the infinitive absolute of the verb šālām. Dyn. XIX-XX.
- 11. Δ , etc.(B 876) Ša-ar-da-na (Ši-ir-da-na is also possible)
  Amarna Šerdan(i), Gr. Σφόαν-, Lat. Sardin-; cf. X. D. 13. Dyn. XIX-XX.

ši

- 12. Δ (B 277) a-ar-ši-na, lentils = aršîna > Copt. ΔΡΨΙΝ; see X. D. 4. Dyn. XIX.
- 13. Cf. B 860-1, where two Syrian place-names begin with Ši- ( where the wis phonetic complement). T III.
- 14. No. 11 is perhaps to be read Si-ir-da-na. Dyn. XIX-XX.

Šu

- \*16. W (B 836) šu-wa-b-tí, pitcher = Amarna šu-i-ib-da. The Eg. word has nothing to do with the homophone meaning "figurine," but is a loan from Can. \*šô'ēbt(a), lit., drawer of water, from Heb. INW, to draw water (cf. Arab. sa'b, mis'ab, skin for drawing water). The vocalization of the Eg. may be parallel to that of Mas. Heb., which would be \*šô'ābt-(cf. Mas. INPLI). TIII.
- 17. W = (B 858) Šu-na-m(a) = Amarma Šunama; see IX. A. 6. T III.

XVI. 
$$\Delta = \mathcal{A}$$

$$\mathbf{A}$$
.  $\Delta \mathbf{k} = qa, qi, qu$ 

- 1. 1 (B 142) \_\_ 's-qa-ru-ra = Amarra Asqalura, etc.; see X. C. 2. Dyn. XIX.
- 2. ΔΛ (B 278) 'r-qa-tu = Amarra Irqata, Arab. 'Irqah, 'Arqah, Gr. Άρκη, etc. Τ III.
- 3. 4 1 1 (B 905) Qa-nu = Amarna Qanii; see IX. 0. 5. T III.
- 4.  $\Delta = \frac{1}{2}$  (B 907) Qa-ma = Assyr. Qama in Galilee. R III.
- VIII. A. 15. R II.
- 6. 1 (B 927) Qa-ra-qi-ša = Hit. Kar(a)kiša (Forrer, Forschungen, I. 76 ff.; Friedrich, Staatsvertrage, II. 22). R II.
- 7. 4 1 1 (B 929) \_ Qa-ar-ta-4n-ba = Can. =Qart(a)-4anab; see X. D. 16. Dyn. XIX.
- 8. 4 1 (B 934) qa-ar-di-na = Can. \*garzin(a), Hob. ] 772, axo; see X. D. 17. Dyn. XIX.
- 9.12 1 (W V. &) qa-da = Can. \*gagg(a), Accad. gassu = Aram. gassa Arab. gass, gass, qass, etc., all meaning gypsum.
  - 10. And 1 (B 959) Qa-d'I-ra = Can. \*Gaz(e)r(a), Amarna Gazri, Heb. 738, Gr. Fughpa, Fughpa. Dyn. XVIII-XIX.
  - 11. ARIRI (B 962) Qa-da-ta = Can. \*dezzat(a), Amarna Azzati, Hazati, Heb. Try , Gr. /offa (for Perso-Arabic Gazzah), Kdourts (from the Eg. form). Dyn.
  - 12. 12. 14. 14. (B 1203) da-'a-qa-ta = Can. \*pa'aqat(a); see V. A. 16. gi
  - ala. (B 158) 'A-qi-ya-wa-ša = Hit. Ahhiyawa, etc.; see III.
- 14 A 17. 14 SA (B 480) ma-ra-qi-ha-ta, a variant spelling of B. 1, be-

  - qu
- \*16.4 = (B 904) = 1 = 14 (B 986) Qu-mi-d (Ku-mi-ta) = Amarra Kumidi;
- 17.4 (A)(A)(B) (B 911, W V. 21) qu-ra, smelter, miner, is the same word as Heb. kfir ( ) and ), smelter, smelting furnace, found in the other Sem. languages as Accad. kfiru, Aram. kfira, Arab. kfir, etc. Dyn. XIX.
- 18.4 ke(원) 등, 된다. (B 912)= 나우(음)전(B 997) qu-ur (ku-ur), ship, the pre-
- cise Sem. equivalent of which is unknown, though there are several possible explanations. nations. The close phonetic relation between Nos. 17 and 18 is shown by the trans ference of the determinative for "ship" to the former. Dyn. XIX-XX.

