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Unidirectional word order shift and universal basic word order

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1 Introduction

Basic word order variation has long been one of the hottest topics in the field of typology, principles-and-parameters theory, and diachronic syntax. As for the subject (S), the object (O), and the verb (V), there are logically six possible word orders. However, the majority of world languages choose either SOV or SVO (cf. Greenberg (1963), Tomlin (1986), and Dryer (1992)). Note that the basic word order is not the problem with the relative order S, O, and V : It might strongly be connected with other syntactic configurations. The order of head to its complement tends to be consistent across different constituents in the same language, such as the relative order of an adjective and a noun, the location of adpositions, question markers, and so on. It is assumed in the principles-and-parameters approach that the cross-linguistic differences of basic word orders can be reduced to the parametric theory of word order, the head-complement parameter, by which our languages can be classified into only two types : Head-initial languages like English and head-final languages like Japanese. Furthermore, the diachronic change of word order (e.g. from SOV to SVO in English) could be explained by parameter resetting. On the other hand, Kayne's (1994) universal base hypothesis (UBH) is a challenging and attractive approach, in which SOV is derived from SVO and the [spec]-[head]-[complement] is the only base order in Universal Grammar (UG). If his theory is tenable, we can dispense with even the head-complement parameter and therefore make UG more minimal. In this way, theories of word order have been more and more elaborated and sophisticated. However, they lack a number of important perspectives such as language evolution. There is a strong possibility that SOV is the original word order and has gradually been shifted to SVO and VSO.

With these in mind, this paper discusses the unidirectional shift from SOV to SVO and deals with the problems with Kayne's (1994) universal base hypothesis (UBH). The present study further claims that the head-complement parameter in the sense of Principle and Parameters Theory does not exist and that some other harmony theory plays a central role in the theory of argument structure. Specifically, Cinque (2005) and the Final-over-Final Constraint (FOFC) should be revised.

2 Issues with basic word order variation

Greenberg's (1963) linguistic universals, based upon a study of 30 languages, show us two important points. One is a statistical distribution. That is to say, there are six logically possible word orders with respect to S, V, and O. According his Universal 1, the subject tends to precede the object in declarative sentences. This means that SOV, SVO, and VSO are more dominant than VOS, OVS, and OSV. More specifically, SOV and SVO account for approximately 80% of all orders. In addition, WALS[1] shows a similar tendency; there are 565 SOV languages (41.0%) and 488 SVO languages (35.4%) among 1377 languages[2].

(1)	SOV	SVO	VSO	VOS	OVS	OSV	No Dominant Order
	565	488	95	25	11	4	188
	41.0%	35.4%	0.07%	0.02%	0.008%	0.003%	13.7%

Another point is that basic word orders are associated with linear orders of other syntactic elements. Consider Greenberg's Universal 2, 3, and 4.

(2) Universal 2

In languages with prepositions, the genitive almost always follows the governing noun, while in languages with postpositions it almost always precedes.

(3) Universal 3

Languages with dominant VSO order are always prepositional.

(4) Universal 4

[1] The WALS is the abbreviation of *The World Atlas of Language Structures,* which is a database of 192 language properties such as phonological, grammatical, and lexical ones with visual maps.
[2] Available online at http://wals.info/chapter/81. The data was accessed on Oct 21, 2014.

With overwhelmingly greater than chance frequency, languages with normal SOV order are postpositional.

These correlations[3] become clearer if we adopt the head-complement parameter in the sense of principles and parameters theory (Chomsky (1981) and Chomsky and Lasnik (1993)), by which all languages can be classified into either head-initial or head-final languages because the parameter holds across categories within the same language in the theory of X-bar structure. Therefore, the value of the parameter is set for a given category(e.g. V) ; the order is automatically fixed in all other categories. In this view, for example, Universal 2 indicates that both the head P of a prepositional phrase and the head D of a genitive phrase precede their complement NP, given Abney's (1986)proposal that the head of a determiner phrase (DP) is the locus of a genitive head. Next consider Universal 3 . The languages with VSO order are taken to be head-initial. It is important to note that the VSO order is derived from SVO. V moves over S to a higher functional head (probably, C). Therefore, both VSO order and having prepositions mean the property of head-initial languages. Finally, Universal 4 simply means that if the head of VP follows its complement, the head of PP also follows its object.

