

GUY JUCQUOIS, *Phonétique comparée des dialectes moyen-babyloniens du nord et de l'ouest*
(= Bibliothèque du Muséon, Vol. 53). Louvain 1966. 318 pp. Institut Orientaliste.

The number of new Akkadian texts from Syria, Anatolia and Northern Mesopotamia in the second millennium B. C. is constantly on the increase, as they are brought to light by ongoing archaeological activity in those areas. As is well known, texts of this type exhibit considerable linguistic difficulties, because Akkadian was not the native tongue of the scribes, and as a result what they wrote was strongly permeated by idiotisms and solecisms betraying the linguistic affiliation of each individual scribe. It is interesting to note that ineptitude in writing good Akkadian was in no way proportional to the cultural, political and economic level of the countries from which the letters came. In other words, there was apparently no fear, in such sophisticated centers as the court of Byblos or even the Pharaonic palace, to pass for provincial upstarts because of the poor quality of their language. It is difficult to imagine how the scribes at the Babylonian court could have kept a straight face while reading the messages of their Egyptian correspondents—though of course such lack of concern for proper Akkadian is our good fortune, because it has preserved a wealth of information on the native language of the scribes, still discernible through the Akkadian veneer of the written texts. It is difficult, however, to probe beneath the veneer, and thus any new text that becomes available makes it imperative to reread previously known texts searching for new interpretations, and to reassess general theories, including linguistic reconstruction. Normally revisions of this type are confined to single aspects of the language and to individual geographical areas; but not so in the book by Jucquois here under review which goes beyond traditional boundaries, and takes as its object the entire phonological system while embracing, geographically, the wide arch of peripheral Akkadian from Nuzi to Egypt; chronologically, the book spans the whole of the second millennium, emphasizing, as stated in the title, the second half of the millennium. It was an ambitious undertaking, and the result is a serious and most useful compendium, which will be a must for every scholar interested either in peripheral Akkadian or in the native language of the scribes (especially Northwest Semitic and Hurrian). The book is divided in three parts. First, an introduction detailing the corpus of written sources, and assessing the problems which derive from the graphic peculiarity of the sources. Second, a section on vocalism, which analyzes qualitative and quantitative changes. Third, a section on consonantism, which begins with further remarks on graphic problems, and continues by analyzing in some detail independent and dependent changes, and then touches briefly on the nature of the syllable and on "syntactic phonetics" (i.e. morphophonemics, see below). In some general conclusions the author recapitulates the main results of his research, and surveys the peculiarities of the various dialectal components (Babylonian proper, Assyrian, Northwest Semitic, Hurrian, Hittite).

The author is well aware of the importance of dialectal differentiation throughout the book. The data are normally listed separately according to provenience, and differences in the treatment of the same phenomenon are explicitly pointed out. Thus for instance on p. 213 the interesting conclusion is drawn that the cuneiform system of writing is much richer in Babylonia proper than it is in the peripheral regions or "intellectual colonies"; also the percentage of monovalent signs is higher in Babylonia proper than elsewhere. Of the peripheral regions, Ugarit is the one that comes closest to Babylonia proper, Alalakh and "Amarna" those which are most removed. The difference in the types of texts found at the various sites has certainly some bearing on the statistical conclusions drawn by the author, but the results are nevertheless interesting. A good illustration is provided by the signs containing a stop:

	Babylonia proper	Ugarit	Amarna	Alalakh
total number of signs containing a stop	483	231	187	113
percentage of monovalent signs	42%	40%	31%	36.5%

