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# The Predynastic Union of Egypt [with 2 plates].

# THE PREDYNASTIC UNION OF EGYPT

(with 2 plates)

BY

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When Ibscher's well known skill has accomplished the final restoration of the Turin Papyrus, and we have likewise succeeded in piecing together more successfully than hitherto the fragments of the earliest Egyptian annals as preserved on the so-called Palermo Stone and the related fragments at Cairo, it is to be hoped that we may be able to recover the chronology and history of early dynastic and predynastic Egypt with some approach to finality. We are greatly indebted to Mons. Gauthier for a careful edition of the Cairo fragments, and I am sure that all scholars who realize the intensely difficult character of these records will be grateful to him for his valuable publication of these largely illegible annals[1]. Documents in such a fragmentary condition require repeated study and examination before the possible readings in the many doubtful passages can be said to have been exhausted, and a final text is the result of numerous collations and much collaboration. I take this occasion to thank Mons. Gauthier very heartily for his kindness in placing the Cairo fragments at my disposition for further study, which was rendered very much easier by his previous valuable work on them.

It is well known that the Palermo fragment of the annals we are discussing contained a list of the predynastic kings of Lower Egypt in the top line[2]. Similarly the largest of the four Cairo fragments also contained a list of kings which preceded the band containing the beginning of the dynastic list. Mons.

[1] H. Gauthier, *Quatre nouveaux fragments de la Pierre de Palerme*, in *Le Musée Égyptien*, éd. Maspero, Cairo, 1915, pp. 29-53 and Plates XXIV-XXXI. Cf. also *Comptes rendus de l'Académie des Inscr. et B.-L.*, 1914, pp. 489-496.

[2] H. Schäfer, *Ein Bruchstück altägyptischer Annalen*, in *Abhandl. Kgl. Preuss. Akad.*, 1902, Tafel I.

Gauthier has quite correctly noted that this uppermost band on the front of the largest Cairo fragment contains a line of royal figures wearing the crown of Upper Egypt, and he calls attention to the fact that the third figure from the right seems to be wearing the crown of *Lower Egypt*. The heads of these royal figures are close to the upper edge of the stone and are therefore excessively difficult to discern; but no one who studies the original will doubt the correctness of Mons. Gauthier's observation. Borchardt likewise remarks that on the Cairo fragment in the top line the kings of Upper and Lower Egypt are intermingled [1]. As his report quoted in the footnote below shows, Borchardt is here speaking exclusively of the two separate crowns, one of Upper Egypt, the other of Lower Egypt, and not of the double crown in which the two are combined.

An exhaustive examination of the Cairo fragment, however, shows that of the ten kings in the top row, seven wear the *double crown* of Upper and Lower Egypt. The line of breakage unfortunately descends toward the left edge of the fragment and has carried away the heads of the last three, so that they are not available. The evidence for the correct readings must now be presented in detail.

The Cairo fragment has been so long subjected to wear that it is quite smooth along the edges of the inscribed surface. Much of the surface itself has completely lost all trace of having been inscribed. The reading of this surface is an epigraphic task of peculiar difficulty and different from any I have ever met before, except the black basalt inscription in the British Museum (No. 135) containing the theology of a Memphite priest. The inscription is made up of narrow incised lines, each line like a narrow trench. When the surface is worn down to the level of the bottom of the trench the surface becomes smooth right across the line which is therefore no longer appreciable to the touch. But the dragging action of the graving tool has slightly dis-

[1] In his communication sent to Berlin after the discovery of the Cairo fragment, Borchardt stated : "Die Könige selbst tragen 1 und 2 die oberägyptische, 3 die unterägyptische, 4 und 5 wieder die oberägyptische, 6 wieder die unterägyptische Krone, bei den übrigen 4 sind die Oberteile abgebrochen, so dass nicht festzustellen ist, ob es oberägyptische oder unterägyptische Könige waren." See Ludwig Borchardt, *Die Annalen und die zeitliche Festlegung des Alten Reichs der ägyptischen Geschichte*, Berlin, 1917, p. 30, and footnote 3.

placed the particles at the bottom of the trench so that in sharply reflected light and under magnification the line is distinguishable as a tiny thread of light different from the light on each side of it. A hand mirror in order to gain complete control of the direction of the light, and also a strong reading glass, are quite indispensable in determining what traces are still visible on the worn surface, for as explained above these traces are often no longer incised lines; but merely a difference in surface color and texture along what was once the bottom of the incised line or trench. This difference is sufficient to distinguish the formerly incised line from the neighbouring surface on each side of it, even after this contiguous surface has been worn down to a level with the old bottom of the incised line. Those who may desire to confirm the readings I have found on the original stone will be able to do so only by reflecting a rather sharp light from the mirror to the stone and observing the effect of the reflected light carefully with a lens.

