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Early encounters: Egyptian-Coptic studies and comparative linguistics in the century from Schlegel to Finck*

"... de quelle importance l'étude du dialecte sacré des Égyptiens peut devenir pour la comparaison des langues ..." (Lepsius 1837: 89)

"Our century has witnessed many intellectual feasts in the vast region of science and art, and among these we must surely reckon the deciphering of inscriptions of bygone times which reveal to us the otherwise sealed history of Egypt, of Babylon, and of Assyria, and make us acquainted with a rich literature in hieroglyphics and cuneiform characters, part of which was written in a time when neither the Pentateuch nor the Veda had been composed. ... These cuneiform inscriptions and hieroglyphics contain no doubt the earliest records of mankind, and their value is heightened by the circumstance that they occasionally give evidence of, and throw light on, the construction of languages still living." (Oppert 1879: 2)

Abstract: From Schlegel (1808) to Finck (1910), the paths of Egyptian and comparative linguistics, despite starting out from different points of departure, crossed often. The early encounters between these two domains of linguistic study have mostly been forgotten by now, perhaps due to the fact that their protagonists went their separate ways during the following century.

This article aims to remind us that one of the earliest translations of a hieroglyphic text into a modern language was accomplished by one of the most renowned comparative linguists of the age, Wilhelm von Humboldt. Moreover, one of the earliest and most influential Egyptologists, Richard Lepsius, began as a comparative linguist and, in fact, never left either of these fields. Emerging knowledge about Egyptian-Coptic was integrated into linguistic thought quite early on and played a role in the developing field of typological classification.

This article cannot tell the whole story of early encounters between the study of Egyptian and of typological classification. Rather, it aims to sketch out some of the main figures and crucial moments of this period in linguistic thought and points to avenues of future investigation.

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1 On the threshold and one step further

Both Egyptology and linguistic approaches to the classification of languages appeared on the scene of European scholarship shortly after 1800, and their early development ran parallel to each other to some extent.

Egyptian language studies in a narrower sense did not exist before 1799, when the trilingual inscription known as the Rosetta stone was discovered. Several European scholars raced to decipher its incomprehensible Egyptian parts – the Demotic and hieroglyphic lines – on the basis of its Greek part. It took only a couple of years until, in 1802, the famous Parisian Orientalist Silvestre de Sacy (1758–1838) and his pupil, the Swedish orientalist Åkerblad (1763–1819), could offer their first tentative results, identifying the phonetic values of a number of alphabetic Demotic signs in the cartouches that were rightly suspected to contain the transcribed Greek names of Ptolemaic kings and queens (Åkerblad 1802; cf. Schenkel 2012a: 43–45, 74–78). However, the Rosetta stone was to resist scholars' efforts for another 20 years.

Before its decipherment, any serious occupation with Ancient Egyptian was limited to the analysis of single Egyptian words that were occasionally transmitted by classical authors (e.g., Jablonski 1804; Quatremère 1808; Schwartze 1843: 969–972, cf. also Wiedemann 1883). This type of evidence supported the hypothesis that at least some parts of Ancient Egyptian survived in Coptic. This hypothesis is presented as a likely assumption in the most current report of the time given in Adelung's *Mithridates* in 1812:

"Whatever is not Greek in the Coptic language may by and large be considered Ancient Egyptian, the possibility of several modifications taken for granted." (transl. from Adelung 1806–1817.3.1: 69)¹

The existence of Coptic, the written language of the Egyptian Christians, was known to European scholars as early as the late 15th century (Emmel 2004). It was studied more thoroughly from the mid-16th century onwards in the context of humanist scholarship, polyglot editions of the Bible, and other types of theo-

¹ The author of this entry was Johann Severin Vater, co-editor of the 3rd volume of *Mithridates* after Adelung's death, who gave reasons for this hypothesis ibid.: 66–67 (translated from German): "The close relation of this [i.e., the pharaonic language] to the Coptic language is evident from clearly proven explanations of many Ancient Egyptian words which are mentioned by Greek and Latin authors and could be satisfactorily explained by experts of the Coptic language. Therefore, these Ancient Egyptian words were integral part of this Coptic language, and the higher their number, the more certain is the close relationship between the one and the other".

logical work (Aufrère 1999; Krause 1998; Emmel 2004). At the time when the presumed key to understanding hieroglyphs, the Rosetta stone, came to light, Coptic was a fairly well-known and translatable language.²

The assumption that Coptic was related to the language underlying the hieroglyphs was to be of crucial importance for the eventual decipherment of Egyptian.³ Once it was demonstrated to be true, the relationship between Coptic and earlier Egyptian became the basis for further achievements in understanding the grammar and lexicon of Ancient Egyptian.

Excursus I: The Genealogical Classification of Ancient Egyptian

The genealogical status of Egyptian and Coptic remained unsolved for quite a while. Coptic-Sanskrit cognates, as proposed by a certain Alter in 1799, are discussed and eventually refuted by Vater in *Mithridates* (1812.3.1: 67–68, who also discussed the relation of Coptic to Semitic and Berber languages (1812.3.1: 72-78). A point of special interest is the range of hypotheses proposing connections between Egyptian and Chinese, both in terms of genealogical relation as in De Guignes' (1721-1800) academy paper of 1758 (De Guignes 1759), Champollion's experiments in reading hieroglyphs as Chinese (Hartleben 1906.1), and Klaproth's attempt to connect Coptic to North-Western Asian languages genealogically (Klaproth 1823), as well as in 'typological' terms, such as in Silvestre de Sacy (1808); Lepsius (1834, cf. below, § 3), and Steinthal (1850 and 1860, cf. below, § 5). Attempts to substantiate the relationship of Egyptian and Semitic languages were taken by Lepsius (1836a, 1836b) and Benfey (1844). Benfey compared Semitic and Coptic pronominals as well as Semitic and (relics of) Coptic gender and number markers and came, decades before the full significance of this comparison could be appreciated (cf. below, § 8), to the conclusion "that in this respect [i.e., in

² Even though its morphosyntax was far from being thoroughly analyzed before Stern 1880 (cf. below, § 8), Coptic was understood well enough, due to extant Arabic-Coptic glossaries and Coptic translations of biblical literature, to be able to separate grammatical items from lexical items and to assign approximate meanings to them. Bibliographical information on contemporary standard works on Coptic grammar and the lexicon can be found in Vater (1815: 51–52).

³ Champollion, who claimed to be as fluent in Coptic as in French, had finished a grammar and a lexicon of Coptic already in 1815, and only Silvestre de Sacy's doubts that Coptic would contribute to the knowledge of Egyptian made the Paris academy refuse their publication (Erman 1922: xxxvii–xxxviii). When Lepsius began to work on Egyptian, he started by acquainting himself with Coptic, and we see him working out a (never published) Coptic grammar early in 1835 (cf. Lepsius 1836b: 86).

terms of pronominals, gender and number marking, covered by Benfey under the term "inflectional forms" (flexivische Formen)] the Egyptian language and the Semitic stand on the same basis, that however these both branches of the underlying source language must have been separated and developed individually very early, long before the standardization of the most inflectional forms." (transl. from Benfey 1844: vi-vii). This conclusion is still accepted, by and large (cf. Loprieno 1986: 1-12; Schenkel 1990: 13-17, and the introduction by Grossman & Richter in this volume). 4 A genealogical link to African languages was first proposed and conceptualized in the framework of the 'Hamitic' language family by Lepsius (1863a and 1880) (cf. below, § 3).

Language classification and linguistic typology have their roots in European traditions of the philosophy of language and universal grammar (cf. Robins 1973; Plank 2001; Rousseau 2001).

In 1808, Friedrich, the younger of the Schlegel brothers (1772–1829), first noticed different degrees of grammaticalization (as one would call it now) as displayed by different languages encoding functional relations between lexemes,⁵ and took this difference as a criterion for distinguishing two general types (Hauptgattungen) of language (cf. Rousseau 2001: 1415-1416; on Friedrich Schlegel's occupation with Egyptian cf. Grimm 2004: 15-16 and 2006: 74-76): on the one hand, the inflected, truly "organic" type, as he called it, such as Sanskrit,6 and on the other hand, the type of language where the same functions are expressed by juxtaposed or agglutinated words, occasionally or exclusively loaded with grammatical meaning. The latter was the far less sophisticated type of language, according to Schlegel.

Shortly before, in August 1807, Jean-François Champollion (1790–1832), a 17-year-old graduate of the lycée in Grenoble, who had been obsessed with the

⁴ For a hotly debated phonological issue related to the shared roots of the Egyptian and Semitic lexicon, see Gensler's article in this volume.

⁵ Schlegel (1808: 45, transl. from German): "Auxiliary assignments of meaning are indicated either by internal changes of stem sounds, i.e., by inflection, or by appending discrete words inherently meaning e.g., plurality, past, future obligation, or any similar terms of relation, and these two simple cases also define the main types of all languages. All other cases are only modifications and sub-categories of these two types."

⁶ Cf. Schlegel (1808: 50–51, transl. from German): "In the Indic language, each root [is] ... truly what the name says, and like a living seedling, since, as relation terms are indicated by internal change, its growth is given scope for free development".

decipherment of hieroglyphs from the age of twelve,⁷ had started to work out a comprehensive geographical description of Ancient Egypt. Published in 1814 under the title *L'Égypte sous les pharaons*, it was his first major contribution to the investigation of Ancient Egypt (Hartleben 1906.1: 65–66). In September 1807, Champollion went to Paris to enroll at university and was introduced to Silvestre de Sacy (Hartleben 1906.1: 72–74), the most famous orientalist of the day and "the first person [in modern times] to read any Egyptian word, albeit in a small way" (Dawson & Uphill 1995: 392).

In the same year 1807, an important contribution of Champollion's later competitor, the English physician and scientist Thomas Young (1773–1829) appeared. This contribution, however, was not yet related to hieroglyphs but rather to the physical nature of light. Only at some point after 1810 did Young became captivated by the hieroglyphs and progressed further than any of his predecessors could have boasted by then.

In 1818, Young published a vocabulary comprising 204 Egyptian words (with more or less correct meanings assigned to roughly a quarter of them)⁸ and a list of 14 hieroglyphs with their presumed phonetic values.⁹ In the same year, the English traveler, William John Bankes (1786–1855), took the first copy of the Abydos king list of Ramesses II (Dawson & Uphill 1995: 29; James 1997) and sent a lithographic table of it to Thomas Young, who did not profit from it as Champollion later would.

Once again in 1818, Friedrich's elder brother, August Wihelm von Schlegel (1767–1845), published his *Observations sur la langue et la littérature provençales*, which was a landmark in the emerging field of linguistic typology, due to the introduction of the two influential terms, "analytic" and "synthetic". These were chosen by Schlegel to subdivide the *inflected* type of language (in terms of his younger brother's classification). Apart from the inflected type ("les langues à inflections"), August Wilhelm von Schlegel defined not just one but two other

⁷ According to Hartleben (1906.1: 33–35), Champollion's decision to conquer that field can be traced back to his visit with Joseph Fourier, who showed him his Egyptian antiquities collected during Napoléon's Egyptian campaign, when he belonged to the scientific staff.

⁸ According to Erman (1922: xxxii-xxxiii).

⁹ These lists were published in Young's entry on "Egypt" in the 1819 supplement of *Encyclopedia Britannica*, but a printed version had apparently already been circulating in 1818. Wilhelm von Humboldt recorded both of them in his library inventory of 1821/1827 on Egyptian: "Young's Hieroglyphical Vocabulary. [London 1818.] 8. Broch." (Mueller-Vollmer 1993: 410).

¹⁰ Schlegel (1818: 16, translated from French): "The languages with inflection subdivide into two classes which I will call, synthetic languages and analytic languages"; cf. also Rousseau (2001: 1416).

types of languages (Schlegel 1818: 14): those lacking any grammatical structure ("les langues sans aucune structure grammaticale") and those using affixes ("les langues qui emploient des affixes").

After years of trial, error, despair, and new approaches, Jean-François Champollion made his final breakthrough in 1822.11 On September 17, he saw for the first time a copy of the Abydos king list. He quickly convinced himself that his way of reading Ptolemaic and Roman emperors' names held good for the reading of names of much earlier, native Egyptian pharaohs too. The mechanism of hieroglyphs used to spell out the sounds of non-Egyptian names of the Graeco-Roman period turned out to be valid from a much earlier time and could thus be taken as an essential feature of the original writing system. On 27 September 1822, Champollion read his *Lettre à M. Dacier*, an outline of some of the main points of his method and results, to the Paris Academy. In 1823, he started working out his *Précis du système hiéroglyphique*, a comprehensive introduction to the hieroglyphic writing system and its different sign functions, "phonétiques", "figuratifs", and "symboliques", as he called them (Champollion 1824a, 2nd ed. 1828). The linguistic data on which Champollion based his argument at that time was almost exclusively taken from proper names: names of Roman emperors, Ptolemaic kings, pharaohs, gods, and private persons. Grammar was only sporadically touched upon when the meanings of Egyptian proper names were to be explained. Champollion continued working on a proper grammatical description of Egyptian for the rest of his life, but only four years after his premature death at the age of 42 could his Grammaire égyptienne, ou principes généraux de l'écriture sacrée égyptienne appliquée à la représentation de la langue parlée appear, edited by his elder brother Jacques-Joseph Champollion (Champollion 1836).

¹¹ This breakthrough and its prehistory have often been narrated, cf. e.g., Hartleben (1906: 420-425); Erman (1922); Müller (1962); Hintze (1972); Parkinson (1999); Schenkel (2003). A more sophisticated version is provided by Schenkel (2012a & 2012b).

2 Humboldt's "reception of the Champollionian turn" 12

The two groundbreaking works by Champollion, his *Lettre* (1822) and his *Précis* (1824a), meant the accomplishment of "one of the first great European scientific projects". They inaugurated a new branch of scholarship – Egyptology; and they eventually initiated an intellectual encounter between the young French scholar and Wilhelm von Humboldt (1767–1835), one of the main figures in the emerging fields of comparative linguistics and language typology. ¹⁴

The elder Humboldt brother had retired from state service on 31 December 1819 and moved to his manor at Tegel near Berlin, where he concentrated on linguistic studies. Humboldt's intellectual platform was not so much the University of Berlin, whose co-founder and *spiritus rector* he was, but the Royal Academy of Berlin, to which he delivered his seminal papers in these years (Trabant 1994).¹⁵

In the first of these, *Ueber das vergleichende Sprachstudium in Beziehung auf die verschiedenen Epochen der Sprachentwicklung*, read in August 1820, Humboldt conceptualized his view on the systemic role that writing plays for languages and for the study of languages (cf. Trabant 1986 and 1990: 185–216; Messling 2009: 15–21). In several following papers, he focused on the relation between language(s) and writing systems, and was occupied by this when Champollion's works crossed his path.¹⁶

¹² This phrase is quoted from Messling (2008a: 127).

¹³ Messling (2009: 22).

¹⁴ This encounter has been profoundly illuminated by Deichler (2004) and Messling (2005, 2008a, 2009a, and 2009b); cf. also Thouard (2009). On Humboldt within the context of 19th-century language classification, see Rousseau (2001: 1416–1425).

