

Second-position is first-position

Wackernagel's Law and
the role of clausal conjunction*

Brian Agbayani and Chris Golston
California State University Fresno

1. Introduction

Based on the comparative syntax of early Indo-European (IE) languages, Delbrück (1878) and Wackernagel (1892) proposed that Proto-IE had a set of clitics which follow the first stressed word of their sentence. Their thesis has been so influential that second-position in a sentence is now usually referred to as *Wackernagel's position*, even outside of IE. Within IE, their conjecture has attained the status of a law. Watkins has gone so far as to say that “One of the few generally accepted syntactic statements about Indo-European is Wackernagel's Law, that enclitics originally occupied the second position in the sentence” (1964: 1036).

Much contemporary work has sought to reevaluate the status of Wackernagel's Law for early IE languages within current linguistic theory. This body of recent work offers a descriptive precision that was not available to the frameworks within which Delbrück and Wackernagel worked; and this recent work has given rise to several analytic trends with respect to second-position (2ndP) phenomena in these languages (Garrett 1990, 1996, Luraghi 1990, 1998, 2001 for Hittite; Hale 1996 and Hock 1996 for Sanskrit; Janse 1992, Hock 1996, and Taylor 1990, 1996 for Ancient Greek; see also Anderson 1993 for more general discussion of the status of Wackernagel's Law in current theory).¹ Many analyses of 2ndP elements rely heavily on prosodic factors to account for their placement (many of the works just cited are such analyses). The present paper offers a new analysis for a particular subset of 2ndP elements from early IE — the 2ndP conjunctions — which relies primarily on factors of syntax / phonology alignment, rather than prosodic factors.

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¹ We do not consider here analyses of the placement of second-position elements in modern languages, for which there is an enormous body of literature (see the seminal work of Klavans 1982, the collected articles in Halpern & Zwicky 1996, and important references such as the work of Franks & King 2000, among many others).

In early IE languages, 2ndP conjunctions are typically the first in any string of 2ndP elements. We propose that a 2ndP conjunction lies external to the sentence which constitutes its right conjunct, and that all subsequent 2ndP elements are clause-initial in that conjunct clause. These generally pronominal 2ndP elements always follow 2ndP conjunctions when they are present. We argue that conjunctions in these early IE languages, as in many languages, syntactically fall *between* the clauses they conjoin, and any 2ndP elements which immediately follow those conjunctions are syntactically clause-initial, and not clause-second. We base our conclusions on the syntax of three early IE languages for which the ‘second position’ phenomenon is especially plain: Hittite, Ancient Greek and Latin. The clausal conjunctions we have in mind include freestanding and 2ndP conjunctions like the following:

(1) Conjunctions	Freestanding	2ndP
An. Greek	<i>kai</i> “and”	<i>te</i> “and”
	<i>atár</i> “but”	<i>dé</i> “and”
Latin	<i>et</i> “and”	= <i>que</i> “and”
	<i>at</i> “but”	= <i>ve</i> “or”
Hittite	<i>nu</i> “and”	= <i>ya</i> “and”
		= <i>ma</i> “but”

Note that Ancient Greek *dé* does not behave as phonologically enclitic (for one thing, it retains its own pitch accent; other 2ndP connective from Ancient Greek behave similarly, e.g. *óun* ‘really’, *gàr* ‘for’) but nevertheless occupies the same position as the sub-clausal conjunction *te*, the Latin conjunction =*que* and Hittite =*ya*, which do behave like phonological clitics.

Most recent analyses have placed these elements within the right conjunct clause on the surface. In this way, 2ndP conjunctions are treated on a par with other 2ndP elements which are assumed to be in ‘second-position’. We argue here, however, for a non-unified analysis of ‘second-position’ elements: 2ndP conjunctions surface *in-situ*, external to the right conjunct clause, whereas other 2ndP elements surface in clause initial position (i.e., “first position”) when the 2ndP conjunction is present.

2. Conjunction below the clause

Our analysis of 2ndP elements rests upon a proper understanding of conjunctions, so we begin here with simple cases of conjunction below the clause, e.g. conjoined noun phrases. As we will see, freestanding conjunctions (*kai*, *et*) come between their conjuncts and 2ndP conjunctions come after the “first word” of their second conjunct.

