

**Some Remarks on the Philological Significance and
Differentiation Between the Synthetic and Analytic
Systems of the Ancient Egyptian Language**

PROF. DR. AYMAN WAZIRY^{1*}

¹ Professor and Head of the Department of Egyptology -
Faculty of Archaeology - Fayoum University-Egypt, Main
building of Faculty of Archaeology

Abstract

This study is a preliminary nucleus and explanatory notes for the general framework of the subject of the study that aims to highlight the philological significance of the synthetic system and analytic system in the syntaxes of the ancient Egyptian sentence within the framework of the ancient Egyptian language, by extrapolating the evidence and the linguistic uses inherent in the ancient Egyptian language, this is in order to reveal the time meaning and temporal significance emerged in the synthetic and analytic systems. When researching the tenors and contexts of the language in general and the ancient Egyptian language in particular, it can be noticed that there are structural or the so-called synthetic system and analytic system through which it is possible to divide and classify the temporal semantics of sentence of the ancient Egyptian language, according to the sources of the ancient Egyptian language and from the perspective of the structural or synthetic system and the analytic system that enveloped the syntaxes of the ancient Egyptian sentence and through the content and context of the ancient Egyptian language.

Keywords

Remarks, Significance, Differentiation, Synthetic System,
Analytic System, Ancient Egyptian Sentence, Ancient
Egyptian Language

INTRODUCTION

When researching the tenors and contexts of the language in general and the ancient Egyptian language in particular, it can be noticed that there are structural or the so-called synthetic system and analytic system through which it is possible to divide and classify the temporal semantics of sentence of the ancient Egyptian language, which will become clear through the following inquiries; What are the features of the linguistic systems in the ancient Egyptian sentence? What are the structural or synthetic system and analytic system of the language? What are the most important features of differentiation between the synthetic system and analytic system of the ancient Egyptian language? What are the most distinctive features of differentiation between the synthetic system and analytic system of the ancient Egyptian language?

This study is a preliminary nucleus and explanatory notes for the general framework of the subject of the study that aims to highlight the philological significance of the synthetic system and analytic system in the syntaxes of the ancient Egyptian sentence within the framework of the ancient Egyptian language, by extrapolating the evidence and the linguistic uses inherent in the ancient Egyptian language, this is in order to reveal the time meaning and temporal significance emerged in the synthetic and analytic systems, according to the sources of the ancient Egyptian language and from the perspective of the structural or synthetic system and the analytic system that enveloped the syntaxes of the ancient Egyptian sentence and through the content and context of the ancient Egyptian language that is one of the more independent branches of the Hamitic Semitic languages- the Afro-Asiatic languages category, the most widely spoken group of languages in the ancient world including the Semitic languages group such as; Akkadian, Canaanite, Hebrew, Aramaic, Phoenician and Ugaritic.

Whilst the Hamitic languages involve the Berber language category including the Libyan and Berber languages, however the Cushitic language group includes the Somali, the Beja, and the Ajau languages, where this last division includes the Chadian Hausa language (*El Aguizy and Haykal, 1996*)⁽¹⁾.

It is believed that the ancient Egyptian language was the closest language to the Semitic, Berber, and Kushite Beja languages, while it was farthest from the rest of the Cushitic and Chadic languages, which made the affect and effect or the manifestations of mutual influences between these languages and some of them easy and this was helped by the expansionist policies of the countries of the ancient Near East (*Loprieno, 1995*)⁽²⁾.

DISCUSSION AND HIGHLIGHTS OF THE STUDY

What are the features of the linguistic systems in the ancient Egyptian sentence?

The linguistic system can be divided through the ancient Egyptian sentence into two main stages, according to the changes that the language experienced in its verbal and nominal systems, where it switched from the synthetic linguistic system to the analytic linguistic system (*El Aguizy and Haykal, 1996*)⁽³⁾.

The classical form of the ancient Egyptian language is known as Middle Egyptian, or the so-called vernacular of the Middle Kingdom of Egypt that remained the literary language of ancient Egypt until the Greco-Roman periods, where the spoken language had evolved into the Demotic by the period of classical antiquity, and finally into the Coptic by the era of Christianization, where the spoken Coptic has almost extinct by the 17th century, but it remains in use as the language of liturgical practices of the Coptic Orthodox Church (*Vycichl, 1936*)⁽⁴⁾. It is believed that the synthetic linguistic system or the so-called the Old Egyptian stage, known as the official Egyptian language was spanned almost during the period from 3000 to 1300 BC, where this stage of formal writing was used to record all royal, literary and religious documents (*Loprieno, 1995*)⁽⁵⁾.