¹⁵ Humboldt's library contained some 20 Egyptological publications, among them Young (1819 and 1823), Champollion (1822, 1824a and 1826), Salt (1825), Spohn (1825), Seyffarth (1826a, 1826b and 1827), and several Coptic publications, among them Kircher (1636), Wilkins (1716), Scholtz & Woide (1775 and 1778), Tuki (1778), Klaproth (1823), and Zoëga (1810). These are recorded in Humboldt's "list of books belonging to the study of languages" (cf. Mueller-Vollmer 1993: 410–411: "Alt Aegyptische Sprache" and 419–420: "Coptische Sprache"). Humboldt's folder "Ueber die Hieroglyphen Schrift" (Coll.Ling.fol.26) contains 139 folios, among them Humboldt's notes related to his publication of the Berlin "lion-headed statues" (cf. Mueller-Vollmer 1993: 170–174). Humboldt's extant copy of Champollion's *Précis* (Champollion 1824a) was "von Humboldt systematisch durchgearbeitet und mit Anmerkungen und Verweisungen versehen" (Mueller-Vollmer 1993: 17).

¹⁶ According to the account given by Hartleben (1906.1: 423–442), Alexander von Humboldt, who lived in Paris and was in Champollion's audience on 27 September 1822, could proudly send the foundry proof of the first printed version of the *Lettre* to his eagerly waiting brother Wilhelm

Humboldt's gradual acquaintance and final agreement with Champollion's theories can be reconstructed from his academy papers from the years 1824–1825 as well as from his correspondence (Messling 2008a: 73–92 and 127–131).

In a letter dated 22 May 1824 to his friend Friedrich Gottlieb Welcker, Humboldt writes about his work on the paper Ueber den Zusammenhang der Schrift mit der Sprache (Messling 2008a: 79-82):

"Last winter [1823/24] I started working on the different types of writing and had already dealt with the hieroglyphic ones in the only way possible, according to the ancient authors. Providentially Champollion's Lettre à Mr. Dacier fell into my hands, and I anticipated that none of my work would be useful and the issue would be totally different. Therefore I examined these new ideas with great accuracy and meticulousness and convinced myself, even more after the appearance of the entire system [i.e., the *Précis* published early in spring 1824], that the Champollionian discovery holds indeed and is really very important." (transl. from the quotation in Messling 2008a: 70)

As Humboldt had rightly foreseen, the acquaintance with Champollion disturbed his paper, which was never read in the academy nor otherwise published during his lifetime or even prepared for publication by himself (cf. Messling 2008a: 76-78). Only after his death was Ueber den Zusammenhang der Schrift mit der Sprache printed.¹⁷ The manuscript shows how Humboldt had changed some passages on hieroglyphs, obviously to accommodate an almost finished text to the contradicting solutions suggested by Champollion, whose Précis is quoted twice (for details see Messling 2008a: 77 and Messling 2009a: 42).

Humboldt's first public acknowledgement of Champollion's work occurs in his paper Ueber die phonetischen Hieroglyphen des Herrn Champollion des jüngern (Humboldt 1903-1936.5: 78-106) read on 8 March 1824, after the Lettre had "fallen into his hands" but before he had seen the recently published *Précis* (Messling 2008a: 88, n. 186). At that time, Humboldt was still hesitating. Although he agrees with Champollion's phonetic interpretation of hieroglyphs in broad terms, he still raises doubts and objections concerning details of Champollion's explanations (Messling 2008: 75 and 87–92).

as early as the first days of November 1822. But this scenario does not seem to fit with other evidence concerning Humboldt's reception of Champollion's Lettre.

¹⁷ Written as an appendix to the introduction to Über die Kawi-Sprache auf der Insel Java, nebst einer Einleitung über die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwicklung des Menschengeschlechts, ed. by Buschmann, Eduard. 3 vols. Berlin 1836-1839: 415-436, it was also published separately in 1836 (Humboldt 1836), and in vol. 6 (1948: 426-487) of the first collected works edition (Humboldt 1841-1852).

Humboldt's next paper *Ueber Buchstabenschrift und ihren Zusammenhang mit dem Sprachbau*, read on 20 May 1824,¹⁸ reflects his acquaintance with the *Précis* and bears witness to his increasing confidence in Champollion's work. Although Humboldt does not quote it explicitly and conspicuously avoids talking about hieroglyphs (cf. Messling 2008a: 131 and n. 262), the few times he does mention them, he credits the Egyptians with a phonetic writing system ("Buchstabenschrift"), *e.g.*:

"The recent Coptic language shows undeniably that also the Ancient Egyptian language had a formation that does not indicate great aptitude for language, *and still, Egypt not only possessed letter writing (Buchstabenschrift) but was even its cradle.*" (transl. from German quotation in Trabant 1994: 99)

"The fact that Egypt possessed *letter writing* (*Buchstabenschrift*) was doubted only in recent times, when even the demotic writing was pronounced conceptual signs; otherwise there were a lot of testimonies giving evidence or suggesting this. Only the issue as to which of the Egyptian writing styles might have been the alphabetic one was debated, or its place was sought after only in the aforementioned Demotic one." (transl. from Trabant 1994: 115)

Humboldt's "Champollionian turn", to put it with Messling (2008a), becomes explicit, if not yet public, in his letter from 26 June 1824 to Champollion.¹⁹ He attached a copy of his academy paper from 8 March and also excused himself for having wrongly criticized some of Champollion's arguments in the *Lettre* that he could only fully appreciate after having read the *Précis* (Messling 2008a: 73–75).

Humboldt's final step towards an unreserved, public agreement with Champollion's method is taken in his academy paper from 24 March 1825 *Ueber vier Aegyptische löwenköpfige Bildsäulen in der hiesigen Königlichen Antikensam-mlung* (cf. Deichler 2004: 17–18, 26–31; Messling 2008a: 157–173). Here Humboldt attempted to read and translate a short hieroglyphic inscription à *la Champollion* – and succeeded to his full satisfaction.

Between the spoken version from March 1825 and the printed version dated 1828,²⁰ Humboldt improved his comprehension of the Egyptian text by correspon-

¹⁸ First printed in the *Abhandlungen* of the Royal Academy from the year 1824 (Humboldt 1826: 161–188).

¹⁹ This letter was first published by Ideler (1841), and has been re-edited from the original manuscript in the Bibliothèque Nationale de France by Messling (2008a: 317–357). Champollion's reply from 12 February 1825 was first published by Ideler (1841), and is re-edited in Hartleben (1909.1: 144–166) and Messling (2008a: 358–380).

²⁰ First printed in the *Abhandlungen* of the Royal Academy of the year 1825 (Humboldt 1828: 145–168); I translate from vol. 4, (1843: 302–333) of the second print of the Collected Works edition (Humboldt 1841–1852).

dence with Champollion; only Humboldt's part of this correspondence is extant.²¹ Champollion's reply from June 1826 is reflected in many references in the printed version and is explicitly mentioned in the extensive acknowledgment, in which Champollion's generosity in giving advice and detailed information is praised.²²

Humboldt's avowal of Champollion's merits reads as follows:

"Without making any claim for myself to have furthered the study of the decipherment of hieroglyphs by my own discoveries (as likewise everything that could seem meritorious in the present paper is owed to Champollion alone), I made it my special concern to examine most accurately what others saw in it and to combine the study of the Coptic language according to its formation and according to the texts edited by Zoega [i.e., Zoega 1810] with it. Hence I gladly confess here that the way taken by Mr. Champollion seems to me the only right one; that I consider the explanations given by him ... true and firmly established; and that I undertake the confident hope that, if it is for him to continue this work for another number of years, a reliable and complete decipherment of hieroglyphic monuments will be owed to him, as far as only possible with documents of which, how ever many of them we may come to possess, a certain part ... is irretrievably lost." (transl. from Humboldt 1841-1852.4: 303)

The correspondence between Humboldt and Champollion continued until summer 1827.²³ While Humboldt's linguistic interests were turning more and more toward East and Southeast Asian languages, his opinion about the decipherment and the nature of hieroglyphs remained unchanged and obviously unchallenged by invectives against Champollion from other aspirants to the decipherment of the hieroglyphs, such as Friedrich August Wilhelm Spohn (1792–1824) and his executor Gustav Seyffarth (1796–1885) from Leipzig.²⁴

²¹ Humboldt's letter to Champollion from 8 March 1826 (Messling 2008a: 381–390).

²² The text, dated from 12 June 1826 (Livorno), is not preserved or is at least not available (cf. Messling 2008a: 315).

²³ The last known parts of this correspondence, Champollion's letter to Humboldt from 14 June 1827 and Humboldt's reply from 7 July 1827, are edited by Messling (2008a: 381–400).

²⁴ Cf. Spohn (1825); Seyffarth (1826a–b); Champollion (1826); Seyffarth (1827). Unlike others, Spohn/Seyffarth did not only offer another clue but an entire counter-system. On the Spohn/ Seyffarthian approach to the decipherment of the hieroglyphs, see Blumenthal (1999) and Wolze (2011). For Seyffarth's (unacknowledged) failure in a public 'decipherment competition' in 1826 in Rome, see Messling (2009b). In his Lettre à M. le duc de Blacas d'Aulps, Champollion himself refuted the Spohn-Seyffarthian approach (Champollion 1826). Seyffarth maintained Spohn's method of deciphering hieroglyphs until his death in 1885 at the time when the Berliner Schule (cf. below, § 8) was beginning to flourish. Spohn's main idea was that hieroglyphs were syllabic signs, not wrong per se, but poorly combined in his and Seyffarth's thinking with the denial of other types of signs, namely determinatives and logograms. Seyffarth's defense of Spohn's system became more and more idiosyncratic and polemic in a ridiculous anti-Champollionian way.

Once and for all, Humboldt was persuaded by his own experience – his analysis and translation of the inscriptions on the Berlin "lion-headed statues", and these make him the first successful translator of a hieroglyphic text into a modern language after Champollion himself.

3 Lepsius and the birth of Egyptology from the spirit of comparative linguistics

While Humboldt's reception of the "Champollionian turn" took slightly more than one year, its reception by a wider audience took more than a decade from the time Champollion's Précis was published in 1824. After Champollion had suddenly passed away in 1832 without having been able to establish an academic tradition, the person to win over a wider academic public to Champollion and to leave behind (more than to convince) the aforementioned competitors was a young comparative linguist from Germany. Carl Richard Lepsius (1810–1884) had studied classical philology, Oriental languages, and comparative linguistics under the auspices of such eminent German scholars of the day as Gottfried Hermann in Leipzig, Heinrich Ewald, Jacob and Wilhelm Grimm and Ottfried Müller in Göttingen, and August Boeckh and Franz Bopp in Berlin (cf. Ebers 1885a & b; Kammerzell 1996 and 2009). His doctoral thesis (Lepsius 1833) was devoted to the decipherment of Umbrian, at that time still an unknown ancient Italic language attested in the so-called *tabulae iguvinae*.²⁵ At age 22, Lepsius had studied an impressive range of Indo-European and Semitic languages, was well acquainted with the current state of comparative linguistics (however not yet with that of Egyptian studies), and was – as an honest Humboldtian! – particularly interested in the phenomenology of writing and its relation to the structure of languages and language change.

To deepen and improve his skills, Lepsius moved to Paris, the European capital of Oriental studies, in the summer of 1833 (cf. Mehlitz 2010: 25–40). His concern was Sanskrit, Italic inscriptions, and manuscript collections, and

²⁵ Lepsius returned to the topic of his academic origins a few years later (Lepsius 1841). Prof. Gerhard Meiser of Halle, whom I asked about the significance of Lepsius's achievements in the fields of Umbrian language study, drew my attention to a statement by Prosdocimi 1984.1: 64: "Decisivo e definitivo è Lepsius, allievo di Müller, che nella sua dissertazione di dottorato (1833) stabilisce ... tutti i valori dell' alfabeto iguvino ...; sono anche associati in una più corretta prospettiva alla loro genesi, con coscienza delle distinzioni conservate nelle trafile. Non solo i valori di massima, ma le stesse convenzioni sono quelle accettate tutt'oggi".

certainly not Egyptian, although it is reported that he attended Jean Antoine Letronne's lectures on Egypt, in which Letronne cast doubts on Champollion's discoveries (Ebers 1885a: 65–66; Mehlitz 2010: 34 + n. 6). Later in 1833, Lepsius started working on his first publication, printed in Berlin in March 1834 under the title Paläographie als Mittel für die Sprachforschung, zunächst am Sanskrit nachgewiesen.²⁶ In this paper, Lepsius presented himself as a Sanskritist and as an up-to-date comparative linguist who knew about and shared current trends and theories:

- Lepsius briefly touched upon the issue of the origin of language, much debated at the time, and sides with the suggestion of original empfindungslaute (Lepsius 1834: 4-5 and 21-22) - the "Pooh-Pooh theory" in Max Müller's terms.
- Lepsius explained his palaeographical approach to language study (programmatically claimed in the title of his paper) with the Humboldtian²⁷ statement that "script, as good as language, is a perceptible dress of the thought" (Lepsius 1834: 6), and stresses the analogy of the two (cf. below).²⁸
- In the wake of the Schlegel brothers and his own teacher Franz Bopp, Lepsius's idea of languages was instinctively associated with the idea of "organic growth" (Lepsius 1834: 5), by which (some) languages, namely the Indo-European, mature to "perfection":

"Here we may point to languages, such as Chinese, and to whole language families, such as Semitic, that prematurely aged as it were, so that their perceptible body never grew to perfection, as our language family: Although the Semitic language family is acknowledged to trace back to the same source as ours originally, ... we are urged to suppose that an originally common and equally undeveloped seed has achieved a higher degree of perfection in one direction, the Indogermanic, and a lesser degree of perfection in the other, the Semitic one." (transl. from Lepsius 1834, 23)

²⁶ Lepsius mentioned this work in his letter to Bunsen from 12th December 1833; the appendix (95 "Diese Blätter waren schon geschrieben, als mir durch die besondere Gefälligkeit des Herrn Eug. Burnouf zu Paris etc.") is dated (p. 101): "Paris. Januar, 1834."

²⁷ Humboldt highly appreciated Lepsius's treatise and sent him a kind letter dated 22 April 1834, cf. Mehlitz (2010: 33).

²⁸ In his letter to Lepsius from 22 April 1834, Humboldt noticed the closeness to his own thought about the relations between writing and language explicitly and pointed to his own academy paper on the topic, Ueber Buchstabenschrift und ihren Zusammenhang mit dem Sprachbau, cf. Mehlitz (2010: 33, n. 29).