Most early IE languages have full form conjunctions that come between their conjuncts in the usual *X and Y* fashion:

(2) Ancient Greek

[*sképtron*] *kai* [*stémma*]
sceptre and fillet

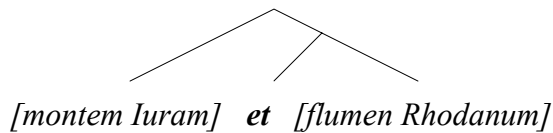
(Homer, *Iliad* 1.28)

(3) Latin

[*montem Iuram*] *et* [*flumen Rhodanum*]
Mount Jura and river Rhone (Caesar, *Bello Gallico* I.6)

We suggest that conjunctions appear between the elements they conjoin in a configurational structure that groups the conjunction with the right-hand conjunct (see Munn 1993, Johannessen 1998, Zoerner 1999):

(4) configurational structure for coordination

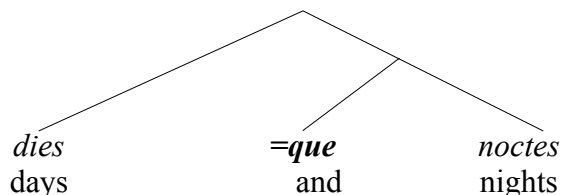


Evidence that the conjunction forms a constituent with the following conjunct will be given shortly, but our main argument does not depend on having a configurational structure for conjunction. We require only that a conjunction be distinct from the elements it conjoins: [conjunct & conjunct]. Even if the conjunction forms a constituent with the following conjunct (as it does in 4), we do not suppose that it is actually *part of* the following conjunct: the first word of the second conjunct above is not *et* but *flumen*. This corresponds more or less with the semantics of the construction, where the coordinated terms are [*montem Iuram*] and [*flumen Rhodanum*], and *et* functions as a Boolean operator that takes each of the individual terms and yields their semantic coordination (creating a single category of the same ‘type’ as the individual terms).

A number of early IE languages have 2ndP conjunctions as well. We assume that the base structure for these is still [conjunct & conjunct], as in the following case from Latin:

- (5) a. *dies* *noctes* =*que*
days nights =and
‘days and nights’

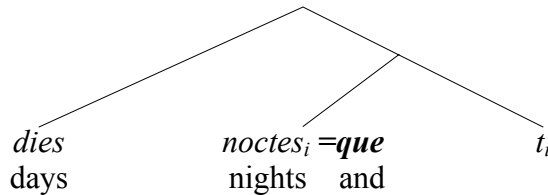
b. base structure for coordination



We assume that the conjunction is not a *Phonological Word* in the sense of Selkirk (1986, 1995) and does not therefore properly align a phonological word with a syntactic head (more on this in section 2.2). To remedy this, the closest phonological word in the second conjunct (*noctes*) moves up to that position. It is important to note that the surface position of the

conjunction apparently has no effect on semantic interpretation. The displaced element of the right-hand conjunct is understood in the scope of the coordinated term (t_i shows the position in which *noctes* is interpreted):

(6)



In cases like this, where the second conjunct consists of a single phonological word, it can look like the conjunction is phrase-final because the moved word (*noctes* above) constitutes the entire final conjunct. This is shown again for Ancient Greek below.

(7) An. Greek

[skéeptron] tiimáas_i te [t_i]
 scepter honors and
 “scepter and honors”

(Aeschylus, *Prometheus* 171)

[teleuteèn] kephaleén_i te [t_i]
 end head and
 “end and head”

(Plato, *Timaeus* 69a)

Thus the conjunction position can be filled either by a full form conjunction (*skéeptron kai stémma*) or by the closest phonological word to the right if the conjunction is in some sense phonologically defective, like *te* (*skéeptron tiimáas_i te t_i*). In either case, the conjunction stays in its base position. We stress this point to contrast our analysis of 2ndP conjunctions with analyses where 2ndP elements undergo prosodic ‘flip’ and drop down into the following phrase (Anderson 1996, Garrett 1996, Hale 1996, Halpern 1995, Hock 1996, Janse 1992, Taylor 1996; Embick & Noyer 2001). Such analyses normally take these 2ndP elements to be light, stressless, toneless elements that need to be phonologically incorporated into a ‘heavier’ host (in this sense they follow closely the original conception in Delbrück 1878 and Wackernagel 1892). As noted earlier, however, not all 2ndP conjunctions in these languages are phonologically enclitic (e.g., An. Greek *dé*). Moreover, the apparent “host” word is often prosodically as light or lighter than the 2ndP connective. For example, the host may be the same prosodic weight as the 2ndP connective, and both may bear pitch accent, as shown in (8):