Yet in spite of the author's concern for dialectal variations, my impression is that differences are sometimes blurred and that the overall effect is not as clear as desirable. The main reason is perhaps to be found in the very size and heterogeneity of the corpus chosen. This applies especially to the extension in time to include Old Babylonian next to Middle Babylonian texts: the former would certainly be informative and enlightening for occasional points of comparison, but they are in my opinion confusing when adduced systematically side by side with texts which are later in time and of quite a different linguistic extraction (no southern Old Babylonian scribe would have raised his eyebrows at letters from Mari as his Middle Babylonian counterpart probably did at letters from Egypt!). The use of Old Babylonian evidence is all the more deceiving when introduced without a clear indication of the chronological difference: for example on pp. 237-39 it is noted that initial *waw* is regularly preserved in Old Babylonian, in contrast to which it is normally dropped in texts from Amarna and Ugarit, it is occasionally dropped in texts from Alalakh, Khattusha and Nuzi, and is regularly preserved in Mari. The sequence is obviously confusing, because it puts Mari on the same level as Alalakh or Ugarit, and in contrast with classical Old Babylonian. In reality, Old Babylonian Mari belongs to the mainstream of Mesopotamian tradition, and cannot possibly be placed, culturally or linguistically, on the same level as the "peripheral" regions of the late second millennium with their barbaric Akkadian. (On the Babylonian character of Mari see especially I. J. Gelb, *The Early History of the West Semitic Peoples*, JCS 15, 1961, pp. 34-45). At most, only the clear West Semitic elements from Mari should have been considered, and then expressly emphasizing the chronological difference. Along these lines, an important piece of evidence from Mari for the use of a sign with *u* to render /*o*/ may be added to Jucquois' list on p. 80: *ḥa-mu-ša-am iḥ-mu-uš* "he truly plundered", where *ḥamūšam* is a Northwest Semitic absolute infinitive for Akkadian *ḥamāšam* («Syria» 32, p. 14 ii 19, cf. von Soden, *AHW* p. 315 b). Also, for the Old Babylonian texts from Chagar Bazar and Tell Brak one may now add to Jucquois' bibliography (pp. 39 f., 54) O. Loretz, *Texte aus Chagar Bazar: Lišan mihurti, Festschrift von Soden*, Neukirchen 1969, pp. 199-260; Id., *Texte aus Chagar Bazar und Tell Brak, Teil I, AOAT* 3, Neukirchen 1969.

With respect to the corpus some reservations must also be voiced pertaining to the utilization of the Amarna letters. Some times these texts are subdivided according to the geographical sub-areas from which they derive, e.g. on pp. 117 f., 240 f., 290. But at other times they are lumped together as on pp. 110 and 115, and normally in the charts. Now it is important in studies of this kind to distinguish carefully and consistently the texts according to their original, rather than archaeological, provenience, since the findspot has little bearing on the linguistic nature of the texts. This incidentally applies not only to the texts found at Amarna, but also to those found at Ugarit, Alalakh and Khattusha, which are all of varied original provenience, though the problem is more acute in the case of the Amarna texts where the original provenience is much more diversified. (For similar remarks concerning Mari see I. J. Gelb, review of A. Finet, *L'Accadien des lettres de Mari*, in «Language» 33, 1951, p. 199).

In the organization of the material the author places an almost exclusive emphasis on phonological change. Each one of the main sections includes the term "change" in its title: qualitative and quantitative changes for the vowels, independent and dependent changes for the consonants. In my opinion, the presentation suffers from such an approach. One will miss, for example, a clear distinction between synchronic and diachronic levels,

a serious utilization of the notion of phoneme (though the term appears occasionally on p. 190), and an explicit description of the phonemic inventory of the language. An equivalent for the latter is introduced in the conclusions to each one of the two main parts, where vowels and consonants are listed according to the tridimensional scheme. But this does not serve the same function; it does not lead, for example, to statements about distributional classes of phonemes which clearly pose a different set of problems from those inherent in the notion of change. Instead, distributional statements are scattered at various points, making for a loss of clarity. Thus the problem of the occurrence or non-occurrence of aleph in word initial is taken up both under vocalism (pp. 158, 175-81) and under consonantism (pp. 248-50); the definition of syllabic structure is given in but two short pages under consonantism (pp. 277-78); stress is never discussed explicitly, but only mentioned occasionally from the viewpoint of other phenomena (e.g. on p. 174); the graphic feature of inverted writings (e.g. GAL + LÛ for LUGAL) is incongruously entered under consonantism (pp. 235 f.). Besides confusing the theoretical scheme of the author, this procedure has the practical disadvantage that it becomes difficult at times to find one's own way through the book. From this point of view the reader, and especially the occasional reader who may want to consult the book for just a given problem, will certainly miss the indexes, not only of topics, but also of words, morphological features (e.g. *ya/yi-* for the third person prefix in the verb, p. 124; *-ša/ši* for the pronominal suffix of the third singular feminine, p. 130-31), and textual references. Some at least of these indexes are promised by the author as a separate publication (p. 9 f.), and I hope they will come soon.