Excursus II: The Inequality of Languages

Still in 1806, the introduction to Adelung's *Mithridates*, the "linguistic encyclopedia" of the Age of Enlightenment, emphatically claimed an overall functional equality of human languages and explicitly argued against the notion of superior and inferior languages:

"Languages are all conditioned in the same way and built on common ground; hence each of them can get to whatever time, circumstances, and culture may require. This is why the dispute about one language's merits over another one is so useless." (transl. from Adelung 1806–1817.1: xxv)

From 1808, in the context of the prevalent Romantic world-view, the comparison and classification of languages rested on a strongly hierarchical and evaluative (rather than descriptive) conception of language diversity.²⁹ This conception has been strongly criticised in the context of the "Orientalism" debate (Said 1978; on philology and comparative linguistics esp. 99), in which it is claimed that 19th-century Western European humanities intellectually anticipated and ideologically supported racism and colonialism. Markus Messling has recently argued for a more sophisticated view of "Western Europe" and "the 19th century" and made a good point for the exoneration of Humboldt from this kind of reproach³⁰ since his thought on the diversity of languages differs so considerably from that of scholars such as the Schlegel brothers (cf. Bär 2002), Bopp,³¹ or Steinthal (for Steinthal's mas-

²⁹ Ringmacher (2001a: 1428) attributes the plain linear hierarchy only to the first two generations – Pott/Bopp and Steinthal/Schleicher – of linguists aproaching language classification, who described "die in den Sprachtypen durchlaufende Geschichte kurz und auf den Gipfelpunkt der klassischen indogermanischen Sprachen hinzielend, wie es den geschichtsphilosophischen Erwartungen ihrer Zeit entsprach". According to Ringmacher (2001a: 1428), the third generation, with G. von der Gabelentz (1840–1893) as protagonist, deviated from that "geschichtsphilosophischen Schematismus". Von der Gabelentz conceptualized his "Typenreihe" no longer as a single, linear, and unidirectional succession, but as a circular, repeating process (cf. von der Gabelentz 1891: 250, on the spiral course of language history ["Spirallauf der Sprachgeschichte"]) and understood typological and genealogical classification of languages as completely independent modes of comparative linguistics. In this framework, such influential conceptions as Misteli's and Finck's (cf. below, § 9) would still belong to the earlier type of linguistic typology.

³⁰ Messling (2008a: 228–276, 2008b and 2010); cf. also van Driem (2001: 129–131) on the difference between Humboldt's and Steinthal's approach and Bär (2002) for the difference between Humboldt's and W.A. Schlegel's concept of linguistic diversity; cf. already Trabant (1990: 235–235) against Aarsleff (1977).

³¹ On Bopp's misinterpretation of Humboldt's "Kawi work" (Bopp 1841), cf. Mueller-Vollmer (1992, 1993).

sively devaluating classification, see below, § 5). A remarkable example of lonely resistance to the prevalent hierarchical concept of language classification will be presented later in this paper (cf. below, § 7).

Still in 1833, when Lepsius was working on his Paläographie als Mittel für die Sprachforschung, he was more or less ignorant of Egypt and Egyptian. The only time Egyptian is mentioned here, it serves as an illustration of picture-writing (Bilderschrift), and thus Lepsius fell back behind the view that Humboldt had already propounded in 1825:

"All writing emerged from pictography, as all languages from intrinsically meaningful sounds of emotion, and, as it is principally the same procedure to draw a tree or an animal on paper and stone like the Chinese or the Egyptian, or in the sand like the savage, or to describe it by gestures in the air, one has to ascribe no lesser age to writing in the broadest sense, than to language itself ... Only by special organic growth over the course of time, not by lucky discovery, could perfect alphabets for the languages develop, just as only by organic growth over the course of time could a perfect grammar develop for them. In Chinese, we find the grammar as imperfect as the writing, and purely on the basis of the use of hieroglyphs, I would ascribe a similar imperfection to the Egyptian language as to the Chinese." (transl. from Lepsius 1834: 4–5)

It is thus even more striking to find Egyptian mentioned in a positive way – in one breath with Sanskrit, instead of Chinese! – at the end of the same treatise, when Lepsius finally outlined the chances of a future "scientific palaeography":

"If palaeography is of much lower worth for our European languages since the predominant intellectual element has restrained the material organism too much, ... it rises however to highest importance and requires the utmost scientific interest if languages are concerned whose material body is still fresh and untouched as in Sanskrit, or even still preeminent as in Egyptian. A scientific palaeography might find here its focus and ascend to a more independent rank and to higher attention if it could only take possession of this rich and already largely accessible material, and could survey and treat it under higher, especially linguistic perspectives." (transl. from Lepsius 1834: 94)

Although this passage is not part of the appendix added in January 1834, and its precise dating remains tentative, it is plausible to assume that these words were written when Lepsius was already considering embarking upon a "scientific palaeography" of Egyptian himself: In November 1833 he had received an offer by Christian Karl Josias Bunsen (1791–1860), who later wrote a seminal historiographical work on Pharaonic Egypt (Bunsen 1844–1857).³² Bunsen, who was at the time the Prussian ambassador in Rome, invited Lepsius to Rome for the study of Umbrian, Oscan, and Etruscan inscriptions, *and* for the study of Egyptian. He raised the possibility of support for this enterprise by the Berlin academy. Lepsius, whose esteem for Egyptian was originally not very high, as has been shown, eventually replied in a letter from 11 December 1833:

"Above all, had I really convinced myself by means of the already available sources, especially Champollion's grammar [that would appear only in 1836, cf. above], that the foundations already laid by a scrupulous and scientific treatment raised hope for further results, then I would gladly devote all my energy, time, and diligence to that issue, whose further promotion can rightly claim the most general interest, whose exploration however can be the concern of only a few beneficiaries by now." (transl. from quotation in Mehlitz 2010: 31–32)

Bunsen replied with further encouragement, which helped.³⁴ In 1834, Lepius began studying Coptic, hieroglyphic sources, Champollion's and others' publications on hieroglyphs, and Champollion's unpublished papers. Lepsius's earliest publication reflecting his new occupation is an article on a *locus classicus* about the different scripts of the Egyptians in a 3rd-century CE Greek text by the church father Clemens of Alexandria (Lepsius 1835).

Lepsius's first attempts at combining his recent Egyptian and Coptic studies with his original interests in comparative linguistics are manifested in *Zwei sprachvergleichende Abhandlungen*, published in 1836. The earlier of the two, finished in March 1835 (Lepsius 1836b: 150), deals with numerals in different language families: Indo-European, Semitic, and (Egyptian)³⁵-Coptic. As a novelty in the sample of languages studied by comparative linguists, Coptic is formally introduced and recommended by Lepsius:

"I am happy to point here for the first time to the Coptic language as being of no small interest for the comparison of languages." (transl. from Lepsius 1836b: 85)

³² Seminal was, for example, Bunsen's subdivision of the political history of Egypt into the Old, Middle, and New Kingdoms.

³³ Translated here from Edouard Naville's quotation in his entry in Allgemeine Deutsche Biographie, vol. 51: 661.

³⁴ Letter from 20 January 1834, cf. Mehlitz (2010: 32).

³⁵ In contrast to what the title suggests, not only Coptic but also hieroglyphic and Demotic spellings of numerals are dealt with (Lepsius 1836b: 88–89). However, the full range of Egyptian numerals was (and still is) available only in Coptic.

Focusing on the etymology and formation patterns of numerals, Lepsius concludes that these not only exhibit structural similarities throughout the three language families but can even be traced back genealogically to a common origin, being pronominal roots of the 1st, 2nd, and 3rd persons. 46 Lepsius sent the original manuscript to Wilhelm von Humboldt, whose particular interest in the topic he anticipated, and whose personal favour he wanted to gain, since he was hoping for financial support by the Royal Academy of Berlin. However the manuscript failed to reach its addressee alive – Humboldt had passed away on 8 April 1835; the manuscript temporarily disappeared, and, after it was sought and found, it could not be printed until 1836 (cf. Mehlitz 2010: 36). In a letter written on 30 April 1835 to Bunsen, Lepsius confessed his closeness to Humboldt's style of language studies:

"W. v. Humboldt's death grieved me a lot, both for the personal benevolence that he showed towards me several times, and for the irrecoverable loss that linguistics sustained therefrom. In particular, he was the one by whom I hoped to be best understood in my direction of linguistics and whose judgment I had always in mind with this last work [i.e., Lepsius 1836b]." (translated from the quotation in Ebers 1885a: 102)

Lepsius's other Sprachvergleichende Abhandlung, read on 12 November 1835 to the Berlin Academy, deals with the arrangement of the Semitic, Indian, Ancient Persian, Ancient Egyptian, and Ethiopic alphabets, with the same intention to demonstrate "the relationship in which these ... hitherto strictly separated classes of peoples originally were" (Lepsius 1836a). In a footnote, Lepsius's increasing admiration for Champollion, already expressed in a letter to Bunsen from 14 August 1835 (cf. Mehlitz 2010: 39, n. 34.), is publicised for the first time:

"Anybody who is still in doubt about Champollion's main discoveries, in particular his hieroglyphic alphabet, must blame himself for being ignorant of one of the most important discoveries of recent sciences; the issue itself has clearly been settled long since." (transl. from Lepsius 1836a: 58–59, n. 1)

Lepsius's first and most famous contribution to Egyptian linguistics is his letter to Champollion's pupil Ippolito Rosellini (1800-1843), finished and printed in Rome in 1837. In this seminal paper, Lepsius focused on the crucial point of early Egyptian linguistics: which of the competing methods of decipherment of the hieroglyphs was the most appropriate. Overall, Lepsius confirmed Champollion's

³⁶ Lepsius's conclusion contradicted the opinio communis, cf. Pott (1847, 1855, 1868). However, Lepsius maintained his opinion (Lepsius 1880: xxiv).

methods and results, and partially improved on them.³⁷ It is generally agreed that Lepsius's *Lettre* of 1837 was the beacon by which the Champollionian approach eventually gained acceptance among a wider audience of linguists.³⁸

In 1846, just back in Berlin from his groundbreaking expedition to Egypt and Nubia (1842–1845), Lepsius was appointed professor of Egyptology at the University of Berlin. The first 'Egyptologist' by profession, he never stopped working on general and comparative linguistics. His scope included mainly two fields of general linguistics, (i) phonetics and (ii) the classification of African languages.

- (i) In 1855, Lepsius published a phonetic alphabet (Lepsius 1855a), based on a general phonetic classification of linguistic sounds, for transcribing European and non-European languages in a standardized way an early ancestor of the International Phonetic Alphabet (IPA). This work was translated into English in the same year (Lepsius 1855b). A second, considerably extended English edition appeared in 1863 (Lepsius 1863a). Due to the adoption of Lepsius's standard alphabet not only by The Church Missionary Society as the title proudly admits but also by the International Congress of Orientalists in London in 1874 (cf. Ebers 1885b: xxiv–xxvii), it was widely distributed and served as a point of departure and reference for later approaches to the standardization of phonetic transcription (cf. e.g., Heepe 1928). Many of Lepsius's publications in the following years (e.g., Lepsius 1855c, 1860, 1861, 1862a, 1862b, 1863b, 1863b, 1863c, 1866a, 1867, 1868) were devoted to several theoretical and empirical issues of phonetics and phonetic transcription.
- (ii) In the 1863 edition of Lepsius's Standard Alphabet, Old Egyptian, Coptic, and five other African languages are dealt with under the label of "Hamitic" languages (Lepsius 1863a: 193–208). The concept of Hamitic languages was

³⁷ The improvement concerned mainly the issue of different types of hieroglyphic signs, to which Lepsius added the type of phonetic but non-alphabetic signs that he called "syllabic" (in fact the only type accepted by Spohn/Seyffarth) and the diachrony of Egyptian: Lepsius demonstrated a greater difference between Egyptian as encoded in hieroglyphs and Coptic than Champollion had been aware of; see Schenkel (1990: 17–19), Richter (2013), and below, §§ 6 and 8. For a more comprehensive account of Lepsius's part in the decipherment of hieroglyphs, see Schenkel (2012a, 2012b).

³⁸ For an illustration of the extent and the span of time that this was felt to be an open issue, it may be worth mentioning that the Ptolemaic sacerdotal decree of Canopus, discovered by Lepsius as late as 1866 (cf. Lepsius 1866b), was appreciated by scholars as a touchstone and final proof of the reliability of the Champollionian tradition of reading hieroglyphs (cf. Ebers 1871: 22, n. 27).

a novelty at this time³⁹ and was therefore expounded by Lepsius in the introductory part of the book:

"We combine with this first division [i.e., literary vs. illiterate languages] a second, referring to the use of grammatical gender. It is not accidental but quite significant, that, as far as I know without any essential exception, only the most highly civilised races - the leading nations in the history of mankind - distinguish throughout the genders, and that the Gender-languages are the same as those, which scientifically by linguistic reasons may be proved as decending from one original Asiatic stock. The development of peculiar forms for the grammatical genders proves a comparatively higher consciousness of the two sexes; and the distinction not only of the masculine and feminine, as in the Semitic and Hamitic languages, but also of the feminine and neuter gender, exclusively expressed in the Japhetic branch, is only a further step in the same direction. The formation of genders has appeared to me so characteristic of the three principal branches, that I thought it a sufficient reason, to ascribe all the African non-Semitic languages, which distinguish the genders, to the Hamitic branch, viz., - besides the old Egyptian and the Coptic - the Beja language of the Bishari (whose anchestors were the Ethiopians of Meroë), the Dankali, Somali, Galla and other neighbouring languages, al (sic) those of the Libyan tribes between the Egyptian Oases and the Canarian Islands, including the Hausa farther on to the south, and even the widely distant languages of the miserably reduced Hottentots and Bushmen, whose immigration into their actual seats is still a curious problem, considering the absolute diversity of their language from all their northern neighbours and at the same time its traces of a certain affinity with the Egyptian language." (Lepsius 1863a: 89–90)

This comment gives just a short glimpse of Lepsius's work on African languages, which was to last some forty years. Starting with a systematic collection of empirical language data during his expedition, 40 it culminated in his *Nubian Grammar* (Lepsius 1880), which included a seminal classification of African languages in the introduction (Lepsius 1880: i-cxxvi; cf. also Lepsius 1879).

In 1884, when the Internationale Zeitschrift für Allgemeine Sprachwissenschaft (IZAS) was founded, it seemed only obvious that Lepsius would be a member of the editorial board among such scholars as Georg von der Gabelentz, August Leskien, Max Müller, Hermann Paul, August Friedrich Pott, Heymann Steinthal, William Dwight Whitney, and Wilhelm Wundt. 41 Although Lepsius died on 19th

³⁹ The biblical name of the Noahite Ham, applied to African peoples for a long time, was apparently first used to refer to (all) African languages in the framework of comparative linguistics by Krapf (1850) and was more narrowly used to refer to African gender languages by Lepsius (1863a: 89–90 and 1880: xx-xxxii) along the lines he had already outlined in Lepsius (1844).

⁴⁰ Lepsius's "Ethiopian journey" as he called it, started in November 1843 from Philae and brought him up to Sannar, 280 kilometers south of Khartoum, and back to Philae by September 1844, cf. Mehlitz (2010: 126-150).

⁴¹ On the IZAS, see Koerner (1973) and Trabant (1990: 62-63); on its large advisory board see

July 1884 and did not live to see the first volume, his name remained on the title pages of the *IZAS* up to its 5th and last volume in 1890. The second volume, from 1885 is dedicated to Lepsius's memory and contains not only an obituary contributed by Georg Ebers, *Richard Lepsius, besonders als Linguist* (Ebers 1885b), but also a frontispiece showing his image. The other four volumes are dedicated to Wilhelm von Humboldt (vol. 1), Silvestre de Sacy (vol. 3), Franz Bopp (vol. 4), and August Friedrich Pott (vol. 5). This in itself indicates Lepsius's status in general linguistics at the time.