(8)

μ μ
 tò dè práksai
 the and making

(Aristotle, *Poetics* 1454a)

Or the “host” may be the same prosodic weight as the 2ndP element, but lack pitch accent:

- (9) μμ μμ
 hai gâr toiáutoi...
 the for same
(Aristotle, *Poetics* 1455a)

Furthermore, the “host” may be lighter than the 2ndP element and lack pitch accent:

- (10) μ μμ
 ho óun polémarkhos
 the so Polymarchus
(Plato, *Republic* 327a)

Given facts such as these, we conclude that phonological weight is not relevant for the positioning of 2ndP conjunctions. We therefore abandon a prosodic lowering analysis for their placement. The analysis we adopt is one where the first phonological word of the right-hand conjunct raises to align with the syntactic conjunction. Here we adopt Selkirk’s (1995) notion that in the syntax-to-phonology mapping, function words may be analyzed prosodically as either phonological words or “prosodic clitics”. A “prosodic clitic” is a morphosyntactic word that is not itself a phonological word. Whereas many functions words in these languages may be analyzed prosodically as phonological words (like An. Greek *kai* and Latin *et*), we claim that the An. Greek connectives *dé*, *te*, *gâr*, *óun*, as well as Latin =*que* and Hittite =*ya* and =*ma* are always analyzed as “prosodic clitics”, in the sense that they are syntactic heads that are never accorded the status of phonological words (regardless of weight). To derive the ‘second position’ behavior of these conjunctive elements, we propose that a phonological word must align with the left edge of the conjunctive head within the syntax-to-phonology mapping (see also Bošković 2000 who argues for clitic placement in Serbo-Croatian given similar mapping conditions). Crucially, the conjunction remains in-situ syntactically, which allows it to behave semantically on a par (at least in terms of its connective function) with the non 2ndP counterparts such as *kai* and *et*.²

Let us now turn to the 2ndP conjunction facts in Latin and Hittite. The 2ndP conjunction pattern for Latin is illustrated in (11), where =*que* does not serve to align a phonological word with the syntactic conjunction head, forcing the movement of the sole phonological word from its right-hand conjunct.

² It is very clear that the prosodic weight of the moved head from the right-hand conjunct is irrelevant in deriving the surface position of the 2ndP conjunctions, since the moved head can be prosodically lighter than the conjunction. Similarly, the prosodic size of the conjunction is also not relevant in deriving the 2ndP effect, since some of the 2ndP connectives are themselves prosodic words (e.g. An. Greek *gâr*, *óun*). Note that adopting Selkirk’s (1995) proposal allows us to uncouple clitic status from phonological weight; this, however, forces us to stipulate the “prosodic clitic” status of these connectives.

(11) Latin

[Labiemun] Terbonium_i=**que** [t_i]

Labienus Trebonius=and
“Labienus and Trebonius”

(Plautus, *Mostellaria* I.22)

[oppida] vicos_i=**que** [t_i]

towns villages=and
“towns and villages”

(Caesar, *Bello Gallico* 1.28)

The first word in the following phrase moves to align a phonological word with the left edge of the syntactic conjunction. Similarly in Hittite, where the conjunction =ya (=a after a consonant) forces the first phonological word of its right-hand conjunct to move:

(12) Hittite

[UD.KAM-ti] GE₆.KAM-ti=**ya** [t_i]

by.day by.night=and
“by day and by night”

(*KUB 33.98 ii 11*)

[nepis] tekann_i=**a** [t_i]

heaven earth=and
“heaven and earth”

(*KBo 6.29 ii 12-13*)

With longer conjuncts the rest of the second conjunct stays behind. This is illustrated in Ancient Greek in (13):

(13) Ancient Greek

[dzéu] álloi_i **te** [t_i t^heoí]

Zeus other and gods
“Zeus and other gods”

(Homer, *Iliad* 6.476)

