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Interface Strategies

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- Shardi, G. (1994). 'Reference and proper names: a theory of N-Movement in Syntax and Logical Form', *Linguistic Inquiry* 25, 609-665.
- van der Lely, A. and E. Weerman (1997). *Flexible Syntax. A Theory of Case and Arguments*. Utrecht Institute of Linguistics OTS, University of Utrecht, Utrecht.
- van der Lely, T. (1990). *Events in the Semantics of English: A Study in Subatomic Semantics*. MIT Press, Cambridge.
- van der Lely, G. (1996). 'Two Subject Positions in Scottish Gaelic: The Syntax-Semantics Interface', *Natural Language Semantics* 4, 165-191.
- van der Lely, E. (1996). *Primitives of Binding*. ms. Utrecht Institute of Linguistics OTS, Utrecht.
- van der Lely, H. van (in press). 'The extension of projections'. To appear in the *Tsuri University Working Papers in Linguistics*.
- van der Lely, M. (1995). 'Indefinites, Adverbs of Quantification and Focus Semantics'. In G. N. Carlson and F. J. Pelletier (eds), *The Generic Book*. Chicago University press, Chicago, 265-299.
- van der Lely, A. (1996). 'Bod in the present tense and in other tenses'. In R. D. Borsley and I. Roberts, (eds), *The Syntax of the Celtic languages*. Cambridge University Press, Cambridge/New York, 125-170.
- van der Lely, M. (1995). *Participial Passive and Aspect in Russian*. Ph. D. dissertation. Utrecht Institute of Linguistics OTS, Utrecht.
- van der Lely, T. (1996). 'The Phrase Structure of Tense'. In J. Rorvick and L. Zaring (eds), *Phrase Structure and the Lexicon*. Kluwer, Dordrecht, 277-291.
- van der Lely, H. de (1993). *Adverbs of Quantification: A Generalized Quantifier Approach*. New York, Garland.
- van der Lely, M. E. (1994). *Thematic Structure in Syntax*. MIT Press, Cambridge.
- van der Lely, J. (1990). 'Kinds and generic Terms'. In M. Stokhof and L. Torrovič (eds), *Proceedings of the Seventh Amsterdam Colloquium, ITLL*. Amsterdam, 685-705.
- van der Lely, J. (1992). *X'-Syntax — X'-Semantics: On the Interpretation of Functional and lexical heads*. Ph. D. dissertation. Utrecht Institute of Linguistics OTS, Utrecht.

Edit Doron & Shraga Assif

Interface Word-Order*

1. Introduction

One of the generalizations about Indo-European which was accepted among neogrammarians was Wackernagel's Law, which stated that enclitics originally occupied the second position in the sentence (see Collinge 1985). Kaisse 1985 reformulates Wackernagel's law as the following typological universal, where S' clitics are defined by Kaisse 1985: 76 as 'elements appearing in COMP':

'Wackernagel's Law' (Kaisse 1985: 81)

All languages with S' clitics place those clitics in second position, after the first stressed constituent (or word) of the clause, regardless of the category of that constituent (or word).

This typological generalization is intended to describe the distribution of Serbo-Croatian auxiliaries, which follow either the first constituent or the first word, as shown in (1a-b) respectively, and also that of Syriac conjunctions, which follow the first word, as in (1c):

- (1) a. Ovu knjigu **sam** kupio (Serbo-Croatian)
this book AUX-1sg bought
b. Ovu **sam** knjigu kupio
this AUX-1sg book bought
'I bought this book.' (Halpern 1995: 50, example (86))
c. sugo **ger** men-hun krisiTyone =waw (Syriac)
many for of them Christians were-3MP
'For many of them were Christians.' (Jul 199:11)

Wackernagel's Law as formulated by Kaisse constitutes a challenge to linguistic theory. On the one hand, it seems to be empirically robust and to hold in a very large variety of

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genetically and typologically unrelated languages. Yet on the other hand, the disjunctive domain it designates for clitic placement, a *constituent or word*, is in no way a linguistically natural domain. Wackernagel himself, it should be noted, was not the one who introduced this unnatural domain. His work (Wackernagel 1892) discussed the classical Indo-European languages, and noted that in those languages, enclitics tend to appear following the initial *word* of the sentence.

Recently, several attempts have appeared in the literature to incorporate Wackernagel's Law into linguistic theory. Anderson 1992, 1993, following Klavans 1980, 1985, proposes to view Wackernagel's Law as the application of morphology at the sentence level. According to this view, clitics are 'phrasal affixes' which attach to the sentence on a par with the way in which word-level affixes attach to the word. A clitic in a sentence is much like an infix in a word, skipping an extrametrical domain. The extrametrical domain for cliticization is either phonological in nature (a word) or syntactic (a constituent), in the same way as there are various extrametrical domains for infixation at the level of the word (a segment, a syllable etc.).

