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The co-occurrences of the dimensional verbal prefixes in Sumerian

This short note is just a very simple play with the data that can be obtained from the Electronic Text Corpus of Sumerian Royal inscriptions (http://oracc.museum.upenn.edu/etcsri. Its aim is to draw attention to the potential of the corpus. It is based on data obtained on 3 August 2013, when the corpus contained 2138 finite verbal forms.

Table 1 and Chart 1 below show the number of co-occurrences of the various prefixes in the verbal prefix-chain. It is based on the grammatical model applied by the project (see Zólyomi 2010, the project's page on parsing: http://oracc.museum.upenn.edu/etcsri/parsing/, and Table 2 below).

The project's grammatical model distinguishes 3 locative cases (cf. Zólyomi 2010); L3 occurs twice in the table and the chart, as it may be marked either with a prefix in slot V10 or with the initial pronominal prefix in slot V11 (cf. Jagerma 2006, and 2010, 416–417 [18.2.1]; note however that Jagersma's and the project's grammatical model overlap only partly).

The numbers on the right side of Chart 1 show the number of occurrences of the individual prefixes when they are the only dimensional prefix in the finite verbal form; they correspond thus to the "ALONE" row of Table 1.

	DAT	COM	ABL	TERM	L1	L2	L3(v10)	L3(v11)
ALONE	857	66	83	54	186	209	58	16
DAT	—	3	9	13	80	10	0	2
COM	3	—	0	0	8	5	0	2
ABL	9	0	—	0	2	3	0	0
TERM	13	0	0	—	0	0	0	0
L1	80	8	2	0	—	0	0	1
L2	10	5	3	0	0	—	0	0
L3(v10)	0	0	0	0	0	0	—	0
L3(v11)	2	2	0	0	1	0	0	—

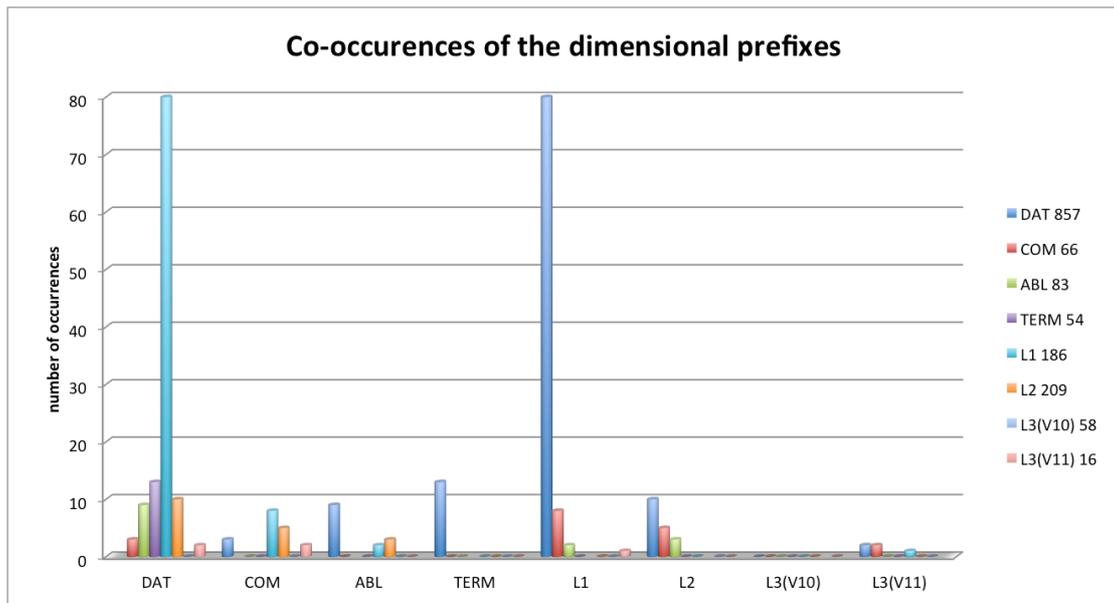Table 1: Co-occurrences of the dimensional prefixes

Chart 1: Co-occurrences of the dimensional prefixes

Some observations on the data:

i) The comitative prefix never occurs together with either the ablative or the terminative prefix in the corpus. They may, therefore, be considered as belonging to the same verbal slot on the basis of this corpus. In the Old Babylonian literary texts, however, there exist forms in which the comitative do co-occur with either of them (cf. Jagersma 2010: 445).

ii) The dative prefix may co-occur with any of the prefixes. The number of verbal forms that contain two verbal prefixes is 138. 117 (84.7 %) of these verbal forms involve a dative prefix, while there are only 21 verbal forms with prefixes other than the dative.

