

# Loglan Paradigms

## Contents

Paradigm A: SIGNS & PUNCTUATION MARKS	1
Paradigm B: LOGICAL CONNECTIVES	2
Paradigm C: CAUSAL CONNECTIVES	3
Paradigm D: TENSE OPERATORS	4
Paradigm E: LOCATION OPERATORS	5
Paradigm F: VARIABLES	6
Paradigm G: DESCRIPTORS	7
Paradigm H: QUANTIFIERS	8
Paradigm I: INDICATORS	9
Paradigm J: DISCURSIVES	10
Paradigm K: MODAL OPERATORS	11
Paradigm L: UNASSIGNED CVV-FORM WORDS	12
Paradigm M: ALPHABET WORDS	13
Paradigm N: OPTIONAL CASE TAGS	14

## Paradigm A: SIGNS & PUNCTUATION MARKS

Words which have optional non-phonemic representations in written Loglan and which correspond roughly to the punctuation marks and mathematical signs of English are listed here. Other non-phonemic signs may be found in Paradigm H, Quantifiers; and Paradigm M, Alphabet Words.

bi	[ = ]	is (identity)	kue	[ \ ]	under/dividing...
bie	[ ∈ ]	is a member of	li	[ < ]	(left quote)
cie	[ < ]	is less than	lu	[ > ]	(right quote)
cio	[ > ]	is greater than	nea	[ - ]	negative (sign of a negative number)
ci	[ - ]	(open hyphen)	nio	[ - ]	minus/less (sign of subtraction)
gie	[ [ ]	(left close bracket)	niu	[ * ]	the incorrect Loglan...
giu	[ ] ]	(right close bracket)	pea	[ + ]	positive (sign of a positive number)
hie	[ ( ]	(left close parenthesis)	pio	[ + ]	plus/and (sign of addition)
hi	[ , ]	(close comma)	pi	[ . ]	(decimal point)
hiu	[ ) ]	(right close parenthesis)	tia	[ * ]	times/multiplied by
kie	[ ( ]	(left open parenthesis)	y	[ - ]	(close hyphen)
kiu	[ ) ]	(right open parenthesis)	zoa	[ ' ' ]	double prime
kua	[ / ]	over/divided by...	zoi	[ ' ]	prime

## Paradigm B: LOGICAL CONNECTIVES

<b>Elements:</b>	a	or	no-/-no-/-noi	negative affixes
	e	and	nu-/-nu-	conversion (only with u)
	i	means	c- / -c	mark of word & sentence forms
	u	whether	i-	mark of sentence forms
			k- / -k	mark of context-free forms

**Contexts:** L-Connectives occur in 3 context-specific and 1 context-free form: (1) between terms (i.e., arguments or predicates) where they are unmarked; (2) between words in predicate expressions, where they are marked with **c**; (3) between sentences, where they are marked with **i** and **c**; and (4) in any of these in a form marked by a leading prefix **k-** (possibly with a suffix of **-noi**), and with a trailing **...ki** (or **...kinoi**).

English Expressions	Between Terms (1)	Between Words (2)	Between Sentences (3)	Context-Free (4)
or (inclusive sense)	a	ca	ica	ka...ki
and	e	ce	ice	ke
if and only if / means	o	co	ico	ko
whether	u	cu	icu	nuku
whether ..., ...	nuu	nucu	inucu	ku
only if	noa	noca	inoca	kanoi...ki
not ...and ...	noe	noce	inoce	kenoi
not ...means .../ or (excl.)	noo <sup>1</sup>	noco	inoco	nukonoi
not ..., whether ...	nou	nocu	inocu	nukunoi
whether ..., not ...	nonuu <sup>2</sup>	nocnuu	inocnuu	nuknuunoi
if	anoi	canoi	icanoi	ka...kinoi
and not	enoi	cenoi	icenoi	ke
means not / or (excl.)	onoi	conoi	iconoi	ko
whether not	unoi <sup>3</sup>	cunoi	icunoi	ku
whether ..., not	nuunoi	nucunoi	inucunoi	ku
not both ...and ...	noanoi	nocanoi	inocanoi	kanoi...kinoi
neither ...nor ...	noenoi	nocenoi	inocenoi	ke
not ...means not ...	noonoi <sup>4</sup>	noconoi	inoconoi	konoi
not ..., whether not ...	nounoi <sup>5</sup>	nocunoi	inocunoi	kunoi
whether not ..., not ...	nonuunoi <sup>6</sup>	nonucunoi	inonucunoi	kanoi