It is a kind of symbolic coincidence that in 1890, when the *IZAS* – the intellectual platform where Egyptology took part in the discourse on general linguistics – disappeared, Egyptian linguistics had finally changed over into a new period, the age of the *Berliner Schule*, formed around Lepsius's pupil Adolf Erman (cf. below, § 8).

4 The place of Egyptian-Coptic in post-Humboldtian language classification: General remarks

Wilhelm von Humboldt's and Richard Lepisus's double occupation with Egyptian *as well as* comparative linguistics could seem to be a rather exceptional approach. But in fact, this approach was to become established and conventionalized academically in the following decades: comparative linguists in the aftermath of Humboldt did not lose sight of Egyptian and were strongly interested in establishing its place in the genealogical and typological (or "physiological", as they would have said) classification of languages. While Humboldt's well-known interest in ancient Egyptian and his own work on hieroglyphs may have been an additional motif, the main driving forces behind this impetus were clearly of a scientific nature:

- Genealogical language classification against the background of the hotly debated issue of the possibility and degree of a relationship between the Indo-European and the Semitic language families, to which Egyptian was (rightly) expected to contribute.
- 2. "Typological" language classification, i.e., classification according to what Humboldt had named the "framework" of languages (*Sprachbau*), within the theoretical horizon of Humboldt's concept of an "inner form" of languages, i.e., their being shaped by the particular world view (*Weltsicht*) of individ-

Koerner (1973: 41-50).

ual peoples. In a "time of a deepened comprehension of language", when languages were "no longer studied just as *vehicles* of the activity of human mind but, even more so, as one of its most important forms" (Benfey 1844: v), the language conveying (and shaped by) the intellectual and psychological activities of such an eminent people as the Ancient Egyptians was an issue for typological classification and could not possibly be ignored.

The latter approach (or, how it was interpreted) accounts for the specific attitude of post-Humboldtian linguists towards Egyptian. These linguists shared a positive opinion about the overall sophistication of the Egyptian language, and those who worked out systems of classification (with their unavoidable implications of hierarchy, see above, Excursus II), tended to assign Egyptian to a high position, next to the top two, the Indo-European and Semitic language families. This opinion, however, was a friendly prejudice based on extra-linguistic considerations. 42 What linguists positively knew about the syntax, morphology, and word formation of Ancient Egyptian, and could not even know until 1880, would not have allowed them to propose any classification in terms of *Sprachbau*; and what they knew about Coptic and its reduced morphology, disappointed them. Moreover, since firm ground to approaching historical linguistics of Egyptian in any proper way was still lacking (see below, § 6), the extent and the kind of differences between Coptic and hieroglyphic Egyptian could not really be grasped and were tentatively estimated to be rather insignificant. The resulting ambivalence is tangible in Carl Abel's straightforward statement:

"Like everything Egyptian, the Coptic language is particularly worth knowing for its historical importance. Furthermore, it is one of the most primitive languages possessing a literature." (transl. from Abel 1876: 11-12)

⁴² Whitney (1867: 367–368) explicitly defended this prejudice as a sophisticated multiple-criteria approach to the evaluation of languages: "Many a tongue thus stands higher, or lower, than its morphological character would naturally indicate. The Chinese is one of the most striking instances of such a discordance; though so nearly formless, in a morphological sense, it is nevertheless placed by Wilhelm von Humboldt and Steinthal [Whitney here refers to Steinthal 1860: 70 and 327] in the higher class of 'form languages,' although with the Indo-European and Semitic, as being a not unsuitable incorporation of clear logical thought". This approach was criticized already by Finck (1901: 23, transl. from German): "The fact that, notwithstanding the unmistakable differences, attempt was made to assign the Egyptian and Chinese languages to the 'form languages' equal to Semitic and Indogermanic ones, can only be explained by the high esteem for two civilized peoples, who would have defied the connection between language perfection and mental development, if they had spoken in formless languages"; on Finck's own approach to language typology see below, § 9.

The impression of "primitivity" in terms of "physiological formation" that Egyptian and Coptic gave to linguists – no inflection, poor morphology – was counterbalanced by other criteria, such as the vague notion of their "inner form" (not visible, but deduced from its *historical* role), or the existence of a gender system. The category of gender was considered an exclusive property of Indo-European and Semitic languages, ⁴³ and was highly esteemed for the merit of requiring agreement and thereby allowing "true synthesis".

5 The place of Egyptian-Coptic in post-Humboldtian language classification: Three examples

5.1 Steinthal 1850 and 1860

A foremost representative of this approach was Heymann Steinthal (1823–1899), (cf. Ringmacher 1996 and 2001a, Wiedebach & Winkelmann 2002). In addition to the diverse languages Steinthal had studied at the University of Berlin (1843–1847) with such celebrities as Franz Bopp and Wilhelm Grimm, he had also learned Coptic with Moritz Gotthilf Schwartze, one of the few Coptic specialists of his time (cf. Endesfelder 1988, 1990 and 2003; Irmscher 1988), and Egyptian with Lepsius. Richard Lepsius, back in Berlin after returning from his expedition in January 1846 (Mehlitz 2010: 172–185), had been appointed to the first German chair of Egyptology and had delivered his inaugural lecture in the winter term of 1846.

In fact, one of Steinthal's earliest publications was the edition of a comprehensive Coptic Grammar, although not on his own behalf but on that of his pre-

⁴³ Lepsius (1863a: 89–90), who made grammatical gender a primary criterion of his classification of African languages, wrote in this vein: "It is not accidental but very significant, that, as far as I know without any essential exception, only the most highly civilized races – the leading nations in the history of mankind – distinguish throughout the genders, and that the *Genderlanguages* are the same as those which scientifically by linguistic reasons may be proved to descend from one original Asiatic stock. The development of peculiar forms for the grammatical genders proves a comparatively higher consciousness of the two sexes; and the distinction not only of the masculine and feminine, as in the *Semitic* and *Hamitic* languages, but also of the feminine and neuter gender, exclusively expressed in the *Japhetic* branch, is only a further step in the same direction." The same idea is developed in greater detail in Lepsius (1880: xxii–xxv). On the existence and distribution of gender systems throughout the languages of the world see Corbett (2005, 2006).

maturely deceased teacher Schwartze (Schwartze & Steinthal 1850). In his later work, Steinthal also occasionally touched on grammatical details of Coptic (cf. Steinthal 1880). However, his fame was not based on observations of philological and grammatical niceties but rather on his panoramic view of languages and linguistics, on the philosophy of language, and eventually on the new "multidisciplinary" approach called Völkerpsychologie (cf. Knobloch 1988 and 2001; Wiedebach & Winkelmann 2002).

In his Classification der Sprachen, dargestellt als die Entwickelung der Sprachidee (Steinthal 1850) as well as in its second, thoroughly revised and renamed edition Charakteristik der hauptsächlichsten Typen des Sprachbaus (Steinthal 1860), Steinthal gives an account of the history of language classification up to Humboldt (Steinthal 1850: 1-49 and 1860: 1-70). Humboldt is presented as a genius partially at odds with himself, a "tragic hero" (Steinthal 1852: 3) who stopped (or died) shortly before having drawn the full and right conclusions from his own thought.⁴⁴ It is Steinthal's aim to synthesize these consequences by using Hegel as a catalyst (Steinthal 1848; cf. Trabant 1990: 60–67).⁴⁵ This synthesis is visualized in a table entitled "System of languages, as the development of the idea of language" (Steinthal 1850, 82-91), where individual languages and language families are assigned to 13 classes according to "the worthiness of the physiological principle".46

The resulting system constitutes a hierarchy, beginning with South-East Asian languages, which are characterized as

"the least developed, most formless languages, corresponding to the zoophytes in terms of zoology. As these mark the transition from the realm of plants to that of animals, those languages mark the borderline of human speech, being close to the dumbness of gesture language. In fact they must be called acritae, since any grammatical distinction is still lacking. These languages do not have any construction at all, like those animals do not have a skeleton. They consist of merely monosyllabic roots, equalling fungi and algae. Their clause formation is an analogy of the lowest mechanical procedure, the fall: One word falls onto the other one." (transl. from Steinthal 1850: 85 = Steinthal 1860: 328)

⁴⁴ For a close reading of Steinthal's reception of Humboldt see Trabant (1983) and Ringmacher (1996). Already Pott (1852), in his review of Steinthal (1850), was irritated by Steinthal's fluctuation between high praise and criticism of Humboldt.

⁴⁵ See his Die Sprachwissenschaft Wilh. v. Humboldt's und die Hegel'sche Philosophie 1848 (on which cf. Tabant 1990: 60-67).

⁴⁶ By one criterion, "distinction of matter and form", Steinthal separated languages mixing matter and form from those (higher developed) languages that distinguish matter and form. By a second criterion, the "external form", Steinthal grouped together languages with an imperfect external form and those (higher developed ones) with a *perfect* external form.

And, unsurprisingly, it culminates in the praise of Indo-European languages, "the rose among the languages" (Steinthal 1850: 91). Egyptian, following the Semitic languages in the third rank, is characterised and evaluated as such:

"As to the primarily distinguished elements of languages – noun and verb, the proper force of utterance lies in the verb, to the formation of which the mind turns first [a reference to the V-S word order of Egyptian], resulting in the neglect of the noun: so it is in Egyptian and Semitic. The basic division of the substantial elements is thus accomplished. However the balance between the two is not yet found. The Egyptian language would be completely misunderstood if grouped together with American languages or Chinese. It is highly organised physiologically, although the nominal relations are deficiently developed; in particular, there is a weak force of articulation and an ear totally unreceptive to pleasant sounds. This is why its external formation Egyptian relates to, say, Turkish." (transl. Fra-Indian, but runs parallel at a higher level, so Egyptian relates to, say, Turkish." (transl. from Steinthal 1850: 90 = 1860: 330)

While Steinthal (1860) largely remains faithful to Steinthal (1850), it is extended by a new section containing descriptions of languages arranged according to the same underlying classification but this time partially correlated to races. Egyptian appears among "the languages of the Caucasian race" or "form languages," which subdivide into Egyptian, Semitic languages, and the Sanskrit family: 48

"The Caucasian race includes the Egyptians, the Semitic, and the Sanskrit peoples ... I treat the languages of these families together as they form an absolute contrast to the languages of all other peoples ...: The latter have been presented as being *material*, *substantial*. Only now, with these languages, do we enter the sphere of *form*. These are the languages of the *peoples of world history* [weltgeschichtliche Völker], and their importance for the evolution of the human mind [Geist] is anticipated in their language, from which the mind [Geist] received the perpetual impetus towards formal conception, i.e., by which they became accustomed not just to comprehending the *content* and its *real circumstances* but also to transforming it into intellectually shaped *forms* appropriate only to the mind". (transl. from Steinthal 1860: 231–232)

The concept of *weltgeschichtliche Völker* (already found in Steinthal 1850: 88–89) left no choice as to the classification of Egyptian, despite its "lack of euphony" and overall "bare, rigid plainness" (Steinthal 1860: 232).

⁴⁷ On Steinthal's concept of *Formsprachen*, i.e., languages distinguishing matter and form, see n. 44 and Ringmacher (2001a: 1433–1434).

⁴⁸ The Caucasian race as an overarching ethnic unit is still present in Finck (1909: 7–42), who subdivided it, linguistically, into Indo-European, Hamito-Semitic, Caucasian, and Dravidian languages.

Elaborating on the traits of Egyptian, Steinthal complains about the lack of stem formation (bare roots that have to be suffixed) and about nouns and verbs being partially indistinguishable. On the other hand, he acknowledges the "purity of a grammatical form created out of the mind" and the merit of possessing a gender system and, accordingly, gender agreement and synthesis (Steinthal 1860: 232–238). His conclusion reads as follows:

"Everywhere in Egyptian we realize the plainest rise of pure forms. The means are few but sufficient for the very essentials. The form of sounds is insufficient; the junction of affixes to stems is loose. There are no further binding forces except that the relative n becomes mbefore labials, and long vowels of stems are shortened if connecting to suffixes." (transl. from Steinthal 1860: 241)

The Egyptian-Coptic language data on which Steinthal based his argument reflects the work of Champollion, Lepsius, Brugsch, and Schwartze. Steinthal distinguished three phases of Egyptian corresponding to the hieroglyphic, Demotic, and Coptic writing systems, although "the principle of their formation is the same in all three periods" (Steinthal 1860: 233). This comes as no surprise, given "the conservative character, the mummy-mind of the Egyptians" (Steinthal 1860: 234).

5.2 Whitney 1867

William Dwight Whitney (1827–1894) studied Oriental philology, especially Sanskrit, in Berlin and Tübingen, held the chair of Sanskrit and comparative philology at Yale University starting in 1854, and was elected corresponding member of the Berlin Academy in 1873 (cf. Alter 2005; Silverstein in Stammerjohann 2009: 1634-1636). His lectures on language and linguistics (Whitney 1867) and on historical linguistics (Whitney 1875a) saw much success not only in the USA and England – translated by European linguists into several European languages (e.g., Whitney 1874, 1875b, 1876a, 1876b, 1877, 1881), the lectures served to popularize contemporary linguistic thought. In one of his Twelve Lectures on the Principles of Linguistic Science (Whitney 1867), Whitney explained Steinthal's classification of languages to a wider audience. His explanations had the merits of brevity and clarity over Steinthal's original works and might thus have experienced wider reception for that reason. Whitney accepted Steinthal's concept of Formsprachen (as well as the reason why Egyptian had to be counted among them) and the consequence thereof, which was the elevation of its rank in terms of the hierarchy of languages:

"Its often alleged connection with Semitic, and the antiquity and importance of the culture to which it served as instrument, would have justified us in treating it next after the Indo-European and Semitic" (Whitney 1867: 340)

He also shares Steinthal's opinion about the insignificance of diachronic differences within Egyptian-Coptic:

"The differences are comparatively slight between the old Egyptian and the later Coptic, for the exceedingly simple structure of the language has saved it from the active operation of linguistic change." (Whitney 1867: 341)

And he is convinced of the primitivity of the language, quoting the same examples that Steinthal had chosen (Steinthal 1860: 233 and 239):

"The Egyptian was a language of the utmost simplicity, or even poverty, of grammatical structure. Its roots – which... are prevailingly, though not uniformly, monosyllabic – are also its words; neither noun nor verb, nor any other part of speech, has a characteristic form, or can be traced back to a simpler radical element, from which it derives by the addition of a formative element. Some roots, as in Chinese, are either verb, substantive, or adjective – thus, *ankh*, 'live, life, alive,' *sekhi*, 'write, a writing, writer' – others are only verbs or only nouns. A word used as substantive is generally marked by a prefixed article ... it has no declension, the objective uses being indicated by prepositions. The personal inflection of the verb is made by means of suffixed pronominal endings, also loosely attached, and capable of being omitted in the third person when a noun is expressed as subject of the verb. Mode and tense are, to a certain limited extend, signified by prefixed auxiliary words. But these pronominal endings, which, when added to the verb, indicate the subject (sometimes also the object), have likewise a possessive value, when appended to nouns: thus, *ran-i* is either 'I name' or 'my name;' ... that is to say, there is no essential distinction formally made between a noun and a verb." (Whitney 1867: 342)

In contrast to the overall morphological and syntactic poverty of Egyptian, its gender system is acknowledged as a further link to higher-ranking languages:

"In the singular number of both articles and pronominal suffixes ... there is made a separation of gender, as masculine and feminine. This is a highly important feature in the structure of Hamitic speech [a term that Whitney uses with explicit reference to, and in the sense defined by, Lepsius 1863a], and the one which gives it its best claim to the title of formlanguage. So far it goes, it puts together the tongues of the family into one class along with the Indo-European and the Semitic. ... But, by its general character, Egyptian is far enough from being entitled to rank with the Indo-European and Semitic languages, being, rather, but a single step above the Chinese, and sometimes even less clear and free from ambiguity." (Whitney 1867: 342–343)

5.3 Oppert 1879

Gustav Salomon Oppert (1836-1908) had studied Indian languages at the Universities of Bonn, Leipzig, Berlin, and Halle, and had made a career in England (Oxford, 1860–1872) and India (Madras, 1872–1893) before he returned to Berlin in 1895.