3 Kayne (1994)'s Universal Base Hypothesis

One of the mysteries about the head-complement parameter is the reason of fixing its value. It is widely known (cf. Borer (1984) and Chomsky (1991)) that parameters are constrained in such a way as to refer to properties of functional heads. For example, a strong feature of V is responsible for overt V movement (to a higher functional head) as long as we further assume that strong features are uninterpretable at interface levels[4]. In V 2 languages, the strong feature of C triggers an extra overt V movement to C. Overt N-to-D movement is also driven by a strong N feature on D in the same fashion. On the other hand, no functional feature seems to be involved in the directional-parameter. Some heads are indeed functional (e.g. C, T, and D), but V is lexical.

One solution to this is to do without the head-complement parameter like Kayne's (1994) Universal Base Hypothesis (UBH), in which SVO is the universal word order

[3] See also Dryer (1992), who claims that VO languages tend to be both prepositional and initial complementizer (the Head-Dependent Theory).

[4] All the uninterpretable features must be checked before Spell-Out ; or the derivation will crash (or will be gibberish) at LF and PF.

and SOV is derived from SVO[5] on the assumption that hierarchical structure maps universally onto linear order by means of *the Linear Correspondence Axiom* (LCA), saying that if a non-terminal category X c-commands another non-terminal category Y, all the terminal nodes dominated by X must precede all of the terminal nodes dominated by Y. The LCA makes an empirical prediction. In his theory, specifiers universally precede heads and heads precede their complements.

（5）　[XP Spec [X' [X Head Complement]]]

As a result, head-final languages like Japanese require more movement operations than head-initial languages like English in order to get superficial word orders. See below. In （7）, the object DP *sono hon-wo* moves over V to [Spec, VP] and then VP moves over T to [Spec, TP] although he does not mention the triggers of movement at all.

（6）　Tom will buy the book.
[TP Tom [T' [T will [VP [V' [V buy [DP the book]]]]]]]

（7）　*Tom-ga sono hon-wo kau-darou.*
[TP *Tom-ga* [TP [VP [DP *sono hon-wo*] [V' [V *kau* t_{DP}]]] [T' [T *darou* t_{VP}]]]

Similarly, DP moves to [Spec, PP] in PP to produce a postpositional phrase and TP moves to [Spec, CP] in CP[6], respectively. See below.

（8）　the derivation of postpositional phrases
a. [PP [P' P DP]]
b. [PP DP_i [P' P t_i]]

（9）　the derivation a final complementizer
a. [CP [C' C TP]]
b. [CP TP_i [C' C t_i]]

There is no discussion about diachronic syntax and language evolution in Kayne (1994). However, we would like to know how and why English shifted from an SOV

[5] Greenberg (1963) mentions that dominant VSO has SVO as an alternative order (Universal 6). This means that VSO is derived from SVO.
[6] Kayne argues that the idea can explain the reason why wh-phrases do not move to [Spec, CP] in SOV languages.

language to an SVO language. Why is SOV used more frequently than SVO although the former requires much complicated movement operations? We also have to investigate that the LCA has been a set of UG since the birth of human language.

4 Evidence against underlying SVO order

In this section, we will see a number of evidence that SOV rather than SVO is an underlying order in human language.

4.1 the Proto-Indo-European (PIE) language

English is a member of the Germanic languages, which are a branch of the Indo-European language family. The Proto-Indo-European （PIE） is the hypothetical common ancestor of the Indo-European languages. First of all, the PIE appears to have been SOV although it had a flexible order. From the chronological viewpoints, Hittite （Anatolian） and Vedic Sanskrit[7] （Indo-Iranian） are the oldest languages of the Indo-European language family but became extinct. According to Lehmann (1974), they were SOV languages. The present Sanskrit, which is its descendant and survives still now, has an SOV basic order. Further, He argues that "by the time of Classical Greek and Latin, the OV syntactic pattern of the PIE has been largely modified to a VO pattern."

4.2 Language shift of English

As time goes by, languages change. At least, English has gradually undergone changes in many respects. It has been long assumed that English was originally a head-final language like Japanese. However, the SVO order became dominant by the period of Old English （OE） although SOV sentences were sporadically attested until the end of Middle English （ME） as long as the object is pronominal. Example (10) shows an INFL-final sentence, which is also attested in Present-day German （See (11)).

(10) *þet ge hit magon gegangan* ...
that ye it may win/gain
COMP S O AUX V

[7] These languages can be traced as early as 2nd millennium BCE.