**Note:** Any of the Logical Connectives can be suffixed with a combination of Tense Operators, Causal Operators, and Location Operators: for example: **efa** = “and-after”; **enukou** = “and-thus”; **evu** = “and-yonder”; **efavu** = “and-yonder-after”; etc.

<sup>1,2,3,4,5,6</sup> The forms on these rows occur only briefly in speech, being transformational products and immediately replacable by their equivalents as follows:

- |                 |    |             |                  |    |          |                    |    |               |
|-----------------|----|-------------|------------------|----|----------|--------------------|----|---------------|
| 1. <b>noo</b>   | by | <b>onoi</b> | 3. <b>unoi</b>   | by | <b>u</b> | 5. <b>nounoi</b>   | by | <b>nou</b>    |
| 2. <b>nonuu</b> | by | <b>nuu</b>  | 4. <b>noonoi</b> | by | <b>o</b> | 6. <b>nonuunoi</b> | by | <b>nuunoi</b> |

## Paradigm C: CAUSAL CONNECTIVES

<b>Elements:</b>	kou	physical sense	no-/-no-	negative affixes
	moi	motivational sense	nu-/-nu-	conversion affixes
	rau	justificational sense	i-	mark of sentence forms
	soa	sense of entailment	-ki	mark of context-free forms

**Contexts:** C-Connectives occur in 2 context-specific and 1 context-free form: (1) prepositional (before arguments) where they are unmarked; (2) conjunctival (between sentences) where marked with **i**; and (3) either of these contexts or any context in which L-Connectives may occur (see Paradigm B) in forms marked by a leading suffix **-ki** (possibly with a prefixed **nu-**, **nuno-**, or **no-**) and with a following **...ki**.

English Expression	Before Arguments (Prepositional)	Before Sentences (Conjunctival)	Context-Free (with ki)
because, since, for, etc.	kou moi + Causes rau soa	ikou E + imoi + C irau isoa	nukouki...ki numoiki nurauki nusoaki
therefore, thus, so, etc.	nukou numoi + Effects nurau nusoa	inukou C + inumoi + E inurau inusoa	kouki...ki moiki rauiki soaki
although, even though, etc.	nokou nomoi + Causes norau nosoa	inokou E + inomoi + C inorau inosoa	nunokouki...ki nunomoiki nununorauki nunosoaiki
nevertheless, despite that, even so, etc.	nunokou nunomoi + Effects nunorau nunosoa	inunokou C + inunomoi + E inunorau inunosoa	nokouki...ki nomoiki norauki nosoaiki

## Paradigm D: TENSE OPERATORS

<b>Elements:</b>	pa (past) / before / then	-zi	of moments/short intervals
	na (present) / at / in / now	-za	of medium length intervals
	fa (future) / after / afterwards	-zu	of long length intervals
	-i- an infix meaning continuity	-u-	an infix meaning habitualness

**Forms:** Tense operators may be (1) simple, (2) continuous (with an infix **-i-**), (3) habitual (with an infix **-u-**), (4) compound; and any of these may be (5) quantified with any of the affixes **zi**, **za**, or **zu**. Any form may occur in any context.

**Contexts:** There are 3 contexts: (i) before predicates, where they function as verbal inflections of that predicate; (ii) before arguments, where they function as prepositions (with concrete arguments) or conjunctions (with abstract ones); and (iii) in any other position where they function as adverbial modifiers of the sentence as a whole, or suitably punctuated, of the elements they follow.