As for the analytic linguistic system, it extended during the period from 1300 BC to 1300 AD, which is believed that it included the interphases of the ancient Egyptian language, where it was the informal language contained the interphases of the late Egyptian language, in which the vernacular literary texts and the texts of administrative transactions were recorded (*Loprieno, 1995*) ⁽⁶⁾.

What are the structural or synthetic system and analytic system of the language?

The synthetic language system used the inflection that falls within the modulation of intonation or pitch in the voice, which may be a change in the form of a word, typically the ending, to express a grammatical function or attribute such as tense, mood, person, number, case, and gender. This inflection used to express syntactic relationships within a sentence, as well as the inflection was the addition of morphemes to a root word that assigns grammatical property to this word, while there was an agglutination that is the combination of two or more morphemes into a single distinct meaningful element of speech or writing, used with others or sometimes alone to form a sentence and typically shown with a space on either side when the word written or printed.

By morphemes can be included indications of a category of grammatical words and sentence such as; whether this word is the subject or object in the sentence, this is in addition to morphology that can be narrative, relational or derivational (*Dawson and Phelan, 2016; Sapir, 1921*) ⁽⁷⁾.

The synthetic language system includes higher ratios of morphemes to the sentence than of the analytic language system, where the analytic language system have lower ratios of morphemes to the sentence and higher use of auxiliary verbs, and greater reliance on word order to convey information grammatically.

The two previous subcategories of synthetic and analytic language system are incorporated language systems, which could be divided to polysynthetic languages denoting or relating to a language characterized by complex words consisting of several morphemes, in which a single word may function as a whole sentence (*Gary and Rick,2010;Halvor and Rolf,2005; Bernard, 1990; Myers-Scotton,1997; Rickford and McWhorter1997*)⁽⁸⁾.

What are the most important features of differentiation between the synthetic system and analytic system of the ancient Egyptian language?

The structural or synthetic system relied on the verbal formula known as VSO (verb + subject + object), which stipulates that the verb must be presented in the first position of the sentence and comes followed by the subject, whether it is nominative or pronoun and followed by the object in the case of a transitive verb, where it is the standard verbal formula of the present tense, linguistically known as **sDm.f form** (*Kramer, 2009*)⁽⁹⁾.

It is worth mentioning that the phrase is a small group of words standing together as a conceptual unit, typically forming a component of a clause. As for the sentence; it is a set of words that is complete in itself, typically containing a subject and predicate, conveying a statement, question, exclamation, or command, and consisting of a main clause and sometimes one or more subordinate clauses, where it is believed that the earliest known complete written sentence dated to be about 2690 BC, which makes it as one of the oldest recorded and known languages (*Allen, 2013*)⁽¹⁰⁾.

It should be noted that the linguistic development and the transition from the formal stage and the synthetic system (Old and Middle Egyptian) to the Late Egyptian and the analytical system would not have come quickly and instantly, as the Late Egyptian is considered to be as the spoken language since its first emergence, but it did not enter the scope of the written language except during the period of the late stage of language (Late Egyptian) (*El Aguizy and Haykal, 1996*)⁽¹¹⁾.

The features of this stage (Late Egyptian) began to appear timidly in the literary texts of the classical stage (Old and Middle Egyptian) that belong to the second intermediate period and the beginning of the eighteenth dynasty until it became the official language with the end of the New Kingdom (*Loprieno, 1995*)⁽¹²⁾.