**XVI** 

- 19. Cf. the writings △♣♠, △♣@, with phonetic complement u in B 939-40, 943-5, 948, all of Dyn. XIX-XX.
- 20. 4 2 1 1 1 (B 920) qu-ur-na-ta, foreskin-Can. \*garlat(a); see IX.
  A. 8. R III.
- (for \*quṣṣ)
  21. 4 1 2 = (B 955) --- qu-d(a), thorns = Heb. qoṣ,. Dyn. XIX.

## $B. \Delta w = gi$

- 1. 4 7 1 (B 480) ma-ra-qí-ha-ta = Can. \*malqihat(a); see VIII.

  A. 4 and cf. A. 14, above. Dyn. XIX.
- \*2. (B 895) Qi-ya-na Amarna Gina; the Eg. spelling stands for Qeyn(a), a Heb. 7° 12, pronounced Qeyn, Qên in Can. For Alley, ê in Can. 'ên, spring, bêt, house, see above, V. B., VI. B. 6-8, and cf. No. 3, below. Dyn. XIX.
- 3. 4 2 III. (B 906) Qi-na = Can. •Qên; cf. No. 2, above. T III.
- °4. △ ♣ ↑ ♣ Ⅲ (B 927) --- Qa-ra-qi-ba = Hit. Kar(a)kiša; see A. 6, above. R II.
  - 5. (B 957) Qi-du-wa-da-na = Hit. Kiz(zu)wadna; see Va. A. 2 and A. 15, above. R II.

## C. 1 \, de= gú

- 1. 13-4111 = 201 (B 351) Bi-ya-ta-da-qú-na = Can. Bêt-Dagôn(a); see VI. B. 8. For (Fey, 6, see above, B. 2. R III.
- 2. See A. 17, above. Dyn. XIX.
- 3. See A. 18, above. Dyn. XIX-XX.

## XVII. = k

## $A. \supset k = ka$

- 2. (B 971) Ka-bu-ra = Heb. Kabûl. R III.
- 3. kaff. Hence Copt. Con, for kap. Dyn. XIX.
- 4. Tan. kamâ (B 978) ka-m(a) = Can. \*kamâ (N. Can. km), Heb. 120, Arab. kamâ, Aram. kamâ, Eth. kamã. Dyn. XIX.
- 5. INA. . , etc. (B 984) ka-m()-ha, a kind of bread = Can. \*qamh(a), meal (Heb. 1725), Arab. qamh. This word is probably a much later loan from Sem. than the old qmhw, a form like k}mw. Dyn. XIX.

## XVII

- 6. A Gardiner and Langdon, JEA, 1920, 196) Ka-rh-n(a) = Hit. Karah-na, Garahna (pronounced perhaps \*Karhna). R II.
- 7. Ka-ra-ka-mi-ša = Karkamiš; see VIII. A. 15. T III.
- eg. (Gardiner and Langdon, JEA, 1920, 196) Ka-r-di = Hit. Karzi(s).
- 10. A = (B 1031) Ka-qt = Mitannian Kahat, pronounced Kagat. (B 1033) Ka-ga-ta-ya, may be a longer form of the same name. R III.
- \*11. A 3 V: (ii) (B 1041) ka-ti = \*kaši, whence Accad. \*kašiu > kašū, Aram. kasyā = Gr. Kudia (cf. Zimmern, Akk. Fremdworter, p. 57). Dyn. XX.

#### B. = ki

- 1. 1257 = (B 55) 'A-ma-ra-s-ki = Mitannian Amasaki (PAR 19), which was perhaps pronounced \*Amarški in Hurrian. T III.
- °2. 1 % III. 129) --- Ra-ki-š(a) = Amarna Lakiša; see X. A. 16. T III.
  - 3. 12 341152 (B 171) 'A-ki-ta-s-ba = Hurrian Aki-Tešub; see III. A. 19. Dyn. XIX.
  - 4. 1 (B 526) Ma-ki-tá = Amarna Makiddâ, etc.; see XIX. A. 6. Dyn. XIX.
- 127) = Gr. K(K). The old Eg. form is kjk), i.e., kijki. Dyn. XIX.
- The spelling ? (B 1019) is to be read K()-()r, not Ki-ra.