Another attempt at explaining the unnatural disjunctive domain of Wackernagel's Law is Halpern 1995. Halpern formulates a rule which adjoins a clitic to an adjacent phonological word ω . In this he follows Hayes 1989, Nespor and Vogel 1986, Zec and Inkelas 1990, 1991 and Sadock 1991, who characterize a clitic as a lexical item with a special prosodic subcategorization frame, usually the word, with which it forms another phonological word (or a 'clitic group'): $[\omega, [\omega] _]$. According to Halpern's rule, if there is a constituent α to the left of a sentence-initial enclitic, then the enclitic adjoins to the last word of α , as in (2a). Otherwise, the enclitic undergoes what Halpern calls 'prosodic inversion', and adjoins to the first word of the sentence, as in (2b):

- (2) Clitic Group formation (Halpern 1995: 64)
- a. $[\omega \dots [\omega Y]] \quad [s = cl [\omega X] \dots] \rightarrow \dots [\omega [\omega Y] = cl] [\omega X] \dots$
- b. otherwise: $[s = cl [\omega X] \dots] \rightarrow [\omega [\omega X] = cl] \dots$

Basically, the accounts of Anderson and Halpern constitute a reformulation within their own respective theories of the unnatural disjunctive formulation of Wackernagel's Law. Here we propose a different approach. We assume, following Selkirk 1984, 1986, neither a special morphological characterization of clitics (which Anderson does) nor a special rule of cliticization (which Halpern does). Rather, the placement of clitics is taken to be part of the general mapping in the syntax-phonology interface from syntactic domains to prosodic domains. We propose that it is the syntactic properties of clitics which determine the particular subdomain of Wackernagel's Law relevant to their distribution. Since the rules of the syntax-phonology interface are sensitive to syntactic information, clitics with different syntactic characteristics are mapped by the same rules to different positions. A clitic which is a projecting head, i.e. heads the phrase to which it belongs (such as an auxiliary, which heads its clause), is syntactically attached to a complement which itself is a maximal projection. On the other hand, a clitic which is a non-projecting head (e.g. a conjunction) is syntactically attached to a non-maximal projection. This difference is crucial for the mapping to phonological domains. A clitic which is syntactically attached to a maximal projection is not mapped to it, but to a preceding

constituent. Such a clitic must therefore be preceded by a constituent, and we call its syntactic position CL-2. On the other hand, a clitic which is attached to a non-maximal projection is mapped to that same projection, and attached to its first word. These clitics do not have to be preceded by a constituent, and we call such constructions CL-1. The output of the same rules is therefore very different for the two kinds of clitics:¹ projecting clitics are attached to the first *constituent*, while non-projecting clitics are attached to the first *word*. Unlike Anderson and Halpern, we do not think that there is any clitic which synchronically partakes in both constructions. Rather, the syntactic properties of each of the two types of clitics (projecting and non-projecting) give rise to different syntactic constructions, and the difference in syntactic constructions determines the different interface positions.

2. CL-2

The syntactic notion of *second position*, i.e. following a syntactic constituent, is found in the literature mostly in the context of the discussion of V2 (verb-second) clause structure in the Germanic languages. We propose that the CL-2 structure be viewed as another example of this notion.

As a matter of fact, this view is found in the literature all along. Hale 1973 states the clause-second position of the auxiliary in Walpiri in term of constituents, such as in (3a), where the auxiliary *kapi-na* follows the noun-phrase *this kangaroo*. Since Walpiri allows discontinuous constituents, the auxiliary would appear to follow the first word (the word *this*) in (3b), but in fact it follows the first maximal projection:

- (3) a. wawiri njampu **kapi-na** pura-mi
kangaroo this **future-I** cook-nonpast
'I will cook this kangaroo' (Hale 1973 (15a))
- b. njampu **kapi-na** pura-mi wawiri
this **future-I** cook-nonpast kangaroo
'I will cook this kangaroo' (Hale 1973 (16a))

Hale notes that in general, the auxiliary cannot be sentence initial, as shown in (4a). Yet (4b), with the auxiliary in initial position, is grammatical:

- (4) a. ***-ka-na** wawiri pura-mi
present-I kangaroo cook-nonpast
'I am cooking the kangaroo' (adapted from Hale 1973 (9))
- b. **kapi-na** wawiri pura-mi
future-I kangaroo cook-nonpast
'I will cook the kangaroo' (Hale 1973 (11a))

¹ The exact formulation of the relevant syntax-phonology interface rules is beyond the scope of this paper, but it can be found in Doron and Assif (1997).

Hale's explanation of the asymmetry between (4a) and (4b) is based on the clitic nature of auxiliaries which are less than syllabic in length.² Assuming that the auxiliary is basically sentence initial in Walpiti, as suggested by Hale, it is possible to account for the second-position nature of auxiliary clitics by saying that unless a constituent is scrambled to the front of the sentence, (4a) is ruled out since it involves an enclitic which cannot be prosodically integrated into a word.³

A similar analysis is proposed for Serbo-Croatian by Progovac 1996. She proposes that auxiliary clitics raise to C, and that, as is familiar from the V2 phenomenon, this movement triggers additional movement of some constituent to SPEC-CP:

- (5) a. Taj *čovek* =je voleo Mariju
that man AUX loved Mary-ACC
b. Taj =je *čovek* voleo Mariju
that AUX man loved Mary-ACC
'That man loved Mary.' (Halpern 1995 (2) on p. 16))

In (5a), according to Progovac, AUX is head-moved to C, and the constituent *that man* ends up in SPEC-CP. In (5b), it looks as if AUX is within the constituent *that man*, since it follows the word *that* and precedes the word *man*. But AUX in (5b) follows the first constituent, not just the first word, for according to Progovac, Serbo-Croatian allows raising of determiners. Accordingly, the demonstrative *that* is a constituent proposed to SPEC-CP independently of *man*.