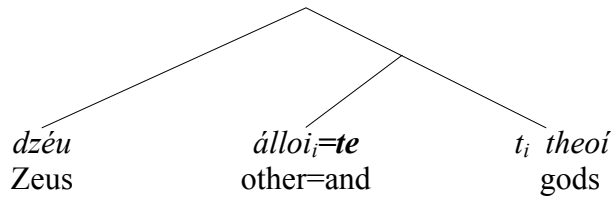
[áigaas anieménous] siáloús_i t^h’ [t_i eúontaas en áùlee]

goats flaying hogs and roasting in courtyard
“flaying goats and roasting hogs in the courtyard”

(Homer, *Odyssey* 2.300)

Thus when the second conjunct has more than one phonological word in it, only the first moves to the conjunction position:

(14) movement from the right conjunct



Note that since the conjunction has not moved, the phonological word (*álloi*) that aligns with its left edge is no longer the first word of the following sentence but has left the position (t_i) in which it is interpreted semantically.

Latin cases show the same thing with =*que*:

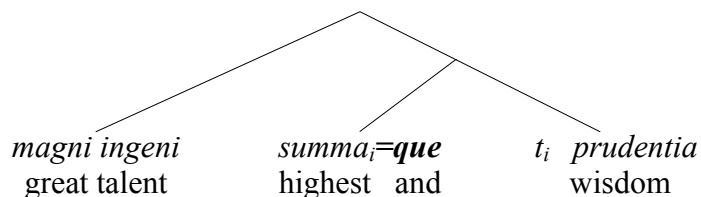
(15) Latin

[*cunctis oppidis*] *castellis*_i=**que** [*t_i desertis*]
 defeated towns fortresses=and deserted
 “the towns defeated and the fortresses deserted” (Caesar, *Bello Gallico* 2.29)

[*vir magni ingeni*] *summa*_i=**que** [*t_i prudentia*]
 man great talent superior=and wisdom
 “a man of great talent and superior wisdom” (Cicero, *Legibus* 3.45)

A moment’s reflection on the semantics shows that *castellis* and *summa* have moved from positions after =*que*:

(16) movement from the right conjunct



The same holds in Hittite:

(17) Hittite

[*ginuwas* GAD.HI.A] *patann*_i=**a** [*t_i GIŠ.GUB*]
 for.kneesveils of.feet=and stool
 “veils for the knees and a stool for the feet.” (StBoT 25.25 I 10)

[ANŠU.KUR.RA.MEŠ] ^{LÚ.MEŠ}IS.GUŠKIN_i=**ya** [*t_i humandan*]
 charioteers golden.grooms=and all
 “charioteers and all the golden grooms” (StBoT 24 ii 60-61)

Interestingly, Hittite has no non-2ndP analog to =*ya* for noun phrase conjunction: all conjunctions below the clause are 2ndP conjunctions.

The analysis that we have proposed moves words to an independently motivated position where conjunctions are found. The movement is driven by the phonological defectiveness of the 2ndP conjunction, which is not derived from factors of prosodic weight, as often assumed, but rather by the inability of the conjunction itself to serve as a phonological word.

The fact that the moved element *always* comes from the following conjunct suggests that the conjunction is more closely connected to what follows than to what precedes, and this is what motivates the configurational structure in (4). Configurational analyses of this type are commonplace in the current literature on conjunction (Munn 1993, Johannessen 1998, Zoerner 1999).

3. Conjunction of clauses

We are now in position to tackle the original Wackernagel phenomena, which we will show can only be understood with a proper notion of how clauses are conjoined. Our analysis of clausal conjunction parallels our analysis of sub-clausal conjunction exactly. We assume again that conjunctions fall between their conjuncts and that the conjunction position must be aligned with a phonological word. There are three types of clausal conjunction to discuss here: cases where the conjunction is itself a phonological word (non-2ndP), cases where it is not a phonological word and surfaces in 2ndP, and cases where it is absent (asyndeton).

If the conjunction is itself a phonological word (Greek *kai*, Latin *et*, Hittite *nu*), then the conjunction surfaces between the clausal conjuncts. However, if the conjunction is not a phonological word (An. Greek *dé*, Latin =*que*, Hittite =*ya*), the first phonological word of the second conjunct moves to align with the conjunctive head. Finally, if the conjunction is implied (asyndeton), we propose that the first phonological word of the second conjunct still moves to align with the conjunctive head.

