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ABNORMAL PLENE WRITINGS
IN AKKADIAN TEXTS

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The method of expressing vowel length in Akkadian syllabic writing, viz., by inserting a vowel sign after the sign for open syllable (formula $cv + v$), is usually called *plene writing*. The term is borrowed from Hebrew grammar, where it denotes the method of writing out vowels by signs which originally expressed consonants, but as a convenient term its use seems to be permissible in Akkadian grammar too.

Before tackling the question of certain particular abnormal plene writings it seems advisable to give a short sketch of the normal use of plene writing in Akkadian, especially in its classical form, Old Babylonian.¹

The definition of plene writing given by us excludes a priori a group of writings of the type $v\text{-}vc$, in which the vowel sign is used to express weak consonants. Thus Old Akkadian writes *i-ik-mi* / *yikmi* and *u-ub-lam* / *yublām* (GELB, MAD II 36), and *ú-ur-qá-am* / *wurqam* is attested in Old Babylonian (GELB). A glottal stop is expressed by a vowel sign in Old Akkadian: *è-ra-a-am-su* / *era'amšū*, *a-áš-hi-iṭ*, *-ni-a-áš*, *e-ir-tim* (GELB, MAD II 161, 168). In Old Babylonian this form of writing appears very consistently in cases like *ša-i-im*, *ir-di-a-am*, *i-ri-a-ab*, *iš-ti-a-at*, *uš-te-li-a-aš-šū*, *an-ni-a-am*, *ki-a-am*

¹ This preliminary sketch has greatly profited by a letter from Dr. I. J. GELB, to whom I express my most sincere thanks. I regret that I cannot in this connection examine some of the problems more comprehensively — it would lead us too far from the original subject.

etc. Exceptions are rare (cf., however, e.g. *i-ni-ak* YOS X 14, 5, *ma-li-at-ma* YOS X 31 X 22) and must probably be regarded as slipshod orthography. A glottal stop in the beginning of a word may also be expressed by plene writing; this is most often done when the root is monosyllabic, as *ú-ul*, *i-in-šu*, *a-aḫ-šu*, *i-ib-bu-ú-um* (CH), *a-al*, *i-ir-tim*, *e-en-tum*, *e-id* (YOS X). Very interesting is the way in which the present G and pres/prét. D- forms of *verba primae gutturalis* are written in the standard orthography, e.g. in CH *i-il-la-ak*, *i-im-ma-ru-ma*, *i-ir-ri-iš*, *i-iš-si-id*, *i-ip-pé-eš*, *i-ip-pa-al*, *ú-up-pa-al*, *ú-up-pa-aš*, *ú-ub-ba-am-má* etc. (cf. v. SODEN GAG § 23 d and § 97 c). It seems that the original laryngal still influenced the pronunciation in some way making it clearly distinguishable from e.g. the preterit *il-li-ik*, from nouns like *ir-ri-šum* and also from *verba primae w*, in the presents of which we regularly find e.g. *uš-ša-ab*, *ub-ba-lu*, *us-si* etc. Note, however, that Old Akkadian even writes *i-la-ku* (GELB MAS II 213) and Southern Old Babylonian texts seem to prefer the writings *i-la-ak*, *i-la-ka*, *i-mar* etc. (in YOS X). Later on the practice degenerates and we may find writings like *ú-ut-te-er* (UNGNAD BB 245, 11) *ú-us-si* (LUTZ UCPSPh IX 5, 17), *i-it-ti-a-ak-ši*, *ú-ub-ta-e-ru-ú-uš*, *i-id-da-an* (KAV 1). This type of writing is also frequent in words beginning with e, for instance *e-ek-me-et* (perm. of *ekēmum*) in YOS X 33 III 50. 52. 55. 57 (cf. *ik-mi-it* *ibid.* line 43) and *e-ed-ḫi-it* (perm. of *edēhum*) YOS X 39 Obv. 25. 26, *e-ep-ša-am* YOS II 68, 12, *e-es-ḫa-a-nim* YOS II 3, 12. Here, however, the motive for using this writing may have been the desire to emphasize the fact that the vowel is e rather than to express a glottal stop.

Even a plene writing proper of the type *cv-v* does not always denote a long vowel. In some cases it is used as a phonetic indicator following a sign with ambiguous vowel quality. For Old Akkadian cf. *Ià-a-da-az*, *Iu_x+ú-ša-na-ág* (GELB MAD II 37. 109) and the writings *ku-nu-ki-e*, *lu-bu-ši-e*, *na-pa-ḫi-e*, where e is primarily used to indicate vowel quality, since quantity is almost never expressed in Old Akkadian. For later Akkadian note especially instances like *lit-ta-i-i-du* (En. el. VII 41), *^mAš-šu-ra-iu-ú*, *liš-'a-a-lu*, *w_a-ša-ah* (GELB, A Study of Writing p. 171).

An isolated case is the writing *a-a* which is generally held to denote $a_i(a)$.