Examined in this manner the top band on the largest of the four Cairo fragments is shown to contain a series of royal figures *each wearing the double crown of Upper and Lower Egypt.* There are ten of these figures, of which the last three heads (at the left) have been broken off. The remaining seven (Nos. 1 to 7 in Pl. I) all show sufficient traces of the crowns to make it quite certain that each figure is wearing the double crown. These traces, listed figure by figure, are as follows :

No. 1. Back of white crown and tall straight back of red crown rising above the other, are certain.

No. 2. Lower half of white crown and just outside of its front line the projecting upper front corner of the red crown are visible.

No. 3. A large part of the red crown, including much of the front spiral, is visible. Under the spiral is the front line of the white crown.

Nos. 4, 5 and 6. The double crown almost complete is discernible on all three figures.

No. 7. The lower part of the white crown, and its front line cutting across the projecting upper front corner of the red crown outside of the front line of the white crown, are clear.

In view of these facts there can be no doubt that the early annalists of Egypt placed a group of kings of *united Egypt* before the dynastic lists, that is before Menes and his successors. The reign which follows this group on the Cairo fragment is that of *Dr-yty* (see Pl. I), who was obviously a successor of Menes[1], and possibly his immediate successor. At the same time the front of the Palermo fragment (Pl. II) has long made it evident that these early annals included a series of kings of Lower Egypt who preceded the dynasties. What was the relation between the predynastic kings of Lower Egypt shown on the Palermo fragment and the predynastic kings of united Egypt recorded on the Cairo fragment?

This raises the question whether the Palermo fragments and the Cairo fragment are parts of the same monument. Mons. Gauthier regarded it as obvious that these fragments belonged to the same monument and bore parts of the same annalistic record. In this conclusion I think he was quite correct. Borchardt on the contrary concludes that the two fragments do not belong to the same monument[2]. His reasons are chiefly three : (1) His conclusion that the thickness of the Palermo fragment differs from that of the Cairo fragment. (2) His conclusion that the rectangular divisions into which the surface is divided on the two fragments differ both in their horizontal and vertical measurements. (3) His conclusion that the style of the signs on the Cairo fragment differs from that on the Palermo fragment.

With regard to the comparative thickness of the two fragments, Borchardt states that the Palermo fragment, *according to Pellegrini* has a thickness of "65 mm."; whereas the Cairo fragment *according to Gauthier* is "60-62 mm." thick. It should be noted that Borchardt himself did not measure the thickness of the two originals; but he concludes that any such difference in thickness of the same stone table would demonstrate "recht ungenaue Arbeit der Platte", and therefore we must conclude that the two fragments belong to different monuments. We may raise the question, however, whether a single measurement of the thickness of these fragments is sufficient. Using calipers which would reach to the middle of the fragments, I made eighteen measurements of the thickness of the Cairo piece; that is, six along the left edge,

[1] See Sethe, *Untersuchungen*, III, pp. 22 ff. — [2] L. Borchardt, *Ibid.*, pp. 21-23.

six down the middle, and six along the right edge. These measurements are as follows :

THICKNESS OF THE CAIRO FRAGMENT.

| DOWNWARD ALONG LEFT EDGE. | DOWNWARD ALONG VERTICAL AXIS IN MIDDLE. | DOWNWARD ALONG RIGHT EDGE. |
|---|---|---|
| 60,5 + mm. | 62 mm. | 62 mm. |
| 62 — | 64 — | 65 — |
| 63,0 − — | 64 — | 65 — |
| 62,5 + — | 63,5 — | 65 — |
| 61,5 — | 62,5 — | 64,0 + — |
| 60 — | 61,0 − — | 63,5 — |

Within the limits of the Cairo fragment itself, therefore, we find a variation of thickness amounting to as much as half a centimeter. When we turn to the Palermo fragment furthermore, we find far larger variations in the thickness.

