

The beginnings of Sumerology (I) From Early Sketches to a First Complete Grammar

Erika Marsal - Vienna
erika.marsal.palomo@univie.univie.ac.at

[A complete understanding of Sumerian grammar still comes up against apparently insurmountable problems that have been studied by a wide range of scholars, each with his own method of transliteration as well as different and often contradicting grammar. The main purpose of this article, which will be published in two parts, is to sketch out a brief history of the development of Sumerian studies, in order to analyse the difficulties that have traditionally hampered the full comprehension of the language of the non-Semitic neighbours of the Akkadian people. In other words, the article will try to outline the progress achieved in Sumerology until what we consider nowadays the fundamentals of Sumerian grammar, analysing some of the most important articles and grammars of the 19th century and of the first quarter of the 20th¹.]

Keywords: Sumerology, Sumerian, Assyriology.

1. *The early decipherment of Sumerian and the first archaeological expeditions.*

The narration of the decipherment of Sumerian begins in the 19th century. It was the time when the budding discipline of Assyriology was still coloured by Romanticism and classical studies provided an established model for the development of both Assyriology and Egyptology.² Therefore, both disciplines

1. The content and main part of this essay was originally written under the title *Sumerian and Sumerologists. A grammatical history of Sumerology from the discovery of Sumerian to World War II* and presented as a Master's Thesis for the Màster en Llengües i Cultures de l'Antiguitat, Universitat de Barcelona on March 2011. I would like to thank the Institut für Assyriologie und Hethitologie - LMU (Munich), the SOAS Library (London), the Seminar für Sprachen und Kulturen des Vorderen Orients - Ruprecht-Karls-Universität (Heidelberg) and the Institut für Altorientalistik - Freie Universität (Berlin) for their kindness and the extense use of their libraries I have made. I would like also to mention my special and heartfelt gratitude to the Institut del Pròxim Orient Antic (Universitat de Barcelona), for a countless list of reasons, to Dr. Marc Such-Gutiérrez for all his valuable suggestions during the defense of my Master's Thesis and particularly to Dr. Lluís Feliu, for all his corrections and recommendations. I have not intended to be exhaustive, that is to say, to analyse here everything that has been published. Instead, my aim is to provide an sketch of what has been said about Sumerian in the earliest years since we came to know of its existence, now just over a century ago.

2. See Trigger, B. 1996; *A History of Archeological Thought*, London. 67-74.

depended on written sources to supply chronologies and historical records and the growth of both was initially supported by belief in their relevance for Biblical studies.³

Nevertheless, as S.N. Kramer has pointed out, Sumerian was not deciphered in the same way that Akkadian or Egyptian was⁴. The scholars who worked in Egyptology or in the decipherment of Akkadian language had access to a great deal of reference material, namely Biblical and classical sources. In the case of Sumerian, no such sources existed, nor was there any recognizable mention of Sumer and its people and language in this kind of literature.

The early steps of Assyriology go back to 1765, when Carsten Niebuhr (1733-1815) made the first successful copies of the inscription of Behistun, in Persepolis, which was soon recognized as trilingual.⁵ By 1802, Georg Friedrich Grotefend (1775-1853) was successful in deciphering a large part of the inscription, and in 1835-1837, Henry C. Rawlinson (1810-1895) succeeded in completing a copy of the Old Persian text. Due to the inaccessibility of the inscription it was not until 1847 that the Babylonian part could be transcribed. In fact, the only traveller in Persia since Rawlinson's time who made an attempt to re-examine any portion of the text in the next fifty years was Prof. Williams Jackson, who in 1903 collated doubtful passages in the lower portions of the first columns of the Persian text.⁶

The crowning achievement in deciphering Akkadian language belongs to Edward Hincks (1792-1866), which, in an addendum to his article "On the First and Second Kinds of Persepolitan writing" proclaimed that he had made some steps toward the reading of the inscriptions in the Babylonian part of the text on the Behistun inscription and that those appeared to have much in common with the Semitic languages.⁷ With considerable contributions from Rawlinson, Hincks published in 1851 the transliteration and translation of the Akkadian text of the Behistun inscription, which is usually taken as the starting point of our knowledge of the Akkadian Language.⁸

In 1850 Hincks began to question whether the dwellers of Assyria were the true inventors of the cuneiform system of writing,⁹ arguing that it was unreasonable that the Semites would have invented a

3. An example to this could be the German Assyriologist Eberhard Schrader (1836-1908), whose work in Assyriology was initially theologically oriented, but who contributed many German translations of inscriptions in his *Keilinschriftliche Bibliothek* (1877).

4. Kramer, S.N. 1944; *Sumerian Mythology. A Study of Spiritual and Literary Achievement in the Third Millennium B.C.*, "Introduction". *Memoirs of the American Philosophical Society* 21.

5. Although not firstly correctly identified, we know today that those three languages are Old Persian, Elamite and Babylonian.

6. See King, L.W., Thomson, R.C. 1907; *The Sculptures and Inscriptions of Darius the Great on the Rock of Behistun in Persia*, London.

7. Hincks, E. 1846; "On the First and Second Kinds of Persepolitan writing", *Transactions of the Royal Irish Academy*, XXI; I.: 13, *apud* Cathcart, K.J. 2011; "The Earliest Contributions to the Decipherment of Sumerian and Akkadian", *Cuneiform Digital Library Journal*: 2.

8. See Cathcart, K.J. 2011: 2, who, contrary to the widespread belief, argues that although the main Babylonian text at Behistun was copied by Rawlinson in 1847, it was not published until the end of 1851. Subsequently it played no role in the crucial first phase of the decipherment of Akkadian.

9. Hincks, E. 1850; "On the Khorsabad Inscriptions", in *Transactions of the Royal Irish Academy*, XXII, II: 19 note: "It is possible, too, that the word from which the phonetic value is derived may be one belonging to a different language. I will, in a subsequent section, produce an instance, in which I believe that the ordinary phonetic character, namely *pa* was adopted from a foreign language. This mode of proceeding may be illustrated by some of the abbreviations used in Irish manuscripts. The Irish letters were at first chiefly used in the copying of Latin texts. In Latin manuscripts, the letter *s* with a peculiar mark, which may be represented by *s'*, was used to express the word *sed*. In the course of time the same mark was used in Irish manuscripts to express *acht*, the Irish equivalent of *sed*. And by a further progress, it was used to express this sound, when it no longer signified "but", but was a portion of a word of totally different meaning. Thus, *ts'* was used for *teacht*, "to come"."

system of writing that did not fit their language perfectly.¹⁰ In 1855, Rawlinson published an article in the *Journal of the Royal Asiatic Society*, which reported the discovery of non-Semitic inscriptions on bricks and tablets from sites in southern Babylonia such as Larsa, Nippur and Uruk.¹¹

During the following year,¹² Hincks also sketched some first recognizable attempts at understanding that unknown language, and established that it was agglutinative in character. The language was finally called “Scythian” or “Akkadian” (in contrast with what we call “Akkadian”, then called “Assyrian”) and had no clear affiliation with any other known language, despite a wide variety of attempts that generated a large amount of literature).¹³ Several years later, in 1869, the French scholar Jules Oppert (1825-1905) suggested that this language could be called “Sumerian”, based on the royal title “king of Sumer and Accad” which could be found in some inscriptions.¹⁴ However, Oppert was not immediately followed by many Assyriologists and the name “Akkadian” continued to be used for some years.¹⁵