In standard Old Babylonian orthography plene writing as indicating a long vowel is normally used only when the long vowel is a result of contraction, e.g. in CH *ru-gu-um-me-e*, *a-hu-ú-um*, *i-li-i*, *i-na-ad-du-ú-šu*, *šu-pi-i-im*, *šu-pa-a-at*, *wa-še-e-em-ma*, *ra-bu-ú-tim* etc. There are, however, numerous exceptions like *ru-ba-am*, *ru-bu-um*, *a-gi-im*, *ra-bu-tim*, *ša-nu-um*, *li-qi-im*, *ru-gu-um-ma-am* (CH).

Morphemic length is never indicated in the orthography of Codex Hammurabi except, often, in feminine plurals *ki-iš-ša-a-tim*, *ši-ba-a-at*, *ša-na-a-at*, *a-wa-a-ti-šu-nu* (contraction?). Note that Old Akkadian can write *à-wa-a-ti* (MAD II 58, very rare!). The motive for using this writing is obviously to avoid ambiguity between singular and plural forms.

Monosyllabic words with a long vowel in open syllable show plene writing almost everywhere, like *šu-ú*, *ši-i*, *lu-ú*, sometimes *lu*, but regularly *la* (CH), later often *la-a* e.g. BB 165, 18.

Much more liberal in the use of plene writing are e.g. the Mari texts and especially texts written in Southern Old Babylonian orthography.¹ In them are found various kinds of plene writings never met with in the standard orthography, as will be shown in the following.

A vowel resulted from the loss of a weak consonant is written plene e.g. in *ma-a-tum*, *ma-a-tam*, *ma-a-at* (passim e.g. in Mari letters and in YOS X, cf., however, *ma-at* YOS X 33 IV 49). $\text{te}_4\text{-e-ma-am}$ CT 29, 8^a (BB 165), 9, $\text{te}_4\text{-e-mi-im}$ YOS II 1, 8, $\text{te}_4\text{-e-em}$ ARM II 40, 16 (but on the preceding line $\text{te}_4\text{-ma-am}$), *te-e-gi-a* (*egûm*) YOS II 3, 9.

The long vowel in hollow verbs is seldom written plene in the standard orthography, cf. *mu-te-ir*, *mu-ne-eh*, *mu-ki-in*, *i-ta-ar*, *ú-ba-ar-ma* but once *ú-ta-a-ar* in the Code of Hammurabi, and *ú-ka-a-al* BB 21, 6 (letter of Hammurabi!). Elsewhere it often may be written plene, cf. *i-ma-a-at* YOS X 24, 39, *te-e-er* BB 194, 17, *qu-ú-ul* ARM I 67, 17.

¹ Cf. GOETZE apud Neugebauer and Sachs, *Mathematical Cuneiform Texts* p. 146.

In Southern Old Babylonian orthography the long vowel that virtually exists e.g. in the plural forms of strong verbs and in the endless forms of verbs with weak 3rd radical, but is generally shortened, may be written plene, e.g. *li-ba-al-li-tú-ú* BB 166, 5 *ša-ak-nu-ú* YOS II 1, 28 (no subjunctive!) *i-šu-ú* YOS X 8, 4 (*i-šu* *ibid.* 8, 25!), *i-bā-aš-ši-i* YOS X 24, 20; *ti-de-e* TCL XVII 19, 12; *ta-ar-ta-ši-i* BB 175; *lu-ú ti-de-e* ARM I 5, 43; *ri-ši-i* (imper.) BB 192, 17; but usually in Mari e.g. *iq-bi*. It even looks as if any final vowel could be written plene; cf. *āt-tā-a* BB 185, 14; *a-na-ku-ú* BB 188, 12, 18; *li-is-su-ú* / *lēt-šu* / YOS X 47, 20; *qá-as-su-ú* YOS X 56 II 39; *na-ak-ru-ú* *ibid.* line 44; *pā-ni-šu-ú* YOS X 62 rev. 23. Such vowels are especially often written plene when *-ma* follows: *i-la-wi-i-ma* YOS X 25, 8; *it-bé-e-ma* *ibid.* 31 XIII 37; *it-ta-at-lu-ú-ma* *ibid.* 33 II 32; *a-na-ku-ú-ma* TCL XVII 12, 15; *wa-aš-ba-a-ku-ú-ma* *ibid.* 55, 9. *ARAD-ka-a-ma* passim in Mari. But this is no absolute rule, cf. e.g. *li-ti-ma* YOS X 26 IV 20; *šu-te-eb-ru-ma* *ibid.* 18, 54; *iš-me-ma* ARM II 25, 11; *iq-bi-ma* *ibid.* line 15, and never occurs in the Code of Hammurabi, cf. e.g. *ip-te-ma*, *i-te-gi-ma*.

Examples of other frequent plene writings in Southern Babylonian texts that may be mentioned are: *li-ba-al-li-tú-ú-ka* YOS II 1, 7; *qū-ul-lu-la-a-ku* *ibid.* 40, 24; *wa-aš-ba-a-ku* TCL VII 23, 18; *lu ba-al-ta-a-ta* *ibid.* 28, 5.