The terminative prefix co-occurs only with the dative. Its restricted distribution must be related to its meaning, unlike that of locative3 in V10; see vi) below.

The prefixes of ablative and locative1–3 occur only six times together in some combination.

This distribution follows from difference in function between the dative and the local cases. The dative case marks as a rule the beneficiary, while the other cases typically relate to the location or the direction of the verbal events, and the description of a verbal event requires more than one local cases only rarely; see also v) below.

Chart 2 below reflects the essentially bipartite character of the set of dimensional prefixes nicely:
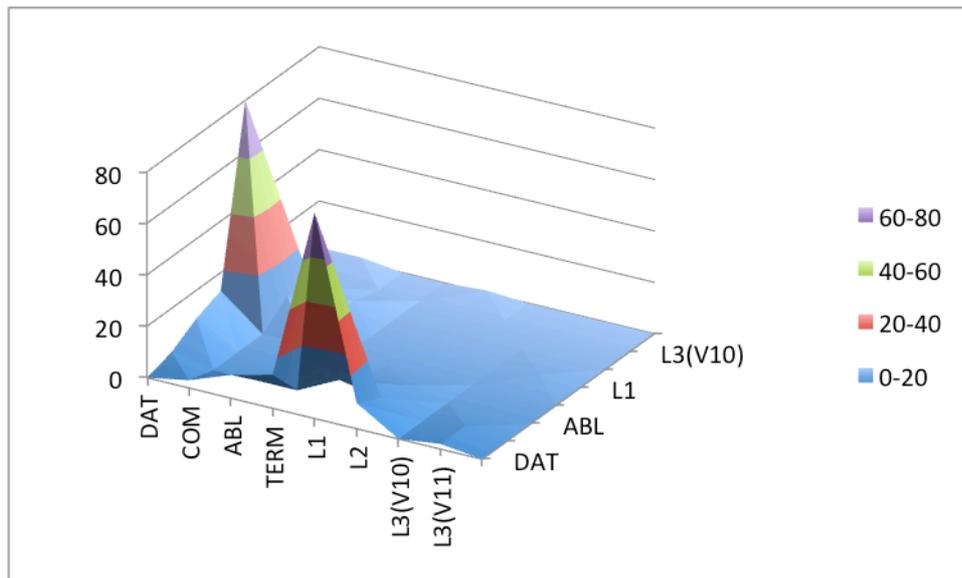
Chart 2: The bipartite character of the set of dimensional prefixes

iii) The ablative occurs twice together with the locative1 (see the website of ETCSRI for the abbreviations in the glossing):

(1) Enmetena 1 2:1–3 (RIME 1.9.5.1)

eg$_2$-bi	id$_2$-nun-ta,	gu$_2$-eden-na-še$_3$,
eg=bi=ø	idnun=ta	guedenak=še
levee=3.SG.NH.POSS=ABS	WN=ABL	GN=TERM

eb$_2$-ta-ni-e$_3$
$_{V2}$i-$_{V5}$b-$_{V9}$ta-$_{V10}$ni-$_{V11}$n-$_{V12}$e-$_{V14}$ø
FIN-3.NH-ABL-L1-3.SG.H.A-leave-3.SG.P
"He extended the (boundary) levee from the Id-nun canal to the Gu-edena."

(2) Enmetena 2 3:5–4:2 (RIME 1.9.5.2)

id$_2$-nun-ta,	mu-bi-kur-ra,
idnun=ta	mubikura=še
WN=ABL	GN=TERM

e-na-ta-ni-e$_3$
$_{V2}$i-$_{V6}$nn-$_{V7}$a-$_{V9}$ta-$_{V10}$ni-$_{V11}$n-$_{V12}$e-$_{V14}$ø
FIN-3.SG.H-DAT-ABL-L1-3.SG.H.A-leave-3.SG.P
"(For Ninĝirsu, his master who loves him, En-metena) extended it (= the boundary levee) from the Idnun canal until Mubikura."

In both cases the locative1 prefix appears to refer to a noun phrase in the terminative in the sentence. As the ablative prefix cannot co-occur with the terminative, the locative1 prefix functions here as a kind of substitute. (For a similar phenomenon, when the dative prefix substitutes a locative2 or locative3 prefix when slot V10 is occupied with a locative1 prefix, see Zólyomi 1999: 232–242; see also Jagersma 2010: 444).

iv) The ablative occurs three times together with the locative2: in En-metena 1 3:4, 6:16, and Gudea Cylinder B18:13.

