### § 3. Phonetics

Because we look at Sumerian through the Akkadian glasses supplied by the lexical lists (syllabic texts, loanwords) the distinctions between the Sumerian and Akkadian phonetic systems tend to be oblitterated. Specifically Sumerian consonants (ones that do not occcur in Akkadian) are  $\check{r}$  (as in drink; Volk transcribes  $d^r$ ) and  $\hat{g}$  (as in thing). There are indications that the vowel system was richer than the one we use in practice.

In theory the final consonant of a word is pronounced only if a grammatical element starting with a vowel follows. Since a logogram encodes the whole word independent of its contextual phenotypes, the absence or presence of the final consonant is on principle not expressed. The drop of the final consonant is the reason that most signs have two values in the lexical lists, one with, and one without final consonant; the word {gu(d)} "ox", for instance, is spelled with Volk no. 124, which has the values gud en gu<sub>4</sub>. The word {kala(g)} "strong" without following vowel is /kala/, and with following vowel, for instance -a ({kalag+a...}), is /kalaga/, spelled kalag-ga (with hook-on spelling) or kalag-a. For both /kala/ (no vowel following) and /kalag/ (as in {kalaga}) the same sign is used (Volk no. 137, cf. p. 87).

The /e/ of grammatical elements starting with /e/ is contracted with the final vowel of the preceding word; the resulting long vowel has the quality of the final vowel of the preceding word:  $\{lu+e\} > /l\hat{u}$  "the man" (§ 5, ergative),  $\{lu+ene\} > /l\hat{u}$ ne/ "the men" (§ 4, plural),  $\{du+ed+e\} > /d\hat{u}$ de/ "for building" (§ 8, durative infinitive). Sometimes the long vowel is made explicit: lú-ù for /lû/ (besides normally lú).

### § 4. Lexical Elements

There is no *formal* distinction between the various classes of lexical elements: substantives, adjectives and verbs. Adjectives ({gal} big) can be used as verbs ({gal} "to be big"). Distinctive contextual phenotypes may exist (§ 3), but are on principle oblitterated by the logographic writing system.

Substantives are either animate (human beings and gods) or inanimate (everything else): {lu} "man, family head, human being" (animate), {na} "stone" (inanimate). There is no *formal* distinction between these two classes of substantives, but the difference has consequences for their grammatical behaviour (combination with cases), and returns in the pronouns.

There is no distinction between masculine and feminine substantives. Sometimes there are different words for the male and female variants of a lexical item: {ur} "dog, male dog" (spelled UR), {nig} "female dog, bitch" (spelled MUNUS.UR: woman-dog); {en} "lord", {nin} "lady" (exceptions in DNs such as {nin-ĝirsu(k)} "Lord!-of-Girsu"); {šeš} "brother", {nin} "sister" (spelled nin<sub>9</sub>). In other cases the word {munus} "woman" can be added to a neutral base word: {dumu} "child, son, daughter", {dumu-munus} "female child, daughter".

Concrete substantives can be derived from verbal roots by prefixing {niĝ} "thing" (spelled niĝ): {ba} "to give", {nig-ba} (spelled niĝ-ba) "gift"; abstract substantives can be derived from concrete substantives by prefixing {nam} (spelled nam): {nam-lugal} "kingship" from {lugal} "king", {nam-lulu} "humanity" (spelled nam-lú-ùlu) from {lulu} "human being" (spelled lú-ùlu).

The adjective immediately follows the word which it qualifies: {kur} "mountain", {kur-gal} "big mountain", {lu} "man", {lu-gal} "big man, king" (spelled lugal), {giš-zid} "true tree". The plural is usually not indicated: {kur} "mountain" and "mountains" (collective), besides {kur-kur}"mountains" (every single mountain); {kur-gal-gal} "big mountains" (note {lu-gal-lu-gal} "kings"). Adjectives can be used as substantives: {gal} "big one, sheikh".

Animate substantives can express the plural by adding the suffix {+ene}: {lu+ene} (/lûne/) "men" (spelled lú(-ù)-ne), {diĝir+ene} "gods" (spelled diĝir-re-ne, diĝir-ne), {diĝir-gal-gal+ene}" great gods", {gal+ene} or {gal-gal} "great ones, sheikhs".