A morphemic stress lengthening a vowel in the last syllable of a word occurs in Akkadian in questions and is often indicated by plene writing. Thus we have *a-na-ku-ú lu GEMÉ* »may I become a slave girl?» (unpublished Ur- III text, communicated by GELB), and frequently in Mari *ú-ul a-na-ku-ú Adad* »am I not Adad?», *ú-ul ā-ša-ap-pa-a-ar* »should I not write?», *ú-ul i-qā-ab-bi-i* »will he not talk?» (Studies Th. H. Robinson p. 103 ff.), *ANŠE.HI.A ú-ul ra-kī-i-ib* »cannot he ride on asses?» ARM I 21, 11; *i-ša-ab-ba-tu-ú ú-ul i-ša-bā-tu-ú* »can they or can they not seize?» ARM I 6, 28; *ā-na-ku-ú . . . TUG.HI.A mi-im-ma-a e-le-eq-qé ú-ul at-ta-ma-a te-le-eq-qé* »Shall I take any clothes? Isn't it you who shall take them?» ARM I 46, 14—17; *ú-ul ša-ar-tu-ú-um i-na li-ti-ka* »is there no beard on your cheeks?» ARM I 61, 10—11; *te-er-tum ú-ul i-ḥa-al-li-i-ig* »does the

administration not go wrong?» *ibid.* line 30. Cf. also v. SODEN GAG § 37 c.

Finally, mention must be made of a phenomenon which in the light of older Akkadian grammars might be considered abnormal. It has hitherto been customary to give the paradigm of a genitive st. cstr. + possessive suffix, like *bēlika*, *bēliki*, *bēlišu* etc., with a short *i*, and only in v. SODEN'S new grammar has an innovation been made and the paradigm been given as *bēlika*, *bēliki*, *bēlišu* etc. with the comment in § 65 a »... wobei das *i* offenbar infolge von Akzentverlagerung auf die Silbe vor dem Suffix gelangt wurde.» It would seem strange that the older grammarians can have been ignorant of such a central morphological feature in Akkadian were it not for the fact that according to the analogy of other Semitic languages one would expect a short vowel in these forms and that the long *i* but relatively seldom appears written plene. In Northern Old Babylonian texts this practically never occurs; the only instance that the present writer has noticed from such texts is TCL VII 44, 6 *i-na a-li-i-šu*. Plene writings in this case are, however, more frequent in Southern Old Babylonian texts, cf. e.g. GOETZE in Neugebauer and Sachs, *Mathematical Cuneiform texts* p. 146 ff., where forms like *e-pe-ši-i-ka*, *ki-im-ra-ti-i-ka*, and *a-ma-ri-i-ka* have been found in texts representing the Southern orthography. Furthermore, one finds e.g. *ši-ri-i-šu* TCL XVII 1, 24, *a-na pa-ni-i-ka* *ibid.* 6, 12, *ša bi-ti-i-ša* YOS II 49, 9, *zu-um-ri-i-ka* YOS X 11 V 16, *qá-ab-li-i-ša* YOS X 33 II 55, (especially frequent just in this text!) *bi-ti-i-ka* YOS X 35, 3, *pa-ni-i-ka* *ibid.* 42 III 33, *it-ti-i-ka* *ibid.* 56, 44, *qá-ti-i-ka* BB 119, 25 *ma-ah-ri-i-šu* *ibid.* 125, 11, *bi-ti-i-ni* *ibid.* 212, 11, *a-na še-e-ri-i-ka* YOS II 88, 10, *ma-ah-ri-i-ka* *ibid.* 132, 13. As examples from Old Babylonian literary texts may be mentioned *iš-ti-i-ka* CT XV 3 II 4, *qá-ti-i-ka* *ibid.* line 8, *ap-pi-i-šu* *ibid.* line 12, *zi-ik-ri-i-ka* RA XXII 170—171, 29, *ha-me-ri-i-ša* *ibid.* line 45. The Middle Assyrian legal work also gives some examples: *a-na ša-ku-li-i-ša* KAV 1 VI 104, *li-ib-bi-i-šu* *ibid.* 2 II 26, *qá-qi-ri-i-šu* *ibid.* 2 V 19. 26. 34. It is also interesting to note that these forms frequently appear at the end of a line in poetical works which follow the Clausula Accadica-law established by LANDSBERGER

(— at the end of a line). For instance, one can quote from Enūma eliš *e-diš-ši-ša* I 43, *kar-ši-ša* I 44, *lib-bi-šu* II 99, *lib-bi-ka* II 109, *maḥ-ri-ka* III 6, *gi-mil-li-ni* IV 13, *mim-mi-ša* IV 42, *EGIR-šú* IV 48, *da-mi-ša* (sing?) IV 131, *it-ti-šu* V 8, *a-lak-ti-ni* VI 157, *gi-mil-li-ni* VI 164, *it-ti-šu* VII 30, *ni-ip-ri-šú-un* VII 48, *mi-im-mi-šú-nu*, VII 49, *qir-bi-šu* VII 129. In the light of this evidence von SODEN's thesis seems quite acceptable though one is still struck by the fact that by far the most important examples come from Southern Babylonian texts.