The most important features of the synthetic system (Old and Middle Egyptian) of the ancient Egyptian language are represented and characterized by the use of synthetic grammatical structures, which are linguistic formulas depending on mixing written passages with the original structure of the word as well as the syntax of the phrase and sentence (*El Aguizy and Haykal, 1996*)⁽¹³⁾, whether these additions are for the purpose of changing the gender and number value of the original root of the name, or for the purpose of conferring possession on those names through suffix pronouns, which is evident through the use of some phonetic attachments and auxiliaries or appendages of nouns in order to determine gender and value of number, without the need to use definite and indefinite particles that are commonly used in the analytic linguistic system of the Late Egyptian Language (*Grandet and Mathieu, 1990*)⁽¹⁴⁾, as well as the use of suffix pronouns after nouns directly to denote possession, without the need to use the possessive adjectives of a late linguistic character that prevailed in the analytic linguistic system of the late stage of the ancient Egyptian language (*Erman, 1902*)⁽¹⁵⁾, in addition to depending on the verbal formula known as VSO (verb + subject + object), which stipulates that the verb must be preceded to be in the first position of the sentence and followed by the subject, whether it is nominative or pronoun, and then followed by the object in the case that the verb is transitive, where it is the standard verbal formula of the present tense, linguistically known as **sDm.f** form (*Kramer, 2009*)⁽¹⁶⁾.

The most important features of the analytic system prevailing during the Late Egyptian language were represented in exemption of the phonetic appendages that come at the end of nouns to determine gender and numbering values, and relying on the use of definite particles (*Erman,1933*)⁽¹⁷⁾ and indefinite articles (*Neveu,2015; Groll and Černý,1975*)⁽¹⁸⁾, as well as the development of the possession system through the emergence of possessive adjectives appended with the suffix pronouns that precede the possession formula and possessive nouns (*Neveu,2015*)⁽¹⁹⁾, in addition to the emergence of detailed analytical verbal formulas instead of the usual verbal formulas represented in the classical stage of the Old and Middle Egyptian language, the verbal formula shifted from the syntax known as VSO (verb + subject + object) to the so-called SVO (subject + verb + object), which requires that the beginning of the verbal sentence in most of its cases and times should be through some temporal indicators such as; **iw**, **wn**, as well as the auxiliary verbs like; **irr**, **nai**, which were used as temporal indicators of the future tense in the ancient Egyptian sentence (*Frandsen,1974*)⁽²⁰⁾.

This linguistic development can be dealt with by the syntax of **sDm.f form** as a standard verbal formula prevailing during the ancient Egyptian classical stage and the synthetic system of the Old and Middle Egyptian language (*Groll and Černý,1975*)⁽²¹⁾, and comparing it with the syntax of **iw.f sDm** as a verbal formula prevalent during the late Egyptian language and common in the analytic linguistic system of the late Egyptian sentence (*Gardiner,1969*)⁽²²⁾. The temporal connotations and considerations in the verbal sentence became more complicated during the late Egyptian stage and in the analytic system of the late Egyptian language than they were in the synthetic system during the classical Egyptian stage of the ancient Egyptian language and this was to express the imperfect tenses and the perfect tenses or the so-called "Pluperfect", as well as the prospective tenses, which represented through the use of prepositions such as; **m**, **Hr**, **r** (*El Aguizy and Haykal, 1996*)⁽²³⁾.

This can be addressed through the syntax of **iw.f r sDm** as a temporal formula indicated to the third future tense in the ancient Egyptian sentence according to Neveu (*Neveu,2015*)⁽²⁴⁾, and comparing it with the syntax of **iw.f Hr sDm** as a temporal formula indicated to the present continuous tense in the ancient Egyptian sentence (future tense implicitly). However, Erman believes that the previous formula is an indication of the past perfect tense or the so-called Pluperfect (*Erman,1933*)⁽²⁵⁾ that is a tense denoting an action completed prior to some past point of time specified or implied in the ancient Egyptian sentence, which formed in English language by "had" that used with the past participle to form the perfect, pluperfect, and future perfect tenses, and the conditional mood, as in "he had gone", indicating the past perfect.

There were new vocabulary appeared in the analytic linguistic system of the late Egyptian stage, which was instead of old vocabulary that was used in the synthetic linguistic system of the classical stage of the ancient Egyptian language, such as; **DADA** meaning "head" (*Lesko,2002*)⁽²⁶⁾, which appeared in the analytic linguistic system during the late Egyptian stage and used as an alternative to **tp** that was used in the synthetic system during the classical stage of the ancient Egyptian language (*Faulkner,1966*)⁽²⁷⁾.