(11)　*der Mann, den ich gestern Abend gesehen habe*
'the man, who I yesterday evening seen have'

Note that the head-final in Old English was not attested across categories: Adpositions and determiners are placed before the nominal object and the complementizer *that* precedes the sentential complement all the time.

4.3 Language Evolution

Gell-mann and Ruhlen (2011) try to connect word order distribution to human migration patterns based on the assumption that all or almost all attested languages share a common origin, which is consistent with the idea of Universal Grammar in the Minimalist Program. They claim that the emergence of other word orders began about 20,000 years ago, as a result of human migration out of Africa. Their phylogenetic tree of human languages reveals a number of interesting points in language evolution: (i) if there was a language from which all or most attested languages derive, it had the word order SOV; (ii) except in cases in diffusion, the direction of change is almost unidirectional with a progress of SOV > SVO > VSO or VOS[8] (Gell-mann and Ruhlen (2011: 17290)).

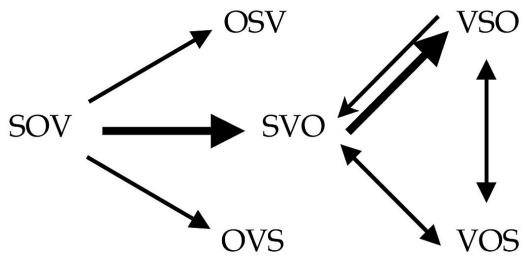

Figure 1 : Evolution of word order

Figure 1 illustrates the possible directions of word order change. The heavy lines indicate the most frequent changes caused by natural drift without diffusion and the other lines show other possible changes. In Fig. 1, the most unmarked drift is from SOV to SVO and then to VSO. Obviously, the change between SOV and SVO is unidirectional although some the back-shift from VSO to SVO is attested. It is widely known that some Arabic dialects permit both SVO and VSO orders. Within

[8] Givon (1977, 1979) already argued that most of the world's language families are derived from SOV. He proposed, unlike Genn-Mann and Ruhlen, that the change took place from SOV to VSO and then to SVO.

the framework of the minimalist program （MP）, this is explained by the internal merge of V to T in the overt syntax and the subject-in-situ. T features are too weak to attract to the subject to [Spec, TP] in VSO orders.

(12) $[_{TP}$ ø $[_{T'}$ $[V_i$+T$]$ $[_{VP}$ Subj $[_{V'}$ t_i Obj $]]]]$

This correlation between SVO and VSO is also compatible with Greenberg's Universal 6, which says that *all languages with dominant VSO order have SVO as an alternative or as the only alternative basic order.* It should be noted, moreover, that SVO ought not to be an underlying structure in human language if the SOV order is historically and evolutionally original.

4.4 Head movement in morphology

In this section, let me make a brief remark on a common morphological operation in syntactically different languages although it might be off the track. The Right-hand Head Rule （RHR） proposed by Williams （1981） requires all English words to be right-headed in compounding as in （13） and derivation as in （14）. This entails that the rightmost constituent determines all the properties （meanings and lexical category） of the whole[9].

(13) a. green(A) ＋house(N) greenhouse(N)
b. hand(N) ＋made(A) handmade(A)

(14) a. inform(V) ＋-ation(N) information(N)
b. revolution(N) ＋-ize(V) revolutionize(V)

It is interesting to note that English and Japanese show the same pattern in morphology although their head positions are different in syntax. In （15a） below, N+V compounds are formed by a head movement of N （theme argument） to [Spec, VP] in English. As a result, the head of the compound is the verb *test* is located in the right position. This means that English is a syntactically head-initial but morphologically head-final. In （15b）, on the other hand, there is no clear evidence that N movement takes place in Japanese. In anyway, the head of the compound is in the rightmost position.

[9] On the contrary, there are also left-hand head languages like Hebrew, Vietnamese, Samoan, Yoruba, and so on.

(15)　a. blood-test (N+V)[10]
　　[VP blood [V' test (blood)]]
　　b. *Ketsueki-kensa* (*suru*)
　　[VP *ketsueki-wo* [*V'* (*ketsueki-wo*) *kensa-suru*]]

If the Mirror Principle (Baker (1985)) is applied here, we can say that English and Japanese might have the same underlying structure although it has been assumed that they have a different basic word order.

4.5 Summary

We have discussed the distribution of basic word order and found out that SOV is the most unmarked word order out of the 6 basic word orders. If this is tenable, SOV derives other five orders, which totally contrasts with Kayne's (2004) view. In the next section, we will consider whether UG should be equipped with the head-complement parameter or not.

