INTRODUCTION TO THE HISTORICAL SYNTAX OF THE INDO-EUROPEAN LANGUAGES

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INTRODUCTION

• Calvert Watkins (1963): 'Syntax is notoriously ignored in most studies of comparative and historical linguistics'.

• Wolfgang Dressler (1971): 'In der Indogermanistik wird die Syntax noch immer stiefmütterlich behandelt und zumeist als Anhängsel der Morphologie betrachtet'.

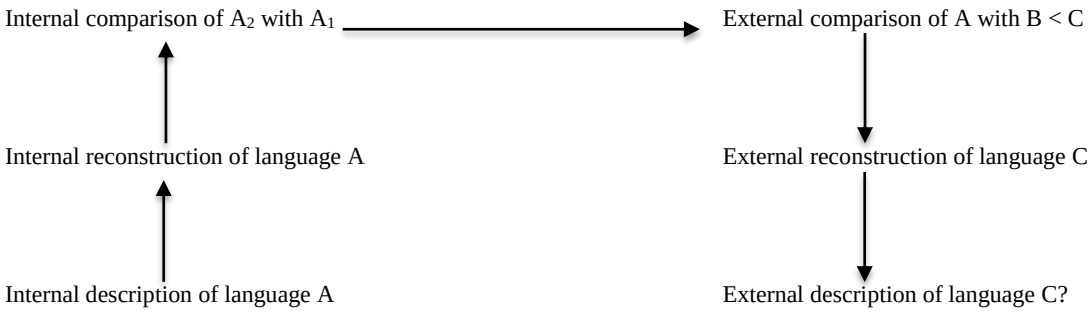
• April McMahon (1994:10): 'Diachronic syntax lays, like the Sleeping Beauty, in a deathlike coma for the first half of this century'

• David Lightfoot (1979:305): 'Certainly there was no tradition of work on syntactic change and, despite isolated discussions, it was not until the 1970s that syntactic change became an area of communal work among linguists'.

• Werner Winter (1984)

A. THE COMPARATIVE METHOD

	Internal analysis	External analysis
Comparison	Internal comparison of A^2 with A^1	External comparison of A with $B < C^x$
Reconstruction	Internal reconstruction of language $A < A^x$	External reconstruction of language A+ B < C
Description	Internal description of language A	External description of language C?



1. Internal Description

1.1. Constituency Tests: 'Internal Object' / 'Cognate Object'

(1) English
They fought a heroic fight.

(2) English
† *A heroic fight was fought by them.*

(3) Ancient Greek: Plato, *Republic*, 551d (cf. already Homer, *Iliad*, B 121 and Γ 435)

πόλεμόν	τινα	πολεμίζειν	'to wage war (to war some war)'
pólemón	*tina*	*polemízein*	
war-ACC.SG	some-ACC.SG	to war-INF	

(4) Ancient Greek: Xenophon, *Hellenica*, 5, 1, 1

Ὁ	πόλεμος	ἐπολεμεῖτο.	'The war was being carried on.'
Ho	*pólemos*	*epolemeĩto.*	
the-NOM.SG	war-NOM.SG	was warred-IND.IMPERF.PASS.3SG	

(5) Latin: Plautus, *Pseudolus*, 254

Malam	*pugnam*	*pugnabo.*	‘I will fight a bad fight.’
bad-ACC.SG	fight-ACC.SG	I will fight-IND.FUT.1SG	

(6) Latin: Plautus, *Amphitryon*, 253 (cf. Pinkster 2015:86)

Haec	*est*	*pugnata*	*pugna*
this-NOM.SG	is-IND.PRS.3SG	having been fought-PART.NOM.SG	fight-NOM.SG

usque	*a*	*mani*	*ad*	*uesperum.*
until	from	morning-ABL.SG	till	evening-ACC.SG

‘This fight was fought there from morning till evening’

(7) Ancient Greek: Herodotus, *Historiae*, 3, 154

Ἑωυτὸν	λωβᾶται	λώβην	ἀνήκεστον.
Heōutòn	*lōbā̃tai*	*lṓbēn*	*anḗkeston.*
himself-ACC.SG	he mutilates-IND.PRS.3SG	mutilation-ACC.SG	irreparable-ACC.SG

‘He mutilates himself a mutilation beyond repair.’

(8) Ancient Greek: Plato, *Gorgias*, 473c

ἄλλας	πολλὰς	καὶ	μεγάλας	καὶ	παντοδαπὰς
állas	*pollàs*	*kaì*	*megálas*	*kaì*	*pantodapàs*
other-ACC.PL	many-ACC.PL	and	big-ACC.PL	and	of every kind-ACC.PL

λώβας	λωβηθείς
lṓbas	*lōbēt^{h}eís*
mutilations-ACC.PL	mutilated-PART.AOR.PASS.NOM.SG

‘having being mutilated a number of grevious mutilations of every kind’

(9) Ancient Greek: Euripides, *Helena*, 1041

Τίνα	φυγὴν	φευξούμεθα ;
Tína	*p^{h}ugèn*	*p^{h}euksoúmet^{h}a?*
which-ACC.SG	escape-ACC.SG	will we escape-IND.FUT.1PL

‘How will we escape?’ (lit. ‘which escape will we escape?’)

(10) Ancient Greek: Plato, *Epinomis*, 974b

Ἡ	δὲ	φυγῇ	φεύγει	τότε	ὅταν	τις
Hē	*dè*	*p^{h}ugẽi*	*p^{h}eúgei*	*tóte*	*hótan*	*tis*
she-NOM.FEM.SG	PCLE	escape-DAT.SG	escapes-IND.PRS.3SG	then	when	someone-NOM.SG

πρός	τινα	φρόνησιν	ἴῃ.
prós	*tina*	*p^{h}rónēsin*	*íẽi.*
towards	some-ACC.SG	knowledge-ACC.SG	goes-SUBJ.PRS.3SG

‘But it (i.e. this power) escapes us with an escape as soon as we attempt any knowledge.’

(11) Latin: Terence, *Eunuchus*, 586-587

Luserat	*/*	*iam*	*olim*	*ille*	*ludum.*
he had played-IND.PLUPERF.3SG		already	previously	that one-NOM.SG	game-ACC.SG

‘As in former times he had played the like game.’

(12) Latin: Plautus, *Mostellaria*, 1158

Scis	*solere*	*illanc*	*aetatem*	*tali*	*ludo*	*ludere.*
you know-IND.PRS.2SG	use to-INF	that-ACC.SG	age-ACC.SG	such-ABL.SG	game-ABL.SG	play-INF

‘You know that age uses to play such a game.’

(13) Young Avestan: *Yašt* 15, 40

yauuata	*gaiia*	*juuāuua*	‘as long as we live our life’
as long as	life-INSTR.SG	we live-IND.PRS.1DU	

(14) Old Church Slavic: *Mc.* 5, 42 Zogr.

И	оужаснѫшѧ сѧ	оужасомь	велиѥмь.
I	*oužasnǫšę sę*	*oužasomь*	*velьjemь.*
and	they were surprised-IND.AOR.3PL=REFL	surprise-INSTR.SG	great-INSTR.SG

‘And they were overcome with a great astonishment.’ (= Greek ἐξέστησαν ἐκστάσει μεγάλῃ)

(15) Old Lithuanian: Mikalojus Daukša, *Postilla Catholicka* (1599: 420$_{40\text{-}41}$)

bernẹlei	*sawû*	*mirimú*	*/*	*arba*	*smerczîâ*	*/*	*numirẹ*
boys-NOM.PL	their-INSTR.SG	death-INSTR.SG		[or	death-INSTR.SG]		dead-PART.PST.NOM.PL

‘boys who are dead their own death’

(16) Gothic: Wulfila's *New Testament*, *Lk.* 2, 9

Ohtedun	*agisa*	*mikilamma.*
they were afraid-IND.PST.3PL	fear-DAT.SG	great-DAT.SG

'They were afraid a great fear.' (= Greek ἐφοβήθησαν φόβον μέγαν)

(17) Old English: *Old English Chronicle*, an. 755 (cf. Visser 1963, [2]1970:413)

He	*feaht*	*miclum*	*feohtum.*	'He fights a big fight.'
he	fights-IND.PRS.3SG	big-DAT.SG	fight-DAT.SG	

(18) Icelandic (cf. Maling 2009:75)

Hann	*svaf*	*djúpum*	*svefni.*	'He slept a deep sleep.'
he	slept-IND.PST.3SG	deep-DAT.SG	sleep-DAT.SG	

• Cf. τοῦτον τὸν τρόπον *toũton tòn trópon* (acc.) and τούτῳ τῷ τρόπῳ *toútōi tôi trópōi* (dat.) 'in that way'.

1.2. Original Texts and Translations

(19) Gothic: Wulfila's *New Testament*, *Jn.* 18, 2 (cf. *Mk.* 14, 44, with ellipsis of the object)

Iudas	*sa*	*galewjands*	*ina*
Judas-NOM.SG	the-NOM.SG	betraying-PART.ACT.NOM.SG	him-ACC.SG

'Judas, the one betraying him' (= Greek Ἰούδας ὁ παραδιδοὺς αὐτόν)

(20) Gothic: Wulfila's *New Testament*, *Mt.* 5, 44

Þiuþjaiþ	*þans*	*wrikandans*	*izwis*
be good-OPT.PRS.2PL	the-ACC.PL	harassing-PART.ACT.ACC.PL	you-ACC.PL

'Pray for those who harass you!' (= Greek εὐλογεῖτε τοὺς καταρωμένους ὑμᾶς)

(21) Gothic: Wulfila's *New Testament*, *Gal.* 6, 6

sa	*laisida*	*waurda*
the-NOM.SG	taught-PART.PASS.NOM.SG	words-ACC.PL

'the one who is taught the word' (= Greek ὁ κατηχούμενος τὸν λόγον)

1.3. Poetic Syntax: PIE Tmesis

a. Pattern 1: [#P-X$_x$-V] = the preverb occupies the initial position in the sentence and is separated from the verb by an open number of words.

b. Pattern 2: [-P-X$_1$-V] = the preverb is not located in initial position, but somewhere in the sentence and is separated from the verb by one single word.

c. Pattern 3: all abnormal realisations of tmesis in Homer and the Rigveda, including 'prepositional tmesis', 'reverse tmesis' (or 'verbal anastrophe') and 'defusional tmesis'.