3.1 Non-2ndP conjunctions

We begin with the simplest case, clauses conjoined by a non-2ndP conjunction:

(18) An. Greek

[*entáutha émeinán heeméraas tréis*] *kai* [*éeke Ménoon*]
there they.waited days three and came Menon
“they waited there three days and Menon came” (Xenophon, *Anabasis* 1.2.6)

Again, we take it as uncontroversial that *kai* “and” falls between the clauses it conjoins, as does *et* “and” in Latin:

(19) Latin

[*consulem interfecerat*] *et* [*eius exercitum sub iugum miserat*]
consul had.killed and his army under yoke sent
“he had killed the consul and sent his army under the yoke”
(Caesar, *Bello Gallico* 1.12.5)

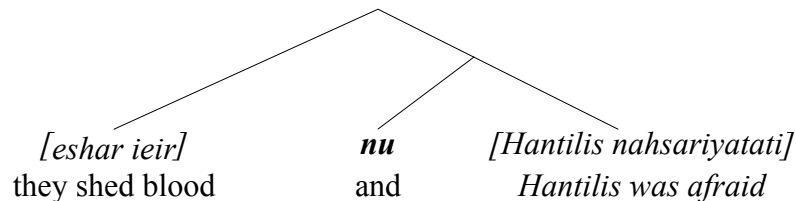
Similarly for Hittite clauses conjoined by ubiquitous *nu* “and”:

(20) Hittite

nu [=kán *Mursilin kuennir*] *nu* [*eshar ieir*] *nu* [*Hantilis nahsariyatati*]
and=prt Mursilis they.killed and blood they.shed and Hantilis he.feared
“And they killed Mursilis and they shed blood and Hantilis was afraid”
(2 *Bo TU 23 1 33-35*)

The proposed structure for these cases is given in (21):

(21)



As long as the conjunction is itself a phonological word, nothing more transpires and everything surfaces where it is interpreted. Note that while there is good reason to think that the conjunction and its following conjunct form a constituent of some kind, we do not take the conjunction to be *part of* the clause that follows. In the case at hand, we recognize that *Hantilis* is the first word in the clause, not the second.

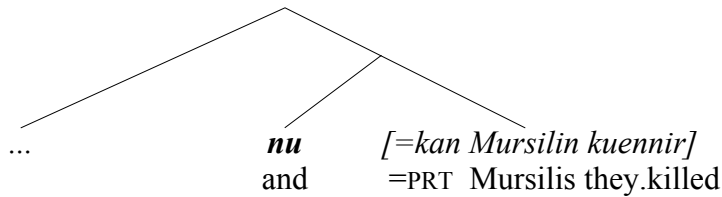
This may be obvious, but it becomes more interesting when ‘second-position’ conjunctions enter the picture. Consider the first clause in (20), repeated below for convenience:

(22) Hittite

nu [=kán *Mursilin kuennir*]
and =PRT Mursilis they.killed
(2 *Bo TU 23 1 33*)

Orthographically, the particle *kán* appears to be second in the sentence. However, given the structure for coordination adopted here, *nu* (by virtue of its function and apparent syntax) falls outside of the clause that =*kán* belongs to; this is a case where what appears to be a ‘second position’ element (=kán) actually surfaces in first position in the clause.

(23)



Thus, the particle =*kán* is clause-initial, not clause-second. It is of course realized on the conjunction phonetically, but there is no sense in which =*kán* is clause-second, given the syntax of coordination.

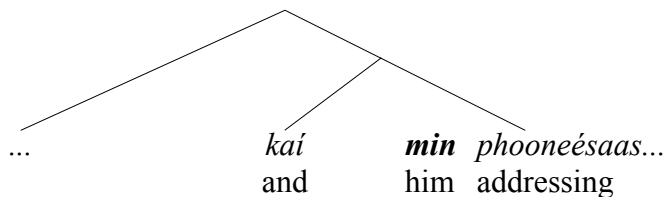
Similarly for Ancient Greek, where pronominal elements like *min* are actually clause-initial, not in second position as is usually assumed:

(24) An. Greek

kaí [min phooneésaas épea pteróenta proseúda]
and him addressing words winged he.spoke
“and addressing him, he spoke winged word” (Homer, *Odyssey* 15.259)

Given the syntax of coordination, the pronominal *min* is clearly positioned *first* in the clause:

(25)

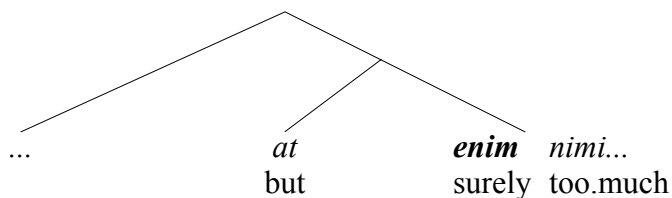


‘Second-position’ clitics in Latin like *enim* “surely” show the same thing once we grant that a conjunction is not the first word of the clause that follows it.