5 The Head-complement parameter and harmonic word orders

One of the most attractive reasons to postulate the head-complement parameter lies in language acquisition: If a child hears and notices the head position of a given phrase (e.g. V of VP) in a daily-conversation, he/she is able to set the parameter value and the order of the head in other categories (N, D, P, T, C, and so on) will be fixed automatically without language experience. This enables children to save times to acquire their mother language because they do not need to be exposed to all the categories. It is indeed that the position of some heads might be interactively determined, but that there is some evidence against the view that the head-complement parameter works for all the syntactic categories. For example, Old English and Present-day German are V-final, but prepositional and C-initial. In this section, we will review some studies on word order and consider the possibility to revise the parameter.

5.1 Cinque (2005)

Greenberg's Universal 20 states that "*when any or all of the items* (*demonstrative, numeral, and descriptive adjective*) *precede the noun, they are always found in that*

[10] This compound can be converted to N+N via zero derivation.

order. If they follow, the order is either the same or its exact opposite." From the viewpoint of the head-complement parameter, this means that the order Dem > Num > A is only allowed in pronominal position while either Dem > Num > A or A > Num > Dem is allowed in post-nominal position. Cinque （2005） investigates the internal structure of DP and finds out that only 14 orders appear to be attested out of the 24 mathematically possible orders of the four elements. The attested orders are shown in （16）.

（16）	a. Dem Num A N	very many languages	A-N
	b. Dem Num N A	many languages	N-A
	c. Dem N Num A	very few languages	N-A
	d. N Dem Num A	few languages	N-A
	e. A N Dem Num	very few languages	A-N
	f. N A Dem Num	few languages	N-A
	g. Dem A N Num	very few languages	A-N
	h. Dem N A Num	many languages	N-A
	i. N Dem A Num	very few languages	N-A
	j. Num A N Dem	very few languages	A-N
	k. Num N A Dem	few languages	N-A
	l. N Num A Dem	few languages	N-A
	m. A N Num Dem	very few languages	A-N
	n. N A Num Dem	very many languages	N-A

（Cinque （2005：319））

With regard to the relative order of N and A, the N-A order has 9 patterns while the A-N has 5 patterns. (16a) and (16n) are the most typical example of SOV and SVO languages, respectively. In addition, (16b) and (16h), where the head N precedes Adj, are also productive. These orders are produced by mixed head-movement and XP-movement （to Spec）. Unattested patterns can also be explained in the same fashion.

The most remarkable discovery of Cinque （2005） is to illustrate harmonic and disharmonic word orders mathematically. The harmonic word order means consistent head-initial or head-final order as in Japanese. On the other hand, the disharmonic word order means a mix of head-initial and head-final orders like German and Old English subordinate clauses. Strictly speaking, the disharmonic word order is inconsistent with the head-complement parameter. However, disharmonic patters

might be so limited and controlled by some language mechanisms such as *the Final-over-Final Constraint* (Biberauer, Holmberg, and Roberts (2014)).

5.2 the Final-over-Final Constraint (FOFC)

Another study of word order variation is Biberauer, Holmberg, and Roberts (henceforth, BHR) (2014), who postulate a universal constraint on phrase structure configurations called the Final-over-Final Constraint (FOFC), given in (18). It follows from (17) that the configuration (18) is ruled out.

(17) The Final-over-Final Constraint (informal statement)
A head-final phrase αP cannot dominate a head-initial phrase βP, where α and β are heads in the same extended projection[11].

(18) *$[_{\beta P}\cdots[_{\alpha P}\cdots\alpha\ \gamma P]\ \beta\cdots]$

(BHR (2014: 171))

Put it simply, a head-initial category cannot be the immediate structural complement of a head-final category if they are in the same extended projection. More specifically, they discuss the following patterns, as in (19).

(19) a. [[O-V]-Aux] Old English, German, Dutch, Japanese
b. O-Aux-V
c. [Aux-[O-V]]
d. V-Aux-O
e. [Aux-[V-O]] Present-day English, Old English
f. *[[V-O]-Aux] unattested

(19f) is an example of the configuration (18) and thus ungrammatical (unattested).

It is well-known that OE is a free word order language with many linear order patterns in TP. Out of 6 logically combinations, only (20f) is unattested. This is again due to FOFC.