Pattern 1 [#P-X$_x$-V]

(22) Ancient Greek: Homer, *Iliad*, Γ 34

Ὑπό	τε	τρόμος	ἔλλαβε	γυῖα.
Hupó	*te*	*trómos*	*éllabe*	*guĩa.*
under-PREV	and	trembling-NOM.SG	seized-IND.AOR.3SG	limbs-NOM.SG

'And trembling seized his limbs beneath him.' (ὑπὸ... ἔλλαβε *hupò... éllabe* 'it seized')

(23) Vedic Sanskrit: *RV* X 127$_3$

Nír	*u*	*svásāram*	*askr̥ta*	*/*	*Uṣásaṃ*	*devī́*	*āyatī́.*
under-PREV	PCLE	sister-ACC.SG	raised-IND.AOR.3SG		dawn-ACC.SG	goddess-NOM.SG	coming-NOM.SG

'The goddess, as she came, has raised her sister, the dawn.' (*nír...askr̥ta* 'has raised')

Pattern 2 [-P-X$_1$-V]

(24) Ancient Greek: Homer, *Iliad*, Π 82

Φίλον	δ'	ἀπὸ	νόστον	ἕλωνται.
P^{h}ílon	*d'*	*apò*	*nóston*	*hélōntai.*
desired-ACC.SG	and	PREV.	return-ACC.SG	they rob-SUBJ.PRS.3PL

'that they rob [the Greeks] of their desired return' (ἀπὸ... ἕλωνται *apò... hélōntai* 'they rob')

(25) Vedic Sanskrit: *RV* I 92$_4$

Gā́vo	*ná*	*vrajáṃ*	*ví*	*uṣā́*	*āvar*	*támaḥ.*
cows-NOM.PL	as	stall-ACC.SG	PREV.	dawn-NOM.SG	opened-IND.AOR.3SG	darkness-ACC.SG

'Dawn has opened darkness as the cows their stall.' (*ví...āvar* 'has opened')

(26) Latin: Lucretius, *De Natura Rerum* IV, 832

Cetera	*de*	*genere*	*hoc*	*inter*	*quaecumque*	*pretantur.*
others-NOM.PL	of	kind-ABL.SG	this-ABL.SG	inter-PREV	whatever-NOM.PL	are (inter)preted-IND.PRS.3PL

'all the other things that are interpreted that way' (*inter-...pretantur* 'are interpreted')

Pattern 3: Prepositional Tmesis

(27) Ancient Greek: Homer, *Odyssey*, λ 115

Δήεις	δ'	ἐν	πήματα	οἴκῳ.
Dḗeis	*d'*	*en*	*pḗmata*	*oikōi.*
you will find-IND.FUT.2SG	and	in-PREP.	sufferings-ACC.PL	house-DAT.SG

'And you will find sufferings at home.' (ἐν... οἴκῳ *en...oikōi* 'at home')

Pattern 3: 'Reverse tmesis' (verbal anastrophe)

(28) Ancient Greek: Homer, *Iliad*, B 699

τότε	δ'	ἤδη	ἔχεν	κάτα	γαῖα	μέλαινα.
tóte	*d'*	*ḗdē*	*ék^{h}en*	*káta*	*gaîa*	*mélaina.*
then	and	already	held-IND.IMPERF.3SG	under-POSTV	earth-NOM.SG	black-NOM.SG

'And then the black earth held him fast.' (ἔχεν κάτα *ék^{h}en káta* = κάτ-εχεν *kát-ek^{h}en* 'held fast')

(29) Ancient Greek: Homer, *Odyssey*, γ 161

ὅς	ῥ'	ἔριν	ὦρσε	κακὴν	ἔπι	δεύτερον αὖτις
hós	*r^{h}'*	*érin*	*ṓrse*	*kakὲ̀n*	*épi*	*deúteron aũtis*
who-NOM.SG	PCLE	quarrell-ACC.SG	raised-IND.AOR.3SG	bad-ACC.SG	on-POSTV	twice again

'who raised evil quarrel again a second time' (ὦρσε...ἔπι *ṓrse...épi* = ἐπ-ῶρσεν *ep-ṓrsen* 'raised up')

(30) Vedic Sanskrit: *RV* I 85_3

Bā́dhante	*víśvam*	*abhimātínam*	*ápa.*
they drive-IND.PRS.3PL	each-ACC.SG	adversary-ACC.SG	away

'They drive off each adversary.' (*bā́dhante...ápa* 'they drive...off')

Pattern 3: 'Defusional Tmesis'

• Greek adverb διαμπερές *diamperés* 'without break, continuously' (e.g. *Iliad*, Π 499, etc.), tmesis in διὰ δ' ἀμπερές *dià d' amperés* (*Iliad*, Λ 377, P 309, *Odyssey*, φ 422).

(31) Latin: Virgilius, *Georgics* III, 381

septem	*subiecta*	*trioni*	'submitted to the Septentrio'
seven-	submitted-NOM.FEM.SG	-trio-DAT.SG	

(32) Latin: Ennius, *Annales* 609

Saxo	*cere-*	*comminuit*	*-brum.*	'He broke the brain with a stone.'
stone-DAT.SG	cere-	he broke-IND.PERF.3SG	brum	

Clitic interposition (insertion of a clitic between a preverb and a verb)

(33) Hittite: *KBo* XVII 18 II 13-[15]

Para-[*m*]*a-aš*	*pa-iz-zi.*
PREV=and=he-NOM.SG	goes-IND.PRS.3SG

'He goes forward.' (*para-...paizzi* 'he goes forward', interposition of the clitics *-ma-* 'and' and *-aš* 'he')

(34) Old Irish: *Echtrae Chonnlai* § 13, 79-80 (ed. McCone 2000)

Ro-m-gab	*dano*	*éolchaire*	*immon*	*mnái.*
PREV=me=seized-IND.PST.3SG	yet	longing-NOM.SG	for=the-DAT.SG	woman-DAT.SG

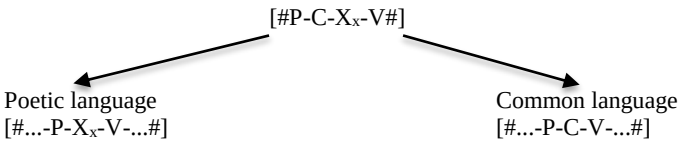
'Yet longing for the woman has seized me.' (*ro-...-gab* 'it seized' interposition of the clitic *-m-* 'to me')

(35) Lithuanian

Ap-si-rengiau.
PREV=REFL=dress-IND.PST.1SG
'I dressed myself.' (*ap-...-rengiau* 'I dressed', interposition of the clitic reflexive particle *-si-* 'oneself')

(36) Ossetic (Digor dialect)

Æрa-cæ-фарста.
Æra-sæ-farsta.
PREV=them=asked-IND.PST.3SG
'He asked them.' (*æra-...-farsta* 'he asked', interposition of the clitic *-sæ-* 'them')



2. Internal Reconstruction

• Donald Ringe (2005:244): 'exploitation of patterns in the synchronic grammar of a single language or dialect to recover information about its prehistory'. Cf. Pisani (1938), Hoenigswald (1944), Chafe (1959), Kuryłowicz (1964, cf. also 1973), Rasmussen & Olander (2009).

• Anthony Fox (1995:146): 'the rather poor relation of the Comparative Method'

• Brigitte Bauer (2008:18): 'Synchronic variants are evaluated on the basis of the assumption that a language at a given stage – or at a given stage of reconstruction – includes material that reflects different layers of development.'

2.1. 'Evidential' vs 'Inferential Clues'

• 'Evidential clues': competition between an archaic form or pattern A_1 and a more recent form or pattern A_2 / 'inferential clues': existence of previous forms or patterns that are not preserved *as such*.

2.2. Syntactic Archaism of Proverbs

(37) Classical Greek: Plato, *Symposium*, Π 82

ἵνα	καὶ	τὴν	παροιμίαν	διαφθείρωμεν	μεταβαλόντες,
hína	*kaì*	*tḕn*	*paroimíān*	*diap^{h}t^{h}eírōmen*	*metabalóntes,*
so that	also	the-ACC.SG	proverb-ACC.SG	we corrupt-SUBJ.PRS.1PL	changing-PART.AOR.NOM.PL

ὡς	ἄρα	καὶ	« Ἀγαθῶν	ἐπὶ δαῖτας	ἴασιν	αὐτόματοι	ἀγαθοί »
hōs	*ára*	*kaì*	*Agat^{h}ṓn*	*epì daîtas*	*íasin*	*autómatoi*	*agat^{h}oí*
that	PCLE	also :	good men-GEN.PL	at feasts-ACC.PL	go-IND.PRS.3PL	self-acting-NOM.PL	good men-NOM.PL

'...so that we might corrupt and modify the proverb: « The good men go of their own accord to the good men's feast. »'

(38) Classical Greek: Isocrates, 1, 6

Κάλλος	μὲν	γὰρ	ἢ	χρόνος	ἀνήλωσεν
Kállos	*mèn*	*gàr*	*ḕ*	*k^{h}rónos*	*anḗlōsen*
beauty-ACC.SG	PCLE	PCLE	either	time-NOM.SG	wasted-IND.AOR.3SG

ἢ	νόσος	ἐμάρανε.
ḕ	*nósos*	*emárane.*
or	disease-NOM.SG	withered-IND.AOR.3SG

'For beauty is either wasted by time or withered by disease.'