10. See Cathcart, K.J. (Ed.). 2007; *The Correspondence of Edward Hincks*, II. Dublin: 297; “I accompanied the announcement with what I considered a necessary consequence of this newly discovered fact, that this mode of writing must have originated with a non-Semitic people; as non-Semitic peoples could have invented a system of writing so uncongenial to their language. [... It is now pretty evident that they were] people who spoke a language different (or rather, perhaps a more ancient form of) the Akkadian of the habitual tablets...”. Conversely, not all the scholars received this announcement with the same delight. The French Orientalist Joseph Halévy (1827-1917) wrote ferociously against the existence of Sumerian as a real language. Muss-Arnoldt in 1894 wrote: “For upwards of twenty years Oppert has fought for the reality of this Akkadian language against Joseph Halévy, who maintained that it was only a system of cryptography invented by the Babylonian priests and scribes.” (Muss-Arnoldt, W. 1894; “The Works of Jules Oppert”, in *Beiträge zur Assyriologie (und semitischen Sprachwissenschaft)*, 2, 523-556: 526). However, Oppert provides a large amount of consistent evidence for its existence, e.g. Oppert, J. 1876. *Études Sumériennes*, Paris: 74. For a detailed overview of Halévy’s thesis see Fossey, C. 1904. *Manuel d’assyriologie*, vol. 1-2 Paris. 281-381. Also Cooper, J. S. 1991; “Posing the Sumerian Question: Race and Scholarship in the Early History of Assyriology” in *Aula Orientalis*, 9, 47-66.

11. Rawlinson, H. 1855; “Notes on the Early history of Babylonia”, *Journal of the Royal Asiatic Society* 15: 215-259, 431-433.

12. Cathcart 2007: 297.

13. See Cathcart, 2007: III, 114, nt. 2 where Hincks uses “Chaldean” for Sumerian, a language he considers to be a Turanian language. Jules Oppert in an article work published in 1876, entitled “Sumérien ou Accadien?” (Oppert 1976: 1), the French Assyriologist explains: “Quel était le nom à donner à ce peuple représentant une antique civilisation? Je proposais alors, faute de mieux, d’appeler l’idiome casdo-scythique ou casdéen, du mot hébreu Kasdim, la Chaldée: le nom proposé était, je l’avoue, assez mal choisi. Aussi n’y eut-il qu’un seul savant qui s’en servît. M. Rawlinson proposa le mot chamitique qu’il changea plus tard contre celui de chaldéen; ne discutons pas la valeur de ces termes que le grand savant britannique emploie encore, et avec lui quelques autres savants anglais. Au mois de juillet 1855, j’eus, pour la seule fois de ma vie, l’heureuse occasion de rencontrer Hincks. Il rejeta, non sans raison, les termes de casdoscythique et chaldéen. Il proposa l’expression d’accadien, et se fonda sur la considération suivante: Tous les rois de la Mésopotamie se servent, après leur titre principal, du titre subsidiaire de roi des Sumers et des Accads ou de Sumer et d’Accad: il pourrait donc être bien probable que l’un des deux peuples fût l’inventeur de l’écriture; Hincks propose celui d’Accad parce que ce nom figure dans la Bible.” See also Lenormant, F. 1876; *Études sur quelques parties des syllabaires cunéiformes*, Paris: 2. For a complete survey of the controversy around the name for the newly discovered language see Fossey 1904: 275-280. For the Akkadian term Šumerû see *The Assyrian Dictionary of the University of Chicago*, Š 273; von Soden, W.; *Akkadisches Handwörterbuch*: 1272.

14. However, in his work published in 1870, A.H. Sayce quotes the same formulation in a different sense: “The early kings of that region entitled themselves rulers of “Sumiri and Accad”, or, still oftener “of the land of Accad” only. Accad is explained as “high”, and would refer to the mountainous country to the east of the Euphrates. Sumiri (also called Cassi) is apparently “the plains...” (Sayce, A.H. 1870; “On an Accadian Seal”, in *The Journal of Philology* 3, 1–50. 1) vol. III: 114, 160, 229.

15. See Cathcart 2007: vol.III, 114, 160, 229.

2. Towards a first sketch of a Sumerian grammar

Before the publication of the first sketch of a Sumerian grammar, only a few publications, most of them written by the aforementioned Paris academician Jules Oppert, shed new light on the newly discovered language. In turn, Hincks (and other scholars) had also made some progress in transliteration, as can be seen from his personal correspondence. However, it was not until the publication in 1870 of the article “An Accadian Seal” by Archibald H. Sayce (1846-1933), that it can be said that a first attempt to write a Sumerian grammar was made.¹⁶

Sayce begins his article with the hopeful announcement of the discovery of a new language that is neither Semitic nor Aryan. More important, the ideographic origin of those characters revealed that, as Hincks had pointed out, the cuneiform system of writing was, in fact, an invention of the speakers of that language and the evidences show that it is out of question that the new discovered language is the origin of the Akkadian syllabary.¹⁷

Due to the lack of texts at the point in that Sayce wrote his article, the author decides to take just a single inscription and to make a philological analysis of it.¹⁸ What surprises us is, nevertheless, how Sayce, although the pointed lack of texts, made a remarkable brilliant approach to the Sumerian language. By using a method of comparison with other languages, which he mastered through his many expeditions in the Pacific Islands, Sayce tries to locate the new discovered language within the already known families of languages and concludes that that new language pertained to the Allophylian family.¹⁹ As he points out, this term is used here as a synonym of “Agglutinative” [1870: 45]. In addition, he establishes a comparison between Sumerian and Basque, arguing that there is a similarity in the way that both languages place the genitives and adjectives and pointing out the necessity of a deeper study of the similarities between both languages, which are in some way related [1870: 46].²⁰ Many sign values are correctly specified, as well as their significance as part of the nominal chain [1870: 8, 10]. The frequentative character denoted by the repetition of the verbal root is also remarked, along with the plural signification by repetition of the noun [1870:4].

Regarding the verbal chain Sayce highlights the fact that the Sumerian verb uses a number of auxiliary words which denote what in other languages is expressed through tenses and conjugations. Sumerian, he says, distinguishes between present and past. The past is indicated by the bare root, whereas the present is marked by a prolongation of it [1870: 36]. Less correctly, Sayce writes about the negative indicator [1870: 41], although he correctly gives the function of the *nu-* particle as the negative prefix.

As a conclusion Sayce states that a further critical comparison between Sumerian and other languages like Iberian or Basque would, independently of the huge interval of space and time between them,

16. See the paper by Haupt, P. 1884; “The Babylonian “Woman’s Language””, in *The American Journal of Philology* 5, 1: 68-84: 68, where he recognizes the primacy of Sayce’s grammar.

17. Sayce 1870: 2.

18. For that inscription, which was not published before, see *The Royal Inscriptions of Mesopotamia, Early periods* 3/2.1.2.2039 with previous bibliography.

19. Allophylian was a general term introduced by the ethnologist James Prichard (1786- 1848) to denote the peoples of Europe and Asia who are neither Aryan nor Semitic, and the languages spoken by them, without especial regard to their characteristics. It is sometimes used to include all races outside those families, and sometimes made an equivalent of Turanian, another term that has been used in reference to diverse groups of people. See Wilson, D. 2013; *Prehistoric Annals of Scotland*, 1, 238ss. For a discussion of the nineteenth-century theory, which divided languages into three families, called Semitic, Aryan and Turanian, see Van Driem, G. 2001; *Languages of the Himalayas*, I: 334-8.