## C. Y=ku

- 1. 1 (B 166) '-ku-na = Amarna akunu(i). T III.
- 2. 与 A 以 (B 810) Sa-u-ku = Can. \*Śaukô; see XIV. A. 14. T III.
- 3. 110 (B 968) ku-ba = Amarra kûba (ku-u-bu, ku-u-pa). R III.
- "(G V. 198; Sethe, ZAS XLV. 9) Ku-b-ni = Amarna Gubli(a), Gr. Bύβλος. Dyn. XVIII.
- 5. Line (B 982) ku-m()-ru = W. Sem. \*kumru, gallus, Accad.(Cappadocian) kumru(m), Aram. kumra, eunuch-priost, Heb. komer. While the Closs. Gol. is late, it contains some old material.
  - 6. Than 1 (B 986) Ku-mi-ta = Amarna Kumidi; see VIII. A. 14. T III.
- 7. ...... 66 (B 987) Ku-mí = Heb. Kún ( 715), Lat. Conna. R III.
- 8. 13 1 \(\Lambda\) (B 1039) \( ---\) ku-ti = Amarna kuzi, guzi, groom (whence chariot-driver) \( <---\) Can. \*kôŝô, lit., dresser; cf. AOF VI. 219. Side by side with Eg. ku-ti we also have ku-di, ku-d. Cf. also No. 9. Dyn. XIX.

#### IVX

- 9. I B \( \lambda \) \( \lambd
- \*10. 12 14 8 = (B 1046) ku-ti-ta = Amarna kuzit(i) < W. Sem. kusît, Accad. kusîtu, garment. For the formation of. XII. B. 2. Dyn. XIX-XX.
- \*Il. I Co:, I Ro (B 1056) --- ku-t(a)-m-t, gold, for a Can. \*kôtémt(a), or the like, derived from Accad. kutimmu, goldomith (whence Zimmern, Akk. Fremd-worter, p. 27, derives Heb.
- —Note also the following Eg. words (not syllabic) where the element ↓ is transcribed ku in cuneiform:
  - a. Z'I 7 . t}b-n-k} = Amarna zabnakû.
  - b. LOUT, k)-ir-k) = Amarna kuihku.
  - c. 08 0 6 , Ht-k)-Pth = Amarna Hikuptah, Gr. Αίγυπτος.

# XVIII. = g

# $A. \triangle k = ga$

- 1. 2 27 74 (B 295) 'a-ga-ra-ta, cart = Can. \* 'aga1(a)t(a); see V. A. 10. R III.
- 2. 50 ma-ga-ra-ta (b-ga-ra-ta), cave = Can. \*magarat(a); see VIII. A. 8. Dyn. XIX.
- 3. 4 T 社 公 R 中 (B 595) Nu-ga-ea = cun. Nuhašše; see IX. C. 3. T III.
- 4. 7 ... \(\alpha\) (B 787) Sa-an-ga-ra(ar) = cun. Sanhar(a); see IX. E. 6.

  Dyn. XIX.
- 5. MACAL. (C) (B 890, 885; cf. W IV. 550) Bi-g(q) a ri = Accad. Bi-garu, cage. The Eg. is shown by the sibilant to be derived either directly from Accad., or from a W. Sem. loan from Babylonian, otherwise lost. Heb. sûgar(probably to be vocalized sîgar, with Zimmern, Akkadische Fremdwörter, p. 15) is borrowed from N. Accad., where s became s; see also XX. A. 15. Dyn. XIX-XX.
- 6. 一点のようりり (B 1033) Ka-ga-ta-ya = Mitannian Kahat; see XVII. A. 10.
- 7. ARRICO (B 1050) ga-wa-na = gawana > gawna > Copt. Gooyne, sack.
- °8. Да (В 1053) ga-fi, monkey, for Mid. Eg. g'f = ga fi>\*gafi>\*gafo, from which were borrowed Heb. qof, Aram. qura, Assyr. uqupu. Dyn. XIX.

