MINISTÈRE DE L'ÉDUCATION NATIONALE, DE L'ENSEIGNEMENT SUPÉRIEUR ET DE LA RECHERCHE

BULLETIN
DE L'INSTITUT FRANÇAIS
D'ARCHÉOLOGIE ORIENTALE

en ligne en ligne en ligne en ligne en ligne en ligne en ligne en ligne en ligne en ligne

BIFAO 43 (1945), p. 51-138

Herbert W. Fairman

An Introduction to the Study of Ptolemaic Signs and their Values.

Conditions d'utilisation

L'utilisation du contenu de ce site est limitée à un usage personnel et non commercial. Toute autre utilisation du site et de son contenu est soumise à une autorisation préalable de l'éditeur (contact AT ifao.egnet.net). Le copyright est conservé par l'éditeur (Ifao).

Conditions of Use

You may use content in this website only for your personal, noncommercial use. Any further use of this website and its content is forbidden, unless you have obtained prior permission from the publisher (contact AT ifao.egnet.net). The copyright is retained by the publisher (Ifao).

Dernières publications

9782724711264	*La chapelle d'Osiris Ounnefer Neb-djefaou*	Laurent Coulon
9782724711752	*Guide du Caire Islamique*	Hadrien Collet
9782724711660	*Mélanges de l'Institut dominicain d'études orientales 41*	Adrien Candiard (éd.)
9782724711745	*Bulletin archéologique des Écoles françaises à l'étranger (BAEFE)*	
9782724711271	*Du côté de chez Zeus*	Emmanuel Botte (éd.), Hélène Cuvigny (éd.), Michel Reddé (éd.)
9782724711677	*La Description de l'Égypte*	Paul-Marie Grinevald
9782724711714	*La pensée et la pratique pharmacologiques d'Avicenne*	Sylvie Ayari
9782724711899	*BCAI 40*	

© Institut français d'archéologie orientale - Le Caire

AN INTRODUCTION

TO THE STUDY OF PTOLEMAIC SIGNS

AND THEIR VALUES

BY

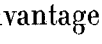
H. W. FAIRMAN.

During the Winter of 1943-1944 at the request of a number of friends and colleagues I devoted a series of talks to an analysis of the way in which Ptolemaic signs obtained their values, my remarks having particular reference to Edfu. This analysis served in a sense as a series of rules for decipherment which were put to the test in readings in Ptolemaic texts and were found to work. After the introductory talks it was suggested to me that it might be useful to give them a more permanent form and the present paper is the result. Through the courtesy of M. Charles Kuentz, who placed a room, blackboard and every facility at our disposal, these talks were given at the *Institut français d'Archéologie orientale* and I gladly take this opportunity of expressing to M. Kuentz the gratitude of my friends and myself for all that he did to make our meetings and discussions possible.

It was some months after these introductory talks had been given and when this paper, all but a few details and references, was in its final and present form, that I first saw a proof copy of Dr. Drioton's *tour de force* entitled "Procédé acrophonique ou Principe consonantal" [1]. I consider Dr. Drioton's attempted defence of the principle of Acrophony as the most damning attack on that principle that has yet appeared in print and a most revealing exposure

[1] *Annales du Service,* 43, 319-349.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

of its weakness, and therefore I see no reason to alter or modify any of my views or statements. The body of this paper, therefore, is textually the same as it was before I read Dr. Drioton's remarks, with the exception that I have taken advantage of his quotation of a possible origin for the value  = *p* [1] on the Consonantal Principle to delete from my manuscript the admission that in the present state of our knowledge Acrophony appeared to be the only explanation of this value.

There is, I think, no need to make a detailed reply to Dr. Drioton's remarks, for they contain their own refutation and condemn themselves by every canon of logic and science. There is neither amusement nor profit in flogging a dead horse and if the only case that can be put up for Acrophony has to depend on the dubious and questionable methods and arguments employed by Dr. Drioton, it is clear that Acrophony is a very dead horse, unwittingly killed by the hand of its creator. Dr. Drioton lays much stress on the artificial nature of cryptography and the artificial way in which cryptographic values arose; he can hardly be surprised, therefore, if the rest of the world looks upon this artificial and unnatural system as having no real existence except as a figment of the imagination of its modern inventor.

It is true that Dr. Drioton attempts to prove that Acrophony not only really existed but was "le procédé normal de signification" by invoking certain cryptograms whose decipherment he claims is guaranteed by versions *en clair*. Of all these texts, however, only one has that guarantee (Papyrus Salt 825 cols. XV and XVI [2], and of that much of Dr. Drioton's explanation is false and mistaken), and one other is probable (the dedication text of Sethos I [3]), but for all the others there is no guarantee that Dr. Drioton's decipherment is a literal and word for word transcription of an Egyptian original *en clair* and in certain cases it is perfectly clear that it is not. The whole of Dr. Drioton's argumentation based on these supposedly guaranteed texts is therefore valueless, it is a perfect example of arguing in a circle, it proves exactly nothing and it can be ignored.

In defence of his theory Dr. Drioton invokes only his own work, he conspicuously fails to enlist the independent evidence of the hundreds of cryptographic

[1] *Annales du Service,* 43, 336, note 1 ; see further note (*d*), p. 82 below. — [2] Drioton in *Annales du Service,* 41, 99-111. — [3] Drioton in *Annales du Service,* 40, 309-314.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

words and phrases whose true equivalent is established beyond all doubt by the double writings in the *Book of Am Duat* [1] and the *Book of the Kererets* [2]. These texts, which ought to form the starting point of any attempt to establish the principles on which cryptography is based, are ignored by Dr. Drioton and he rarely quotes them in his studies. The reasons for this omission will be obvious to anyone who takes the trouble to analyse these texts, for they strikingly and markedly fail to support Dr. Drioton's contentions and show that their values were not obtained by Acrophony.

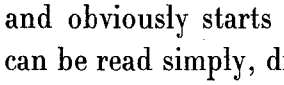
Dr. Drioton, of course, is fully entitled to differ from my views and to criticise and combat them as vigorously as he pleases. Indeed, criticism is to be welcomed, for it is only by full and frank discussion that ideas are clarified and the truth revealed. But discussion is valueless unless it complies with certain conditions, unless it is fair and accurate and does not distort the facts or the words of those with whom one is in dispute. Unfortunately Dr. Drioton's arguments against some of my suggestions do not comply with these conditions and I have felt impelled at various points in this paper to justify my views, particularly since many who are unfamiliar with Ptolemaic and the existing material might otherwise be led into error or imagine that I had ignored Dr. Drioton's remarks. These notes will demonstrate, I think, that my views and remarks have been based on facts that stand up to criticism and examination, and that it is Dr. Drioton's prejudiced aberrations that are mistaken and untenable. In my view, Dr. Drioton's suggestions are not justified or proved, but I have specifically referred only to a few in which there are either glaring errors of fact, or misrepresentation or distortion of my own words or those of others or of the evidence of the signs and the monuments. Similar arguments could be advanced against his other suggestions which I have passed by without comment. Dr. Drioton has called all these « les plus marquantes

[1] Bucher, *Les Textes des Tombes de Thoutmosis III et d'Aménophis II,* vol. I, *passim;* Lefébure, *Les . Hypogées royaux de Thèbes,* 1re partie, *Le Tombeau de Seti Ier* (*Mém. Miss.,* t. II). Cf. also Grapow in *Z. A. S.,* 72, 23-29. M. Piankoff informs me that an unpublished version of the *Book of Am Duat* with cryptographic writings is to be found in Corridor XIII and the Sarcophagus Chamber of the tomb of Pedamenopet.

[2] Piankoff in *B. I. F. A. O.,* 42, Pls. LX, LXII, LXVIII, vii, LXIX, LXX, i, LXXIII, LXXVI-LXXIX; 43, Pls. CXLVI-CLI.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

de ces rectifications », and the reader can judge for himself the strength and stability of the foundations on which they have been based.

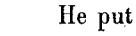
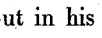
At the end of his paper Dr. Drioton, rather like Little Jack Horner of the nursery rhyme [1] or a conjurer producing a rabbit from his hat, quotes a ushabti which he claims bears a cryptographic text [2]. Using this text as a test of his theory of Acrophony, Dr. Drioton has produced one of the most extraordinary decipherments and perversions of the truth that has appeared since the days of Athanasius Kircher [3], and concludes with a challenge to decipher it according to the Consonantal Principle. This challenge is not going to be accepted here for the very good reason that, as Dr. Drioton himself ought to know, Egyptian texts are not to be deciphered by any one principle, be it acrophonic, consonantal or any other, but by taking into consideration and utilising all the factors that govern the selection of Egyptian sign-values. A complete theory cannot be proved by a single short text and no useful purpose is served by using to that end a text the copy of which, as Dr. Drioton admits [4], may be defective in details. Before embarking on a study of this text I prefer to collate the published copy but this is unfortunately impossible at the present time. I will only add that Dr. Drioton's decipherment is completely and utterly wrong [5], owing to his dependence on Acrophony. The text clearly and obviously starts with a writing of the well-known  [6] and can be read simply, directly and with ease, apart from two slight and probably temporary uncertainties which may be due to error on the part of the modern copyist. Dr. Drioton could not have given a better proof of how dependence on Acrophony twists truth into falsehood, needlessly complicates what is simple and normal, creates difficulties where none exist, turns high noon into midnight, brings the science of Egyptology into discredit and transports it into the realm of fantasy.

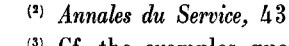
[1] Little Jack Horner
Sat in a corner
Eating his Christmas pie,
He put in his thumb -
And pulled out a plum
And said " What a good little boy am I ".

[2] *Annales du Service,* 43, 347-349.

[3] Cf. the examples quoted by Erman, *Die Hieroglyphen,* 3, and Gardiner, *Grammar,* p. 12.

[4] *Annales du Service,* 43, 347, note 3.

[5] I admit, however, that he has correctly deciphered  *Wsir ḥm-ntr* and  *m;ʿ ḫrw.*

[6] Cf. Černý's note in *B. I. F. A. O.,* 41, 111. occurs as the determinative of *wšbti* in  (*B. I. F. A. O.,* 41, 121, three exx.).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

I. — PTOLEMAIC WRITING, ITS NATURE AND THE METHOD OF APPROACH TO ITS DECIPHERMENT.

1. *Ptolemaic Writing.* By Ptolemaic Writing we are accustomed to refer to the system of hieroglyphic writing employed in temples of the Graeco-Roman Period [1]. It is important, however, to bear certain points in mind :

(*a*) The language of these inscriptions is largely a dead one, it is not the spoken language of the time but is something traditional and in the nature of a priestly revival.

(*b*) As a system of writing it is essentially a temple writing, something monumental, it does not find its way into contemporary hieratic texts (except a few passages in Papyrus Salt 825), not even into those of a religious nature, it is only present to a very limited extent in the hieroglyphic stelae of the times, and is found in its full, normal and most typical form only on the walls of temples.

(*c*) It is not an isolated phenomenon out of touch with the main stream of hieroglyphic writing, but is the logical continuation, in a more developed form, of a manner of writing that tended to become increasingly common throughout the Late Period. It is in the direct line of descent from writing employed in the New Kingdom and can be traced sporadically at least as far back as the Middle Kingdom and possibly even the Old Kingdom. There are good indications that its roots lie in the early stages of the Egyptian language. It is something, therefore, that has always existed in Egyptian, although, perhaps, it adopts a more extreme form in Ptolemaic.

(*d*) The system of writing and grammar employed in the Ptolemaic temples is uniform in general, but every temple has its peculiarities in writing, in the

[1] What I would term the "normal" and common Ptolemaic writing is, of course, also found in hieroglyphic stelae of the period and these are naturally also "Ptolemaic". To most minds, however, the most typical and certainly the most developed Ptolemaic inscriptions and writings are those found in the temples of the Graeco-Roman Period.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

forms of signs, in grammar and in the content of its texts. There appear to be some indications of a development of the system as time goes on, particularly in the signs and manner of writing, but this is an aspect that as yet has not been the subject of detailed study and examination and hence this observation is only provisional and is liable to correction or modification.

The texts of the Temple of Edfu afford the best starting point for any study of Ptolemaic writing partly because the temple was built in a relatively short space of time [1] and hence forms a homogeneous unit to a greater extent than any other late temple, partly because its texts present to us Ptolemaic writing at its earliest and best, and partly because the temple and its inscriptions are the product of the almost undivided attention of the best scribes and craftsmen of the time [2]. The present study is therefore devoted almost exclusively to the Edfu texts though I do not hesitate to quote from Dendera or other sources if any useful purpose is served [3].

2. *Characteristics of Ptolemaic Writing.* The chief characteristics of this system of writing are :

(*a*) An increase in the signs in common use and in the values they could bear, this increase being effected partly in ways that will become obvious in the following pages and partly by the introduction of many often minute additions to or modifications of existing signs.

(*b*) A big increase in the number of ideograms and in the number of determinatives that are used as ideograms and phonograms.

[1] See p. 93 below.

[2] Where reference is made to Edfu inscriptions I quote by volume, page and line of the edition of Rochemonteix and Chassinat (cf. *Annales du Service,* 43, 193, note 1). The prefix *Mam.* indicates Chassinat, *Le Mammisi d'Edfou,* quotation being by page and line of the publication. *C. D.* is an abbreviation for Chassinat, *Le Temple de Dendarah,* quotation being by volume, page and line of the publication (only four volumes at present published).

[3] It is as well to point out at this stage that in some of the quotations I have not employed the exact forms originally used by Chassinat. These divergences are due to the fact that alternative and improved forms of signs have been introduced into the fount since the passage quoted was first printed (cf. *Annales du Service,* 43, 200). Thus I habitually use for ,  for ,  for  and  for etc. I have only made these changes where it is certain that only changes in the forms in the fount are concerned, and in all other cases I have adhered to Chassinat's printed copy.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(*c*) An increase, as compared with Classical Egyptian, in purely alphabetic writings.

(*d*) The deliberate employment of a variety of alternatives for known signs, values and spellings.

(*e*) The deliberate revival of archaistic spellings and old values, constructions and usages.

(*f*) A certain attempt, clearly based on real knowledge, to indicate phonetic changes or the current pronunciation.

Grammatical characteristics are omitted from this brief enumeration, partly because our chief concern here is with the mechanism of the actual system of writing, and partly because a proper and thorough grammatical study of any single temple has yet to be made, for though JUNKER'S *Grammatik der Dendera-texte* attempts to supply this deficiency in the case of Dendera, it is far from ideal and far from complete. For our present purpose, and with all due reserves, all that need be said is that the grammar and vocabulary, just as the contents of the texts themselves, have as their basis not merely Middle Egyptian but Old Egyptian, the Pyramid Texts and even older sources. The roots of Ptolemaic are firmly planted in the past, its inspiration and the rules that govern it are found in the past, and to study the origins and background of Ptolemaic writing we must go back to the very beginnings of Egyptian, for that is what the Ptolemaic priests and scribes did.

It was inevitable, nevertheless, that the later stages of the language should have been not without some influence on the Ptolemaic scribes, and therefore we find the old grammatical structure and vocabulary infused with Late Egyptian, though texts in a completely Late Egyptian idiom are not frequent. Ptolemaic is therefore a hybrid, mainly Old and Middle Egyptian but influenced in part by Late Egyptian and not completely either the one or the other. Among particular phenomena we may mention that in general the distinction between *sḏm·f* and *sḏm·n·f* has largely ceased to have any real significance, and that there is an enormous extension in the use of the Pseudo-Verbal Construction, both *ḫr* and the infinitive, and the Old Perfective, which tends to have the ending common to all persons.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

It must be pointed out, however, that in any one temple the texts are never all written in the same way and two clear styles are to be distinguished. The fully developed, decorative Ptolemaic type has only a restricted use and is found only in the horizontal line immediately under the frieze or below the first (bottom) register, on doorways, architraves and ceilings, and sometimes on certain parts of columns. The great majority of the temple inscriptions are written in a manner that is almost normal and that in general offers no great difficulty in the way of decipherment, although naturally the decorative tendency is not without its influence on the spellings and the Ptolemaic spirit can be detected in the frequent indications of phonetic changes, in the ideographic manner of writing some of the suffix pronouns, in some special grammatical peculiarities and constructions and in a number of other points. Except for a few brief and stereotyped divine titles and epithets, not even the most extreme and developed examples of Ptolemaic decorative writing are ever written entirely in the advanced manner, which is never maintained in its most extreme form for more than a handful of words at a time. All the texts are always a mixture of new and old forms and values, which occur side by side not merely in sentences and phrases but in individual words. I therefore make no apology for introducing into the following pages signs and values that are by no means exclusively Ptolemaic, for the old and the new are integral parts of the system and to concentrate on the new at the expense of the old would give an entirely false impression of the real nature of Ptolemaic writing.

3. *The Approach to Ptolemaic and its Decipherment.* These brief preliminary remarks should give us some guide in the formulation of principles which should guide and control our efforts to decipher and interpret Ptolemaic texts.

The manner in which we find the new inextricably mingled with the old is a clear indication that we do not have to do with two separate systems of writing but rather with two aspects of one and the same tradition. This being so, it is a reasonable assumption that the new and the old values were obtained according to the same general principles, and we should always act on this assumption until or unless it is proved to be unworkable. Our starting point must therefore be the traditional way and we are not justified in using, still

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

less in using habitually, any principles or procedure for which authority cannot be found in earlier periods unless we find that the old ways do not apply and that the new way is the only one that will explain a given value. In short we must proceed from the old to the new and we are not justified in assuming at the outset the existence of any new procedure without having first proved that the old no longer applies.

As the starting point of our enquiry, therefore, I suggest that we should be guided by the following main principles :

(*a*) Ptolemaic is a logical system of writing and as such it is not to be treated as a game without rules or method.

(*b*) At the outset an attempt should be made to read and interpret it in exactly the same way as normal Egyptian writing until or unless it can clearly be proved that such a course is impossible.

(*c*) The derivation of signs and values must be in accordance with traditional ways. No new procedure should be adopted or advocated unless it can be proved that the traditional procedure cannot and will not work. Such new procedure cannot be made into a general rule unless it can be demonstrated beyond dispute that it is no isolated phenomenon and that there are a number of other instances to which the traditional methods do not apply.

(*d*) In general, the simple and direct explanation is to be sought in preference to the explanation that is indirect, ingenious and subtle. A decipherment that depends on an undue number of ingenious explanations is suspect and must be treated with caution and reserve.

(*e*) No sign can acquire a value

(i) unless the sign in question is an ideogram or the determinative of the word of origin; or

(ii) unless the origin is an epithet or attribute clearly applied in Egyptian texts (which must be quoted) to the person or thing depicted by the sign; or

(iii) unless it is derived by some legitimate form of pun in accordance with known and established procedure; or

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(iv) unless, in the case of values whose precise origin in unknown, that value is clearly supported by parallel texts or by unequivocal evidence of the use of the sign in question as a phonogram with the required value or as a derivative from such a phonetic value; or

(v) unless the value borne by the sign can be derived by phonetic change from values that originated in one or other of the ways already indicated.

Obs. The student is particularly warned against the danger of applying to a sign some modern European epithet or concept and then seeking or inventing an Egyptian hieroglyphic translation of that idea. Such a translation or equivalent is inadmissible and no value based on such an equation can be accepted unless Egyptian evidence of its application to the sign in question can be adduced and quoted.

(*f*) The explanation that leaves no alternative word of origin is generally speaking more likely to be correct than the explanation that produces one or more alternatives, for in the latter case the exact origin has still to be found.

(*g*) Not all signs and their values, not even all signs outwardly and apparently formed in the same way, necessarily originate in the same way.

(*h*) Signs must not be considered as isolated units or even merely as the component elements of words but must be considered against the whole background of the passage in which they occur.

(*i*) Every decipherment must be rigorously checked in general and in detail against the known rules of procedure, the context and the knowledge acquired from Egyptian texts in order to ensure that it does not violate the probabilities or any reasonable rules. The system of decipherment that habitually produces words, sentences, ideas and constructions that are unique or rare cannot command complete confidence. Even when the result of the decipherment is a well-known word or phrase this is not necessarily a proof of its accuracy unless it can be proved to have been obtained by sound and legitimate methods and to agree with the context and the parallels. Mere ability to produce known Egyptian words is not in itself a guarantee that a particular decipherment, whether it be a single word, a phrase or an entire text, is accurate.

The following additional points are not so much matters of principle as practical suggestions regarding procedure which it is advisable to bear in mind.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(*j*) Detailed recording and study of determinatives is essential.

(*k*) The variant forms of signs are often very numerous and the differences are frequently extremely slight but in all cases meticulous attention must be paid to the precise form of signs. Very often the differences have no phonetic importance but sometimes even a trifling detail is of great significance. Even though the differences may not always be of phonetic significance, they are always of importance in connection with the decorative side of Ptolemaic writing.

(*l*) Wherever possible consult the original or a photo, or, if neither is possible, a reliable modern copy, but not every modern copy is automatically accurate and reliable. It is dangerous to trust and rely upon old copies, even when not absolutely wrong they are frequently misleading, particularly with regard to the forms of signs.

(*m*) Do not accept any value, no matter from what book of reference it is drawn, or by what authority ancient or modern it is quoted, unless either you or your source can quote at least one authenticated word in which it occurs : such words must always be checked and counterchecked.

II. — ALPHABETIC SIGNS.

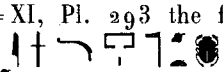
I have recently devoted a paper to a somewhat detailed study of the alphabetic signs and their origins [1]. In the present paper I have given only a very brief and summary outline of the ways in which the alphabetic signs were formed, in order to reduce repetition to a minimum, and full details, references and explanatory notes will be found in my earlier paper. The numbers added

[1] *Notes on the Alphabetic Signs employed in the Hieroglyphic Inscriptions of the Temple of Edfu,* in *Annales du Service,* 43, 193-318. The following corrections should be made to that paper :

p. 238, No. 248 (*d*) ; for *š* read *s*.

p. 260, line 9 : for Fig. 55 read Fig. 54.

p. 269, line 10 from bottom : for *si* read *is*.

p. 279, Note 73. In the last example from I, 208, 5 = XI, Pl. 293 the final clause should read  ; the omission of  was an inexcusable piece of carelessness on my part. This corrected reading proves that  is equivalent to the suffix pronoun first pers. sing.

p. 296, line 8 : for Note XXXIX read Note XL.

p. 308, line 6 : for *ibḫ* read *ibḥ*.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

in brackets after some of the signs mentioned here refer to the published list of alphabetic signs. As a supplement to my previous article I have thought that it might be interesting and useful to print here an index to the alphabetic signs and briefly to comment on the phonetic significance of the facts that it reveals.

A. *The Formation of Alphabetic Values.*

Signs acquire alphabetic values in the following ways :

1. Direct representation by extension of the use of ideograms[1]. This is restricted solely to certain of the suffix pronouns, i. e. : 1st person singular masculine and feminine, 2nd person singular feminine, 1st person (common) dual, and 1st person (common) plural.

Examples :

1st pers. sing. masc. : (38), (50), (54 *a*), (65 *a*), (80), (269), (314 *a*).

1st pers. sing. fem. : (86 *a*), (90), (102 *a*), (294 *e*), (307 *e*), (314 *a*).

2nd pers. sing. fem. : (84 *b*), (87 *b*), (96 *b*), (101 *b*).

1st pers. plural : (34 *c*).

1st pers. dual : (46 *b*), (65 *b*), (87 *c*).