20. Sayce’s interest in comparing Sumerian with Basque can be easily explained by the fact that Basques were theorized to have Turanian ancestors.

doubtlessly yield valuable results. Such comparison, in the author's own words, "may yet stand to Turanian philology much in the same place that the Rig-Veda stands to Aryan philology" [1870: 46].

After Sayce, the next important work on the field is by the French scholar François Lenormant (1837-1883). Since 1867 Lenormant had turned his attention to the cuneiform inscriptions and published several texts on the newly discovered language of Sumerian, among others, his *Lettres assyriologiques* (1871-1872), *Études Accadiennes* (1873-1879) and *La Langue Primitive de la Chaldée et les idiomes Touraniens* (1875), as well as other important works about religion and magic. Some have claimed him as having discovered the Sumerian language²¹, but this credit really belongs to Rawlinson on his article already mentioned about the non-Semitic inscriptions on bricks and tablets from sites in southern Babylonia.

The first chapter starts with a description of the sources of information on Sumerian. As Lenormant explains, the pronunciation of Sumerian cuneiform is different from Akkadian. Whereas Akkadian can be read ideographically, logographically or phonetically, Sumerian has to be read only ideographically. At the moment, he continues, we have a fund of 500 words confirmed by numerous examples established in the Sumerian texts, but this amount can be increased to 1000 if we compare them with the Akkadian texts [1873: 7].

A special mention is made of tablets called syllabaries, which, as Lenormant explains, are displayed in three columns: in the first place, the phonological description of the word to be explained, which is represented by a set of simple syllabograms; secondly, the Sumerian logogram and finally, the Akkadian translation. Further investigation reveals that polyphony is more developed in Sumerian than in Akkadian [1870: 9], which is a consequence of the exclusively ideographic use of the signs. This assertion is followed by an extensive explanation of the nature of the polyphony [1873: 9-13]. However, as we continue reading, we find that most signs are here read as in Akkadian. On the other hand, not all the signs now have the same reading that they had in Sayce's article. For example, Lenormant reads *lugal*, "king" as *ūngal* [Lenormant 1873: 49], which in Sayce [1870: 2] was still read *šar*.

After describing the peculiarities of vowel harmony (a feature that was already mentioned by Sayce [1870: 45]), Lenormant agrees with Sayce in relation to the frequentative character denoted by the reduplication of the verbal root [1873: 40]. When the reduplicated word is an adjective, he adds, then we have the superlative. Finally, the reduplication of a noun marks the idea of an augmentative or a collective (i.e. the plural of the word). In addition, in Sumerian there are many compound words formed from two or more nouns or a verb plus a noun [*ibid.*]. Unlike Sayce, Lenormant already talks about declensions [1873: 75]. However, he incorrectly considers the particle *-la* (or *-ta*, [1873: 77]) to be the comitative [1873: 76], and the particle *-na* to be the ablative [*ibid.*].

It is not until chapter eight [1873: 96] that Lenormant discusses the verb properly. He distinguishes, mixing Akkadian and Sumerian, eight principal voices²², which differ from each other by changes in the radical. The indicative form, which is the simple form, is the easiest to conjugate because it presents the verbal root without additional incorporated pronouns [1873: 100]. The difference between the present tense and the preterite is indicated by the addition of an *-e* vowel to the basic root. As Lenormant explains, when this happens, the root is "extended". This distinction between the two meanings in Sumerian is the same as the difference between the *status rectus* and the *status absolutus* in the noun. However, he continues, when the radical ends in an *-a*, an additional *-a* is placed after it [*ibid.*]. For the verbal conjugation, Lenormant quotes Sayce extensively [1873: 104].

21. E.G. Budge, E. A. 1925; *Rise and Progress of Assyriology*, London: 209.

22. As we shall see, the discussion of voice in Sumerian is as old as the discipline itself. See, for example, Woods, CH. 2008; *The Grammar of Perspective. The Sumerian Conjugation Prefixes as a System of Voice*: 23.

The last lines of the grammar [1873: 206] briefly mention the new name “Sumerian” that Oppert had considered. The convenience of the change of name for this language should be properly examined. The third volume of the *Lettres* will be devoted to that purpose.

In 1876, a few years later, a collection of Oppert’s articles from *Revue d’Assyriologie* was published under the title *Études Sumériennes*. Further articles, this time in the *Zeitschrift für Assyriologie*, resulted in a slight improvement in the study of the Sumerian language.²³ The main subject of these articles was the name of the language itself, but some progress in the reading of the signs is also noticeable.²⁴ Although Oppert’s opinions were not accepted unanimously by all Assyriologists, the publication in 1880 of the *Manuel de la langue Assyrienne* and later, of *Les Langues Perdues de la Perse et de l’Assyrie* (1885-1886) by Joachim Menant (1820-1899) confirmed and validated the results obtained by Rawlinson, Hincks and Oppert. Menant’s works, therefore, signified in France the definitive acceptance of Assyriology as a well-founded discipline, and proved the reached achievements to be adequate.²⁵

Meanwhile, in Germany, Paul Haupt (1858-1926) had published his important work *Sumerische Familiengesetze* (1879), which at the time was also the best contribution to the comparative phonology of the Semitic languages on the basis of a comparative analysis of Akkadian bilingual texts. Haupt also edited and translated the text of the *Babylonian Nimrodepos* (1884-1889), an article on the *Akkadian Language* (1883) and a paper on the 12th tablet of the *Nimrodepos* (1890), to list but a few titles of his vast output.²⁶

In his *Grundzüge der akkadischen Grammatik*²⁷ Haupt begins with the distinction of two dialects in the Sumerian language: *Êmê-gu* and *Eme-sal*, which are further analysed on his article *The Babylonian Woman’s Language*.²⁸ Sayce and Lenormant, independently, had shown that the first two columns in the so-called “Trilingual Tablet” in II R 31²⁹ do not represent two different languages, but divergent forms of the same language. Haupt [1884: 68] recognizes that the first scholar to point out the existence of two Sumerian dialects was A. H. Sayce in the introduction of a paper read before the Society of Biblical Archaeology on November 1874.³⁰ It was Haupt, however, who in *Über einen Dialekt der Sumerischen Sprache* (1880) established the phonological changes between the two dialects, which was undeniably a very significant contribution.³¹

23. See Oppert 1889; “La langue sumérienne dans les syllabaires assyriens”, in *Zeitschrift für Assyriologie*, 4: 172-173, on the loanwords from Sumerian to Akkadian, and Oppert 1876: 3: “En 1869, j’exposai les principes de cette langue antique au Congrès des Orientalistes à Kiel. A la fin de 1872, je fis à la Société asiatique de Paris une esquisse de tout le système grammatical de la langue que je nomme *sumérienne*.”

24. See Lenormant 1873: 64; the sign for $\hat{g}u_{10}$ is still read as *mu* but the interpretation of the postpositions is already established more precisely. There the reading of $\hat{s}e_3$, the allative, is *ku*, but its meaning had been understood correctly.

