

Beyond the European Alphabets: Ahmed Kamal, Champollion, and Moncef Chelli

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Abstract

Decipherment bicentenary exhibitions helped to foreground the archival evidence and its gaps. Egyptologists have emphasized also how a detailed understanding of the ancient language and its scripts took many decades beyond 1822, while researchers in multiple disciplines have analyzed the bias against non-European scripts in European-language philology and linguistics. Research starting from Arabic language and script, as Ahmed Kamal sought, would support more accurate description and appreciation of the ancient script that spoke clearly first in modern times to Champollion.

The Ancient Egyptian-Arabic Dictionary by Ahmed Kamal

On 29 September 2020, the Bibliotheca Alexandrina received from Abdel Hamid Kamal Zakaria the *Dictionary of the Egyptian Language* by his grandfather Ahmed Kamal.¹ A century earlier, during the British military occupation of Egypt, a committee of foreign nationals had rejected its publication. Only in 2002, the Supreme Council of Antiquities, under Zahi Hawass, could begin printing facsimiles of the manuscript volumes.² In a recent *Abgadiyat* article,³ Basem El Sharkawi conveyed the long formation and wide scope of the Ahmed Kamal Dictionary, summarized by Ahmed Osman as ‘more than thirteen thousand ancient Egyptian words ... attested in Hieroglyphics, Hieratic, Demotic, and Coptic ... compared with those of Hebrew, Amharic, Greek, Latin, and Arabic ... translated into French and Arabic’.⁴ Donald Reid has contrasted this single-handed personal accomplishment with the early twentieth century dictionary project by Adolf Erman in Berlin, where German imperial funds harnessed an international cast of European-language Egyptologists.⁵ The 1922 refusal to publish an ancient Egyptian-Arabic Dictionary epitomises ‘the struggle of Ahmed Kamal to establish Egyptology for Egyptian in a hostile colonial environment’ during the decades of British military, economic and political control, and French control of the Egyptian Antiquities Service.⁶ The Dictionary acquisition opens the way to accessible publication, and analysis of its underlying concept and method, following the earlier El Sharkawi study and the project ‘Studying, Indexing and Verifying Ahmed Kamal Pacha Ancient Egyptian Dictionary’. Its new home ensures research and wider access in the Library, including print and online publication. The Dictionary appeared in exhibition for the first time at the Bibliotheca Alexandrina conference and exhibition ‘Hieroglyphs in the Twenty-first Century’, where Azza Ezzat presented the extant draft volumes, their conservation, and the multilingual dimension of the Dictionary, and Ahmed Mansour described the project to assemble Arabic documentary evidence for the working life of Ahmed Kamal.⁷

Display as Enquiry

Several other exhibitions celebrated the bicentenary of the decipherment by Jean-François Champollion.⁸ Visitors in London could see crucial documents such as the September 1801 Treaty of Alexandria in English or French. Treaty Article 16 declared the Arabic and Turkish manuscripts, and larger monuments removed by the French Army to Alexandria, including *Hajar Rashid*/the Rosetta Stone, to ‘be considered as public property and subject to the disposal of the Generals of the combined army’.⁹ As that combined army included forces sent from both Constantinople and London, the display might prompt visitors to wonder what Turkish wording appears in any Ottoman copy archived in Cairo or Istanbul.

Another bicentenary exhibit was the 1822 *Lettre à M. Dacier*, where Champollion explained hieroglyphic writings of names of Greek and Roman rulers of Egypt.¹⁰ On 27 September that year, in Paris, Champollion read to the Académie des Inscriptions et Belles-Lettres part of his latest research on the Rosetta Stone and other inscriptions, as a *Mémoire relatif à l’alphabet des hiéroglyphes phonétiques égyptiens*; he published an extract the next month.¹¹ A longer version appeared separately in December 1822, giving the date of writing as 22 September 1822, with a note of the date of his *Mémoire* lecture, naming that too an ‘extract’.¹² In the earliest published version (the October article), Champollion applied his knowledge of Coptic, the

form of the Ancient Egyptian language that the Egyptian Christian Church still uses, and that the Egyptian exile Father Hanna Chiftigi had taught him in Paris years earlier.¹³ From Coptic vocabulary, Champollion showed how ancient Egyptian writers selected for foreign names such as Cleopatra and Caesar a hieroglyph that depicted an object for which the Egyptian Coptic word begins with the sound equivalent to the required Greek or Latin letter, as with *ro* ‘mouth’ for ‘*r*’. He added a table to illustrate how different hieroglyphs could be used to write one sound. Decisively, in this lecture he began to argue that the use of hieroglyphs to write sounds was not a foreign addition, but a regular, integral part of the system. As both Champollion and his rival decoders previously considered the phonetic use of hieroglyphs an exceptional late practice only for non-Egyptian names, this step announced the threshold of decipherment.¹⁴