2. By the Consonantal Principle[2].

(*a*) By loss of weak consonants :

(i) The *initial* consonant only is retained, very common :

(4) *f* from *fꜣi.*
(16 *b*) *n* from *nwn* (*nn*).
(113 *a*) *ḥ* from *ḥr.*
(145 *a*) *m* from *mr.*
(145 *b*) *k* from *kꜣ.*
(146) *b* from *bꜣ.*
(148) *r* from *rw.*
(152) *m* from *mꜣi.*
(158) *ḥ* from *ḥꜣt.*
(163 *a*) *ḫ* from *ḫt.*
(189 *a*) *š* from *šwt.*
(246 *a*) *m* from *mr.*
(264) *w* from *wiꜣ.*
(271 *a*) *n* from *nt.*
(275) *s* from *siꜣt.*
(303 *d*) *ḫ* from *ḫr.*

[1] *Annales du Service,* 43, 288-290. — [2] *Annales du Service,* 43, 291-298.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(ii) The *medial* consonant only is retained :

(17 *d*) *m* from *imti*[1].
(29 *b*) ꜣ from *iꜣw*[2].
(192 *a*) *f* from *wfi*.
(193 *a*) *ḏ* from *wꜣḏt*.
(202) *m* from *imꜣ*.
(227) *ḫ* from *ꜣḫw*.
(263) *m* from *imw*.
(280) *p* from *ipt*[3].

(iii) The *final* consonant only is retained :

(142) *t* from *it*.
(143) *n* from *in*.
(164 *a*) *b* from *ib*.
(166 *a*) *m* from *im*.
(167 *a*) *f* from *iwf*.
(215) *t* from *wꜣḏ*[4].
(216 *b*) *ḫ* from *ꜣḫ*[5].

Obs. It is clear that the feature common to these three classes is that the selected value is either the only strong consonant in the word of origin, or, if the word of origin is composed entirely of weak consonants, the strongest of such consonants. The position that the surviving consonant occupied in the word of origin is of no special significance. To treat the signs of class (i) separately by ascribing to them an origin by Acrophony is clearly unjustified.

(*b*) By the weakening and subsequent disappearance of — when in direct contact with [6] :

(16 *c*) *ḫ* from *ḫʿ*ꜣ.
(297) *ḫ* from *ḫʿt*[7].

Possibly also in (265) and (277), both *ḫ* from *ḫʿ*, which are both somewhat uncertain since in the circumstances it is impossible to decide finally

[1] Cf. note (*g*), p. 85, below.
[2] Cf. *Annales du Service*, 43, 306, No. 1.
[3] Cf. note (*f*), p. 85, below.
[4] With phonetic change.
[5] Hitherto the exact word of origin of *ḫ* does not seem to have been quoted, reference being usually made to the reduplicated stem *ꜣḫꜣḫ* "verdant" and to its use as the phonogram *ꜣḫ* in *ꜣḫ-biti* "Khemmis". The simple form *ꜣḫ*, however, which is the origin of the value *ḫ*, occurs at Edfu, e. g. (VI, 41, 17) *ꜣḫw* "papyrus thickets"; cf. also (Anast. IV, 1 *b*, 7 = Gardiner, *Late Egyptian Miscellanies*, 35, 10).
[6] See further *Annales du Service*, 43, 250, note IV.
[7] *Annales du Service*, 43, 309, no. 11.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

whether they are alphabetic *ḥ* or biliteral *ḥ'*, but the former alternative is possible : cf. p. 75, n. 2.

(*c*) By coalescence of two identical consonants or two closely related consonants when in direct juxtaposition without an intervening consonant[1],

(2) *n* from *nn*. (239 *e*) *m* from *mnt*[3].
(7) *ḥ* from *ḥḥ*. (289 *b*) *m* from *mn*[4].
(175 *a*) *m* from *mm* or *nm*[2]. (313 *a*) *m* from *mn*[4].

Cf. also (291) and (292) *g*, for origin cf. *gg*.

3. Phonetic change.

The following is only a brief indication of the values acquired by phonetic change and a complete list will be found in the appropriate column of the Analytical Index of Alphabetic Values (pp. 68-79 below) which should be studied in conjunction with the comment on pp. 92-97, with special attention to the caution with which this comment is prefaced. With a more complete knowledge of the phonetics of the Edfu inscriptions I feel it is probable that a few values which can be explained directly will find a more satisfactory explanation in phonetic change. A case in point is the use of for , where, although a direct origin in *mw* is possible, it now seems that phonetic change affords the best explanation of its use (see below p. 92).

(*a*) Normal alphabetic signs.

(i) The following are common in certain circumstances :

(219 *d*) and (187 *b*) for .
(248 *b*) for .
for (299 *b*) and (299 *c*).
for (307 *b*), (307 *c*) and (307 *d*).

[1] *Annales du Service*, 43, 296. — [2] Cf. *Annales du Service*, 43, 268, n. XL. — [3] Cf. *Annales du Service*, 43, 308, n. 6. — [4] Cf. *Annales du Service*, 43, 280, n. LXXVIII.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(ii) Less frequent and apparently under more restricted conditions :

 is replaced by  (166 *c*) and  (266 *b*).
 — (134 *b*).
 — (245 *b*)[1].
 — (166 *b*), (173 *b*) and (285 *b*).
 — (317 *b*).

(*b*) Many other signs replace the normal alphabetic signs by phonetic change from values that have been acquired directly :

 (164 *b*) *p* from *ỉb*.
 (198 *b*) *ḥ* from *ḥ;t*.
 (121 *b*) *ḳ* from *k;*.
 (300 *b*) *k* from *g;t* (*g;wt*).
 (214) *k* from *ḫ;*.
 (188 *b*) *t* from *ṯ;*.
 (312 *b*) *t* from *dỉ*.
 (239 *c*) *t* from *ḏw*.
 (239 *b*) *d* from *ḏw*.
 (193 *d*) *t* from *w;ḏt*.
 (193 *c*) *ṯ* from *w;ḏt*.
 (281 *b*) *ṯ* from *ḏ;*.

(*c*) Note the exceptional use of (248 *d*) for , restricted to spellings of *šps* and its derivatives.

4. Occasionally an old sign is depicted from a new aspect

 (115) *r* for .
 (211) *ḥ* for .
 (158) *ḥ* for .

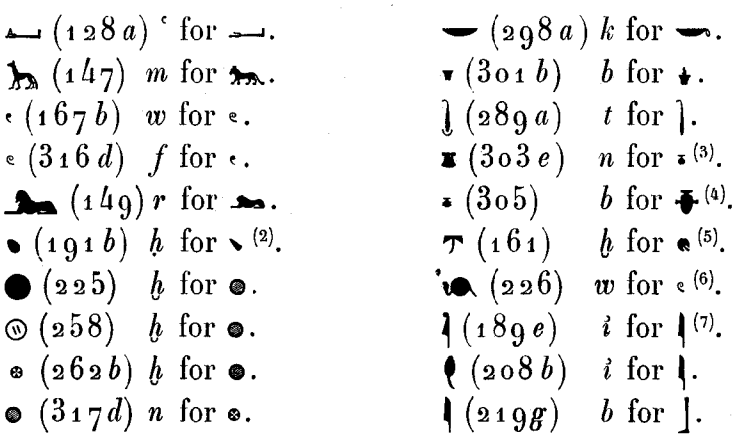
or is replaced by a sign of the same general class but of different form.

 (193 *g*) *f* for .
 (193 *f*) *r* for .
 (195 *c*) *r* for .
 (293) *s* for .

[1] See below, p. 92, nn. 3 and 4.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

5. Through confusion or error[1].



6. From the hieratic :



[1] It is difficult to make a precise distinction between "confusion" and error. Strictly speaking it is an error to replace any sign by any other sign that cannot legitimately acquire the same value either directly or indirectly from the same or another word of origin, but obviously there are degrees of error. Some of these "errors" arise, for a variety of reasons, in genuine confusion between somewhat similar signs (e. g. ʿ for ꜥ, ꜥ for ʿ, Ⓦ for ⊚), while others are clearly due to mistakes by the scribe or sculptor (e. g. for , for). Generally speaking, examples of confusion occur quite frequently and are apt to be repeated, but "error" is on the whole only occasional and isolated. The use of for , however, is an error due to the scribe's omitting the handle (this is indicated by a number of examples in which the missing handle is added in ink) but it is an error made so frequently that it almost becomes a legitimate and regular form and hence itself can sometimes replace as *nb*. The sign-list does not include all the signs used in error by the Ptolemaic scribes.

[2] See below, p. 89, n. (*k*).

[3] See below, p. 86, n. (*h*).

[4] See below, p. 83, n. (*e*).

[5] See below, p. 90, n. (*l*).

[6] See below, p. 81, n. (*c*).

[7] Dr. Drioton (*Annales du Service*, 43, 348, n. 3) denies that this is an error and considers it to be a "variation matérielle" of . This is a mere quibble and Dr. Drioton's view is an impossible one, all the more so since in his text is not equivalent to , this being only one of his numerous errors.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

7. By rebus :

(154 *a*), (179) and) (228) *i* for .
(160) ᶜ for .
(220) *w* for .

8. By convention :

Only (314 *c*) *w* for .

9. For graphic reasons :

Only (135) *b* for [1].

10. Signs whose origin is still unknown :

(187 *a*) *w*, (285 *a*) *m*, (272 *a*) *k*, (273) *s*, (299 *a*) *k*.

11. Acrophony.

There is no certain evidence that any of the alphabetic signs used at Edfu originated through acrophony. For the origin of *p* which I had previously admitted, with considerable reserve, might have been derived by acrophony from *psg*, see now p. 82, note (*d*).

B. *An Analytical Index of Alphabetic Signs.*

As a supplement to the preceding outline and the detailed list on which it is based, I have prepared an index which is designed to convey an approximate impression of the chief ways in which the values arose. Since, from considerations of space and convenience, this index has been compressed into only three columns, it will be appreciated that to a certain extent it is only an approximation and there are a number of border line cases which others may prefer to place in different columns from those to which I have assigned them. Such instances are inevitable when there has to be so much condensation but in spite of these imperfections it is hoped that the index will prove to be both useful and instructive.

[1] Cf. *Annales du Service*, 43, 253, n. XIX. I am increasingly inclined to suspect that graphic reasons played a larger part than is yet recognised in governing the use of certain signs. The reasons for this will become apparent at various stages in this paper.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

It should be noted that as a result of further reading and a more complete acquaintance with the phonetic phenomena at Edfu, the index incorporates some slight modifications in the origins of a few signs as compared with those given in the original study : where these modifications are of importance they are indicated in the footnotes. Advantage has been taken of the preparation of the index to insert a few additional alphabetic signs that were not included in the original list. All these additional signs are of rare occurrence. The details of their use and origin will be found in the footnotes.

The small letters inserted above the line refer to the additional notes on origins on pp. 80-92. The index should be studied in conjunction with the comments on pp. 92-97, which will help to place it in its true prespective and to indicate its limitations. This index is only the first step towards an analysis of the phonetic phenomena of the Edfu inscriptions, but it deals only with one aspect of one portion of the evidence and is therefore neither complete nor final.

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
 (168 *a*)	 (29 *b*)  (169)	 (127 *b*) (219 *c*); (315 *b*)	
 (219 *a*)	 (73 *b*), (74 *b*)  (154 *a*), (156)  (179)  (228), (229)  (233 *a*), (235 *b*), (246 *b*)  (244) (315 *a*)	 (168 *b*)	 (189 *e*)  (208 *b*)

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
 (127 *a*)	[a] (16 *a*)  (15),  (129),  (301 *a*) (160) [b] (189 *d*)  (195 *d*)  (255),  (256)  (318)	 (168 *c*)  (219 *e*)	(128 *a*)  (266 *c*)
 (187 *a*)	[1],  (185 *a*)  (220)  (264)  (290)  (314 *c*)  (316 *a*)		 (167 *b*) [c] (226)
 (134 *a*)	 (31)  (135)  (146)  (164 *a*) [2] (—)  (170 *a*),  (171 *a*),  (180), (181),  (182)  (267 *a*)	(166 *c*)  (266 *b*)	 (219 *g*) (301 *b*), (268)

(1) See *Annales du Service,* 43, 286, No. 5, and in particular note 1 on p. 72 below.

(2) Only in (II, 61, 2 = XII, Pl. 372) *bḫnt* "pylon". Origin: *b*; "leopard skin" (*Wb. d. äg. Spr.,* I, 415 : *Urk.,* I, 127, 1).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
■ (266 *a*)	(d) (116), (117), (118), (119), (120)	(134 *b*)	(254 *b*)
	(186 *a*)	(164 *b*)	(e) (305) (306)
	(224)	(170 *b*)	
	(253 *a*)	(267 *b*)	
	(f) (280)		
(192 *a*)	(3), (4), (5), (6), (20), (21), (22), (23), (24), (25), (26), (27), (28)	(1) (165)	(316 *d*)
	(167 *a*)		
	(193 *g*)		

(1) The precise origin of this value is not quite clear, but I imagine that some phonetic factor was at work (cf. *Annales du Service*, 43, 264, n. XXXIV). Three additional examples of =*f* have come to my notice: (II, 218, 5) *Fk-ḥrt*, name of a country; (II, 218, 8) *ḥm.f* "his Majesty"; (II, 194, 6) *m ḥri-ib.f* "in its middle". These three examples have been collated with the photograph in XII, Pl. 388.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
(1) (173 *a*)	(*x*) (17 *d*), (18), (19) (127 *c*), (130), (131) (133) (166 *a*), (137), (138) (144), (145 *a*) (152), (153) (162) (174), (175 *a*), (176 *a*), (177), (178) (202), (204) (3) (—) (239 *e*) (246 *a*) (263) (278), (279) (285 *a*), (286), (287) (289 *b*) (304 *b*) (4) (313 *a*)	(134 *c*) (2) (245 *b*) (271 *b*)	(147) (320)

(1) The equation = *m* is to be deleted from the list of alphabetic signs (*Annales du Service,* 43, 238, No. 248 *f*). I now feel that it is most unlikely that should be equivalent to *m* by phonetic change from = *n* in view of the fact that the change from *n* to *m* appears generally to occur when is followed by *b, p* or *m:* see further p. 92 below. In No. 248 (*f*) is biliteral *mr* (cf. *Annales du Service,* 43, 286, No. 6). This value does not appear to be common at Edfu, but it occurs occasionally as in *mr(wt).k* "love of thee" (VIII, 58, 2).

(2) In view of note 4 on p. 92 below this value is more likely to be due to phonetic change than to originate in *mw* as originally suggested (*Annales du Service,* 43, 237, No. 245 (*b*) and 278, Note LXV).

(3) Only noted in *mr(w)t* "love" (IV, 102, 7). Origin : *mnt* "sky, firmament", first suggested by Drioton in Piankoff, *Le Livre du Jour et de la Nuit,* 105.

(4) In view of p. 92, n. 3 and 4, this value is more likely to be derived on the Consonantal Principle from *mnw* "pot, jar" than by phonetic change from *nw* or *in;* cf. *Annales du Service,* 43, 286, No. 8.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
(245 *a*)	(2)	(106 *b*)	(222 *b*), (223)
	(16 *b*), (17 *a*)	(173 *b*)[1]	(h) (302 *b*), (h) (303 *e*)
	(48 *b*)	(285 *b*)	(317 *d*)
	(88), (89), (91), (97), (98 *a*)		
	(122)		
	(143), (304 *a*)		
	(151), (155)		
	(208 *a*), (221)		
	(235 *a*), (248 *e*), (252)		
	(262 *a*)		
	(270)		
	(271 *a*)		

[1] The suggestion that  may be equivalent to *n* is to be deleted from the list (*Annales du Service,* 43, 226, No. 176 (*b*); cf. pp. 286, No. 5, 307, No. 2). The parallel phrase  (II, 121, 9) indicates that  (VI, 68, 2) is to be read *ibw* as originally suggested by Dr. Drioton (*Bulletin de l'Institut d'Égypte,* 25, 11, n. (*f*), the apparent inversion being due to the fact that is a correction and addition (cf. *Annales du Service,* 43, 307, No. 2). Dr. Drioton's interpretation of VI, 68, 2 is not quite exact, however, for is not "abri de toiture, vigie", which means nothing. The original meaning of *ibw* is "booth" and hence by extension "shelter, protection" but here and in similar passages it is clear that *ibw* is practically synonymous with "wall" which is the best translation; cf. the parallelism in II, 107, 2 and see  (II, 177, 17) "excellent wall of copper".  is an error for *ỉnt* "stone", and being often confused. The correct trans-

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
NEGATIVE [1] (122)	(16 *b*) (17 *a*) (123), (124), (125), (126) (172) (208 *a*)		(190)

lation is "wall of stone round about Egypt" (VI, 68, 2) and "wall of stone round about Upper and Lower Egypt" (II, 121, 9). The reference is to the common conception of the king or a god as a wall of stone or copper about Egypt or a city (cf. VI, 13, 5; 75, 6, 14; II, 107, 2).

Although in and in the words quoted in *Annales du Service,* 43, 286, No. 5 it is suggested that is equivalent to , it should be noted that the use of in these words is due to a misunderstanding of the hieratic form of , and Dr. A. H. Gardiner points out to me that Möller, *Hieratische Paläographie,* II and III, Nos. 138, 139 leaves no doubt on the subject. Hence it would appear to be more accurate to consider not as alphabetic *w* but as the phonetic determinative *ỉb* in , (cf. , VI, 250, 12) and and as determinative of small animals in ; cf. also the late hieratic spelling for *ỉbw* "booth" (quoted by Grdseloff, *Das ägyptische Reinigungszelt,* 46, 47). Note also the description of the enclosure wall of Edfu as (VI, 6, 5-6) *ỉbw n bỉ3 ḥ3 ḥ3y(t) n Ḥr-3ḫty* "wall (shelter) of copper round about the court of Harakhte". I am therefore inclined to recommend the deletion of = *w* from the list of alphabetic signs; cf. p. 69 above.

[1] My original suggestion that (No. 196) and (No. 197) were simple is to be abandoned in favour of the revised reading *n rḫ* put forward in *Annales du Service,* 43, 307, No. 3. An additional example of this value occurs in (*C. D.,* III, 102, 9) *n rḫ·tw ḏt·k* "thy body is not known". Dr. Drioton's strictures (*Annales du Service,* 43, 344, No. 15) on my tentative suggestion for the origin of the inaccurate value are, however, hasty and inexact, for at Dendera there is at least one example of replacing "Hathor" in (*C. D.,* IV, 264, 15) *Ḥwt-Ḥr ḫnti 'Iwnt* "Hathor pre-eminent in Dendera". Similarly itself occasionally replaces both and :—e. g., (*Mam.,* 92, 14) *'Iḥy s3 Ḥwt-Ḥr* "Ihy, son of Hathor", (*Mam.,* 218, 9) *Ḥr-sm3-t3.wy p(3) ḫrd s3 Ḥwt-Ḥr* "Harsomtus the child, son of Hathor", and (*C. D.,* III, 101, 9) *Ḥwt-Ḥr nbt 'Iwnt irt Rᶜ* "Hathor, Mistress of Dendera, Eye of Rēᶜ".

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
(1) (114 *a*)	(62)	, (187 *b*), (219 *d*)	(149), (150)
	(115), (136), (2) (—)	(3) (304 *c*)	
	(148)		
	(185 *b*)		
	(189 *c*)		
	(193 *f*), (194 *a*), (195 *c*)		
(254 *a*)	(186 *b*)		(253 *b*)

(1) In the circumstances it is obviously difficult, if not impossible, to indicate to what extent, if any, either by itself or in combination with is equivalent to *l*. Some possible instances have been indicated in the detailed list of alphabetic signs (*Annales du Service*, 43, 217, No. 114 (*b*) and 237, No. 245 (*c*). It is very probable that = *l* in (III, 242, 1; cf. III, 188, 16; VIII, 66, 11), var. (VII, 58, 10) *t*ȝ *b*(*n*)*r* "foreign (*lit.* outer) land" (cf. ΒΟΛ) and (VI, 75, 8) *br.wy* "eye-balls" (cf. ΒΑΛ).

(2) Only noted in (VII, 116, 3) *rnnw*(*t*) "young women". Origin : variant of .

(3) This use is restricted : it occurs only in spellings of *mhn* (old *mhr*) "milk jug", where it appears to be regular (cf. IV, 19, 2; 199, 3; VII, 226, 9; *Mam.*, 32, 2). Note that in the verb *mhr* "suckle" is retained (e. g., IV, 198, 5; VII, 285, 1).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
(297)	 (7),  (8),  (9),  (10),  (11),  (12),  (13),  (14)	 [1] (163 *c*)	
	 (16 *c*)		
	 (113 *a*)		
	 (157),  (158)		
	 [j] (159), (236)		[k] (191 *b*)
	(216 *a*), (217 *a*), (218 *a*)		
	(237), (238)		(239 *d*), (240), (241)
	[2] (265)		[2] (277)

[1] It is not impossible, of course, that in  (I, 327, 15) *ḥwt-ntr* and similar spellings  is not simple *ḥ* but biliteral *ḥ(w)t*.

[2] The alphabetic nature of and , though quite probable, is not in my opinion established beyond all possibility of doubt, but the parallelism between such writings as  (I, 432, 11 = XII, Pl. 347) and  (I, 430, 16 = XII, Pl. 341) *ḥ'w* "flesh" renders it not unlikely.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
(317 *a*)	(16 *d*), (17 *b*)	(163 *b*)	(225), (258), (262 *b*)
	(201)	(198 *b*)	[1] (161)
	(209 *a*), (210 *a*), (211), (212), (213)	(189 *b*)	(243 *b*)
	[1] (216 *b*)	(247 *b*), (248 *b*), (249 *b*), (259 *b*), (260 *b*), (261)	
	(227)		
	(233 *b*)		
	(—)[2]		
	(276)	(316 *c*)	
(163 *a*)	(198 *a*)	(209 *b*), (210 *b*)	
	(303 *d*)	(248 *c*)	
		(317 *b*)	

[1] See above p. 63, n. 5. — [2] Only noted in (V, 233, 15) *Fnḫw* « Phoenicians ». Origin : phonetic change ; cf. *Annales du Service*, 43, 276, Note LII.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
(257),  (273)	 (16 *e*),  (17 *c*)  (140),  (141),  (293)  (154 *b*)  (185 *c*)  (m) (191 *a*)  (193 *e*),  (194 *b*)  (222 *a*)  (274), (313 *b*), (275)  (295),  (296)  (319),  (1) (—)	(248 *d*)	
(248 *a*)	 (139),  (247 *a*),  (249 *a*),  (250),  (251),  (259 *a*), (260 *a*)  (189 *a*)  (205),  (206),  (207)  (316 *b*)	 (317 *c*)	 (243 *a*)
 (2) (242 *a*)		 (121 *b*)  (145 *c*)  (272 *c*) (299 *b*) (303 *c*)	

(1) In (I, 372, 7 = XII, Pl. 326) *smw* "vegetation"; cf. (VII, 74, 16), var. (VII, 58, 11) *snwt* "Egypt". Origin : *sis(w)*, old *srsw*, "six" (cf. Coptic coογ).

(2) is mechanically substitued for in *wnm* "eat" (cf. *Annales du Service*, 43, 229, No. 195 (*e*)).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
(299 *a*)	 (121 *a*)  (145 *b*) (195 *a*)  (272 *a*)	(1) (214) (242 *b*) (303 *b*) (300 *b*)	(298 *a*)
(302 *a*)	(291), (292)  (300 *a*)  (303 *a*)	(299 *c*)  (195 *b*) (242 *c*) (272 *b*)	(298 *b*)
(307 *a*)	(183 *a*), (184)  (192 *b*) (199) (230 *a*), (231 *a*)  (284 *a*), (2) (—) (288 *a*) (308), (309), (310), (311)	(188 *b*)  (128 *b*),  (132 *b*) (193 *d*) (215) (239 *c*) (294 *b*) (312 *b*) (3) (—) (315 *c*)	(289 *a*)

(1) For a possible instance of being used for ḳ cf. *Annales du Service,* 43, 276, n. LVIII.

(2) Only in (III, 262, 3) for *twꜣ* "column, pillar". Origin : *tꜣ* "kiln".