There are, however, certain groups of texts containing plene writings which obviously do not belong to any of the types we have described so far. The most important group is that of the letters published by DOSSIN in TCL XVII 1—10. They are written by a certain Šilli-Šamaš to his lord (*ana bēliya*) and are rapports of agricultural proceedings on an estate. Clearly belonging to the same group are the letters No. 94 and 110 published by LUTZ in Early Babylonian Letters, YOS II, and probably also No. 49 of the same collection. Fortunately two of these letters are dated (a practice totally neglected in later Old Babylonian epistolary literature) and thus we have in TCL XVII 4 the formula *itu gu₄-si-sá u₄-11-kam šà mu^{urudu}alan Ku-du-ur-ma-bu-uk é-^dNanna-šè i-ni-in-tu-ri* (3d year of Rim-Sin of Larsa) and YOS II 94 *šà mu é-^dIškur šà Z ar ar^{ki} ba-dù* (2nd year of Rim-Sin). Another group showing abnormal plene writings is the collection of Old Babylonian Omen texts published by GOETZE in YOS X. In them abnormalities similar to those in the letters from Larsa occur more sporadically, and of course only in some of the texts, although most of them are written in the Southern Old Babylonian dialect. Many of them are of course not original documents in the same sense as the letters: the text may be a result of repeated copying processes in the course of which the original orthographical peculiarities were effaced. As a third important group must be mentioned the Middle Assyrian legal work in KAV 1—2, which also contains plene writings so strikingly similar to those of the letters from Larsa that it cannot be omitted from this treatise, although its language otherwise differs

widely from Old Babylonian and objections could be raised against treating it together with the other texts. In addition to these three major groups which are intended to form the basis of the study, I have collected some instances from other texts too that have come to my attention from time to time. This is a list of the abnormalities occurring in the three major groups:

I. The Šilli-Šamaš letters:

- TCL XVII 1, 6 *na-ri-i-im*
 1, 14 *im-qú-ú-tu*
 1, 15 *li-im-hu-ú-ru*
 1, 29 *ᵛap¹-ta-ti-i-iq*
 1, 30 *a-ka-ᵛaš¹-ša-a-ar*
 1, 35 *ᵛuh¹-hu-ra-ᵛa¹-at(?)*
 2, 19 *aš-ta-pa-a-ak*
 2, 39 *ip-ra-a-am*
 2, 40 *i-ma-ᵛah¹-ha-a-ru*
 3, 4 *ša-ad-da-ag-di-i-im* (line 8 *ša-ad-da-ag-di-im!*)
 3, 7 *ib-ba-a-ši* (cf. *ib-ba-ši-i* 1, 5 in a similar phrase)
 3, 9 *mi-iq-ra-a-am*
 3, 10 *am-qu-ú-ur*
 3, 12 *ad-di-ᵛi¹-ᵛin¹*
 3, 15 *ú-ši-ib-šu-nu-ši-i-im*
 3, 18 *it-ta-al-kú-ni-i-im-ᵛma¹*
 4, 8 *ak-ka-a-li* (pret. N 1. pers. from *kašúm*)
 4, 8 *šum-ma-a-an* (cf. *šum-mā-an* 7, 7)
 5, 15 *i-ir-ri-i-šu*
 5, 17 *ša-a-pi* (perm. of *šapúm*)
 5, 21 *ša-la-a-aš*
 5, 24 *i-ga-am-ma-a-ru*
 6, 5 *aš-ta-pa-a-ak*
 6, 6 *ru-uᵛt-ᵛù-ú-ub*
 6, 8 *wa-ar-ᵛi-i-im* (same on line 9)
 6, 14 *qá-du-ú-um*

- 7, 14 *ʿit¹-ba-a-lu-i*
 8, 10 *iš-ʿšé¹-e-pi (?)*
 8, 13 *lu-na-ak-ke-e-er-ma*
 8, 22 *i-ik-ka-a-al*
 9, 19 *le-el-li-ka-ni-i-im¹*
 10, 18 *im-ʿma¹(?)-ra-a-aš*
 10, 42 *i-ta-a-wi*
 10, 44 *ni-ip-pa-a-al*
 YOS II 49, 22 *a-li-i-im*
 49, 23 *it-ta-ke-e-er*
 94, 5 *ib-ba-a-ši*
 110, 9 *ad-di-iš-šu-nu-ši-i-im*
 110, 13 *ú-zí-ib! -šú-nu-ši-i-im*

II. YOS X.

- 7, 5 *ša-al-ʿma¹-a-at*
 7, 19 *ta-lu-ú-um ša li-ib-bi-i-im*
 7, 30 *ta-al-lu-ú-um ša li-ib-bi-i-im*
 7, 31 *ú-ša-a-ab*
 17, 40 *ú-ʿša¹-a-ab*
 20, 18. 20. 23 *i-tu-ra-a-am*
 20, 21 *ne-ši-i-im*
 20, 28 *ú-ši-e-ši*
 21, 6 *(i-na-di) i-na-a-di*
 24, 13 *i-re-ʿe¹-di*
 24, 15 *te-e-ri-di*
 24, 19 *šú-ul-mu-ú-um*
 24, 24 *i-te-e-li*
 24, 24 *ib-ba-la-ka-a-sú*
 24, 31 *ri-qá-a-am*
 33 II 44 *te-ep-pe-e-eš*
 33 IV 7 *uš-ša-ab*
 33 V 22 *ip-tù-ʿú¹-ru* (cf. 33 II 24. 26 *ip-tù-ru*)

¹ For the striking orthography with *el* cf. e.g. YOS II 49, 14 *a-we-el-tum*.