Oppert took an independent approach to language classification in general and the classification of Egyptian in particular. This approach is worked out in Oppert (1879), Oppert's main work on the topic, and is concisely presented again in Oppert (1883) and (1884). More explicitly (and less polemically) than contemporary linguists, Oppert refers to the linguistic discourse on language classification according to Sprachbau from F. and A.W. Schlegel, Humboldt, Grimm, and Bopp, up to Schleicher, Pott, Steinthal, Caldwell, and Max Müller (Oppert 1879: 2–7). Taking his point of departure from tripartite classifications à la A.W. v. Schlegel and Bopp, 49 he aimed to surpass his predecessors, first by refining the existing morphological classification systems and, second, by combining their merely morphological criteria of classification with another level of classification according to a criterion called "modes of thought", also called the "psychological" or "mental" character of a language.

"It is ... the object of this discourse to suggest a classification of languages, which, while admitting the importance of ... external marks, assigns to them only the part of characterizing the different dialects belonging to the various subdivisions by stating whether those languages are monosyllabic, agglutinative, inflectional, &c. The principle arrangement rests on the tendency displayed by a language in its peculiar mode of thought." (Oppert 1879: 8-9)

These modes are displayed by languages (or: dialects, as he puts it) in

"the manner in which the different categories as gender, number, space, and time are treated in several dialects" (Oppert 1879: 8-9).

⁴⁹ On Bopp's typological approach, see Ringmacher (2001a: 1430). Bopp distinguished (1833: 112-113 and 1868-1871.1: 204-206) 1. "languages without proper roots, without capability of composition and thus without organism, without grammar at all", 2. "languages with monosyllabic roots capable of composition, as their only way of gaining organism and grammar", and 3. "languages with bi-syllabic verbal roots and three necessary consonants as the only carriers of basic meanings, generating grammatical forms not just by composition, but also by inner modification of roots".

As a criterion independent from morphological traits, its role and significance for classification is close to Steinthal's concept of *Formsprachen*.

Oppert's refinement of the morphological level, or the "physiological (vocal) characteristics" of languages as he calls it, leads to an increase of the number of classes to ten (Oppert 1879: 23–29, 107–108):

- I Monosyllabic
- II Incorporative
- III Euphonic
- IV Euphonic inflectional
- V Alliteral
- VI Agglutinative
- VII Agglutinative inflectional
- VIII Dissyllabic inflectional
- IX Inflectional synthetical
- X Inflectional analytical

The second level, referring to "modes of thought" or "psychological (mental) characteristics" of languages, was subdivided into two main classes: "Concrete languages" (including *a.* heterologous vs. *b.* homologous) as opposed to "Abstract languages", which are distinguished by the existence of a gender system (Oppert 1879: 68–92) and further subdivide into *a)* two-gender ("digeneous") and *b)* threegender ("trigeneous") languages (Oppert 1879: 35–39, 1883: 17).

The resulting classification of languages and language families is arranged in a system formed by those two levels as coordinates ("Scheme of the System of Classification": Oppert 1879: 104–109, 1883: 18–19, and 1884). Egyptian is located in the upper right corner: Its "physiological (vocal)" character is taken that of a monosyllabic language. In terms of "psychological (mental)" character, Egyptian is defined as an "abstract", namely a "digeneous" language. Its horizontal neighbour to the left is Chinese, also classified as a monosyllabic but "concrete" language. Its vertical neighbour in the same "abstract > digeneous" column is the Semitic family, which, however, ranks higher on the morphological scale due to the "disyllabic inflectional" type it displays. In the same "abstract > digeneous" column is the "disyllabic inflectional" type it displays.

⁵⁰ In Oppert's sample of kinship terms, exemplified by certain languages in order to illustrate their principles of word formation morphology, Egyptian seems to give evidence for one-syllable words, quite in keeping with its supposed nature of a monosyllabic language (Oppert 1879: 136): "Father *Ut*, Mother *Mu*, Boy *Si*, Girl *Set*, Son *Si*, Daughter *Set*, Brother *Sen*, Sister *Sent*."

⁵¹ In Oppert (1883, 1884), Hausa ("euphonic inflectional" / "abstract > digenous") comes between Egyptian and Semitic.

It is striking to see Oppert, although in quite different ways and terms, arriving at results quite similar to those reached by Steinthal (and Whitney).

6 Historical linguistics and grammar of Egyptian still in their infancy

If the description of Egyptian in terms of 19th-century language classification looks odd to modern eyes, one has to concede that this generation of comparative linguists was well-informed about the most current advancements in Egyptian language studies and that their failure was to a considerable extent the failure of contemporary Egyptology.52

One crucial point is the lack of a notion of language change for Egyptian. Champollion (1824a and 1836) had conceptualized the difference between hieroglyphic Egyptian and Coptic as the written / spoken contrast of "écriture sacrée" as opposed to "langue parlée"53 – an efficient working hypothesis that allowed him the maximal exploitation of Coptic for the understanding of hieroglyphs.

In 1837, Lepsius had *en passant* corrected Champollion's idea that even such striking differences between hieroglyphic and Coptic Egyptian as different word order patterns of nominal phrases (noun followed by gender/number-markers versus article followed by noun) and different conjugation patterns (VS versus SV), would reflect nothing but different orthographic conventions.⁵⁴ But as far as I can tell Egyptian diachrony was not made an issue before 1871, when the French Egyptologist Gaston Maspero (1846–1916) provided a systematic analysis of the development of Egyptian conjugation, still traditionally subdivided into three

⁵² Certainly there were also paths of information flow without direct input from Egyptology, such as Whitney's adoption of Egyptian features from Steinthal (cf. above) and Oppert's reference to Müller (cf. below, Excursus III).

⁵³ E.g., Champollion (1836: 50, § 72): "Les trois méthodes ou procédés fondamentaux de l'écriture sacrée, l'imitation, l'assimilation et la peinture des sons, furent appliquées à la représentation des noms communs de la langue égyptienne parlée." Cf. Schenkel (1990: 18-19).

⁵⁴ Lepsius (1837: 72, translated from French): "One of the most obvious differences between the sacred dialect and the Coptic language is that the majority of grammatical affixes once suffixed to substantives and verbs are found to be prefixed in the Coptic language, a linguistic phenomenon that repetedly occurs throughout all languages." See Schenkel (1990: 18-19). On the typological change of word order in the language history of Egyptian see below, §7, and the introductory chapters by Grossman & Richter (2014, in this volume) and by Haspelmath (2014, in this volume).

phases according to writing systems, i.e., Hieroglyphic, Demotic, and Coptic (Maspero 1871).

His account is compromised by another major shortcoming in the understanding of pre-Coptic Egyptian: The ignorance of the fact that hieroglyphs, even though read as phonetic signs, represent only consonantal phonemes. Accordingly, Maspero's point of departure is the notion of an extreme lack of tenses and modes. In hieroglyphic Egyptian, he identified two verbal forms altogether, employed to express a general idea of present and past,⁵⁵ not to mention the fact that the same two forms also seemed to represent suffixed nouns, depending only on context.⁵⁶

Excursus III: The Hidden Root-and-Pattern-Morphology of Egyptian Since the morphological dimension of differently vocalised forms escaped the early Egyptologists, the lack of distinction between parts of speech in Egyptian (see also above, § 5 on Steinthal and Whitney) was something obvious to them. Max Müller, quoting Bunsen, wrote (Müller 1864.2: 84-85): "In Egyptian, as Bunsen states [ref. to Bunsen 144-1857.1: 324], there is no formal distinction between noun, verb, adjective, and particle, and a word like an'h might mean life, to live, living, lively. ... I think it shows that there was a stage in the growth of language in which that distinction which we make between the different parts of speech had not yet fixed, and when even that fundamental distinction between subject and predicate, on which all the parts of speech are based, had not yet been realized in its fullness, and had not yet received a corresponding outward expression." Oppert (1879: 23 + n.) quoted Bunsen (1844–1857.1: 271) and Max Müller (1864.2: 89.): "Originally, the incoherently uttered word comprised within itself the different variations in meaning as represented later by the different forms of speech. We observe

⁵⁵ Maspero (1871: 1:) "... une extrême pénurie de temps et de modes, puisque temps et modes se réduisent à deux qui expriment d'une manière générale, le premier l'idée de l'action présente, la seconde l'idée de l'action passée ...". So already in Champollion (1836: 391ff. "Formation des temps du mode indicatif: I. Temps présent") and 406ff. "Formation des temps du mode indicatif: II. Formation du temps passé").

⁵⁶ Maspero (1871: 121): "Au début de l'histoire, la langue égyptienne n'établit aucune différence entre le verbe et le nom. La racine, non susceptible de modification extérieure marque d'une manière générale une action ou une qualité que l'on applique à une personne ou à une chose par l'adjonction en préfixe ou en suffixe des pronoms personnels". The *origin* of the Egyptian Suffix conjugation in a suffixed nominal form (a participle rather than an abstract noun) is, by the way, still considered a likely hypothesis (cf. Schenkel 1975 and Schenkel 1990: 115–121).

this fact in Old Egyptian, in Chinese, Burmese, and other languages, where e.g., 'to live, life, alive, and a living being;' 'great, to be great, and greatness;' 'eye, sight, and to see' are expressed by the same word or sound".

Moreover, the systematic absence of a whole layer of morphological information in the graphemic representation of Egyptian hieroglyphs did not even occur to them as a possibility. A main epistemological reason for that ignorance was the erroneous attribution of *vocalic* phonetic values (a, i, u) to hieroglyphs which first and foremost represent consonants such as a stop (Aleph [?]), a fricative (Ajin [S]), and glides (w and y) by Champollion (1836) and then also by Lepsius, the undisputed authority in the field of Egyptian phonology (Lepsius 1837, 1855a, 1863a), although Hincks 1848 had already produced evidence from Egyptian spellings of Canaanite loanwords for the consonantal value of these hieroglyphs (cf. Ray 1994; Schenkel 1990: 30-31 and 2008: 410-411). It is striking to realize what consequences some slightly(!) wrong assumptions about Egyptian phonology had for the overall understanding of its word formation and morphosyntax: The absence of vowels from the written record was not noticed, leading to the misinterpretations mentioned above; fewer consonants per word were counted, reinforcing the impression of primarily monosyllabic words (instead of two- or three-consonantal roots); the phonological type of weak radicals was not recognized. Thus, the entire common ground of Egyptian and Semitic word formation remained undetected and undetectable - shortcomings overcome only by the Berliner Schule, see below, § 8. A good deal of the linguists' discussion about the lack of differentiation between nominal and verbal lexemes and about the poverty of verbal morphology in Egyptian is due to the Egyptologists' ignorance of that possibility. The root-and-pattern morphology of Egyptian and its root-inflecting capacity thus remained hidden to linguists who would have wished for nothing more than a sign of Egyptian bearing inflection – a tragic aspect of the story!

Over the course of time, Maspero claims, the original poverty of Egyptian syntax was gradually compensated for by the employment of auxiliaries, due to which the ambivalence of parts of speech was also reduced – a narrative of growth from crude imperfection upwards.⁵⁷ The steady improvement of Egyptian would even-

⁵⁷ Maspero (1871: 122): "Dans les derniers temps, l'évolution est accomplie. La forme primitive du verbe, réservée à quelques mots seulement, a disparu de la langue, et cette élimination

tually profit from contact with Greek, due to the impact of which Egyptian would for the first time develop true modes.⁵⁸

Maspero's approach shows, however, that the notion of language change in Egyptian had eventually become somewhat obvious to Egyptologists, and he came to the result of rather significant diachronic differences between the Egyptian language phases.

In the same year (1871), Lepsius's pupil Georg Ebers (1837–1898), professor of Egyptology at the University of Leipzig, expounded on language change in Egyptian in a public lecture about the hieroglyphic writing system held before a non-specialist audience that he nevertheless credited with having some knoweldge of Indo-European:

"The space of time between the age of the pyramid builders and the origins of Christianity is not much smaller than the time German needed to develop from Sanskrit. But would any German speaker, even though he perfectly knew the Old Indic alphabet, succeed in understanding the writings of the Brahmans? And still such an incredible constellation can be proved to have happened with the language of Egypt. Coptic has deviated from the most archaic forms of Ancient Egyptian hardly further than Italian from Latin." (transl. from Ebers 1871: 10–11)

In contrast to his predecessors, Ebers finds it important to emphasize that whatever happened to Egyptian happened in conformity with regularities close to natural laws, and he quotes August Schleicher (1821–1868), one of the early explorers of the Indo-European *Ursprache* and forerunners of the *Leipziger*, or *junggrammatische Schule* (cf. Bynon 2001):⁵⁹

"What we encounter hereby, is not a coincidental, but a regular phenomenon, if the laws as established especially by Schleicher are true, according to which, first, the more persistently a people stays at the same settling places, the less it will change its language, and second, the language of a people that undertakes vivid exchange with other nations is much more easily exposed to manifold changes than that of a people living in seclusion." (transl. from Ebers 1871: 11)

rend désormais impossible la confusion entre le nom et le verbe. Le système de conjugaison par auxiliaires s'est agrandi et fixé."

⁵⁸ Maspero (1871: 122–123): "La nécessité de traduire en langue égyptienne des textes grecs où la distinction des modes est généralement marquée, amène … les auteurs coptes à choisir certaines formes de leur langue pour rendre certains modes du Grec et prépare ainsi les voies à la création des modes." For the recent discussion of syntactic interference of Greek and Coptic, cf. Polotsky (1950); Oréal (1999); Reintges (2001, 2004), and Hasznos (2012).

⁵⁹ Schleicher was also active and influential in the field of language classification: Schleicher (1848: 6–12, 1850, 1859, 1860: 11–26); cf. Ringmacher (2001a: 1430–1432).

On the basis of these assumptions, Ebers could easily explain to his audience why Champollion was able to rely on Coptic while deciphering hieroglyphs:

"Now, the Egyptians never left their dwelling places during their historical life, and, secluded on their fertile island between the Libyan and the Arabic mountains like an oyster in its shell, they carefully avoided any contact with other peoples in full awareness. This is why Coptic, although deviating from the most ancient Egyptian language varieties in several ways, can rightly be called the basic idiom of the hieroglyphs," (transl. from Ebers 1871: 11)

Unlike his teacher Richard Lepsius and his pupils Ludwig Stern and Adolf Erman (cf. below, § 8), Georg Ebers was not particularly close to language studies, and still he proves to be fairly well-informed about recent theories in the field of comparative linguistics.⁶⁰ These theories allowed him to argue for a rather conventional view on the issue of closeness between hieroglyphic Egyptian and Coptic.