(3) In *twr* "purifier" (VII, 282, 15; cf. VII, 256, 16; 257, 5). Origin : phonetic change from the phonogram *tꜣ* in *tꜣw* "breath". The sail is already phon. *tꜣ* in *tꜣ-wr* "Abydos" (V, 293, 14).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

NORMAL SIGN	PTOLEMAIC (EDFU) EQUIVALENTS		
	DIRECT	PHONETIC CHANGE	CONFUSION AND ERROR
 (294 *a*)	 (142)  (188 *a*)	(132 *c*) (183 *b*) (193 *c*) (230 *b*), (232), (234) (281 *b*) (283 *a*) (288 *b*) (307 *b*)	
 (132 *a*)	 (312 *a*)	(193 *b*) (230 *c*), (231 *b*) (239 *b*) (282), (283 *b*). (284 *b*) (288 *c*) (294 *c*) (307 *c*)	
 (193 *a*)	(239 *a*)  (281 *a*)	(132 *d*) (154 *c*) (188 *c*) (288 *d*) (294 *d*) (307 *d*)	

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

C. *Notes on the Origins of some Alphabetic Values.*

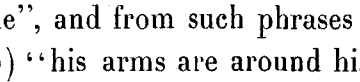
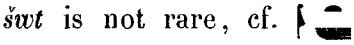
(*a*) Dr. Drioton's discussion of = ʿ [1] completely misrepresents my remarks. In my note on this value [2] I pointed out that the word  is known from the Old Kingdom, reference being made to an article by Grdseloff [3], and that a similar word  is recorded by the *Wörterbuch*. All this material was included in my original manuscript which was lent to Dr. Drioton and utilised by him before it went to the printer, though I was unable to insert the precise page reference to Grdseloff's paper until the proof stage. Dr. Drioton could easily have obtained the fullest information from either Grdseloff or myself, but instead he chose to suppress the evidence of the long history of this word. His insinuation that the word ʿ "child" does not occur at Edfu is quite unfounded (cf. for instance  *Mam.*, 38, 19), I only quoted the Dendera example because I considered it to be the clearest example at my disposal and the one most easily to be appreciated by the student unfamiliar with Ptolemaic. My suggestion stands therefore and is certainly much better than Dr. Drioton's alternative.

(*b*) Dr. Drioton's note on = ʿ [4] well illustrates the way in which he denies to others what he takes for himself. He denies that  could represent the arm of the bird, which he claims must be the whole wing, yet in the same breath he suggests that = ʿ could be derived from either  or . What is sauce for the gander is sauce for the goose and the arguments that he produces against my suggestion apply with double force to his.

Dr. Drioton's argument is in fact quite mistaken. The wing of the bird was certainly regarded as its arm. This fact is illustrated by such writings as  (III, 201, 13), (VII, 21, 14) and (IV, 319, 10) and is implicit in numerous passages too common and too well-known to need quotation. was also regarded as the wing, and hence as the arm, by application of the process by which a part of a thing is used to denote the whole (see below p. 104). This is obvious from the employment of the

[1] *Annales du Service*, 43, 342, No. 1. — [2] *Annales du Service*, 43, 249, n. II. — [3] *Annales du Service*, 42, 114. — [4] *Annales du Service*, 43, 344, No. 11.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

feather  to write *gs* "side" e. g.  (III, 83, 7) *gs wnmi·i* "my right side", and from such phrases as  (VII, 25, 15-16) "his arms are around his father, protecting him with his great wing", and  "who makes shadow with her wings" (Louvre C. 286, 14 = *B.I.F.A.O.*, 30, 741). At Edfu the use of  as determinative of *šwt* is not rare, cf.  *šwt* (VI, 15, 2),  (IV, 56, 6) *ṯḥn šwt.*

It should be noted, however, that the reading ʿ, which is based on the solitary example  (VI, 77, 10), is not quite certain. In our translation and commentary on the passage in which it occurs Professor Blackman and I have suggested the reading *ḫpi* (*J. E. A.*, 29, 18, note *m*). In suggesting the alternative reading *ʿpi* I have been influenced by the assonance and alliteration between *ʿpi* and *ʿbb*, but it is still an open question which of the proposed readings *ʿpi* or *ḫpi* is the correct one.

(*c*) In spite of Dr. Drioton's remarks[1], no one will doubt that the use of  for *w* is due to an error on the part of the scribe. It will be noted in passing that Dr. Drioton cannot even reproduce the true form of as it occurs in the Edfu example nor the correct  of the cryptogram, which is the form that occurs in the original and which Dr. Drioton correctly reproduced in his original study[2]. This is not a quibble, for the precise form of signs is always a matter of paramount importance and the difference between  and may be of significance in determining the true value of , assuming that *wbn* is the correct reading.

Dr. Drioton himself has pointed out[3] that  occasionally acts as a substitute for [4], as in *nḫn*[5], and claims that is equivalent to *n* in certain cryptograms[6]. It seems probable to me that the equation  =

[1] *Annales du Service,* 43, 345, No. 19.

[2] In Piankoff, *Le Livre du Jour et de la Nuit,* 85.

[3] *Revue d'Égyptologie,* I, 38, n. 4.

[4] The opposite process by which an original  is replaced by is very well known, e. g.  for .

[5] Louvre C 65, 11 = Drioton, *Revue d'Égyptologie,* I, pl. 4.

[6] Cf. the list in *Revue d'Égyptologie,* I, 38, No. 39, and cf. pp. 45, No. 122, 46, No. 127. A certain proportion of these, however, are certainly not equivalent to *n*.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

arose from a simplification or misunderstanding of the semi-hieratic form of  such as occurs in the palette of Nehemawy[1] in  *ḥnw* (B. 66, p. 17),  *snw* (B. 68, p. 17) and  *nw* (B. 88, p. 17). Thus in  the sign may act for  and have the value *wb* as in Ptolemaic *wbn*. At Edfu occasionally replaces  as in (II, 60, 10 = XII Pl. 371) *nw* "moment".

(*d*) In my discussion of the origin of = *p* I suggested that eventually it might prove to be an as yet unknown word **pwi* or **p;i*[2]. Dr. Drioton has now drawn attention to a word  "fécondateur"[3] which he suggests is the basis of the writing  (III, 90, 3),  (IV, 218, 14.16) *ḫ'-pi* = "corps qui crache (?)". He insists, however, that  = *p* is obtained by acrophony form *psg* "spit".

Dr. Drioton's explanation of the writing  "Nile" is not convincing. His suggestion "corps qui crache" demands an Egyptian **ḫ'w psg* but the transliteration he gives is *ḫ'-pi*. It is clear that the word  is composed of the two elements  *ḫ'w* and  *pwi* or *p;i* which have been reduced, by the loss of weak consonants, to *ḫ'* and *pi* respectively. Thus the spelling does not give a complete phrase but, as is so often the case, is the result of a combination of phonograms.

Such spellings as  testify that  and its variants sometimes bore the value *pi*. At Edfu there are also a few instances in which is certainly equivalent to *pw* as a writing of  in the forms  (I, 23, 8.9), and  (I 22, 12 = XI, Pl. 215). This value is also found in cryptograms in  *pw*[4] and  *pwi*[5].

There is no necessity to assume that *pw*, *pi* must have had independent origins, on the contrary it is more probable that they had a common origin. It will be realised also that though a Ptolemaic scribe might write ,

[1] *Revue d'Égyptologie*, I, pl. 2. In the three words next quoted the references are to the pages of Dr. Drioton's paper and to his numbering of the signs.

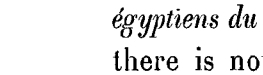
[2] *Annales du Service*, 43, 304.

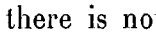
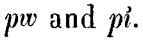
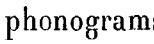
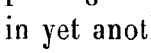
[3] *Annales du Service*, 43, 336, n. 1, quoting inscription 275 from Medamud = Drioton *Rapport sur les fouilles de Médamoud* (1925). *Les Inscriptions*, Le Caire 1926, p. 117.

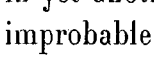
[4] *Revue d'Égyptologie*, I, pp. 5, 6, 7 and 8, Nos. A. 39, 45, 80, 131, 137.

[5] *Revue d'Égyptologie*, I, p. 5, Nos. 61 and 70.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

or , this was only a concession to tradition in writing, and the current pronunciation was undoubtedly akin to or identical with ⲡⲉ. The history of itself, ⲡⲉ, or such writings as  (III, 94, 5), (VII, 50, 2),  (I, 147, 9) *p;yw* "birds", or , (V, 49, 5)  (Pap. Boulaq, VI, 11, 4 = Mariette, *Les Papyrus égyptiens du Musée du Boulaq*, I, 35) *p;i* "copulate, beget", demonstrate that there is nothing inherently improbable in postulating a common origin for *pw* and *pi*. What seems to be quite impossible is that, the existence of the phonograms *pw* and *pi* being assured, alphabetic *p* should have originated in yet another word *psg*, a suggestion that is manifestly unreasonable and improbable. I should now be inclined to explain the alphabetic value *p* as originating in the phonograms *pi*, *pw*, the exact origin of which is still unknown.

Dr. Drioton's  is interesting but it must be treated with caution for the present. It is clearly a variant of  *p;i*, being used because there is a tendency for it to replace in certain words. I am slowly accumulating a considerable amount of material on the very interesting, and sometimes surprising, uses of and until this study is completed I feel it is as well to be cautious before giving any final opinion on whether the phenomena revealed by are sufficiently typical and fundamental to justify considering it as the origin of *p*. Similar caution must be exercised in considering the occasional use of  in such words as *pr*[1] "come forth" and  (IV, 99, 6) *pd* "fumigate, offer incense", and it is for this reason that hitherto I have deliberately refrained from mentioning them when discussing the probable origin of *p*.

(*e*) Dr. Drioton denies that  = *p* is an error for and suggests "une valeur tirée de (*Wörterbuch* I, 490)[2], mot qui désigne précisément ce genre de petits vases ronds[3]." This specious suggestion might just possibly be plausible but for two little facts : (*a*) the group has nothing whatever to do with , which normally has a strictly specialised use, and

[1] Pap. Mag. Harris (Harris 501), 6, 12 ; 8, 5.

[2] I have taken the liberty of correcting Dr. Drioton's inaccurate reference to the *Wörterbuch*.

[3] *Annales du Service* 43, 346, No. 26.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

Dr. Drioton's assertion that it describes the *-type of pot is pure invention and imagination [1], for the texts quoted by the *Wörterbuch* say nothing of the sort; (*b*) the word  does not exist.

Since Dr. Drioton quotes the *Wörterbuch*, it may be assumed that he has taken the elementary precaution of verifying and studying the texts which it quotes and has based his remarks on them. According to the references given by the *Wörterbuch* [2] the word occurs in  [3] and  [4]. These phrases are merely variants of a common and stereotyped title of scenes that occur in all late temples. At Edfu it is found in the forms  (IV, 88, 6: var. IV, 244, 12);  (VI, 282, 15), var.  (III, 291, 15; varr. IV, 348, 6; VII, 93, 6; cf. also VI, 343, 7). In certain examples of this scene the title is written out in full with the complete writing of the name of the vase :  (V, 206, 13),  (V, 69, 13; varr. V, 377, 13; 381, 8; cf. also V, 257, 6). There is no doubt at all that these abbreviated and full writings are only variants of the same general title. In half the examples quoted the accompanying texts specifically call the vase  (V, 381, 9; varr. V, 257, 7; IV. 348, 7; V, 206, 14; VI, 282, 16; VII, 93, 7). Thus study of the material quoted by the *Wörterbuch*, which could have been checked by Dr. Drioton, demonstrates that the word *p* does not exist and that the group is to be read *p*(*ȝ*) *mnw* [5]. Dr. Drioton has once more failed to study his signs or to check his material and error for  remains as the only reasonable explanation of this use of * [6].

The chances that this explanation is correct are strengthened by the fact that itself sometimes replaces *, e. g. as ideogram *ḥnḳt* "beer" (V, 131, 7)

[1] is used once, however, instead of * as the ideogram *mnw* (V, 69, 17).

[2] In addition to the two immediately following examples, the *Wörterbuch* quotes *L. D.*, IV, 76 *d*. All these examples are from Dendera.

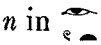
[3] *L. D., Text,* II, 221.

[4] *C. D.,* III, 57, 15 = Mariette, *Dendérah,* II, 66 *b*.

[5] I have limited my examples to Edfu, but a few minutes search in the four volumes of Chassinat, *Le Temple de Dendarah* will reveal identical facts.

[6] As a matter of interest I would point out that is used for in (I, 103, 13) *mn ḫib*. Since I have not collated or checked this passage it is not to be accepted unquestioningly and I have no intention of stressing it. Nevertheless, I have no valid reason for suspecting that the copy is defective at this point.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

or as determinative of  *irp* (V, 132, 8), and replaces , , as det. of  *md̲* (*C. D.*, IV, 102, 2; cf. 53, 14, 15; 102, 7; 233, 8; 266, 14, etc,). Moreover,  and sometimes replace  as in  (VII, 323, 7) *ibw n ḫ;kw-ib*, and  (*C. D.*, IV, 52, 17) *ibw*, (*C. D.*, IV, 81, 6) *ib·k*. is also wrongly written for  *n* in  (*Mam.*, 119, 15) *ir·tw n·f wd̲;w* "amulets are made for him".

(*f*) Note the extreme simplicity and impropriety of the method employed by Dr. Drioton[1] to discredit the derivation of  *p* from *ipt* "corn-measure". First, he calls  a "vase", which it is not; next, he advances a stage further and speaks of "le vase penché qui laisse échapper l'eau" regardless of the fact that this is not what  is doing; then he drags in a reference to , which has no connection with , and so easily and triumphantly arrives at a derivation by acrophony from *pnḳ* "to pour a liquid", which is not what is depicted by .

The facts are quite different.  is itself a corn-measure from which corn is being poured and is an infrequent variant of Ptolemaic . At Edfu sometimes alternates with [2], and often occurs as ideogram (VI, 163, 8) and determinative (VI, 162, 13) of *ḫ;i* "measure", as ideogram *it* "corn" (IV, 15, 5), *bdt* "spelt" (VII, 242, 11; cf. IV, 8, 4-5; VII, 242, 12) and as determinative of numerous words for grain, harvest, etc. There is not the slightest necessity, therefore, to suspect or abandon the origin I have suggested. Dr. Drioton's argument is an admirable illustration of how, in his blind endeavour at all costs to prove the non-existent principle of acrophony, he entirely ignores the nature and uses of signs and distorts and manipulates the evidence.

(*g*) Dr. Drioton's remarks on  = *m*[3] are quite beside the point and mistaken. All his protests cannot alter the fact that  is a legitimate substitute for [4], that  is not a rare Ptolemaic word for "child", derived from

[1] *Annales du Service*, 43, 346, No. 23.

[2] E.g.  (III, 149, 14), (VI, 261, 6) for *npr* "corn".

[3] *Annales du Service*, 43, 342, No. 3.

[4] Thus  (IV, 37, 5) is given as in the parallel passage (V, 25, 11).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

the older [1], and that replaces as early as the Old Kingdom, e.g. in the personal name [2]. The fact that the phonetic value *im* is implicit in is clearly shown by such writings as [3], [4] for [5] *im*; "charm", "grace", where it is clear that is written because it is the phonetic determinative *im*, for has nothing to do with *im*; and is hardly a legitimate substitute for . cannot be regarded as the correct word of origin "dans les meilleures conditions d'exactitude et d'emploi" because it does not comply with the phonetic rules that govern the creation of alphabetic values.

(*h*) The careful reader will realise that Dr. Drioton has not proved that acrophony was "le procédé normal de signification[6]" since his arguments are not only wrong but are based on material that is defective and inadmissible. Even if he had proved his point, it would have had no bearing on the question of how and the more common acquired the value *n*. It cannot be emphasised too strongly that mere search in dictionaries to find words that suit a particular theory does not solve the problem of origins : in all circumstances the first essential is to study the original signs, and not their printed forms, in form, context and use. A glance at original Ptolemaic texts, or at good photographs of them if the original is not accessible, will show that while a form rather like is in use, a very common form has no real resemblance to but is closest to , the two forms being at times almost indistinguishable. This fact affords the simplest and most direct explanation of the fact that both and occasionally replace . It is, moreover, the

[1] Not as inaccurately given by Dr. Drioton, *loc. cit.* The fact that and are occasionally alphabetic *m* is to be explained by the fact that as Edfu is an Upper Egyptian temple the scribe gave the sign a specifically Upper Egyptian form by showing the crown. The same idea habitually prevails in the writings of the 18th and 19th nomes of Lower Egypt, for whereas the latter is , the former is normally (cf. I, 335, 3 ; IV, 36, 2 ; V, 24, 13). It is clear that at all times the scribe could use , or at will as particular circumstances dictated.

[2] *Annales du Service,* 15, 230 (VIth Dynasty, Meir).

[3] Pap. Anastasi I, 1, 6.

[4] Pap. Anastasi I, 2, 5.

[5] Cf. the Ptolemaic (*C. D.*, II, 100, 9 = Mariette, *Dendérah,* II, 33 *b*) and other variants at Edfu and Dendera.

[6] *Annales du Service,* 43, 346, No. 25.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

only explanation of the fact that ⟨ sometimes replaces ⟨, as in ⟨ (V, 116, 8) for the preposition ⟨ *ḥr*, and ⟨ (V, 120, 8) for ⟨ *grḥ* "cease".

(*i*) Dr. Drioton's derivation of = *r* from "Libyan"[1] cannot be accepted. It would be interesting to know by what new and doubtless subtle process he imagines that the value *r* can be wrung from a word in which it is known that the initial was equivalent to *l*. Dr. Drioton also fails to bear in mind the fact that the name of the Libyan feather, which was the mark of a chief, is known to us and occurs as [2]. Moreover, Dr. Drioton's statement that the feather is a Libyan characteristic is not exact. Hölscher[3] has demonstrated that the feather is not a characteristically Libyan adornment but is worn by Nubians and negroes, and in general is "African" and "western" in a wide sense. In early texts, such as the inscription of Uni for instance, the feather is worn by Asiatics as well as Africans and is to be seen in the determinatives[4] to *nḥsyw* (*Urk.* I, 104, 12), *ʿ3mw* (*Urk.* I, 101, 9), *ḫ3stywy* (*Urk.* I, 104, 12), *sḳrw-ʿnḫ* (*Urk.* I, 104, 3) and *btkw* (*Urk.* I, 104, 12) and it is surely superfluous to quote examples of *mšʿ*. Hölscher points out that at Medinet Habu hardly any Libyans wear the feather[5], and concludes that it is a sign of rank and is not specifically a mark of race, certainly not of Libyan race. Černý's suggestion still holds the field as being both plausible and possible and is certainly not to be rejected in favour of this fantastic flight of the imagination.

(*j*) Dr. Drioton[6] suppresses all reference to the suggestion I have made concerning the way in which may have acquired the value *ḫw*[7]. This is inexcusable, for I communicated my suggestion to Dr. Drioton verbally (and he considered it plausible) and he not only gave me the permission to quote the evidence from the kiosk of Sesostris I, but offered to ask Dr. Abul Naga to make the drawing for me and subsequently passed on to me Varille's example.

[1] *Annales du Service*, 344, No. 11.

[2] Petrie, *Six Temples*, Pl. 14, 6; *Urk.*, III, 11, 15; 40, 16; cf. Wilhelm Hölscher, *Libyer und Aegypter*, 36.

[3] Hölscher, *op. cit.*, 35-37.

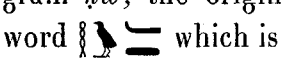
[4] For facsimiles of the determinatives employed see the plate accompanying Tresson, *L'Inscription d'Ouni*.

[5] Hölscher, *op. cit.*, 42.

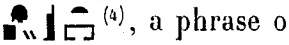
[6] *Annales du Service*, 43, 343, No. 6.

[7] *Annales du Service*, 43, 284, additional n. 2. A cross-reference to this note was inserted in the sign list on p. 223 (No. 159).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

Until I had realised the possible importance of the spellings of the place-name *Ḥw*, the only origin that could be suggested for  *ḥ* was the phonogram *ḥw*, the origin of which was unknown, and accordingly I quoted the word  which is the clearest example proving the existence of this value and the example that is usually quoted. It was perfectly legitimate to do this.

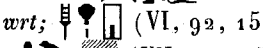
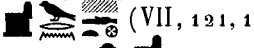
It is unfortunately only too true that often we are still unable to quote the word in which a given value originated. In such cases we can only point out that the sign had a certain value and quote words that prove that contention. Thus we do not yet know the origins of  *t* (*t*),  *ḥ* (*ḥ*),  *n* (*nt*), *m* (*mn*) and  *m* (*mn*) and other signs, and we can only prove that as phonograms they had certain values (which are inserted here in brackets) from which the alphabetic values developed. Dr. Drioton's suggestion that  *t* (*t*) originated in  [1] is untenable because he fails to prove that this was ever specifically applied to the scarab and is condemned by his own rule (which, however, I believe is purely fictitious) about rarity of words [2], and by the genuine rule, based on fact, which has been enunciated above on p. 59, (*e*) [3].

Dr. Drioton clearly does not consider himself bound by the rules that he seeks to impose on others, for otherwise he could not propose  = *t* from  [4], a phrase of which he does not quote any Ancient Egyptian ex-

[1] *Annales du Service,* 43, 345, No. 16.

[2] Cf. *Annales du Service,* 43, 342, Nos. 1 and 2, 344, No. 13.

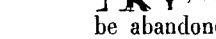
[3] The rule that any direct or indirect origin must be supported by unequivocal Egyptian evidence that it was directly applied to the sign concerned was formulated many months before I had any knowledge of Dr. Drioton's paper. It is a fundamental rule and is the foundation of any scientific attempt to establish the origins of phonetic values accurately and securely. There is, of course, nothing new in this rule; we are all bound to act upon it, even if we do not formulate it in precise terms. Dr. Drioton's arguments prove how necessary it is to stress this elementary rule and the caution it embodies.

[4]. *Annales du Service,* 43, 348. The Egyptian equivalent of "quelqu'un qui est sur un trône" is not *tpi st,* for Egyptian, as is proved by hundreds of examples in the texts of all periods, uses either *ḥr* or *ḥri*. Thus, to quote only a few random examples from Edfu, we have  (VI, 102, 4) *ḥri st·f wrt;*  (VI, 92, 15) *ḫ' ḥr srḫ;*  (VII, 121, 15) *ḥr st·f ḥnti st-wrt n* [*Bḥ*]*dt;*  (VII, 38, 7, 9; 129, 4) *ḥr bḥdw·f;*  (VII, 102, 11) *ḥr p·f* and very many others. I have no record of any Edfu examples of *tp* or *tpi* replacing *ḥr* or *ḥri* in these and similar passages: this is not surprising for *tp* has a somewhat different idiomatic significance from *ḥr*.

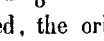
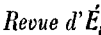
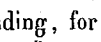
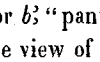
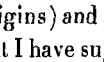
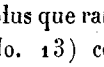
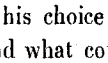
BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

ample. It might be easier to believe his rule about the rarity of words of origin if Dr. Drioton himself acted upon it, but how many values in his cryptograms does he not explain either by rare words or by invented phrases for which he does not quote any direct parallel[1]? The truth is that as long as it is certain that a word existed in Egyptian, the fact that it seems rare to us means nothing and is relatively unimportant. The decisive factor in deciding whether a certain word can be considered as the origin of a given value is not its frequency or rarity but its conformity with the rules and the spirit of the language.