(26) Latin

at [enim nimis hic longo sermone utimur]
but surely too.much here long speech we.use
“But surely we are making our discussion too long here” (Plautus, *Trinummus* 3.3.79)

(27)



If *at* sits syntactically between its conjuncts, *enim* sits at the beginning of its clause, not in second position.

Returning to Hittite, this language has many more apparently ‘second position’ elements than the simple case above would suggest. The first word in (20) above *nu=kán* shows the common pattern, with the particle =*kán* immediately following the clausal conjunction. A short text illustrates how common such elements are and how clear it is that they are not in ‘second-position’ within their clause:

(28) Hittite

nu [utnee arha tarranut] *nu*[=s arunas irhus ieit]
 and countriesaway strengthened and=them of.the.sea boundaries made
 “And he weakened the countries and he made them boundaries of the sea...”

n[=as ^{URU}Halpa pait] *nu* [^{URU}Halpan harnikta]
 and=he to.Aleppo went and Aleppo destroyed
 “and he went to Aleppo and he destroyed Aleppo” (2 Bo TU 23 1.27-28)

Each of these clauses is conjoined to the preceding clause with *nu* “and”; the apparently 2ndP elements in question are the object =*us* “them” and the subject =*as* “he”. They are both syntactically clause-initial, just like the comparable elements we have seen in Greek and Latin. The fact that they are phonetically attached to the conjunction does not alter this.³

3.2 ‘Second position’ conjunctions

These languages also have clausal conjunctions that are ‘second position’. If the conjunction is a 2ndP element, it forces the first phonological word of its right hand conjunct to move to its left edge, which properly aligns a phonological word with the syntactic conjunctive head. In Ancient Greek we find this with the tonic 2ndP conjunction *dé*:

(29) An. Greek

[érgeto d’ eks húpnou] theíei, *dè* [t_i min amphékhut’ ompheé]
 keeps and out of.sleep divine and him around.poured voice
 “he kept off sleep and the divine voice poured around him” (Homer, *Iliad* 2.41)

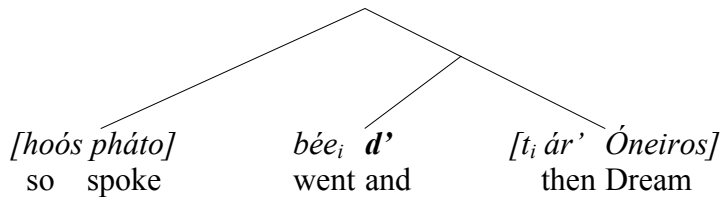
³ Given current conceptions of phrase structure in syntactic theory, the ‘2ndP’ elements in question (excluding 2ndP conjunctions) may be adjoined to Complementizer Phrase (CP) or to the Complementizer head in these languages, presumably via syntactic movement. In either case, these elements would occupy the topmost projection of the clause.

[hoòs éphat' Alkínoos] tóisin_i d' [t_i epieéndane múuthos]
 so spoke Alcinoos them and pleased speech
 “so spoke Alcinoos and his speech pleased them” (Homer, *Odyssey* 13.16)

[hoòs pháto] bée_i d' [t_i ár' Óneiros]
 so spoke went and then Dream
 “so he spoke and Dream then left” (Homer, *Iliad* 2.16)

The conjunctions (reduced to *d'* before vowel-initial words) surface in situ between their conjuncts, but do not provide a phonological word to align with the conjunction position. For this reason the first phonological word of the following conjunct (*theíee*, *tóisin*, *bée*) moves out of its clause to fill the conjunction position. As with the sub-clausal conjunction discussed above, we merely assume (i) that the base position for conjunctions is between their conjuncts and (ii) that conjunction positions must be aligned with a phonological word.