Modification of proverbs

1250:	*Brend child fuir fordredeth.*
1410:	*For brent child dredith fyer.*
1484:	*Brent chylde fyre dredeth.*
1515:	*For children brent still after drede the fire.*
1546:	*And burnt childe fyre dredth.*
1580:	*A burnt childe dreadeth the fire.*
1614:	*Burnt child fire dreades.*
1670:	*The burnt child dreads the fire.*
1855:	*It's only the child that burns its fingers that dreads the fire.*
1913:	*As a burnt child would recoil from fire.*
1935:	*He's a burnt child who dreads the fire.*
1975:	*A burnt child dreads the fire.*

2.3. Phraseological Collocations

(39) Old Icelandic: *Edda, Atlamál in grœnlenzko*, 99, 3

Oss	*á*	*hǫnd*	*gengo.*
us-DAT.PL	in	hand-ACC.SG	went-IND.PST.3PL

'They did us service.' (< 'they went to us in hands', without article in *á hǫnd* 'in hands')

(40) Classical Armenian: *Mt.* 2, 2

Եւ	եկաք	երկիր	պագանել	նմա.
Ew	*ekak‘*	*erkir*	*paganel*	*nma.*
and	we came-IND.AOR.1PL	earth-ACC.SG	to kiss-INF	him-DAT.SG

‘And we came to worship him.’ (< ‘to kiss earth for him’, with երկիր պագանել *erkir paganel* ‘to kiss earth’, without article on երկիր *erkir* ‘earth’) (= Gr. ἤλθομεν προσκυνῆσαι αὐτῷ)

(41) Classical Armenian: *Lk.* 11, 7

Մի	աշխատ	առներ	զիս.
Mi	*ašxat*	*aṙner*	*z-is.*
NEG.PROHIB	tiredness-ACC.SG	make-IMPER.PRS.2SG	OBJ=me-ACC.SG

‘Do not tire me out!’ (< ‘Do not make tiredness + me’) (= Gr. Μή μοι κόπους πάρεχε)

2.4. Coexistence of A_1 and A_2: ‘be-languages’ vs ‘have-languages’ (Isačenko 1974)

(42) Origins of the verb ‘to have’: Ancient Greek ἔχω *ék^{h}ō* (< PIE **seĝ^h-* ‘to hold’, cf. Vedic Sanskrit *sáhati* ‘to hold back’); Lat. *habeō* (< PIE **g^{h}ab^h-*, cf. Old Irish *gaibim* ‘to grasp’, Lith. *gabénti* ‘to transport, to carry’); Old High German *habēn* (< PIE **kh$_2$p-eh$_1$-*, cf. Lat. *capiō* ‘to grasp, to seize’); Old Church Slavic имѣти *iměti* (< PIE **h$_1$°m-eh$_1$-*, cf. Old Church Slavic ѧти *jęti*, Lith. *ĩmti* ‘to take, to seize’); Lithuanian *turéti* (< PIE **tur-eh$_1$-*, cf. Lith. *tvérti* ‘to grasp, to enclose’); Albanian *kam* (< PIE **kṷeh$_2$-* ‘to possess’, cf. Gr. dial. πέπᾱμαι *pépāmai* ‘I possess’); Arm. ունիմ *ownim* (< PIE **h$_1$e-h$_1$op-*, cf. Vedic Sanskrit *āpnóti* ‘to reach, to gain’).

(43) Latin: Plautus, *Miles Gloriosus*, 717 (cf. Bauer 2000:159)

Tibi	*sunt*	*gemini.*	‘You have twins.’
to you-DAT.SG	are-IND.PRS.3PL	twins-NOM.PL	

(44) Latin: Plautus, *Bacchides*, 333

Tantas	*diuitias*	*habet.*	‘He has so many riches.’
such-ACC.PL	riches-ACC.PL	he has-IND.PRS.3SG	

(45) Ancient Greek: Homer, *Iliad* X 293

Οὐδ’	ἄλλ’	ἔχε	μείλινον	ἔγχος	‘But he had no spear of ash.’
Oud’	*áll’*	*ék^{h}e*	*meílinon*	*énk^{h}os.*	
NEG	other	he had-IND.IMPERF.3SG	of ash-ACC.SG	spear-ACC.SG	

(46) Ancient Greek: Homer, *Iliad* I 144

Τρεῖς	δέ	μοι	εἰσὶ	θύγατρες.	‘I have three daughters.’
Treĩs	*dé*	*moi*	*eisì*	*t^{h}úgatres.*	
three-NOM.PL	PCLE	to me-DAT.SG	are-IND.PRS.3PL	daughters-NOM.PL	

(47) Old Lithuanian: Jonas Bretkūnas, *Biblia* (1579-1590: *Gn.* 19, 8)

Schitai,	*man*	*ira*	*dwi*	*Dukteri.*	‘Behold, I have two daughters.’
behold	to me-DAT.SG	are-IND.PRS.3	two-NOM.DU	daughters-NOM.DU	

(48) Old Lithuanian: Jonas Bretkūnas, *Biblia* (1579-1590: *Ex.* 2, 16)

Plebonas	*Madiane*	*turreia*	*septines*	*Dukteres.*
priest-NOM.SG	Madian-LOC.SG	had-IND.PST.3	seven-ACC.PL	daughters-ACC.PL

‘A priest in Madian had seven daughters.’

• Brigitte Bauer (2000:183, 185): the *mihi est*-construction ‘refers predominantly to an animate, and more specifically a human being’, the *habeo*-construction ‘to concrete objects and persons’.

2.5. Coexistence of A_1 and A_2: Lithuanian Preposition *į* + acc. ‘into, to’ vs. Illative Case

(49) Lithuanian

eĩti	*į̃*	*pievą*	‘to go to the meadow’
to go-INF	into	meadow-ACC.SG	

(50) Lithuanian

eĩti	*pievon*	‘to go to the meadow’
to go-INF	meadow-ILL.SG	

• Illative: *pievon* (< accusative **pievān* ‘meadow’ + postposition **-nā* ‘to’) vs. preposition: *į̃ pievą* (< **in pievān* = Latin *in* + ACC., Gothic *in* + ACC.)

2.6. 'Inferential Clues': The Tocharian Secondary Cases

(51) Tocharian B (cf. Pinault 2008:467; see also Krause & Thomas 1960:I 92)

krent	*pelaiknene*	'in the good law'
good-OBL.SG	law-LOC.SG	

(52) Tocharian B: 496, 3a

sanai	*ṣaryompa*	'with my only beloved'
alone-OBL.SG	beloved-COMIT.SG	

(53) Tocharian B: 107, 11

spharīräṣṣe	*aisemeṃ*	'from the crystal pot'
crystal-OBL.SG	pot-ABL.SG	

(54) Tocharian B (cf. Krause & Thomas 1960:I 91, Pinault 2008:466)

kektseñ	*reki*	*palskosa*	'through body, word and thought'
body-OBL.SG	word-OBL.SG	thought-PERL.SG	

(55) Tocharian B (cf. Krause & Thomas 1960:I 92, Pinault 2008:467)

kreñcepi	*wnolmentse*	'of a good creature'
good-GEN.SG	creature-GEN.SG	

(56) Tocharian B

**krent*	*pelaikne*	*-ne*	'in the good law'
good-OBL.SG	law-OBL.SG	=in-POSTP	

• Tocharian B: locative ending *-*ne* < postposition **no* (cf. Slavic preposition на *na* 'on' < PIE **nō*)

(57) Tocharian B (cf. Pinault 2008 467)

kreñt	*wnolmentse*	'of a good creature'
good-OBL.SG	creature-GEN.SG	

(58) Tocharian A: *TEB* 17.19, § 28

ṣñi	*ṣñaṣṣesā*	*ortāsā*	'by his parents and friends'
of him-GEN.SG	parents-PERL.PL	friends-PERL.PL	

3. Internal Comparison

3.1. Continuity of the Documentation: Reflexivity in Greek (**sṷe*)

(59) Ancient Greek: Homer, *Odyssey* ν 320 ('in his own breast' = 'in my breast')

Ἀλλ'	αἰεὶ	φρεσὶν	ἦσιν	ἔχων	δεδαϊγμένον	ἦτορ
All'	*aieì*	*p^{h}resìn*	*hễisin*	*ék^{h}ōn*	*dedaïgménon*	*ễtor*
but	always	breast-DAT.PL	own-DAT.PL	having-PART.NOM.SG	stricken-ACC.SG	heart-ACC.SG
/ ἠλώμην.						
/ ēlṓmen.						
I wandered-IND.IMPERF.1SG				'I always wandered, having in my breast a stricken heart.'		

(60) Ancient Greek: Homer, *Iliad* O 64 ('his friend')

Ὅ	δ'	ἀνστήσει	ὃν	ἑταῖρον.
Ho	*d'*	*anstḗsei*	*hòn*	*hetaĩron.*
this one-NOM.SG	PCLE	will arouse-IND.FUT.3SG	his-ACC.SG	friend-ACC.SG

'He will arouse his friend.'

(61) Ancient Greek: Homer, *Iliad* E 212-213 ('my native land')

Ἐσόψομαι	ὀφθαλμοῖσιν	/	πατρίδ'	ἐμήν.
Esópsomai	*op^{h}t^{h}almoĩsin*	/	*patrid'*	*emḗn.*
I will see-IND.FUT.1SG	with the eyes-DAT.PL		native land-ACC.SG	mine-ACC.SG

'I will see with my eyes my fatherland.'