THICKNESS OF THE PALERMO FRAGMENT.

| DOWNWARD ALONG LEFT EDGE. | DOWNWARD ALONG VERTICAL AXIS IN MIDDLE. | DOWNWARD ALONG RIGHT EDGE. |
|---|---|---|
| 51,5 mm. | 51,0 + mm. | 57,0 mm. |
| 52,0 — | 53,5 − — | 60,0 — |
| 65,5 — | 56,0 + — | 61,0 — |
| 57,0 − — | 58,5 − — | 65,0 — |
| 57,5 + — | 59,5 — | 61,0 − — |
| | 59,0 — | |

It ought to be stated that I made the above measurements on the original stones with a pair of wooden calipers, which were obviously not accurate enough to justify any attempt to measure small fractions of a millimeter. Hence only half millimeters are included in the measurements listed above. The large range of variation, however, makes it quite evident that any effort to secure accuracy within finer limits would be a complete loss of time. The Cairo piece ranges from a minimum of 60 mm. to a maximum of 65 mm. in thickness; while the Palermo fragment measures only 51 mm. in thickness in the upper left-hand quarter, but increases in two places to a maximum of

65 mm.—a difference of almost 1-1/2 centimeters in the thickness of the same piece! It is obvious that in the matter of thickness there is no evidence indicating that the Cairo fragment and the Palermo fragment were not part of the same stone slab.

Borchardt's second argument regarding the different dimensions of the rectangles on the two fragments is based on the published photographs taken without scale, and not on measurements of the originals. It would not be appropriate to devote any of the space in this volume to computations shifting Borchardt's percentages into millimeters. The best reply to the entire argument is a set of actual dimensions based on measurements of the originals. Elaborate efforts have been made to reconstruct a diagram of the complete annals on the uninjured original slab, but all these efforts have unfortunately been based on photographs without a scale, and not on measurements of the original fragments.

Some years ago I made a series of measurements of both the original fragments under discussion and hope eventually to publish a reconstruction of the annals based on these measurements. For our purpose here it will be sufficient to employ only a few of them :

| PALERMO FRAGMENT—FRONT. | M. |
|---|---|
| *Row I :* | — |
| Combined width of 12 rectangles (measured at bottom) | .1965 |
| Width of second rectangle | .0167 |
| Width of third rectangle | .0160 |
| Average width of twelve | .0163 + |
| *Row II :* | |
| Combined width of 11 rectangles (measured at bottom) | .2395 |
| Combined width of 10 rectangles (measured just above Nile data) | .2165 + |
| Average width of eleven | .0217 + |
| Average width of ten | .0216 + |
| Width of widest rectangle | .0225 |
| Width of narrowest rectangle | .0210 |
| *Row III :* | |
| Combined width of 12 rectangles (measured just above Nile data) | .2139 |
| Average width of twelve | .0178 + |
| Width of widest rectangle | .0185 — |
| Width of narrowest rectangle | .0170 + |

| | M. |
|---|---|
| *Row IV :* | — |
| Combined width of 14 rectangles (measured at about middle)..... | .2110 |
| Average width of fourteen..... | .0150 + |
| Width of widest rectangle..... | .0162 |
| Width of narrowest rectangle..... | .0145 + |
| *Row V :* | |
| Combined width of 10 rectangles measured just below curve of year-sign)..... | .1895 — |
| Combined width of 9 rectangles (measured just above Nile data)..... | .1710 |
| Average width of ten..... | .0189 + |
| Average width of nine..... | .0190 |
| Width of widest rectangle..... | .0205 — |
| Width of narrowest rectangle..... | .0185 |

## Cairo fragment—front.

| | |
|---|---|
| *Row I :* | |
| Combined width of 9 rectangles (measured at bottom)..... | .1205 |
| Combined width of 8 rectangles (measured at bottom)..... | .1075 + |
| Average width of nine rectangles..... | .0133 + |
| Average width of eight rectangles..... | .0134 + |
| *Row II :* | |
| Combined width of 7 rectangles..... | .1530 + |
| Average width of seven rectangles..... | .0218 + |
| *Row III :* | |
| Combined width of 10 rectangles (left end very faint)..... | .1820 |
| Combined width of 9 rectangles..... | .1640 |
| Average width of ten rectangles..... | .0182 |
| Average width of nine rectangles..... | .0182 + |
| *Row IV :* | |
| Combined width of 8 rectangles..... | .1175 + |
| Average width of eight rectangles..... | .0146 + |
| *Row V :* | |
| Combined width of 9 rectangles..... | .1695 + |
| Combined width of 8 rectangles..... | .1515 |
| Average width of nine rectangles..... | .0188 + |
| Average width of eight rectangles..... | .0189 + |

SUMMARY COMPARISON OF AVERAGE RECTANGLE WIDTH.

| | M. |
|---|---|
| *Row I :* | |
| Palermo Front | .0163 + |
| Cairo Front | .0133 + |
| *Row II :* | |
| Palermo Front | .0217 + (0.216 +) |
| Cairo Front | .0218 + |
| *Row III :* | |
| Palermo Front | .0178 + |
| Cairo Front | .0182 + |
| *Row IV :* | |
| Palermo Front | .0150 + |
| Cairo Front | .0146 + |
| *Row V :* | |
| Palermo Front | .0189 + (.0190) |
| Cairo Front | .0189 + (.0188) |