It is unfortunate that Jucquois' volume appeared in the same year as E. Reiner's *Linguistic Analysis of Akkadian*, so that he was unable to consider her insights which I believe to be very important for a proper understanding of Akkadian grammar, most especially in matters of phonology. The main drawback in Jucquois' book is the lack of a clear differentiation between historical change and morphophonemic alternation, i.e. he does not state with sufficient clarity that some "changes" are the result of concomitant morphological processes, and not the development through time of one form from another. The unfortunate consequence is that the synchronic and diachronic levels become confused, normally in the sense that the diachronic dimension tends to take over and dominate. Some of the decisions involving historical development (in matters morphological as well as phonological) are questionable, and would have better been avoided in favor of a synchronic, morphophonemic statement. Two examples will suffice. On p. 168 *itār* is derived from **itawwar*, *iqāl* from **iqawwal*, *iqāp* from **iqayyap*, and so on (the author is so much at ease with the proto-forms that they are not even starred in the book though it may simply be a printing mistake); again on p. 173 *idūk* is derived from **iduwk*, *taqīp* from **taqyip*, etc. Thus to explain the attested forms the author opts for a rigid triradical understanding of the weak verb, which is hardly shared by scholars today. On p. 155 the precativè is derived from the particle *lū* followed by the preterite. Even though this follows the traditional theory, there is little to commend it, and the phonological difficulties are such that it seems unwise to introduce a set of phonological rules of the type $\bar{u} + a > \bar{u}$ or $\bar{u} + u > \bar{i}$, which do not occur elsewhere and are otherwise improbable.

If I favor Reiner's morphophonemic approach it is not in order to pay lip service to innovative jargon, but because I see a real usefulness in the theory, which enables us to account for the largest number of phenomena with the minimum number of statements. These statements are more precise and stringent, the "exceptions" being well specified and limited to a definite number. In the traditional approach, on the other hand, rules tend to be ill-defined and lax, with more room left for free variation than is desirable in a well ordered and truly "powerful" grammar. A few examples will illustrate my point with reference to the book here under consideration. On p. 275 one finds the rule that "a bilabial initial is dissimilated by a bilabial of the following syllable", a formulation which is both too narrow and too broad, and essentially incorrect. In effect, the rule should be stated

in such a way that it applies only to nouns of the pattern *maḫras* from roots with a labial in any position. If the morphological elements are stated exactly, they account for all apparent exceptions: there has to be a process of internal inflection correlating a root and a pattern (which accounts for the lack of dissimilation in a word like *manman* "someone", a pronoun *not* derived through internal inflection, though similar in shape to that of a noun of the pattern *maḫras*; note that *mamman* would be included in Jucquois' definition), there has to be a pattern *maḫras* (hence *mamitu* "oath" of pattern *maḫris*, or *munnabtu* "fugitive" do not dissimilate), the root labial may be in any position, not necessarily in the second syllable (e.g. *warānu* "beloved"). The rule is strictly applied in Akkadian, whereas it does not obtain in Northwest Semitic, already in its oldest attested layer (cf. G. Buccellati, *The Amorites of the Ur III Period*, Naples 1966, pp. 169-70); an interesting violation of the rule in the Akkadian of Ugarit, under apparent influence of Northwest Semitic, is *maṣṣaru* "sword" for Akkadian *naṣṣaru* (cf. von Soden, *AHW* s. v.).—The rule on p. 184 is also susceptible of a clearer statement. "In classical Akkadian, because of an intensity stress, the second vowel is sometimes dropped and the first vowel is lengthened by position—this when there is a sequence of three short vowels in open syllables". In reality the rule is stringent (hence no need for the qualification "sometimes"), but it must be narrowed. In the first place the sequence need not be of three short vowels in open syllables, but rather of three syllables of which only the first two are short and open ({*damiqū*} > *damiqū* "they are good" is realized in the same manner as {*damiqū*} > *damiqū* "good (singular)"). Secondly, the rule does not apply when the noun is a loanword (e.g. *gabadiḫū* "battlement"), a compound (e.g. a personal name like *Abu-tāb* "The-father-is-good"), or a noun with a suffix (e.g. *šarra-šunū* "their king").—The rule concerning the loss of mimation on p. 260 is obviously conditioned by morphological considerations, since mimation does not refer to any final *m*, but only to the *m* of a case ending. The morphological condition is stated by the author, but only implicitly, and without excluding clearly from the rule a final *m* other than mimation (e.g. *šulum* "peace of"; this particular example is the one given by Reiner, *Analysis*, cited, p. 113).—One final example: on p. 139 it is stated that the evolution *a* > *i* (*e*) does not affect the accusative ending. The rule is actually much broader, because the "evolution" does not extend beyond any morphemic boundary, not just that of the accusative; thus with the verb the ventive remains *a(m)* (e.g. *ileqqā* "he will take") and the plural ending remains *ā* (e.g. *leqā* "take!").