The redundant signs are considered one of the most important features of the analytic linguistic system during the late Egyptian stage, as these signs were not used in the same words that appeared in the texts of the synthetic linguistic system during the classical stage of the ancient Egyptian language. These redundant signs were a group of extra signs that are written and not pronounced, and these signs usually come at the end of the words without adding any linguistic meaning or role, and one of the most important features of these extra signs represented in the exaggeration in writing the different determinatives for one word (*Junge,2005*)⁽²⁸⁾.

What are the most distinctive features of differentiation between the synthetic system and analytic system of the ancient Egyptian language?

There are distinctive features and differentiation between the synthetic system and analytic system of the ancient Egyptian language, where the analytic linguistic system distinguished during the late stage of the ancient Egyptian language from the older counterpart known as the synthetic system by the existence of borrowed and extraneous vocabulary or the so-called "Loan Words" (*El Aguizy and Haykal, 1996*)⁽²⁹⁾, as there were many Semitic vocabulary appeared within the ancient Egyptian lexical outcome, and its flow reached its peak during the New Kingdom, specifically during the Ramesside era, perhaps due to the Egyptian expansionist policy against the countries of the ancient Near East, in addition to the existence of Semitic peoples in Egypt who helped in societal adaptation of these exotic vocabulary, which included the names of some plants, birds, and geographical places (*Hoch, 1994*)⁽³⁰⁾.

It is believed that since the fourth century BC, Greek vocabulary began to infiltrate the ancient Egyptian lexical outcome, especially in the Demotic and Coptic stages of the ancient Egyptian language" (*Haykal, 1994*)⁽³¹⁾.

The analytic linguistic system during the late Egyptian language was also distinguished by the existence of group writing or the so-called Monograms, which was considered a linguistic phenomenon that was one of the most important linguistic influences occurred on the writing system during the late linguistic stage, which began to grow during the New Kingdom to accommodate the large number of exotic vocabulary that broke into the fortified wall of the ancient Egyptian language, where the group writing has compound phonemic values, but use a single phoneme or has unilateral phonetic value (*Junge, 2005*)⁽³²⁾, although this linguistic phenomenon appeared in the late Egyptian language, it became a major feature in the Demotic writing system (*Johnson, 2000; Junge, 2005*)⁽³³⁾.

The analytic system was also distinguished during the late Egyptian language by the presence of syllabic writing, where the phenomenon of syllabic writing began to grow during the New Kingdom until it accommodated the large number of foreign and exotic vocabulary "loan words" on the lexical outcome of the ancient Egyptian language. The syllabic writing is considered as a linguistic system of orthography phenomenon, which consists in using a single sign to express a sequence of consonant or vowel phonetic signs, unlike group writings, which in turn aim to pronounce consonants without vowels, where syllabic writing has been widely used in writing the names of geographical place names as well as the names of individuals (*El Aguizy and Haykal, 1996; Junge, 2005*)⁽³⁴⁾.

Cryptography is also considered one of the most important of those external influences that penetrated into the ancient Egyptian language, which manifested in the manifestations of transformation that occurred in the ancient Egyptian language as a result of mixing with exotic words and foreign peoples, where these cryptographic writings arose due to the desire of the ancient Egyptian to hide the meanings of religious scriptures from the common people, which were permeated by exotic elements and foreign peoples (*David, 1996; Roberson, 2020; Lateiner, 2010; Broemeling, 2011*)⁽³⁵⁾, the cryptographic writing relied on giving some signs different phonemic values than their usual phonetic values, and these writings reached their extent during the Greco-Roman periods (*Fischer, 1977*)⁽³⁶⁾.

I believe the so-called Talismanic Writing is related to the nature and symbolism of talisman, where symbolism can be attached to talismanic objects, He also thinks that the relationship between language and the writing system in ancient Egypt was sometimes characterized by idealism, and at other times it was characterized by manifestations of crossbreeding or hybridization as well as ambiguity permeated with coding or talismanism, where this can be verified through linguistic practices during the dominant linguistic era or historical time. Thus, the principle of checking the relationship between written language and written practices shows the two concepts are closely and clearly related.

The interaction of the two concepts appeared throughout the ages of the ancient Egyptian civilization, and therefore it is mentioned that the hieroglyphs was based on pictorial signs or the so-called Ideograms and Phonograms. Thus, it has been noted that a great deal of ancient Egyptian art was heavily influenced by the written language, on many occasions where art interacts with hieroglyphs and figurative signs "Ideograms" (*Waziry, 2015*)⁽³⁷⁾.