An important fact emerges from this comparison. Disregarding Row I, the Palermo fragment *by itself* exhibits differences in the widths of the rectangles in the same row larger than those on the basis of which Borchardt would assign the two fragments to two different originals. In Row V on the Palermo fragment these differences rise as high as two mm. This is a difference five times as great as the greatest difference between Palermo and Cairo disclosed by the above summary comparison, except in Row I, where we find a difference of three mm. between Palermo and Cairo. It is important to note, however, that on the Palermo fragment we are dealing with a group of kings of Lower Egypt in Row I; whereas on the Cairo fragment we have a group of kings of Upper and Lower Egypt. Obviously these two groups must each have contained a different total number of royal names, and such a difference might easily lead the scribe to alter the size of the rectangles in these two different groups. The inaccuracy of this scribe in such matters, however, might easily result in a difference of three mm., as between two different parts of the same

row. The widths of the rectangles on the front therefore furnish no evidence whatever that the two fragments do not belong to the same document. On the contrary the above comparison is in itself strong evidence that the records on the two fragments are parts not only of the same document, but also of the same copy of the document.

A comparison of the vertical intervals between the horizontal lines on the two fragments is also instructive. In the following list of measurements the horizontally ruled lines are lettered from the top downward, beginning with the marginal ruling at the top of the Palermo fragment which is called "*a-a*" (Pl. II). The uppermost three lines, that is, *a-a*, *b-b*, and *c-c*, on the Palermo fragment are lost on the Cairo fragment, and have been restored in broken lines on the sketch (Pl. I). It is necessary, therefore, to begin with the comparison by measuring down from line *d-d* on both fragments :

COMPARISON OF VERTICAL INTERVALS BETWEEN HORIZONTAL LINES.

| VERTICAL DISTANCE FROM. | PALERMO M. | CAIRO M. |
|---|---|---|
| Line *d* to line *e* (top of Row II) | .0150 | .0160 |
| — *f* | .0465 | .046 − |
| — *g* (bottom of Row II) | .0565 | .056 + |
| — *h* (top of Row III) | .0730 | .0730 |
| — *i* | .1037 + | .104 + |
| — *j* (bottom of Row III) | .1140 | .114 − |
| — *k* (top of Row IV) | .1305 | .130 − |
| — *l* | .1605 | .160 − |
| — *m* (bottom of Row IV) | .1725 | .170 |
| — *n* (top of Row V) | .1870 | .187 − |
| — *o* | .2180 | lost |
| — *p* (bottom of Row V) | .2280 | .2285 |
| — *q* (top of Row VI) | .2500 | lost |
| — *r* | .3030 | .316 |
| — *s* (bottom of Row VI) | .3180 | .325 |

Before attempting to deal with the above data it is necessary to determine what are the maximum limits of inaccuracy in the work of the scribal sculptor who laid out the horizontal lines on the Palermo fragment. This factor of

inaccuracy increases directly as the distance between the horizontal lines increases. The distance between line *d* (bottom of Row I) and line *s* (bottom of Row VI) amounts to over 31 centimeters. The length of line *s* as preserved is roughly 13 cm. At the right end it is m. .3155 from line *d;* while only 13 centimeters to left, at its left end, it is m. .318 from line *d.* There is a divergence here of two and a half millimeters in a horizontal length of only about 13 centimeters. This rapid increase in the heigth of a horizontal band over 31 centimeters high would not be very noticeable in a band so broad, but it would amount to over a centimeter in a horizontal length of only fifty centimeters. The Palermo fragment by itself therefore shows sufficient divergence to reconcile the differences in the distances *d-r* and *d-s* as between Palermo and Cairo. On the other hand, the above comparative table as a whole shows thirteen pairs of measurements out of which eleven are so well within the limits of our sculptor's demonstrated inaccuracy that they are identical and therefore form strong evidence that the two fragments of Palermo and Cairo belonged to the same monument.

The third and final argument adduced by Borchardt, as demonstrating that the two fragments under discussion did not form parts of the same monument is based on the difference in style between the hieroglyphic signs on the two pieces. It must be admitted that there is some difference observable. Much of it, however, as Borchardt has himself noticed, is due to the worn condition of the Cairo piece. It should be remembered that the narrow slab, lying on the long bottom edge, was amply long enough in its original condition for two sculptors to work upon it side by side at the same time. In view of the evidence of the measurements the slight differences in style between the writing on the two pieces is not sufficient ground for assigning them to two different monuments.