25. Budge 1925: 208.

26. As Budge 1925: 247 has pointed out, Haupt wrote more than 400 papers on topics concerning the Bible and Assyriology, which, for obvious reasons, we cannot list here in their entirety. These works contributed considerably to his understanding of Sumerian grammar as well as to the compilation of Akkadian and Sumerian word-lists and sign-lists. For his complete bibliography see Adler, C., Ember, A. (Eds.), 1926; *Oriental Studies published in Commemoration of the Fortieth Anniversary (1883-1923) of Paul Haupt as Director of the Oriental Seminary of the Johns Hopkins University*.

27. Haupt, P. 1882; *Akkadische und sumerische Keilschrifttexte*, Leipzig: 133-147.

28. Haupt, P. 1884; “The Babylonian Woman’s Language”, in *The American Journal of Philology*, 5, 1: 68-84.

29. Rawlinson, H.C., 1861-1866; *The Cuneiform Inscriptions of Western Asia*.

30. Published on Sayce, A. 1874; “The languages of the cuneiform inscriptions of Elam and Media”. *Transactions of the Society of Biblical Archaeology*, 3: 465-485.

31. Cf. Prince 1907; “Sumerian as a Language”, in *American Journal of Semitic languages and Literatures*, 23, 3: 202-219. who gives directly the main credit to Haupt, mentioning Sayce in second place.

When speaking about the verbal roots, Haupt remarks that primitively the verbal roots would have been monosyllabic and with both nominal and verbal meaning. In a second stage of the language, with the necessity to use the words only in a nominal or verbal sense, the number of syllables of the root would have increased. Haupt speaks about the *-a* and *-e* that appear at the end of some constructions also in terms of “Verlängerungsvokal”. The indicator of the dative is *-ra*, which can be shortened to *-r* [1882: 140]. The genitive can be expressed as *kid* (*ke₄*) (for *ki-ta*, as it is interpreted) or is simply not expressed. Other case markers are *-šu* (*še₃*) “above, on”, “to, in”, *ru(m)*, *-ka* “in”, *-gim(ê)* “like”, *-a* “in” (locative is thus, correctly identified). Specifically about the verb, Haupt observes that there are in Sumerian two verbal tenses: the present and the imperfect. The verbal root itself has an imperfective meaning, so in order to express the present it is necessary to reduplicate the root or to add the suffix *-e* before the root, i.e., whereas *in-lal* means “he is counted”, *in-lal-e* would mean “he counts” [1882: 142].

Another remarkable title from the same author is *Die akkadische Sprache* [1883], which was also included in the third part of his book *Akkadische und sumerische Keilschrifttexte*. It summarises some important aspects of Sumerian grammar, including the sequence of elements in a sentence [1883: 5], which is correctly established as S-O-V, and the Sumerian verbal conjugation [1883: 9], here called “postpositive conjugation”. Haupt also speaks there about an “*m*-Stamm” and a “*b*-Stamm” for the Sumerian prefixes *ma*, *mi*, *mu* and *ba*, *bi* respectively [*ibid.*]. The forms *imma-*, *umma-* ... are intensive allomorphs of *mi* > *im* or *mu* > *um* with the consonant doubled. Haupt suggests that the consonants *b* and *n* represent the abbreviated form of incorporated objects, which also appear reflected in the verbal form.

During the spring of 1880 and under the direction of the French archaeologist Ernest de Sarzec (1832-1901) the remains of a Sumerian temple and a considerable amount of small objects were found, some of which were inscribed with the names of Mesilim, Ur-Nanše or Entemena, as well as great diorite statues of the early governors of the ancient Sumerian city of Girsu. De Sarzec returned to Telloh many times between 1881 and 1891, and excavated again at various sites in the seventeen mounds where he had already worked.³² The first volume of the monumental work *Découvertes en Chaldée*, written by Léon Heuzey, appeared as soon as 1884 and used Sarzec’s reports. When de Sarzec died, further excavations were conducted at the site of Telloh by Gaston du Cross (1861-1915), a French army officer and archaeologist.

In the following years, the British Museum acquired a large and important collection of Babylonian and Assyrian tablets. This made it increasingly necessary to carry out a rearrangement in order to make the new tablets more easily accessible. That rearrangement however, hampered until 1896 the publication of any other great *corpus* of cuneiform texts.

In those years, George Bertin (1848-1891) was also employed by the Trustees of the Museum to copy the texts of Babylonian contract tablets and allowed him to make direct contact with the texts, deriving in the development of an extensive study of Sumerian grammar in several articles and works.

L’incorporation verbale en Accadien (1885) begins with a reference in a footnote to the correct name for the Sumerian language [1885a: 105]. Bertin agrees with Oppert for the convenience of the name *sumérien*, but he is not yet convinced of the correct interpretation of this language, namely, as Halévy expected, if the statement that Sumerian is itself a real language was wrong. Bertin starts with his analysis of Sumerian grammar. The “incorporation pronominale” is one of the foremost important characteristics

32. Sadly remarkable is also the high level of looting that took place on that period. Some sculptures were stolen before the arrival of Sarzec, some when he returned to Bassorah. Further looting continued until 1928, when official excavations restarted after the First World War. For that subject see Caubet, A. 2009; “The historical context of Sumerian discoveries” in *Museum International*, 61, 1-2: 75ss.

of the Sumerian language. There are four pronominal themes: *ma*, *ba*, *na* and *a₂*. These pronouns are now seen as particles which add various nuances to the verbal root and are not, as previously thought, the personal pronouns themselves.

The second part of the article is on the incorporated pronouns when they are inserted into the verbal chain [1885a: 148]. In such cases, the change of meaning of the verbal root is more intense than when the pronoun appears before the verbal chain. An example of this can be seen in the analysis of the following chain: *mu-un-na-ni-ib-gi-gi*. Here *mu* is the explicative complement, *un* is the direct object, *na* is the indirect object governed by the particle *ni* and *ib* is the subject. The Sumerian sentence corresponds therefore to French “il lui réplique”.

The prefix *im-ma* can be found frequently. According to Bertin it is however difficult to say if it is a plural form of the first emphatic pronoun (namely *ma-*, *mu-* or *im-*, with the consonant *m* as the characteristic marker) plus *ni*, which, by assimilation of the *n*, turns into *-ma-* or if it is indeed the second pronoun *na* where the consonant is assimilated and governed by the particle *ni* [1885a:149]. The plural option is somewhat remote, as well as differing from Lenormant, but it can be considered as an interesting attempt.³³

The incorporated particle *ta* [1885a: 150] seems to be used only with certain verbal forms. Bertin also detects a relationship between this particle and *ra*, with which it sometimes interchanged. The particle has a certain meaning of moving away from a point and corresponds to French *en* in the compound verbs “envoyer”, “em-porter”, etc.

For the compound *ba-ra* Bertin established that it is possibly a defective form of *ba-a-ra*, where *ba-* is the object and *-a-* the indirect object, governed by the particle *ra-*.

Finally, the particle *ši* has a certain nuance of repose. It appears sometimes with verbs of movement but “cela vient de ce que dans ce cas le régime indirect joue un rôle passif et que l’action de mouvement est indépendante de lui; ainsi dans le premier exemple le sujet se meut, mais le régime indirect reste immobile [1885a: 151].”

The last part of the article is consigned to the verbal suffixes. As Lenormant has pointed out, explains Bertin [1885a: 152], a final vowel is occasionally the marker of the participle, thus *lal-e*, *dib-a*, *sa-a*, *kur-ra*. This vowel is not rather than the fourth pronoun.