(*k*) In order to disprove my suggestion that  = *ḥ* is an error for  Dr. Drioton produces the new rule that error can only be admitted if all examples come from passages that are indisputably faultily engraved[2]. The absurdity of this rule is too obvious to need extended comment, errors can occur at any point even in the best and most carefully written texts in any language[3]. is certainly confused with , as in  *t;* (VIII, 78, 2) for

[1] It is Dr. Drioton, for instance, the leader of the crusade against rare words of origin, who, in seeking for an origin of  = *b*, gives his first preference to the non-existent word , adding that if the reading *b;sw* is to be abandoned, the origin is to be sought in  (*Revue d'Égyptologie*, I, 40, No. 64 and note 6). In fact, there is no doubt at all about the reading, for von Bissing's discussion of (*Z. Ä. S.*, 40, 97, quoted by Dr. Drioton himself) proves that these signs are to be read *b;šmˁ* (for *b;* "panther" cf. *Peasant* R. 14): this is also the view of *Wb. d. äg. Spr.*, I, 415. It is to Dr. Drioton's *b;sw* (and to others of his suggested origins) and not to the various words of origin that I have suggested, that his delightful phrase "plus que rare" (*Annales du Service*, 43, 344, No. 13) could more fittingly be applied, for his choice, unlike mine, does not even exist and what could be rarer than that?

[2] *Annales du Service*, 43, 344, No. 12.

[3] My own paper on the alphabetic signs was certainly written and corrected carefully, yet it contains errors in proof-reading. It is to be presumed that Dr. Drioton's paper in which he enunciates this absurd rule was also carefully written, yet it contains many errors, e. g.  and  (p. 336, note 1),  for  (p. 342, No. 3), *ḥ* for *ḥ* (p. 343, No. 7, twice),  for  (p. 345, No. 19), for  (p. 345, No. 21) etc. Again he twice gives  (pp. 328, 336) instead of the correct form printed in his original study (*Revue d'Égyptologie*, I, p. 5, A. 66: though the correct form does not exist in the fount he owed it to his readers to state that he was printing a substitute). Similarly, in another study he thrice gives  (*Revue d'Égyptologie*, I, p. 15, B. 3, B. 10; p. 17, B. 62) although the photograph (*op. cit.*, Pl. 2) shows quite clearly that the sign bears no resemblance to  and seems to be closest to , which has a bearing on the correct decipherment of the text. So too my own

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

the correct  (VIII, 26, 1) and other variants, or in (VI, 47, 8) "Isis the great".

(*l*) The reader will not fail to notice that in discussing the origin of in *ḥ(y)t* Dr. Drioton confines his remarks to the consonant *ḥ*[1] whereas I was concerned with demonstrating that = *ḥ*[2]. The probability of being an error for or some related sign is increased by the fact that clearly retains a faint suspicion of the weak consonant that existed in *ḫyt*, which would be entirely lacking if *ḥ* were derived from *ḥn*. Dr. Drioton, moreover, is in error in stating that the same usage is attested in the Coffin Texts, for in the example which he quotes, [3] = , it is clear that is not alphabetic but, like itself, is biliteral *ḥn*. Dr. Drioton is peculiarly prone in his cryptographic studies unnecessarily to convert multiliteral into unilateral signs in order to bolster up his theory of the alphabetic nature of cryptographic writing and the acrophonic origin of its values. A very considerable proportion of his supposed alphabetic signs and their acrophonic origin are neither the one nor the other.

(*m*) Dr. Drioton's argument[4] against the origin of = *s* being *s*; "son" is completely beside the point and will deceive no one. It is beyond all dispute that from the Middle Kingdom was used as a synonym of *s*; "son", with the phonetic value *s*;, and hence could give rise to the alphabetic value *s* on the Consonantal Principle. Dr. Drioton's criticism that cannot be the

collation of the original text of the cryptograms of the « Book of the Day and the Night » in the tomb of Ramesses VI shows that Dr. Drioton's published copy (in Piankoff, *Le Livre du Jour et de la Nuit*, 84-97), which differs in certain details from Piankoff's correct copy, contains some forty errors : although most of the errors are merely small details in the forms of signs that do not materially affect the reading, others are of real importance and significance, including as they do entirely wrong signs, omissions of signs, addition of signs that do not occur in the original and inversion of the exact order of the signs, and the principle involved, the need to establish accurate and faithful working copies, is a vital one. It is quite hopeless to attempt the decipherment of cryptograms and Ptolemaic texts or to suggest origins unless we can work from faithful copies with such explanatory notes on exact forms as may be necessary. The ordinary reader will be excused for wondering how accurate decipherments and correct origins are to be derived from defective material.

(1) *Annales du Service*, 43, 343, No. 7 (this error is twice repeated).

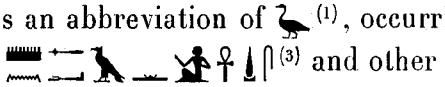
(2) *Annales du Service*, 43, 223, No. 161.

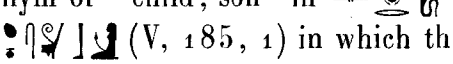
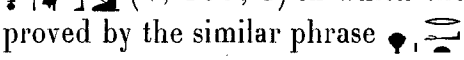
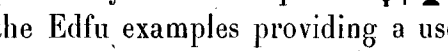
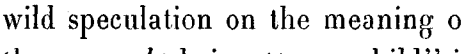
(3) De Buck, *Coffin Texts*, II, 25 *a*.

(4) *Annales du Service*, 43, 344, No. 12.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

origin because the egg represents not only "son" but "daughter" is nonsense because it is an established fact that  represents *s;* "son" alone and that in order to write *s;t* "daughter" it is necessary to add the feminine ending and write  *s;t.* by itself does not carry the value *s;t* nor does it express the notion "daughter".

The use of to designate "son" originates in Middle Kingdom hieratic as an abbreviation of [1], occurring in [2] [3] and other examples[4]. , therefore, is a substitute for , arising from the hieratic, and as such bears the value *s;* in its own right and was fully capable of acting as the origin of alphabetic *s*.

The subsequent introduction of *s;* into hieroglyphic was due to the automatic copying of a usage already consecrated by hieratic, though it is a moot point whether its hieratic origin was always borne in mind. It is not impossible that in later times *s;* may have been interpreted as a sort of pun, the egg from which the chick emerges being taken as a symbol of the chick itself, which is the "son" of the bird, in much the same way as acquires the value *imi* "that which is in" (cf. the examples quoted below, p. 119, note 1). I have already pointed out[5] that *swḥt* "egg" is used as a synonym of "child, son" in  (IV, 302, 10-11),  (V, 185, 1) in which the fact that *swḥt* is equivalent to "child" is proved by the similar phrase  (Cairo J. E. 85932, 5[6]), the Edfu examples providing a useful corrective to Dr. Drioton's somewhat wild speculation on the meaning of the last quoted passage[7]. The idea of the egg *swḥt* being "son, child" is by no means uncommon: the king, for example, is called [8]. It is in keeping with and by a

[1] Sethe in *Z. Ä. S.*, 49, 96-7; Möller, *Hieratische Paläographie*, I, Nos. 216, 238.

[2] *Sinuhet*, B. 30 = Blackman, *Middle Egyptian Stories*, 15, 7; B. 142-3 = Blackman, *op. cit.*, 28, 11.

[3] *Shipwrecked Sailor*, 189 = Blackman, *op. cit.*, 48, 4.

[4] Cf. for example Griffith, *Hieratic Papyri from Kahun and Gurob*, IX, 2, 16, 27 etc.; Anthes, *Hatnub*, Pl. 28 = Graffito 27, 1; Pl. 24 = Graffito 45 (both wrongly transcribed by Anthes) and other examples quoted by Sethe, *loc. cit.*

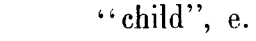
[5] *Annales du Service*, 43, 271, Note XLIX.

[6] Published by Drioton, *Les Fêtes de Bouto* in *Bulletin de l'Institut d'Égypte*, 25, 1-19.

[7] *Bulletin de l'Institut d'Égypte*, 25, 6 note (*g*).

[8] De Morgan, *Ombos*, I, p. 103, No. 130.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

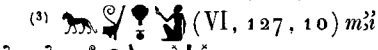
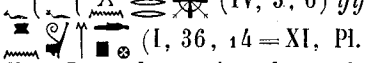
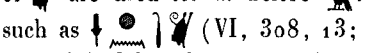
further extension of the same general idea that the chick is called *nwn* "child", e.g.  (VI, 83, 9),  (*Mam.*, 97, 11), cf. [1].

D. *Comment on the Index.*

It is hardly necessary to point out the interest and value of the analytical index of the alphabetic signs in connection with phonetic changes in Ptolemaic, but its importance must not be exaggerated. The chief value of the analysis and the full list of alphabetic signs on which it is based is as a sign-post or indicator, but it would be unwise at present to employ it as the sole or final authority for binding conclusions on consonantal changes. The sign list is only an introduction to the study of the alphabetic signs and it lays no claim to be anything more than a record of the signs that in certain circumstances could replace the normal alphabetic signs at Edfu[2]. It makes no pretence of indicating in full what those circumstances were, but this is a matter of real importance without which no conclusions of lasting value can be reached. For instance, to quote one example only, the list records the fact that  (No. 245 *b*) and  (No. 271 *b*) replace , but no hint is given as to how or when this takes place. This bare statement of fact assumes quite a different complexion when it is realised that, with very few exceptions[3], practically every example of this replacement known to me at present occurs before or [4].

[1] Naville, *Festival Hall*, Pl. 22.

[2] *Annales du Service*, 43, 203.

[3]  (VI, 127, 10) *m3ỉ m ḥr n pʿt;*  (IV, 3, 6) *tftf·tỉ m ḥrr(t);*  (I, 36, 14 = XI, Pl. 219) *ḫʿ m Nt m Dp*, and a number of examples where  or  are used for *m* before . Writings such as  (VI, 308, 13; the det. in the original has the uræus) for *sḫmty* do not indicate any phonetic change in , the use of which shows that this word was already equivalent to ψχεντ.

[4] E.g. (IV, 2, 4; VII, 88, 9), varr. (III, 87, 13; VII, 9, 9),  (III, 66, 10) *m pt;* (III. 87, 13; with VII, 263, 17) *m Bḥdt;* (VII, 11, 2) *m bik;* (VII, 3, 7) *m bi3;* and in a number of other phrases. It is worthy of note that the same phenomenon is not generally to be observed in the case of , although there are a few examples, e.g. (VI, 188, 2) *m P*, and (IV, 101, 9) *m pr ỉm·f.* Like , is also used in (IV, 255, 5) as an indication of the phonetic change which this word had undergone.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

It is clear, therefore, that a full and accurate picture of the phonetic changes shown by the alphabetic signs is dependent on a complete and exhaustive analysis of the circumstances in which they took place, and the material which I have presented so far only marks the first stage in the enquiry. Similarly, a complete presentation of the phonetic changes to be observed in the inscriptions at Edfu cannot be made before the multiliteral signs and the vocabulary of the inscriptions have been studied and analysed in detail. It will be some time before this study can be finished, but it is already apparent that when it has been completed we should be in a position to speak with considerable, and perhaps unexpected, precision about the phonetics of Ptolemaic as revealed by the Edfu inscriptions.

The value of the hieroglyphic inscriptions of Edfu lies very largely in the fact that they can be dated so precisely and within such narrow limits. The building of the main temple was commenced in 237 B.C.[1], certain portions were decorated between 212 and 206 B. C.[2] and the decoration was completed by 142 B.C.[3] The Pronaos was started in 140 B.C. and was completed in 124 B.C.[4] Finally, the foundations of the Forecourt, the Pylon and the Enclosure Wall were laid in 116 B. C.[5] and the greater part of the decoration was the work of Soter II, Alexander I and Soter II after his return from exile. The decoration was completed by Auletes in whose 25th year (57 B. C.) the great doors in the Pylon were hung[6], although I imagine that the decoration must have been completed some years earlier since the dedication ceremony (*swḏ ḳ;t n nb·f*) was celebrated in his 11th year[7]. Thus the temple was built and inscribed entirely within the Ptolemaic Period within 180 years and we have a firm lower limit for its texts from which we ought eventually to be able to reach some reasonably firm conclusions on the state of phonetic development that the language had attained by 57 B. C.

Such a result will be no unimportant achievement and it is reasonable to anticipate that if similar studies of the other Graeco-Roman temples were made, once reliable copies of their texts are available, it should be possible

[1] IV, 7, 1; VII, 5, 7.
[2] IV, 7, 10 — 8, 2; VII, 6, 4-6.
[3] IV, 8, 9; VII, 7, 6.
[4] VII, 8, 7 — 9, 2.
[5] VII, 9, 3.
[6] V, 304, 11; cf. Dümichen in *Z. Ä. S.*, 1870, 12.
[7] VIII, 67, 6.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

to trace still further and with some degree of precision the phonetic development of the language and its approach to Coptic. Such studies will not be as easy and as simple as the study of Edfu, for the material is not so homogeneous and is spread over a wider period, but the effort should be made. It will be necessary to study each temple individually, above all it will be essential to pay strict attention to chronology, perhaps by a rough division of the texts into the two main categories of "Ptolemaic" and "Roman", for unless some such subdivision is made the true course of evolution is likely to be obscured. In such studies the temple of Esna, even though the material is relatively limited, seems destined to occupy an important place and it is much to be hoped that a complete and final publication will not be long delayed.

To return, however, to the analysis of the alphabetic signs, a glance will show that in the first column some of the consonants can be represented by many signs while others have few or no forms differing from the normal. This may be interpreted partly as a hint that the consonants without many alternatives are falling out of use, and partly, perhaps, as an indication that there are certain circumstances that prevent such consonants from acquiring many alternatives. In the second column the values acquired by phonetic change give us some idea of what consonants are weakening or changing and what consonants are replacing them. I must emphasise once again, however, that these and any other conclusions on phonetic changes at Edfu based on the present material are quite tentative and may have to be modified to a greater or a lesser degree because the true facts can only emerge from the detailed study of the circumstances in which the various signs are used. With this caution in mind it appears that the following preliminary and tentative inferences may be drawn from the analysis of the uses of the alphabetic signs:

(*a*) there is no evidence that  has begun seriously to weaken; weakening is only frequent when is in contact with  and related consonants[1] and very much less frequently when followed by [2].

[1] For an exposition of the circumstances see *Annales du Service*, 43, 250, Note IV.

[2] Cf. *Annales du Service*, 43, 233, No. 219(*e*). also appears to weaken sometimes when in contact with , but this is not apparent from the alphabetic signs but is to be deduced from the circumstances to which brief reference is made in *Annales du Service*, 43, 255, Note XXII: cf. also the spellings of *m*(ᶜ)*d*ȝ quoted in Obs. 2 to III B, 4(*a*), p. 112 below.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(*b*) the change of  to  and  has started but probably has not gone far and appears to be restricted to a few words [1].

(*c*) the weakening of , naturally only in certain conditions and contexts, is marked; in certain words has fallen away completely or at least is not indicated in the spelling [2].

(*d*) there is no evidence of any general tendency for , ,  and  to be written by a single sign equivalent to z as in Coptic, although the first hints of such a tendency are to be discerned in a few words in which is used instead of (confined, as far as my present notes go, to spellings of *ḥwt* in *ḥwt-ntr* "temple" and *Nbt-ḥwt* "Nephthys": cf. an example quoted below on p. 111). The evidence seems to indicate quite clearly that in general there was a marked tendency for to be replaced or absorbed by . The assimilation of to  is well advanced, although I have not established the conditions under which it took place.

(*e*) The group composed of ,  and  is interesting. The complete absence of any alternative forms of is striking and it is difficult to escape the conclusion that there is an increasing tendency for to replace both and .

(*f*) Similarly, in the group , ,  and  there is a marked tendency for all to become little more than , though it is hardly necessary to add that this was not automatic or invariable and that it only took place in certain circumstances.

[1] See also *Annales du Service*, 43, 253, Note XVIII; 266, Note XXXV; 272, Note LV.

[2] It is sometimes possible that is equivalent to *l* but naturally it is difficult to make a definite assertion to this effect; cf. note 1 on p. 74 above. On the transition from to see above p. 74, note 3, and cf. p. 111 below, Obs. 1 to III B, 4 (*a*). Though not specifically indicated in either the index or the sign-list, sometimes replaces an original , as in (V, 157, 16) *wrḫ* (*wꜣḫ*) "flourish". This phenomenon is not confined to Ptolemaic but is of long standing. The best known example is , "lock", written in the New Kingdom as , which survives in Coptic as ϩⲗⲁϩ. This is also found in an Eighteenth Dynasty cryptogram in the writing (Bucher, *Les textes des tombes de Thoutmosis III et Amenophis II*, 23, 7; 142, 4) for (Bucher, *op. cit.*, 86, 19). Cf. Grapow in *Z. Ä. S.*, 72, 27, 29. Grapow is wrong, however, in citing (Bucher, *op. cit.*, 27, 93; 145, 121) as an example of the same phenomenon.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

It is necessary to draw attention to the weak consonants ,  and . It is remarkable that these consonants should have so few alternatives and that these alternatives are either of infrequent occurrence or are only employed in fixed and stereotyped contexts. It is also worthy of note that a considerable proportion of these alternatives are either already in use in pre-Ptolemaic times or are only variants of the normal forms. This lack of alternatives cannot be due to any disappearance of *ꜣ*, *i* or *w*, and there must be some other explanation.

Leaving aside for the moment , , , , ,) and , the origins of which are the subject of dispute, it will be noticed that all other alternatives of , and arise either from words composed entirely of weak consonants, or, less frequently, from some sort of rebus. In my opinion the only adequate explanation of these facts is that the formation of the alphabetic values is mainly governed by the Consonantal Principle and not by Acrophony. If Acrophony were a legitimate method of forming alphabetic values, it is clear that many more alternatives of these weak signs could have been employed. It is equally clear that these alternatives were never used, there must be some reason for this and that reason can only be that selection by Acrophony did not play any part in the formation of the alphabetic values because it is precisely the consonants *ꜣ*, *i* and *w* that are most prone to fall away.

If Acrophony were really operative there would, for instance, be nothing to prevent , or  from being used for *i*, or  or  for *w*, or  or  for *ꜣ*, in fact there would be every reason for these and other signs to be used in this way but for the fact that *ꜣ*, *i* and *w* could never be selected as long as there were other strong consonants in the word of origin. This being so, it is increasingly probable that Dr. Drioton's contention that , , , , ,) and  became equivalent to *i* by acrophony from *iʿḥ* or *ib*, as the case may be, is wrong, and my suggestion that the ultimate origin is to be sought in  is right.

These conclusions are supported if we take into consideration a notable class of absentees from the list of alphabetic signs. Apart from , , ,  and their variants, all of which can be explained by the Consonantal Principle, no divine figures acquire alphabetic values. Why should this be? If Acrophony were really operative, there was ample opportunity for the

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

creation of new alphabetic signs but the Egyptian scribes conspicuously failed to profit by it. The conclusion imposes itself that alphabetic signs could not be formed from the figures of most divinities because the Egyptians did not use Acrophony and because the consonantal structure of most divine names afforded no opportunity for the formation of alphabetic values on the Consonantal Principle.

Although many divine figures act as the suffix pronouns 1st and 2nd persons singular and 1st person plural and dual, none of them (except  and  for *i*) have any alphabetic uses except as the suffix pronouns. The same observation is also true with regard to the substitutes for divine figures, , [1], ,  and , which never have the value *i* when not used as suffix pronouns. This is a clear indication that in using these signs instead of the normal suffixes graphic considerations were paramount and phonetic considerations were absent. It is for this reason that it is necessary to reject Dr. Drioton's contention in his fantasy on the ushabti that [2] acquired the value *i* because it acts as a substitute for  as the suffix pronoun 1st person singular.

III. — MULTILITERAL SIGNS.

A. IDEOGRAMS[3].

Ideograms signify the object which is depicted and as such have both direct and indirect uses.

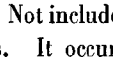
1. (*a*) *Direct.*

 nsw "King of Upper Egypt" (VII, 4, 4)

 bỉtỉ "King of Lower Egypt" (III, 14, 7)

 *nsw-bỉt* "King of Upper and Lower Egypt" (III, 105, 18)

 'Imn "Amun" (VI, 13, 14)

[1] Not included in my paper on the alphabetic signs. It occurs in  (*Mam.*, 152, 10-11) *nḏb·i nḥt·t* "I hearken to thy prayer" (the speaker is Amen-Rēᶜ).

[2] *Annales du Service*, 43, 348.

[3] The following analysis of the ideograms has been much influenced by the excellent summary in Lefebvre, *Grammaire de l'égyptien classique*, pp. 10, 11, which I have followed closely.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

 *Wsir* "Osiris" (VII, 8, 8)

 Šw "Shu" (VI, 8, 6)

 *Ḥr-Bḥdt* "Horus of Behdet" (VII, 2, 9)

 *Ḥwt-Ḥr* "Hathor" (VII, 95, 11)

 M;ᶜt "Maat" (VII, 21, 7)

 *ḫḫ* "throat" (IV, 75, 1); *ḥtyt* "throat, gullet" (III, 34, 11)

 *s;b-šwt* "He-of-the-dappled-plumage" (VI, 12, 4)

 *ᶜbb* "winged beetle" (VI, 131, 1)

 *Rᶜ* "Rēᶜ" (VI, 93, 14); *ỉtn* "sun-disk" (VII, 2, 10)

 *ỉnr* "stone" (IV, 12, 8)

 *ỉnb* "wall" (VI, 75, 6)

 *bḫnt* "pylon" (V, 2, 6)

 wn-ḥr "mirror" (VII, 89, 2)

(*b*) *Indirect.*

(i) An ideogram can represent an *action* :

 *f;ỉ ỉḫt* "carry offerings" (IV, 309, 5)

 *tw; pt* "uplift the sky" (III, 253, 12; cf. III, 236, 2)

 snỉ-t; "smell (kiss) the earth" (VII, 4, 7)

 pḏ šsr "stretch the cord" (IV, 14, 4)

 *ms* "bear" (V, 173, 11)

 *m;;* "see" (IV, 94, 2), hence var.  *m;;* (V, 274, 2)

 ;m "grasp" (IV, 79, 12)

 *;m*[1] "grasp" in (I, 17, 25) *nḫḫ ;m m wnmỉ-k* "the flail is grasped in thy right hand".

 *pr* "come forth" (III, 221, 6)

 *ᶜḳ* "enter" (VII, 56, 12)

[1] A rare use of this sign; for the normal value see below, p. 121, note 1.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(ii) An ideogram can also represent more than one action which though different can be depicted by the same gesture or symbol[1].



f;i "raise" (VI, 106, 6)
;tp "carry, load" (II, 32, 4 = XII, Pl. 374; cf. III, 41, 7)
k;wt "lift, bear" (III, 172, 5; cf. IV, 251, 2)
tw; "lift, raise" (IV, 354, 9; cf. VIII, 102, 12)



dw; "praise" (I, 435, 14)
i;w "adoration" (VII, 31, 3)

2. Ideograms also have a *symbolic* use, at the root of which, of course, lies some sort of pun or rebus.

(*a*) *Metonymy :* a sign is used for the thing meant :

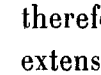
, the crown of Upper Egypt, for *nsw*[2] "King of Upper Egypt" (VIII, 120, 6) and therefore *nswi* "rule as King of Upper Egypt" (III, 146, 1),  *nsyt* "kingship" (III, 78, 1), and hence by extension *šmᶜ* in  *šmᶜ* "Upper Egypt" (VIII, 97, 11) and  *šmᶜ·s* "Upper Egyptian crown" (VI, 285, 11).

, the crown of Lower Egypt, for *bity*[2] "King of Lower Egypt" in (I, 40, 18 = XI, Pl. 223) *nsw-bit* "King of Upper and Lower Egypt" and

[1] This fact often renders it difficult to establish the precise value of a sign, even though the general meaning of the word is clear. A very close and detailed study of the context and of the passages in which such signs occur is the only way of establishing the correct reading, but even then there are a number of examples in which it is difficult or impossible to decide which of the alternatives is to be preferred : cf. also note 3, p. 106 below.