Some adjectives get a (meanigless) ending {+a}, others don't; the {+a} is often spelled hook-on. An adjective with {+a} is for instance {kalag+a} "strong" (spelled kalag-ga or kalag), an adjective without {+a} is for instance {zi(d)} "rightgeous".

Two susbstantives can be juxtaposed to express a more complex notion: {ur} "dog", {ur-saĝ} "dog-head" for "head dog, leader of the pack, warrior", {an-šag} "heaven interior", for "interior heaven" (spelled an-šà).

A substantive can be in apposition to another substantive: {en-lil} (spelled <sup>d</sup>en-líl) "Lord Ether", the god Enlil, who represents the space between heaven and earth; {e-ninnu} (spelled é-ninnu) "house fifty" (the temple of Ninĝirsu; fifty refers to the fifty me "powers" subservient to N.).

# The genitive

Two substantives can also be joined genitivically. The genitive element is  $\{+a(k)\}$ ; the /-a/ is usually absorbed by a preceding vowel (exception § 6), and the /-(k)/ appears only if it is followed by a grammatical element starting with a vowel, such as the locative  $\{-a\}$  "in", the ergative  $\{-e\}$ , here translated with "by", or the dative  $\{-ra\}$  "for, to" (see § 5):

```
house-chariot+of: "the house of the chariot, garage"
{e-gigir+a(k)}
/egigira/
é-<sup>ĝiš</sup>gígir-ra, é-<sup>ĝiš</sup>gígir
                                the first spelling is hook-on; <sup>ĝiš</sup> is determinative
\{ensi(g)-lagaš+a(k)+e\}
                                city ruler-Lagaš+of+ergative: "by the city ruler of Lagaš"
/ensilagašake/
énsi-lagaš-ša<sub>4</sub>-ke<sub>4</sub> énsi-lagaš-ke<sub>4</sub> the second spelling ignores the /-a-/ of {-a(k)}
{ur-gatumdu(g)+a(k)+e} man-Gatumdug+of+ergative: "by the man of Gatumdug"
/urĝatumdugake/
ur-<sup>d</sup>ĝá-tùm-dùg-ga-ke<sub>4</sub>, ur-<sup>d</sup>ĝá-tùm-dùg-ke<sub>4</sub>
{nin-ĝirsu+a(k)}
                               lord-Ĝirsu+of: "Lord of Ĝirsu (a god)".
/ninĝirsû/
<sup>d</sup>nin-ĝír-sú, <sup>d</sup>nin-ĝír-su
{nin-giš-zid+a(k)}
                                lord-tree-true+of: "Lord of the true tree" (a god)".
/ninĝišzida/
<sup>d</sup>nin-giš-zi-da
```

The adjective always stays directly behind the word which it qualifies:

```
{ursaĝ-kalag+a-enlil+a(k)+ra} hero-strong-Enlil+of+dative: "for the strong hero of Enlil" /ursaĝkalagaenlilara/ ur-saĝ-kalag-ga-<sup>d</sup>en-líl-lá-ra
```

A complex like the preceding one can be followed by an apposition:

```
{ursaĝ-kalag+a-enlil+a(k) lugal+ani+ra} "for the strong hero of Enlil, his king"
```

In a conjunction of two genitives the element -a(k) appears twice:

```
 \begin{cases} \text{dumu-lugal+a(k)} & \text{son-king+of: "the son of the king"} \\ \text{dumu-lugal-la} \\ \text{\{e-}\frac{\text{dumu-lugal+ak}}{\text{dumu-lugal+ak+ak+a}} & \text{house-}(\frac{\text{son-king+of}}{\text{son-king+of}}) + \text{of+locative: "in the house of the son of the king"} \\ \text{\'e-dumu-lugal-la-ka-ka} \\ \text{\'e-dumu-lugal-la-ka-ka} \end{cases} \\ \text{\'e-ninnu-}\frac{\text{nin-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{d}}{\text{nin-}\hat{\text{gir}}}} + \text{ak+a(k)}} \\ \text{house-fifty-}(\text{lord-}\frac{\hat{\text{girsu+of}}}{\text{cond-}\hat{\text{girsu+of}}}) + \text{of "the House-Fifty of the Lord-of-Girsu-locative: "in the house of the son of the king"} \\ \text{\'e-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{girsu+ak}}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{girsu+ak}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{girsu+ak}}}}}{\text{de-ninnu-}\frac{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-}\hat{\text{dom-
```

An alternative construction has the genitive in front of the word to which it belongs:

```
{lugal+a(k) e+ani} of the king his house = the house of the king /lugala eani/ lugal-la é-a-ni, lugal é-a-ni
```

In this construction the possesive pronoun (here {+ani} "his") refers back to the word with suffixed genitive element (here {lugal+a(k)} "of the king").