(20) a. AUX-Inf-PastParticiple [T 1 －[T 2 －VP]] (Present-day English)
...sceold beon geborn

[11] See Grimshaw (1991, 2005) for the notion of extended projection.

b. Aux-PastParticiple-Inf　[T 1 −[VP-T 2]]
...moste.....geteald beon
c. PastParticiple-Inf-Aux　[[VP-T 2] −T 1]
oferwunnen beon wolde
d. PastParticiple-Aux-Inf　[[VP [T 1 −[T 2]]
geboren sceolde weorðan
e. Inf-Aux-PastParticiple　T 2 −[T 1 −[VP]]
weorðan sceolde toslopena
f. Inf-PastParticiple-Aux　*[[T 2 −VP]-T 1]

FOFC can account for Cinque's (2005) question : Phrasal movement except NP is not permitted in the nominal domain. For example, the order *Num > NP > Dem*, which listed as an unattested order in Cinque (2005), is derived by NumP-movement to [Spec, DemP], as shown in (21). (21b) clearly violates FOFC.

(21) a. [$_{DemP}$ ø [Dem [$_{NumP}$ Num NP]]]]
b. [$_{DemP}$ [Num NP]$_i$ [Dem [$_{NumP}$ t_i]]]

Nevertheless, there seem to be some counterexamples for FOFC. Example (22) shows that a head-initial DP or PP can be immediately dominated be a head-final VP in German. This does not violate FOFC because it holds only within the same extended projection : The higher head V is [+V] while the lower head D is [-V].

(22) *Johann hat* [$_{VP}$ [$_{DP}$ *einen Mann*] *gesehen*].
Johann has a man seen　(BHR (2014 : 197))

In this way, BHR's theory simply predicts harmonic word orders in each domain but permits disharmonic word orders in mixed domains. This analysis casts doubt on the view that the head-complement parameter holds for cross-categories. It is possible to say that the parameter might work differently in each domain. In the next section, it will be shown that there are some patterns incompatible with the traditional head-complement parameter and FOFC.

5.3 WALS

I investigated a number of head-complement order combinations in the WALS data. First, consider the correlation of the position of C and VO/OV orders.

(23)　a. [OV] COMP　14
　　b. COMP [OV]　14
　　c. [VO] COMP　0
　　d. COMP [VO]　63

(23a) is the ideal combinations of the head-final language like Japanese while (23d) is the best order for the head-initial language like English. Surprisingly, there are 14 examples in which V is head-final but C is head-initial as in (24b).

Examples (24a-d) illustrate the correlation of V and P. The numbers of (24a) and (24d) are very large because they are the typical examples of head-final/initial languages. Like (23b), (24b) is an counterexample against the head-complement parameter: V is head-final while P is head-initial. Apparently, (24c) violates FOFC if P takes VP as its direct complement. However, there is no problem because P [+N, -V] and V [-N, +V] do not belong to the same extended projection.

(24)　a. [OV] & PostP　472
　　b. [OV] & PrepP　14
　　c. [VO] & PostP　42
　　d. [VO] & PrepP　456

What I would like to emphasize here is that there are some cases that are not consistent with the head-complement parameter in the sense of the Principles and Parameter Theory[12]. As shown in (26), there are a number of counterexamples to show that the head-complement parameter holds across categories[13].

(25)　a. [OV] & DemN　317　!
　　b. [OV] & NDem　141
　　c. [VO] & DemN　155
　　d. [VO] & NDem　374　!

[12] Here, I mean "consistent head-initial or final order across categories".
[13] Dem and Gen stands for Demonstrative (*this* or *that*) and Genitive (*my* or *Tom's*), located in the head position of D.

Note that inconsistent combinations （e.g.(25a） and （25b)） are more frequent than consistent combinations ((25b） and （25c)). Further, the genitive head has the same tendency, as in （26).

(26) a. [OV] & GenN 112 !
b. [OV] & NGen 12
c. [VO] & GenN 30
d. [VO] & NGen 63 !

These data clearly show that the head order of V and N can behave differently. It can be said, that is to say, that the head-complement parameter DOES work differently in each extended projection. This is not totally consistent with the traditional view that the head-complement parameter holds across the category. As mentioned above, Old English was an SOV order with initial-COMP and initial P. Even Hittite permitted both initial and final COMP although its position might depend on the focus structure. The present study claims that the head-complement parameter does not exist in a traditional sense. In this point, my theory partly agrees with Kayne's （1995） view that the head-directionality parameter is not necessary because SVO is the only underlying base order in human languages.