[2] Further examples of this use of in classical Egyptian are quoted by Lacau in *Z. Ä. S.*, 51, 57 and Gardiner, *Grammar,* Sign List S. 3, p. 491.  as a writing of *nsw-bit* occurs in the reign of Sethos I (Mariette, *Abydos,* I, 40 *b*). and and their variants occur either individually as *nsw* or *bity,* or jointly as *nsw-bit* in several New Kingdom cryptograms (cf. Drioton's studies : *Revue d'Égyptologie,* I, p. 47, Nos. 153, 154; II, p. 3, note *d,* p. 12, fig. 6, p. 15, note *l; Annales du Service,* 40, 369, 371, No. 181). Lacau (*Z. Ä. S.,* 51, 57) considered that was substituted for for superstitious reasons but the parallel uses of indicate that the origin I have suggested is more plausible. The explanation of this use given by Chassinat (*Revue de l'Égypte ancienne,* 2, 19) and his arguments in favour of the old reading *swtn* are quite mistaken, though it is true that does have the values *stn, stn.*

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

therefore *bìtì* "rule as King of Lower Egypt" (III, 146, 2) and hence by extension *mḥw* in  *mḥw* "Lower Egypt (V, 286, 16) and  *mḥw·s* "Lower Egyptian crown" (VI, 285, 12).

, the double crown, for *nsw-bìt* "King of Upper and Lower Egypt" (V, 312, 5).

, the emblem of Upper Egypt, for *šmˁ* "Upper Egypt" (III, 49, 4).

, the emblem of Lower Egypt, for *mḥw* "Lower Egypt" (VI, 158, 9) and hence

 tȝ·wy "the Two Lands" (Egypt) (III, 84, 13).

, the symbol of divinity, for *ntr* "god" (very common : IV, 142, 3) and hence  (*Mam.*, 141, 3), var.  (IV, 82, 4) *psḏt* "Ennead".

, the tongue, for *dpt* "taste" in  (III, 129, 4).

, the night sky, for *grḥ* "night" (VIII, 131, 14).

This is capable of considerable extension :

(i) a pun developes on some characteristic or emblem :

 Bḥdtì in  (VIII, 139, 8) *Ḥr Bḥdtì* "Horus of Behdet".

 *Bḥdtì* "Behdeti" (VIII, 132, 12; 133, 4; for the reading, cf. V, 243, 17).

 *Ḥwt-Ḥr* "Hathor" (V, 307, 7)[1]

 nbt ʾIwnt "Mistress of Dendera" (*C. D.*, IV, 9, 10)[1]

(ii) Hence by further extension , the sun, can represent "day" in  *hrw* "day" (VII, 16, 8), *ssw* "day of the month" (in dates : VII, 9, 3), and thus *Rᵉ* "Rē" is *hrw* in  (IV, 14, 4), varr. (*Mam.*, 56, 1),  (VIII, 110, 15) *hrw pn nfr* "this happy day".

(iii) By a form of inverted metonymy, which has various aspects :

— the effect for the cause : , a sail filled with wind, represents wind, breath, e. g. *tȝw, nf* (III, 19, 14);

[1] Cf. Junker's note in *Z.Ä.S.*, 43, 120. I have no record of any Edfu example of *nbt ʾIwnt*.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

— the cause for the effect :

, a tooth, for "bite" in  (V, 85, 14) *psḥ* "bite";[1]

 and variants, a conventional representation of the throat, for *ʿm* "eat, swallow" in (III, 90, 10) *ʿm* "swallow", (IV, 76, 2) *ʿm-t;·wy,* an epithet of Thoth, (V, 257, 16) *sʿm* "swallow", and also for *ḥnʿ* "fill" (V, 257, 7), var. (*Mam.*, 85, 3); cf. (*C. D.*, I, 25, 2) *ḥnʿ* "throat".

(*b*) Occasionally from the contents of a vessel :

 irṯt "milk" (V, 172. 4).

 irp "wine" (II, 203, 11 = XII, Pl. 390).

 ḥnḳt "beer" (IV, 105, 12).

 (IV, 258, 12), var. (VI, 93, 10) *sntr* "incense".

(*c*) Sometimes a part is used for the whole :

, the side-lock, for *ḥrd* "child" (V, 209, 7).

, phallus, for man, male in *t;w* "men" (IV, 11, 9).

• the pupil of the eye, for : e. g. *m;;* "see" (V, 312, 2).

 a feather, for *gs* "side" in (III, 83, 7) *gs wnmi·i* "my right side".

(*d*) A special type of the symbolic use of ideograms is apparently restricted to a small group of signs that designate the notions "father", "mother" and "son" :

 it, it(i) "father" : (VII, 194, 13) *it(i) ityw* "father of the fathers", cf. the varr. (IV, 110, 10), , *it(i) ityw* (Sethe, *Amun und die Acht Urgötter,* Pl. 2).

 mwt "mother" : in *mwt* "mother" (common : VI, 74, 2).

 s; "son" : e. g. in (VII, 174, 7) *s; Ḥwt-Ḥr* "son of Hathor".

Obs. These uses, of course, are not confined to Ptolemaic, but have a long history.  and in particular are very common. For further examples of *it(i)* "father" cf. Grdseloff in *Annales du Service,* 43, 316-318. This form of symbolism is presumably a survival of a distant time when , and were the symbols of the "father", "mother" and "son" of the clan[2].

[1] The reading *psḥ* is assured by the full writing in the parallel passage Sethe, *Amun und die Acht Urgötter,* Pl. IV (Theb. T. 95 k). — [2] Cf. Grdseloff in *Annales du Service,* 43. 317.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

B. PHONOGRAMS.

1. By pun or rebus.

(*a*) Simple puns, the sign used being normally but not necessarily invariably a determinative.

 *b(;)ḥ* in  (V, 178, 2) *B(;)ḥ(w)* "East".

 *mrt* in  (II, 65, 17 = XII, Pl. 373) *mrty* "eyes".

 ḏt in  (*Mam.*, 205, 16) *r ḥḥ ḥnᶜ ḏt* "for ever and ever".

 tf in  (V, 98, 16) *tfn* "be glad".

 *nbd* in  (VI, 122, 3), varr. (IV, 111, 12), (VI, 287, 1) *Nbd*, a name of Seth.

 *rnpt* in  (V, 139, 9–10) *ḥsb·i rnpwt·k r ḏrw ḥḥ* "I reckon thy years to the limits of eternity".

 *;ms* in  (IV, 2, 5) *;ms ib·f* "his heart rejoices".

 *s;b* in  (III, 135, 6) *s;b-sš* "traverse".

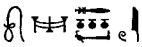
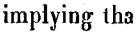
 *nḏs* in  (*Mam.*, 126, 15) *psḏt nḏst* "the small Ennead".

 ᶜnḫ in  (V, 304, 9, cf. 311, 11) *wḏ ᶜnḫ n T;·wy* "who gives life to the Two Lands".

 9 in  (VII, 6, 8) *ḫ;t-sp 9* "year 9"; cf. (IV, 52, 5) *psḏ* "shine".

* *ᶜnḫ* in  (IV, 12, 2) *ḫntỉ k;w ᶜnḫw* "at the head of the Kas of the living",  (IV, 240, 5) *k;w ᶜnḫw* "living spirits".

 ḫn in  (VII, 6, 7) *ḫn* "disturb, interrupt"[1].

[1] Although only one example of this value is at present known to me it is worth noting since it permits us to make a slight rectification in a detail of Ptolemaic history. It occurs in  (VII, 6, 6-7). This well-known description of the outbreak of the native revolts in the reign of Ptolemy IV has been misinterpreted in various histories as implying that "bands of insurgents hid themselves in the interior of the temple" (Bevan, *A History of Egypt under the Ptolemaic Dynasty*, 240), or that "Le temple inachevé d'Edfou sert de forteresse aux rebelles" (Jouguet in *Précis de l'Histoire d'Égypte*, I, 291). This is certainly straining the evidence of the text a little too much for all it says is "Thereafter rebellion broke out and ignorant rebels in the southern district interrupted the work (read [*ḥr*] *ḫn ḫ;t*) in the Throne-of-the-Gods" (Edfu). I imagine that *gs-ḫnt* probably refers to southern Upper Egypt, possibly those parts south of Luxor. For this meaning of *ḫn* cf.  (*Urk.*, I, 30, 12-13), a reference that I owe to Mr. Grdseloff.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

 *ḏ3* (rare) in (VIII, 93, 6) *ḏ3 pt rˁ nb* "who crosses the sky every day", (VIII, 130, 9) *ḏ3·n·f pt* "he crossed heaven".

Obs. It is important to note the part played by the determinatives in the formation of values. There is *a priori* no reason why almost any determinative should not be employed with the value of the word it determines, and in practice this will be found to be the case with the vast majority of determinatives. Particularly instructive are *ḏ3* and *ḥn:* in the former example it is clear that does not automatically arouse the idea *ḏ3* "cross", for while it may convey the general impression of "sailing", "journeying", this might be any one of a number of synonyms, and the primary idea is that of "boat", *imw, wi3* or *dpt,* and the secondary one is "sailing downstream" *ḥd* (as phonogram *ḥd*, cf. IV, 144, 1). Similarly, does not automatically carry the value *ḥn,* but rather *ḥbs* and other values. In both examples it is clear that and could bear the values *ḏ3* and *ḥn* respectively because they were the determinatives of and *ḥn* "tent" (*Wb. d. äg. Spr.*, III, 368).

It would be easy to multiply similar instances. Thus × is *sš* in (IV, 10, 12) *sš* "open" (cf. other uses of × listed by Gardiner, *Grammar,* Sign List Z. 9, p. 522), and is *bnr* in (V, 31, 14) *r bnr* "out, outside", where in neither case do × and have any connection with *sš* and *bnr* except as determinatives. and its variants have additional values *ḥ3w* and *rk* "time" in (III, 194, 10) *ḥ3w* and (III, 143, 15) *rk,* where again has no obvious connection with "time" except as determinative (cf. however Černý's remarks on this point in *Annales du Service,* 42, 344).

Such usages as these are possible because it is clear that the majority of determinatives always retained some vestige of their original phonetic significance, the phonograms and alphabetic signs that accompany them acting as phonetic complements (cf. *Annales du Service,* 43, 297, 298). This is also evident from the use of the phonetic determinatives and from numerous spellings such as (III, 6, 10) *wi3* "barque", (IV, 19, 11) *wbn* "rise, shine", (VI, 33, 8) *bˁḥ* "flood, inundate", (VII, 27, 3) *rmt* "men", *ḫm* in (VIII, 121, 8) *m ḫm·s* "without her knowing" or (V, 37, 7) *ḫrs* (*ḫsr*) "repulse".

(*b*) Pictorial or visual puns.

 is 7 (*sfḫ*) in (V, 305, 1) *mḥ* 27 *r-6* "27 $\frac{1}{6}$ cubits", because of the seven openings in the head[1], and hence is phon. *sfḫ* in (V, 139, 8) *sfḫt-ˁb·wy,* an epithet of Seshat.

× is 5 in (VII, 6, 4) *nrỉt* 25 "25 years".

[1] Cf. Sethe, *Von Zahlen und Zahlwörter,* 25.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

● is 1 in ●● (IV, 6, 4) "8 (cubits)".

● is 1 in ●● (VI, 7, 5) *sb; 2* "two doors".

is *pr m ;ḫt* "he who comes forth from the horizon" (VI, 5, 5)[1]

is *s;b-šwt pr m ;ḫt* "He-of-the-dappled-plumage who comes forth from the horizon" (V, 311, 12)[1].

(*c*) A part is used for the whole :

•, the pupil, for in (VII, 14, 6) *irw* "image", (V, 348, 5) *Wsir* "Osiris".

for in (IV, 74, 7) *nrw* "terror".

for in (VII, 103, 12) *;ḫt* "field, meadow" for (VI, 27, 9).

for in (IV, 19, 9) *hrw pn* "this day"[2].

(*d*) Puns based on certain divine titles, epithets, attributes or symbols :

ntr ᶜ; in (VII, 7, 9) *Ḥr-Bḥdt ntr ᶜ; nb pt* "Horus of Behdet, great god, lord of heaven"; cf. the title of Ihy (*Mam.*, 163, 10) and Junker's note in *Z. Ä. S.*, 43, 112[3].

ᶜ; in (V, 9, 13) *ntr ᶜ; ḫntỉ t;-wy ỉdbw* "great god, pre-eminent in the lands and banks", (V, 5, 3) *Ḏḥwtỉ ᶜ; ᶜ;*

[1] Note the difference between these forms.

[2] I have no record of itself being used for *hrw*. The *Wörterbuch* does not know a word *h;w* "donkey", whose existence, however, is to be deduced from the fact that Seth as a donkey (, III, 188, 6, 7; cf. , VI, 317, 6, *St* "Seth", for the reading cf. III, 188, 14) is not infrequently called (III, 188, 7; cf. also *Wb. d. äg. Spr.*, II. 475, 483). of course has the value *h;w* and is used as an indication of the contemporary pronunciation (cf. (VIII, 131, 14) for *hrw* "day" and Coptic 2OOY).

[3] Drioton (*Annales du Service*, 40, 388, No. 2) suggests that this value originated in *ntr ᶜ* "le dieu du chœur", for which, however, he quotes no Egyptian parallel and of whose application to Ihy he produces no evidence. I cannot trace any example of such a phrase and it must therefore be rejected as a possible derivation. The only examples of , var. quoted by the *Wörterbuch* occur in the title (Pap. Greenfield, 2, 4; var. 19, 12; 21, 11). The same title is borne by a certain on an unpublished stela from the Delta recently acquired by the Cairo Museum : I am indebted to Labib Habashi Effendi for knowledge of this additional example.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

"Thoth the twice great"; cf. the very common title of Thoth (II, 26, 10 = XII, Pl. 380 and often) : see also III, B, 1 *f*, p. 106 below.

nb in (IV, 15, 6) *mnw·f n(t) r'-nb* "his daily offerings" : the moon is one of the two "lords" of the sky.

nb in (VII, 3, 1) *nb pt* "lord of heaven" : Hathor is *nbt* "the golden one" (IV, 88, 16), cf. *Mam.*, 78, 6.

ikr in (IV, 214, 7), var. (IV, 212, 7-8) *mṯnty ikr* "excellent harpooner", (VI, 62, 9) *ikr ḏd* "excellent of speech" : Thoth is the "excellent" one, (II, 70, 15), (I, 377, 17); see also III, B, 1 *f*, p. 106 below.

ḥḥ / *ḏt* in (IV, 12, 1) *ḏr ḥḥ r ḫm ḏt* "from eternity to the end of everlasting" [1].

(*e*) Puns of association :

ḫnw in (III, 221, 7) *m-ḫnw* "in" : because *'It-t3·wy* "Lisht" was formerly the *ḫnw* "royal residence" [2].

ḫmnw in (III, 77, 17) *Ḫmnw* "Hermopolis", and hence the number "8" in (VII, 14, 2) *mḥ 8* "eight cubits".

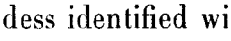
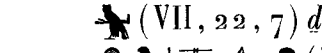
ḫmnw in (IV, 14, 8) *Ḫmnw* "Hermopolis", and hence the number "8" in (V, 351, 7) *ssw 28* "day 28".

[1] is an epithet of the sun-god (*Wb. d. äg. Spr.*, II, 302; cf. Mond and Myers, *The Bucheum*, III, Pl. XLIII, No. 13, 5) and of Horus (*Wb. d. äg. Spr.*, II, 302; for Edfu examples cf. I, 51, 7; IV, 211, 5). I do not know of another example of *ḥḥ* at Edfu, but it is the same notion of Horus as *ḥḥ* that lies behind the phrase (IV, 56, 2) *nb ḥtm ḏr ḥḥ r min ḏr Ḏrty r ḫm ḏt* "lord of the universe from eternity until to-day, and from "the falcon" (i. e. eternity) until the end of everlasting".

Osiris, *nb ḏt, ḥḳ3 ḏt*, is not infrequently equivalent to *ḏt* in late texts.

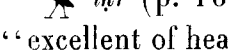
[2] Vikentiev has recently suggested this origin (*Annales du Service*, 43, 119) in connection with the occurrence of this value in the Osireion in the reign of Sethos I (Frankfort, *The Cenotaph of Seti I*, II, Pl. LXXXI). itself has the value *ḫnw* in the tomb of Ramesses VI in the double writing (*B. I. F. A. O.*, 42, Pl. LXX, *i*); cf. (*Urk.*, I, 5, 4).

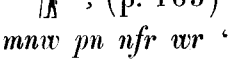
BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

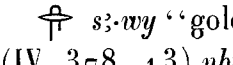
 *s;* : of occasional use only, usually only employed when Isis, or a goddess identified with her, is speaking or is referred to : e.g.  (VII, 22, 7) *dr wtṯs St s;·s ḥr-m-dỉ* "because Isis lifted up her son therein",  (V, 100, 13) *ḥw s;·s m Ḫbt* "who protects her son in Khemmis"[1].

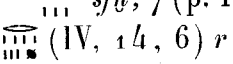
 *4* (*ifd*) in (V, 6, 5) *<m>-ʿb k;·f 14* "together with his fourteen Kas"[2].

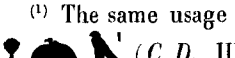
(*f*) Synonyms and puns in reverse.

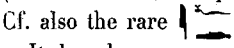
 ỉḳr (p. 105), hence *mnḫ* "excellent" in (II, 63, 10) *mnḫ ỉb* "excellent of heart",  (*C. D.* IV, 59, 1) *k;t mnḫ(t) nt ḥḥ* "excellent work of eternity[3]".

 ʿ; (p. 105) hence *wr* "great" (not frequent) : (VII, 3, 4) *mnw pn nfr wr* "this great and beautiful monument",  (*C. D.* IV, 9, 3) *ntr ʿ; wr r ntrw nbw* "great god, greater than all the gods".

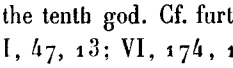
 s;·wy "gold", hence *nb* in (III, 125, 5) *nbwt* "cows",  (IV, 378, 13) *nbtyw,* name of some minor goddesses.

 sfḫ, 7 (p. 103), hence *tp* "head" in (VI, 246, 2) *tp·f* "his head",  (IV, 14, 6) *r tp-ḥsb* "perfect".

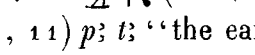
[1] The same usage also occurs at Dendera,  (*C. D.*, III, 6, 7) "protecting her son".

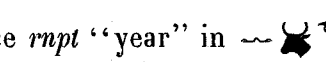
[2] This use originates in the fact that  and its variants represent the little square kiosk in which the jubilee ceremonies were celebrated (cf. Borchardt, *Tempel mit Umgang*, 56 *ff.*). Cf. also the rare  (VI, 6, 7).

It has been suggested by the *Wörterbuch* (*Belegstellen,* II, 268, with a quotation from Pap. Berlin 7809, 4, 14) that  = 10 originates in the fact that Horus is regarded as the tenth god. Cf. further I, 38, 7-8 = *C. D.*, I, 47, 13; VI, 174, 14-15.

[3] It is naturally exceedingly difficult to disentangle *mnḫ* from *ỉḳr*. The same difficulty exists in regard to other signs that can represent words of similar meaning but different spelling (cf. p. 99, note 1). In such cases a secure reading is only possible after minute study of the phrases in which these words occur and it is often of very great value to pay close attention to such factors as alliteration. Thus it is reasonably certain that  is to be read *k;wt* in (III, 172, 5) because of the alliteration *ḥr k;wt g;wt·sn r pr[·k]*, cf. the fuller writing in IV, 251, 2. But unfortunately not even alliteration is always a sure guide for we also find  (III, 153, 3).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

 *ꜣḫ* in  (VIII, 8, 16) *ꜣḫ(t)* "field, meadow", hence *tꜣ* in  (V, 85, 11) *pꜣ tꜣ* "the earth";  (*C. D.*, IV, 239, 5) *tꜣ·wy ỉdbw* "the Two Lands and the Banks.

 nrỉt "year", hence *rnpt* "year" in  (VII, 79, 17) *n ḳn rnpt m ḥꜣw·k* "there is no famine in thy time"[1].

 *dỉw* "five", hence *Gb* "Geb" in (*Mam.*, 96, 4; cf. III, 180, 14; for the reading, cf. IV, 303, 3; VII, 172, 4) *Gb* "Geb": see further Obs. 2, below.

 originally *gbt* "heaven"[2] in  (III, 196, 7), var.  (VIII, 111, 12), and hence *pt* "heaven" in  (V, 148, 4) *ntr ʿꜣ nb pt* "great god, lord of heaven".

 *tp, tpỉ* "first", hence the number "one" *wʿ* in  (VIII, 67, 6) *ḥꜣt-sp 11* "year 11", the only example of this value known to me.

Obs. 1. It is probable that  *pt* in (VII, 3, 1) *nb pt* "lord of heaven" originated in the same way. A common word for heaven is  (III, 264, 11) *wtst* which, because of the confusion between and , is also written (III, 196, 8), (III, 283, 11) and other variants. Thus the goddess Isis, , could be interpreted as *pt* "heaven". Similarly, is also *pt* in (V, 263, 18) *Ḥr-Bḥdỉ ntr ʿꜣ nb pt* "Horus of Behdet, great god, lord of heaven" because (V, 195, 16), Nut, is the sky-goddess.

2. The interesting writing "Geb", as well as the more common and related forms , , arises from the fact that Geb is the father of the Five Gods (cf. De Buck, *Coffin Texts*, II, 115 *f*), just as Nut is their mother (, VII, 290, 4-5). Thus Geb himself is considered as the god Five, (IV, 110, 13) *Gb ỉrỉ-pʿt ntrw, Dỉw nb šfyt ḫntỉ Bḥdt* "Geb, prince of the gods, God Five, lord of dignity in Edfu", and also as *wr dỉw* "chief of the Five" in (VII, 290, 3) *wr dỉw wtt·n·f dỉw* "chief of the Five, who begat the Five". I now consider it likely that when the king is called (V, 293, 2, quoted *Annales du Service*, 43, 260) "image of Geb" is likely to be better than my original suggestion "image of the god Five". Note the parallel between this use and = 10 referred to above p. 106, note 2.

[1] See further *Annales du Service*, 43, 303; Blackman in *Liverpool Annals*, 25, 136; note 4; *J. E. A.*, 29, 24.

[2] The figure of the woman represents Nut, who acquires the value *gbt* as the feminine counterpart of Geb.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(*g*) Extended puns.

mr (*imi-r*) "overseer" in (IV, 307, 16) *mr st ḫnt*, a title.

rmṯ in (VII, 166, 12) *rmṯ* "men"[1]. Hence (by substitution?) acquires the same value in (VII, 21, 5) *rmṯ* "men".

šw, the god Shu (III, 158, 15); more usual var. (VI, 103, 1), less frequent (III, 183, 12)[2].

ḫnw, as simplification of old [3] in (IV, 5, 5) *ḫnw* "chapel" and (III, 222, 16) *m-ḫnw* "within, in".

ḥri-tp (the hair being "that which is on the head") in (VI, 4, 15) *ḥrit-tp* "diadem" and also *ḥri-tp* "chief" (noun : V, 287, 13), "rule" (verb : V, 261, 11) and "chief" (adjective : VI, 87, 9).

ḫft-ḥr (that which is before the face) in (V, 186, 17) *r ḫft-ḥr* "before", var. (V, 191, 2).

ḫsdb in (VIII, 72, 7) *ḫsdb* "lapis lazuli"[4].

ḫnw in (V, 325, 15-16) *ḏ; pt m-ḫnw (M)sktt* "who sails across the sky in the evening barque".

[1] This has been explained as *r* + *mt* = *r mt* "mouth of the vulture" (cf. Lefebvre, *Grammaire*, p. 38). Although at first sight this seems very attractive, and in spite of the variant *rmṯ* (Tomb 112, Thebes; unpublished, reign of Tuthmosis III) and other variants, there are certain difficulties in the way of accepting this derivation. It is rather far-fetched to interpret as the "mouth" of the vulture, there is no evidence to support this. The frequent use of for *rmṯ* is difficult to reconcile with this derivation, though it may be a case of simple substitution, being apparently earlier than in this sense; but see (de Buck, *Coffin Texts*, I, 76). Finally, there is no certain evidence that Egyptian had a word *mt* "vulture". It is often assumed that such a word must have existed because of "mother" but in view of the suggestion made above (p. 101) that was the symbol of the "mother" of the clan, it is clear that as the symbolic equivalent of the Egyptian word *mwt* "mother" it could have acquired the phonetic value *mwt*, *mt* without there being any necessity to assume the existence of a word *mt* "vulture". In spite of this destructive criticism, I am unable at present to offer any other suggestion.