The Formation of Nominal Chains

Substantives (S), adjectives (A), possesive pronouns (poss. pron.  $\S$  6), the plural element ( $\{+a(k)\}$ ), the case elements ( $\S$  5), and the copula ( $\S$  6) always appear in a fixed order:

```
S(A)_1 poss. pron. +ene +case

S(A)_2 poss. pron. +ene+a(k) +copula

S(A)_3 poss. pron.+ene+a(k)
```

An example (see further § 5):

 $\{e-\text{lu-gal-ir}+\hat{\mathbf{g}}\mathbf{u}+\mathbf{e}\mathbf{n}\mathbf{e}+\mathbf{a}(\mathbf{k})+\mathbf{a}(\mathbf{k})+a\}$  in (-a) the house (e) of the owner (lu-gal) of my ( $\hat{\mathbf{g}}\mathbf{u}$ ) slaves (ir)

## § 5. Case

The Sumerian case system differs fundamentally from that of the Indo-European and Semitic languages. The Sumerian system is called ergative(-absolutive), the system of the other languages mentioned is called accusative(-nominative). There is a third system called active-stative, which is rare. In Europe only Basque is an ergative language; in the Near East Sumerian is joined by Hurrian and Elamite. Clusters of unrelated ergative languages occur in the Caucasus, North and Middle America, and Australia.

Coded in active	Universal	Coded in ergative	Example sentences
languages as	Functions	languages as	
77			
Nominative	Agens	Ergative	the <u>lord</u> (dominus/lugal-e) beats
			the dog
Nominative	Subject	Absolutive	the <u>lord</u> ( <i>dominus/lugal-</i> Ø)
			dies/sits
Accusative	Object	Absolutive	the lord beats the dog (canem/ur-
			Ø) — ` ·

In Sumerian the cases appear as postpositions after a substantive or a nominal chain. Some examples can be found in § 4 *The Genitive* 

{ <b>-Ø</b> }	Absolutive
{-e}	Ergative
$\{-r(a)\}$	Dative (only with animate substantives): "for, to"
{-a}	Locative (only with inanimate substantives): "in, on"
{-e}	Locative-Terminative (only with inanimate substantives): "along, on, against"
{-da}	Comitative: "with, next to"
{-ta}	Ablative-Instrumental (only with inanimate substantives): "out, by, with"
$\{-\check{s}(e)\}$	Terminative: "to(ward)" (spelled šè)
{-gin}	Aequative: "as, like" (spelled gin <sub>7</sub> )

If postpositions starting with a consonant (especially  $\{-r(a)\}$  and  $\{-\check{s}(e)\}$ ) are suffixed to a word or complex ending on a vowel, the vowel of the postposition probably always disappears:  $\{\min+ani+ra\} > \min/(spelled: \min-a-ni-ir)$ . This phonetic reduction can be ignored in writing (actual spelling in that case:  $\min-a-ni-ra$ ); such spellings (ignoring phonological variation in favour of a grammatical standard) are called morpho-phonemic, and regularly occur in all writing systems. After the genitive element  $\{-a(k)\}$  the dative is usually *not* reduced to /-r/, perhaps because the /-r/ of the dative was assimilated to the /-k/ of the preceding genitye ( $\{ur-sa\hat{g}-enlil-a(k)-ra\} > /ursa\hat{g}-enlilarra/$  "for the hero of Enlil").

The  $\{-e\}$  of the ergative and of the locative-terminative is absorbed by the final vowel of the word on which the element is suffixed, which results in a long vowel with the quality of the final vowel of the word in question:  $\{lu+e\} > /l\hat{u}/(spelled |\hat{u}-\hat{u}|)$  of  $|\hat{u}|$ .

In the third millennium postpositions are not necessarily written (Volk no. 1:2 nin-a-ni for nin-a-ni-ra, or more correct nin-a-ni-ir).