33. The morpheme /-m-/ is perhaps the trickiest problem in the whole Sumerian grammar. See e.g. Falkenstein, A. 1959; *Grammatik der Sprache Gudeas von Lagaš*, in *Analecta Orientalia*, 28-29: 48-49, who understands /-m-/ as derived from /-b-/ , the inanimate pronominal element; Jacobsen 1965; “About the Sumerian Verb”, in *AS* 16: 77 regards /-m-/ as an independent morpheme which marks propinquity to the area of the speech; Yoshikawa, M. 1978. “The Sumerian Ventive and lenthive”, in *Orientalia, Nova Series*, 47: 461 relates /-m-/ with the ventive; also Jagersma, A.H. 2010; *A Descriptive Grammar of Sumerian*: 497, who considers as well *mu-* as the basic ventive form, where the /u/ is lost in the sequence /muCV/; and others (see for example Foxvog, D. A. 2014; *Introduction to a Sumerian Grammar*: 90; Edzard, O. 2003; *Sumerian Grammar*: 93 and 103, who considers that the coincidence between the morphemes in Sumerian and Akkadian is due to a later re-interpretation of the Akkadian morpheme under Sumerian influence; Postgate, J. N. 1974; “Two Points of Grammar in Gudea”, in *Journal of Cuneiform Studies*, 26: 24 suggested that /-m-/ is derived from /mu-/; Attinger, P. 1993; *Eléments de linguistique sumérienne*: 270-280; Thomsen, M.L. 1984; *The Sumerian language. An introduction to its history and grammatical structure*: 172, §329, relates also the /-m-/ with the ventive, although she do not discard a relation with the prefix *mu-*; see also Jestin, R. 1946; *Le verbe sumérien*, 2 vols. II, 113-127; Sollberger 1952; *Le système verbal dans les inscriptions royales presargoniques de Lagash*: 120; Kang, S.T. 1968; *A study of the Sumerian verb in bilingual grammatical texts*: 11-18; 22-27, Zólyomi, G. 2006; “Sumerisch”, in: *Sprachen des Alten Orients*: 32 about the ventive morpheme. Woods, C. 2008; *The Grammar of Perspective. The Sumerian Conjugation Prefixes as a System of Voice*: 161-219 relates the prefix *imma-* with the dimensional indicators and describes it as “typified by elements in which the subject is affected by the action that he brings about, events in which the Initiator and the Endpoint are the same entity”. The prefix can, as such, be also identified with a “middle voice marker”.

The imperative and the precativ e are explained in the last pages.³⁴ The imperative is the shortest verbal form. It appears, however, also in a secondary construction, that is, formed with the prefix *u-me-*. Bertin quotes here an article of M. Pinches in *the Journal of the Royal Asiatic Society*,³⁵ who explained this secondary imperative as a “polite imperative”.³⁶ According to Bertin this interpretation is not completely clear, but could be related to the copulative particle of Akkadian [1885: 154].

Bertin was one of the first scholars to describe a recognizably modern Sumerian grammar. Many shortcomings are still noticeable in his terminology, which are due to the limited development of linguistics and philology at that time. However, a initial success in understanding and explaining the peculiarities of Sumerian is quite appreciable and the clarity of mind and brilliance of the scholars involved are evidently undeniable. In *L'ordre syntactique en suméro-accadien* (1888), for example, Bertin undertakes a completely different method of studying: the focus here is not the morphology but the syntax. In Bertin's treatment of the language one can see a real attempt to understand something beyond a mere reading of the signs. Here a further step is made towards a complete understanding of Sumerian grammar and the role which the different parts of a sentence play in it. With Bertin, after the discovery of the site of Telloh, which contained a large amount of Sumerian material, we find a new wave of Sumerologists, and a noticeable a sensitive increase in the forms that they isolated. With so many more inscriptions available, Bertin was able to determine additional characteristics of the noun and the verb. As we have seen, Bertin was also the first to consider *im-ma* as a compound, namely, a variation of the prefix *mu- >im-*, and not as an independent prefix. Bertin is even thought to be the first to suggest that *mu-* can have the specific nuance of proximity, that is, to give a certain dimensional meaning to the Conjugation prefixes.

In 1888, Arthur Amiaud (1849-1889) had also written about the inscriptions on the statues of Gudea and a Cappadocian tablet. Together with the collaboration of L. Mechineau, he compiled a valuable comparative table of archaic Sumerian signs with their Babylonian and Assyrian variants.³⁷ One last noteworthy scholar of this period is also Franz H. Weissbach (1865-1944), who in his *Zur Lösung der sumerischen Frage* (1897) largely proved the inconsistencies of Halévy's arguments. This was followed by his other main work on Sumerian, *Die sumerische Frage* (1898), where he returned to those arguments, insisting on the existence of the *Eme-sal* dialect as the main evidence for the existence of Sumerian.³⁸ With the publication of these important works, the reality of a Sumerian language was proved definitively, although Halévy's arguments would still continue to be quoted in the first pages of all Sumerian grammars for some years to come.

34. About the imperative see also Römer, W. H., 1999; *Die Sumerologie. Einführung in die Forschung und Bibliographie in Auswahl. Zweite, erweiterte Auflage*: 129-130; Thomsen, M.L. 1984: 251-253; Yoshikawa, M. 1980; “Aspectual Morpheme /a/ in Sumerian”, in *Zeitschrift für Assyriologie*, 69, 191-176: 165-170; Jacobsen, T. 1988; “The Sumerian verbal core”, in *Zeitschrift für Assyriologie*, 78, 161-241: 206-208.

35. Pinches, Th. G.; “Observations upon the languages of the Early Inhabitants of Mesopotamia”, *Journal of Royal Asiatic Society*, 16, II, 301-324.

36. An interpretation that we can still find nowadays in some authors. See Edzard 2003: 122 who suggests the idea of a polite imperative. Thomsen 1984: 209, §412 underlines that the idea of a polite imperative is a consequence of the parallelism found in the Akkadian translations, which translate the construction as an imperative. However, she considers that it is nothing but the modal prefix *ī-*, which in enclitic position turns into [u]. Yoshikawa in 1989. “The Origin of the Sumerian Verbal Preformatives”, in *Acta Sumerologica*, 11, 293-304: 299 compiles several references historically made about the function of *u₃-*. In 1989: 300 he also relates this particle with a possible origin in the word *u₄* “day” and argues that the conjunction *u₃* “is never attested as such in the pre-Sargonic texts, thus indicating that *u₃* has been borrowed from the Akkadian later than the pre-Sargonic period. The fact that *u₃* was already in use in the pre-Sargonic period may suggest that [the Akkadian conjunction] *u₃* is not the origin of *u₃*.” See also Römer 1999: 121.

37. Amiaud, A.-Méchineau, L. 1902; *Tableau comparé des écritures*.

38. Weissbach, F. H. 1898; *Die Sumerische Frage*: 55-61.

3. The 20th century. A new generation of Sumerologists

With the beginning of the new century it was published an enormous amount of new articles on the Sumerian language. The most prolific and discerning scholar from this period was perhaps Arno Poebel (1881-1958). Before him, François Thureau-Dangin (1872-1944), with whom Poebel maintained several discussions on important aspects of grammar, published several texts and grammatical comments, which contributed to the development of a reliable grammar of Sumerian. During these years John D. Prince (1868-1945), but especially Stephen Langdon (1876-1937) also made significant contributions.