Moreover, in embedded clauses, e.g. (6), an overt complementizer occupies C alongside AUX, obliterating the need for an overt SPEC-CP, thereby creating an asymmetry between main and embedded clauses reminiscent of the one in Germanic, which has been pointed out by den Besten (for example in den Besten 1989):

- (6) Stefan tvrdi [da =mu=ga =je Petar poklonio]
Stefan claims [that him it AUX Peter given]
'Stefan claims that Peter has given it to him as a present.' (Progovac 1996 (20))

As suggested by Anderson 1993, it might be possible to reduce V2 to CL-2, due to clitic-like properties of verbs. Elsewhere (see Halpern and Zwicky 1996) it has been suggested that the combination of V2 and CL-2 in Old Romance conspired to achieve the variation in the ordering of verbs and pronominal clitics of the modern Romance languages.

3. CL-1

We now turn to those clitics which follow the first word. These have been reported in

² (4a) is attested in fast speech, where cliticization is possible to the last constituent of a preceding sentence (cf. Simpson 1991).

³ Hale's own analysis is in terms of a rule of Aux-Insertion, which reorders Aux with the first constituent of the sentence. A similar account for Luisefño can be found in Pullum (1981).

Classical Greek (Denniston 1934, Taylor 1990), Latin (Carlson 1983), Hittite and Sanskrit (Halpern and Zwicky 1996), Tagalog (Schachter 1985), and Dyrhbal (Dixon 1980).

Whereas the domain of CL-2 is the clause (as in the Walpiti and Serbo-Croatian examples above), the domain of CL-1 may be any syntactic constituent, such as the noun phrase, in addition to whole clauses. This is related to the fact that the clitics in CL-2 constructions are complementizers, auxiliaries and pronouns, whereas the clitics in CL-1 constructions are heads which are not selective of their syntactic domain, e.g. conjunctions. As is well known, conjunctions, like *and* for example, connect different types of phrases, not necessarily the clause.

⁴ Our discussion will be based on data from Syriac, a dialect of Aramaic, a language with a class of clitic conjunctions which establish various rhetorical relations such as elaboration, background, explanation, result, contrast, etc. We refer to such conjunctions as *Rhetorical Conjunctions* (RCNs). RCNs mark their syntactic domain as a rhetorical unit with a particular role in the discourse, and moreover, they construct a hierarchy of these rhetorical units. We will assume for lack of a theory of rhetorical structure that it is part of Logical Form.

⁵ We will argue that the structures involving Syriac RCNs are CL-1. Syntactically, they are phrase-initial, and phonologically, they follow the first word of their domain. Semantically, they determine the rhetorical force of the phrase in their domain. We present in (7) a few preliminary examples, and we intend the rhetorical contribution of each RCN to be understood from the italicized portion of the translation of the sentence as a whole.⁵

⁴ Aramaic was the lingua franca of the Middle East for over a millennium, until about the 8th century AD, when it was replaced by Arabic (though Modern Aramaic is still spoken nowadays by Kurdish Jews and Christians and several Christian communities in Syria, Lebanon and Iraq). Hebrew and Aramaic, together with a few extinct languages, form the North-Western branch of the Semitic languages. Syriac belongs to the Eastern Aramaic group, alongside Mandaic and the Aramaic of the Babylonian Talmud. Historically, Syriac flourished AD 200-700, from which period an immense literature remains of writings of the Eastern branch of the Orthodox Church, whose center was in Edessa (present-day Urfa in Turkey). The present study is mostly based on the original Syriac texts of *Julian the Apostate* (c. 525) and *Addai* (c. 400). In addition, we have studied all the RCN examples in the Syriac translations of the Bible, including the Old Testament Peshitta, the apocryphal books of the Old Testament, the old (Sinaitic and Curetonian) versions of the New Testament, and the Peshitta version of the New Testament.

⁵ The transcription of the examples reflects the Western (Jacobite) method for the notation of vocalization and spirantization. The English translations of the examples from *Addai* is from Howard, and that of the examples from *Julian the Apostate* is a revision of the translation by Gollancz. The New Testament examples from *Mt (Matthew)* and *Lk (Luke)* are from the Peshitta version, and their English counterparts are from the King James Version. We use the following abbreviations in glossing the examples: 1/2/3 — 1st/2nd/3rd person, M — masculine, F — feminine, S — singular, P — plural, NOM — nominative, ACC — accusative, GEN — genitive, CS — construct state, PART — participle, IMP — imperative.