Seeing the material *Lettre* version in exhibitions, visitors might wonder what precisely Champollion read out on 27 September. Or who in the audience recorded the experience, or whether other material traces survive from the process of finalizing the *Lettre* over Autumn 1822, and what evidence remains for the role of the guiding elder brother Jacques-Joseph Champollion-Figeac in that and later revisions.¹⁵ More than illustrators of knowledge, these exhibitions actively enable viewers to mark out gaps in the story, and towards thinking in different, more precise ways about the limits of what we know. Such rethinking may push higher up the agenda of research institutions such urgent tasks as a digitized inventory of dispersed Champollion correspondence and diaries.

Images as Messengers

Among exhibition stimuli to understanding the decipherment, and to further research, were drawings by the architect Jean-Nicholas Huyot from his 1818/1819 travels in Egypt and Nubia, with cartouches of New Kingdom kings, and copies by Champollion from Huyot.¹⁶ Sixty years ago Jean Leclant signalled the relocation of Huyot drawings among the papers of Nestor L’Hôte, and expressed the hope for a publication of those with the Huyot travel journal studied by Moënis Taha Hussein.¹⁷ Those drawings are now online, including copies of cartouches with the names Ramses and Thutmes, said to have sparked the breakthrough.¹⁸ Suddenly, it seems, Champollion had recognized—on which day(s)? which drawings? from which sites?—not the alphabetic value of one sign (the vertical loop used for ‘*s*’ in Ptolemaios and Kaisaros), or ideographic value of another (sun disc = ‘*ra*’ in Coptic; ibis = the god ‘*Thut*’), but the underlying principle of combining both. Alone among 1820s readers, he had studied Egyptian Coptic vocabulary and hieroglyphic writings of Greek and Latin names in such depth that he could identify the integration of sound and image as the two sign functions throughout the ‘hieroglyphic system’.¹⁹ Day 14 September may stand as Decipherment Day if archival research pinpoints it as the point when the two names spoke to Champollion.

Champollion achieved decipherment, then, through studying copies. He had seen many Egyptian antiquities in Provence and Paris, notably a demotic papyrus newly bought from an enigmatic Monsieur Casati,²⁰ but not the temples on the Nile, or the obelisk from Philae Temple moved to Kingston Lacey or its Greek-inscribed base,²¹ or the Stone from Rashid moved to London. The crowds at the Stone in a London museum today seem to be in the wrong place. A different itinerary might lead them first to the Fort of Qaitbay on the Nile River mouth at Rashid/Rosetta, where the inscribed block emerged

in 1799 during repairs for French army defence against Ottoman or English counter-attack. Visitors there can consider precisely where it emerged on the site, a point not documented by the French officers, and whether presence of an ancient inscription made the block a monument to keep visible, in the manner of other monuments removed by the French forces from religious or other urban buildings in active use.²² Visitors could then travel upriver or online to Luxor and the relocated monuments of Nubia, from which Paris archives and libraries preserve the drawings that may have sparked the Champollion breakthrough moment. Site + library > decipherment.

Understanding, Misunderstanding, Difference

Champollion died at the age of 41, less than a decade after deciphering the system, leaving to later researchers further explanation of the script, notably the presence of the sound called ‘*Ayin*’ in Arabic, not written in Coptic, and of signs to denote two or three sounds, a feature resolved by Emmanuel de Rougé only in 1867.²³ Later, Heinrich Brugsch and Erman established a consistent method of transliteration to convey sounds of the Ancient Egyptian language in Latin letters and supplementary symbols. Building from grammatical analyses in the works of Champollion, they clarified the history of language change from earlier (Old and Middle) to later (Late, Demotic and Coptic) Egyptian.²⁴ After the Champollion Dictionary published in 1841, the index-card dictionary by his pupil and colleague Ippolito Rosellini at Pisa led Richard Lepsius and then Erman towards producing in Berlin the vastly expanded *Dictionary of the Egyptian Language*, fundamental reference-work of Egyptology.²⁵