#### XVIII

9. Oh TX A( V. 177) - ga-ni-sa = ganisa > gansa > Copt. CONC: XONC.

10. 5 k (1) 0 h (B 1071) — Ga-da-tu = Can. •Gazzătu; see XVI. A. 11 (on B 962). T III (and Dyn. XIX).

B. & = gi

1. \(\sigma \operatorname{\text{M}}\) (B 1022) \( -\text{Ki-r-gi-pa} = \text{Hit. Giluhopa; see VII. A. 8. R II.}

## $XIX. \triangle = t$

#### A. 9 99 = ta

- 1. 43 7 10 h (B 123) \_\_'A-ra-ta-tu = Amarra Ardata. T III.
- °2. Inalia (Wreszinski, Der Londoner medizinische Papyrus, p. 151, No. 28)
   's-ta-ra = N. Accad. (Assyrian) Istar (Bab. Ištar). Late Dyn. XIX.
- 5. 797 (cf. V. A. 8) 'a-s-ta-ra = N. Can. 'Astar ('Attar, 'Astar; for pronunciation of the s see JPOS XIV. 107). Dyn. XVIII-XIX.
- 4. 10 = 14 & & (B 285) 's-ta-ar-ta(t) = Can. 'Abtart(a); see X. D. 5. Dyn. XVIII-XIX.
- 5. 1 al (B 286) 's-ta-ra-tu = Amarna Aštarti, Heb. 'Aštarôt (pl.). T III.
- 6. 14 Mak(B 526) Ma-k-ta = Amarna Mak(g)iddâ; see VIII. A. 6. T III.
- 7. 10 10 (B 527) Ma-k-ta-ra = Can. Magdal(a), soc VIII. A. 7. TIII.
- 8. 一つうまで, etc. (B 528) ma-k-ta-ra, tower = Can. magdal(a); see VIII. A. 7. The Copt. word MEO To A: MIXTO A is not derived from N. Eg. maktar(a), which would yield \*MOO TA, but from later Can. (Phoenician) migdol (Heb. ショス以), unless we assume vocalic transposition (which is not unknown). Dyn. XIX.
- 9. \_\_ ] (B 542; cf. G III. 26) Mi-ta-n-ni = cum. Mitanni. Dyn. XVIII.
- 10. 574 = & (B 824) Sa-ta-r-na = Mitannian Sut(t)arna. Dyn. XVIII.
- 11. 24 (Miller, MVAG, 1902, 5, text, line 28) Ha(r)-pa-an-ta-r-ya-ea = Hit. Hapantaliya(s); see IV. 14. R II.
- 12. ) 14 b (B 1077) Ta-ya-tá = Mitannian Taita (Taite, Taidi, Tedi, PAR 28, Weidner, Boghazkoi-Studien, 8. 26, n. 2). For the use of a-ya to represent the diphthong ai cf. No. 18, below. Dyn. XVIII.
- 13. 14 (10, 1(1) 28) (W V. 247) ta-wi, ta-w(t), sandals (older tbt) tawe(y) or tawe(y), from \*tabwey. From the uncompensated and compensated forms come, respectively, Copt. Τοογε(S) and Θωογι(B).
- 14. That (B 1090) Ta-ms-qu = Heb. Dammenoq, (Aram.) Darmesoq. This equation is nearly useless, since Amarna offers Dimaga and Dumaga. T III.
- 15. 1 (B 1095) ta-an-ra (ta-la) = Early Accad. dal(1)u(m), mighty, la-

ter dannu(m); there is no evidence that DA-LUM is to be read da-raim. \*dall, weak, is perhaps a pejorative antiphrastic development of the Old Can-

word \*dallu. Dyn. XIX.

96. 14 つ 日本 in 14 日本 (B 1118) and 14 日本 (B 1119) -Ta-ra-ga = Hit. Targ(k)a in Targasnallis, etc. (Friedrich, Kleinasiatische Forschungen, I. 370). In Hittite the two names would appear approximately as \*Targannas and \*Targatazis. 17. № (В 1128) — Ta-h-si = Amarna Tahši. Т III.

th. For the writing a-ya for ai see above, No. 12.