Accordingly, it was difficult to pronounce what was written in the ancient Egyptian language without specifying the historical time period or linguistic era as a reference point at the beginning and before starting to pronounce the written words, this is because the writing system and the way of expressing speech among the ancient Egyptians had to undergo a change and development according to the different eras of time, where this was in conjunction with the writing system and the prevailing linguistic era. It is reported that the writing systems of the ancient Egyptian language extended since 3000 BC to 1300 AD, where it should be noted that during a period of time such as the aforementioned or a shorter period of time, it will be easy to find the differences in the orthographic system and sentence structure or syntax in the ancient Egyptian language. Therefore, it can be said that the hieroglyphic figurative signs "Ideograms" as a form of written inscriptions are a clear and often specific expressive and symbolic statement that have figurative and symbolic meanings "Phonograms" (*Waziry, 2015*)⁽³⁸⁾. From the above, it can be said that there are important some temporal connotations in the ancient Egyptian sentence, where these connotations may be associated with the synthetic system and analytic system in the syntaxes of the ancient Egyptian sentence within the framework of the ancient Egyptian language, as there are some distinctive roles of the verbs and auxiliary verbs that had the greatest impact in directing the meaning of the context of the text in the ancient Egyptian sentence in particular and in the ancient Egyptian language in general. This study has been addressed through some notes about the synthetic system and analytic system in the ancient Egyptian sentence particularly and of the ancient Egyptian language generally.

CONCLUSION

From the foregoing, it is clear that there are some significant linguistic phenomena, which have an effective role in directing the meaning of the words, speech, phrase, clause, sentence and context of the text in terms of the general syntax of the ancient Egyptian sentence particularly and in the ancient Egyptian language generally. The grammatical evidence of these linguistic phenomena is closely connected to the meaning of the phrase, sentence and context of the text along with the convergence of its vocabulary. The time is one of the most important indicators that affected the ancient Egyptian sentence, and from a linguistic point of view, the temporal connotations expressed by the sentence time are among the most important linguistic elements that had a great influence on the ancient Egyptian language.

With regard to the content and context of the ancient Egyptian sentence particularly and in the ancient Egyptian language generally, it is so clear that the syntax framework of the ancient Egyptian language in general along with the ancient Egyptian sentence in particular have both synthetic and analytic systems. When researching the tenors and contexts of the language in general and the ancient Egyptian language in particular, it can be noted that there are both structural or synthetic and analytic systems through which it is possible to divide and classify the temporal semantics of sentence of the ancient Egyptian language, which will become clear through some inquiries such as; What are the structural or synthetic system and analytic system of the language? What are the features of the linguistic systems in the ancient Egyptian sentence? What are the most important features of differentiation between the synthetic system and analytic system of the ancient Egyptian language? What are the most distinctive features of differentiation between the synthetic system and analytic system of the ancient Egyptian language? Regarding these inquiries; the study was able to answer all of these inquiries to cover some important linguistic aspects related to the content and context of the subject of the study, which became clear through the course of this study.

This study aims to highlight the synthetic system and the analytic system of the ancient Egyptian language, by extrapolating the evidence and the linguistic uses inherent in the ancient Egyptian language, this is in order to reveal the meaning of time and temporal connotation of verbs and auxiliary verbs in the ancient Egyptian sentence, according to the sources of the ancient Egyptian language and from the perspective of the structural or synthetic system and the analytic system that enveloped the content and contexts of the ancient Egyptian sentence.