An underlined consonant indicates the corresponding fricative, and a capital letter - the corresponding pharyngealized consonant. 9 is the voiced pharyngeal fricative, and ? the glottal

- a. *abgar den malko yairr men kul noš*
 Abgar but king more than every man
 m9oq =wo 9la(y)-w
 grieved-PART-MS =was-3MS on him
 'But King Abgar, more than anybody, grieved over him.' (Add 49:3)
- b. *negrub hokel neHud sedr-oh*
 will-come-near-IP therefore will-join-IP sequence-GEN(3FS)
 d= melt-an
 of word(P)-GEN(IP)
 'Let us therefore draw near to rejoin the sequence of our story...' (Jul 93:22)
- c. *lo ger marpe aloho ido b= mar9i-eh*
 not for slacken-PART-MS god hand off flock his
 'For God will not slacken his hand from off his flock.' (Jul 8:25)
- d. *kmo lam zabnin b9it*
 how many q-u times wished-1S
 'quote-unquote "How many times have I wished ..."' (Jul 139:5)
- e. *Hnan kay boire w= hedyuTe*
 we mod poor-ones and simple-ones
 'What about us, poor simple ones, ...?' (Jul 148:14)
- f. *en ket kad b= ar9o ita(y)-w =wo yesu9 mor-an*
 if i.e. when in earth BE-GEN(3MS) was-3MS Jesus Lord-our
 'If when Jesus our Lord was indeed on the earth ...' (Add 28:10)

e is evidence that RCNs are enclitic to the preceding word rather than, say, proclitic e following word. First, as mentioned by Nöldke 1898: §327, they are attested at end of one word sentences, e.g. *šuloma=w ger* 'For that is the end.' (Apocalypse of ch 69:5). Secondly, though Syriac is a dead language, it is possible to determine that it forms a prosodic unit with the preceding, not the following word. Syriac literature is rich in tradition of marking texts for intonation cues (cf. Segal 1953). Diacritics which are a pause never immediately precede an RCN, but in many examples immediately follow one, c.f. Jul 106:1, Jul 66:2 and many other examples. Thirdly, parenthetical clauses are never inserted between the RCN and the preceding word, but often (cf. (11) x) between an RCN and the following word.

le lexical category of RCNs determines that syntactically they are at the left edge of domain. RCNs are conjunctions, and a conjunction in Syriac precedes the phrase it is associated with. Conjunctions are heads, therefore they combine with their domain in a fashion determined by the headedness parameter of the language — in this case head-

Hyphens mark inflectional affixes, and clitics are marked with double hyphens. It is beyond the scope of the paper to motivate the morphological analysis assumed in the transcription of the examples, which in essence is Nöldke's classical analysis, with nominative enclitics (Nöldke : §64) and accusative and genitive suffixes (*ibid.* § 65–66).

first.⁶ Indeed, many conjunctions, such as those exemplified in (8a), are phonologically phrase-initial, and so are all complementizers in (8b):

- (8) a. *phrase-initial conjunctions*
 w= 'and', aw 'or', bram, elo 'but', oq= 'even'
 b. *complementizers*
 d= 'that', dalmo 'lest', en, elu 'if', elo, elu=lo 'unless', kad 'while', open, kad=Toḅ 'although'

Yet despite being conjunctions, RCNs are strictly barred from initial position, as already observed by Brockelmann (1899: §175), Duval (1881: §372), Nöldke (1898: §155, §327) and others. It is interesting that, while RCNs are non-initial conjunctions (i.e. despite their being syntactically initial, they are mapped by the phonology to a non-initial position), there do not exist any non-initial complementizers. Marantz (1989) has suggested that the natural position for complementizers is at the edge of the clause, as their function is to mark a syntactic relation (i.e. subordination) between their clause and adjacent clauses. In other words, complementizers, unlike conjunctions, project their own structure. Conjunctions such as *and* and *or* may project their own structure as well (cf. Larson 1988). In this sense they too mark a syntactic relation, and are therefore mapped to the edge of their phrase. It is only conjunctions which do not head their own projections, e.g. RCNs, which may be non-initial. This is another reason not to follow the analyses of Anderson and Halpern, who treat clitics which serve a syntactic function on a par with RCNs.

Syriac RCNs are definitely not CL-2. Of the three thousand or so examples we have examined, we have not found a single example which contradicts this claim. In no example do RCNs immediately follow a constituent which consists of more than one word. Even when RCNs mark a domain which is not sentence initial, they do not cliticize to the last word of the preceding constituent, as in Walpuri and Serbo-Croatian, but occur to the right of the first word of their own domain. In the following example, the PP *by their nature* is adjoined to the domain of *lam* in (9), yet *lam* does not cliticize to it, but rather to the first word, *gods*, of its own domain. The domain of *lam* is shown by the square brackets:

- (9) *holan d= men=kyon -hun [aloh lam itay-hun]*
 those that by nature their gods q-u BE-GEN(3MP)
 '...who are gods by their nature.' (Jul 51:7)

Where there is a hierarchy of discourse units, this may give rise to multiple marking, one marking per discourse unit, again very differently from CL-2 constructions, which disallow multiple occurrences of a clitic:

⁶ Yet they are heads which do not select their complements and do not determine the syntactic category of their projections (i.e. they are not even heads of an extended projection of their domain in the sense of Grimshaw).