B. 📆 = tá

1. (B 144) \_\_\_ 's-tá-ra-'u-mi = cun. Ištar-ummī; cf. III. D. 4.

2. 上 (B 526) — Ma-ki-tá = Amarna Makidda; see VIII. A. 6. Dyn. XIX.

3. The A & (B 1078) - The a-m-tu = Can. \*The make, a taffal formation from (ms (N. Can., Heb. Dry), whence several Heb. personal names). The first vowel must be a, both because of the formation and of the following y. The tar'al form is much commoner in early Som. times than later. Early Dyn. XVIII.

 $C. \cap k = ta(?)$ 

1. At (B 1079) - T(a)-'a-na-ka = Can. Ta'(a)nak(a); see V. A. 15.

**D.**  $\Theta \square$ , etc. = ti

1. 但如本語 (B 32) — 'a-bi-ti = Can. \*'abǐ(d)ti; see III. A. 2. Dyn. XIX.

n(i) (Gustavs, ZAS 64. 55). Dyn. XVIII. 3. Collection (B 1085) — Ti-pu-nu = Can. Dibôn(a) (Heb. 7177, Moabite Daiban or Daibon; Arab. Diban). This equation is phonetically precarious.

O4. O (G VI. 21) — Ti-in-ni = Amarna Tenni; see IX. B. 9.

5.  $\frac{\partial \Box}{\partial \Box} = \frac{1}{\sqrt{2}}$  in the first element (ti-ra-ba) of B 1113 and 1114.

6. 台口 つんぱらる (B 1122) — Ti-ra-th)i-s-ba = Hurrian Tilla-Tošub. R II.

このにより、このでAsi (w v. 411) — tk-ti-na (tk-tí-n), watchman ハコカ)。 = \*taktina, from Can. ekt, to pay attention (Heb. אלכת, Samaritan השם).

The ending may be the E. Can. (Amorite) plural. E. \, \, \> \\ = ti

1. Al (B 179) — 'I-tí-ni = Assyr. Atinni (PAR 58). T III.

(B 1094) — Tí-in-nu-ra = Sem. \*Tinnûr(a); see IX.D.3. T III.

XIX

- 4. See D. 5, above, where = 8.... R III.
- 5. See D. 7, above, where Q = 9 ....

F. 13 = tu

- 1. 24 % M 2 (B 431) Pu-tu-hi-pa = Hit. Putuhepa. R II.
- °2. W 103 k (B 843) S(a)-b-tu-na, a Can. place-name ending in On(a). T III.
  - 3. \( \hbar \) \(
- •5. △A □ (B 1124) tu-hi-ra = Can. \*dôhĕr(a), chariot-driver; see XI. B. 1. Dyn. XIX.
- 6. 0174 (B 1137) Tu-ta-ya-na = Can. \*Dôtajn(a); see A. 18, above. T III.
- °7. OÀ O À (Ranke, zas 56. 69 f.) --- Tu-tu = Amarna Dûdu (Du-u-du, Du-ud-du).
- \*8. Oh is the regular ending of the Can. feminine substantive in Eg. transcriptions prior to 1400 B.C. (B \$133), thus corresponding exactly to Can. \*-Au; the Can. case-endings were lost between 1400 and 1200 (cf. JPOS XII. 205, XIV. 110 f.).

# XX. = t

A. 3%, 3' = ti

- 1. \( \frac{1}{N} \) \( \frac{2}{N} \) (B 189) \( \frac{1}{1 \text{ti}} = \text{Can. } \frac{1}{6} \text{zê, or the like; sec III. C. 2. Dyn. } \)
- 2. 1327 (B 193) 'a-ti-ra, prisoner = Can. 'asîr(a); see III. A. 20.
- 3. XIIII. C. 3. Late Dyn. XVIII.
- 5. = 3'40 1 (B 706) --- Ha-ti-ya-na = Can. \*Hâziyân(a); soc XII. A. 5. XIX.
- •6. [本] (B 756) Ha-ti-ya = Amarna Hazi; nec XIII. A. 3. T III.
- \*7. 1. 3 (8) (B 778) -- Si-pa-ti-ra = Hit. Sippaziti(8); see XIV. C. 4. R II.
  - 8. 43'SA (B 1039) ku-ti, groom = Amarna kuzi; see XVII.C.8. Dyn. XIX.
- 9. 12 1 (B 1044) ku-ti-na = Can. \*kôiên or \*kôiîn; see XVII. C. 9.