(62) Ancient Greek: Sophocles, *Oedipus Tyrannus* 141 ('myself')

Ἐμαυτὸν	ὠφελῶ.	'I serve myself.'
Emautòn	*ōp^{h}elỗ.*	
myself-ACC.SG	I serve-IND.PRS.1SG	

(63) Ancient Greek: Xenophon, *Cyropedia* 7, 3, 14 ('himself, herself')

Σφάττει	ἑαυτήν.	'She kills herself.'
Sp^{h}áttei	*heautḗn.*	
she kills-IND.PRS.3SG	herself-ACC.SG	

(64) New Testament Greek: *2Cor.* 13, 5

Ἑαυτοὺς	πειράζετε.	‘Test yourselves.’
Heautoùs	*peirázete.*	
themselves-ACC.PL	test-IMPER.PRS.2PL	

(65) Medieval Greek: Theodoros Prodromos, *Opera Omnia*, I 276

Τρέφε	τὸν	ἑαυτόν	σου.	‘Feed yourself.’
Tréph^{h}*e*	*tòn*	*heautón*	*sou.*	
feed-IMPER.PRS.2SG	the-ACC.SG	self-ACC.SG	of you-GEN.SG	

Evolution in Greek

(1) A general reflexive not marked in person (vestiges in Homer).
(2) A third person reflexive pronoun and no distinct expression of reflexivity in the other persons (Homer).
(3) A distinct expression of reflexivity for each person (Classical Greek).
(4) A general reflexive used indistinctly for all persons (New Testament).
(5) A reflexive substantive followed by personal markers (Modern Greek).

3.2. Discontinuity of the Documentation: Slovenian Subordination and Clitics

(66) Slovenian (cf. Herrity 2000:343)

Ker	*ga*	*je*	*domá*	*zéblo,*
because	him-ACC.SG	is-IND.PRS.3.SG	at home-ADV	cold-NOM.NEUT.SG
je	*šèl*	*v*	*kavárno.*	
is-IND.PRS.3.SG	gone-PART.NOM.SG	to	coffee shop-ACC.SG	

‘Because he felt cold at home, he went to the coffee shop.’

(67) Old Slovenian: *Brižinski Spomeniki*, 158v, 1-3

Eccę	*bi*	*δetd*	*naſ*	*ne-ʒe/greſil*
if	COND.PCLE	forefather-NOM.SG	our-NOM.SG	NEG-having sinned-PART.NOM.SG
τe-v-ueki-gemu-be			/	*ſiti.*
then=for-ever=to him-DAT.SG=would be-COND.3SG.				to live-INF

‘If our forefather had not sinned, then he would have lived for ever.’

(68) 16th century Slovenian: Primož Trubar, *Ta Celi Novi testament* (1582), *Mtt.* 12, 2

Kadar	*tu*	*ty*	*farizei*	*zagledaio,*
when	that-ACC.SG	the-NOM.PL	Pharisees-NOM.PL	see-IND.PRS.3.PL
so	*k*	*nemu*	*rekli.*	
are-IND.PRS.3.PL	to	him-DAT.SG	having said-PART.NOM.PL	

‘When the Pharisees saw this, they said to him.’

3.3. Directional Illusion: Interpreting A_1 in the light of A_2 (‘retrospective illusion’)

• **Romance definite article** < Latin demonstrative *ille* ‘that’ (cf. Spanish *el*, *la*, Portuguese *o*, *a*, Italian *il*/*lo*, *la*, Rheto-Romance *il*, *la*, French *le*, *la* and Romanian *-l*, *-a*) or emphatic *ipse* ‘self’ (cf. Sardinian *su*, *sa* and similar forms in some Catalan dialects)

(69) Late Latin: Theodosius, *De Situ Terrae Sanctae*, 68 (ca 530 CE, ed. Gildemeister 1882:25)

Memoria	*sancti*	*Helisaei,*	*ubi*	*fontem*	*illum*
monument-NOM.SG	of Saint-GEN.SG	Helisaeus-GEN.SG	where	fountain-ACC.SG	that-ACC.SG
benedixit,	*ibi*	*est,*	*et*	*super*	*ipsa*	*memoria*
blessed-IND.PST.3SG	there	is-IND.PRS.3SG	and	over	that-ABL.SG	monument-ABL.SG
ecclesia	*fabricata*	*est.*				
church-NOM.SG	built-PART.NOM.SG	is-IND.PRS.3SG				

‘The monument of Sanct Helisaeus, where he blessed that/the fountain, is there, and over that/the monument a church has been built.’

• **Modern Bulgarian postposed definite article** < Slavic demonstrative **to*- (e.g. градъ-т *gradă-t* ‘the city’, книга-та *kniga-ta* ‘the book’)

(70) Old Church Slavic: *Jn.* 18, 10 Sav.

Бѣ	же	имѧ	рабоу	томоу	Мельхъ.
Bě	*že*	*imę*	*rabou*	*tomoy*	*Melьxъ.*
was-IND.IMPERF.3SG	PCLE	name-NOM.SG	slave-DAT.SG	that-DAT.SG	Malkhos-NOM.SG

‘The servant’s name was Malchus.’ (= Greek ἦν δὲ ὄνομα τῷ δούλῳ Μάλχος)

(71) Old Church Slavic: *Jn.* 14, 11 Zogr.

За	та	дѣла	вѣрѫ	емлѣте	ми.
Za	*ta*	*dělа*	*věrǫ*	*eml'ěte*	*mi.*
for	these-ACC.PL	deeds-ACC.SG	faith-ACC.SG	take-IMPER.PRS.2PL	to me-DAT.SG

'Believe me for the very works' sake.' (= Greek διὰ τὰ ἔργα αὐτὰ πιστεύετε)

4. External Comparison

4.1. Cross-linguistic Comparability

• William Croft (1990:11): 'The fundamental prerequisite for cross-linguistic comparison is cross-linguistic comparability, that is the ability to identify the 'same' grammatical phenomenon across languages'.

4.2. Infinitives

• Terminology: Latin *infinitivus*, Greek ἀπέμφατος *apémp^{h}atos* 'the incongruous mood'

(72) Latin: Plautus, *Bacchides*, 631

Militis	*parasitus*	*modo*	*uenerat*	*aurum*	*petere*	*hinc.*
captain-GEN.SG	parasite-NOM.SG	just	came-IND.PLUPERF.3SG	gold-ACC.SG	fetch-INF	hence

'The captain's parasite came here right now to fetch the gold hence.'

(73) Latin: Horace, *Odes* I, 29, 9

doctus	*sagittas*	*tendere*	*Sericas*	'skilled to bend the Serian bow'
skilled-NOM.SG	bows-ACC.PL	bend-INF	Serian-ACC.PL	

(74) Latin: Plautus, *Trinummus*, 5

Operam	*dare*	*promittitis.*	'You promised to give attention.'
attention-ACC.SG	give-INF	promised-IND.PRS.2PL	

(75) Latin: Plautus, *Mercator*, 577

Scio	*pol*	*te*	*amare.*	'I know that you are in love.'
I know-IND.PRS.1SG	PCLE	you-ACC.SG	be in love-INF	

(76) Hittite: *ABoT* 60 rev. 3-4, *VBoT* 2: 10-12 (cf. Hoffner & Melchert 2008:337)

Liliwaḫḫuwanzi	*nai.*	'Send quickly!'
hurry-INF	send-IMPER.ACT.2SG	

(77) Old English: *Beowulf*, 702-703

Cōm	*on*	*wanre*	*niht*	/	*scrīðan*	*sceadugenga.*
came-IND.PST.3SG	in	dark-DAT.SG	night-DAT.SG		to glide-INF	shadow-stalker-NOM.SG

'Out of the dark night came the shadow-stalker swiftly'.

(78) Old Lithuanian: Jonas Bretkūnas, *Biblia* (1579-1590: *Ex.* 12, 33)

Mumus	*wissiems*	*mirti.*	'We all have to die.'
to us-DAT.PL	all-DAT.PL	to die-INF	

(79) Modern Lithuanian

Jaũ	*bõkštas*	*matýti.*
already	tower-NOM.SG	to see-INF

'We can already see a tower.' (lit. 'a tower is already to see.')

(80) Vedic Sanskrit: *RV* II 1_{12}

Táva	*spārhé*	*várṇa*	*ā́*	*saṃdŕ̥ṣi*	*śríyaḥ.*
of you-GEN.SG	delightful-LOC.SG	colour-LOC.SG	in	to see-INF	splendors-NOM.PL

'In your delightful colour are the splendors visible.' ('are to see' < lit. 'in seeing')

4.3. New Terminological Labels: 'Evidentials'

• Joan Bybee (1985:184): evidentials 'indicate something about the *source* of the information in the proposition'

• Franz Boas (1947): Kwakiutl, an Amerindian language spoken in British Columbia (Canada)

• Roman Jakobson (1957)

(81) Bulgarian (cf. Smirnova 2013:479 sq.)

Мариа	написала	книга.	‘Maria wrote a book (I heard).’
Maria	*napisala*	*kniga.*	
Maria	having written-PART.PERF	book	

(82) Bulgarian (cf. Smirnova 2013:479 sq.)

Мариа	написа	книга.	‘Maria wrote a book.’
Maria	*napisa*	*kniga.*	
Maria	wrote-IND.AOR.3SG	book	

(83) Albanian (cf. Buchholz & Fiedler 1987:154)

E,	*unë*	*paskam*	*miq !*	‘Eh, I have friends!’
eh	I-NOM.SG	have-ADMIR.PRS.1SG	friends-ACC.PL	

• Cf. Victor Friedman (1982, 1986)

• Distinction between evidentiality (referring to the source of the information) and epistemic modality (referring to its subjective validation). Cf. Gabriele Diewald & Elena Smirnova (2010:6): ‘While evidentiality indicates the source of evidence a speaker has for making a statement, without necessarily accompanying that with a factuality judgment, epistemic modality is concerned exactly and exclusively with the latter, i.e. with the degree of factuality a speaker attributes to a proposition’.