Finally, we found out some examples of violating FOFC.

(27) FOFC violation in the WALS data
a. PostP & GenN 442
[PP [DP G NP] PostP]
b. PostP & DemN 272
[PP [DP D NP] PostP]

If we assume P is nominal in the sense of Grimshaw （2001), they are clearly not consistent with the harmonious structure.

6 Concluding remarks

It has long been assumed that the head-directionality parameter plays an important role in theoretical linguistics. The parameter is so attractive in that once the head position in a given category (e.g. V) is fixed, all the other head positions (e.g. N, D, P, T, and C) are automatically set. As a result, the parameter can explain why a child does acquire the syntactic structure of his/her mother tongue even though he/she does not have experience with all categories. In principle and parameter theory, it (and X-bar structure) enabled us to simplify the syntactic structure.

Kayne's (1995) claim that SVO is the only underlying word order (the UBH) totally contradicts such a traditional view. However, we have argued that SOV should be the only basic structure from historical, evolutional, and statistical viewpoints. Nevertheless, the present study partly shares the same view with Kayne (1995) in that the head-directionality parameter does not work in a traditional sense. As Cinque (2005) and Biberauer, Holmberg, and Roberts (2014) show, there are harmonious and disharmonious word orders. There is not a clear answer to what and how much the harmony theory can explain. It is possible to say from the present study that the head-complement parameter behaves differently within each extended projections in the sense of Grimshaw (2001). This agrees with the view that internal representations of nouns and verbs are identified in different parts of the network architecture (cf. Parisi (2004) and Vigliocco et al. (2011)). Or it might be possible to say that language structures should be analyzed based on L and E systems, as in Miyagawa et al. (2014). Appendix I shows the Functional-Lexical linear and hierarchical combinations of syntactic structures (the data comes from WALS). What the figure means remains open for further research.

Appendix 1 : The List of Head Combinations

	UPPER		LOWER		FOFC Violation	EXAMPLE	MEMO
1	F	F	L	L	#		
2	F	F	L	F	#		
3	F	F	F	F	#	*unattested*	
4	F	F	F	L	#		
5	F	F	L	L			
6	F	F	L	F			
7	F	F	F	F		*unattested*	
8	F	F	F	L			
9	F	F	L	L			
10	F	F	L	F			
11	F	F	F	F		*unattested*	
12	F	F	F	L		Comp-T-v-V	
13	F	F	L	L			
14	F	F	L	F			
15	F	F	F	F		*unattested*	
16	F	F	F	L			
17	F	L	L	L	#		
18	F	L	L	F	#		
19	F	L	F	F	#		
20	F	L	F	L	#		
21	F	L	L	L			
22	F	L	L	F			
23	F	L	F	F			
24	F	L	F	L			
25	F	L	L	L		[Comp [VO]], [Aux [VO]], [Neg [VO]]	
26	F	L	L	F			
27	F	L	F	F			
28	F	L	F	L		[PreP [Gen-N]]	
29	F	L	L	L		[PreP&[OV]], [Neg [OV]]	
30	F	L	L	F		[Comp [OV]], [PreP [N-Gen]]	
31	F	L	F	F		v-VP-T-C	
32	F	L	F	L			
33	L	L	L	L	#	*unattested*	
34	L	L	L	F	#		
35	L	L	F	F	#		
36	L	L	F	L	#	[[Aux [D NP] V]]	
37	L	L	L	L		*unattested*	
38	L	L	L	F			
39	L	L	F	F			
40	L	L	F	L			
41	L	L	L	L		*unattested*	
42	L	L	L	F			
43	L	L	F	F			
44	L	L	F	L			
45	L	L	L	L		*unattested*	
46	L	L	L	F			
47	L	L	F	F			
48	L	L	F	L			
49	L	F	L	L	#	[[VO] Aux]], [[VO]&PostP],[[VO] Neg]	
50	L	F	L	F	#		
51	L	F	F	F	#		
52	L	F	F	L	#	[[Gen-N] PostP], [[Dem-N] PostP]	
53	L	F	L	L		[[OV]&PostP]	
54	L	F	L	F		[[N-Gen] PostP]	
55	L	F	F	F			
56	L	F	F	L			
57	L	F	L	L			
58	L	F	L	F			
59	L	F	F	F			
60	L	F	F	L			
61	L	F	L	L		[[OV] Comp], [[OV] Aux]	
62	L	F	L	F			
63	L	F	F	F			
64	L	F	F	L			

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