7 Ewald on the equality of languages and the typological change from *Hinterbau* to Vorderbau in Egyptian

The Göttingen scholar Heinrich Ewald (1803–1875), most renowned for his work on Arabic and Hebrew, but also concerned with Sanskrit (which he had once taught to Lepsius) and a good number of other languages, published two Sprachwissenschaftliche Abhandlungen on word order typology (though not calling it thus). The first of these deals with the morphology of the verb in Coptic (Ewald 1861), and the other one deals with relations between the four language families Nordisch, Mittelländisch, Semitisch, and Koptisch (Ewald 1862).

In his first treatise, Ewald surprisingly challenged an article of faith held by the linguists of his day – the hierarchy of languages.

"How often it has been, and is still heard, that one language, from its origins and by its unchangeable nature as it were, is more beautiful than the other, or one language family

⁶⁰ Although there is no positive evidence, it is not unlikely that Ebers had made the acquaintance of Schleicher in Jena, where he was affiliated from 1862 to 1870 before he moved to Leipzig. Schleicher was not officially involved in the committees of the philosophical faculty concerned with Ebers' academic qualifications, his doctoral dissertation, or his Habilitation, cf. Poethke (1980).

more perfect and more capable of higher development than the other, and this or that language surely deserves priority over all others." (transl. from Ewald 1861: 7)

Against the communis opinio, Ewald claimed that

"it does not seem right to praise one's own language, or one's own language family over all the others and, for example, to agree with what is said so often in our days, that the Indo-European ... languages were the most perfect ones from the beginning." (transl. from Ewald 1861: 7; cf. also Ewald 1862: 38–39)

Even more surprisingly, Ewald clearly realized the ideological implications and the "political" consequences of an approach that was a scientific failure in his eyes, so that his counter-position is not based on ethical considerations but on linguistic reasons:

"If such an idea had firm ground, consequences would result therefrom which are both serious and sad in every respect. Because language is the closest and most appropriate ... as well as most unchangeable expression of the particular human mind. Consequently, if a people, or an entire family of peoples, really possessed a considerably less worthy language from the very beginning, this would be the clearest evidence for the overall lesser talent of such a people, and one would be entitled to treat them accordingly; and what would result from this goes without saying. ... However, our recent linguistics is sufficiently advanced to reduce all these ideas to nothing. All languages and language families are completely equal in terms of their highest (and eventually their only) importance, as a means of the perfectly clear expression of all thinkable thoughts of the human mind. ... Given the range of historical diversity, ... one language or language family may apply some of those means or matters (by which all of them eventually achieve the same goal) in a more elegantly proportioned, or more beautiful, or more perfect way; however, no single one holds all of these merits alone, and such readily despised languages as the ancient and modern African languages have, in several respects, significant merits over other, much higher esteemed ones."

He adds in a footnote:

"What advantages has, for example, the Egyptian even by its most diverse but always precise and consistent ways of expression for what we can express only by *and*!" (transl. from Ewald 1861: 7–8)

⁶¹ In contrast, see Steinthal's complaint (Steinthal 1867: vi) about "languages [*such as Mandé*] that have no common ground with the scheme of categories of the philosophical grammarians and which cannot possibly be compared, in terms of inner formation, to our higher organised Indo-European languages, as it is impossible to compare an insect with a mammal".

Ewald's untimely attempt to argue against an axiomatic layer of 19th-century comparative linguistics did not remain uncontradicted. The role of the nemesis was taken by August Friedrich Pott (1802–1887).

Pott, who spent the major part of his long life as a professor of general linguistics in Halle, is a seminal, but perhaps still underestimated figure of 19th century linguistics (cf. Bense et al. 2006; Plank in Stammerjohann 2009: 1203-1205; Ringmacher 2001a). He had studied Sanskrit and comparative linguistics in Berlin with Bopp and became one of the most influential interpreters of Humboldt's linguistic heritage next to (and in hostile rivalry with) Steinthal.⁶² He witnessed the course of comparative linguistics, whose doyen he was considered to be (Oppert 1879: 7), from the days of the Schlegel brothers and Humboldt up to the inauguration of the Internationale Zeitschrift für Allgemeine Sprachwissenschaft, to which he contributed a comprehensive overview of the entire field (Pott 1884a&b, 1885a&b, 1887a&b, 1889, 1890).⁶³ Pott, who dealt with an amazingly wide range of topics in his academic teaching, ⁶⁴ apparently liked to supervise and to guide his colleagues, and he never avoided polemics.

Already in his works on numerals (Pott 1847, 1868), Pott had rejected Lepsius's argument in favour of a common origin of the Indo-European, Semitic, and Egyptian language families (Lepsius 1836b). In fact, affirming the fundamental diversity of language families was one of Pott's major concerns (Pott 1855).65 It is this mission for which he was to fight "the last battle over the tower of Babel"

⁶² Both of them re-edited Humboldt's linguistic chefs d'œuvre: Pott published a second edition of the monumental introduction to the Kawi work "Ueber die Verschiedenheit des menschlichen Sprachbaues und ihren Einfluss auf die geistige Entwickelung des Menschengeschlechts" after the edition of 1836 (on its editorial history and reception, cf. Mueller-Vollmer 1991, 1992 and 1993), to which he added a likewise monumental introduction on "Humboldt und die Sprachwissenschaft", comprising 421 pages in the 1st edition (1876) and 561 pages in the 2nd edition (1880). Steinthal edited and commented on Die sprachphilosophischen Werke Wilhelm's von Humboldt in 1884, cf. Trabant (1990: 62-64) and Ringmacher (1996).

⁶³ In the third volume (1887) of Internationale Zeitschrift für allgemeine Sprachwissenschaft Pott gave an up-to-date report "Zur Litteratur der Sprachenkunde Afrikas" (249-275), where he also commented on Egyptian (267–270) and Coptic linguistics (270–273).

⁶⁴ He is said to have also taught classes on "hieroglyphics", as Egyptian linguistics was called at his time.

⁶⁵ See also Pott (1886) against his favourite enemy, Carl Abel (cf. Abel 1885, 1886, 1891a&b). It would be a demanding but worthwhile enterprise to acknowledge the merits of Carl Abel (1837-1906), the author of such notorious works as Der Gegensinn der Urworte 1884, Einleitung in ein aegyptisch-semitisch-indoeuropaeisches Wurzelwörterbuch 1886 (a forerunner of the Nostratic hypothesis), and an 842-page volume from 1876 called Koptische Untersuchungen. His research at the intersection of comparative linguistics and Egyptology was as strongly rejected by contemporary linguists (cf. e.g., Techmer 1889) as by Egyptologists (cf. e.g., Erman 1878b and 1887).

(Leopold 1989) against Franz Philipp Kaulen (1827–1907). Kaulen was a Catholic priest and Old Testament scholar who defended the biblical account of the origin of mankind and the diversity of peoples and languages according to Genesis, on the basis of the linguistic theory of an primal relationship (*Urverwandtschaft*) of language families (Pott 1863). In this battle, Heinrich Ewald innocently came under fire (Pott 1863: 219–289). His attempt to describe the driving forces of language change cross-linguistically (cf. below) was completely misunderstood by Pott and blamed as another awkward attempt to prove the monogenesis of language families; and his plea for the equality of languages was taken as further proof of the overall inferiority of Ewald's scholarship:

"Frankly spoken, should this jumble of most contradictory terms make any sense at all, I do not grasp it. Languages which are "equal" ... in terms of rank and purpose, despite all inequality, would be like ... cats that are all grey, certainly at night only, when all differences of colors fade." (transl. from Pott 1863: 225)

In fact, Pott did double injustice to Ewald, first, by mistaking his argument and, second, by intermingling it with that of an apologetic conservatism⁶⁷ from which Ewald, one of the most honest German liberals of his time, was as far as he could be.

Ewald's aim was not to demonstrate genealogical *Urverwandtschaft* but to provide a way to compare languages without regard for their genealogical relation:

"Given the great amount and diversity of languages, it could in previous times already seem a significant success just to correctly distinguish the ones actually interrelated and to connect them to certain language families; the issue however as to how these distinct language families relate to each other remained in the dark and it seemed entirely impossible to solve it by any cautious and prudent procedure." (transl. from Ewald 1861: 5)

⁶⁶ Pott (1863: 287, translated from German): "On my part, I take the exact opposite for the truth. These langague families are innately and principally, by 'primordial forces' to put it with Ewald, separated from each other."

⁶⁷ On the other hand, this conservatism was a theoretical stronghold against the more *zeitgeist*-oriented concept of fundamental cultural differences between humans which easily combined with the developing racial science (and scientific racism) based on biological arguments such as anthropometry. On the 19th- and 20th-century linguistic and ethnological discourse on the relation of language and race, see van Driem (2001: especially 126–128) on the contemporary linguistic debate about the Comte de Gobineau. In Pott's favour, it was he who refuted (Pott 1856), from the point of view of comparative linguistics, Arthur de Gobineau's theory of the inequality of races – the "hegemonial discourse" that Ewald had hinted at *avant la lettre*.

Ewald identified such a perspective in the observation of shared tendencies of language change that he called "language forces" (Sprachmächte) when he claimed

"that everything in human language finally depends on certain forces which can be recognized and traced and which are limited in number ... but irresistible in their effect ... Language forces is our word for those necessities that start working as soon as the mind, whatever it wants to express linguistically, does actually express using language material ... One can justly claim that the sound knowledge of these forces, based on the knowledge and the comparison of the most diverse languages, is the strongest lever of all linguistics, and neither a single language nor human language as a whole can be subject to secure and fruitful knowledge without it" (transl. from Ewald 1861: 9-10).

What Ewald claimed was therefore not a shared *substrate* underlying different language families and connecting them genealogically. He rather argued for a shared set of fundamental motivating factors, working in all languages and connecting them typologically, or, to put it in modern terms, for universals of, and typological constraints on, language change.

To achieve this goal, he further claimed

"that all languages, even those most remote from ours in terms of time and place, have to be taken into account with the same due care and that especially the hitherto most overlooked ones should eventually be studied most thoroughly" (transl. from Ewald 1861: 11).

To illustrate his claims, Ewald chose Coptic, first, for the interest it bears for the study of Ancient Egyptian⁶⁸ and, second, for the very feature for which linguists used to think of it as a primitive language – its easily analyzable morphological structure, to which Ewald applied the established term "agglutinating". 69 From features which he interpreted as fossilized remains of earlier language phases,

⁶⁸ Ewald (1861: 11–12, translated from German): "A thorough scientific knowledge of Coptic has highest importance for us not at least for its close connection to the entire Egyptian antiquity; since without its aid we could never achieve a reliable understanding of the language of the hieroglyphs and the cursive writing styles depeloped from those. Although first steps to their decipherment are taken by now, there are many further ones still to be tried, and many of the biggest difficulties are not yet resolved".

⁶⁹ Ewald (1861: 12-13, translated from German): "In the Coptic language ... these primal constituents are generally more easily traceable, even though not every element of this kind forms an easily separable word of its own as in Chinese. ... As is well known, a few decades ago, some at that time influential linguists wanted to subdivide all languages into monosyllabic, agglutinating, and inflecting ones: In these terms it would be easy to label Coptic as an agglutinating language. However I have been reluctant about this catergorization already then, and cannot endorse it even now".

Ewald inferred a development of the Egyptian language from what he called "post-structuring" (*hinterbau*) to "pre-structuring" (*vorderbau*) – a development he suspected to be a typological tendency of language change in other languages too:

"Taking a closer look at the overall formation of Coptic, there eventually occurs to us a phenomenon most significant for language history, that possibly in no other language has taken shape as perfect as in Coptic, which however is equally instructive for all of them. Very distinctive traces lead us ... to the certain assumption that Coptic in its extreme primeval time preferred the post-structuring [hinterbau] of words. Such a construction is very natural, it developed in the strongest way, with an amazing, almost rigid force in the Nordic [i.e., Ewald's term for Turkic, etc.) language family; in the Middle Land [Mittelländischen, i.e., Indo-European] languages it still represents the earliest and most solid basis of word formation; and also in the Semitic, it left strong traces of its earliest dominance. In Coptic it is almost fading away, but when observed more thoroughly, it has still left many massive traces of its former dominance, and the more isolatedly dispersed and the less considerable they are, the more undoubtedly they reveal themselves as the most ancient components of that language." (transl. from Ewald 1861: 15)

The evidence for post-structuring, *hinterbau*, is found by Ewald in phenomena of the formation of words, phrases, and clauses, such as:

- 1. the remains of verbal endings of the Coptic verb form called the "Stative"⁷⁰
 the very forms whose origins Adolf Erman would trace to the inflection pattern of an ancient Perfect conjugation shared by Egyptian and Semitic languages (Erman 1889a, cf. below, § 8),
- 2. the remains of suffixed gender and number markers which, as Ewald concludes, although in Coptic being nothing but "isolatedly dispersed and disintegrated fragments of a once productive formation" (Ewald 1861: 16), originally were a shared feature of Egyptian and Semitic languages where they are still extant,⁷¹
- 3. the remains of suffixed possessive pronominals,⁷² another pattern shared with Semitic languages (Ewald 1861: 18).

Among the much more frequent, and in Coptic, only productive features of prestructuring, *vorderbau*, "according to which the elements serving to specify the

⁷⁰ See Reintges' contribution in this volume and Haspelmath's introduction, § 1.9.

⁷¹ Ewald (1861: 16, translated from German): "There is nothing in which Semitic and Coptic must once have paralleled each other as completely as in the formation of gender and number".

⁷² Cf. the contribution of Haspelmath in this volume.

verbal or nominal basic lexemes are moved to the front" (Ewald 1861: 18)73, Ewald mentions phenomena such as:

- SV order in all conjugation patterns (Ewald 1861: 19), 1.
- word formation by prefixed compound elements, such as the nominal prefix mnt- deriving abstract nouns and the prefix ref- deriving agent nouns, as opposed to the transposition of lexemes by endings or word-internal morphological change (Ewald 1861: 20)
- 3. the use of prepositions to indicate functional relations otherwise marked by case endings (Ewald 1861: 21)
- 4. prefixed articles, demonstratives, and possessive markers, leading to what Ewald calls "word chain" (Wortkette), as opposed to suffixed, or postposed elements with this range of functions (Ewald 1861: 21–23)
- prefixed conjugation bases, leading to what Ewald calls "clause chain" (Satzkette): "the morpheme dominating the sentence draws and chains with the strongest power, as it were, the both parts of the sentence, so that the full meaning of all the words working together here becomes clear only by their mutual concatenation and their strict order" (Ewald 1861: 23–24).