- 33 V 33 [*i-la*]-*a-ak*
 35, 23 *ta-a-ka-al*
- 36 III 35 *gi-iš-ra-a-am*
 40, 2 *i-ka-ša-a-ad*
 40, 10 *i-ik-ka-a-al*
 41, 41 *ta-la-a-ku*
 41, 46 *tu-ka-al-la-a-am*
 44, 71 *uš-ša-a-ab*
 47, 16 *i-la-a-ka-a*
 47, 17 »
 47, 20 *i-pe-e-eš*
 47, 25 *il-te-e-te*
 47, 26 »
 47, 71 *le-e-ti*
 47, 90 *i-tu-ru-né-e-šu*
 49, 6 *ti-iš-bu-ú-tu* (in the parallel passage 48, 34 *ti-iš-bu-tu*)
- 51 IV 18 *i-pe-e-šu* (cf. 52 IV 19 *i-pi-šu*)

III KAV 1—2

- 1 I 18 *ta-ar-ti-i-ši*
 1 I 22 *i-qa-ar-ri-i-bu*
 1 I 79 *ta-ah-te-e-pi*
 1 I 84 *tar-ti-i-ši*
- 1 II 15 *iš-ša-ba-a-sú* (cf. line 18 *iš-ša-ba-as-si*)
 1 II 40 *e-pa-a-su* (= *eppaš-ši*)
 1 II 71 *il-lu-ú-ku*
- 1 III 13 *e-ep-pu-ú-šu-uš*
 1 III 15 *tal-te-e-qi*
 1 III 65 *it-ti-ke-e-er*
 1 III 67 *il-lu-ú-ku*
 1 III 70 *it-tu-ú-ra* (cf. line 74 *it-tu-ra*)
 1 III 74 *za-a-ku* (and passim)
 1 III 94 *iš-ša-ab-bu-ú-tu*

- 1 IV 34 *kal-la-a-su*
 1 IV 71 *ra-ki-i-eš*
 1 IV 94 *in-na-gu-ú-ru*
 1 IV 95 *tu-ú-qa-a* (cf. line 98 *tu-qa-'a-a*)
 1 V 19 *tu-ú-uš-ša* (cf. IV 74 *tu-uš-ša*)
 1 V 60 *pa-aš-šu-ú-na-at*
 1 V 84 *ú-pal-lu-ú-šu*
 1 V 92 *ú-na-ku-ú-su*
 1 VI 70 *tu-ú-uš-ša-ab*
 1 VI 73 *it-tu-ú-ra*
 1 VI 91 *tu-ú-uš-ša*
 1 VI 94 *tu-ú-uš-ša-ab*
 1 VI 101 *tu-ú-uš-šab* (cf. line 107 *tu-uš-šab*)
 1 VII 90 *i-ša-ak-ku-ú-nu-uš*
 1 VII 99 *mi-ta-a-at*
 1 VIII 36 *iḫ-ḫa-a-si*
 1 VIII 38 *ḫa-a-di*
 1 VIII 45 *i-qar-ri-i-bu*
 2 III 49 *i-ša-tu-ú-ru* (cf. line 37 *i-šaṭ-tu-ru*)
 2 V 33 *e-pa-a-áš* (cf. V 8. *e-ep-pa-áš*)
 2 VI 25 *iz-za-a-zu*
 2 VII 4 *iḫ-ta-ra-a-áš*
 2 VII 11 *it-tam-ra-a-aq*

Similar writings can be found elsewhere too. In the first place mention must be made of a couple of texts which like the Silli-Šamaš letters come from Rim-Sin's Larsa; viz., (1) STRASSMÄIER, Die altbabylonischen Verträge aus Warka (not really from Uruk!) B 27, 2 *iq-ta-a-bi* B 27 a (the same text as the preceding one, the two texts constituting the case and the tablet) 4 *iq-ta-a-bi* 10 *ú-ul iq-ta-a-bi* (2) the letter VS XVI 73 (for provenience see P. Kraus MVAEG XXXV 2 p. 34) 17 *ta-ap-pa-a-al*. There is a suspicion that CT XXIX 12 (BB 125) too has a provenience not far from Larsa, for it writes line 25 *ta-ma-a-ru-šu* along with other characteristics common to the Silli-Šamaš letters. We also have *a-la-ka-a-am* YOS II 88, 9,