**Null-Form:** Standing outside this system is the word **ga** which preserves the timelessness of the unadorned predicate in contexts in which the predicate would otherwise be absorbed by a preceding description: **Le mrenu ga penso** = “The man is a thinker” vs. **Le mrenu penso** = “The man-type of thinker”. **Ga** can also take the forms **gia** and **gua**, for the continuous and habitual senses; and **gua**, which has a “strong potentiality” sense.

Inflection	Preposition or Conjunction	Adverbial Modifier
<b>3 Simple Tenses:</b>		
pa ...-ed / was ... / was a ...	before ...	then / formerly
na ...-s / is a ...	at / during / when ...	now / currently
fa will ... / will be ...-ing / will be a ...	after ...	afterwards
<b>3 Continuous Tenses:</b>		
pia was ...-ing / was being (a) ...	until	until now
nia is now ...-ing / is now being (a) ...	while ...	meanwhile
fia will be ... / will be ...-ing	since ...	ever since
<b>3 Habitual Tenses:</b>		
pua ...-ed / was ... / was a ... (habitually)	before ... (hab.)	then / formerly (hab.)
nua ...-s / is a ... (habitually)	at / during / when ... (hab.)	now / currently (hab.)
fua will be ... / will be ...-ing (habitually)	since ... (hab.)	ever since (hab.)

### 9 Compound Tenses: (here translated only as infections)

papa had (past perfect)	pana was then ...	pafa was going to ...
napa has (present perfect)	nana is just now ...	nafa is now going to ...
fapa will have (future perfect)	fana will then be ...	fafa will be going to ...

### A large number of Quantified Tenses:

pazi just now	fazi immediately	piazi continuously and briefly before now
paza recently	faza soon	piazza continuously for a short time before now
pazu long ago	fazu eventually	piazuzo continuously for a long time before
etc	etc	etc

**Note:** Tense Operators, Causal Operators, and Location Operators can be combined in arbitrary ways **navi** = “here-now”; **vakou** = “there-causing”; etc. Also, such forms such as **pacenoina** = “once-but-not-now”; **vicava** = “here-or-there”; etc., may be used. And, quantified forms may be formed by prefixing a Quantifier before a Tense Operator, Causal Operator, or Location Operator: **nina** = “never”; **nepa** = “once (in the past)”; **rava** = “everywhere”; etc. Also, **zi**, **za**, and **zu** may be used as a prefixes, where they denote the length of the event: **zipazu** = “long ago, for a short time”.

## Paradigm E: LOCATION OPERATORS

**Elements:** vi in/at -zi very small / point-like -i- an infix meaning spatial extension  
va near -za a small/medium space  
vu far -zu a large region

**Contexts & Forms:** The same as for tense operators: (1) inflectional, (2) prepositional/conjunctival, and (3) adverbial. Contexts (1) and (3) are not well distinguished in English.

<b>Inflector</b>	<b>Preposition or Conjunction</b>	<b>Adverbial</b>
<b>3 Simple Locators:</b>		
vi here	at/in/where ...	here
va near here	near / near the place where ...	nearby
vu far away	far from / far from where ...	away
<b>3 Extended Locators:</b>		
vii throughout..., a small place	throughout..., a small place	throughout..., a small place
via throughout..., a medium place	throughout..., a medium place	throughout..., a medium place
viu throughout..., a large place	throughout..., a large place	throughout..., a large place
<b>9 Compound Locators: (here translated only prepositionally)</b>		
vivi around in	vavi into ... (from nearby)	vuvi into ... (from afar)
viva out of ... (a short way)	vava past ... (nearby)	vuva toward ...
vivu out of ... (a long way)	vavu away from ...	vuvu past ... (at a distance)
<b>A large number of Quantified Locators such as: (here translated prepositionally)</b>		
vizi at ..., a spot	vazi near ..., a spot	vuzi far from ..., a spot
viza in ..., a small place	vaza near ..., a small place	vuza far from ..., a small place
vuza in ..., a large region	vuza near ..., a region	vuza far from ..., a region

## Paradigm F: VARIABLES

**Forms:** Variables correspond to the pronouns of English and are of *seven* forms, as below. In addition, any variable may be subscripted by using the infix **-ci-** between it and any Quantifier (Paradigm H), any Alphabet Word (Paradigm M), or any other variable.