Other points of detail which may be mentioned here are: p. 136: the verb *awū/emū* means "to become", while "to speak" is *awū*. P. 159: hiatus does not subsist if the forms are analyzed as having strong aleph, e.g. *uba'ū* (cf. Reiner, *Analysis*, cited, 5.4.5.6.2). P. 180, and elsewhere: I do not see that there are good reasons why the writing V-VC should stand for /VC/. Rather the simple vowel signs should be taken regularly as representing /V/, so that the writing V-VC stands for /VC/. Pp. 215, 285, and elsewhere: in the normal understanding of the Akkadian consonantal system, *ḫ* is considered a velar rather than a laryngeal. Pp. 248, 284: spirantization of initial ' seems unlikely to me. Pp. 284: spirantization of velars is already attested in Old Babylonian, see now W. von Soden, *Die Spirantisierung von Verschlusslauten im Akkadischen. Ein Zwischenbericht: JNES* 27 (1968), pp. 214-220; E. E. Knudsen, *Spirantization of Velars in Akkadian: Lišan mithurti, Festschrift von Soden*, Neukirchen 1969, pp. 147-155.

The remarks which I have been making so far should not obscure the real value of Jucquois' work, which adds considerably to our understanding of peripheral Akkadian. Its main contribution is to have sifted through a vast corpus and to have assembled the data in a conscientious and comprehensive manner. His understanding and presentation of phonological phenomena is buttressed by his clear treatment of graphic problems, not only in the two main sections on pp. 57-71 and 195-236, but also throughout the work in matters of detail. Another important feature of Jucquois' book is the ample use of statistical considera-

tions, and this, if I am not wrong, is a novum in the study of Akkadian (at least on this scale; for interesting statistical analyses of a different kind see e.g. P. Fronzaroli, *Prospettive di metodo statistico nella classificazione delle lingue semitiche: Rendiconti dell'Accademia Nazionale dei Lincei*, VIII/XVI, fase. 7-12 (1961), pp. 348-380). Statistical criteria are especially important when we have to derive our understanding of the language from texts handed down by means of a graphic system which is ambiguous and often contradictory. A sample of his utilization of statistics has been given above in this review, and conclusions of this sort are numerous throughout the book, and all of considerable interest. Because of his attention to statistical correlations, the author is alert to the importance of defining precisely the notion of "mistake" (p. 71 f.); he correctly points out that this notion, if taken maximally, may become an easy way out of explaining difficult forms, if taken minimally may result in needlessly multiplying rules, sub-rules and exceptions. An equally sober view is espoused with respect to the transliteration of signs (p. 58 f.), where it is necessary to strike a balance between the need of rendering the text faithfully and the danger to introduce syllabic values simply to fit a preconceived notion of what the phonology of the language should be. Finally, two other features which ought to be pointed out are the seven maps of various isoglosses, and especially the exemplary bibliography, comprehensive and detailed, with a separate entry for each paragraph.

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