There has been no expert petrological examination of either fragment, to determine the character of the stone itself. Long continued epigraphic work on the two pieces, however, gave me a very decided impression that the two pieces are of the same compact black stone, with identical characteristic concentric striations on the fractured surfaces. As to the provenience of the two pieces, we have no information regarding the source of the Palermo piece, and the meager information concerning the origin of the Cairo fragment is

not very conclusive. The existent fragments taken together show conclusively that there were at least two copies of such annals in existence, and there is therefore no inherent improbability in assuming that our two fragments belonged to two different monuments. A fair consideration of the measurements, however, both horizontal and vertical, makes it very probable that the two fragments we are discussing formed parts of the same monument. In any case the identical divisions and disposition of the surface of the stone in laying out the first five rows make it perfectly certain that the records on the two fragments are parts of the same document, and that they may be employed to supplement each other in our endeavors to reconstruct the complete record once inscribed on the front of the slab [1].

We are concerned only with Row I and the recovery of all possible indications regarding its original content. The Cairo fragment demonstrates that in the left portion of this uppermost row there was a group of at least ten kings, seven of whom were kings of Upper and Lower Egypt; while in the same row at some distance to the right there was a group of thirteen kings, of whom at least nine were kings of Lower Egypt. The arrangement was roughly as follows :

Demonstrated arrangement of Row I.

| | | |
|---|---|---|
| Kings of Upper and Lower Egypt | Kings of Lower Egypt | ..... ? |
| | | .....? |

At the right we have a lost section of Row I, of problematical content, followed by a section containing kings of Lower Egypt, and another containing kings of Upper and Lower Egypt, that is, of a united Egypt. When we consider that these annals were compiled in the Fifth Dynasty, many centuries after the leadership of Upper Egypt had become an established tradition, we can hardly doubt that the lost group at the right was made up of a list of kings of Upper Egypt. If these three lists filled the entire row, occupying the complete length of the original stone, all of these three lists must have

[1] This is also the conclusion of Borchardt, *Ibid.*, p. 30 ff.

been long. Accepting this restoration at the right, the final reconstruction would be as follows :

RECONSTRUCTION OF ROW I WITH RESTORATION AT RIGHT END.

| 3 | 2 | 1 |
|---|---|---|
| Long List of Kings of Upper and Lower Egypt | Long List of Kings of Lower Egypt | [Long List of Kings of Upper Egypt] |

The top of the Palermo fragment (see Pl. II) displays a horizontal band enclosed between line *a* and line *b*, which is of about the same breadth as the title bands over Rows II, III, IV and V. There can be no doubt that this was likewise a title band containing an inscription or inscriptions indicating the content of Row I over which the band extends. It is especially regrettable that these titles are now lost. The titles over groups 1 and 2 might have contained nothing new; but the title over group 3 might have given us very valuable information regarding the origin and identity of these kings of united Upper and Lower Egypt before the dynasties; in other words, a predynastic dynasty. While we have long known that two parallel lines of kings ruled contemporaneously, the one in Upper, the other in Lower Egypt, the royal lists have never before disclosed to us the fact that before the dynastic union under Menes there had been a line of kings who already ruled *all Egypt*.

The primary purpose of this brief essay is merely to demonstrate the existence of a dynasty or group of dynasties ruling a united Egypt long before the union under Menes, on the basis of the royal lists still surviving in the Fifth Dynasty. To discuss the new fact in all its historical connections would require a treatise exceeding the space available in this volume. Some of the larger aspects of the predynastic union of all Egypt may, however, be recalled here.

Egyptologists have long been aware of the evidences pointing toward the fact that the earliest advances of civilization were made in the Delta, especially the theological and religious primacy of Heliopolis, a Delta city. The leadership of civilization by a remote Delta population, which far surpassed the culture of Upper Egypt in early predynastic times, was suggested by Newberry

as far back as 1906[1]. Sethe has several times called attention to less obvious indications, and in 1922 he published a penetrating essay[2] disclosing evidence for a predynastic union of Egypt resulting from an invasion of Upper Egypt by conquerors from the Delta, at that time long the leader in Nile valley civilization. It is obvious that the presence of a group of kings of Upper and Lower Egypt preceding Menes in an annalistic compilation of the Fifth Dynasty, is a conclusive documentary demonstration of the soundness of Sethe's hypothesis. It can no longer be regarded merely as a hypothesis, but must be classed among established historical facts. Menes will then have been a revolter who broke up the earlier union and established the supremacy of Upper Egypt. That supremacy proved to be lasting, and thus furnished the reason why Menes was afterward regarded as the conqueror who brought about the unity of Egypt, and thus became head and founder of the dynastic line which continued that unity.