ENDNOTES

- (1) El Aguizy, O., and Haykal, F., "*Changes in Ancient Egyptian Language*", *Égypte/Monde arabe* (EMA), no 27-28, (1996), p. 27.
- (²) Loprieno, A., *Ancient Egyptian: a Linguistic Introduction*, Cambridge, (1995), p.1.
- (3) El Aguizy, O., and Haykal, F., "*Changes in Ancient Egyptian Language*", p. 26.
- (4) Vycichl, W., Pi-Solsel, ein Dorf mit Koptischer Überlieferung, *MDAIK* 6, 1936, pp.169-175.
- (5) Loprieno, A., *Ancient Egyptian: a Linguistic Introduction*, p.5.
- (6) Loprieno, A., *Ancient Egyptian: a Linguistic Introduction*, p.6.
- (7) Dawson, H.C., and Phelan, M., (Eds.). *Language Files*, 12^{ed}., USA, (2016), pp.156, 173-175; Sapir, E., *Types of Linguistic Structure*, *Language: An introduction to the study of speech*, Harcourt, Brace & World Press, New York, (1921), pp.121-123.
- (8) Gary, L., and Rick, D., *Language Structure Is Partly Determined by Social Structure*, *PLoS ONE* 5(1), 2010, pp.3-5; cf: chapter 4; *Linguistic typology*, In: Halvor, E., and Rolf, T., (Eds.). *Linguistics for Students of Asian and African Languages*, The University of Oslo Press, Norway, (2005), pp.1ff; Bernard, C., (Ed.). *The Major Languages of South Asia*, The Middle East and Africa, Routledge Press, London, (1990); Bernard, C., (Ed.). *The Major Languages of East and South-East Asia*, Routledge Press, London, (1990); Myers-Scotton, C., "Code-switching", In: Coulmas, F., (Ed.). *The Handbook of Sociolinguistics*, Blackwell Press, Malden (1997), pp.217ff; Rickford, J.R., and McWhorter, J., *Language Contact and Language Generation; Pidgins and Creoles*", In: Coulmas, F., (Ed.). *The Handbook of Sociolinguistics*, Blackwell Press, Malden, (1997), pp. 238ff.
- (9) Kramer, R., "VSO and SVO Word order in Middle Egyptian", *NACAL* 35, Cambridge (2009), p. 31.
- (10) Allen, J.P., *The Ancient Egyptian Language: An Historical Study*, Cambridge University Press, Cambridge, (2013), pp.1-2.
- (11) El Aguizy, O., and Haykal, F., "*Changes in Ancient Egyptian Language*", p. 28.
- (12) Loprieno, A., *Ancient Egyptian: a Linguistic Introduction*, pp.6-7.
- (13) El Aguizy, O., and Haykal, F., "*Changes in Ancient Egyptian Language*", p. 28.
- (14) Grandet, P., & Mathieu, B., *Cours d'égyptien hiéroglyphique*, Paris, (1990), p. 63.
- (15) Erman, A., *Ägyptische Grammatik: mit Schrifttafel, Litteratur, Lesestücken und Wörterverzeichnis*, Berlin, (1902), p. 40-41, §§ 82-83.
- (16) Kramer, R., "VSO and SVO Word order in Middle Egyptian", p. 31.