(84) English

John	*was*	*allegedly*	*singing.*
John	was-IND.PST.3SG	allegedly-ADV	singing

• Pro: Aikhenvald (2003:19); contra: Boye (2010:291).

4.4. Goals of the Comparison

Universal patterns of language (typological comparison); reconstruction of common prototypes (genetic comparison); patterns shared by neighbouring languages (areal comparison).

4.5. Clitic Doubling in the Balkan Languages

(85) Albanian

Agimi	*e*	*pa*	*Sokolin.*
Agim-NOM.SG=DEF.ART	him-ACC.SG	saw-IND.AOR.3SG	Sokol-ACC.SG=DEF.ART

‘Agim saw Sokol.’ (lit. ‘Agim saw him Sokol.’)

(86) Bulgarian

Иван	го	виждам.	‘I see Ivan.’ (‘I see him Ivan.’)
Iván	*go*	*vížda*m.	
Ivan	him-OBJ.SG	I see-IND.PRS.1SG	

(87) Romanian

L-am	*văzut*	*pe*	*Popescu.*
him-OBJ=have-IND.PRS.1SG	seen-PART	OBJ.MARK.	Popescu

‘I have seen Popescu.’ (‘I have seen him Popescu.’)

(88) Modern Greek

Τον	συνάντησα	τον	αδερφό	της	προχθές.
Ton	*sinántisa*	*ton*	*aδerfó*	*tis*	*proχθés.*
him-ACC.SG	I met-IND.AOR.1SG	the-ACC.SG	brother-ACC.SG	of her-GEN.SG	the day before yesterday-ADV

‘I met her brother the day before yesterday.’ (lit. ‘I met him her brother the day before yesterday.’)

First approach: Kayne (1975) = right-dislocation

(89) French

Je	*le*	*vois,*	*Jean.*	‘I see Jean.’
I	him-OBJ	see-IND.PRS.1SG	Jean	

(90) Spanish

Juan	*lo*	*leyó*	*el libro.*	‘Juan read the book.’
Juan	it-OBJ	read-IND.PST.3SG	the book	

Second approach: Romance development

(91) Latin: Cicero, *De Oratore* 2, 160

Et	*illum*	*legi*	*librum*	‘And I have read this book’
And	that-ACC.SG	I read-IND.PERF.1SG	book-ACC.SG	

Third approach: Balkan feature

- Franz Miklosich (1862:7-8).

5. External Reconstruction

5.1. Vocative Case and Plurality

(92) Ancient Greek: Homer, *Odyssey* γ 43 = vocative singular

Εὔχεο	νῦν,	ὦ	ξεῖνε.	‘Offer a prayer, o stranger!’
Eúk^{h}eo	*nũ̃n,*	*ō̃*	*kseĩne.*	
pray-IMPER.PRS.MED.2SG	now	PCLE	stranger-VOC.SG	

(93) Ancient Greek: Homer, *Odyssey* ι 252 = nominative plural in vocative function

Ὦ	ξεῖνοι,	τίνες	ἐστέ ;	‘O strangers, who are you?’
Ō̃	*kseĩnoi,*	*tínes*	*esté?*	
PCLE	strangers-NOM.PL	who-NOM.PL	are you-IND.PRS.2PL	

(94) Vedic Sanskrit: *RV* I 114$_9$ = vocative singular

Rā́svā	*pitar*	*marutā̃m*	*sumnám*	*asmé.*
give-IMP.AOR.2SG	father-VOC.SG	of the Maruts-GEN.PL	favour-ACC.SG	to us-DAT.PL

‘Give us your favour, o father of the Maruts!’

(95) Vedic Sanskrit: *RV* X 15, 6$_2$ = nominative plural in vocative function

Mā́	*hiṃsiṣṭa,*	*pitaraḥ.*	‘Do not injure us, o fathers!’
NEG	injure-INJ.AOR.2PL	fathers-NOM.PL	

(96) Old Irish: *Tail Bo Cuailnge*, 2456, cf. O’Rahilly (1970:67) = nominative plural

Atrubratar	*fir*	*Hérend.*	‘The men of Erin discussed.’
discussed-IND.PST.3PL	men-NOM.PL	of Erin-GEN.SG	

(97) Old Irish: *Tail Bo Cuailnge*, 3791, cf. O’Rahilly (1970:105) = vocative plural

Maith	*a*	*fíru*	*Hérend!*	‘O men of Erin!’
well-ADV	PCLE	men-VOC.PL	of Erin-GEN.SG	

(98) Romanian (cf. Hill 2014:188)

Fetelor!	*le-a*	*spus*	*fetelor.*
girls-VOC.PL	them-GEN.DAT.PL=has.IND.PRS.3SG	said-PART.NOM.SG	girls-GEN-DAT.PL

‘“Girls!”, he said to the girls.’

(99) Romanian (cf. Hill 2014:188)

Vă	*spun*	*vouă,*	*fraţilor.*
you-GEN-DAT.PL	I tell.IND.PRS.1SG	to you-GEN-DAT.PL	brothers-GEN-DAT.PL

‘I tell you, [you being] my brothers.’

The [VOC+NOM] pattern

(100) Vedic Sanskrit: *RV* I 2, 5

Vā́yav	*Índraś*	*ca*	*cetathaḥ.*	‘O Vāyu and Indra, you know!’
Vāyu-VOC.SG	Indra-NOM.SG	=and	you know-IND.PRS.2PL	

(101) Ancient Greek: Homer, *Iliad* Γ 276-277

Ζεῦ	πάτερ	Ἴδηθεν	μεδέων,	κύδιστε,	μέγιστε
Zeũ	*páter*	*Ídēt^{h}en*	*medéōn,*	*kū́diste,*	*mégiste*
Zeus-VOC.SG	father-VOC.SG	from the Ida-ABL.SG	leader-NOM.SG	most glorious-VOC.SG	biggest-VOC.SG

Ἠέλιός	θ’	ὃς	πάντ’	ἐφορᾷς
Ēéliós	*t^{h}’*	*hòs*	*pánt’*	*ep^{h}orã̃is*
Sun-NOM.SG	=and	who-NOM.SG	everything-ACC.SG	sees-IND.PRS.3SG

καὶ	πάντ’	ἐπακούεις
kaì	*pánt’*	*epakoúeis.*
and	everything-ACC.SG	hears-IND.PRS.3SG

‘Father Zeus, who rules from the Ida, the most glorious, the biggest, and thou Sun, who sees everything, who hears everything!’

The [NOM+VOC] pattern

(102) Vedic Sanskrit: *RV* IV 50, 10 (with 'inverted *ca*')

Índraś	*ca*	*sómaṃ*	*pibataṃ*	*Bṛhaspate.*
Indra-NOM.SG	=and	soma-ACC.SG	drink-IMPER.PRES.2DU	Bṛhaspati-VOC.SG

'Indra and Bṛhaspati, drink the soma!'

(103) Ancient Greek: Homer, *Odyssey* τ 406 (cf. Platt 1909:105)

Γαμβρὸς	ἐμὸς	θύγατέρ	τε,	
Gambròs	*emòs*	*t*^{h}*úgatér*	*te,*	
son-in-law-NOM.SG	my-NOM.SG	daughter-VOC.SG	=and	
τίθεσθ'	ὄνομ'	ὅττι	κεν	εἴπω.
tít^{h}*est*^{h}*'*	*ónom'*	*hótti*	*ken*	*eípō.*
put-IMPER.PRS.2PL	name-ACC.SG	whatever-ACC.SG	PCLE	I say-SUBJ.AOR.1SG

'My son-in-law and my daughter! give him whatsoever name I say.'

The [VOC+VOC] pattern

(104) Vedic Sanskrit: *RV* I 185, 11 (cf. also V 46, 2 and V 71, 3)

Idáṃ	*dyāvāpṛthivī*	*satyám*	*astu*		
now	Earth-Heaven-NOM.DU	true-NOM.SG	be-IMPER.PRES.3SG		
pítar	*mā́tar*	*yád*	*ihópabruvé*		*vām.*
father-VOC.SG	mother-VOC.SG	when	now-I address-IND.PRES.1SG		you-ACC.SG

'Be this true, o Earth and Heaven, when, Father and Mother, I address you.'

(105) Ancient Greek: Homer, *Iliad* Z 77 (cf. Platt 1909:106)

Αἰνεία	τε καὶ	Ἕκτορ	'Aeneas and Hector!'
Aineía	*te kaì*	*Héktor*	
Aeneas-VOC.SG	=and	Hector-VOC.SG	

(106) Old Avestan: *Yasna* 46, 18

Mazdā	*Ašā*	'O Mazda [and] Aša!'
Mazda-VOC.SG	Aša-VOC.SG	

(107) Old Avestan: *Yasna* 28, 7

Mazdā	*Xšaiiā-cā*	'O Mazda [and] king!'
Mazda-VOC.SG	King-VOC.SG=and	

(108) Romanian

Doamnelor	*şi*	*domnilor!*	'Ladies and gentlemen!'
ladies-VOC.PL	and	gentlemen-VOC.PL	

• Jan Gonda (1975:91 [1956]): particle *ca* (Ved.), τε *te* (Gr.) 'and' < PIE particle **k^{u}e*, 'indicating complementary unity'.