### Personal Variables

	Singular	Plural	
		Set	Multiple
I	mi		
I, you		mu	mo
I, other(s)		miu	mio
I, you, other(s)		muu	muo
you	tu	tou	too
you, other(s)		tuu	tuo

### 3rd Person, Definite

da	X/the Xs/he/she/it/him/her/they/them
de	Y/the Ys/he/she/it/him/her/they/them
di	W/the Ws/he/she/it/him/her/they/them
do	H/the Hs/he/she/it/him/her/they/them
du	Q/the Qs/he/she/it/him/her/they/them

### 3rd Person, Indefinite

ba	someone/something x
be	someone/something y
bo	someone/something h
bu	someone/something q

### Demonstrative Variables

ti	this	ta	that
toi	that remark previously mentioned	toa	this remark about to be mentioned
tio	that situation previously mentioned	tao	this situation about to be mentioned

### Predicate Variables

dua	is / does (the former)	dui	is / does (the latter)
bua	this	bui	that

**Subscripted Forms:** **dacine** = “X-sub-1”; **micitu** = “me-sub-you”; **deci,ama** = “Y-sub-A”; etc.

**Note:** Any of the Alphabet Words of Paradigm M may be used either as variables or as “constants”, i.e., variables with an arbitrarily constant designation.

## Paradigm G: DESCRIPTORS

**Form:** Descriptors may be (1) simple, (2) specified (prefixed to a time or location operator), or (3) possessive (prefixed to a variable). These correspond to English (i) definite articles, (ii) demonstrative adjectives, and (iii) possessive pronouns. Only **la**, **laa**, **le**, **lea**, **lee**, **leu**, **lo**, and **loe** may be used in specified or possessive forms. In addition, the quote words **li**, **lii**, **liu**, and **lie** may be optionally suffixed with **-zi** for the written form of the quoted, and **-za** for the spoken form.

**Contexts:** **Lao** is used before foreign names, **la** before names, **lae** and **lue** before arguments, **lau** and **lou** before lists, **lie** before foreign phrases, **lii** before letters, **lio** before quantifiers, **li...lu** around quotations, **liu** before words, and **lua** and **luo** after lists. All other descriptors occur in one context only: before untensed predicate expressions.

### 18 Simple Descriptors:

la	the one named
le	the
lo	the mass of
li ... lu	the utterance...
laa	the unique... (le)
lae	the addressee of... (indirect designation)
lao	the foreign name... (la)
lau ... (lua)	the set... (le)
lea	the set of all... (le)
lee	an arbitrary... (le)
leu	the particular set of... (le)
lie	(strong quotation mark) (li)
lii	the letter/sound... (li)
lio	the number...
liu	the word... (li)
loe	the typical... (le)
lou ... (luo)	the ordered list... (le)
lue	a/the sign/address of... (inverse of lae)

### Many Specified Descriptors:    Many Possessive Descriptors:

levi	this/these ...	lemi	my ...
leva	that/those (nearby) ...	letu	your ...
levu	that/those (distant) ...	lemu	our ...
lepa	the-former ...	leda	X's / his / hers / its / their ...
lena	the-present ...	leba	x's / someone's / something's
lefa	the-future ...	levina	the-here-and-now ...
etc.		etc.	