- (17) For more information see: Erman, A., *Neuägyptische Grammatik*, Leipzig, (1933), p. 22.
- (18) For more information see: Neveu, F., *The Language of Ramesses: Late Egyptian Grammar*, translated by: Cannat, M., Oxford & Philadelphia, (2015), pp. 5-6; cf: Groll, S., and Černý, J., *Late Egyptian Grammar*, Rome (1975), p. 45.
- (19) Neveu, F., *The Language of Ramesses: Late Egyptian Grammar*, pp. 10-11.
- (20) Frandsen, P. J., *An Outline of the Late Egyptian Verbal System*, Copenhagen (1974), p. 18.
- (21) Groll, S., & Černý, J., *Late Egyptian Grammar*, p. 155.
- (22) Gardiner, A. H., *Egyptian Grammar: Being an introduction to the study of Hieroglyphs*, 3rd Edition, London, (1969), p. 350, § 438.
- (23) El Aguizy, O., and Haykal, F., "Changes in Ancient Egyptian Language", pp. 29-30.
- (24) Neveu, F., *The Language of Ramesses*, p. 76.
- (25) Erman, A., *Neuägyptische Grammatik*, Leipzig, (1933), p. 230.
- (26) Lesko, L. H., *A Dictionary of Late Egyptian*, Vol. I, Berkeley, (2002), pp. 262-263; Wb. VI, 263. 6.
- (27) Faulkner, R. O., *A Concise Dictionary of Middle Egyptian*, 2nd Edition, Oxford, (1966), p.296.
- (28) Junge, F., *Late Egyptian Grammar: An Introduction*, translated by: Warburton. D, Oxford, (2005), p. 33.
- (29) El Aguizy, O., and Haykal, F., "Changes in Ancient Egyptian Language", p. 31.
- (30) Hoch, J. E., *Semitic words in Egyptian Texts of the New Kingdom and Third Intermediate Period*, Princeton University Press, Princeton, (1994), p. 19.
- (31) Haikal, F., "Les problèmes institutionnels de l'eau en Égypte ancienne et dans l'Antiquité méditerranéenne", IFAO, Le Caire, (1994), p. 207.
- (32) Junge, F., *Late Egyptian Grammar*, p. 42.
- (33) Johnson, J. H., "An Introductory Grammar of Demotic", SAOC 45, Chicago, (2000), pp. 2-3; cf: Junge, F., *Late Egyptian Grammar*, p. 42.
- (34) El Aguizy, O., and Haykal, F., "Changes in Ancient Egyptian Language", p. 32; cf: Junge, F., *Late Egyptian Grammar*, p. 44.
- (35) For more about Cryptography see: David, K., *The Codebreakers: A Comprehensive History of Secret Communication from Ancient Times to the Internet*, New York, (1996); Roberson, J.A., *Enigmatic Writing in the Egyptian New Kingdom, A Lexicon of Ancient Egyptian Cryptography of the New Kingdom*, Vol.2, Berlin, (2020); Lateiner, D., *Signifying Names and Other Ominous Accidental Utterances in Classical Historiography*, Greek, Roman, and Byzantine Studies 45/1, (2010), pp.35-57; Broemeling, L., "An Account of Early Statistical Inference in Arab Cryptology", *The American Statistician* 65/4, (2011), pp.255-257.
- (36) Fischer, H.G., "Hieroglyphen", *LÄ II*, Wiesbaden, (1977), Col. 1196.
- (37) Waziry, A., *Mazahir Al tatawur Alhajayiyi Walkhatiyi fi Binyat Altarkib Allughawii saHa-sHnt*, *Majalat Markaz Aldirasat Albardiah Walnuqushi = The Manifestations of the Orthographic and Transcriptional development in the structure of the linguistic structure saHa-sHnt*, *Journal of the Center for Papyrology and Inscriptions Studies*, Volume 32, Issue 1, (2015), pp. 23-25.

(38)Waziry, A., Mazahir Al tatawur Alhajayyi= The Manifestations of the Orthographic and Transcriptional development,pp.31-32.

ABBREVIATION

- **EMA**= *Égypte/Monde arabe, Institute Française d'Archéologie Oriental, Le Caire-Paris.*
- **IFAO** = *Institute Français d'Archéologie Oriental, Le Caire.*
- **LÄ** = *Helck, W. & Otto, E., "Lexikon der Ägyptologie", 7 Vols., Wiesbaden,(1975-1986).*
- **MDAIK** = *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo, bis (1944): Mitteilungen des Deutschen Instituts für Ägyptische Altertumskunde in Kairo, Berlin, Wiesbaden, ab (1970); Mainz.*
- **NACAL** = *North American Conference on Afro-asiatic Linguistics, Cambridge*
- **PLoS ONE**= *Public Library of Science, San Francisco, California, and United Kingdom.*
- **SAOC** = *Studies in Ancient Oriental Civilization, Chicago.*
- **Wb** = *Erman, E., & Grapow, H., "Wörterbuch der ägyptischen Sprache", 6 vols., Berlin-Leipzig, (1957).*

BIBLIOGRAPHY

- **Allen, J.P.**, *The Ancient Egyptian Language: An Historical Study*, Cambridge University Press, Cambridge, (2013).
- **Bernard, C., (Ed.)**. *The Major Languages of East and South-East Asia*, Routledge Press, London, (1990).
- **Bernard, C., (Ed.)**. *The Major Languages of South Asia, The Middle East and Africa*, Routledge Press, London, (1990).
- **Broemeling, L.**, "An Account of Early Statistical Inference in Arab Cryptology", *The American Statistician* 65/4, (2011), pp.255-257.
- **David, K.**, *The Codebreakers: A Comprehensive History of Secret Communication from Ancient Times to the Internet*, New York,(1996).
- **Dawson, H.C., and Phelan, M., (Eds.)**. *Language Files*, 12^{ed}.,USA, (2016),pp.156-175.
- **El Aguizy, O., and Haykal, F.**, "Changes in Ancient Egyptian Language", *Égypte/Monde arabe (EMA)*, no 27-28, (1996), pp. 27ff
- **Erman, A.**, *Ägyptische Grammatik: mit Schrifttafel, Litteratur, Lesestücken und Wörterverzeichnis*, Berlin, (1902).
- **Erman, A.**, *Neuägyptische Grammatik*, Leipzig, (1933).
- **Erman, E., and Grapow, H.**, "Wörterbuch der ägyptischen Sprache", 6 Vols., Berlin-Leipzig, (1957).
- **Faulkner, R. O.**, *A Concise Dictionary of Middle Egyptian*, 2nd Edition, Oxford, (1966).
- **Fischer, H.G.**, "Hieroglyphen", *LÄ II*, Wiesbaden, (1977), Col. 1196.
- **Frandsen, P. J.**, *An Outline of the Late Egyptian Verbal System*, Copenhagen (1974).