(10) [9a]= Truno **den** ewsebyos [Hdo zban **den** hwo I-an
 on tyrant **but** Eusebius one time **but** was-3MS to-us
 b= mahšabī-an]]
 in mind-our
 'And as to the implacable Eusebius, once⁷ we had it in our mind...' (Jul 39:10)

The effect of intonation breaks too is different on the two types of clitic structures. In Serbo-Croatian, as described by Radanović-Kocić 1996, clitics cannot precede intonation breaks such as the ones associated with vocatives. In Syriac, it is exactly the opposite. The typical position for vocatives is actually immediately following RCNs:

(11) da9 hokel bna9 romo d= elo
 know-IMP-MP therefore sons(CS) Rome that unless
 [Taksun yoŷ-kon
 will-behave-2MP self-GEN(2MP)
 'Know then, O children of Rome, that unless you conduct yourselves well...'
 (Jul 45:10)

The characteristics of RCN clitics are quite distinct from those of affixes (see Zwicky and Pullum 1983 for criteria distinguishing affixation from cliticization). RCNs can be iterated, their relative order is not fixed (examples: *den lam* Jul 74:21, *lam den* Jul 147:9, *lam ger* Jul 105:8, *ger lam* Jul 122:2, *lam keŷ* Jul 50:9) and these order variations do not affect meaning. RCNs show no selection of the hosts they attach to, and they do not have to be repeated for each member of a conjoined phrase. They do not show any type of allomorphy or word-internal phonological irregularity. These characteristics distinguish them from affixes, which often exhibit allomorphy and irregularity, are usually selective of their hosts, and cannot be concatenated in various orders without affecting the meaning. Also, the syntactic position to the left of a sentence coupled with a phonological position to the right of a word characterizes clitics, not affixes, which are not treated by the syntax as independent syntactic entities (as noted by Sproat 1988). For all these reasons, we do not think that it is in general justified to analyse clitics as 'phrasal affixes', though it is possible that Klavans and Anderson's analysis is correct for particular cases such as the possessive 's clitic in English (cf. Poser 1985, Zwicky 1987, Miller 1992, 1993, Halpern 1995).

4. The rhetorical function of RCNs

The following Syriac conjunctions are enclitic: *den*, *ger*, *lan*, *kay*, *hokel*, *keŷ*, *9uđ*, *man*.⁸ These conjunctions, as already noted by Bar Hebraeus (1226–1286), are never required

⁷ The collocation *Hdo zban* 'once' is consistently treated as a single word.

⁸ *den*, *ger* and *man* are analogous to the Greek *de*, *gar* and *men* respectively, which are RCNs as well. But in general, RCNs are documented in Aramaic much earlier than the Hellenistic period, cf. (16) below. *man* and *9uđ* are not discussed in the paper, due to the scarcity of their occurrence.

by the syntactic rules of the language, and in every case can be omitted without reducing grammaticality. In this they are of course very different from CL-2. Moreover, RCNs do not contribute to the truth functional meaning of their sentence, rather they specify rhetorical force.

The conjunction *den* marks a discontinuous transition. It either marks the beginning of a new discourse unit (e.g. a new paragraph, or a parenthetical sentence), or it marks a change of topic or a contrastive topic within a discourse unit, as in the following example:⁹

(12) men-an **den** dli-an kasyo =y I-hun **den** l= alohe
 from-IP **but** of us hidden-PART-FS =3FS to-3MP **but** to gods(MP)
 galyo
 revealed-PART-FS =3FS
 'From us, it is hidden, but it is revealed to the gods.' (Jul 36:17)

ger marks evidence or justification for the previous discourse, similarly to the English *for*.¹⁰

(13) soβrin **ger** da= b= mamllō sagiyo meštam9in
 think-PART-3MP **for** that in speech a lot heard-PART-MP
 '...for they think that they shall be heard for their much speaking.' (Mt. 6:7)

den and *ger* never cooccur in the same sentence, as their rhetorical functions are incompatible. Clearly, a sentence cannot simultaneously stand in the rhetorical relations of discontinuity and explanation to the previous discourse. *den* marks its sentence either as contrasting to preceding discourse, or as irrelevant to it, whereas *ger* marks its sentence as an explanation to the preceding discourse. Clearly these are incompatible relations. *kay* may be added to modal expressions of doubt, desire or interrogation, either in main or embedded clauses:

⁹ *den* may cooccur with other markers of contrast such as *brum* (cf. (15) below):

bram **den** atun bna-y
but **but** you sons-nine
 'But you, my sons, ...' (Jul 12:27)

In Mt. 23:23, *den* marks neither a new topic nor a new discourse unit, but irrealis modality. According to Joosten (1988), *den* was originally a marker of the irrealis (wishes and counterfactual conditionals).

¹⁰ In Jul 23:1, *ger* marks a rhetorical question, which is probably the original use of *ger* according to Joosten (1988). Bearing in mind that rhetorical questions are used to make self-evident statements, it is plausible that the use of *ger* should have eventually extended to mark evidence in general. In Jul 91:15 and 244:25, *ger* is found in what are clearly *den* positions. Such switches of *den* and *ger* have already been noticed by Bar Hebraeus.