## Paradigm H: QUANTIFIERS

Numeric				Non-Numeric	
<b>Elements:</b>	n-	0 or 1	-e odd	ra	all/each/every one of...
	t-	2 or 3	-o even	re	most of...
	f-	4 or 5	-i zero (0)	ri	several/a few of...
	s-	6 or 7	-ma hundreds ( $\emptyset$ )	ro	many of...
	v-	8 or 9	-mo thousands ( $\theta$ )	ru	enough of...
	pi-/-pi-	point-/-point-	(.)	sa-	around... of...
				si-	at most... of...
				su-	at least... of...
				sasi-	almost... of...
				sasu-	barely... of...
<b>Digits</b>	<b>Tens</b>	<b>Hundreds, Etc.</b>		<b>Abbreviations</b>	
ni = 0	neni = 10	nema = 1 $\emptyset$ = 100		sa = sara	almost all of...
ne = 1	nene = 11	toma = 2 $\emptyset$ = 200		si = sine	at most one of...
to = 2	neto = 12	tema = 3 $\emptyset$ = 300		su = sune	at least one of...
te = 3	etc.	etc.		sasi = sasine	almost one of...
fo = 4				sasi = sasine	barely one of...
fe = 5	toni = 20	nemo = 1 $\theta$ = 1,000			
so = 6	teni = 30	nenimo = 1 $\theta$ = 10,000			
se = 7	fonni = 40	nemamo = 1 $\emptyset\theta$ = 100,000			
vo = 8	feni = 30	nemomo = 1 $\theta\theta$ = 1,000,000			
ve = 9	etc.	etc.			

### Fractional Forms:

(these may be numeric or non-numeric)

pine = .1	nepife = 1.5	pira	all of (some whole) ...
pito = .2	topisu = 2.6	pire	most of (some whole) ...
pite = .3	tepise = 3.7	piri	a little of (some whole) ...
piso = .4	etc.	piro	much of (some whole) ...
etc.		piru	enough of (some whole) ...
pinine = .01		pisa	almost all of (some whole) ...
pimane = $\emptyset$ 1 = .001		pisi	at most a tenth of (some whole) ...
pimone = $\theta$ 1 = .0001		pisu	at least a tenth of (some whole) ...
etc.			

## Paradigm I: INDICATORS

### Conviction Scale

ia	Yes / certainly / It's true that ...
io	probably
ii	perhaps / possibly
iu	I don't know
ii no	perhaps not
io no	probably not
ia no	No / It's not true that ...

### Intention Scale

ai	Yes / I will ...
ao	I want to ...
ae	I hope to ...
au	I don't care whether ...
ae no	I hope not to ...
ao no	I want not to ...
ai no	No / I will not ...

### Obligation Scale

oa	I/you must ...
oe	I/you should ...
oi	I/you may ...
ou	It doesn't matter whether ...
oi no	I/you are permitted not to ...
oe no	I/you should not ...
oa no	I/you must not / No, don't do ...

### Non-scalar Additudes

ua	There! (satisfaction/completion)
ue	Well! (surprise)
ui	How nice! Good! (pleasure)
uo	What! (anger/annoyance)
uu	What a shame! (sorrow/sympathy)
aa	I see (what you mean)
ee	Caution / Careful / Take care
oo	Hmm (disapproval)

### Interrogatives

ie	Which? / / Who? / What?	eo	Please? / Will you let us ...?
ea	Let's ... / I suggest that ...	eu	Let us suppose that ... (sign of subjective mood)
ei	Is that so? / is it true that ...?		

**Note:** Compound indicators are possible, e.g., **ui ai** = "I will gladly ..."; **uu ia** = "I am sorry to say so, but ..."; etc.