[2] *Šw* "the empty (cartouche)": this does not explain, however, why the normal writing is with two cartouches.

[3] Cf. Sethe in *Z. Ä. S.*, 59, 61-3.

[4] Explained by Goodwin (*Z. Ä. S.*, 6 [1868], 7) as *ḫsf db* "stop-pig". This is certainly wrong and quite impossible as an explanation. I would tentatively suggest, though there are obvious objections, *ḫs(r) db* "who drives away the hippopotamus".

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

2. By loss of weak consonants, in accordance with the Consonantal Principal.

(*a*) By loss of the initial consonant (not common) :

 originally *ibḥ* becomes *bḥ* in (VII, 155, 12) *bḥs* "calf".

 originally *i;b* becomes *;b* in  (V, 368, 15) *;bḥ* "unite, join".

Obs. 1. In Ptolemaic and its variants regularly replace old , which survives in a new form that is not of very frequent occurrence, e. g. (VI, 199, 10) *;bw* "Elephantine".

2. is to be included in this class unless it be considered purely uniconsonantal in (V, 208, 18), var. (III, 159, 7) *ḫ'w* "flesh" (see further p. 75, note 2).

(*b*) By loss of the medial consonant :

 originally *k;wt* becomes *k;t* in (VII, 2, 9) *k;t* "work".

 — *'in* — *'n* in (VI, 242, 9) *'ntyw* "myrrh".

 — *s;b* — *sp* in (III, 118, 16) *m sp* "together".

 — *m;i* — *mi* in (IV, 11, 7) *mi* "like".

 — *iwn* — *in* in (V, 153, 2) *inm* "hue, skin".

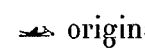
 — *w;s* — *ws* in (VIII, 23, 8) *Wsir* "Osiris".

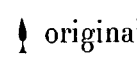
 — *idn* — *in* (*i*[*w*]*n*) in (IV, 143, 10) = (IV, 142, 18) *b;w 'Iwnw* "souls of Heliopolis", (VIII, 100, 3) = (IV, 85, 10) *k; 'Iwnw* "bull of Heliopolis".

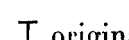
Obs. The disappearance of from the middle of the word, though not common, for is not usually weak in this position, is well attested, cf. (V, 124, 3) for *idr* "herds". falls away in similar conditions, as in (V, 125, 1), (III, 257, 15) for *itr* "river" (EIOOP), (I, 179, 16 : not collated) for *m-itrty* "near, beside", cf. the common writing (III, 140, 3) for *ptr* "see". As far as my present information goes, this disappearance of and only occurs when they are followed by or .

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(*c*) By loss of the final consonant :

 originally *imw* becomes *im* in  (IV, 87, 1) *mw·k im·f* "thy seed is he" [1].

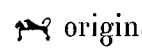
 originally *im;* becomes *im* in  (VI, 118, 6) *n rḫ·n·f bw iw·sn im* "he did not know where they were".

 originally *sm;* becomes *sm* in  (V, 228, 5) *smsw* "eldest"

 — *šs;* — *sš* in  (IV, 13, 2) *sš* "open".

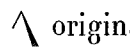
 — *wtt* — *wd* in  (IV, 379, 4) *wd(i)* "emit".

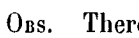
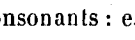
3. By retention of one of two identical and consecutive syllables or consonants [2] (cf. III, B, 4 *c*, p. 113 below).

 originally *mḳmḳ* becomes *mḳ* in  (IV, 10, 1) *ir·n mḳ(t)·f* "let us protect him";  (IV, 90, 13) *ib·ḳ ḥtp ḥrỉ mḳ(t)·f* "thy heart resting on its proper place".

 originally *ḏ;ḏ;t* becomes *ḏ;* in  (IV, 14, 8) *ḏ;sw*, minor gods.

 — *wrrt* — *wrt* in  (IV, 9, 8; probably also IV, 73, 1) *st wrt* "Great Seat" [3].

 originally *nḫḫ* becomes *nḫ* in  (V, 312, 4) *nḫ·fs; mr·f* "he protects his beloved son".

Obs. There is a tendency in Ptolemaic to omit one of two consecutive and identical consonants : e.g.  (VIII, 9, 16) for *wbs·sn n·ḳ* "they flourish for thee",  (VIII, 66, 7) for *ḥr ḫrp ḫt·sn n kꜣ·ḳ* "offering their produce to thy Ka".

[1] For this construction, which is quite common at Edfu in certain contexts, see Junker in *W. Z. K. M.*, 22 (1908), 175-9; Sethe, *Nominalsatz*, 98, and Drioton in *Annales du Service*, 40, 619-621.

[2] There are naturally very few examples of this owing to the relative rarety of words with suitable reduplicated stems. The process involved is in parallel with that already noted in connection with certain alphabetic signs (see above p. 64, II, A, 2 (*c*) and *Annales du Service*, 43, 296).

[3] The reading *st nfrt*, which would normally be one's first choice, seems to excluded by the general sense of the context, for the passage refers to the temple in general or, less likely, to the sanctuary. At Edfu *st nfrt* is usually the Treasury (cf. VII, 17, 10). *wrt* is rare and the reading though probable is not absolutely assured in either of the examples quoted.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

4. Phonetic change.

(*a*) *Simple:*

originally *s;b* becomes *sp* in (VII, 7, 1) *ḥ;t-sp* "regnal year".

— *nrỉt* — *nỉwt*[1] in (VII, 21, 6) *sšt;f m-ḫnt nỉwt·f Ḏb;* "his image is in his city Edfu".

originally *ḫt* becomes *ḫr* in (IV, 6, 3) *ḫr dbḥ nw ḫt-ntr* "containing the requirements of the divine cult".

originally *ỉb* becomes *;b* in (VIII, 128, 10) *;bḏw* "Abydos".

— *ḥ;t*[2] — *ḥwt* in (VI, 21, 2) *Nbt-ḥwt* "Nephthys".

— *mr* — *mỉ* in (III, 105, 11) *mỉ t; ḫr psḏt* "like earth with the Ennead", (IV, 3, 9) *n wn mỉtt·s* "without its like".

originally *ḫt* becomes *ḫr* in * (V, 304, 11) *ḫr ḥ;t-sp* 25 "in year 25", (III, 128, 6) *ḫr-m-dỉ* "within"[3].

originally *sbỉ* becomes *sy* in (VII, 25, 16) *sy ky m-snt r·f* "what other (god) is like unto him?".

originally *ʿḥʿ* becomes *ʿḥ;* in (III, 100, 11) *ḫt nb ʿḥ;* "all the panoply of war".

originally *tm;* becomes *dm* in (III, 69, 18) *dm;t-pḏwt,* an epithet of Nekhbet; (V, 244, 15) *dm·tw rn·f* "his name is pronounced".

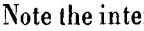
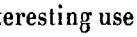
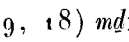
Obs. 1. It is probably phonetic change that lies at the root of (IV, 14, 5), (VII, 21, 7), (V, 261, 8) (V, 34, 3) and other spellings of . Since Coptic uses only 2N, it is impossible, I think, to suggest transliterations such as **ḫr*, **ḫʿ*, **ḫrʿ*, etc. as alternatives of *ḫnʿ*, and moreover these are all undoubtedly only different spellings of a single word. The transliteration *ḫn*(ʿ) or *ḫnʿ* is to be recommended in all examples. In general, these writings appear to be due to two phonetic factors, (*a*) the relationship between and , and (*b*) the association of and .

(1) Cf. *Annales du Service,* 43, 303.

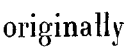
(2) There is little evidence at Edfu of the change from or to (cf. p. 95 above) and it is clear that this process was only in its beginning at the time covered by the temple inscriptions, cf. (*Mam.*, 167, 9) for *Nbt-ḥwt* "Nephthys" and (*Mam.*, 114, 3) for "second stanza".

(3) Cf. the varr. (IV, 17, 7), (VII, 26, 7), etc.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

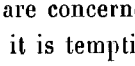
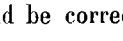
2. Note the interesting use of *mdd* for *md*ꜣ in  (II, 85, 6) =  (I, 399, 18) *mdꜣi*, an epithet of Min, and  (I, 471, 17 = XII, Pl. 355) var.  (*C. D.*, II, 145, 9 = Mariette, *Dendérah*, II, 42 *b*; *C. D.* II, 155, 8 = Mariette, *op. cit.*, II, 42 *a*) *m*(ᶜ)*d*ꜣ, a basket or container for dates (for *mᶜdꜣ* MAAXE see now Gardiner's note in *J. E. A.* 26, 157, 158).

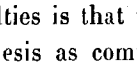
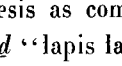
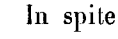
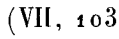
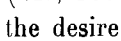
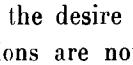
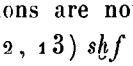
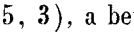
(*b*) *Metathesis:*

 originally *šs*ꜣ becomes *sš* in  (IV, 13, 2) *sš* "open".

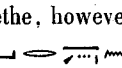
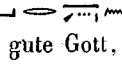
 — *šs* — *sš* in (III, 132, 2) *sšm* "guide, lead".

 — *mt*ꜣ — *tm*ꜣ in (III, 132, 6) *tm*ꜣ-ᶜ "strong of arm".

Obs. Metathesis does not appear to be very common as far as the values of individual signs are concerned. A rather doubtful case is the word  (VII, 146, 2) "mother" which it is tempting to transliterate as *mwt*. It is, however, by no means certain that it would be correct to do so in every example : the word occurs in special contexts and I have as yet no clear evidence of its occurrence in phrases where beyond any doubt it replaces ,[1] except in  (IV, 283, 7; *C. D.*, IV, 80, 17) *mwt-ntr nt Kꜣ-mwt·f* (cf. VIII, 35, 5, quoted p. 122 below), and it may very probably be *tmꜣt* (cf. *Wb. d. äg. Spr.*, V, 308). Until clear evidence to the contrary is forthcoming, it would be more cautious to transliterate in most cases as *tmꜣt*.

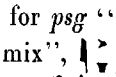
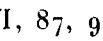
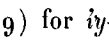
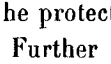
The degree to which metathesis affected Ptolemaic vocabulary is uncertain and it would be as well for the present to approach the question with caution and reserve. One of the difficulties is that the normal and regular writings of a number of words seem to show metathesis as compared with their earlier forms, e.g.  (VI, 36, 5) *ḫsdb* for old *ḫsbḏ* "lapis lazuli",  (VII, 111, 11), (V, 44, 5) *ḫrs* for old *ḫsr* "drive away". In spite of such forms as  (V, 122, 7), it is not yet certain whether there was real metathesis in these words which seem to owe their form, like such writings as  (VII, 103, 2) for *bd* "natron",  (III, 195, 1) *sbḳt*, a name of the sacred eye, to the desire to obtain better groupings. On the other hand, such aesthetic considerations are not apparent in  (VII, 162, 4) *wfᶜ* for *wᶜf* "smite", or  (IV, 212, 13) *sḫf* for *sfḫ* "loose, unloose", though the latter may be influenced by (V, 145, 3), a better grouping than , or by Coptic CAϢϥ "seven".

In addition to those words that regularly seem to show metathesis, there are numerous examples of apparent metathesis[2] that occur sporadically. The majority of these are

[1] Sethe, however, read  *mwt* in  which he translated as "der gute Gott, der Sohn des Verbergenen (Amun), zur Welt gebracht durch Mut" (Sethe, *Amun und die Acht Urgötter*, p. 88).

[2] Cf. Lacau, *Métathèses apparentes en égyptien* in *Rec. de Trav.*, 25, 139-161.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

purely graphic as  (VI, 34, 8) for *ḥ'pi* "Nile",  (VI, 149, 2 : fairly common) for *psg* "spit",  (IV, 282, 11) for *mḥnt* "uraeus",  (IV, 151, 16) for *šbn* "mix",  (VI, 314, 6) for *ibr* "unguent". In the same tradition are such groupings as  (V, 131, 9),  (V, 131, 5) for *Ḥwt-Ḥr nbt 'Iwnt*,  (*Mam.*, 151, 17) for *ndm ptr·f* "pleasant to see",  (VI, 162, 12) for *hnw* "*hin*-measure",  (*Mam.*, 91, 7) for *mḥr* "suckle". Other examples, however, are due to scribal errors, as  (II, 60, 11 = XII, Pl. 371; VIII, 29, 16) for *nb pt*,  (VI, 87, 9) for *iy-m-ḥtp* "Imhotep",  (VII, 147, 8) for *ḥbs·f n·k bht* "he protects thee",  (IV, 210, 13 for *ḥsb* "count".

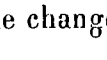
Further research and study will be necessary before it will be possible to speak with finality on the part played by metathesis. It is clear, however, that the scribe had not the slightest compunction in subordinating the strict order of signs to purely aesthetic and graphic considerations whenever it suited him to do so. This is yet another sign of the importance of the decorative aspect of Ptolemaic writing.

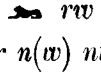
(*c*) *Assimilation* (cf. III, B, 3, p. 110 above).

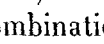
 originally *šsp* becomes *šp* in  (I, 373, 8) *nšp* "breathe".

 originally *šsp* becomes *šp* in  (VI, 141, 5), var.  (VI, 248, 3) for *sšp* "light".

(*d*) It is convenient to mention here a special case, not at all frequent, in which a sign acquires a special value or acts as a substitute for that value, not because of any phonetic change in the sign itself but as an indication of the changes which certain combinations of consonants have undergone.

 *rw* (*lw*) replaces  *mr* (*imi-r*) in  (III, 129, 8) *mr ḥmw-ntr n(w) ntrw ntrwt* "overseer of the priests of the gods and goddesses";  (III, 131, 2) *mr st-ḫnt*, a title (cf. the var. quoted above under III, B, 1 *g*, p. 108). This particular use of , which is not uncommon, is due to the combination *m* + *r* giving rise to *l* as in Coptic λεμηηωε, λαωανε.

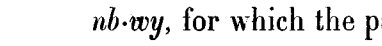
It is in accord with the same tradition that there arise such writings as  (IV, 5, 7) for *sḫrw* "plans" and hence  (V, 7, 3) for *irt sḫrw* = ερωιωι, or  (V, 352, 6),  (V, 400, 4) for *sb;* "star", plural  (I, 16, 4).

A slightly different phenomenon is illustrated by the rare use of  *rmn* instead of  *nb(t)* in  (IV, 303, 13), varr.  (IV, 105, 2),  (VII, 307, 14) for *Nbt-ḥwt* "Nephthys". The following explanation of this

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

I owe to Mr. Grdseloff and Dr. Polotsky who point out to me that we have here a further example of the phenomenon already pointed out by Lacau[1]. *Nbt-ḥwt* = **nmḥt* (cf. ) and becomes *rmḥe* (cf. ⲣⲉⲙϩⲉ) which gives rise to the artificial *graphic* writing *rm(n)-ḥ(wt)*. This is a purely graphic trick, for the spoken language preserved the etymological form ⲛⲉⲃⲑⲱ, but it is a trick founded on a genuine phonetic phenomenon.

5. By employing old or familiar signs in new forms or from different aspects.

 for [2] in (IV, 8, 6) *whm tw ỉr(t) k;t m Ḥtp-nb·wy*, for which the parallel text has  (VII, 7, 3) *whm tw ỉr(t) k;t m Ḥwt-ḳn* "work was resumed in *Ḥtp-nb·wy* (var. *Ḥwt-ḳn*)".

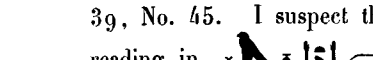
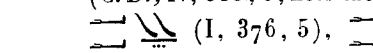
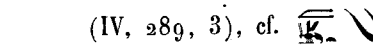
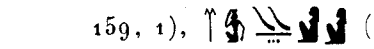
, var. in frequent use , for  in (IV, 10, 13) *ḫr ḫ;t* "before",  (VII, 8, 7) *ḫ;t-sp* "regnal year".

 for [3] in (I, 41, 3 = XI, Pl. 223) *wp ʿ;·wy Bḥdt* "open are the doors of Behdet",  (I, 379, 7) *wpš* "illumine".

 for *ỉm* in (IV, 10, 9) *Db; pw ḏb; ḥfti m-ỉm·f* "it is Retribution Town (Edfu) in which the enemy is punished". See further Obs. 2 below.

Obs. 1. There is, of course, a strong element of punning behind some of these uses, especially that of , where there is clearly a play upon the notion of "division". Similarly ⋆ 5 (see above III, B, 1 *b*, p. 103), which is due to a visual pun on the five-pointed star, is also in a sense a new form or aspect of the normal . Sethe, however (*Von Zahlen und Zahlwörter*, 25) was inclined to see in ⋆ 5 a derivative of ⋆ *dw;*.

[1] Cf. Lacau, *Sur le* (*n*) *égyptien devenant* ⲣ (*r*) *en copte* in *Recueil Champollion*, 721-731.

[2] This use has already been noted in cryptograms; cf. Drioton in *Revue d'Égyptologie*, I, 39, No. 45. I suspect that *k;t* is the best reading in  (*C. D.*, IV, 113, 6, note the alliteration) and in  (I, 376, 5),  (IV, 289, 3), cf.  (VII, 159, 1), (I, 432, 11 = XII, Pl. 341) "the handiwork of the two ladies". In the near future I hope to devote a note to the reading of and its variants: the reading *msnty* proposed by *Wb. d. äg. Spr.*, II, 144 is most improbable.

[3] Noted in an Eighteenth Dynasty cryptogram by Drioton in *Revue d'Égyptologie*, I, 41, No. 78. Hence at Dendera, but not apparently at Edfu, is used to denote the number 2, e.g. *sḥ 3* "three chambers" (Dümichen, *Baugeschichte*, XIII, 3).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

2.  acts as a variant of , e.g. (IV, 19, 12) *ʿš* "cedar".

 also has the value *ḫt* in (IV, 18, 1) *ḫt* "inscribe", (IV, 11, 6) *m-ḫt·f* "in his train, after him" (cf. also IV, 18, 4; 20, 2; 195, 7) and hence by phonetic change is equivalent to *ḫr* in (IV, 14, 1) *ḫr-m-dì* "within". Here also may simply be acting for , which also has the value *ḫt*, e.g. (V, 243, 17) *shpr ḫpr nb m-ḫt ḫpr·f* "who created every being after he came into existence". On the other hand, it is possible that in these examples is only acting as a variant of . I am rather inclined to favour this second alternative.

6. *Abbreviation.*

Apparently restricted to the use of for *wḏ;* and for *snb* in the common and related phrases. Under the influence of this formula, however, both and very occasionally have the values *wḏ;* and *snb* in other contexts : e.g. (II, 26, 10 = XII, Pl. 38o) *swḏ; B;ḳt* "who protects Egypt"; (VI, 95, 11; *Mam.*, 129, 15) *mì snb·t* "as thou art well", (VI, 96, 8) *ḫrì-ìb·t m snb* "thy middle is well".

7. *From the hieratic*

× *mʿb;* in (III, 33, 2) *mʿb;* "spear"[1].

 ḫw in (V, 25, 8) *ḫw* "smite".

 4 in (VI, 92, 13) *Ḥmnw* "Hermopolis", cf. (VI, 168, 15).

 pḫr in (VII, 192, 11) *pḫr* "walk round".

 9 in (VII, 15, 9) *mḫ 9* "nine cubits".

 s; in (VI, 19, 11) *rd nb ḫr s; t;* "everything that grows on the back of the earth", (VI, 203, 5) *s;w* "wall".

 nm for [2] in (VII, 253, 1) *ḫnm* "scent".

Obs. Misunderstanding or misreading of the hieratic sometimes leads not to the creation of special forms but to the replacement of the correct sign by a combination that has no real connection with the word or sign in question, as in (IV, 59, 8) *stì* "shoot" for the correct (IV, 343, 4), or (VII, 159, 10) for *m-stì n* "before, in the presence of".

[1] Cf. Faulkner, *Pap. Bremner-Rhind* (*Bibliotheca Aegyptiaca*, III), p. 94, note on p. 43, line 6. — [2] Cf. *Annales du Service*, 43, 268, Note XL.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

8. *By false analogy.*

 originally *irỉ*, *iryw* is *pḥr* because of  *pḥr* in (VII, 4, 7) *pḥr* "corridor".

 originally *r*, *irỉ* is *pḥr* because of *pḥr* in (VII, 33, 13) *ṯs pḥr* "vice-versa".

 is normally *ʿ* and is substituted for and hence acquires the value *dỉ*, because is confused with , in (III, 119, 5) *rdỉ* "give".

 is *gb* in (VII, 89, 7) *Gb* "Geb" because it was imagined that since could be substituted for *s;* "son" it could therefore be substituted for in .

9. *Confusion between signs.*

Very frequent with certain signs. There is, of course, nothing essentially "Ptolemaic" in these uses and many of the most common and typical examples occur in earlier periods also. I only give a very brief selection.

 ḳd and *ỉs* : is often *ỉs* as in (VII, 27, 11) for *ỉst* "crew".

 p; and *ḫn, ḫm;* : is *ḫn* in (VIII, 106, 14) *ḫn·f ḥr bḫnt* "he alights on the pylon"; and *ḫm;* in (*Mam.*, 88, 17) *ḫm;·n·f wnnt* "he created that which exists".

 and : is *ỉr* in (III, 168, 5) *ỉrw* "image".

 mdw and *ḫrw, ḫpt* : is *ḫr* in (III, 86, 10) *ḫrwyw* "enemies" and *ḫp* in (VII, 166, 8) *m ḫp* "in haste"; is *mdw* in (VIII, 119, 7) *ḏd mdw* "utterance".

 stp and *nw* : is *nw* in (VII, 8, 4) *nwḫ* "be drunk", (III, 285, 6) *ms nw; ʾInp(w)* "who brings the adze of Anubis" (cf. *Wb. d. äg. Spr.*, II, 222); is *stp* in (III, 127, 10) *stp* "cut up".

 and *sp* and *nỉwt* : (III, 127, 10) for *whỉ sp·f*, an epithet of Seth; (V, 176, 8) for *nỉwt* "city" (cf. the alphabetic uses of , and mentioned p. 66 above).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

C. COMPOSITE SIGNS.

To complete the preceding survey I add a brief outline of the principal types of composite signs. The classification is based on the form or structure of the signs and will serve, it is hoped, as a guide to what is permissible and what is not permissible when deciphering texts that employ such signs. It will be realised that the component elements of such signs could obtain their values in any of the ways already indicated in other sections of this paper.

1. Two or more uniconsonantal signs are combined :


ʿb in  (III, 88, 9) *ʿbʿ* "boast".
bʿ in  (VIII, 139, 6) *ḏbʿw* "fingers".
bꜣ in  (III, 316, 16) *bꜣḥ* "phallus"[1].


bḥ in  (III, 49, 13) *B(ꜣ)ḥ(w)* "East".

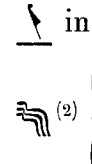

bš in  (IV, 336, 9) *bšỉ* "vomit".
šb in  (III, 118, 2) *šbw* "provisions".


ỉn in  (V, 4, 5) *ỉn ḥmw tpỉ n wnwt·sn* "by the foremost workers in their craft".


šr in  (I, 40, 14 = XI, Pl. 222) *mšr* "evening".


pn in  (VII, 3, 4) *mnw pn nfr* "this beautiful monument".

in (I, 25, 8 = XI, Pl. 213) *ḫt* "inscribe",

[2]
ḏr·f in  (*Mam.*, 122, 11) *tꜣ ḏr·f* "the whole earth".
ḏsf in  (I, 411, 1) *ḫp(r) ḏsf* "self-created".
ḏsr in  (I, 432, 11 = XII, Pl. 347) *r ḏsr ḥʿw·k* "in order to make sacred thy body".