- (14) hwof =wof den b9oto bet= aHe d= mon kay
 was-3FS was-3FS but debate(F) among brothers that what mod
 hwo men= holen kumre da= HTi9o
 was-3MS from these priests of sin
 'It was debated among the brethren as to what had become of these priests of sin.'
 (Jul 27:1)

hokel means 'therefore, *ket* — 'that is to say'. *lam* functions similarly to the expression 'quote unquote' in English, which either signals direct speech or indirectly attributes the words to another person (either specific or generic, as in 'it is said that...', or even as free indirect discourse). *lam* takes any constituent as its scope, for example the noun phrase 'the holder of the rule of the world' (the king's title):

- (15) bram den aHid lam šulTon-eh d= 9olmo
 but but held-PART-MS q-u rule-GEN(3MS) of world(M)
 yulianos mako da= l= 9olam šadr -an
 Julian king that for ever sent-3MS us
 'But the holder of the rule of the world, Julian king forever, has sent us ...' (Jul 122:19)

We provide examples of *lam* from pre-Hellenistic Aramaic texts to emphasize the native origin of RCNs:

- (16) a. ?mr br? lm yhw 1 -y
 said-3MS son q-u will-be-3MS to me
 'He said: "I will have a son ..."' (Ahiqar 26:2, 5th century B.C.)
 b. w= k9t 1 -n sym T9m mnt? lm zy
 and now to us was-issued-3MS order(M) the-share(F) q-u that
 yhbh b= mdynt?
 given-PART-FS in the-city
 'And now, an order was issued to us: "The share which is given in the province..." (Arsames, letter written 6 November 427 B.C., Elephantine, Egypt)

5. RCNs and other clitics

Since clitics in CL-1 constructions are structurally at the edge of the clause, they are expected to cliticize peripherally to clitics which are clause-internal, such as auxiliary and pronominal clitics. This is another difference between CL-1 on the one hand and CL-2 constructions, where the clitics are ordered among themselves by the syntax, on the other hand.

Among clause-internal clitics, uninflected prepositions, conjunctions such as *w=* 'and' and complementizers such as *d=* 'that' are proclitic, whereas the weak forms of the auxiliary *hwy* 'be' are enclitic, and so are the weak forms of pronouns in the different

Cases, for example the 3MS pronoun (*h*/*u*) (Nominative), *l-eh* (Accusative/Dative) or *b-* (Oblique). RCNs are peripheral to all these clitics (cf. also (22) below):

- (17) a. Hor =b-eh den yubenyanos b= su9rono porušo'it
 looked-3MS at-3MS but Jovian at affair(M) prudently
 'Jovian looked with prudence upon the affair.' (Jul 104:18)
 b. men= bo9ar= d= go'9em =no den
 from after that rise-PART-MS NOM(1S) but
 'But after I am risen again...' (Mt. 26:32)

Strong forms of pronouns are not enclitic (e.g. *b-eh* in (18a) and *amn* in note 9), a neither are inflected prepositions (e.g. *men-oh* in (18b)), therefore they follow RCNs:

- (18) a. mabel =wfo den b-eh qadišo
 mock-PART-MS =was-3MS but at-him saint
 'The saint mocked at him' (Jul 53:5)
 b. wa= 9qar lam men -oh To9yuy-hun d= nocro9e
 and uprooted-3MS q-u from her error-GEN(3MP) of Christians
 '...and rooted out from it the erroneous belief of the Nazarenes.' (Jul 72:1)

It is very clear that *b-* and *l-* are Case markers whereas *men* 'from' is a preposition. Syriac prepositions differ from Case markers in the Case they assign. Prepositions assign genitive Case, as can be inferred from the observation in Nöldke 1898: §222b if arguments which double an inflected preposition like *men-eh* in (19) are marked genitive (with *d=*):

- (19) men-eh d= su9rono
 from-3MS of matter(M)
 'from the matter' (Jul 58:2)

On the other hand, arguments doubling Case-marked pronouns are marked with the same Case as the pronoun, as is shown in (17a) for the oblique Case-marker: *b-eh* *b= su9rono* 'at the affair'.¹¹

6. The prosody of RCNs

In our view, the reordering of clitics in CL-1 constructions away from their phrase-initial syntactic position is part of the mapping from syntactic domains to phonologic domains. We can show that the reordering of RCNs is indeed due to a prosodic and not to a syntactic operation. First, it is impossible to maintain that the word at the left of the RCN is moved there by a syntactic transformation. Since there is no evidence in Syri

¹¹ Note that oblique pronouns (marked with *b-*) are weak in (17a) and (22) below, and strong (18a) and in Jul 14:28.

for discontinuous constituents of the Walpiri type, such movement would violate the CED (Huang 1982), as it extracts parts of subjects and adjuncts:¹²

- (20) a. *mokse den w= zanyoto haymnu-y*
 tax-collectors **but** and harlots believed-3MP-him
 'But the publicans and the harlots believed him.' (Mt 21:32)
 b. *dlo ger aguno wa= dlo neçHono wa= dlo rdupyo*
 without **for** struggle and without bravery and without persecution
 (Jul 9:12)

Secondly, it is also impossible to defend a syntactic lowering analysis of the clitic to a position to the right of the first word (similarly to what is proposed for the question particle =*li* in Bulgarian in Rivero 1993). The relevant unit of *word* is one constructed phonologically and not through incorporation in the syntactic component. Syntactic incorporation, or X⁰ movement, affects heads only (cf. Koopman 1984, Marantz 1984, Baker 1988). In Semitic, the proclisis of a preposition P to its complement NP cannot be a result of incorporation, since P does not necessarily cliticize to a head, but also to a single conjunct of the head, as in (21a), or to a specifier, as in (21b), or even to a single conjunct in the specifier, as in (21c). The *word* thus formed is therefore phonological and not syntactic, yet it constitutes the relevant unit for the enclisis of RCNs:

- (21) a. *9am= Hayltoŋe ger w= šarite*
 with strong-ones **for** and true-ones (Jul 10:3)
 b. *9al= 9estro den dorin*
 to ten **but** generations (Jul 76:10)
 c. *l= Hamšin ger w= arba9 šnin*
 for fifty **for** and four years (Jul 65:25)

In the same way, enclisis of weak pronouns to V is prosodic rather than by syntactic incorporation, since it too violates the Coordinate Structure Constraint. Yet it forms words for the purpose of RCN enclisis:

- ¹² Second position is determined by the morphophonological rules of Syriac even in examples which are translations from Greek. For example the Syriac
 malep =wō =l-hun ger
 teach-PART-MS was-3MS to them **for**
 is a translation of the Greek:
 en gar didaskōn autous
 for teach them
 'For he taught them...' (Mt. 7:29)

In the same way, in the (20a) example below in the text, the Greek is:
 hoi de telonai kai hai pornai
 the **but** tax-collectors and the harlots

- (22) *man= d= nebbat =b-i den wa= b= metal(y)-y*
 who that will-be-ashamed-3MS in-1S **but** and in words-GEN(1S)
 'Whosoever shall be ashamed of me and of my words...' (Lk 9:26)

7. Conclusion

We have argued that the LF interface includes a hierarchical structure of rhetorical units, marked by rhetorical conjunctions. The function of rhetorical conjunctions is to indicate the rhetorical force of the phrase in their scope, and to construct a hierarchical structure of discourse units. The prosodic mapping from syntactic constituents to phonological domains maps clitic rhetorical conjunctions into the domain they are syntactically attached to. The prosodic mapping of the clitic into its own syntactic domain results in a word-order within that domain which does not correspond to its syntactic structure. This feature sharply sets clitic rhetorical conjunctions apart from the more familiar type of 'second-position' clitics, those which are ordered by the syntax. This distinction among clitics correlates with a difference in their syntactic category. It therefore constitutes a principled account of the disjunctive nature of the 'second position' in Wackernagel's Law.

References

- Anderson, S. R. (1992) *A-Morphous Morphology*. University Press, Cambridge.
 Anderson, S. R. (1993) 'Wackernagel's Revenge: Clitics, Morphology, and the Syntax of Second Position', *Language* 69:68-98.
 Baker, M. (1988) *Incorporation: A Theory of Grammatical Function Changing*. University Press, Chicago.
 Bar-Hebraeus, G. (1226-1286) *kybo d=centhe. Le livre des splendeurs: la grande grammaire de Gregoire Barhebraeus*. Axel Moberg (ed.) (1922) C. W. K. Gleerup, Lund.
 den Besten, H. (1989) *Studies in West Germanic Syntax*. Rodopi, Amsterdam.
 Brockelmann C. (1899) *Syrische Grammatik*. Reuter and Reichard, Berlin. 9th edition (1962) VEB Verlag Enzyklopädie, Leipzig.
 Carlson, G. (1983) 'Marking Constituents'. In F. Heny and B. Richards (eds), *Linguistic Categories: Auxiliaries and Related Puzzles*. Reidel, Dordrecht.
 Collinge, N. E. (1985) *The Laws of Indo-European*. John Benjamins, Amsterdam.
 Denniston, J. D. (1934) *The Greek Particles*. Clarendon Press, Oxford.
 Dixon, R. M. W. (1980) *The Languages of Australia*. University Press, Cambridge.
 Doron, E. and S. Assif (1997) 'The Prosody of Rhetorical Conjunctions'. Hebrew University ms.
 Duval, R. (1881) *Traité de grammaire syriaque*. Paris.
 Hale, K. (1973) 'Person Marking in Walbiri'. In S. A. Anderson and P. Kiparsky (eds), *A Festschrift for Morris Halle*. Holt, Rinehart and Winston, New York, 308-44.
 Halpern, A. (1995) *The Placement and Morphology of Clitics*. CSLI Publications, Stanford.
 Halpern, A. and A. Zwicky (eds) (1996) *Approaching Second: Second Position Clitics and Related Phenomena*. CSLI Publications, Stanford.
 Hayes, B. (1989) 'The Prosodic Hierarchy in Meter'. In P. Kiparsky and G. Younan (eds), *Rhythm and Meter*. Academic Press, Orlando.