## Paradigm J: DISCURSIVES

Discourse operators are CVV-form words usually derived from 5-letter predicates. Their function is to relate new elements in a discourse to the foregoing portions. They are self-contained modifiers like indicators and occur in all the contexts of modifier forms. At present time there are 28 such words but the list may be extended indefinitely; see Paradigm L. Also, any Quantifier may be prefixed to **-fi**, forming ordinals: **nefi** = “first”; **tofi** = “second”; **rafi** = “last”; etc.

bea	For example/For instance (cf. piu)	(bleka = look)
biu	Hence it is possible that <sup>1</sup>	(blicu = possible)
buo	However/In contrast/On the contrary	(bufpo = opposite)
cea	That is/In other words	(cenja = change)
ceu	Anyway/In any case	(clesi = without)
cia	Similarly/Like the foregoing	(clika = like)
coa	In short/In sum/By way of summary	(corta = short)
coi	According to/In principle	(tcori = authority)
dau	Hence it is probable that <sup>2</sup>	(dakli = probable)
dou	Given/By hypothesis/As assumed	(donsu = give)
fae	And vice versa (reverses the order of terms)	(fanve = reverse)
fao	Finally/In conclusion	(fando = end)
feu	In fact/Actually/Indeed	(fekto = fact)
gea	Again/I repeat	(genza = again)
kuo	Usually/Customarily	(kusmo = custom)
kuu	Generally/Generalizing from the above	(kuntu = common)
nao	Changing topics/(New paragraph)	(Eng. “Now”)
nie	In detail/Looking closely	(snire = near)
pae	And so forth/etc.	(prase = continue)
piu	In particular/Applying the above (cf. bea)	(plizo = use)
rea	Clearly/Obviously	(frena = in front)
saa	Loosely/Roughly/Simply speaking	(sapla = simple)
sii	Apparently/Evidently	(simci = seem)
sui	Also/Moreover/Besides/Furthermore/Too/In addition	(sumji = sum)
taa	In turn/In sequence	(trana = turn)
toe	Respectively	(to = two)
voi	Skipping details	(valti = jump)
zou	By the way/Incidentally	(dzoru = walk)

<sup>1,2</sup> **biu** and **dau** differ from the indicators **ii** and **io** in that the former relate the possibility or probability of some claim to a foregoing statement (or statements), not the attitude of the speaker.

## Paradigm K: MODAL OPERATORS

Semantically, modal operators are optional extensions of the place-structure of any predicate which specify the mode, means, manner, source, or conditions which a predicable relationship obtains. Syntactically, they are used like tense or location operators to form phrases or clauses. Like discursives, they are CVV-form words, and generally derived from 5-letter predicates; at present there are 12 such words but the list may be extended indefinitely; see Paradigm L.

ciu	as much as/as little as/to the same degree as...	(ciktu = equals)
coi	according to rule/method/ authority...	(tcori = authority)
dii	for/on behalf of...	(dilri = represent)
duo	in manner/mode... /by method...	(durzo = do)
hea	with... 's help/through agent...	(helba = help)
kii	with/accompanied by...	(kinci = with)
lia	like/as/in the way that...	(clika = like)
lui <sup>1</sup>	for/in order to please...	(pluci = please)
mou	more than/to a greater degree than	(mordu = more)
peu	re/concerning/as for/with regard to...	(perti = pertain)
sea	instead of/in place of...	(setfa = put)
tie	with..., a tool or means	(trime = tool)

**Note:** **ciu** and **mou** form the following series:

<b>ciu</b>	equal to
<b>nociu</b>	not equal to
<b>mou</b>	greater than
<b>nomou</b>	not greater than
<b>numou</b>	less than
<b>nunomou</b>	greater than or equal to

<sup>1</sup> **lui** differs from the indicator **cia** in that the former relates the element it modifies to definite arguments, whereas the latter relates the element to the foregoing discourse.