ʿbb in  (VI, 87, 2) *ʿbb* "harpoon".

[1] A very rare value due solely to the juxtaposition of and and not occurring in other contexts : see further *Annales du Service*, 43, 250, Note IV.

[2] In , however, which occurs in the titles of Hathor  (*Mam.*, 134, 10) *ḫnwt sꜣbwt*, and (VII, 167, 11) *špst nt sꜣbwt*, acts as determinative.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

b'b' in (VI, 77, 8) *b'b'* "drink".

gbgb in (VII, 292, 12) *gbgb* "slay".

Obs. 1. Note the exceptional combinations of the type for *'bb* in (IV, 374, 1) *'bb* "harpoon" and for *šbšb* in (IV, 309, 13) *šbšb* "divide". For such signs and writings, see *Annales du Service*, 43, 253, Note XIX.

2. There is no rule governing the order in which the component elements of composite signs are to be read. Either the vertical or the horizontal sign can be read first according to the circumstances and if need arises a sign can be read in two ways. It is clear that a very considerable proportion of these signs are formed from a desire to have more pleasing and square groupings of adjacent signs (see p. 126).

2. Uniconsonantal and multiliteral signs are combined.

(*a*) Simple combination of uniconsonantal and multiliteral signs :

rdi in (VI, 162, 12) *rdi r wḥ;t* "put into a cauldron".

ḏsr in (I, 40, 12 = XI, Pl. 222) *ḏsr sšt;* "sacred of image".

ršwt in (IV, 17, 4) *St-wrt m ršwt* "the Great Seat is in joy".

, var. (IV, 14, 10) *bs;* in (VII, 13, 7) *ḥr ir(t) bs;·f* "protect him".

mds in (III, 287, 9) *mds 'f(')* *m 'bb·f* "who slays the crocodile with his harpoon".

wmt in (II, 121, 8) *wmt ib* "stout of heart".

rwḏ in (VII, 19, 8) *tḫn·wy wrw rwḏ m-rwt·sn* "the two great obelisks are firm before them".

rwt in (VIII, 106, 14) *m-rwt* "beyond, outside".

t;š in (VIII, 8, 15) *t;š* "boundary".

ḫntš in (I, 420, 5 = XII, Pl. 343) *ḫntš ntrwt m im;·f* "the goddesses rejoice in his grace" : var. in the parallel passage (I, 426, 8-9 = XII, Pl. 348).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

 *imn* in  (VII, 147, 15) *'Imn* "Amun" [1].

 *šns* in  (IV, 40, 4; cf. the parallel V, 27, 15) *šns*, name of the *mr* of the XXIInd (supplementary) nome of Lower Egypt.

 *šns* in  (IV, 40, 6; cf. the parallel V, 28, 2) *šns*, name of the XXIInd. (supplementary) nome of Lower Egypt.

 *nt-ᶜ* in  (VI, 102, 3) *nt-ᶜ* "rites".

(*b*) Phonogram or ideogram plus phonetic complement :

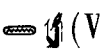
 *smsw* in  (VIII, 139, 9) *s; smsw n Wsir* "eldest son of Osiris" [2].

 *sd* in  (IV, 149, 2) *ḥb-sd* "jubilee".

 *ᶜb* in  (IV, 378, 5) *m-ᶜb* "together with".

 *wtt* in  (IV, 18, 12) *wtt* "beget".

 *ḥsf* in  (VI, 27, 7) *ḥsf* "repel".

[1] was explained by Sethe, *Die Bau- und Denkmalsteine der alten Agypter und ihre Namen* (*Sitzb. Preuss. Akad. d. Wiss.*, Phil.-Hist. Kl. 1933), 8, note 18, as *i m n* = "*i* together with *n*". This is not impossible, there is certainly no objection to it from the grammatical point of view, but I have increasing doubts as to the accuracy of suggested origins of the type "A *m* B" = "A together with B", for signs of this type are rare (though this does not prove this sort of origin to have been impossible) and all known to me can be explained in other ways. The simplest explanation of *imn* is  *im* +  *n* = *imn*. depicts "what is inside", *im* (suggested by Drioton in *Revue d'Égyptologie*, I, 49, No. 180), the underlying idea being similar to that by which it was possible to use for *ḫnw*, or as *imi* (*Urk.*, IV, 46, 14; 49, 7), which led to the further use of within an egg as *im*, first suggested by Sethe (in Spiegelberg-Northampton, *Excavations in the Theban Necropolis*, 10) but of which the earliest example known to me occurs in a text of the Thirteenth Dynasty published by Ranke in *Mélanges Maspero*, I, 362.

[2] If were the only writing of *smsw*, there would be no obvious objection to suggesting that it originated in *s m sw* "a man (*s*) together with *sw*". This explanation appears less satisfactory when other spellings are taken into account, e. g. the very common  (VI, 289, 6) or  (IV, 200, 2). The most satisfactory explanation is to see in a combination of the ideogram *smsw* and the phonetic complement *sw*, and I can see no essential difference between (III, 78, 12) and beyond the fact that in the second example, to give a more compact grouping, the man is depicted holding instead of the staff. Note that very occasionally itself acts as determinative e. g. (IV, 94, 18). This conclusion is only reinforced when we take into account the use of such signs as in (*C. D.*, IV, 115, 2) *sms(w)t s;t Rᶜ* "eldest daughter of Rēᶜ" and the masculine form (V, 93, 5) for which a parallel phrase gives (V, 143, 18).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

šḫm in (VII, 75, 6) *šḫm* "strong".

sk in (VII, 20, 2) *sk* "perish".

(III, 137, 2), var. IV, 150, 4) *sm;* "slay".

ššm in (VII, 134, 15) *ššm* "guide".

(*c*) Phonogram plus following suffix pronoun (apparently restricted to).

sm;·f "he unites" (IV, 9, 4)

wnmi·f "his right hand" (VIII, 145, 17)

ḥw·f "he protects" (VII, 24, 6)

tr·f "his season" (VII, 120, 4)

ḥs·f "he praises" (VII, 24, 5).

Obs. Note the unusual use of for *nfr* + suffix *k* in (*C. D.*, III, 106, 11) *nfrw·k* "thy beauty".

(*d*) Rare are combinations such as

in (IV, 380, 6) *ḥḳ; Fnḫw* "ruler of Phoenicia",

in (VI, 6, 7), var. (VI, 285, 12; 288, 1) *nḏ it·f* "protector of his father": but note (V, 9, 8) *t; ḥr ndb·f* "the earth on its foundation".

Obs. These infrequent forms are clearly imitations of the combinations already mentioned under (*c*) and are used, like nearly all composite signs, with the purpose of making better groupings.

3. Two or more phonograms are combined to form a single word, a compound word or a complete phrase.

(*a*) Simple combinations :

msdm in (V, 191, 11) *msdm* "eye-paint" (1).

ʿntyw in (VII, 89, 1) *ʿntyw* "myrrh".

(1) apparently is not to be regarded as an error for which one would expect. Much to my surprise I have been unable so far to find a single Edfu example of and Edfu uses either (II, 84, 13; 297, 17) or some other spelling (e. g. I, 88, 4; 425, 11; III, 143, 17-18; 144, 5; VII, 277, 10-11) is a Dendera form (e. g., *C. D.*, IV, 267, 3).

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

s; Rᶜ in (VIII, 68, 7) *s; Rᶜ nb ḥᶜ(w)* "Son of Rēᶜ, lord of diadems".

nn-ib in (VI, 166, 13) *nn-ib* "styrax".

ᶜnḫ+ʾImn / *Rᶜ+shm* — of frequent occurrence in the name of Ptolemy XI Auletes, e.g. (VIII, 90, 5) *iwᶜ n p(;) ntr nti nḥm, stp Pth, ir M;ᶜt Rᶜ, shm ᶜnḫ ʾImn* "Heir of the Saviour God, chosen of Ptah, doer of truth of Rēᶜ, living image of Amun",

irt Rᶜ in (III, 353, 13) *irt Rᶜ nbt pt* "Eye of Rēᶜ, mistress of heaven".

ᶜnḫ ntr in (III, 160, 8) *ᶜnḫ ntr nfr* "long live the good god".

dd mdw "utterance" (V, 205, 17).

nfr ḥr in (V, 229, 7) *Ḥr-Bḥdti ntr ᶜ; nb pt nfr ḥr ḥri st·f wrt* "Horus of Behdet, great god, lord of heaven, beautiful of face on his great seat".

šsp-ᶜnḫ in (V, 304, 6) *šsp-ᶜnḫ n S;b-šwt* "living image of Him-of-the-dappled plumage".

ḥs(;)-šnᶜ in (III, 88, 9) *ḥs(;)-šnᶜ m dt·f dsf* "powerful(?) of body"; cf. (I, 374, 3)[1].

, var. (V, 390, 11), *srḳ ḥtyt* in (VII, 196, 1) *srḳ ḥtyt n bw nb* "who causes the throat(s) of all men to breathe".

ḥnk M;ᶜt "offering truth" (V, 359, 7).

[1] The precise meaning of *ḥs;-šnᶜ* has not been determined; in most examples "strong, powerful, power" appears to make good sense, though "fierce, ferocious" would suit certain passages. Professor Blackman and I were at one time inclined to read all examples of as *;m* because it was usually used with reference to Min or Horus and was connected with words that either mean or might mean "phallus", e. g. *dt* (III, 87, 8-9; 88, 9; V, 241, 15), *nḫt* (III, 122, 4), *ḥᶜw-ᶜnḫ* (IV, 71, 7-8) or *nfrw* (IV, 271, 4). This breaks down, however, on further examination, for instead of (V, 241, 15) we find (I, 375, 14-15; cf. also III, 88, 9; I, 374, 3 quoted above; De Morgan, *Ombos* I, 21, No. 46) and for (III, 122, 4; cf. I, 242, 11) we have (I, 82, 10; cf. II, 85, 3). Compare also (I, 82, 8) with (I, 16, 12). Only in the group *ḥᶜw-ᶜnḫ, nfrw* have I been unable to find any full spellings with *ḥs;-šnᶜ* and it is possible that in this group we should read *;m*.

There are other phrases in which cannot read *;m* and where *ḥs;-šnᶜ* must be used, e. g. III, 132, 15; 188, 10; IV, 299, 6(?); 383, 13; I, 375, 10. Note that Min is (IV, 270, 15) *nb ḥs(;)-šnᶜ* "lord of power".

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

 *gs-dp* in  (V, 368, 11) *ḥr ir(t) gs-dp·k* "protect thee".

 ḥr-ʿḥ; in  (IV, 39, 8; for the reading cf. V, 27, 5) *ḥr-ʿḥ;* "Babylon"[1].

 ntr ntrt in  (V, 369, 7) *ntrw ntrwt* "gods and goddesses".

 *mwt-ntr* in  (V, 346, 4) *mwt-ntr* "god's mother"; sometimes merely *mwt*, e. g.  (VIII, 35, 5) *mwt-ntr n K;-mwt·f* "mother of Kamephis".

 *Ḥr-Bḥdtî ntr ʿ; nb pt* "Horus of Behdet, great god, lord of heaven" (V, 312, 4).

 (VII, 193, 3) *bik n nb* "falcon of gold" (usually written at Edfu as though to be interpreted "falcon of the Golden One").

(*b*) Punning combinations :

 *in ḥrt*[2] in  (I, 25, 15 = XI, Pl. 214) *in ḥrt n nb·s* "who brings the Distant Eye to its lord",  (VI, 229, 13) *ʾIn-ḥrt* Šw "Onuris-Shu".

 *nsw*[4] "king" (V, 229, 13) (= *in sw* "who brings it", i. e. the eye).

 nsw[5] in  (VIII, 133, 1) *nsw ntrw rmṯ* "king of gods and men".

 ʾin-ḥrt in (III, 278, 16) *ʾIn-ḥrt ntr ʿ; nb Ṯn* "Onuris, great god, lord of This".

4. Combinations of signs one of which acts as support or determinative.

 nsw in  (VII, 8, 3) *smrw nsw ʿḥʿ m ḫkrw·sn* "the royal companions stood in their fine array".

 (V, 311, 10), varr.  (V, 311, 11),  (VII, 3, 2) *k;* "Ka, spirit".

 ;ḫt in  (*Mam.*, 116, 9) *imî ;ḫt* "He who is in the horizon".

[1] This interesting writing was communicated to me in 1943 by Dr. A. H. Gardiner.

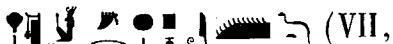
[2] Cf. Junker, *Die Onurislegende*, 6.

[3] The exact form of this sign is not in the fount : in the original the free arm is bent across the breast.

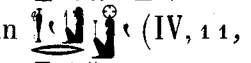
[4] The earliest example of this value known to me occurs in  *ʾImn-Rʿ nsw ntrw* "Amen-Rēʿ king of the gods" (Guilmant, *Le Tombeau de Ramsès IX*, Pl. V, collated). Piankoff informs me, however, that he has seen an example of  *nsw* in an inscription of Ramesses II in the Temple of Luxor.

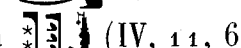
[5] The earliest example known to me occurs in a text of Ramesses II in the chapel of Khons in Luxor Temple : cf. Daressy in *Rec. de Trav.*, 16, 54.

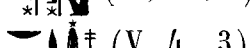
BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

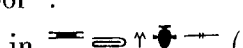
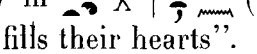
ḥm in  (VII, 8, 6) *ḥr wṯs ḥm·f ḏr ḥrw pn r ḥm ḏt* "uplifting His Majesty (Horus) from this day to the end of eternity".

ḥnwt in  (III, 41, 4) *ḥnwt T3-ntr* "Mistress of God's-land".

niwt in  (IV, 11, 13) *ḥs·f Rᶜ r niwt·f* "he gives thanks for his city".

wṯst in  (IV, 11, 6) *psḏt Wṯst* "the ennead of Edfu".

sb3 in  (V, 4, 3) *wᶜ nb im m sb3 nfr* "each one of them is a beautiful door".


- *pḫr* in  (III, 20, 17) *mrwt·k pḫr m ib·sn* "love of thee fills their hearts".
- *dbn* in  (V, 52, 7) *Ḥr dbn(y) dbn hh* "Horus the traveller who traverses the sky".

 *šm* "go" (VI, 112, 3).

5. One or more signs, usually but not invariably ideograms or phonograms, are combined with a determinative.

(*a*) Simple combinations.

 (V, 286, 6), *ḥḥ* "eternity".

 *sm3* "copulate" (IV, 384, 17).

 *wtt* "beget" (VII, 147, 3).

 *nb* "lord" (VIII, 111, 12).

 *sḫm* "powerful" (III, 35, 8).

 *ḥᶜ* "stand" (VI, 270, 2).

 (VII, 6, 5), var. (VII, 3, 7) *ḫt* "inscribe".

 *tr* "season" (VII, 8, 7).

 *Ḥḏt-Nḫn*, an epithet of Nekhbet (V, 237, 16).

 *nt-ᶜw* "rites" (VI, 9, 8).

 *šmᶜ* "Upper Egyptian grain" (VI, 281, 1).

Obs. Note that very occasionally a combination of phonogram and determinative is used simply as a phonogram, e. g.

 *ḫw* in (V, 231, 4) *ḫwd* "enrich".

 *nd* in (VIII, 26, 2) *ndb* "foundation".

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(*b*) Very common in geographical or place-names are combinations with , (or its substitute) and .

 (VII, 230, 9),  (III, 64, 1),  (III, 110, 1),  (VI, 12, 6),  (IV, 225, 13),  (*Mam.*, 122, 1) for *Šmᶜ* "Upper Egypt".

 (V, 177, 7),  (III, 25, 1),  (VII, 10, 9),  (VI, 7, 1) for *Mḥw* "Lower Egypt".

 (VI, 276, 2) *Ḳbḥ-wy* "the Two Sources" (Egypt).

 (VI, 296, 7) *Wṯst-Ḥr* "Edfu".

 in  (VIII, 145, 12) *ỉ;bt* "East".

 in  (VI, 294, 14) *ỉmnt* "West".

(*c*) Where the nature of the sign permits, the whole or part of the spelling is placed within the determinative.

 (V, 311, 12) *bḫnt* "pylon".

 (IV, 6, 4) *ḥ;yt* "court".

 (VIII, 111, 7) *rwt* "portal, gate".

 wsḫ in  (IV, 9, 8) *swsḫ* "extend, increase".

 (VI, 87, 12) *wsḫt* "court".

 (VII, 5, 3) *wsḫt wdn* "court of offerings".

 (VIII, 62, 16) *Kmt* "Egypt".

(*d*) Very rarely a determinative is combined with a following pronoun.

 in  (III, 220, 4) *ḫy·k* "thou art uplifted".

 in  (VII, 11, 6) *mnw pn* "this monument"

6. Certain ideograms or phonograms, whose form lends itself to such uses, enclose or "hold" other signs in order to form complete words or phrases.

(*a*) The sign encloses one or more signs that give the whole or part of the spelling of the word or a following suffix : particularly common with

 (VI, 154, 2) *ḏt* "eternity".

 (V, 315, 14) *rn·f* "his name".

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

(IV, 13, 10) *ḥd·f* "his shrine" (or perhaps, *k;r·f*).

(VI, 306, 5), var. (IV, 11, 8) *ḥwt-ntr·f* "his temple".

ḥwt-ntr "temple" (III, 1, 14).
ḥwt-bik "Mansion of the Falcon" (VIII, 116, 5).
Ḥwt-Ḥr "Hathor" (VII, 28, 9).

Ḥwt-Ḥr nb(t) in (VI, 249, 14) *Ḥwt-Ḥr nb(t) 'Iwnt* "Hathor, mistress of Dendera".

(VIII, 63, 4), var. (VII, 7, 3) *ḥwt ḳn* "Mansion of Valour" (a name of the temple of Edfu).

(III, 104, 2), var. (III, 113, 10), (III, 166, 6) *ḥwt wry(t)*.

(*Mam.*, 39, 13), var. (*Mam.*, 39, 16) *wsḫt ḥtp(w)* "hall of offerings".

(III, 339, 9) *pr md;t* "the (temple) library".

(III, 346, 3) *pr ʿnḫ* "the house of life", i.e. the scriptorium [1].

(VII, 17, 10) *pr ḥd* "treasury".

(VI, 319, 6), varr. (VI, 321, 4), (VI, 319, 8) *pr ḏt*, one of the names of the temple of Edfu.

Cf. also *ntri n* in (III, 253, 12) *mw ntri n ir wnn(t)* "Divine seed of the creator of what exists".

(*b*) A special class of "holding" sign is that in which forms part. There are numerous examples of this type of combination, the signs that are held being determinatives or other words be they nouns, verbs, prepositions or pronouns.

k; "spirit" (VII, 75, 16).

k;w "provisions" (V, 311, 11).

di k;w "give provisions" (V, 311, 11).

bwt k;·f "the abomination of his Ka" (VII, 113, 3).

n k;·k "for thy Ka" (V, 64, 3).

$=k$ ( ) plus determinative ( ) in (VIII, 107, 4) *mk* "joy, festivity".

nḫb k; in (VII, 7, 1) *nḫb k;·f is im·s* "his name was inscribed therein", but note (VII, 9, 7) *nḫb·tw k;·f* "his name was inscribed".

[1] Cf. GARDINER, *The House of Life* in *J.E.A.*, 24, 137-179.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

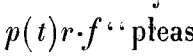
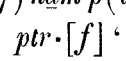
7. *Final remarks on the Composite Signs.*

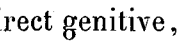
The values of the different signs that make up the composite signs are controlled by the same rules that govern the use and formation of all uniconsonantal and multiliteral signs. It is clear, however, that the chief reason for their formation and use was the desire to enhance the decorative aspect of hieroglyphic writing, an aspect that it is certain must always have been strongly in the mind of the scribe. The vast majority of the composite signs are simply combinations of normally consecutive signs combined in such ways as to form neater and more compact groups than if they had been written one after the other in the more usual manner. Such combinations, at least to the Egyptian eye, must undoubtedly have increased the decorative value of the texts by grouping signs in more pleasing ways and by creating new forms and thereby introducing an element of variety.

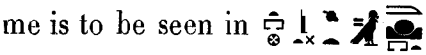
It may, perhaps, be thought that the analysis just given of the composite signs is needlessly elaborate and it could certainly have been presented in more compressed form if I had so desired. The present method of presentation has been adopted deliberately in order to illustrate as fully as possible with my present material the ways in which the composite signs could be used and to gain some idea of the manner of their formation. The important point that emerges from an examination of these signs is that their component elements are inseparable, in decomposing and deciphering a composite sign it is impossible to insert another word or phrase between any of the signs of which it is composed and these signs must be read consecutively. This, of course, is only to be expected, for the composite signs are nothing but substitutes for signs that are written consecutively in normal writing.

There may seem to be a contradiction between this statement and the phrase  quoted above (p. 125), but this is not really so. The scribe was always free to take certain liberties with the strict order of signs if he could thereby obtain a better grouping (see above p. 113). There were definite limits, however, to the liberties that he could take, but he could always alter the order either of the signs composing a word, if it suited his purpose, or of some slight formative element of the verb, the indirect genetive or, very

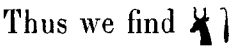
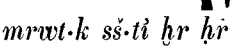
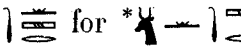
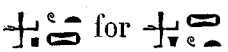
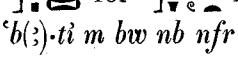
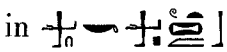
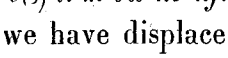
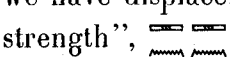
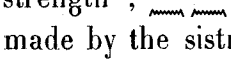
BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

rarely and in special circumstances, two consecutive words. What he could never do was to split up a composite sign and use the separate signs as widely separated words or to spell words that are not consecutive. The utmost lengths to which he could go are illustrated by the special uses of  *ndm* such as  (*Mam.*, 151,17) *ndm p(t)r·f* "pleasant to see",  (VII, 90, 2) for *nḫn nfr ndm ptr·[f]* "a goodly stripling pleasant to see" (cf. the parallel V, 249, 19), or  (VII, 90, 3) for *ndm ʿnḫ*, a name of Edfu.

Another good example of the splitting of a composite sign is afforded by the name of Ptolemy XI. In addition to the spelling quoted above (III, C, 3(*a*), p. 121), we find variants that employ the indirect genitive,  *ir Mꜣʿt n Rʿ sḫm ʿnḫ n 'Imn* (VIII, 58, 10), where clearly the scribe was reluctant to abandon his neat grouping, particularly useful in the restricted space of a cartouche, and it was felt that the insertion of the indirect genetive did not seriously split the composite sign.