Ewald's conclusions about a systemic change from hinterbau to vorderbau in the Egyptian language history were immediately denied by Pott (1863: 278). But in fact, Ewald had seen the right facts in the right way. Eighty-five years later, the Egyptologist and linguist Fritz Hintze (1915–1993) described the same process, based on the same observations, although in terms of structural linguistics and against the background of a tremendously increased text corpus and an incomparably advanced Egyptian philology (Hintze 1947 and 1950).⁷⁴ Since then, this typological notion has become common wisdom in Egyptological linguistics.⁷⁵

^{73 &}quot;... vorderbau, nach welchem die näheren bestimmungen des als grund dienenden thatoder namenswortes nach vorne verschoben werden".

⁷⁴ On Hintze as a Coptic linguist, see Funk 2003. Hintze knew and mentioned his predecessor Ewald: "Diese Verhältnisse hatte schon der Göttinger Orientalist H. Ewald geahnt" (Hintze 1947:

⁷⁵ Cf. Schenkel (1990: 95–96); Loprieno (1995: 5–8).

8 Solutions and dissolutions: Egyptian linguistics at the dawn of the *Berliner Schule*

The most up-to-date and most advanced pre-*Berliner Schule* report on Egyptian in terms of comparative linguistics was provided by Ludwig Stern in his seminal Coptic grammar (Stern 1880). Ludwig Stern (1846–1911) had studied Romance and Oriental languages as well as Egyptology (with Heinrich Brugsch) at Göttingen. Appointed Richard Lepsius's assistant in the Egyptian department of the Berlin Royal Museum in 1874, he was originally on friendly terms with Adolf Erman but increasingly became a rival of the would-be main figure of the so-called *Berliner Schule*. In 1885, when Erman, the younger of the two, was appointed Lepsius's successor as the director of the Egyptian museum instead of him, Stern turned his back on Egyptian and moved to Celtic studies. To earn his living, he took a position as a librarian at the Berlin Royal Library, where he was finally appointed the head of the manuscripts collection in 1905 (Dawson & Uphill 1995: 404; Magen 2007 and 2013).

Stern's overall description of the character of Coptic seems to be inspired – apart from his own study – by Heinrich Ewald:⁷⁷

"The Coptic language, written by means of the Greek alphabet, is a daughter of ancient Egyptian ... Between those two, chronologically, the Demotic is situated, whose writing system is closer to the hieroglyphic, whose forms and pronunciation are however closer to the Coptic language. While the ancient language generally persisted in the stage of isolating languages, Coptic, which tends to replace such grammatical elements which in the hieroglyphic language occur in apparent isolation by internal or preposed formations, has already developed into an overall agglutinating one. Its vocalism appears rejuvenated, as it were, and to be shaped according to new rules. ... The Coptic language greatly surpasses ancient Egyptian in certainty, adroitness, and diversity, although it constructs clauses not without long-windedness; being poor in forms, it is rich in means of distinguished expression and unsurpassed in the development of diacritic possibilities. Its vocabulary is as transparent and clear as its syntax; its phonetic laws are of exceptional regularity and strictness." (transl. from Stern 1880: 3–4)

⁷⁶ Stern's Coptic grammar constituted tremendous progress in the knowledge of Coptic morphosyntax, and his achievements were already praised by Erman (1884: 28): "In das Chaos der koptischen Verbalstämme hat Stern Licht gebracht".

⁷⁷ Ewald was expelled from the University of Göttingen and lost his permission to teach in 1868 after having opposed Prussian imperialism by refusing to swear an oath of allegiance to the Prussian king. Ludwig Stern, who studied at Göttingen from 1865–1868, might have been among his last students.

Dealing with the issue of genealogical classification, Stern groups Egyptian with the Hamitic languages, although he indicates cognates with Semitic languages:

"There is a relationship between Egyptian, which belongs to the Hamitic family, and the Semitic languages, as is unmistakably indicated in the formation of pronominals and in a few shared roots; however Egyptian apparently separated early from its Asian siblings and followed its own path. Many Coptic words still resemble the related Semitic ones ... The overall relationship is obscured by heavy phonetic shifts and changes." (transl. from Stern 1880: 4)

The new insight into the grammar of Coptic as gained by Ludwig Stern was the bud, as it were, of the bloom of Egyptian-Coptic linguistics known under the name of the Berliner Schule of Egyptology (cf. Gertzen 2012; Schenkel 1990: 19-21).78 This prosperity was in no small part due to the efforts of Stern's colleague and competitor Adolf Erman (1854–1937).⁷⁹ Erman studied Egyptology with Georg Ebers at Leipzig and with Richard Lepsius and Ludwig Stern in Berlin. In his other main subject, Semitic languages (Arabic, Assyrian, Hebrew, and Syriac), Erman was taught by Fritz Hommel (1854–1936) and Ludolf Krehl (1825–1901) in Leipzig and by Eduard Sachau (1845–1930), Eberhard Schrader (1836–1908), August Dillmann (1823–1894), and Franz Prätorius (1847–1927) in Berlin.80 Erman's new achievements were mainly based on three interrelated approaches: 1. – a decisive turn to the study of Egyptian morphology and syntax, 2. – a more sophisticated subdivision of the linguistic history of Egyptian, 3. – an attempt to look at Egyptian in the light of Semitic languages and, consequently, to deal with it in terms of Semitic linguistics.

The long-established notion of the "primitiveness" of Coptic and, accordingly, of Egyptian, had prevented earlier Coptologists and two generations of Egyptian philologists from a closer look at the grammar of the language. This excuse eventually collapsed in 1880, when Stern's Koptische Grammatik and Erman's *Neuägyptische Grammatik* appeared.⁸¹ In his commentary on the Old

⁷⁸ On the Berliner Schule, see Gertzen (2012), Schenkel (1990: 19–21).

⁷⁹ On Erman, see Schipper (2006); on Erman's research in Egyptian linguistics, see Satzinger

⁸⁰ See Erman's autobiography (Erman 1929: 110–114), where he downplays the influence of almost all of his teachers to a degree that makes him seem a self-taught man.

⁸¹ Erman (1880: viii, translation from German): "The syntax of the Egyptian language has been doomed all along. Even Peyron, the great expert of Coptic, still held the opinion that there was hardly anything to notice about the syntax of this language, and in Schwartze's grammar where phonology takes 300 pages, not even 30 are devoted to syntax ...; up to the present day not a meager description of it has been published. And likewise dreadful is the situation of the syntax

Kingdom autobiography of *Wnj*, Erman described the poor state of Egyptian grammatical investigation that he found himself faced with:

"What would one think about a classical philologist who, translating Cicero, had no idea why sometimes conjunctive, sometimes indicative, sometimes perfect, sometimes imperfect is used, and moreover, who had hardly any awareness of this ignorance? And who could deny that we are still taking this naive attitude towards the language of the Old and Middle Kingdom?" (transl. from Erman 1882: 1–2)

2. Erman's *Neuägyptische Grammatik* from 1880 was a landmark not only in grammatical exploration but also in the study of the linguistic history of Egyptian. Up to Maspero (1871, cf. above, § 6), Egyptian was traditionally subdivided into three language phases corresponding with the three writing systems Hieroglyphic/Hieratic, Demotic, and Coptic.

On the basis of linguistic features Erman subdivided the hieroglyphic section into Ancient Egyptian (*altaegyptisch*) and Late Egyptian (Erman 1878: 3: *jungaegyptisch*, Erman 1880: *neuägyptisch*), although he was aware of the dependence of these features on both language change in time, and different linguistic registers:⁸³

"While all texts written in hieroglyphs ... were called Ancient Egyptian (*altaegyptisch*) up to now, I call only the ancient classical language by this name, which is preserved as a living language in the sacred books and the earlier inscriptions; I choose however the term Late Egyptian (*neuaegyptisch*) to designate the vulgar language of the New Kingdom which I shall deal with in this work. Late Egyptian is situated roughly halfway between the sacred language, whose classical period may fall around 3000 B.C., and the Demotic-Coptic language. We encounter it as early as from the beginning of the New Kingdom; however only

of Ancient Egyptian".

⁸² In a similar vein, Erman (1878b: 764) had already written: "dass wir ... vom Aegyptischen und seiner Grammatik noch nicht viel mehr wissen, als ein Quintaner vom Latein".

⁸³ Polotsky (1969: 465 + n. 2), pointed to Stern who seems to propose an even more sophisticated periodization already years earlier (Stern 1874: 90, translated from German): "Advanced linguistic study will come to subdivide the almost 5,000 years of the Egyptian written record into four roughly equal periods. The first period, the *Ancient* one, would span over the first six dynasties; the second, the *Middle* one, would extend until the 17th dynasty, the third, *New* one until the 26th dynasty, and the last, *Late* one up to the emperor Decius, this is to say, up to the extinction of hieroglyphic writing. In this last period, maybe already a bit earlier, the ancient Egyptian language was a dead and sacred language used like Sankrit by the Indians, Hebrew by the Jews, the language of the Qur'an by the Arabs, and Latin in the Western world." See Schenkel (1990: 8), who wonders whether Bunsen's periodization of Egyptian history could have inspired Stern's periodization.

in the 19th and 20th dynasties, that is to say, around the thirteenth and twelfth centuries B.C., do we find evidence sufficient for proper knowledge of it" (Erman 1880: 1)84 "The many easily comprehensible texts of different genres in Late Egyptian make the task for the grammarian easier, although the right interpretation of its forms and constructions is often suggested by its closeness to Coptic." (transl. from Erman 1880: viii)

Although Erman separated Late Egyptian, "the vernacular of the New Kingdom", from Demotic, "the vernacular of the last pre-Christian centuries, written in a peculiar script", and Coptic, "the language of the Christian Egyptians, written in Greek letters" (Erman 1894: 1), he grouped all three together in contrast to what he called Ancient Egyptian [altaegyptisch]. This notion of closeness between New Kingdom (hieroglyphic) Egyptian and Coptic was now to replace the former concept of a consistent "hieroglyphic" Egyptian as opposed to Demotic and Coptic. 85 The range of distinctive features between the norms included in Erman's concepts of Ancient Egyptian and Late Egyptian is worked out in his seminal grammatical study (Erman 1890) on the language of Papyrus Westcar, an early 18th-dynasty manuscript recording Egyptian fairy tales which are linked by a framing narrative:

"Without being guilty of much exaggeration, one may define the overall relation in such a way that the language of the Westcar papyrus is still walking on the paths of Ancient Egyptian, while Late Egyptian is already on the track leading to Coptic; there is a vast gulf dividing the two." (transl. from Erman 1890: 9)

Erman's concept of Altaegyptisch, "the most ancient language, though kept in use as a learned idiom of literature up until the Roman period" (Erman 1894: 1 and already Erman 1880 and 1890), was wider than the term Old Egyptian, as it is used today. It includes the two phases nowadays distinguished as *Old Egyptian* (the language of Old Kingdom texts) and Middle Egyptian (the "classical" language from the Middle Kingdom onwards) and corresponds thus to the modern concept of Earlier Egyptian (cf. Grossman's & Richter's introductory chapter in this volume). However, Erman was well aware of the linguistic peculiarities of the earliest Egyptian texts, the spells inscribed in 5th- and 6th-dynasty pyramids and

⁸⁴ Already in the introduction to his thesis on plural formation, Erman presented a first sketch of the historical grammar of Egyptian (Erman 1878a: 1-4).

⁸⁵ Cf. Erman (1878a: 2-3, translated from German): "... in almost all cases where the ways of Coptic deviate from those of Ancient Egyptian, we find the language of the 19th and 20th dynasty already there – in short, it is much closer to the most recent Egyptian idiom than to that of the ancient sacred one. [...] Would not the ancient script and orthography veil its true self, no grammarian would ever have separated it and assigned it to Ancient Egyptian".

the tomb inscriptions of contemporary high officials,⁸⁶ and distinguished them carefully from the language of Egyptian literature of the Middle Kingdom.⁸⁷ The overall picture of Egyptian diachrony as drawn by him eventually comes close to much more recent Egyptological approaches to language periodization (starting with Stricker 1945) and would look like the following:

Erman's "Altaegyptisch"		[Later Egyptian]		
Old Kingdom A.Eg.	Middle Kingdom A.Eg.	Late Egyptian	Demotic	Coptic

3. Assumptions about the genealogical relatedness of Egyptian-Coptic and the Semitic languages used to be limited to the notion of single cognate words, most obviously in the realm of pronominals (e.g., Rossi 1808; Vater 1812; Lepsius 1836; Benfey 1844; Schwartze 1843: 466–763; Schwartze in Bunsen 1845: 517–645; Schwartze 1850: 6–7). 88 Erman demonstrated even more farreaching similarities, including basic features of word formation and syntax, especially in the earliest layers of the Egyptian language. Already in his *Neu-ägyptische Grammatik* he wrote:

"It will not escape experts how many analogies to Semitic the syntax even of Late Egyptian still exhibits; in Ancient Egyptian this holds true to a much higher degree." (transl. from Erman 1880: vii)

The full range of such "analogies" is worked out in a number of seminal articles that Erman published in the *Zeitschrift für Ägyptische Sprache und Altertumskunde*.

⁸⁶ Erman (1894: vi): "... the particular features of the ancient religious literature and the inscriptions of the Old Kingdom...".

⁸⁷ Erman (1894: vi, translated from German): "what might be called, the Classical language, the language of Middle Kingdom poetry and inscriptions". From this one he separates what he calls (Erman 1894: 1) "Middle Egyptian, the vernacular of the Middle Kingdom" ("das Mittelägyptische, die Volkssprache des mittleren Reiches"): The term "Middle Egyptian" as used by Erman thus refers to a sociolinguistically distinguished layer of Middle Kingdom "Ancient Egyptian".

⁸⁸ And even those were doubted by some linguists, cf. e.g Whitney (1867: 343): "The Egyptian pronouns present some striking analogies with the Semitic, and from this fact, the confident conclusion has been drawn by many linguistic scholars that the two families are ultimately related ... Considering, however, the exceeding structural difference between them and the high improbability that any genuine correspondences of so special a character should have survived that thorough working-over which could have made Semitic speech out of anything like Egyptian, the conclusion must be pronounced, at least, a venturesome one".

This journal, founded in 1863 by Heinrich Brugsch and edited by Richard Lepsius from 1864, was the first academic periodical exclusively dedicated to Egyptology (cf. Gertzen 2013 and Gady 2013). Its foundation indicates the increasing autonomy of Egyptian studies within the academic frame of humanities and, collateral to this development, the gradual deviation of Egyptian linguistics from general and comparative linguistics.

In the first of his contributions (Erman 1881), Erman dealt with some linguistic peculiarities of the autobiography of the high official Wnj, one of the most comprehensive narrative texts extant from the Old Kingdom. These peculiarities include

- the morphological formation of a dualis displaying forms that partially resemble their Semitic counterparts,89
- an adjective marker i which Erman did not hesitate to call nisbe, adopting the name of the functionally and morphologically similar pattern in Semitic word formation.90
- a type of verbal noun ending in the feminine marker .t, the discovery of the so-called Relative forms,⁹¹
- and the existence of a morphological class of verbs that Erman called verba mediae geminatae, again drawing upon the terminology of Semitic linguistics.92

Erman's most far-reaching discovery was the preservation of the old Semitic Perfect conjugation in the earliest attested layers of Egyptian (Erman 1889), 93 and its further occurrence (although in changed syntactic and functional patterns) throughout Egyptian up to the residual form known as the Coptic stative (Erman 1889 and 1894b).