The place of this predynastic union in Egyptian history is an interesting question. Borchardt and others have endeavoured to shift the reign of Menes back to the introduction of the calendar in 4236 B. C., because such an administrative enactment would seem to require administrative control of the entire country. Chronologically the proposed shift is impossible; but administratively considered the argument is sound. Was it the unknown king, the founder of the predynastic union, who introduced the calendar? In that case the predynastic union took place in the forty-third century B. C.

It has been objected that the actual predynastic remains as yet known to us are so crude and primitive as to forbid the supposition that the age to which they belong was sufficiently civilized to have produced a calendar[3]. This objection is not well grounded. In the first place, it should be noted that the Maya civilization of Yucatan produced and used for more than a thousand years, and probably more than fifteen hundred years, a highly complex calendar.

[1] *Proceedings of the Society of Biblical Archeology*, February, 1906, p. 69.

[2] Kurt Sethe, *Die ægyptischen Ausdrücke für rechts und links und die Hieroglyphenzeichen für Westen und Osten*, in *Nachrichten der Kgl. Gesell. der Wiss. zu Gött.*, Phil.-hist. Kl., 1922, pp. 197-252.

[3] Alexander Scharff, *Grundzüge der ägyptischen Vorgeschichte*, Leipzig. 1927, pp. 54 ff., written in favor of a shorter chronology.

This period was one during which the Maya people had reached a chalcolithic culture stage. They were certainly no further advanced than the so-called "Second Civilization", which immediately preceded the Egyptian dynasties. Of this Second Civilization we possess at present only a number of village cemeteries. The royal monuments of the period probably lie deep under the alluvial mud of the Delta, where their final recovery by excavation is unlikely. But no one would deny the existence of the splendid Saracen culture of Old Cairo because the outlying village cemeteries of Egypt in this period contain no hint of it. Scharff has himself convincingly shown that (*ibid.*, pp. 46-50) the most important elements of culture appeared in Egypt during the Second Civilization. Besides the origins of writing and the incoming of metal, the half millenium preceding the dynasties presumably witnessed the transition from hoe-culture to plow-culture,—a change which for the first time in the course of developing human life brought under cultivation a relatively very large area and thus put into the hands of the ruler the first large body of portable and at the same time easily divisible wealth in the form of grain. The early development of a high and centralized civilisation in Egypt was based on the annual availability of this great volume of portable wealth, which placed power of a new kind in the hands of both ruler and people. As the annual volume of grain increased internal trade must have received a tremendous impetus. Newberry's interesting observation[1] that among some three hundred Nile boats painted on the pottery of the Second Civilization, two hundred and twenty-two bear standards indicating their origin in the Western Delta is an important disclosure of the Lower Egyptian source of such commerce at that time. We may be certain that this traffic was based on grain.

An agricultural development like this is a slow process, and equally slow must have been the shift from picture writing to phonetic signs which were already present at the beginning of the dynasties. On this question the analogy of culture progress among the Mayas is very instructive. The development of their civilization can now be followed back to "the second or third

[1] P. E. Newberry, *Egypt as a Field for Anthropological Research*, Presidential Address, Anthropological Section, *Proceedings of the British Association for the Advance of Science*, 1923.

century B. C.", that is, for a period of over two thousand years [1]. The calendar, probably the most elaborate system ever devised, and writing both reach back into the pre-Christian age, when as we have said above, the cultural situation of the Maya people was obviously no further advanced than the Second Civilization of predynastic times. Yet after the lapse of at least seventeen hundred years the Maya system of writing had not yet passed into the phonetic stage, or made more than a beginning leading toward the transition from the pictographic to the phonetic stage.

These facts are of importance in considering the possible length of the dynasty which preceded Menes on the Cairo fragment. The union of Babylonia under Hammurabi, which after some interruption became fairly permanent, was preceded by a thousand years of intermittent union under a succession of rival cities like Ur. There would be nothing improbable in assuming that the process of centralization and union in Egypt was going on in the same way for a thousand years before Menes established a more or less permanent union. The conclusion that the unknown Delta king who established the first union in Egypt lived in the forthy-third century B. C., and that he introduced the calendar in 4236 B. C. is not attended by any historical improbability. On the contrary the conclusion seems to me not only plausible but probable. It involves the acceptance of a period of seven or eight hundred years for the pre-Menite dynasty or dynasties. The group of ten of these pre-Menite kings actually preserved on the Cairo fragment will have ruled a total of about one hundred and fifty years. All the proposed reconstructions of these annals, such as those of Sethe and Borchardt, call for a total length of the top row which would easily accommodate in the left-hand portion of the row a line of fifty-odd royal names; that is, a number amply sufficient to fill a period of some eight hundred years and leaving plenty of room at the right for a long line of kings of the two separate kingdoms of Upper and Lower Egypt, a portion of the latter group of which has been preserved on the Palermo fragment.