Yet another apparent but deceptive example of splitting occurs in the group  *Ḥr-Bḥdt . . . . mry* which occurs in  (V, 304, 10-11) *Ḥr-Bḥdt ntr ʿ; nb pt Sꜣb-šwt pr m ;ḫt Rʿ-Ḥr-;ḫty ḫntỉ st-wrt·f mry* "beloved of Horus of Behdet, great god, lord of heaven, He-of-the-dappled-plumage who came forth from the horizon, Rēʿ-Harakhte pre-eminent in his great seat". The same is to be seen in  (VIII, 30, 14-15) *Ḥr-Bḥdt ntr ʿ; nb pt Sꜣb-šwt pr m ;ḫt Rʿ-Ḥr-;ḫty ḫntỉ St-wrt mry* "beloved of Horus of Behdet, great god, lord of heaven, He-of-the-dappled-plumage who came forth from the horizon, Rēʿ-Harakhte pre-eminent in the Great Seat",  (VIII, 58, 10-11) *Ḥr-Bḥdt ntr ʿ; nb pt mry Sꜣb-šwt pr [m ;ḫt] . . .*,  (VIII, 41, 16) *Ḥwt-Ḥr nbt 'Iwnt ỉrt Rʿ nbt pt ḫnwt ntrw nbw mry* "beloved of Hathor, mistress of Dendera, Eye of Rēʿ, lady of heaven, mistress of all the gods". In all the examples the inversion of the position of *mry* is not real, it is due to the fact that the divine names and titles are written in retrograde script, but *mry* which is written in the normal direction occurs in its usual position at the end of the phrase and thus happens to coincide with the first sign of the phrase.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

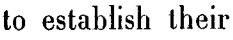
The same alteration of the strict order is to be seen in other contexts. Thus we find  for  in  (V, 141, 9) *dì·i mrwt·k šš·tì ḥr ḥr nbw* "I cause love of thee to be spread among all men" or  for  in  (I, 471, 17-18 = XII, Pl. 355) *ʿb(ȝ)·k ʿb(ȝ)·tì m bw nb nfr* "thy offering table is endowed with every good thing"; or we have displacements of pronouns as in  (VII, 154, 5) *m nḫt·f* "in his strength",  (V, 87, 12) *ḫnḫn·f* "its rattling" (reference to the noise made by the sistrum when shaken), or even  (VI, 77, 10) *ìb·sn* "their hearts". It was always possible to take liberties of this sort either with the full spellings of words or with the composite signs, but the scribe could not go further and it was utterly impossible to split a composite sign and insert complete words or phrases between its component elements.

D. SIGNS OF UNKNOWN ORIGIN OR READING.

The values of the vast majority of Ptolemaic signs can be explained in one or other of the ways outlined in the preceding sections. Nevertheless, it is not possible at present to explain all signs and there remain some whose reading is certain but whose origin is unknown, including even some of the most common values, and there are others for which a reading cannot be suggested or concerning whose reading there are doubts. There is little doubt that in time and with increased knowledge and documentation most of these difficulties will be solved, but in order to complete the record I give below some of the signs for whose origin or reading I have no certain suggestions to offer.

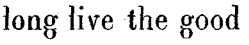
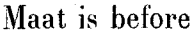
 tȝ : very often used to write *tȝ* "land", e.g. (VII, 10, 9) *tȝ mḥw* "Lower Egypt",  (VIII, 68, 7) *nsw-bìt nb tȝ·wy* "King of Upper and Lower Egypt, Lord of the Two Lands".

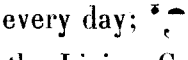
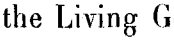
 ʿḥʿw : e.g. (V, 286, 6) *ḫsb ʿḥʿw* "reckoner of time", an epithet of Thoth,  (VI, 335, 5) *ʿḥʿw·k* "thy length of life".

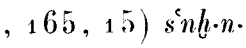
 kȝt : e.g. (VII, 3, 7) *r sḏd kȝ·sn ḥr kȝt·sn* "in order to establish their names on their work",  (IV, 9, 6) *m kȝt nt ìswt* "as the work of ancient days".

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

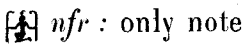
 ʿnḫ : only noted at Edfu in  (III, 104, 15) =  *ʿnḫ ntr nfr* "long live the good god", var.  (*C. D.* IV, 220, 10).

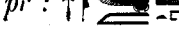
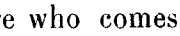
[1] *ʿnḫ* : (V, 300, 15) *ʿnḫ ntr nfr;*  (IV, 5, 3) =  (VII, 21, 7) *M;ʿt m-b;ḥ·f n ḥr r ḥm·f ʿnḫ·f ỉm·s rʿ-nb* "Maat is before him, not being distant from His Majesty, and he lives on her every day;  (VIII, 154, 1) *ntf ʿnḫ ʿnḫ·tw m ʿnḫ·f* "He is the Living God by whose life men live";  (*C. D.*, III, 165, 15) *sʿnḫ·n·s rmṯ m-ḫt mt* "she vivifies men after death";  (I, 147, 9) *ʿnḫ* "goat". See also IV, 15, 8; 19, 8.

 *nfr* : only noted at Edfu in (III, 104, 15) *ʿnḫ ntr nfr;* cf.  (*C. D.*, IV, 231, 10 = Mariette, *Dendérah*, II, 1*c*) *ʿnḫ ntr nfr;*  (Mariette, *Dendérah*, III, 55*a*) *ntr nfr.*

 pr : (V, 149, 10) *S;b-šwt pr m ;ḫt* "He of the dappled plumage who comes forth from the horizon",  (IV, 11, 3-4) *ʿpy pr·tỉ m Pwnt* "the winged scarab is come forth from Punt".

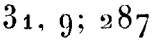
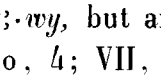
 varr. , and  *pr* : (III, 84, 14), var.  (*Mam.*, 55, 9) *S;b-šwt pr m ;ḫt;*  (V, 212, 10; III, 86, 10) *pr m St* "who came forth from Isis". Note the writing *pr* (V, 221, 15) in a context that is not very clear to me.

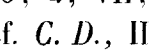
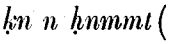
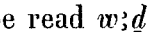
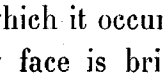
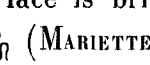
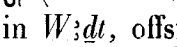
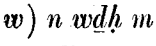
 pḫr : (VII, 3, 5) *pḫr* "corridor",  (VII, 26, 9) *nỉwt r-ḏr·s pḫr·tỉ m nhm* "the whole city goes about rejoicing". I was at one time inclined to guess that *pḫr* must be a name of , as a dagger sheath covered with lion's skin, hence as determinative, under the influence of (I, 412, 14) *pḫr·f w;ḏ·f m ḥb·f tpỉ* "he walks about his shrine at his First Feast". This is obviously a very wild suggestion and it is, moreover, difficult to reconcile with the variants (III, 115, 13) and (rare : IV, 14, 8). I have no useful suggestion to make as to the origin, but the reading is certain.

 varr. and . This sign certainly appears to be equivalent to *ḫn* in  (VII, 92, 17) =  (VII, 88, 9) *ʿn ḥr ḫn m sḏm*, the origin being  *ḫnw* "span, horse (*Urk.*, III, 8, 11) cf.

[1] Not to be confused with *nḫp*.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

ḫrp ḳnw (*Wb. d. äg. Spr.*, III, 329). The reading *ḳn* would suit  (VII, 159, 9) *ḫwt ḳn*(?) and seems reasonably assured in  (IV, 117, 15; 107, 3) *ḳn sʿnḫ rḫyt;*  (V, 267, 13) *ʿnḫ ntr nfr ḳn m sʿnḫ;*  (IV, 111,18; 131, 9; 287, 4) *ḳn r sʿnḫ rḫyt* and  (V, 304, 9) *ḳn wd ʿnḫ n t;·wy,* but are we still to read *ḳn* in  (*Mam.*, 203, 12; cf. III, 60, 4; VII, 67, 11) *Ḳn ḳn m sʿnḫ* (?) or in  (IV, 91, 11-12; cf. *C. D.*, II, 223, 15) *sw m ḳn n*(*t*) *psḏt* (?) or  [sic] (V, 100, 8) for *ḳn n ḳnmmt*(?).

 : that this sign is to be read *w;ḏ* seems certain from certain puns on *w;ḏ* in various passages in which it occurs : -  (IV, 392, 5) *sṯḥn ḫr·k m w;ḏ n W;ḏyt* "thy face is brightened by the papyrus-sceptre of Edjō",  (Mariette, *Dendérah*, III, 52*t*) *nn* (*nwv*) *m W;ḏt w;ḏ n W;ḏyt* "youth in *W;ḏt*, offspring of Edjō",  (IV, 391, 16-392, 1) *wd k;*(*w*) *n wḏḥ m W;ḏt* "who gives food to the youth in *W;ḏt*".  appears occasionally as a spelling of the name of the goddess *W;ḏyt* (IV, 392, 5) but is more frequent in the place-name *W;ḏ*,  (*C.D.*, III, 105, 13; 118, 16; *C.D.*, IV, 56, 7; Mariette, *op. cit.*, III, 52)  (I, 402, 10; IV, 18, 8; 392, 1; V, 9, 12; VII, 24, 9; 259, 11, etc.). Although the reading thus seems assured, I do not understand the form of the sign or the function of the two boat-shaped objects.

IV. — CONCLUSION.

The system outlined above is simple and direct. It is not based on any particular theoretical considerations but is derived directly from analysis of the inscriptions and their decipherment. It contains nothing that cannot be observed in the classical and better known stages of Egyptian hieroglyphic writing or that could not have developed legitimately from known procedure. It is, moreover, practical and has been proved to work in the course of readings with friends who had no previous experience of Ptolemaic. Our failure as yet to discover the values borne by certain signs or the origins of some of these values does not necessarily indicate that there may be some still unsuspected principle at work, but is rather a measure of how much we still have to learn

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

about Egyptian. The difficulties that attend the reading of late hieroglyphic texts are very largely due to the unfamiliarity of their outward appearance and not to any new or foreign procedure that had no part in the texts of earlier periods. The successful overcoming of these difficulties is dependent on commonsense, practice and familiarity, together with the realisation that they are not really subtle, complicated or involved. The one certain way of courting trouble in attempting the decipherment of texts of "Ptolemaic" type is to approach them with fear and suspicion as though every sign concealed a trap or a bite; such an approach leads inevitably to trouble if not disaster, it creates difficulties where none really exist and repeatedly produces versions that give rise to doubts. The royal road to the successful decipherment of these texts is the way that is simple and direct.

At the root of the values borne by Ptolemaic signs lie the same factors that always governed the use and selection of hieroglyphic signs, the main difference being that Ptolemaic has a tendency to use a greater variety of signs (largely because so much of the inspiration of Ptolemaic lies in the early and formative periods of the language modified somewhat by the impact of contemporary events and conditions) and that Ptolemaic is archaistic and gives added emphasis to and revives processes that were largely obsolete in classical Egyptian.

Ptolemaic writing depends essentially upon three things : (*a*) the origin of hieroglyphic writing in picture writing, which made possible the use of ideograms; (*b*) the consonantal nature of Egyptian writing, and (*c*) the wide use of the pun or rebus, which was only possible because of the consonantal nature of the writing, to create phonograms from ideograms. All the subsidiary and contributory factors such as phonetic change, loss or elision of radicals, the influence of hieratic, the extensive use of composite signs and even errors and confusions are in the final analysis based and dependent upon these fundamentals. These are features that existed to a greater or lesser degree at all known stages of the language and the Ptolemaic system of writing is not separated or apart from the main stream of hieroglyphic but is part of it and is governed by the same rules.

These observations are obvious and axiomatic. The chief point on which dispute may arise is the question of the part played by the Consonantal Principle and Acrophony in the formation of the uniconsonantal values. It is

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

here that the views expressed in this and in my previous paper come into strong conflict with those held and advocated by Dr. Drioton. This is unfortunate, for no one can work on Ptolemaic texts and not be very conscious of the deep debt, the stimulus and inspiration he owes to Dr. Drioton's cryptographic studies, which contain much of permanent and abiding worth to every student of Ptolemaic as well as cryptography, but this very fact makes it all the more necessary to combat the error of Acrophony that is distorting his results and methods and that thereby regrettably throws doubt on those parts of his work that are sound and permanent. I confess frankly that in my earlier reading of Ptolemaic I accepted Dr. Drioton's theory of Acrophony without question; I have been compelled to abandon it because it led me into repeated error and trouble and because I found that it did not apply even to Dr. Drioton's cryptograms to anything like the extent that he claimed.

It is true that both the Consonantal Principle and Acrophony are only theories, and that in the nature of things it is impossible to give definite proof of either the one or the other. There is, however, a great difference in the quality of the evidence that can be advanced in support of these rival theories, for while there is a good sub-stratum of solid fact underlying the Consonantal Principle, it is impossible to find a single positive item of evidence in favour of Acrophony beyond the assertion, as unsupported as it is dogmatic, that it must exist.

The Consonantal Principle is based on a simple and natural fact, the fact that Man is careless and slipshod in his speech and is ever prone to slur, drop, distort or otherwise modify certain sounds and letters. This is a very ancient and common characteristic of the human race and there is clear evidence that what may be observed in the speech of the living peoples of the modern world also existed in Ancient Egypt. There is general agreement among modern scholars that, in so far as their origins can be discovered or suggested, the signs forming the normal Egyptian "alphabet" originated through the working of what I have called the Consonantal Principle, by the reduction of certain words, under certain strict conditions, to a single strong consonant. It is legitimate to postulate that the less familiar and Ptolemaic equivalents of the normal alphabetic signs also originated in the same way, and it would be quite unjustified to assume that they did not without first

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

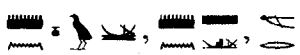
attempting to work on the old, traditional lines. It is certain that some of the Ptolemaic signs did originate in the Consonantal Principle (such signs as  and  for , for instance). This assumption is also supported by the fact that it is undeniable that a certain number of the multiliteral values were obtained in the same way by the loss of weak radicals, and it is natural to suppose that a similar loss of weak radicals may have led to the formation of uniconsonantal values. Moreover, it will be noted from the preceding analysis of the formation of Ptolemaic alphabetic and multiliteral signs that they form part of a similar, uniform and coherent system.

When Acrophony is considered the position is entirely different. The theory that certain signs became uniconsonantal by the selection of the initial consonant of the word or words which they represented is not based on customary usage or any natural phonetic process but is something arbitrary or even capricious. The argument in favour of Acrophony is the purely negative one that no other explanation is known or can be thought of. A negative argument undoubtedly has its value, but it is a very limited one; it is exceedingly dangerous to build an entire theory and system upon negative evidence and such evidence is only valid, final and conclusive when it is certain that everything is known about the subject under discussion. No one will be so bold as to claim that we are even beginning to know everything about the Ancient Egyptian language, writing or vocabulary and it is utterly impossible in the present state of our knowledge to state that any value could only have originated in Acrophony, that would be palpably false, for in no branch of Egyptian philology can we be said even to be approaching finality. Until it is certain that we know every word ever used by the Egyptians and that we fully understand their language and system of writing it cannot be claimed that Acrophony is the only explanation of any value of any sign employed by an Egyptian scribe. The most that can be claimed is, perhaps, that it is "probable", but even that claim I believe to be contrary to the facts we possess.

Acrophony is open to further objections. It fails to solve the problem of origins because experience shows that repeatedly there is more than one word from which a uniconsonantal value could have arisen by Acrophony. It is true that even on the Consonantal Principle there are a number of signs for

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

which alternative origins can be suggested, but they are exceptional, their number is very small and infinitely less than in the case of Acrophony and there is good reason for believing that only the incomplete state of our knowledge accounts for these apparent alternatives.

The contention that Acrophony does not solve the problem of origins is not difficult to prove, but lest I be accused of being too partial or of pressing the argument too far, let me quote Dr. Drioton himself, who cannot be accused of being prejudiced against Acrophony. In a discussion of the value  = *m* Dr. Drioton has written " = *m*, valeur fréquente dans l'écriture ptolémaïque, JUNKER, *Über das Schriftsystem im Tempel der Hathor in Dendera*, Berlin 1903, p. 16. Il est toutefois difficile de préciser par acrophonie duquel des nombreux mots commençant par *m* qui désignent une barque en égyptien,  etc. La valeur *im* de ce signe, courante à la basse époque, ferait pencher pour une acrophonie consonantique de  "barque" [1]. Here even Dr. Drioton is compelled to admit that Acrophony fails him and that what is really the Consonantal Principle is operative. What is clear from his own words is that he made no attempt to find an origin by traditional methods until he found that his new theory of Acrophony gave him no help. Unfortunately, having once realised the truth, he has failed to realise that the same argument applies to many other supposed examples of acrophonic origin.

Acrophony affords no control or check over the accuracy of decipherment and in practice it will be found that the habitual use of Acrophony enables practically any desired result to be extracted from any series of hieroglyphs. Thus we find ourselves in the absurd position in which different scholars produce entirely different and contradictory versions of the same text and our science and our methods are brought into disrepute.

In my previous article [2], in illustration of the way in which the application of Acrophony can lead to differing versions of one and the same text, I cited the versions of the Athribis cryptogram produced by Professor A. M. Blackman, Dr. Drioton and Mahmud Hamza. Dr. Drioton has been quick to try to defend himself by asserting that my claim "est en réalité sans valeur. Le fait allégué,

[1] *Annales du Service*, 40, 346, No. 40. — [2] *Annales du Service*, 43, 305, note 1.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

d'abord, n'est pas exact'' [1]. Since it is Dr. Drioton's statement that is not exact, the facts will repay some examination.

Dr. Drioton first claims that Hamza has not proposed any serious decipherment because he has only stated ''The group of five signs also appears to be enigmatical and may be either epithets of the heart of Osiris or of the divinity inside the temple, i. e. Horus-Khenty-Khety, who was associated with Osiris''.[2] Dr. Drioton has, however, obscured and suppressed vital facts, for Hamza expressly states ''I believe that we are here face to face with the name of the great temple of Athribis, which probably reads *H.t-ib-*ˁ;'' [3] and then makes a brief attempt at justification. The use of the words ''I believe'' will indicate to most of us that Hamza was putting forward a serious suggestion in which he had confidence. In fact, Hamza proposed and attempted the justification of a decipherment of half the text and made no attempt to decipher the other portion, although he hazarded a vague and unsupported guess as to its nature, and it is to this guess that the words quoted by Dr. Drioton refer.

Dr. Drioton then turns his attention to Professor Blackman's version and claims that this was no more serious than that of Hamza because he states that his decipherment ''seems not altogether impossible [4]''. Thus Dr. Drioton quite unjustifiably twists Professor Blackman's modest understatement into a confession of no confidence in his own suggestion. Does anyone seriously believe that a scholar of Professor Blackman's calibre and reputation, writing in a serious, technical journal, should print a decipherment of a text, append a justification of every value and reading suggested, and then in the same breath tell his readers that he did not mean it, that his solution was wrong and not serious and his arguments not valid? Moreover, I personally had many opportunities of discussing this version with Professor Blackman while he was preparing it and I can testify that he had every confidence in it, and certainly neither of us had the faintest suspicion that Dr. Drioton was going to produce a solution that so patently diverges from the truth.

Having thus airily dismissed the solutions of his rivals the way is now clear for Dr. Drioton to make his triumphant claim ''Il ne reste donc qu'un

[1] *Annales du Service*, 43, 322, note 1. — [2] *Annales du Service*, 38, 200. — [3] *Annales du Service*, 38, 198, 199. — [4] *Liverpool Annals*, 25, 137.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

déchiffrement qui ait l'intention d'en être un et qui puisse être critiqué comme tel'' [1] and he gives a cross reference to his own version published in *Annales du Service,* XXXVIII, 109-116. The attitude revealed by this chain of argument and the claim that follows it bears a striking resemblance to that popularly supposed to be adopted by the ostrich on the approach of danger, and is just about as scientific and effective. How very weak must be the case whose defenders have to resort to such shifts and expedients.

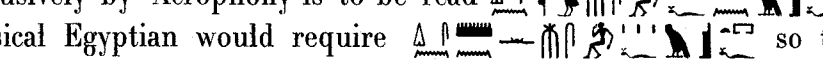
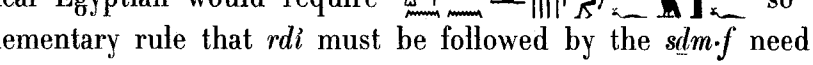
In spite of Dr. Drioton's denials it is certain that three scholars working on the same general lines have produced three entirely different versions of a single, short and very simple text that can be read simply and directly. Such a result is bound to raise doubts and queries and the only scientific course is not to dismiss the alternative versions as not being serious but to submit all the versions to a fresh and searching examination to discover where the error lies and the reasons for it. If three independent attempts to decipher an ordinary hieroglyphic inscription produced similar conflicting versions, everybody would immediately realise that something was seriously wrong and would insist that the versions and the methods of decipherment must be examined and controlled and checked. It is no less imperative to submit cryptograms and Ptolemaic to the same criticism and control, but Dr. Drioton refuses to face the clear warning contained in these circumstances and seeks comfort by declaring in effect ''La cryptographie c'est moi''.

Dr. Drioton hits the nail squarely on the head in his final words ''il faudrait de plus abandonner tout espoir de déchiffrer jamais le fameux cryptogramme, car toute solution nouvelle sera forcément la quatrième, et devra automatiquement être tenue pour fausse''. Exactly, there could be no better description of the regrettable state to which the decipherment of cryptograms has been reduced. As long as the method is wrong, every solution will be wrong. It is useless to shut our eyes to the facts; if a system of decipherment makes it possible to produce three, four or even a hundred versions, all are equally discredited, the system and the methods are discredited and must be checked and if need be revised or abandoned. It is for this reason that I refrain from publishing my own version, though I believe it to be the correct

[1] *Annales du Service,* 43, 322, note 1.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

one, for who will now believe any proposed decipherment of the Athribis cryptogram until a secure foundation has been established?

The study of cryptography has been reduced to a state of well-nigh hopeless confusion. Thanks to this systemless system, which even its inventor claims is artificial, practically anything can be done with any text and any sign, and there is no criterion to enable the student to judge where lies truth or error. The accepted methods of procedure can be thrown overboard if deemed necessary, all things are permissible, and even rules of grammar need no longer apply, for Dr. Drioton tells us that a short phrase which he has deciphered almost exclusively by Acrophony is to be read  [1] where classical Egyptian would require  so that even the elementary rule that *rdi* must be followed by the *sdm·f* need no longer be observed and grammar is also relegated to the limbo of the past. Truly the form of Cryptography that is created by Acrophony is a world all on its own.

There must be some way of establishing the correct solution and it behoves us to seek that way. The fact that the three published versions are all based on the same general principle, the key-stone of which is Acrophony, is a hint that it is perhaps the method that is faulty. At the very least, if we are honest with ourselves, we are bound to try to find a way that does not produce alternatives and that reduces doubt and lack of confidence to a minimum. The evidence not only of the Athribis cryptogram but others as well indicates that Acrophony does not provide the required assurance.

In assessing the claims of the rival theories, Consonantal Principle versus Acrophony, it will be seen that it is generally admitted that the Consonantal Principle was operative in the formation of the normal alphabetic values, that it was a natural process, that beyond all reasonable doubt it did play a part in the formation of some phonetic values and that it adds considerably to the credibility of decipherments and our ability to control or check them. Acrophony, on the other hand, has no natural basis, there is no concrete evidence in its favour, or even hint of such evidence, decipherments based on it are difficult if not impossible to control, they are facile, arbitrary and do not

[1] *Revue d'Égyptologie*, I, 21.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net

engender confidence. The sound procedure when attempting to decipher any hieroglyphic text is surely first of all to attempt to work on traditional and known lines, which include the Consonantal Principle, and to have recourse to Acrophony or any other new procedure only when all other normal methods have clearly failed, and even then only with extreme caution and great reserve. Neither in Ptolemaic nor in any other kind of hieroglyphic text whose decipherment is established and certain does Acrophony play any definite and proven role, and the contention that Acrophony played any large part in the formation of the uniconsonantal values of any period or any text rests on very insecure foundations.

There is always a very slight possibility that a few isolated and occasional values may sometimes have originated in Acrophony but it is certain that Acrophony was never in operation as a general rule and principle.

The attraction of Acrophony is that it affords us an easy way of escape from our difficulties, its danger is that there is never any guarantee that it is the right way. The Consonantal Principle, which must be combined with all those processes that contribute to the decipherment of inscriptions, does not always render inscriptions more easy to decipher, but it does render the final result more probable and secure. That decipherment should be difficult leaves me personally unmoved as long as the final result is safe, for it is better to have a solitary text of whose reading all can be certain than a hundred easily obtained readings and all of them wrong.

BIFAO 43 (1945), p. 51-138 Herbert W. Fairman
An Introduction to the Study of Ptolemaic Signs and their Values.
© IFAO 2026 BIFAO en ligne https://www.ifao.egnet.net