- **Gardiner, A. H.**, *Egyptian Grammar: Being an introduction to the study of Hieroglyphs*, 3rd Edition, London, (1969).
- **Gary, L., and Rick, D.**, *Language Structure Is Partly Determined by Social Structure*, PLoS ONE 5(1), 2010, pp.3-5.
- **Grandet, P., & Mathieu, B.**, *Cours d'égyptien hiéroglyphique*, Paris, (1990).
- **Groll, S., and Černý, J.**, *Late Egyptian Grammar*, Rome (1975).
- **Haikal, F.**, "Les Problèmes institutionnels de l'eau en Égypte ancienne et dans l'Antiquité méditerranéenne", IFAO, Le Caire, (1994), pp. 207ff.
- **Halvor, E., and Rolf, T.,(Eds.)**. *Linguistics for Students of Asian and African Languages*, The University of Oslo Press, Norway, (2005).
- **Hoch, J. E.**, *Semitic words in Egyptian Texts of the New Kingdom and Third Intermediate Period*, Princeton University Press, Princeton, (1994).
- **Johnson, J. H.**, "An Introductory Grammar of Demotic", SAOC 45, Chicago, (2000).
- **Junge, F.**, *Late Egyptian Grammar: An Introduction*, translated by: Warburton. D, Oxford, (2005).
- **Kramer, R.**, "VSO and SVO Word order in Middle Egyptian", NACAL 35, Cambridge, (2009), pp. 31ff.
- **Lateiner, D.**, *Signifying Names and Other Ominous Accidental Utterances in Classical Historiography*, *Greek, Roman, and Byzantine Studies* 45/1, (2010), pp.35-57.
- **Lesko, L. H.**, *A Dictionary of Late Egyptian*, Vol. I, Berkeley, (2002).
- **Loprieno, A.**, *Ancient Egyptian: a Linguistic Introduction*, Cambridge,(1995).
- **Myers-Scotton, C.**, "Code-switching", In: Coulmas, F., (Ed.). *The Handbook of Sociolinguistics*, Blackwell Press, Malden (1997), pp.217ff.
- **Neveu, F.**, *The Language of Ramesses: Late Egyptian Grammar*, translated by: Cannat, M., Oxford & Philadelphia, (2015).
- **Rickford, J.R., and McWhorter, J.**, *Language Contact and Language Generation; Pidgins and Creoles*", In: Coulmas, F., (Ed.). *The Handbook of Sociolinguistics*, Blackwell Press, Malden, (1997), pp. 238ff.
- **Roberson, J.A.**, *Enigmatic Writing in the Egyptian New Kingdom, A Lexicon of Ancient Egyptian Cryptography of the New Kingdom*, Vol.2, Berlin, (2020).
- **Sapir, E.**, *Types of Linguistic Structure*, *Language: An introduction to the study of speech*, Harcourt, Brace & World Press, New York,(1921).
- **Vycichl, W.**, *Pi-Solsel, ein Dorf mit Koptischer Überlieferung*, MDAIK 6, 1936,pp.169-175.
- **Waziry, A.**, *Mazahir Al tatawur Alhajayiyi Walkhatiyi fi Binyat Altarkib Allughawii saHa-sHnt*, *Majalat Markaz Aldirasat Albardiah Walnuqushi = The Manifestations of the Orthographic and Transcriptional development in the structure of the linguistic structure saHa-sHnt*, *Journal of the Center for Papyrology and Inscriptions Studies*, Volume 32, Issue 1, (2015), pp. 23-35.