The works of Ahmed Kamal took shape in that European-dominated late nineteenth century, at a point arrested by the double shock of the 1876 Anglo-French bankruptcy of Egypt and the 1882 British military occupation.²⁶ The table of hieroglyphs in the first volume (Fig. 1) gives the Egyptological sequence of sounds and the single sign in most frequent use for each, as set in 1889 by Brugsch and Erman for their research journal *Zeitschrift für Aegyptische Sprache und Alterthumskunde*.²⁷ Ahmed Kamal had learned ancient Egyptian language from Brugsch, and kept updated at least to this point. A user of the twentieth century Berlin Dictionary would note one omission in the 1889 Brugsch-Erman list, a sound identified from variant writings of words as between Arabic ش *shin* and خ *kha*, and its regular hieroglyph, the underside of a cow.²⁸ A reader trained in European-language Egyptology may see its omission in the Kamal Dictionary as an error. However, as with documents displayed in exhibitions, this difference could prompt us to consider the concept at work in the Kamal Dictionary. Reid has commented on how Kamal ‘seems to have imagined an audience of Arabic-reading fellow specialists, students and the general public’.²⁹ Rather than an oversight, was the distinction of that extra sound less useful, less convincing, in that context of teaching in a different dialogue? The multilingual horizon of his lexical entries indicates an author writing in Egypt for an Egyptian readership who would recognize without footnotes any colloquial ingredient of the Arabic translations.³⁰ In engaging speakers of Arabic, rather than of European languages, his *Dictionary* holds special potential for new research insights as well as wider access. At the same time, a critical analysis of its limits is also essential for realizing that potential, as with any other Egyptological study of script and

language. European-language Egyptology perpetuates obstacles to understanding the hieroglyphic system, and we might first assess whether the Ahmed Kamal Dictionary shares these, or helps to overcome them.

The first obstacle has been active since decipherment: the conflation of sign form with sign function, whereby signs used to convey a sound (signs with phonetic function) are called ‘phonetic signs’ or phonograms, excising for convenience (or forgetting) how many signs have multiple functions. This issue arises partly from modern teaching practice, introducing the language sounds through a selection of one widely used sign for each identifiably separate sound (as Fig.1). Most of this Egyptological 1-sound sign set indeed have just that one function; for their ancient readers a lack of ambiguity is required by their use in the most frequently used words such as pronouns, prepositions and particles. However, Wolfgang Schenkel counts not 25 but 67 1-sound signs in the Middle Kingdom corpus of *Coffin Texts*.³¹ The dozens of 1-sound signs provide a support system to dispel ambiguity, as complements to 2-sound and 3-sound signs, and not a batch of primary signs conceived as a set; we do not find the Egyptological selection isolated by ancient Egyptian writers on objects as learning tools. For ancient Egyptian speakers, the two functions of hieroglyphs, for sound and for meaning, share an organic unity as long as the object depicted by the hieroglyph remained recognizable. Writers use images-as-signs for the overlapping functions that we divide into ideogram, logogram, phonogram, but those uses do not operate as fixed categories. Instead, the ancient writer deploys the options emanating from the words of their own language, spatially from an image, and temporally from collective transmission or accepted innovation.

Modern use of a conventional set of 1-sound signs as a teaching-tool converts it into an anti-historical alphabet, making us forget the relations of ancient writers to readers. The word ‘alphabet’ itself appears as the source of misunderstandings and distortions, as extensively debated across disciplines over the past half-century.³² As in any script, including alphabets, reader sign-function recognition depends on systemic contexts, including factors of regional dialect and medium. Literate English-speakers know when to keep the sound of ‘k’ and when not; with more regular orthographic rules Italian-readers recognize readily the hard and the soft value of ‘c’ in calcio; Arabic-readers similarly adjust their pronunciation of sign-sounds according to contexts internal and external to a written passage. Any script ‘is not the mirror of what *should be there* in a language from a phonemic or even phonological point of view, rather, it is the data stock of what provides *maximum efficiency with least effort* from a semantic point of view’.³³ In a critique of uses of the International Phonetic Alphabet, Florian Coulmas emphasizes the semantic principle of writing:³⁴

‘Writing is for readers who...know the language that is written, and therefore, do not depend on such information for identifying meaningful units in the text. Rather, they are better served by a system that filters out unnecessary phonetic information and even omits phonological information for the sake of morphology and grammar’.