(3) Gudea Cyl. B 18:12–13

iri-e	^{d}utu-gin$_7$,	ki-ša-ra
iri=e	utu=gin	kišar='a
city=DAT.NH	DN=EQU	earth=L2.NH

im-ma-ta-a-e$_3$

$_{V2}$i-$_{V4}$m-$_{V5}$b-$_{V7}$a-$_{V9}$ta-$_{V10}$y-$_{V12}$e-$_{V14}$ø

FIN-VEN-3.NH-DAT-ABL-L2-leave-3.SG.S

"Like Utu, he (= Gudea) rose on the horizon for the city."

In the En-metena texts the verb is *bala* 'to turn'. In all three cases, the ablative does not refer to some verbal participant of the sentence; rather it appears to modify the meaning of the verb. So the meaning of *bala* appears to be 'to cross' with the ablative, while the meaning of *e$_3$* with ablative is 'to rise' (said about the Sun).

v) The observations made in iii) and iv) above indicate that the co-occurrence of the prefixes of V9 and V10 is in fact very limited, and happens only in special circumstances.

vi) When the locative3 is marked with a morpheme in V10, no other dimensional prefix occurs together with it. In all these verbal forms L3 forms a composite dimensional prefix (cf. Zólyomi 2010: 580) with a pronominal prefix in either V5 or V6, which prevents the occurrence of any other dimensional prefix in the verbal form (cf. Jagersma 2010: 420 and 422).

vii) Table 1 and Chart 1 presents the co-occurrence of two dimensional prefixes in a verbal form. The number of finite verbal forms with more than two dimensional prefixes is extremely small, and no more than three dimensional prefixes are attested to co-occur. The corpus contains only three examples with more than two prefixes. In example (2) above a dative, an ablative, and a locative1 prefix occur together. In example (3) above a dative, an ablative, and a locative2 occur together. In example (4) below a dative, a comitative, and a syncopated locative1 occur together:

(4) Gudea Statue E 8:13–15

^{d}ba-u$_2$,	e$_2$	iri-kug-ga-<ka>-na,
bau=ra	e	irikug=ak=ani='a
DN=DAT.H	house	GN=GEN=3.SG.H.POSS=L1

mu-na-da-ku$_4$-ku$_4$

$_{V4}$mu-$_{V6}$nn-$_{V7}$a-$_{V8}$da-$_{V10}$n-$_{V12}$kuku-$_{V14}$ø

VEN-3.SG.H-DAT-COM-L1.SYN-enter-3.SG.S

"(His personal god, Ninĝišzida,) brings these (gifts) to Bau in her temple in Iri-kug."
(Lit. "... enters her temple in Iri-kug with these [gifts] ...")

viii) Among the 2138 finite verbal forms in the corpus, 1529 (72 %) contains a single dimensional prefix, 138 (6.45 %) contains two, and 3 (0.14 %) contains three prefixes.

To sum up the observations made in this note, one can state that Sumerian finite verbal forms in this corpus typically contain only one dimensional prefix. If they contain two, then one of them is the dative in the great majority cases. Finite verbal forms with three dimensional prefixes are extremely rare.

Slot 1	MODAL prefixes, prefix of ANTERIORITY
Slot 2	FINITE-MARKER prefix
Slot 3	COORDINATOR prefix
Slot 4	VENTIVE (cislocative) prefix
Slot 5	MIDDLE prefix or 3NH PRONOMINAL prefix (specifying the person, gender and number of the first in the sequence of dimensional prefixes)
Slot 6	INITIAL PRONOMINAL prefix (specifying the person, gender and number of the first in the sequence of dimensional prefixes)
Slot 7	Dimensional I: DATIVE prefix
Slot 8	Dimensional II: COMITATIVE prefix
Slot 9	Dimensional III: ABLATIVE or TERMINATIVE prefix
Slot 10	Dimensional IV: LOCATIVE1, LOCATIVE2, or LOCATIVE3 prefix
Slot 11	FINAL PRONOMINAL prefix (referring to A or P, depending on the tense)
Slot 12	stem
Slot 13	PRESENT-FUTURE MARKER (*in intransitive verbs*)
Slot 14	PRONOMINAL suffix (referring A, S, or P depending on the tense)
Slot 15	Subordinator

Table 2: Sumerian verbal template of finite verbs

References

Jagersma, Bram (2006), 'The final person-prefixes and the passive', *N.A.B.U.*, no. 93.

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