## Paradigm L: UNASSIGNED CVV-FORM WORDS

The 107 still unassigned CVV-sequences are shown by blanks (-) in the table; the 319 words entered here have meanings in the current lexicon.

	b-	c-	d-	f-	g-	h-	j-	k-	l-	m-	n-	p-	r-	s-	t-	v-	z-
-aa	baa	-	daa	faa	gaa	haa	-	kaa	laa	maa	naa	-	raa	saa	taa	vaa	-
-ae	bae	cae	-	fae	-	-	jae	kae	lae	mae	-	paе	rae	sae	tae	-	-
-ai	bai	cai	dai	fai	gai	hai	jai	kai	lai	mai	nai	pai	rai	sai	tai	vai	zai
-ao	-	cao	dao	fao	gao	hao	jao	kao	lao	mao	nao	pao	rao	sao	tao	vao	zao
-au	-	cau	dau	fau	gau	hau	-	kau	lau	-	nau	-	rau	sau	tau	vau	-
-ea	bea	cea	dea	fea	gea	hea	-	kea	lea	mea	nea	pea	rea	sea	-	vea	zea
-ee	-	-	-	-	gee	-	-	-	lee	-	-	pee	-	-	-	-	-
-ei	bei	cei	dei	fei	gei	hei	jei	kei	lei	mei	nei	pei	rei	sei	tei	vei	zei
-eo	beo	ceo	deo	feo	geo	heo	jeo	keo	leo	meo	neo	peo	reo	seo	teo	veo	zeo
-eu	beu	ceu	deu	feu	geu	-	-	keu	leu	meu	neu	peu	reu	-	teu	veu	zeu
-ia	bia	cia	dia	fia	gia	hia	-	kia	lia	mia	nia	pia	ria	sia	tia	via	zia
-ie	bie	cie	die	fie	gie	hie	jie	kie	lie	-	nie	pie	rie	-	tie	vie	zie
-ii	bii	-	dii	fii	-	-	-	kii	lii	mii	-	-	rii	sii	-	vii	-
-io	bio	cio	dio	fio	-	-	jio	kio	lio	mio	nio	pio	-	sio	tio	-	zio
-iu	biu	ciu	diu	fiu	giu	hiu	-	kiu	liu	miu	niu	piu	riu	siu	tiu	viu	-
-oa	-	coa	-	foa	goa	hoa	-	koa	loa	moa	noa	poa	roa	soa	toa	-	zoa
-oe	-	-	-	-	-	-	-	koe	loe	-	noe	-	-	soe	toe	-	-
-oi	boi	coi	-	foi	goi	hoi	-	koi	loi	moi	noi	poi	roi	soi	toi	voi	zoi
-oo	-	-	-	-	-	hoo	-	koo	-	moo	noo	-	-	-	too	-	-
-ou	bou	cou	dou	-	-	hou	-	kou	lou	mou	nou	pou	rou	-	tou	-	zou
-ua	bua	-	dua	fua	gua	-	jua	kua	lua	-	nua	pua	rua	sua	tua	-	zua
-ue	bue	cue	-	-	gue	hue	jue	kue	lue	mue	nue	pue	ruе	sue	tue	-	zue
-ui	bui	cui	dui	fui	gui	hui	jui	kui	lui	mui	nui	-	ruい	sui	tui	-	zui
-uo	buo	cuo	duo	fuо	guo	-	juo	kuo	luo	muo	nuo	puo	-	suo	tuo	-	zuo
-uu	buu	-	-	-	guu	-	-	kuu	-	muu	nuu	puu	ruu	suu	tuu	-	zuu

## Paradigm M: ALPHABET WORDS

Each of the 26 Loglan phonemes has been combined with 6 alphabetic suffixes as follows:

If a vowel, with:		If a consonant, with:	
-ma	Latin capital	-ai	Latin capital
-si	Latin lower case	-ei	Latin lower case
-fi	Greek lower case	-eo	Greek lower case

Greek capitals are generated by prefixing **gao** to the phoneme for consonants, and **gao**, for vowels. This generates a pool of 94 alphabet words and signs which may be used as variables or constants, in dimensioned numbers and acronyms, or for the spelling of words.