The alphabet is also at the root of a second obstacle to understanding the hieroglyphic system, again at play since the time of the decipherment. Modern users of the alphabets derived from ancient Greek and Latin have naturalized in their practice and expectations a particular pattern of dividing the flow of speech into two artificially extracted sound types: consonants and vowels. That pattern emerged as variably and locally as

the words ‘consonant’ and ‘vowel’ themselves, but now alphabet-users are primed to expect the two types, not to consider the ‘intellectual history’ of the decision to classify sounds in that way.³⁵ Yet, the ideology of the alphabet has been at the center of debates for many decades.³⁶ Here the theory of script difference by Moncef Chelli is of special relevance to any modern engagement with ancient Egyptian writing, and in particular to recognizing the potential of the Ahmed Kamal Dictionary. Chelli titled his chapter on the topic ‘the absence of the vowels’,³⁷ explaining that the Arabic *harakat* ‘movement’ signs above or below letters may seem to European-alphabet users the equivalent of vowels accompanying consonants, but work in a manner fundamentally alien to the European separation of ‘vowel’ and ‘consonant’. As Timothy Mitchell summarizes from Chelli:³⁸

‘The movement cannot be produced independently of the letter and a letter cannot be produced without a movement, whereas vowels and consonants seem to exist independently of each other... In treating words as moving combinations of letters, Arabic writing remains closer to the play of differences that produces meaning. Seen in this way, the vowel is not something missing in Arabic. It is a strange artifice, whose presence in European writing masks the relations of difference between words’.

Egyptologists who speak only European languages may recall their first difficulty in pronouncing the ancient Egyptian language in its hieroglyphic script, which makes no use of any equivalent of European ‘vowels’ or Arabic ‘movements’, and offers only ‘consonants’.³⁹ Arabic readers may rather ask where the ‘movement’ is, with the important advantage that Chelli and Mitchell signal: like the ancient Egyptian scripts, Arabic writing does not usually indicate the ‘movement’.⁴⁰ Users of a European alphabet risk starting from an assumption that a vowel letter is necessary for reading, not only for themselves, but even within the community of speakers using a script. In contrast, readers of other scripts, including Arabic, can recognize rather that we are all, in modern times, outside the community of Ancient Egyptian language speakers using the hieroglyphic, hieratic or demotic scripts. However obvious, this point helps to emphasize the distance in inter-script communication and the fragmentary archaeological form of the evidence for the study of this language.⁴¹ Broadly the experience of learning and teaching confirms the Chelli hypothesis that each script enacts its own philosophy of language and society.

Considering the two general obstacles outlined above, the assumptions continually re-imported from European alphabetic tradition into Egyptological study undermine the understanding and appreciation of ancient Egyptian language and scripts. In this light, the Ahmed Kamal Dictionary is a vital resource for returning to the ancient speakers. Alongside philological analyses and commentary on the Dictionary, wider historical and intercultural researches are also necessary.

9

Les Egyptologues ont adapté comme alphabet les signes simples mentionnés dans le tableau suivant. Ils les ont classés et transcrits par des lettres et quelques uns par des signes conventionnels. Les mots suivent dans les dictionnaires l'ordre de cet alphabet.

اتفق الاثريون على عروفا هي ائمة بسيطة مستطوية في الاشارة الهرمليفية وهي المبنية في الجدول الآتي ورسموها ووضعوا الفونيموجراف اوئكم وبعدها باشارات اصطلاحية عليها وجعلوا مواد اللغة المصرية سائرة في العواصم المصرية الحديثة بمقتضى ترتيب هذه الحروف الارجائية وصحوة بقاها

عدد	حروف مصرية	حروف يونانية	حروف لاتينية	حروف مصرية	حروف يونانية	حروف لاتينية
1		α	α	13		ε
2		β	β	14		ϕ
3		γ	γ	15		σ
4		δ	δ	16		ς
5		ε	ε	17		ς
6		ζ	ζ	18		κ
7		η	η	19		κ
8		θ	θ	20		γ
9		ι	ι	21		τ
10		κ	κ	22		τ
11		λ	λ	23		δ
12		μ	μ	24		δ

Le lion marqué x, quoique polysyllabique, il se figure dans ce tableau, parce qu'il y a une grande série de mots qui débute par ce lion et qui remplissent une partie du dictionnaire.