uš-zi-i-iz ibid. 96, 7, *a-ta-na-a-ah* ibid. 132, 13, *ta-ak-la-a-am* UCPSPh IX 12, 9.15, *ú-še-er-re-e-bu-ki-i* ibid. 14, 21, and *ša-al-ma-a-at* CT IV 34 (report on extispicy), 6. 7. It is particularly surprising to find these writings in a couple of Mari letters too. ARM II 75, 5 writes *i-la-a-ku*, 18 *ta-da-ab-bu-ú-ba*, 24 *ta-a-al-la-ka* (cf. line 21 *ta-al-la-ka*). And yet the text has the typical Mari form *an-ni-ki-e-em* instead of *an-ni-ki-a-am*! In ARM V 20, 6 we find *lu-na-ap-pi-i-iš*, ibid. line 28 *e-ri-iš-ta-a-am*. And finally several Old Babylonian literary texts contain writings that seem to belong here: CT XV 1 ff. I 4 *di-iš-pi-i-im*, ibid. line 5 *ka-ra-ni-i-im*, line 6 *ha-aš-hu-ri-i-im*, line 9 *a¹-ap-pa-a-am*, ibid. col. VIII 8 *ur-du-ni-i-im*, line 13 *is-ke-e-er*, CT XV 3 ff. I 12 *pu-uš-ši-e-hi*, ibid. line 20 *tu-ša-la-a-am*, col. II 14 *h^e-gál-la-a-am*, RA XXII p. 170—171 line 30 *im-ta-al-li-i-ku* and Enuma eliš VII 50 *liq-qa-a-bi*.

The practice of using redundant plene writing seems to have been continued in Cassite times too by some scribes. It is interesting to note that two letters of Burnaburiaš (EA 9 and 11) are sharply distinguished from other letters by Cassite kings just in this respect. Cf. *ul-te-bi-i-lu* EA 9, 9, *ul-te-bi-i-la* 9, 11, *šu-bi-i-la* 9, 13 (but *šu-bi-la* lines 12 and 16), *tu-še-bi-e-la* 9, 14, *ip-pu-ú-šu* 9, 35, *šu-pt-i-šu* 11 Rev 6, *šu-bi-i-la* 11 Rev. 8, *li-iš-ru-ú-pu* 11 Rev. 10. Note that n. 11 also writes DUMU *ši-ip-ri-i-ka* and *it-ti-i-šu*.

Completely outside the scope of our study fall the extravagancies practised in the field of plene writings by some writers of barbaric Accadian in peripheric areas, cf. e.g. EA no. 41 (Hittite). The same holds true of the Akkadian epical texts found in El Amarna (cf. e.g. EA 357, 1—3 *i-nu-ma i-lu iš-ku-nu ki-e-ri-e-ta a-na a-ha-ti-šu-nu e-ri-eš-ki-i-ga-a-al iš-pu-ú-ru ma-a-ar ši-i-ip-ri*).¹

As a further comment on the list of abnormal plene writings given above it should be added that no text or group of texts seems to use the writings consistently. I have already tried to illustrate this fact by pointing out the normal writings occurring occasionally in close vicinity of the abnormal spellings. This, however, is not very

¹ Cf. BÖHL, Die Sprache der Amarnabriefe p. 3.

surprising for, as we have seen, all texts use plene writing rather inconsistently on the whole.

Finally, the task that remains is to find some general principle underlying all these hitherto unexplained plene writings. A priori it seems plausible that there must have been in certain areas and at certain times a tendency to pronounce particular vowels long; otherwise it is difficult to understand why an ancient scribe should have wasted his time inserting superfluous signs. One can indeed easily see that a vast majority of the abnormal plene writings seem to follow two simple laws: (1) when the last syllable is a closed one its vowel is written plene and is consequently lengthened; (2) when the last syllable is an open one the vowel of the penultimate syllable (if the syllable is an open one and the vowel is normally short) is written plene and consequently must have been lengthened.

To illustrate the thesis and to facilitate comparison between separate groups of texts I have rearranged the occurring forms (written in transcription and assuming that the vowels written plene are long) in the following list. The three groups are marked with Roman numbers (I the Šilli-Šamaš letters, II the Omen texts, III the Assyrian legal work).

1. Words with closed last syllable:

I: *nārīm*, *iprām*, *miqrām*, *šaddagdīm*, *šummān*, *šalāš*, *warhīm*,
ālīm, *ruttūb*, *uḫhurāt*¹, *addiššunūšīm*, *ūšibšunūšīm*, *lillikānīm*,
*ittalkūnīnma*², *aṃqūr*, *addīm*, *ikkāl*, *nippāl*, *akaššār*, *immarrāš*,
*lunakkērma*², *aptatīq*, *aštapāk*, *ittakēr*.

II: *šalmāt*, *tallūm*, *šulmūm*, *libbīm*, *iturrām*, *nēšīm*, *gišrām*, *rēqām*,
uššāb, *uššāb*, *teppēš*, *illāk*, *ikaššād*, *ikkāl*, *tukallām*.

III: *mūtāt*, *rakīš*, *eppāš*, *ihtarāš*, *ittamrāq*, *ittikēr*.

2. Words with open last syllable:

I: *imqūtu*, *limhūru*, *ibālu*, *imahhāru*, *irrišu*, *igammāru*, *šāpi*.

II: *ipṭūru*, *ippēšu*, *tallāku*, *illāka*.

¹ Does not belong here, if perm. 2nd pers. sing.

² The forms with suffixed -ma perhaps constitute a problem in themselves, because -ma always draws the stress to the syllable preceding it.