Latin Letters				Greek Letters <sup>1</sup>				
Capitals		Lower Case		Capitals		Lower Case		
Sign	Word	Sign	Word	Sign	Word	Sign	Word	
A	Ama	a	asi	<i>A</i>	gao,afi	$\alpha$	afi	(alpha)
B	Bai	b	bei	<i>B</i>	gaobeo	$\beta$	beo	(beta)
C	Cai	c	cei	<i>X</i>	gaoceo	$\chi$	ceo	(chi)
D	Dai	d	dei	$\Delta$	gaodeo	$\delta$	deo	(delta)
E	Ema	e	esi	<i>E</i>	gao,efi	$\epsilon$	efi	(epsilon)
F	Fai	f	fei	<i>F</i>	gaogeo	$\gamma$	geo	(gamma)
G	Gai	g	gei	<i>I</i>	gao,ifi	$\iota$	ifi	(iota)
H	Hai	h	hei	$\Xi$	gaojeo	$\xi$	jeo	(xi)
I	Ima	i	isi	<i>K</i>	gaokeo	$\kappa$	keo	(kappa)
J	Jai	j	jei	$\Lambda$	gaoleo	$\lambda$	leo	(lambda)
K	Kai	k	kei	<i>M</i>	gaomeo	$\mu$	meo	(mu)
L	Lai	l	lei	<i>N</i>	gaoneo	$\nu$	neo	(nu)
M	Mai	m	mei	$\Omega$	gao,ofi	$\omega$	ofi	(omega)
N	Nai	n	nei	$\Pi$	gaopeo	$\pi$	peo	(pi)
O	Oma	o	osi	$\Theta$	gaoqeo	$\theta$	qeo	(theta)
P	Pai	p	pei	<i>P</i>	gaoreo	$\rho$	reo	(rho)
Q	Qai	q	qei	$\Sigma$	gaoseo	$\sigma$	seo	(sigma)
R	Rai	r	rei	<i>T</i>	gaoteo	$\tau$	teo	(tau)
S	Sai	s	sei	$\Upsilon$	gao,ufi	$\upsilon$	ufi	(upsilon)
T	Tai	t	tei	$\Psi$	gaoveo	$\psi$	veo	(psi)
U	Uma	u	usi	<i>Z</i>	gaozeo	$\zeta$	zeo	(zeta)
V	Vai	v	vei					
W	Wma	w	wsi					
X	Xai	x	xei					
Y	Yma	y	ysi					
Z	Zai	z	zei					

<sup>1</sup> As Greek does not contain the Loglan sounds **c**, **j**, and **v**, it has been necessary to assign the Greek letter-words for **chi**, **xi**, and **psi** rather arbitrarily to these sounds. This leaves two Greek letters unused, namely **eta** and **omicron**.

## Paradigm N: OPTIONAL CASE TAGS

With optional case tags, the arguments of a predicate can be put in non-standard order. The case tags listed below in the table are semantic case tags; another set of case tags are non-semantic and based on the standard order of the arguments of the unconverted predicate: **zua** = “the normally first argument”; **zue** = “the normally second argument”; **zui** = “the normally third argument”; **zuo** = “the normally fourth argument”; and **zuu** = “the normally fifth argument”.

beu	B	Beki	(object)	“-/in”	Patients, Parts, Properties
cau	C	Canli	(quantity)	“by/for”	Quantities, Amounts, Values
dio	D	Dirco	(direction)	“to/for”	Recipients, Beneficiaries, Destinations
foa	F	Folma	(full)	“in/of”	Wholes, Sets, Collectivities
jui	J	Junti	(young)	“than”	Lessers in greater/lesser than relations
kao	K	Kakto	(act)	“-/by”	Actors, Agents, Doers
neu	N	Nerbi	(necessary)	“under”	Conditions, Fields, Circumstances
pou	P	Proju	(produce)	“-”	Products, Outputs, Purposes
goa	G	Groda	(big)	“than”	Greaterers in greater/lesser than relations
sau	S	Satci	(start)	“from”	Sources, Origins, Reasons, Causes
veu	V	Vetci	(event)	“by/via”	Events, States, Deeds, Means, Routes, Effects