- Kuang, J. (1982) *Logical Relations in Chinese and the Theory of Grammar*. Doctoral Dissertation. MIT, Cambridge, Mass.
- Inkelas, S. and D. Zec (eds) (1990) *The Phonology-Syntax Connection*. University of Chicago Press and CSLI Publications, Chicago and Stanford.
- Joosten, J. (1988) 'The Use of Some Particles in the Old Testament Peshitta', *Texts* 14, 175-83.
- Kaisse, E. (1985) *Connected Speech: The Interaction of Syntax and Phonology*. Academic Press, Orlando.
- Klavans, J. (1980) *Some Problems in a Theory of Clitics*. Indiana University Linguistics Club, Booming-ton.
- Klavans, J. (1985) 'The Independence of Syntax and Phonology in Cliticization', *Language* 61, 95-120.
- Koopman, H. (1984) *The Syntax of Verbs*. Dordrecht.
- Larson, R. (1988) 'On the double object construction', *Linguistic Inquiry* 19, 335-92.
- Marantz, A. (1984) *On the Nature of Grammatical Relations*. MIT Press, Cambridge.
- Marantz, A. (1989) 'Clitics and Phrase Structure'. In M. Balin and A. Kroch (eds), *Alternative Conceptions of Phrase Structure*. University Press, Chicago, 99-116.
- Miller, P. (1992) 'Postlexical Cliticization vs. Affixation: Coordination Criteria', *CLS* 28, 382-96.
- Miller, P. (1993) 'Morphological marking misses the head', *WCCFL* 11, 341-53.
- Nespor, M. and I. Vogel (1986) *Prosodic Phonology*. Foris, Dordrecht.
- Niideke T. (1898) *Kurzgefasste syrische Grammatik*. 2nd edn. Leipzig. 1st edn (1880). Translated J. A. Crichton (1904) *Compendious Syriac Grammar*. Williams & Norgate, London.
- Poser, W. (1985) 'Cliticization to NP and lexical phonology', *WCCFL* 4, 262-72.
- Pullum, G. K. (1981) 'Evidence against the 'AUX' Node in Luisiño and English', *Linguistic Inquiry* 12, 435-63.
- Progovac, L. (1996) 'Clitics in Serbian/Croatian: Comp as the Second Position'. In Halpern and Zwicky (1996).
- Radanović-Kocić, V. (1996) 'Placement of Serbo-Croatian Clitics: a Prosodic Account'. In Halpern and Zwicky (1996).
- Rivero, M.-L. (1993) 'Bulgarian and Serbo-Croatian Yes-No Questions: V⁰-Raising to -*li* versus -*li* hopping', *Linguistic Inquiry* 23, 567-75.
- Sadock, J. (1991) *Autolexical Syntax: A Theory of Parallel Grammatical Representations*. University of Chicago Press, Chicago.
- Schachter, P. (1985) 'Part of Speech Systems'. In T. Shopen, ed. *Language Typology and Syntactic Description*. University Press, Cambridge.
- Segal, J. B. (1953) *The Diacritical Point and the Accents in Syriac*. Oxford University Press, London.
- Selkirk, E. (1984) *Phonology and Syntax*. MIT Press, Cambridge.
- Selkirk, E. (1986) 'On derived domains in sentence phonology', *Phonology Yearbook* 3, 371-405.
- Simpson, J. (1991) *Walpiri Morpho-Syntax: A Lexicalist Approach*. Kluwer, Dordrecht.
- Sproat, R. (1988) 'Bracketing Paradoxes, Cliticization and Other Topics: the Mapping between Syntactic and Phonological Structure'. In M. Everaert, A. Evers, R. Huybregts and M. Trommelen (eds), *Morphology and Modularity*. Foris, Dordrecht, 339-60.
- Taylor, A. (1990) *Clitics and Configurationality in Ancient Greek*. Doctoral Dissertation, the University of Pennsylvania.
- Wackernagel, J. (1892) 'Über ein Gesetz der indogermanischen Wortstellung', *Indogermanische Forschungen* 1, 333-436. Also (1955) in *Kleine Schriften* 1, 11-104, Vandenhoeck & Ruprecht, Göttingen.
- Zec, D. and S. Inkelas (1990) 'Prosodically Constrained Syntax'. In Inkelas and Zec (1990), 364-78.
- Zec, D. and S. Inkelas (1991) 'The Place of Clitics in the Prosodic Hierarchy', *WCCFL* 10, 505-520.
- Zwicky, A. (1987) 'Suppressing the Z's', *Journal of Linguistics* 23, 133-48.
- Zwicky, A. and G. Pullum (1983) 'Cliticization vs. Inflection: English n't', *Language* 59, 502-13.

List of texts

- Add: *The teaching of Adlai*, dated c. AD 400, translated by G. Howard (1981) Society of Biblical Literature — Scholars Press, Chico, California.
- Ahiqar: The Words of Ahiqar, dated c. BC 400. In B. Porten and A. Yardeni (eds), *Textbook of Aramaic Documents from Ancient Egypt*, Vol. 3. (1993) Jerusalem.
- Apocalypse of Baruch: *Vetus Testamentum Syriace, pars IV, fasc. III* (1973) Leiden.
- Arsames: The Letters of Arsames, dated c. BC 400. In B. Porten and A. Yardeni (eds), *Textbook of Aramaic Documents from Ancient Egypt*, Vol. 1. (1986) Jerusalem.
- Jul. *Julianos der Abtrünnige*, dated c. AD 525, ed. by J. G. E. Hoffmann (1880) E. J. Brill, Leiden.
- Translated as *Julian the Apostate* by H. Gollancz (1928) Oxford University Press, London.
- Peshitta translation of the Gospels, dated before AD 431: *Tetraeuangelium Sanctum iuxta simplicem Syrorum versionem*, ed. by P. E. Pusey and G. H. Gwilliam (1901) Clarendon, Oxford.