Thureau-Dangin was one of the first Assyriologists to turn his attention to the study of the inscriptions on the monuments at Telloh. In 1892 he began his contributions on the Cylinder A of Gudea. Three years later, in 1895, he had also published the first part of the text, with transliteration, translation, commentary, grammar and vocabulary. His papers in the *Revue d'Assyriologie* added considerably to our basic knowledge of Assyriology, as well as provided many accurate transcriptions and copies.

In his article *Sur les préfixes du verbe sumérien* (1907)³⁹ Thureau-Dangin makes an approach to the Sumerian verbal prefixes from a semantic point of view. These considerations provided the future basis of the directional theory,⁴⁰ resulting in the paradigm that predominated until Poebel's *Grundzüge der sumerischen Grammatik* [1923].⁴¹ In this article, Thureau-Dangin describes verbal prefixes not only as indicators of voice, but also as marks of a spatial orientation, which is not only limited to the verbs of motion.⁴²

According to Thureau-Dangin, the Sumerian verbal system comprises a total of eight prefixes: *e*-class (*mu*, *mī*, *im*, etc.), *b*-class (*ba*, *bi*, *ib*, etc.), *n*-class (*ni*, *na*, *ne*, etc.), *ra*, *da*, *ta* and *ši*. After establishing this, the author analyses which are the most frequently used prefixes. The one that recurs most seems to be the chain *mu-na*, with the variations: “*mu - du₃* (translation = “il + construire”) *mu-ni-du₃* (trans. = “il + le + construire”) *mu-na-du₃* (trans. = “il + lui + construire”) *mu-ne-du₃* (trans. = “il + leur + construire”) *mu-na-ni-du₃* (trans. = “il + lui + le + construire”). Therefore, *mu* must be the pronoun representing the subject [1907: 381].

On the other hand, the particle *u₃*- is one possible way to mark the imperative, but with little difference in meaning. Prefixes themselves do not seem to express directly the notions of cause, reflexivity or the passive. Only the particle *ba*- is an exception to this [1907: 384], and gives the verb a nuance of “sens réfléchi-passif”.⁴³ The prefixes have neither gender nor number which are therefore expressed by the

39. Thureau-Dangin, F. 1907; “Sur les préfixes du verbe sumérien”, in *Zeitschrift für Assyriologie*, 20: 380-404.

40. See Woods 2008 : 24.

41. Woods 2008: 30-32: “It comes as no surprise that the directional theory, semantic in its outlook, is completely absent from Falkenstein’s assessment. Yet, in the years following the publication of the *Grammatik der Sprache Gudeas von Lagas* until the present, a number of scholars have pursued and modified the theory first put forth a century ago by Thureau-Dangin. (...) The result is that some aspect of the directional theory has been accepted by most scholars, even if deixis is not considered a primary function of *mu*- (and *im*-).” The directional theory was, however pointed out for other Sumerologists from the time of Thureau-Dangin, as Scholtz, R. 1934; “Die Struktur der Sumerischen engeren Verbalpräfixe speziell dargelegt an der I. und II. Form”, in *Vorderasiatisch-ägyptische Gesellschaft. Mitteilungen*, 34, II, 1-180 and Witzel, M. 1912; *Untersuchungen über die Verbal-Präformative im Sumerischen*.

42. For modern approaches to this theory, see. also Steiner 1990; “Sumerisch und Elamisch: Typologische Parallelen”, in *Acta Sumerologica*, 12: 143-176. 147, who describes *mu*- as a “zentripetale Präfix”; *e*- / *i₃*- as “zentrifugale Präfix” *ana*- / *an*- / *al*- as “neutrale Präfix”.

43. This fact seems to have been commonly accepted among the old Sumerologists. However not all modern authors agree with this asseveration. See Zólyomi 1993; *Voice and Topicalization in Sumerian: 2*: “this controversial prefix occurs in passive forms so often that some scholars have even proposed that it is the *ba*- that carries the passive meaning in the forms concerned. We will review the various contexts the prefix can occur in and suggest that one of the functions of *ba*- is to mark middle voice in

personal pronouns, sometimes attached to the root. With respect to number, we can see that the dative prefix has a form that corresponds to the plural, but the marker of the plural is more frequently indicated by a suffix, although this can be omitted. The forms *mu-um*, *im-mi*, *im-ma* are considered emphatic variants of *mu-*. The other prefixes *e-*, *b-* class and *n-* class are also used to indicate the subject [1907: 387]. The pronoun *ni* is used to express the accusative [*ibid.*].⁴⁴

The last and most important point is to analyse the reason for the choice of prefix. For that purpose, Thureau-Dangin draws from a collection of Presargonic tablets and compares the use of the different prefixes in the texts. First of all he identifies the use of *u-* and *e-*. As he explains:

du point de vue du rédacteur le sujet est dans le second cas au premier plan et comme “au centre” et dans le premier cas au second plan, “au dehors”; de plus dans le premier cas l’action est dirigée du “dehors”, vers le “centre” dans le second du “centre” vers le “dehors” [1907: 396].

The clue, therefore, is on the one hand, the location of the subject and on the other, the location of the object, that is, the direction of the action. As a result, the essential significance of these particles is basically deictic, imparting a directional force to the verb, which can be applied “metaphorically” to all types of verbs. With *mu-* the result of the action is “external” to the subject whereas with *ba-*, it is “internal” to it [1907: 398].

John D. Prince was a linguist and professor at New York University and Columbia and combined his scientific career with his occupation as diplomat and politician, as minister to Denmark and Yugoslavia. In *The first and second persons in Sumerian* (1903) Prince describes the interesting idea that Sumerian could be a tonal language. In his opinion, the suffix *-mu* and the indeterminate prefix *mu-* are most likely also etymologically identical. The author suggests that there was presumably a difference of tone pronunciation in Sumerian, as had been suggested already by Paul Haupt⁴⁵. As early as 1879, Haupt had conjectured a difference of “accent” (i.e. tone) in pronouncing Sumerian syllables. As in Chinese, in Sumerian it would have become necessary to distinguish between several monosyllabic elements which apparently had the same sound value [1903: 207].

Sumerian. Moreover, we will argue that the *ba-* prefix of passive forms functions as a middle prefix.” In Zólyomi 2006: 31 calls it “Mediumpräfix”: “Das Mediumpräfix /ba/ drückt aus, dass der Sachverhalt das grammatische Subjekt oder seine Interessen berührt. So wird es bei intransitiven Verben mit einer entsprechenden Bedeutung verwendet (...) oder, wenn der Agens weggelassen wird, was ein intransitives, passives Verb ergibt. (...) Bei Verben der Bewegung resultiert der indirekt-reflexive Gebrauch in eine separative Bedeutung. Das *ba-*Präfix drückt hier aus, dass sich der Endpunkt der Bewegung und das Subjekt der 3. Person am selben Ort befinden. (...) Wahrscheinlich sekundär ist die Funktion von /ba/ als pronominales Präfix vor den adverbialen Präfixen der Slots 6-9 (...). In dieser Funktion hat /ba/ das Allomorph /b/”. Diakonoff, I. 1965; *Semito-Hamitic languages. An Essay in Classification*: 16 considers that the essence of the ergative construction lies in the inexistence of the direct object and cannot likewise have voices. Thomsen 1984: §275 follows Falkenstein and considers that Sumerian verbal roots are not transitive or intransitive, but neutral. Edzard 2003: 94 treats this prefix as a compound of *-b-* and *-a-* and does not consider it as a “conjugal prefix”, the function of this “dimensional indicator”, as it is called, is “apart from indicating a locative proper, (...) with verbs of motion, denote the moving away.” Edzard finds also a special function of *ba-* to denote passive voice first attested in Ur III. see also Attinger 1993: 204 and 280, who sees in *ba-* a possible junction of the elements *b-* (= pronominal element) + *a*.