III: *innaggūru, iqarribu, izzāzu, illūku, unakkūsu, išattūru, ittūra, iššabbūtu* (pres. N), *-upallūšu, hādi, zāku*.

It is particularly interesting to observe that t-forms of verbs with a weak 3rd radical behave in a way different from that of the strong verbs. Cf. the following examples with the forms: *iptatīq, āštapāk, ihtarāš, ittakēr* listed above:

I: *ūtāwi*.

II: *ūtēli, ūtēte*.

III: *tartūši, tahtēpi, talteqi*.

The same thing happens with the pret. N-forms with a weak 3rd radical:

I: *akkāli, ibbāši, iššēpi*.

Verbal forms with an accusative suffix seem to behave in exactly the same way as forms without a suffix:

II: *iturrūnāššu*.

III: *isakkūnūš, eppūšūš, iššabāssu (iššabat-ši), eppāssu (eppaš-ši), ihhāssi (ihhaz-ši)*.

This may be applied to nouns with possessive suffixes as well, cf. III *kallāssu (kallat-šu)*. It is more doubtful whether *passūnat* (III) can be explained as consisting of a »regular» perm. *passūn* + the fem. sg. 3. p. ending *-at*.

There remain, however, certain spellings which do not fit our rules. These are:

II: *ušēšši, irēddi, ināddi, tākkal, tēreddi, (tāllaka Mari)*.

III: *tūšša, tūššab, tūqa'a*.

Some of them seem to convey the impression that in certain instances also a vowel in a stressed closed syllable could be lengthened, and in the last two examples from II and III the vowel preceding that syllable seems to be lengthened. It is particularly vexing, that instead of *tākkal* and *tūššab* we should expect *takkāl* and *tūššāb* according to our rules (we actually have *ikkāl* and *uššāb*, cf. the list). For the time being, therefore, these spellings must remain unexplained.

Before we proceed to draw the final conclusions from our material we must meet certain objections. Some of the writings quoted by us

or forms resembling them have formerly been explained as pausal forms, e.g. by SCHROEDER in his Inhaltsübersicht to KAV (p. VII) and by von SODEN in ZA L p. 164 when criticizing POEBEL's views of the verb *UZUZU* («Die vier Beispiele für *ú(z)-za-a-az(-zu)* stehen durchweg am Schluss des eigentlichen Urkundes und sind offenbar Pausalformen»)¹ There are of course among the examples quoted by us many which can be explained as pausal forms. This can be said of almost any verbal form since the predicate in Akkadian regularly stands at the end of a sentence. We have, however, seen that the law established by us affects nouns and other parts of speech as well as verbs, and is consequently applicable outside the «pausa» too. If this is the case, then the theory of pausal forms becomes redundant. Furthermore it is uncertain whether Akkadian did have separate pausal forms at all. We know pausal forms with certainty only from Biblical Hebrew and classical Arabic, both of which are to some degree artificial languages with a pronunciation affected by the use of sacred texts in solemn musical recitation. No living Semitic language has clearly marked pausal forms, at least to the present writer's knowledge.

In GAG § 83 d. von SODEN has established a law which could be applied to some of our examples too. There he states that a subjunctive ending *-u* draws the stress to the syllable immediately preceding it and causes a lengthening of the vowel (in later Babylonian and Assyrian a doubling of the consonant). This law would again eliminate only a few of our examples, viz., TCL XVII 1, 14 *la-ma mu-ú im-qú-ú-tu* «before the waters have gone down», YOS X 41, 41 *a-lum ša a-na la-wi-i-šu ta-la-a-ku* «the city which thou wilt go to siege», and KAV 2 III 49 *ša LÚ.DI.KUD.MEŠ i-ša-tu-ú-ru*. The Old Babylonian example quoted by von SODEN is BB 125, 25 *e-em ta-ma-a-ru-šu* «wherever you see him». We can consequently see that however true this law may be it does not help us very far, and besides all these instances fit our scheme as well.

Finally, one might think that questions are involved in the

¹ Cf. also J. LEWY BBK I 4, 5 ff. and LANDSBERGER OLZ 1924, 719 ff.

examples. There are, however, no questions as far as the present writer can see.¹ In Old Babylonian, questions seem to cause a lengthening of the vowel only in the last syllable (cf. *supra*); the example given by von SODEN GAG § 39 c of a stress on the penultima is Neo-Bab. The question forms consequently seem to follow a law different from that of our abnormal writings.