  Dyn. XVIII-XX.

- XX
- 10. 13115 = (B 1046) --- ku-ti-ta = W. Sem. \*kusit(a), garment; see XVII. C. 10. Dyn. XIX-XX.
- •11. ♣ 🖴 ❸ (B 1158) Ti-ru = Amarna Zilû; see X. 0. 19. Dyn. XVIII-XIX.
- 12. 多以作录 (B 1162) ti-ir(ra)-ya-na = W. Som. \*siryân(a); see IV.15.
  Dyn. XVIII-XIX.
- 13. 多合同 性(B 1171 a) ti-ir-ta, bark = Can. \*\*\* fr(a)t(a) (cf. late Heb. コアウ, boat), from \*bir (Heb. つウ), basin; cf. the identical development of Heb. 'oni, 'oniyah and Eng. vessel. Dyn. XIX-XX.
- °14. ≥ ° R I (B 1171 b) Ti-ka-ra, etc., probably corresponds to the Latin and Gr. Sicul, Sicil, Sikel, etc., which may then stand for \*Tsikl, or the like (cf. JPOS I. 57-8, n. 3). R III.
- 16. 2 2 (W V. 413) ti-ti = \*tit > Copt. XAX: OAX, sparrow (cf. on B. 6, below. The Sem. equivalent is evidently Aram. R; 77, bird, insect (with various special meanings).

B. >\, > e = tu

- 1. 4 À ⇒ À (B 190) 'U-tu = Amarna Uzu, Can. Ûŝô; see III.E.5. Dyn. XIX.
- 2. 12 10 2 2 2 3 5 16 (B 390) Bi-ta-tu-pi-ir = Can. \*Bât-âôper, lit. Scribe-town (cf. ZAW, 1929, 2, n. 3). Cf. No. 3. Dyn. XIX.
- 3. で 本 流 い に (B 1147) tu-pi-ir, scribe = Can. šôpěr; cf. VII. A. 14. Dyn. XIX.
- 4. The Alling (B 1172 a) tu-ru-ta, meal, flour = Can. \*sult(a), Heb. roso (stem slt, Accad. salatu). Dyn. XIX.
- 5. © © (B 1181) tu-tu, small bird, is not the same as A. 16, as thought by B and W, but = Heb. sûs (Dab), swallow. Dyn. XIX.
- New Eg. 1 , papyrus, Heb. 775, is not syllabic, but consonantal, standing for \*tawfey, as shown by Copt. 20079.

# XXI. = d

A. = k = da

- °2. □ 1 (B 437) Pf-da-sa = Hit. Pitassa(s); see VII. C. 4. R II.

XXI

- 3. 上 (B 707) Ha-da-sa-t = Can. \*Hadabat, lit. New-town; see XII. A. 6. R III.
- 4. = 2 190 1, otc.(B 1188) Danuma = Amarma Danuma. R. II.
- 5. = 12 (B 1194) Da-r-d-(a)n-ya = Gr. Dardan-. R II.

B. \ = di

- 1. = 34 (B 708) Ha-di-ta = Heb. Hadid. T III.
- 2. Note \(\sim\) before 44 in the characteristic Hurrian hypocoristic ending iya, in B 960, Q(a)-d(a)-(a)r-di-ya, name of a prince of 'A-sa-ru (which is shown by the writing to be distinct from Assûr and Aser, with both of which it has been identified. Dyn. XIX.