(30) movement from the right conjunct



Again, the phonological word moved to align with the syntactic conjunction is interpreted semantically with the second conjunct. There is little reason to think that the conjunction has been lowered into the following conjunct; for one thing, since there is no syntactic position there that it could be lowered into. This is one reason we assume that the first word of the following conjunct is raised to the syntactic conjunction position. Identical facts obtain in Latin, where the conjunction =*que* requires the first phonological word of the following conjunct to move:

(31) Latin

[ipse in Italiam magnis itineribus contendit] duas_i=**que** [t_i ibi legiones conscribit]
 self in Italy great marches speeds two=**and** there legions enrolls
 “and he speeds to Italy with great marches and enrolls two legions there”
 (Caesar, *Bello Gallico* 1.10.3)

[arcebat longe Latio] multos=**que** [t_i per annos errabant]
 defended far Latium many=**and** for years wandered
 “kept them far from Latium, and for many years they wandered”
 (Virgil, *Aeneid* 1.31-2)

Identical patterns are found in Hittite with the conjunctions =*ya* “and” (=a after a consonant, which is geminated) and =*ma* “but”:

(32) Hittite

...*apass_i=a* [*t_i ARAD DINGIR-LIM eesdu*]
...he=and servant of deity become
“and let him (too) be a servant of the deity!” (StBot 24 iv 79)

...*kedani_i=ma* [*t_i ANA BULUGGIMan hasatarset NU.GÁL*]
...this=but to malt like offspring not.exist
“but as with this malt there is no offspring...” (KBo VI 34 II 31)

The conjunction is generated syntactically between its conjuncts, as the semantics indicates. The first phonological words of the following conjuncts above (*apass* “he” and *kiedani* “this”) have moved out of the clauses in which they are interpreted. Other 2ndP elements line up at the top of their clause following the conjunction.

(33) Hittite

apiya_i=ya [=at *t_i QATAMMA=pat taparta*]
at that time=and =it in the same way ruled
“and at that time he ruled it in the very same manner.” (KUB 14.4 i 11-12)

sessar_i=ma [=wa=si *t_i akuwanna udandu*]
beer=but =Quote=him drinking they.bring
“but ‘they will bring him beer for drinking’ he said” (KUB 33 102 C II 26)

Again, we assume that the conjunction is in each case in its logical position between its conjuncts. In these languages the 2ndP conjunctions are always the first in any string of 2ndP elements; this falls out from the syntax, where the conjunctive head is always external to the clause in which the other 2ndP elements reside. The other 2ndP elements that immediately follow are initial in their clause and merely lean on the conjunction phonetically. Crucially, not one of the ‘2ndP’ elements here — neither the conjunction nor the other ‘2ndP’ elements — is actually in second-position in the clause. The conjunctions (=ya, =ma) are *in situ* between their conjuncts; the rest of the elements are clause-initial, but phonetically enclitic on what precedes them. Furthermore, these ‘2ndP’ elements don’t form a cluster in a common position syntactically. Again, the conjunctions are *in situ*, external to the right hand clause, and the other ‘2ndP’ elements are clause-internal.

So far this is all completely parallel to conjunction below the clause. If the conjunction is itself a phonological word, its conjuncts surface on either side of it. If the conjunction is not itself a phonological word, the first phonological word of its second conjunct raises out of its clause to align with the left edge of the syntactic conjunction head. Again, it is the closest phonological word in the second conjunct that moves. That phonological word is usually a single lexical item. But it can also be a content word (noun, verb, adjective, adverb) plus one or more preceding function words (prepositions, articles, etc.), which Selkirk (1986, 1995) also documents (for languages like English) can form a complex phonological word. The following examples from Ancient Greek illustrate this possibility:

(34) moved complex phonological words in An. Greek

[tée dekátee]_i **d'** [t_i agoreénde kaléssato laòn Akhilleús]
the tenth and to.assembly called host Achilles
“and on the tenth day, Achilles called the host to assembly” (Homer, *Iliad* 1.54)

[ek tóon émprosthén] **dè** [t_i anasképsai]
from the previous and consider
“and consider this from the previous cases” (Plato, *Cratylus*. 389A)

[kai tóon par' heautóo]_i **dè** [t_i barbároon epemeléito]
also the around himself and barbarians took.care.of
“and he even took care of the barbarians around him” (Xenophon, *An. i.i.5*)

(35) moved complex phonological words in Latin

[sub occasum]_i=**que** [t_i solis]
before setting=and of.sun
“and before the setting of the sun” (Caesar, *Bello Gallico* 2.11)

[ob eas]_i=**que** [t_i res]
from those=and things
“and from those things” (Caesar, *Bello Gallico* 2.35)

Note that such facts seem to argue against a morphological affixation account of conjunction placement, since the conjunction does not seem to function as an affix that attaches to a morphological/morphosyntactic word (contra Embick & Noyer 2001). The apparent “host” can be a content word plus one or more preceding function words, which do not necessarily constitute either a morphological word or a syntactic constituent (as in the above examples). Thus, there appears to be no straightforward morphological source for the placement of 2ndP conjunctions. The crucial observation here is that the conjunction is always preceded by a phonological word, suggesting that what derives the surface position of the conjunction are factors of syntax / phonology alignment.