44. For a revision of this particular point see the article by Poebel 1908. Also Poebel 1923: §206-208; Falkenstein 1949: §196-199; Edzard 1959; “Fragen der sumerischen Syntax“, in *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, 109, 235-253; Foxvog 1975: 395-396; Yoshikawa, 1977; “Some remarks on the Sumerian Verbal prefixes *-n-/-b-* in a preradical position, in *Journal of Cuneiform Studies*, 29: 80-84; Thomsen 1984: §145-147; Attinger 1985: “Les préfixes absolutifs de la première et de la deuxième personne singulier dans les formes *marû* ergatives”, in *Zeitschrift für Assyriologie*, 75:161-178, Römer 1999:92.

45. Haupt, P. 1917; “Tones in Sumerian”, in *Journal of the American Oriental Society*, 37: 309-323.

Pupil of Prince and Thureau-Dangin was Stephen Langdon, who will later become Professor of Assyriology at the University of Oxford. He was also the author of many editions and monographs, like the *Annals of Ashurbanipal* (1904), *Building Inscriptions* (1906), *Inscriptions from Drehem* (1911), *Königsinschriften* (1912), *Babylonian liturgies* (1913), *Historical and religious texts* (1914), *History of Sumer and Accad* (1922) and more. His most important contribution, however, was the publication of the first complete grammar of Sumerian, for which the article *La syntaxe du verbe Sumérien* (1907) is only an intuitive starting-point.

La syntaxe du verbe Sumérien (1907) departs from the texts published by Thureau-Dangin in *Les inscriptions de Sumer et d'Akkad* (1905) and *Recherches sur l'origine de l'écriture cunéiforme* (1898). As Langdon explains, the article is divided in two parts. The first part analyses the structure of the phrase, developing into the verbal conjugation, the main conjugations constructed with the auxiliary verb “to be” and compound verbs. The second part is an attempt at conjugating the Sumerian verb, according to the principles explained and derived from classical texts. This second part is also followed by a comparative analysis between the Sumerian conjugation and the Indo-European verb system.

In the primitive conjugation [1907: 213], he writes, the verbal radical (infinitive) and the noun would have been merely juxtaposed. However, this statement is merely a supposition: as the author admits, we do not have any proof of such a construction, but we can infer its primitive form through the use of the infinitive in the classical language. In addition, the verb “to be” is not used in this primary stage. In relation to the “classical” conjugation, the main principle is that the verb is always followed by possessive suffixes and determinatives. In Langdon’s opinion, the classical conjugation is a development from the construction infinitive plus a possessive pronoun.

This primitive possessive pronoun attached to the verbal root would have connected the subject with the verb. The primitive verb-subject relation through the possessive pronouns would have been replaced by the demonstrative pronouns. These elements would reproduce preceding elements of the sentence (subject, direct and indirect object, locative, agent and instrumental). At the same time, those demonstrative pronouns would express the same notions expressed in Latin through the different cases. However, Sumerian has only two different declension cases: nominative-accusative and ablative-dative. The genitive is used only to indicate possession [1907: 221], and is displayed in two forms: the direct case (*ge*) and the indirect case (*ka*). The demonstratives, as Bertin [1888b] has explained, can be divided into three phonetic elements: /m/, /n/ and /b/.

If one Assyriologist deserves major consideration amongst the others that is without any doubt Arno Poebel (1881-1958). Poebel was one of the foremost Assyriologists of all time. His first steps in the study of the ancient Near East had begun in 1909, with the publication of his first important work *Babylonian Legal and Business Documents from the Time of the First Dynasty of Babylon*. This, together with his first articles, which belong to the author’s early years, constitute a proposal that would reach its zenith in his *Grundzüge der sumerischen Grammatik* (1923).

His first article, *Das Verbum im Sumerischen* (1908) was written when he was only 27 years old and it is a response to the article by Thureau-Dangin about the Sumerian verb. According to Thureau-Dangin, the differences between the prefixes *e-*, *ba-* and *mu-* are in some sense similar to the difference between “kommen” and “gehen”, “revenir” and “retourner”, that is, from “Zentrum nach aussen oder von aussen nach dem Zentrum” [Poebel 1908: 216]. These spatial locations can be also expressed in Sumerian by the postpositions *-ta* and *šú*, and perhaps also by *-ra* [Poebel 1908: 217]. The German Assyriologist however establishes an opposition between the prefixes *i-* and *mu-* but, contrary to the spatially orientated conception of Thureau-Dangin, he situates the differentiation of the verbal prefix on a temporal axis: the *i-* prefix, therefore, denotes an action that is taken in the present, but had its beginning in the past (“*e-lal* würde demnach bedeuten: ‘er hat gewogen und nun ist es gewogen’ ” [1908:218]).

The prefix *ba-* [1908: 220] is used in the same cases as *e (i)* and its presence depends only on the *genus verbi*. Its meaning can fluctuate between a medial voice (analogous to the Babylonian *t*-form), the intransitive and the passive. On the other hand, *mu-* is temporally neutral, that is, it has no reference to any particular point in time [1908: 224] and it can also be used for the historical narrative tense [1908: 227]. Thureau-Dangin interprets *ni* as the marker of the accusative. Poebel in response to that observes:

Ein Blick in die älteren Inschriften lässt uns wahrnehmen, dass in der überwiegenden Anzahl von Sätzen die aus Subjekt, Objekt und Prädikat bestehen, das Verbum überhaupt kein Infix und bei dem Hinzutreten eines entfernteren Objekts nur das Infix *na* oder *ne* aufweist. So finden wir nur *mu-du*, nicht *mu-un-du*, nur *mu-na-du* (...) Erst in der Dynastie von Ur und später wird die pleonastische Wiederaufnahme des Akkusativobjekts durch vokalloses *n* gebräuchlicher, bis sie zur Zeit der ersten Dynastie von Babylon fast die Regel bildet. Da somit in den älteren Inschriften die pleonastische Wiederholung des Akkusativobjekts unzweifelhaft entbehrlich war, so liegt es nahe, anzunehmen, dass auch das in den älteren Inschriften auftretende *ni* nicht den Akkusativ bezeichnet. In der Tat glaube ich im folgenden nachweisen zu können, dass dem *ni* vielmehr die Bedeutung "darin" (resp. "hinein") eignet [1908: 232-233].

As a result, the infix *-ni-* is not correctly determined whereas it has, in fact, a locative meaning. To express the accusative there remain the infixed consonants *b* and *n*, without any vowels, as already identified by Thureau-Dangin.