⁸⁹ Erman (1881: 44–52): "Das \setminus , der Dualis und die Nisbe", 46–47: "This vowel i plays a main role in Ancient Egyptian morphology. First, it serves the formation of the dualis; in fact, Ancient Egyptian has a dualis". See also Erman (1875).

⁹⁰ Erman (1881: 49): "Even more important however than this dualis is the other paradigm marked by \\ [i.e., the hieroglyphic sign encoding of the morpheme called by Erman "vowel i"], which I want to call by a term taken from Semitic grammar, the nisbe".

⁹¹ Erman (1881: 53–58): "Verbalformen auf t".

⁹² Erman (1881: 58-66): "Verba mediae geminatae im Aegyptischen".

⁹³ On the cognates of the Semitic perfect conjugation see esp. 80–81. Today one wonders how earlier Egyptologists could have overlooked these forms. However, many of these are not that conspicuous, and the distinctive form of the 1st person singular: -kw was wrongly identified by Maspero (1871: 18) with the Coptic particle ce. See also Schenkel (1990: 13, and 105–107). For the stative in Ancient Egyptian see Kammerzell (1991); Reintges (2006); Oréal (2009), and Reintges' article in this volume.

A synthesis of these discoveries in terms of an Egyptian and Semitic genealogical relationship was given in Erman 1892 (cf. also Schenkel 1990: 13–16). Eventually in his *Ägyptische Grammatik* (Erman 1894a), Erman dealt with the classification of verbs completely in terms of Semitic grammar: ⁹⁴ He distinguished verbal classes "according to the number and quality of their consonants, the so-called radicals" (Erman 1894a: 62–63), and he identified root patterns widely corresponding to those of the Semitic verb. ⁹⁵ The relation of Egyptian to African and Semitic languages was now expressed in terms of an equal distance:

"The Egyptian language is a relative of the Semitic languages (Hebrew, Arabic, Aramaic, etc.), of the eastern African languages (Bishari, Galla, Somali, and others), and of the Berber languages of Northern Africa." (Erman 1894a: 1)

The rise of the *Berliner Schule* meant an enormous increase of professionalism in the developing discipline of Egyptology. Erman himself was fully aware of the significance of the turn triggered by his discoveries. In 1895, when he delivered his inaugural speech to the Berlin academy – the very institution to which seventy years before Wilhelm von Humboldt had introduced Champollion's "phonetic hieroglyphs" – Erman put it in terms of an ambivalent feeling of pride, guilt, and melancholy:

"We transformed a cheerful science rich in surprises into a dull philology with uncomfortable phonetic laws and wicked syntactic rules ... What is happening to Egyptology today is the process that no science can escape ... Where are the happy days gone when every text could be translated and understood? From the time when grammar became better known to us, we have unfortunately encountered difficulties and obstacles all around that we did not even suspect before ... The age of swift results is over, and the monotonous age of work on details has begun." (transl. from Grapow 1954: 14–16)

The driving forces of professionalization inherent in and resulting from Erman's solutions to a number of crucial issues of Egyptian linguistics are part of the reason why the venerable companionship between comparative linguistics and Egyptian language studies eventually dissolved, and the latter, ennobled as an independent philological discipline, was to move on in splendid isolation.

⁹⁴ Erman (1894: 62): "The designations of the classes are those used in the Semitic grammar". **95** Erman (1894: 62–63): "The verbs subdivide into several classes according to the quantity and quality of their consonants, the so-called *radicals*. These classes differ in their ways of inflection". Erman's pupil Kurt Sethe (1869–1934) had already used this terminology two years earlier in his doctoral thesis on *Aleph prostheticum*, Berlin 1892.

9 The new achievements of Egyptian lingustics as echoed by linguistic typology: From Misteli to Finck

The development within Egyptology also affected the attempts by comparative linguists to classify Egyptian typologically, and eventually led to the same result on their side.

In pre-Berliner Schule times, classifying Egyptian in terms of Sprachbau meant to deal with a language almost bare of grammar - "the plainest rise of pure forms", "bare, rigid plainness", as Steinthal 1860 put it. How much more demanding was this business to become when the classification of this language meant dealing with not just one grammar but with three (since 1880) or four (since 1894).

The changed, in fact terribly complicated, situation is echoed in the third edition of Steinthal's Charakteristik der hauptsächlichsten Typen des Sprachbaues from 1893, which the Swiss linguist, Franz Misteli (1841–1903; cf. Ringmacher 1996: 202-206 and 2001b: 1437-1438; Aschenberg 2001; Häcki Buhofer in Stammerjohann 2009: 1032–1033), published more than thirty years after the appearance of its second edition (Steinthal 1860). Compared with the previous editions (Steinthal 1850 and 1860), Misteli's revision of 1893 exhibits a number of striking changes:

Egyptian has changed places. It is now classified together with the Bantu languages under the type 'anreihende Sprachen' (Misteli 1893: 104-110). Although Egyptian is still awarded the title of Formsprache (Misteli 1893: 107–108), this change increased the typological distance between Egyptian and Semitic, as well as between Egyptian and the Indo-European languages. On the other hand, although Misteli partially based his work on Stern 1880, he did not follow Stern's suggestion (Stern 1880: 3-4) to distinguish different phases of Egyptian typologically and to classify pre-Coptic Egyptian as an isolating language, as opposed to Coptic as an agglutinating one. Also, Erman's new insight into the closeness of Ancient Egyptian to Semitic languages – not just genealogically, but also structurally, including evidence for verbal inflection – had no impact on Misteli's classification. 96

⁹⁶ The increasing danger of dilettantism faced by approaches to general language classification from the late 19th century due to the increasing number of specialized philologies is dealt with by Ringmacher (2001b: 1436-1437).

- 2. The description of Egyptian (Misteli 1893: 266–301) differs significantly from the second edition and presents itself as being informed by recent Egyptological work.⁹⁷ While only Stern's Coptic grammar (Stern 1880) is referred to explicitly, the whole chapter is based on Erman's *Neuaegyptische Grammatik*, starting with Misteli's introduction to the language history of Egyptian, where Erman (1880) is quoted literally, if not explicitly.⁹⁸ While the diachronically unchanged *Sprachbau* of Egyptian, as was claimed by Steinthal, is maintained theoretically (Misteli 1893: 267),⁹⁹ in practice Misteli no longer dared to deal with Egyptian as a uniform linguistic entity. Instead, he narrows the validity of his description down to Late Egyptian (*Neuägyptisch*) and Coptic (Misteli 1893: 267), the two most easily accessible phases of Egyptian, thanks to Erman (1880) and Stern (1880).
- 3. The overall classification system has changed: Steinthal's rather idiosyncratic terminology following the overarching concept of Formsprachen, even though not given up entirely, is "converted" into terms that, on the one hand, explicitly link to earlier terminological traditions of language classification (F. and A.W. Schlegel, Humboldt, Pott 1848), such as einverleibend 'incorporating', wurzel-isolierend 'root-isolating', stamm-isolierend 'stem-isolating', anreihend 'attaching', agglutinierend 'agglutinating', flectierend 'inflecting'. On the other hand, they anticipate the terminology still used by Finck 1910.

⁹⁷ Misteli writes in his preface (ix, translated from German): "Also the specimens in the Egyptian-Coptic chapter and a good deal of the idea of it are based on well-known recent studies [an implicit reference to Stern 1880 and Erman 1880], with the exception of certain scholars who think that they can find sounds of primeval language in Egyptian [an innuendo to the work of Carl Abell".

⁹⁸ Misteli (1893: 267, translated from German): "The language of Egypt is known to us from three different periods. The Egyptian of the hieroglyphs [i.e., the first period, previous to the Demotic and Coptic periods] ... can further be subdivided into Old Egyptian and New Egyptian, the first one being the "classical language extant in the holy scriptures and the earliest inscriptions" (around 3000 BCE), the latter being the "vernacular language of the New Kingdom" for which we have sufficient evidence from the 13th and 12th centuries BCE". This is obviously paraphrased from Erman (1880: 1) (cf. above, § 8).

⁹⁹ Misteli (1893, 267, translated from German): "These three (or four, respectively) phases are different only with regard to phonology and to the disappearance, or spread, of the one or the other form; the principle of formation is the same in all of them."

¹⁰⁰ In his preface, Misteli describes his aims ironically (Misteli 1893: viii, translated from German): "Once having taken up a revision of Steinthal's book, I tried to limit myself to the knowable and to the purely linguistic, although ethnopsychology still won't be left empty-handed, and doubtlessly one phrase or another will sound mystical enough". On Misteli's aims and method see also Ringmacher (2001b: 1437–1438).

Franz Nikolaus Finck (1867–1910), professor of general linguistics in Berlin (cf. Koerner 1970; Plank in Stammerjohann 2009: 459-461), contributed to language classification the first time in his concise programmatic essay Die Klassifikation der Sprachen (Finck 1901; cf. Daniels 1998: 195; Ringmacher 2001b: 1439–1440), where he compared the two approaches taken by Byrne 1885 (on James Byrne [1820-1897] cf. Daniels 1998: 194-195 and Ringmacher 2001b: 1438-1439) and Misteli 1893. Finck's idea of Egyptian was apparently not very clear at that time, but clear enough to approve its classification together with Bantu languages, as proposed by Misteli 1893 (Finck 1901: 17), and to criticize Steinthal's earlier treatment of Egyptian (and Chinese) in terms of Formsprachen.¹⁰¹ Although Byrne's and Misteli's systems were developed from distant points of view and are different in several respects, Finck found them compatible to a degree that gave him confidence in their achievable convergence into, what he called, "the truth". 102

Finck's synthesis of language classification is provided in two popular booklets, Die Sprachstämme des Erdkreises (Finck 1909, 3rd edition 1923) and Die Haupttypen des Sprachbaus (Finck 1910, 5th edition 1965), which, in some way, are the final word of 19th-century language classification (Lehmann 1969: 50-52).

The first of the two, Sprachstämme des Erdkreises (Finck 1909), deals with genealogical classification. Egyptian, grouped together with the *Hamito-Semitic* language family, is subdivided into Altägyptisch, Mittelägyptisch, and Neuägyptisch, which was still unusual in Egyptology (cf. above, § 8). Given the brevity of presentation, it is difficult to guess how Finck wanted these labels to be under-

¹⁰¹ Finck (1901: 20–21, translated from German): "As is well-known, some have tried to incorporate the Egyptian and Chinese languages - albeit acknowledging great differences - together with them [i.e., the Indo-European and Semitic languages] into the class of form languages thereby performing quite a feat of wishful interpretation! Although Egyptian does not possess subjective verbs [i.e., modal verbs], although roots and suffixes are not firmly fused with each other, it is still supposed to be a form language, because "the Egyptians," as Steinthal says, "have been thinking formally, and therefore their language is formal". But who stands surety for this? And even if they had been thinking formally, does this matter for somebody who wants just to study their language? The only positive argument produced in favor of formality is the grammatical gender, so much praised with effusively eloquent words. Apart from that it is not plausible why it should be of bigger importance than any other categorial differentiation, ... it is certainly not true that the rules of congruence and thereby, true synthesis would be possible by virtue of this [i.e., the category of grammatical gender] alone".

¹⁰² Finck (1901: 15-16, translated from German): "Comparing this classification [i.e., according to Byrne] with the classification at which F. Misteli, following Steinthal, arrived via a very different route, a broad consensus gets visible which, despite all differences, raises hope for an approximation to the truth by means of a careful evaluation of merits and shortcomings on either side".

stood. It seems, however, likely that he took them from Erman and, unaware of or unwilling to follow Erman's special concept of *Middle Egyptian* (cf. above, n. 92), placed it "logically" amidst Ancient and Late Egyptian. After all, the British Egyptologist Battiscombe Gunn (1883–1950), who introduced the term *Middle Egyptian* into Egyptology, was surprised to find it anticipated in a small booklet written by a general linguist: "Who invented the term 'Middle Egyptian' in this sense I do not know; I thought myself to have been perhaps the originator of it until I found it so used in Finck, *Die Sprachstämme des Erdkreises*, 25." (Gunn 1924: ix).

Finck's second booklet, *Die Haupttypen des Sprachbaus* (Finck 1910), explains language typology, as this business was now called (following von der Gabelentz 1894; cf. Ringmacher 2001b: 1436), to a wider audience. Eight types of *Sprachbau* are distinguished: *wurzelisolierend* 'root-isolating', *stammisolierend* 'stemisolating', *einverleibend* 'incorporating', *unterordnend* 'subordinating', *anreihend* 'attaching', *gruppenflektierend* 'group-inflecting', *wurzelflektierend* 'root-inflecting', *stammflektierend* 'stem-inflecting' (Finck 1910: 153–155). Finck expounded his typological classification by introducing one representative of each of them. Egyptian-Coptic was not selected, and we cannot know for sure to which class(es) Finck would have grouped it now.

10 Outlook

As this article aimed to show, Egyptian-Coptic was a central concern to comparative linguists throughout the 19th century. This was no longer so in the 20th century. The rise and development of structuralism and the Greenbergian approach to linguistic typology is a story completely different from the further development of Egyptian philology. Admittedly some Egyptologists, such as Hans-Jakob Polotsky (1905–1991) and Fritz Hintze (1915–1993), were well aware of contemporary trends in linguistics, quite to the benefit of their thought on Egyptian. Linguistics, however, was no longer informed by Egyptology. If proof were needed, nothing could be more revealing than the conspicuous behaviour of Sir

¹⁰³ As to the best of my knowledge, Martin Haspelmath's introductory chapter on Egyptian in this volume is the first attempt to describe Egyptian in terms of general linguistics undertaken by a general linguist after Misteli 1893. An exceptional case of reception from Egyptology is Karl Bühler (Bühler 1934: 399–402 = Bühler 2011: 453–456), who referred to the (unpublished) PhD of the Austrian Egyptologist Willy Diemke (Diemke 1934) when dealing with the grammaticalization of subordninate sentences, although despite his influence on linguists, Bühler was not a linguist himself.

Alan Gardiner (1879–1963). Offspring of the Berliner Schule, he was one of the most eminent Egyptian philologists and linguists of the day and the author of the most successful Egyptian grammar ever written (Gardiner 1927, 3rd edition 1957 followed by numerous reprint editions up to the present). Sometimes, however, Gardiner enjoyed himself by writing on general linguistics, and whenever doing so, he carefully switched off his internal Egyptologist – only a couple of random examples in his works on general linguistics are taken from Egyptian, while his overall argument is based on the classical languages (Gardiner 1932, 1951, 1954).

According to Antonio Loprieno, Egyptian linguistics at the dawn of the third millennium experienced a "typological turn" (Loprieno 2003: 74)104, and this diagnosis is supported last but not least by the evidence in this volume. However, turning Lepsius's initially-quoted statement (Lepsius 1837: 89) into a question, "de quelle importance l'étude du dialecte sacré des Égyptiens peut-elle devenir pour la comparaison des langues"?

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^{104 &}quot;As for the language features that are being studied, there has been a rather dramatic shift in the general interests of Egyptian linguistics from issues of syntax to issues of typology. ... This shift ... implies that features of the Egyptian language that were previously considered within the frame of Egyptian itself are now read in the light of general trends in the history of human language, i.e., of what linguists call universals."

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