5.2. Verb-initial Sentences in Indo-European (VSO or VOS)

(109) Vedic Sanskrit: *RV* V 54, 2 (cf. Viti 2008:89)

Vā́sati	*tritáḥ*	*sváranty*	*ā́paḥ.*
roars out-IND.PRS.3SG	Trita-NOM.SG	thunder-IND.PRS.3PL	waters-NOM.PL

'Trita roars out. The waters thunder.'

(110) Vedic Sanskrit: *RV* I 35, 3 (cf. Viti 2008:89)

Yā́ti	*deváḥ*	*pravátā,*	*yā́ti*	*udvátā.*
goes-IND.PRS.3SG	god-NOM.SG	by the downward path	goes-IND.PRS.3SG	by the upward path

'The god goes by the downward path, he goes by the upward path.'

(111) Young Avestan: *Yašt* 10, 2

Mərəṇcaite	*vīspam*	*daiŋhaom*	*mairiiō*	*Miθrō.druxś.*
destroys-IND.PRS.MED.3.SG	all-ACC.SG	region-ACC.SG	false-NOM.SG	deceiver of Mithra-NOM.SG

'He destroys the whole region the false deceiver of Mithra.'

(112) Ancient Greek: Homer, *Iliad* Φ 387

Βράχε	δ'	εὐρεῖα	χθών.	'The broad earth thundered.'
Brák^{h}*e*	*d'*	*eureĩa*	*k*^{h}*t*^{h}*ṓn.*	
thundered-IND.AOR.3SG	PCLE	broad-NOM.SG	earth-NOM.SG	

(113) Ancient Greek: Homer, *Iliad* P 689

Πέφαται	δ’	ὥριστος	Ἀχαιῶν //	Πάτροκλος.
Pép^{h}atai	*d’*	*hṓristos*	*Akhaiõn //*	*Pátroklos.*
died-IND.PERF.3SG	PCLE	the=best-NOM.SG	Achaeans-GEN.PL	Patroklos-NOM.SG

‘He is dead the best of the Achaeans, Patroclos.’

(114) Latin: Cicero, *Tusculanes* 1, 108 (cf. Spevak 2010:44)

Condiunt	*Aegyptii*	*mortuos*	*et eos*	*servant*	*domi.*
embalm-IND.PRS.3PL	Egyptians-NOM.PL	deads-ACC.PL	and them-ACC.PL	keep-IND.PRS.3PL	home

‘Egyptians embalm the deads and keep them at home.’

(115) Latin: Caeasar, *De Bello Gallico* 1, 9 (cf. Luraghi 1995:369)

Relinquebatur	*una*	*per*	*Sequanos*	*uia.*
remained-IND. IMPERF.PASS.3SG	one-NOM.SG	through	Sequani-ACC.PL	way-NOM.SG

‘There remained only one other line of route, through the borders of the Sequani.’

(116) Classical Armenian: Movsēs Xorenac’i, *History of Armenia*, I, 31 (‘The Birth of Vahagn’)

Երկնէր	երկինն,	երկնէր	երկինր ը.
Erknēr	*erkin,*	*erknēr*	*erkir.*
was in labour-IND.IMPERF.3SG	sky-NOM.SG	was in labour-IND.IMPERF.3SG	earth-NOM.SG

‘The sky was in labour, the earth was in labour.’ (see Tolegian 1979:32-33)

(117) Tocharian A: I, 2 (cf. Krause & Thomas 1960:II17, Pinault 2008:467)

Nämseñc	*yäsluṣ*	*tsraṣisac,*
bow down-IND.PRS.3PL	enemies-NOM.PL	powerful-ALL.PL
kumseñc	*yärkant*	*tsraṣisac.*
come-IND.PRS.3PL	homages-NOM.PL	powerful-ALL.PL

‘Enemies bow down before the powerfuls, homages come to the powerfuls.’

(118) Old High German: *Monsee Fragment*, 20, 8 (cf. Lenerz 1985:104)

See,	*quimit*	*ther*	*brutigomo.*	‘Look, there comes the bridegroom!’
look	comes-IND.PRS.3SG	the-NOM.SG	bridegroom-NOM.SG	

(119) Old English: *Beowulf*, 1888

Cwōm	*þā*	*tō*	*flōde*	*fela*	*mōdriga.*
came-IND.PST.3SG	then	to	wave-DAT.SG	much-NOM.SG	braves-GEN.PL

‘Then came to the waves many brave men’.

(120) Lithuanian: Ludwig Rhesa, *Dainos oder Litthauische Volkslieder* (1825: 48$_{1\text{-}2}$)

Téka	*Uppuż́elij’*	*/*	*Cʒyſtas*	*Wandenélis.*
flows-IND.PRS.3	river-LOC.SG		pure-NOM.SG	water-NOM.SG

‘Pure water is flowing in the river.’

(121) Hittite: *KUB* XVII 10 II 35 (cf. Holland 1980:45)

Auš-ta-an	^{D}*Kammarušepaš.*	‘And Kammarušepaš saw him.’
saw-IND.PST.3SG=PCLE=him.ACC.SG	Kammarušepaš-NOM.SG	

(122) Hittite: *KUB* XXXIII 122 ii 1.1. (cf. Holland 1980:41, Luraghi 1995:358)

Uu̯atten,	*ḫalziššai-u̯a-tta*	DINGIR^{MEŠ}*-aš*	*attaš*	^{D}*Kumarbiš.*
come-IMPER.2PL	calls-IND.PRS.3SG=PCLE=you.ACC.SG	gods-GEN.PL	father-NOM.SG	Kumarbiš-NOM.SG

‘Come, Kumarbis, the father of the gods, is calling you’

(123) Hittite: *KBo* VI 29 II 25-26 (cf. Holland 1980:38-39)

Úitma	^{LÚ}KÚR	^{URU}PIŠḪURUŠ	*anda*	*araš.*
came-IND.PST.3SG	enemy	Pišḫuruš	PCLE	attacked-IND.PST.3SG

‘And he came the enemy of Pishurus attacked’

• Wilhelm Kroll (1909:114, 116): ‘progress of the action’ (*den Fortschritt der Handlung*) or ‘description’ of a state (*Schilderung*). Cf. also Wolfgang Dressler (1969).

(124) Ancient Greek: Homer, *Odyssey* λ 84

ἦλθε	δ’	ἔπι	ψυχὴ	μητρὸς	κατατεθνηκυίης.
Élt^{h}e	*d’*	*épi*	*psuk^{h}è*	*mētròs*	*katatet^{h}nēkuíēs.*
came-IND. AOR.3SG	PCLE	POSTV	soul-NOM.SG	mother-GEN.SG	dead-GEN.SG

‘Then came the soul of my dead mother.’

• Carlotta Viti (2008): ‘thetic’ function (cf. *there is a cat in the room*), in contrast to ‘categorical’ (cf. *a cat is sleeping in the room*)

(125) Classical Sanskrit: *Mahābhārata* II, 53, 1

Āsīd	*rājā*	*Nalo*	*nāma.*	‘There was a king named Nalas.’
was-IND.IMPERF.3SG	king-NOM.SG	Nalas-NOM.SG	name-NOM-ACC.SG	

(126) Ancient Greek: Homer, *Iliad* Z 152 (cf. Kahn 1973:239)

Ἔστι	πόλις	Ἐφύρη	μυχῷ	Ἄργεος	ἱπποβότοιο.
Ésti	*pólis*	*Ep^{h}úrē*	*muk^{h}ôi*	*Árgeos*	*hippobótoio.*
is-IND.PRS.3SG	city-NOM.SG	Ephyre-NOM.SG	corner-DAT.SG	Argos-GEN.SG	horse-pasturing-GEN.SG

‘There is a city, Ephyre, in the corner of horse-pasturing Argos.’

(127) Latin: Cicero, *Verres*, 1, 6, 4 (cf. Spevak 2010:41)

Erat	*comes*	*eius*	*Rubrius*	*quidam.*
was-IND.IMPERF.3SG	fellow-NOM.SG	of him-GEN.SG	Rubrius-NOM.SG	some-NOM.SG

‘There was a fellow of him, a certain Rubrius.’

6. External description?

6.1. Comparison of Superiority in PIE

John	*is*	*tall-*	*er*	*than*	*Jack*
target of comparison		gradable predicate	comparative morpheme	standard marker	standard of comparison

- Thomas Stolz (2013:9):
  - COMPAREE: ‘the participant in a situation of comparison whose share of the QUALITY is measured against the STANDARD’
  - STANDARD: ‘the participant in a situation of comparison which serves as yardstick for the measurement of the QUALITY with the COMPAREE’
  - QUALITY: ‘the property in which COMPAREE and STANDARD partake’
  - DEGREE: ‘the (in)difference of the shares COMPAREE and STANDARD have of the QUALITY’
  - TIE: ‘the relation that connects the STANDARD to COMPAREE and QUALITY’.

(128) Hindi (cf. Kachru 2006:66)

Yəh	*məkan*	*tumhare məkan*	*se*	*c^{h}oṭa*	*hɛ.*
this	house-MASC.SG	your house-MASC.SG	=than	small-MASC.SG	is-IND.PRS.3SG

‘This house is smaller than your house.’

(129) Hittite: *KUB* XXXI 42 II 18 (cf. Andersen 1983:113)

Anzel	TI-*anni*	*UL*	*SA*	*BELU.NI*		TI-*tar*	*nakki.*
of us-GEN.PL	life-DAT.-LOC.SG	NEG	GEN	lord	our	life-NOM.SG	important-NOM.SG

‘The life of our lord is not more important than our life.’