Fig. 1. Ahmed Kamal table of the Egyptological selection of one-sound hieroglyphs with Arabic equivalents, from Volume I of his *Dictionary of the Ancient Egyptian Language*. © Bibliotheca Alexandrina.

Endnotes

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- 1 News post 7 October 2020, ‘The BA Receives the Dictionary of the “Ancient Egyptian Language” from the Family of the Late Ahmed Pasha Kamal’, <https://www.bibalex.org/en/News/Details?DocumentID=38043&Keywords=> accessed 14 August 2023.
 - 2 A. Kamal, *Makḥṭuṭ Mu‘jam al-Lugha al-Misriya al-Qadimah : Manuscrit lexique de la langue égyptienne ancienne* (Cairo, 2002). On the 1922 rejection, see D. Reid, *Contesting Antiquity in Egypt: Archaeologies, Museums, and the Struggle for Identities from World War I to Nasser* (Cairo, 2015), 58–59; George Reisner from the USA supported publication, while French Director-General of the Antiquities Service Pierre Lacau opposed, with English committee member Cecil Firth in the middle.
 - 3 B. El Sharkawi, ‘Ahmed Kamal Pasha (1851–1923) Steps to His Ancient Egyptian Dictionary (Chronological-Statistical Study)’, *Abgadiyat* 6 (2011), 44–70.
 - 4 A. Osman, *A Methodological Approach to Utilize Egyptian Colloquial Arabic as a Source for Ancient Egyptian Linguistic Analysis* (MA diss., American University Cairo, 2021), 14–15, noting the inclusion of Egyptian colloquial Arabic among linguistic resources of the Dictionary; <https://fount.aucegypt.edu/etds/1576/> accessed 14 August 2023.
 - 5 D. Reid, *Whose Pharaohs?: Archaeology, Museums, and Egyptian National Identity from Napoleon to World War I?* (Chicago, 2002), 212.
 - 6 Reid, *Whose Pharaohs?*, 201. Reem Bassiouney assesses the impact of unequal power relations in a related field of language studies, in her *Arabic Sociolinguistics* 2nd edition (Edinburgh, 2020), 308–309.
 - 7 11 October 2022: conference recording at <http://webcast.bibalex.org/Conference/Details.aspx?ID=5121> accessed 14 August 2023.
 - 8 On the ingredients required for a decipherment, see S. Polis, ‘Jean-François Champollion : Un déchiffrement modèle’, in G. Andreu-Lanoë, V. Desclaux, H. Virenque (eds.), *L’aventure Champollion : Dans le secret des hiéroglyphes* (Paris, 2022), 76–105.
 - 9 S. Moser, *Wondrous Curiosities. Ancient Egypt at the British Museum* (Chicago, 2006), 66. The British Museum exhibition displayed a French version, National Archives, Kew, WO 1/345. 450–451, I. Regulski, *Hieroglyphs: Unlocking Ancient Egypt* (London, 2022), 70; at Article 16 a note records the need for General Hope to consult with ‘le Général en Chef de l’Armée anglaise’, suggesting that this is a negotiating draft rather than the final version. The ‘Stone’ was one of fifteen monuments taken to London in addition to: four complete and twelve fragments of Sekhmet statues; four column fragments; and a ‘chest of Oriental manuscripts’. See M. Bierbrier, ‘The Acquisition by the British Museum of Antiquities Discovered during the French Invasion of Egypt’, in W.V. Davies (ed.), *Studies in Egyptian Antiquities: A Tribute to T.G.H. James* (London, 1999), 111–113; Moser, *Wondrous Curiosities*, 66–67.
 - 10 V. Rondot (ed.), *Champollion, la voie des hiéroglyphes* (Lens, 2022), 218–219, entry by Didier Devauchelle on the *Lettre*, exhibit no.175 at the Louvre Lens exhibition.
 - 11 J.-F. Champollion, ‘Extrait d’un mémoire relatif à l’alphabet des hiéroglyphes phonétiques égyptiens’, *Journal des savans*, octobre 1822, 620–628.
 - 12 J.-F. Champollion, *Lettre à M. Dacier, Secrétaire perpétuel de l’Académie Royale des Inscriptions et Belles-Lettres relative à l’alphabet des hiéroglyphes phonétiques employés par les Égyptiens pour inscrire sur leurs monuments les titres, les noms et les surnoms des souverains grecs et romains* (Paris, 1822), 44 n.1 ‘Un extrait de cette Lettre a été lu à l’Académie Royale des Inscriptions et Belles-Lettres, le 27 septembre 1822’.
 - 13 A. Loucas, *L’autre Égypte : De Bonaparte à Taha Hussein* (Cairo, 2006), 103–116 ch.8 ‘Déchiffrer Champollion’.
 - 14 For the detailed reconsideration of decipherment as a process into the late nineteenth century, see W. Schenkel, ‘The Decipherment of Hieroglyphs and Richard Lepsius’, *Bulletin of the Australian Centre for Egyptology* 23 (2012), 105–144.
 - 15 Rondot (ed.), *Champollion*, 211 entry by Caroline Dugand on exhibit no.169 the desk of Champollion, with the legend of the breakthrough, on how, as the decipherer collapsed, ‘Jacques-Joseph rassemble les notes de son cadet alité pour rédiger lui-même la fameuse *Lettre*’.