To illustrate the point of view advanced above some of the examples are given again in their contexts. TCL XVII 1, 6—7 300.GUR a-na pi-i na-ri-i-im uš-te-e-ši »I have brought out 300 kur. (of barley): to the mouth of the river». Ibid. 14—15 la-ma mu-ú im-qú-ú-tu li-im-ħu-ú-ru »before the water has fallen, they may receive» TCL XVII 2, 39—40 ù šú-ħa-ru-ú ip-ra-a-am a-a-i-ki-a-am i-ma-ah-ħa-a-ru »and where will the servants get food?». TCL XVII 5, 21—22 ša-ma-a-tum ša-la-a-aš iz-nu-na-a-ma »there have been three rainfalls». Ibid. 23—24 a-na ri-iš wa-ar-ħi-im! i-na e-ri-ši-im i-ga-am-ma-a-ru »they will finish sowing by the beginning of (next) month». YOS X 7, 30 ta-al-lu-ú-um ša li-ib-bi-i-im da-an »the tallu of the heart is strong». YOS X 33 IV 7 šar-rum ma-as-sú a-na pi-i-šu uš-ša-a-ab »as to the king, his land will live according to his command». YOS X 40, 2 [LU]GAL ir-ši-tam la ša-at-tam qá-sú i-ka-ša-a-ad »as to the king, his hand will conquer a land that does not belong to him». YOS X 41, 46 da-na-ta-am tu-ka-al-la-a-am šu-ú . . . » . . . thou wilt show distress, he . . . »YOS X 47, 16 DIŠ UDU di-i-ma-tu-šu i-la-a-ka ša-mu-ú-um i-za-nu-un »if the sheep's tears flow, it will rain». KAV 1 I 14—22 šum-ma SAL . . . ši-il-la-ta taq-ti-bi lu-ú mi-qi-it pe-e ta-ar-ti-i-ši SAL ši-i-it a-ra-an-ša ta-na-aš-ši a-na mu-ti-ša DUMU.MEŠ-ša DUMU.SAL.MEŠ-ša la-a i-qar-ri-i-bu »If a woman . . . has uttered blasphemy or indulged in loose talk, this woman shall bear her own

¹ In MAOG XV p. 11 EBELING translates TCL XVII 7, 12—14 a-pa-lu-ú ša ú-la-am-mi-du-ka 4. 60 GUR še-a-am ša li-qi-e-ka it(?) -ba-a-lu-ú »Werde ich begleichen (müssen), wovon ich dich benachrichtigt habe? Haben sie 240 Kur Korn, was du zu bekommen hast, weggenommen?» In reality, however, there is hardly any question involved, but we have to read a-wi-lu-ú and translate: »The men who informed you have taken the 240 kur of barley that you were supposed to take».

guilt; they shall not touch her husband, her sons or her daughters». KAV 1 III 14—17 *šum-ma DAM-at LÚ DAM-at LÚ-ma a-na É-ti-ša tal-te-e-qi a-na LÚ a-na ni-a-ki ta-ti-din-ši* »If a married woman has taken a married woman into her house and has given her to a man for the purpose of adultery», KAV 1 III 65—57 *ù šum-ma it-ti-ke-e-er la-a i-di-e-ma i-qa-ab-bi a-na ÍD.^{i-id} il-lu-ú-ku* »and if he has denied, saying »I do not know», they shall go to the river».

Finally, the problem of the abnormal plene writings can be summarized in the following way:

1. In Old Babylonian times there seems to have been, at least at Lārsa, a tendency to pronounce certain vowels long. Most of the cases can be reduced to two laws, as we have seen. There seems to have been a third law too, whose relation to the first two laws we cannot yet explain. As to the cause of the phenomenon, it seems plausible that this lengthening is due to a change in stress or to an exceptionally strong by-stress (presumably *wárhîm* or *wàrhîm*, *ikkâl* or *ikkâl*, *lîmhûru* or *lîmhûru*). It is, furthermore, very likely that this change only affected words in certain positions in the sentence. As we have seen, these writings occur most often, but not exclusively, at the end of a sentence, and it is difficult to define precisely where they may occur and where they may not. It remains at least possible that we have here examples of sentence stress or intonation in Akkadian (a thing very difficult to tackle in a dead language!)

2. It is possible that dialectal differences in this respect existed down to Cassite times. Another possibility is that there were different »schools» of orthography, and fuller plene writings were considered fashionable in some circles. The second possibility may perhaps be supported by the fact that outside of the Akkadian area plene writing seems to have lost its original function of indicating a long vowel and become a means of precisising the vowel sound of the preceding sign.¹

3. As to the abnormal plene writings in Middle Assyrian legal work, they offer at least one important feature which leads us to an

¹ Cf. GELB, A Study of Writing p. 172.

interesting conclusion. We have seen that also vowels affected by the Assyrian vowel harmony may be written plene (cf. e.g. *il-lu-ú-ku*, *ú-na-ku-ú-su*) and that these vowels could have been long at an earlier stage of the language when the law of the vowel harmony was at work can be definitely excluded. Consequently we can say that the supposed law causing the lengthening of vowels in certain positions cannot at least be common to all types of Akkadian, even if we assume that it was concealed by the orthography e.g. in Northern Old Babylonian, where plene writing was restricted mainly to vowels resulting from contraction. It is even doubtful whether the orthography of the Legal Work had any basis at all in actual pronunciation in Middle Assyrian. One is tempted to think that we only have here an imitation of the orthography in certain Babylonian compositions in high style, (cf. the occurrence of our plene writings in literary texts) used here to enhance the solem character of the laws. It is a known fact that legal language everywhere tends to be more or less archaistic.

In the preceding we have tried to solve the problem of the abnormal plene writings in Akkadian with the help of the material now to hand. Many points still remain obscure and it is to be hoped that in the future more material will throw further light on the problem.