(130) Classical Armenian: *Ps.* 18, 11

Քաղցր	է	քան	զմեղր.	‘He is sweeter than honey.’
K'ałc'r	*ē*	*k'an*	*z-mełr.*	
sweet-NOM.SG	is-IND.PRS.3SG	than	PREP=honey-ACC.SG	

(131) Tocharian B: B 496, 1 (cf. Krause & Thomas 1960:I 86, Pinault 2008:20 and 64, see Thomas 1958)

Mā	*ñi*	*cisa*	*noṣ*	*śomo*	*ñem*	*wnolme*
NEG	to me-DAT.SG	than you-PERL.SG	before	human-NOM.SG	name-NOM.SG	creature-NOM.SG
lāre	*tāka.*					
dear-NOM.SG	was-IND.PST.3SG					

‘No creature with a human name was dearer to me than you before.’

- Synthetic comparatives of superiority: Lat. *doctus* ‘learned’, compar. *doctior* ‘more learned’ vs. analytic: Ital. *dotto* ‘learned’, compar. *più dotto* ‘more learned’. PIE suffixes *-*i̯e/os*- and *-*tero*-.

6.2. The Standard of Comparison in PIE

- Andersen (1983:112-113):
  - JUXTAPOSITION: *(A is) bigger, B (is) not (big) / is small*
  - CASE: *(A is) bigg(er) B-from*
  - PRE-/POSTPOSITION: *(A is) bigg(er) from B*
  - PARTICLE: *(A is) bigger than B*

6.3. *From*-comparative (ablative)

(132) Vedic Sanskrit: *RV* VIII 24_{20}

ghṛtā́t	*svā́diyaḥ*	‘sweeter than butter’
butter-ABL.SG	sweeter-NOM.SG	

(133) Young Avestan: *Hāδōxt* 2, 7

(*vātō*)	*hubaoiδiš*	*hubaoiδitarō*	*aniiaēibiiō*	*vātaēibiiō*
(wind)	fragrant-NOM.SG	more fragrant-NOM.SG	other-ABL.PL	winds-ABL.PL

‘(wind) fragrant, more fragrant than the other winds’

(134) Latin: Plautus, *Rudens*, 675

melius	*morte*	‘better than death’
better-NOM.-ACC.NEUT.SG	death-ABL.SG	

Genitive < ablative

(135) Ancient Greek: Homer, *Iliad*, A 249

μέλιτος	γλυκίων	ῥέεν	αὐδή.
mélitos	*glukíōn*	*r^{h}éen*	*audḗ.*
than honey-GEN.SG	sweeter-NOM.SG	flowed-IND.IMPERF.3SG	voice-NOM.SG

‘His voice was flowing sweeter than honey.’

(136) Old Church Slavic: *Jn.* 1, 50

Больша	сихъ	оузьриши.
Bolьša	*sixъ*	*uzьriši.*
greater-ACC.NEUT.PL	these-GEN.PL	you will see-IND.PRS.PERF.2SG

‘You will see greater things than these.’ (= Greek μείζω τούτων ὄψῃ)

(137) Russian

Я	старше	своей	сестры.	‘I am older than my sister.’
Ja	*starše*	*svoeï*	*sestry.*	
I-NOM.SG	older-NOM.SG	his own-GEN.SG	sister-GEN.SG	

(138) Tocharian A: A 30, a_1

Vipul	*ṣuläṣ*	*lyutār*	*tpär*	‘higher than the Vipula mountain’
Vipula-OBL.SG	mountain-ABL.SG	more	high-NOM.SG	

(139) Hindi

Mohan	*se*	*baṛā*	‘bigger than Mohan’
Mohan	=from	big	

(140) Ossetic (cf. Abaev 1964:19)

дæуæй	хуыздæр	‘better than you’
dæuæï	*xuyzdær*	
you-ABL.SG	better	

***From*-adpositions**

(141) Sogdian (cf. Gerschevitch 1954:195)

cn	*škr’*	*n’mrtr*	‘sweeter than sugar’
from	sugar	sweeter	

(142) Modern Persian (cf. Lazard 1992:86)

In	*ketâb*	*az*	*ân*	*qadimatar-ast.*	‘This book is older than that one.’
this	book	from	that	older=is-IND.PRS.3SG	

(143) Modern Greek (cf. Holton, Mackridge, Philippaki-Warburton 1997:471)

Ο	Γίαννης	είναι	εξυπνότερος	από	την	Ελένη.
O	*Γίanis*	*íne*	*eksipnóteros*	*apó*	*tin*	*Eléni.*
the-NOM.SG	John-NOM.SG	is-IND.PRS.3SG	cleverer-NOM.SG	from	the-ACC.SG	Helen-ACC.SG

‘John is cleverer than Helen.’

(144) Albanian (cf. Ressuli 1985:593)

Hekuri	*është*	*më*	*i dobishëm*	*nga*	*ari.*
iron-NOM.SG=DEF.ART	is-IND.PRS.3SG	more	useful	from	gold-NOM.SG=DEF.ART

‘Iron is more useful than gold.’

(145) Welsh (cf. King 1993:76)

Mae	*aur*	*yn*	*fwy*	*gwerthfawr*	*nag*	*arian.*
is-IND.PRS.3SG	gold-SG	in	more	valuable-SG	than	silver-SG

'Gold is more valuable than silver.' (*nag* 'than' < **-n og* < **ud-ĝʰos* 'out, from')

(146) Slovenian (cf. Svane 1958:125)

Vȇčji	*je*	*od*	*méne.*	'He is taller than me.'
taller-NOM.SG	is-IND.PRS.3SG	from	me-GEN.SG	

(147) Serbo-Croatian (cf. Ronelle 2006:125)

Gòran	*je*	*srètniji*	*od*	*tebe.*	'Goran is happier than you.'
Goran-NOM.SG	is-IND.PRS.3SG	happier-NOM.SG	from	you-GEN.SG	

(148) Bulgarian (cf. Scatton 1983:145)

Той	е	поумен	от	мене.	'He is more intelligent than me.'
Toj	*e*	*poumen*	*ot*	*mene.*	
he-SG	is-IND.PRS.3SG	more intelligent-SG	from	me-OBL.SG	

(149) Polish

Jestem	*większy*	*od*	*ciebie.*	'I am taller than you.'
I am-IND.PRS.1SG	taller-NOM.SG	from	you-GEN.SG	

(150) Italian (cf. Napoli & Nespor 1986:622)

Dario	*è*	*ancora*	*più*	*furbo*	*di*	*Tommaso.*
Dario-SG	is-IND.PRS.3SG	still	more	shrewd-SG	from	Tommaso-SG

'Dario is even shrewder than Tommaso.'

6.4. *For*-comparative (dative)

(151) Hittite: *KUB* XXXI 42 II 18 (cf. Andersen 1983:113)

Anzel	TI-*anni*	*UL*	*SA*	*BELU.NI*	TI-*tar*	*nakki.*
of us-GEN.PL	life-DAT.-LOC.SG	NEG	GEN	lord our	life-NOM.SG	important-NOM.SG

'The life of our lord is not more important than our life.'

(152) Hieroglyphic Luwian: TELL AHMAR 1 § 16 (cf. Yakubovich 2013:160)

Apašaza[*-pa*]-*u̯a/i-mu*	FRATER.*LA-za*	MAGNUS+*ra/izana*	*izità*
his-POSS.DAT.PL.=but=PCLE=me-ACC.SG	brothers-DAT.PL	great-ACC.SG	he made-IND.PST.3SG

'He made me greater than his own brothers.'

(153) Gothic: Wulfila's *New Testament*, *Lk.* 16, 8

forodozans	*sunum*	*liuhadis*
cleverer-ACC.PL	sons-DAT.PL	light-GEN.SG

'cleverer than the sons of light' (= Greek φρονιμώτεροι ὑπὲρ τοὺς υἱοὺς τοῦ φωτός)

(154) Old Icelandic: *Edda, Hávamál*, 51

Eldi	*heitari*	*brennr*	*með*	*illom*	*vinom*
fire-DAT.SG	fiercer-NOM.SG	burns-IND.PRS.3SG	among	bad-DAT.PL	friends-DAT.PL
Friðr	*fimm*	*daga.*			
love-NOM.SG	five	days-ACC.PL			

'Fiercer than fire, Love burns five days among bad friends.'

(155) Modern Icelandic (residual construction, cf. Breivik 1994:55)

Hún	*var*	*öllum*	*fegri.*	'She was prettier than all (the others).'
she-NOM.SG	was-IND.PST.3SG	all-DAT.PL	prettier-NOM.SG	

(156) Old High German: Otfrid, *Evangelienbuch*, 3, 18, 33 (cf. Schrodt 2004:38)

Bistú	*nu zi wáre*	*furira*	*Ábrahame?*
are you-IND.PRS.2SG=thou-NOM.SG	really	older-NOM.SG	Abraham-DAT.SG

'Are you really older than Abraham?'

(157) Old English: Bede, *Ecclesiastical History*, I, 9, 46 (text and translation from Miller 1890:46-47)

Wæs	*þis gefeoht*	*wælgrimre*	*&*	*strengre*
was-IND.PST.3SG	this contest-NOM.SG	more bloody-NOM.SG	and	more violent-NOM.SG
eallum	*þam*	*ærgedonum.*	'This contest was more bloody and violent than any before'.	
all-DAT.PL	the-DAT.PL	former-DAT.PL		

(158) Old Irish: *Scéla Mucci Mic Dathó* 3, 11

Bid	*lia*	*turim*	*a*	*chath.*
will be-IND.FUT.3SG	more	counting-DAT.SG	his-POSS	fight-NOM.SG

'The fight for him will be more than a count (more than can be counted).'

(159) Modern Sinhalese (cf. Gair 2003:803)

Mee	*potə*	*ee*	*potəṭə*	*wæḍiye*	*hoňdayi.*
this	book-DIR.SG	that	book-DAT.SG	more	good-ASSIM

'This book is better than that book.'