- 16 Rondot (ed.), *Champollion*, 202–203 no. 162 ‘Copies d’inscriptions et empreintes portant des noms royaux’, Bibliothèque nationale de France, Manuscrit NAF 20339, ff59–60.
- 17 J. Leclant, ‘Le voyage de Jean-Nicolas Huyot en Égypte (1818–1819) et les manuscrits de Nestor L’Hôte’, *Bulletin de la Société Française d’Égyptologie* 32 (1961), 35–42 (Bibliothèque nationale de France, Manuscrits NAF 20402, 20403).
- 18 BNF Manuscrit NAF 20402 from <https://gallica.bnf.fr/ark:/12148/btv1b53103965n/f1.item> accessed 14 August 2023. The birth-names Ramses and Thutmes occur on either side of some folios (Karnak: ff88, 91, 133). Separate instances of Thutmes occur in records from Karnak (f89, an example without epithets) and Amada (ff231, 232, 237, the latter including post-decipherment identification notes). The birth-name of Ramses II occurs in examples from Derr (ff242, 243), Sebua (ff254, 255), and Abu Simbel (ff274, 295, 297, 313, 314). Schenkel, *Bulletin of the Australian Centre for Egyptology* 23, 118 with 139–140 nn.37–38 considers the variations with and without epithets, and identifications of sources and examples in J.-F. Champollion, *Précis du système hiéroglyphique des anciens Égyptiens* (Paris, 1824), where at pp. 240–241, Thutmes cartouches are noted from Amada, comparing the name form [deity]+*ms* with Ramses.
- 19 Champollion, *Précis du système hiéroglyphique*, 48 conclusion from analysis of Latin names in hieroglyphic inscriptions of the Roman Period, that ‘à l’égard du système général de l’écriture hiéroglyphique, nous reconnaissons déjà avec certitude qu’il employa deux ordres de signes très différents: les uns exprimaient des *sons*, et les autres des *idées*’. On the problematic abbreviation of ‘sign functions’ to ‘signs’, see below.
- 20 Bibliothèque nationale de France, Manuscrit égyptien 218, exhibited at Lens, entry by Didier Devauchelle in Rondot, *Champollion*, 216–217 no.173.
- 21 On the central role of the Philae obelisk in decipherment, see Schenkel, *Bulletin of the Australian Centre for Egyptology* 23, 111–117.
- 22 Examples include the sarcophagus of King Nakhthorheb, for which one 1806 news report questioned the legitimacy of removal: Moser, *Wondrous Curiosities*, 90 with 259 n.92.
- 23 Schenkel, *Bulletin of the Australian Centre for Egyptology* 23, 126–129.
- 24 T.S. Richter, ‘Early Encounters: Egyptian-Coptic Studies and Comparative Linguistics in the Century from Schlegel to Finck’, in E. Grossman, M. Haspelmath, T.S. Richter (eds.), *Egyptian-Coptic Linguistics in Typological Perspective* (Berlin 2014), 3–68, especially 43–45 on Erman.
- 25 G. Miniaci, ‘Tracing a Line to Modern Egyptology: Ippolito Rosellini, Vladimir Propp, and the Cryptohistory of the “Dizionario Geroglifico”’, in M. Betrò, G. Miniaci (eds.), *Talking along the Nile: Ippolito Rosellini, Travellers and Scholars of the 19th Century in Egypt* (Pisa, 2013), 151–161.
- 26 As succinctly summarized by Reid, *Contesting Antiquity*, 21.
- 27 [H. Brugsch, A. Erman], ‘Zur Umschreibung der Hieroglyphen’, *ZÄS* 27 (1889), 1–4.
- 28 G. Takács, *Etymological Dictionary of Egyptian. I: A Phonological Introduction* (Leiden, 1999), 273, defining as ‘voiceless palatal fricative (spirant)’ in distinction to *shin* ‘voiceless palatal fricative (sibilant)’ and *kha* ‘voiceless velar fricative’, cf A. Loprieno, *Ancient Egyptian: A Linguistic Introduction* (Cambridge, 1995), 33 Table 3.1.
- 29 Reid, *Whose Pharaohs?*, 202.
- 30 Osman, *A Methodological Approach*, 15 ‘Egyptian Colloquial Arabic Lexical Items in Kamāl’s Dictionary Are Unreferenced and Depend only on the Author’s Knowledge’—shared, then, with his Egyptian readers.
- 31 Schenkel, *Bulletin of the Australian Centre for Egyptology* 23, 124. Champollion, *Lettre*, pl. 4, illustrated from Ptolemaic and Roman Period writings the principle that any one sound could be written with more than one sign.
- 32 Compare the critique of the modern division between alphabet and abjad by R. Lehmann, ‘27–30–22–26—How Many Letters Need an Alphabet? The Case of Semitic’, in A. de Voogt, J.F. Quack (eds.), *The Idea of Writing: Writing across Borders* (Leiden, 2012), 11–52, at pp. 22–27. At p.24 n.51, Lehmann highlights the Eurocentric bias of interpreting the Greek alphabet and its European descendants as perfection-point in a global evolution of script, rather than as devices attuned, like any script, by their speakers to their particular language.