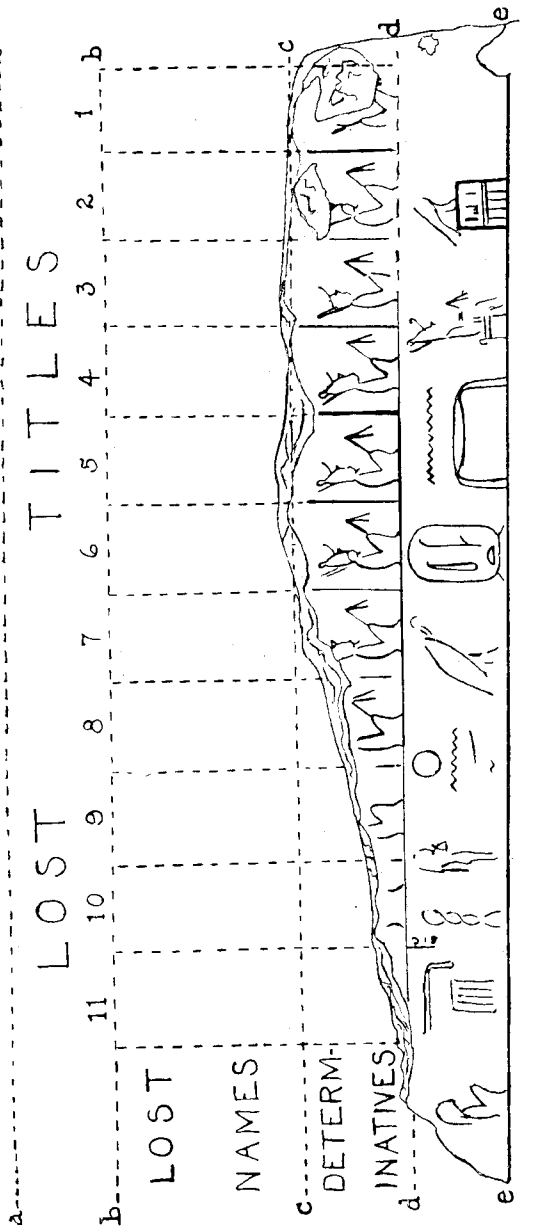
Summarizing our conclusions, therefore, we find that the earliest annals of Egypt as compiled in the Fifth Dynasty were introduced by a long list of

[1] See Silvanus G. Morley, *New Light on the Discovery of Yucatan and the Foundation of the New Maya Empire*, in *American Journal of Archeology*, vol. 31 (1927), pp. 51-69; the same author's : *The Inscriptions of Copan*, Carnegie Institution of Washington, 1920, especially pp. 465-535.

kings who ruled for many centuries before the dynasties. These predynastic kings were recorded in a horizontal line at the top probably extending from end to end of the long narrow slab designed to contain the annals. A narrow band above this line of royal names presumably contained designations or titles of the groups of royal names which were below it. It is probable that the title at the right contained at least the words "Kings of Upper Egypt" (*Nyw-sw·t*) that over the kings of the Delta of whom a group of thirteen (seven preserved) are still observable on the Palermo fragment, will likewise have contained the words "Kings of Lower Egypt" (*byty·w*); while the third group, consisting of kings of both Upper and Lower Egypt, will doubtless have been designated by both these titles, with possibly some additional designation to distinguish them from the following post-Menite dynasties. This long succession of predynastic monarchies fell into two periods : *First* we have a period of the two kingdoms of Upper and Lower Egypt, ruled by two parallel lines of kings who were contemporary, notwithstanding the fact that the Upper Egyptian group is placed first and the Lower Egyptian group placed second, as we read the horizontal line from right to left. *Second,* we have a group of kings who ruled a united Egypt before the dynasties beginning with Menes.