3.3 *Asyndeton*

It sometimes happens that clauses are conjoined *asyndetically*, without an overt conjunction. Consider the following from Ancient Greek, where the ‘2ndP’ particle *kén* follows the adverb *tóte* “then”:

(36) An. Greek

tóte_i [kén min t_i hilassámenoi pepíthoimen]
then PRT him appeasing we.mollify.OPT
“Then let us mollify him by appeasing him.” (Homer, *Iliad* 1.100)

The clause is conjoined asyndetically to the preceding clause, i.e., without an overt conjunction. We assume the syntactic position normally occupied by conjunctions is still there, and still needs to be aligned with a phonological word. Since the elements *kén* and *min* do not constitute phonological words, we assume, the next word in the clause (*tóte*) moves leftward. The same applies for Latin, where the ‘2ndP’ question particle *=ne* is not sufficient to align with the conjunction position that conjoins this clause to the preceding discourse:

(37) Latin

<i>tantae_i</i>	[<i>=ne</i>	<i>t_i</i>	<i>animis</i>	<i>caelestibus</i>	<i>irae?</i>]	
such	=Q		souls	heavenly.ones	angers	
“Is there such anger in the souls of the gods?”						(Virgil, <i>Aeneid</i> 1.11)

Since *=ne* does not constitute a phonological word, the first word in the following conjunct moves leftward. Hittite provides similar cases, including many cases with strings of 2ndP elements:

(38) Hittite

<i>istamassanzi_i</i>	[<i>=tta</i>	<i>t_i</i>]				
listen	=you					
“They listen to you”						(KUB 21.27 iv 31)
DINGIR-LUM _i	[<i>=mu=za=kán</i>	<i>t_i</i>	GAŠAN-YA	<i>humandaza=pat</i>	<i>daskisi</i>]	
goddess	=me=REFL=PRT		lady-my	always=PRT	you.rescue.ITER	
“Goddess, my Lady, you always rescue me”						(StBoT 24 i 50)

Except for the 2ndP conjunctions, which are *in situ*, all of these ‘2ndP’ elements are actually clause-initial. The single phonological word that precedes them is not *in situ* but has been moved to a phonetically null conjunction position. We must therefore reject an analysis that places these elements in ‘second-position in the clause’. Note that from a syntactic perspective this is a desirable result, since ‘second-position in the clause’ is a notion that is not naturally definable within a configurational syntax (Keenan & Stabler 2001).

4. Conclusion

This paper has offered a plausible reanalysis of the so-called ‘second position’ elements in early IE languages. We began with the notion that 2ndP conjunctions lie external to their right-hand conjuncts, and for clausal coordination, this means that the conjunction sits in an extra-sentential position; crucially, we have argued that it cannot surface in ‘second position’ of the right-hand conjunct clause. A proper understanding of conjunction in early IE languages thus undercuts the traditional notion of ‘second-position’. From this simple generalization, we have shown that other ‘2ndP’ elements that follow clausal conjunctions are clause-initial, not in ‘second-position’ of the clause. Of course, we have left open the interesting question of how and why these elements surface in clause-initial position, and we have also left open the question of what derives their ordering with respect to each other

(however, we do offer a syntactic explanation for why ‘2ndP’ conjunctions always precede the clause-initial ‘2ndP’ elements). In this paper we have simply shown that they must on the surface be in the topmost projection of the clause, preceding all other elements that are within that clause. If we extend this idea to clauses that are conjoined asyndetically, without an overt conjunction, all ‘Wackernagel elements’ in the early IE languages (excluding conjunctions) can be treated uniformly in clause-initial position, and this allows us to dispense with the syntactically undefinable notion of ‘second-position’ for the very languages that this notion was originally designed to account for.

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