- 33 Lehmann, in Voogt, Quack (eds.), *The Idea of Writing: Writing across Borders*, 26.
- 34 F. Coulmas, *Writing Systems: An Introduction to Their Linguistic Analysis* (Cambridge, 2003), 31. See also L. Zimman, 'International Phonetic Alphabet', in J. Stanlaw (ed.), *International Encyclopedia of Linguistic Anthropology* (Hoboken, 2020) at <https://onlinelibrary.wiley.com/doi/epdf/10.1002/9781118786093.iela0179> accessed 15 August 2023. Zimman connects such shortcomings again, as Reid and Bassiouney above, with the history of Imperialism: 'Socioculturally, the IPA is grounded in the orthographic norms and language ideologies of Western Europe and is heavily shaped by the colonial history of linguistics and anthropology'. Context and communicative function are also central for J.F. Quack, 'Die Rolle der Hieroglyphen in der Theorie vom griechischen Vokalalphabet', in W. Ernst, F. Kittler (eds.), *Die Geburt des Vokalalphabets aus dem Geist der Poesie* (Munich, 2006), 75–98 at pp. 83–84.
- 35 The term is from N. Posegay, *Points of Contact: The Shared Intellectual History of Vocalisation in Syriac, Arabic and Hebrew* (Cambridge, 2021).
- 36 R. Harris, *The Origin of Writing* (London, 1986), 29–56 ch.2 'The Tyranny of the Alphabet'; N. Love, 'Transcending Saussure', *Poetics Today* 10.4 (1989), 793–818.
- 37 M. Chelli, *La parole arabe*, (Paris, 1980), 35–45.
- 38 T. Mitchell, *Colonising Egypt* (Cambridge, 1988), 148–149.
- 39 A. Gardiner, *Egyptian Grammar*, 3rd ed. (Oxford, 1957), 26. 'The course usually adopted is to use the English vowel *e* in every case except where the consonants *ʒ* and 'occur; in those two cases *a* (pronounced as in French) is substituted for *e*'.
- 40 Chelli, *La parole arabe*, 35, 'les voyelles ne sont pas représentées en arabe sauf par des signes placés au-dessus ou au-dessous des lettres et réservés aux enfants qui apprennent à épeler et qu'un livre, pour l'usage des adultes, ne comporte aucune voyelle'.
- 41 I. Diakonov, *Afrasian Languages* (Moscow, 1988), 34–35, makes the archaeological evidence in this philology transparent by replacing 'phoneme' with 'graphophoneme'.