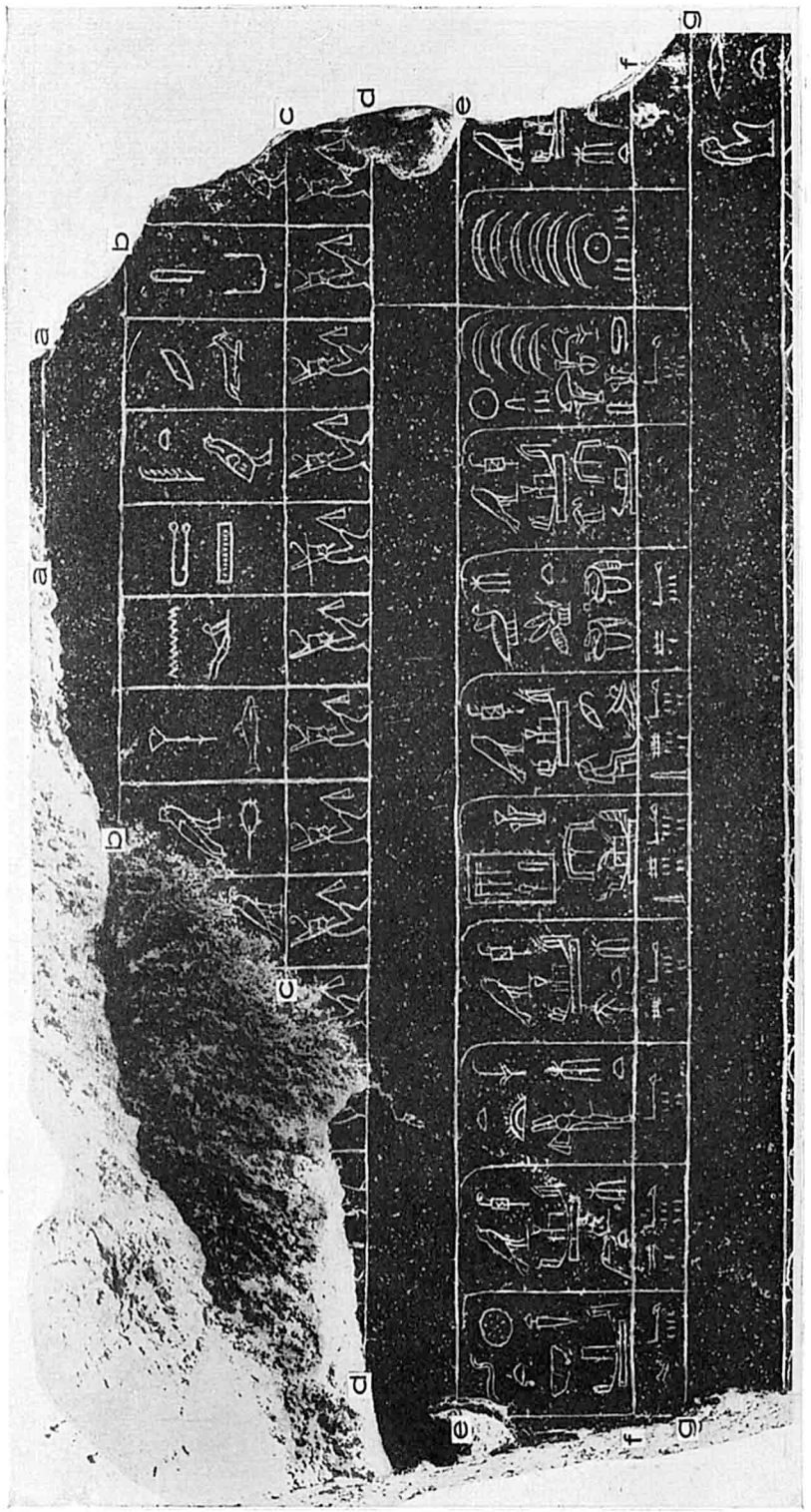
Culturally the second of these two predynastic periods must have coincided with a large part of the period of the Second Civilization of predynastic times; and hence the first of the two periods may have been contemporaneous with the First Civilization. If so, the history of the two separate kingdoms of the Delta and the valley must have reached back at least to the middle of the Fifth Millennium and probably earlier. In any case we must now regard a predynastic conquest of the valley by the more advanced civilization of the Delta, and the resulting line or lines of predynastic kings ruling a united Egypt, as having received conclusive inscriptional confirmation. The social, economic and political development leading toward union in the Nile valley, *preceding* the final union under Menes, was longer than we have been inclined to think. In conclusion it should be noticed that political unity in Egypt is enormously earlier than in Western Asia, and the cultural development leading to union without doubt reaches back much further in Egypt than in Babylonia.

James H. Breasted.




Top of the largest annals fragment at Cairo showing the royal determinatives in row I and the title of the reign of Dr immediately below them.

The lost rectangles once containing the royal names and the other lacking lines have been restored in broken lines on the vertical scale of the Palermo fragment; the portion preserved on the Cairo fragment is slightly smaller than the original. The distance from left line of 1 to left line of 10 should be cm. 10.75.




Top of the Palermo fragment showing row I and lines *a-a*, *b-b* and *c-c*, restored in Plate I but preserved here.
The scale is only approximate; the distance on the original between the last vertical line at the right and the last vertical line at the left is cm. 19.65 (measured on line *d-d*).

James H. Breasted, *The predynastic union of Egypt.*