Two years later, in 1911, appeared the first Sumerian grammar to be published as a monography: *A Sumerian Grammar with Chrestomathy* by S. Langdon. One of the first interesting new features of this grammar is his special attention to phonetic phenomena. Langdon begins discussing phonetic elements and sound changes, which are also classified by the point of articulation [1911: 36]. He also suggests the existence of a labialised *ī*, a sound between *u* and *i*, like French *u* or German *ü* [*ibid.*]. This would explain the sign variations in various grammatical constructions. An analogous case is found between the short vowels *ī* and *ě*, which are sometimes interchanged in Sumerian. It is particularly interesting to note that Langdon also isolates a velar nasal sound: "The palatal *ñ* after *i* and *e* offers the only reasonable explanation for the process *mm* > *ng* after *i*. The dialect form *dimmer* for *digir* > *diġir* (*diñir*) "god", and *kengir* > *Sumer* show the reverse process. It will be seen, therefore, that palatal *ñ*, always written *ġ*, on the one hand became labial *m*, on the other hand represents the end of a species of palatalisation of gutturals *g* > *ñ* or *k* > *ñ*" [1911: 39].

The verbal conjugation appears as suffixed in Sumerian⁴⁶ [1911: 127], showing the close relationship between the subject and the verb. There are three inflected infixes (*m*, *n*, *b*), which represent the three demonstrative elements [1911: 131]. When inflecting in *status rectus* and *status obliquus*, they become *mu*, *mi*, *me* and *ma*. Later on, Langdon correctly states that those prefixes have no connection with the pronoun of the first person, but with subject and object. Regarding the form *immi-*, we find it as an emphatic form of *mi-* [1911: 132].⁴⁷ The form *imma*, on the other hand, is interpreted as follows [1911: 133]:

46. See Prince 1911; "Certain Grammatical Phenomena in Sumerian", in *American Journal of Semitic languages and Literatures*, 27, 4, 328-330. 74, who recognises his debt of this point to Haupt, whom Langdon does not mention at all. Also Prince, on his review of Langdon's grammar (Prince, J.D. 1911. "Sumerian Grammar and Chrestomathy" in *The American Journal of Semitic Language and Literature*, 28: 68) notes that Langdon did not mention Delitzsch's authorship of the concept of "gunification", which Langdon describes on 1911: 21 and which was however originally brought to general attention by Delitzsch in his *Entstehung des ältesten Keilschriftsystems* (1897).

47. Later he explained: "If the subject may be emphasised by doubling the characteristic consonant as *immi* (*imi*), *inni* (*ini*), the same process is of course possible in case of the adverbial element; *mu-un-na-du*, and *mu-na-du* ..." [1911: 141].

in the form *im-ma-na-ib-ĝar*, “he constructed it for him”, *immi* is the subject is partially assimilated to *na*. On the contrary, in forms like *im-ma-ni-uš*, “he caused to be there”, the element *ma* appears to be independent of the element *im* in so far as the force of the two is concerned. Compare also *in-na-ni-tu-ra*, “(when) he brought it in for him”, where *in-na* apparently serves both as subject and as dative object. (...) The forms *im-mi* and *in-ni*, *im-ma* and *in-na* may be both emphatic expressing a single idea, or be so extended as to serve in a double sense. The reduced forms *im*, *in*, and by analogy *ib* (for a supposed form *ib-bi*) are really direct forms and can be employed only as subject or object. If *immi* be the emphatic of *mi*, *im-ma* appears as the emphatic of *ma* in such cases as *im-ma-bar-ra-mu* (...) “which is plundered”, where the oblique prefix *im-ma* clearly indicates the passive.

The particles *ma* and *ba* are most frequently used in passive constructions [1911: 134]. In certain constructions they can indicate the subject. The passive construction of *ma* and *ba* appears to have been discovered independently by Thureau-Dangin and Langdon.⁴⁸ Thureau-Dangin also attributes a reflexive function to *ba*. Langdon believes that *ba* can also represent the middle voice [1911: 136]: “The choice of *ba* for the middle voice to the exclusion of *ma* depends upon an inner psychological distinction of the elements *m* and *b* which as yet escapes us.”

Inspired by the article of Thureau-Dangin,⁴⁹ Langdon notes that there seems to be a certain nuance of the locative in the elements *e*, *m*, *n* and *b* [1911: 137]: “The prefixes seem originally to have had local distinctions.⁵⁰ *e* is used for a subject which acts at the place where the tablet is redacted and *mu* denotes a subject near the centre of action. *bi* and *ni* denote those subjects which are at some distance.” After this statement, Langdon agrees with some of the views of Thureau-Dangin but he adds that this theory is “linguistically too mechanical” [1911: 138].⁵¹ Certain locational idea seems however to play a main role in Langdon’s distinction of the prefixes *mu* and *ba* [1911: 139] for the subject and with *ni* and *bi* for the object [1911: 140].

The first part of this article finishes here. As we have seen, Langdon synthesized what other scholars said before him about Sumerian, adding some important observations and presenting them under the form of the first complete Sumerian grammar. In its pages, all the important elements of the nominal chain had

48. See Langdon 1907; “Syntax of Compound Verbs in Sumerian”, in *Babyloniaca, études de philologie assyro-babylonienne*, 2: 73 and Thureau-Dangin 1907. “Sur les préfixes du verbe sumérien”, in *Zeitschrift für Assyriologie*, 20: 398.

49. Thureau-Dangin 1907.

50. See Yoshikawa 1989, who believes in an adverbial origin of the verbal preformatives, conjunctions and interjections. According to this author, these particles were placed originally before the finite verb with an adverbial meaning and later became a member of the verbal complex itself.

51. Cf. Prince 1911: 74: “Langdon admits the local distinction (§163). Thus, he gives *e-* as indicating a subject near by; *mu-a* subject near the center of action; *bi-* and *ni-* a subject at a distance. I have given the meaning of these same prefixes as follows. *e* denotes final past action; *mu* the relating past, *bi* refers to the nearer subject of object and *ni-* to the remoter subject or object [1908. “The verbal prefixes and Infixes in Sumerian”, in *American Journal of Semitic Languages and Literatures* 24, 4, 354-365. Langdon agrees with Thureau-Dangin only in part. Langdon says: “the theory that a particle has in itself the power of denoting the direction of an action and beautiful hypothesis of action from the center (*e*), and towards the action and the beautiful hypothesis of action from the center (*e*), and towards the center (*ba*), and from the center back to the interior (*ni*) is linguistically too mechanical.” Yet he himself refers *mu* to the center of action and speaks of nearer and distant objects. As to the mechanical character of such distinctions, how about the common demonstratives in German, *dieser* and *jener*, or, to take a widely differing idiom, the difference in Turkish between the demonstratives *ol* and *bu*? The fact seems to be that the many prefixes and infixes in Sumerian have meanings indicating direction, purpose, means, and finality of action [Prince 1908: 355]. An important future task of Sumerologists must be to tabulate every verb-form in the inscriptions with sufficient context, in order to correct or verify the results set forth by Thureau-Dangin and Langdon, both of whom have undoubtedly paved the way to a proper understanding of the Sumerian verb in all its varied and difficult ramifications.”

been established already, although Sumerian is still considered to follow a nominative-accusative pattern. In the important chapter on phonetics in his Grammar, Langdon correctly identified the velar nasal sound, and explained other consonantal characteristics.

Although his findings are now mainly outdated by the works of later scholars, Langdon definitely constituted a starting point of the modern studies on Sumerian language, setting the course for later scholars to follow. After Langdon, authors like Arno Poebel and his *Grundzüge der Sumerischen Grammatik* and not less important, Adam Falkenstein and his canonical *Grammatik der Sprache Gudeas von Lagaš*, among others, continued this work and made significant progress to our understanding of the Sumerian language. These scholars, each taking one step further than his predecessor, shaped Sumerology as it is today.