C. ≥1, ≥0 = du

- 1. 12€ = (B 196) 'A-du-m(a) = Hob. 'Edôm, Assyr. Udumu; see III. A. 21.
  Late Dyn. XIX.
- 2. 41 3 (B 230) Ya-ar-du-na = Can. \*Yardôn(a); see IV. 6. Dyn. XIX.
- 5. A 全計等 (B 951) Qa-du-ru = a Can. \*Gadôr (Heb. ついてな, Arab. Čādûr). Dyn. XIX.
- 4. € T (B.1185) Du-bi-hi = Amarna Tubihi; see VI. B. 19. Dyn. XIX.
- 5. The (B 1247) Di-du-na = Amarna Şiduna, Heb. Şîdên. Dyn. XIX.

# XXII. = d

A.  $\ell(k) = da$ , di, du

- 2.  $\Delta k (k) \cap k$  (B 1071) Ga-da-tu =  $\bar{G}$ azzăt(u); see above. T III.
- 3. 12 = 1112 (B 1203) da-'a-qa-ta = Can. \*sa'aqat(a); see V. A. 16.
- 4. 12 in VII. B. 5-6 (B 337, etc.) da-pú-na = Can. sapôn(a), north (Heb. 7154); see reference.
- 5. ביל און (B 1216) Da-f-ta = Can. \*Sapt(a)(the anomalous Eg. f is perhaps due to a popular etymology associating the name with one of the Eg. words dft; cf. עוב ער 569); cf. Heb. אַבַּאי, Arab. Sâfed. T III.
- 6. 11-(4), etc. (B 1217), seem to stand for da-m ', da-ma-', i.e., \*dama',

#### XXII

> \*dome', Copt.  $\times \omega \omega M \in : \times \omega M$ . If d}m' is the consonantal form, this explanation is wrong.

7. La 3. (B 1233) — Da-ar-pá-ta = Can. \*Şárpăt(a); see VII. B. 3. Dyn. XIX.

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- 8. @ 1 1 (B 303) u-di-ir = Can. 'Ozer, helper; see V. C.1. Dyn. XIX.
- 9. 12 (var. 2 ) D (B 934) qa-ar-di-na = Heb. garzen; see X. D. 17. Dyn. XIX.
- 10. Δλ (Δ) ? \coo(B 959) Qa-di-ra = Amarna Gazr(i), Gr. Γαζηρα, etc.; see XVI. A. 10. Dyn. XIX.
- °11. 2 1 1 (Gardiner and Langdon, JEA, 1920, 196) Ka-r-di = Hit. Karzi(s); see XVII. A. 9. R II.
- °12. 12 (Sethe, JEA, 1920, pl. 18) Di[] = Accad. si(6)ru (Kees in Sommer, Die Abbijavā-Urkunden, p. 381). R II.
- 13. 23 P 28 M (B 1200) Dif'i)-t-ja(r)-ri-ya = Hit. Zitjariya(s); see III. C. 3. R II.
- 15. (B) 1222) di-in-ra = \*dǐ1(a) > Copt.(B) xxx, branch. Dyn. XIX.
- 16. 2 本 (B 1228) di-ir, courier = Heb. gîr ( ¬ 文). Dyn. XIX.
- 17. 位于 文章 (B 12元) Di-ra-bi-sa-na = Amarna Ziribašani; see XIV. A. 17. Late Dyn. XIX.

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- 18. 三 紀(名) ? (B 709) Ḥa-du-ra = Amarna Hazura; see XII.A.8. Dyn. XVIII f.
- 19. = 1 (B 1157) Ju-un-du-ra = Can. \*Š(i)nzôr; see IX.E.7. T III.
- - 21. 21. 1 (B 1218) Du-mu-ra = Amarna Şumur(a); see VIII.A. 25. T III.
  - 22. [] (Δ) (Δ) (Β 1227) Du-ra(ur) = Amarna Surri ( ¬) y, Τύρος). XIX f.
- 23. 12 7 d (B 1231) Du-ra-b = Hit. Zulapa(bi); see X. A. 23. T III.

B. 3 = di

- 1.) See above, A 9-10 for  $= \underline{d}i$  in B 934 and B 959. Both T III.
- 3. See above, XVII. C. 9 for = di in 157 (B 1048).
- 4. (B 1247) Dí-du-na = Amarna Siduna, Heb. Sidôn. Dyn. XIX.
- 5. ♣ 📆 ♥ ב (B 1248) dí-dí, blossom = Heb. efe ( צִיץ). Dyn. XIX.