## § 6. Pronouns

## *Genitive Pronouns (= Possessive Pronouns)*

```
\{-\hat{g}u\} (spelled -\hat{g}u_{10})
                                 my;
                                                                               \{-\hat{g}u+a...\} > /-\hat{g}\hat{a}.../ (spelled \hat{g}\hat{a})
                                                                               \{-zu+a...\} > /-z\hat{a}.../
{-zu]
                                 your;
{-(a)ni}
                                 his/her (animate);
                                                                               \{-ani+a...\} > /anâ.../
{-be}, later {-bi}
                                 his (inanimate), their (collective); \{-bi+a...\} > /b\hat{a}.../
{-me}
{-zunene}
                                 your (pl)
{-(a)nene}
                                 their (animate)
```

If a grammatical element starting with /a/ (genitive, locative) is suffixed to a pronoun, then the final vowel of the pronoun is absorbed by the /a/ of the grammatical element (see paradigm).

The /a/ of  $\{-(a)ni\}$  and  $\{-(a)nene\}$  is absorbed by the final vowel of the word on which it is suffixed, which results in a long vowel with the quality of the final vowel in question.

In the nominal chain (§ 4) the genitive pronoun is in complementary distribution with the genitive; a (admittedly clumsy) translation "of me", "of you" etc. brings out the genitival character of this pronoun more clearly:

```
\{lugal-\underline{kalam+a(k)}\}
                                        the king of the land
/lugalkalama/
lugal-kalam-ma
                                        the king of him/her = "his/her king"
{lugal+ani}
/lugalani/
lugal-la-ni, lugal-a-ni, lugal-ni
{lugal-kalam-\underline{\text{din}}gir+ene+a(k)+a(k)} the king of the land \underline{\text{of the gods}} (§ 4)
/lugalkalamdiĝirenêka/
lugal-kalam-diĝir-re-ne-ka
\{lugal-kalam+\underline{anene}+a(k)\}
                                         the king of the land of them = of their land
/lugalkalamanenê/
lugal-kalam-ma-ne-ne, lugal-kalam-ne-ne
{šeš-lugal+ak+ene}
                                        the brothers of the king
/šešlugalakene/
šeš-lugal-la-ke<sub>4</sub>-ne
{ir+<u>ĝu</u>+ene}
                                        the slaves of me = my slaves
/irĝune/
```

```
ir-\hat{g}u_{10}-ne
```

Here follow some further examples of complex nominal chains. The case element is always suffixed at the very end of the chain, and thus gives the whole chain its function in the sentence. The complexes that appear not have a final postposition in reality are suffixed with the absolutive  $(\{-\emptyset\})$ :

```
{dumu-lugal+ani+a(k)+Ø} "the son of his/her king" (absolutive)

/dumulugalanâ/
dumu-lugal-la-na, dumu-lugal-na

{e-dumu-lugal+ani+a(k)+a(k)+Ø} "the house of the son of his/her king" (absolutive)

/edumulugalanâka/
é-dumu-lugal-la-na-ka, é-dumu-lugal-na-ka

{e-dumu-lugal+ani+a(k)+a(k)+a} "in (locative)

/edumulugalanâkaka/
é-dumu-lugal-la-na-ka-ka, é-dumu-lugal-na-ka-ka
```

# Independent pronouns

{ĝae}	I	ĝá-e
{zae}	you	za-e
{ane, ene}	he	a-ni, e-ne
{mende(n)}	we	me(-en)-dè(-en)
$\{menze(n)\}$	you (pl)	me(-en)-zé(-en)
{anene, enene}	they	a-ne-ne, e-ne-ne

# Enclitic pronouns (copula)

```
{-me(n)}
                            I am
                                                        -me(-en)
{-me(n)}
                            you are
                                                        -me(-en)
{-am}
                            he is
                                                        -am<sub>6</sub>, later -àm
{-mende(n)}
                            we are
                                                        -me(-en)-dè(-en)
{-menze(n)}
                            you (pl) are
                                                        -me(-en)-zé(-en)
\{-me(\check{s})\}
                            they are
                                                        -me(-eš)
```

In reality these are forms of the verb {me} "to be". The enclitic pronouns can be used to form nominal sentences (sentences without verb):

```
{lugal+men} "I am king", "you are king", {diĝir+am} "he is god", {gal+meš} "they are big".
```