(160) Modern Breton (cf. Stassen 1985:142, Stolz 2013:81)

Jazo	*brasoc'h*	*widon.*	'He is bigger than I.'
he-NOM.SG	bigger-NOM.SG	for=me-SG	

(161) Lithuanian (cf. Žindžiutė-Michelini 2007:149)

Jis	*už*	*tėvą*	*aukštesnis.*	'He is taller than his father.'
he-NOM.SG	for, instead of	father-ACC.SG	taller-NOM.SG	

(162) Latvian (cf. Forssman 2001:272)

Es	*esmu*	*vecāks*	*par*	*tevi.*	'I am older than you.'
I-NOM.SG	am-IND.PRS.1SG	older-NOM.SG	for	you-ACC.SG	

6.5. Variations

(163) Hittite: *KUB* XLIII 53 I 22

Kapru-šše̯t-ašta	*kapruaz*	GAL-*li.*	'His throat is bigger than a throat.'
throat-NOM.SG=his.POSS.=PCLE	throat-ABL.SG	big-NOM.SG	

(164) Hittite: *KUB* XLIII 53 I 23

Iški(š)-šet-ašta	*iškisi*	GAL-*li.*	'His back is bigger than a back.'
back-NOM.SG=his.POSS.=PCLE	back-DAT-LOC.SG	big-NOM.SG	

6.6. Particles or Conjunctions and Comparison of Equality

(165) Latin: Plautus, *Menaechmi*, 488 (cf. Bauer 1995:155)

homo	*leuior*	*quam*	*pluma*	'a man lighter than a feather'
man-NOM.SG	lighter-NOM.SG	as	feather-NOM.SG	

(166) Latin: Plautus, *Bacchides*, 767 (cf. Bennett 1910:115)

Tam	*frictum*	*illum*	*reddam*	'I will give him back as parched as a pea is parched.'
as	parched-ACC.SG	him-ACC.SG	I will give back-IND.FUT.1SG	
quam	*frictum*	*est*	*cicer.*	
as	parched-ACC.SG	is-IND.PRS.3SG	pea-NOM.SG	

• Latin *quam* < PIE **k$^{\mu}$ām* < **k$^{\mu}$eh$_2$m*

(167) Classical Armenian: *Lk.* 11, 22

hqɯıբɯqnjն	բɯն	qն ɯ	'stronger than he'
hzawragoyn	*k'an*	*z-na*	
strong-NOM.SG	than	OBJ=him-ACC.SG	

(168) Lithuanian (cf. Žindžiutė-Michelini 2007:56)

Jis	*gudresnis*	*kaip*	*tu.*	'He is cleverer than you.'
he-NOM.SG	cleverer-NOM.SG	as, like	you-NOM.SG	

(169) Old Prussian: *Third Catechism, Enchiridion*, 115$_{8-9}$ (1561)

ſteimans	*malnijkikamans*	*ni*	*maſſais*	*kai*	*ſtēimans*	*vremmans*
the-DAT.PL	children-DAT.PL	NEG	less	as, like	the-DAT.PL	old men-DAT.PL

'to the little children not less than to the old men' (= German *den Kindlein nicht weniger / denn den Alten*)

(170) Modern German (see also Eggs 2006)
Er *ist* *größer* *als* *ich.*
he-NOM.SG is-IND.PRS.3SG taller than I-NOM.SG
'He is taller than I.' (*als* < Middle German *al sō* 'all like')

(171) Ancient Greek: Homer, *Iliad*, Λ 162
γύπεσσιν πολὺ φίλτεροι ἢ ἀλόχοισιν 'far dearer to the vultures than to their wives'
gúpessin *polù* *pʰílteroi* *ḕ* *alókʰoisin*
vultures-DAT.PL much dearer-NOM.PL or wifes-DAT.PL

(172) Gothic: Wulfila's *New Testament*, *2Tim.* 3, 4
frijondans *wiljan* *seinana* *mais* *þau* *guþ*
loving-ACC.PL pleasure-ACC.SG their-ACC.SG more or God-ACC.SG
'loving their pleasure more than God' (= Greek φιλήδονοι μᾶλλον ἢ φιλόθεοι)

(173) Old High German: Notker, *Liber de Martianus Capella*, I, 43, 11
Tér *uuás* *rîchero* *dánne* *der* *brûoder*
he-NOM.SG was-IND.PST.3SG richer-NOM.SG then the-NOM.SG brother-NOM.SG
únde geschíster.
and sister-NOM.SG
'He was richer than his brother and sister.'

(174) Old Saxon: *Heliand*, 941
So *mikilu* *is* *he* *betara* *than* *ic.* 'He is much better than I.'
so much is-IND.PRS.3SG he-NOM.SG better-NOM.SG then I-NOM.SG

(175) Classical Sanskrit (cf. Andersen 1983:226, see also Small 1923:101)
Śreyān *mr̥tyur* *na* *nirjayaḥ.*
better-NOM.SG death-NOM.SG NEG defeat-NOM.SG
'Death is better than defeat.' (< 'death is better, not defeat')

(176) Old Church Slavic: *Mt.* 11, 22 Zogr.
Туроу и Сидоноу отърадьнѣе бѫдетъ
Turou *i* *Sidonou* *otъradьněe* *bǫdetъ*
Tyre-DAT.SG and Sidon-DAT.SG more bearable-NOM.SG it will be-IND.FUT.3SG
въ дьнь сѫдъны неже вама.
vь *dьnь* *sǫdъny* *neže* *vama.*
in day-ACC.SG judgment-GEN.SG NEG=PCLE both of you-DAT.DU
'It will be more bearable on the day of judgment for Tyre and Sidon than for you.' (= Greek Τύρῳ καὶ Σιδῶνι ἀνεκτότερον ἔσται ἐν ἡμέρᾳ κρίσεως ἢ ὑμῖν)

(177) Serbo-Croatian (cf. Ronelle 2006:180)
Òna *je* *ljepša* *nego* *ti.* 'She is prettier than you.'
she-NOM.SG is-IND.PRS.3SG prettier-NOM.SG NEG=PCLE you-NOM.SG

(178) Czech
Karel *je* *větší* *než* *Věra.* 'Karel is tallier than Vera.'
Karel-NOM.SG is-IND.PRS.3SG taller-NOM.SG NEG=PCLE Vera-NOM.SG

(179) Polish
Jestem *większy* *niż* *ty.* 'I am taller than you.'
I am-IND.PRS.1SG taller-NOM.SG NEG=PCLE you-NOM.SG

(180) Modern Lithuanian (cf. Žindžiutė-Michelini 2007:56)
Ąžuolas *aukštesnis* *negu* *beržas.* 'The oak is higher than the birch.'
oak-NOM.SG higher-NOM.SG NEG=PCLE birch-NOM.SG

(181) Modern Latvian

Es	*esmu*	*vecāks*	*nekā*	*tu.*	‘I am older than you.’
I-NOM.SG	am-IND.PRS.1SG	older-NOM.SG	NEG=like-PCLE	you-NOM.SG	

6.7. Disjunctive Comparison

(182) Ancient Greek: Homer, *Iliad*, B 453 (cf. Chantraine 1953:152)

Τοῖσι	δ’	ἄφαρ	πόλεμος	γλυκίων	γένετ’
Toîsi	*d’*	*áp^{h}ar*	*pólemos*	*glukíōn*	*génet’*
to them-DAT.PL.	PCLE	soon	battle-NOM.SG	sweeter-NOM.SG	became-IND.AOR.3SG

ἠὲ νέεσθαι.
ēè néest^{h}ai.
than to come back-INF
‘To them the battle soon became sweeter than to return.’

• Benveniste (1948:115-143): genitive (< ablative) = dimensional meaning (*sens dimensionnel*) vs. disjunctive particle ἤ *ḗ* = differential value (*valeur différentielle*)

COMPARATIVE FORMATION	CONSTRUCTION	SEMANTIC INTERPRETATION
intensive *-*i̯e/os*-	+ genitive (< ablative)	‘quite X judging from Y’
contrastive *-*tero*-	+ ἤ *ḗ* ‘or’	‘relatively X in contrast to Y’

6.8. Summary

• 1. Ablative:	a. Old Indo-Aryan (Vedic Sanskrit, Avestan), Latin; b. (> genitive) Ancient Greek, Slavic; c. (> rebuilt ablatives or *from*-constructions) Tocharian A, Hindi, Sogdian, Ossetic, Persian, Modern Greek, Albanian, Welsh, Modern Slavic, Italian.
• 2. Dative:	a. Anatolian, Germanic (Gothic, Old and Modern Icelandic, Old High German, Old English), Old Irish; b. (with adpositions) Modern Sinhalese, Modern Breton, Baltic.
• 3. PIE *k^{u}*ām* (< *k^{u}*eh$_2$m*):	a. Latin (> Romance), Armenian.
• 4. Comparison (‘like’):	a. Lithuanian (*kaip*), Old Prussian (*kai*); German (*als*); Russian (чем *čem*).
• 5. Negation:	a. Sanskrit, Slavic, Baltic.

6.9. Internal Variations

• Ablative vs. Dative:	(perhaps) Hittite.
• Ablative vs. Negation:	Sanskrit; (> Genitive, vs. Negation) Slavic.
• Ablative vs. PIE *k^{u}*ām*:	Latin; (*from*-comparative, vs. **que* < Latin *quam*) Spanish, French, Italian.
• Ablative vs. Disjunction:	(> Genitive, vs. Disjunction) Ancient Greek.
• Dative vs. Comparison:	(> Preposition, vs. Comparison) possibly East Baltic.
• Dative vs. Preposition:	Old Irish.
• Dative vs. Disjunction:	Gothic.
• Dative vs. Temporal particle:	Old High German, Old English.
• Comparison vs. Negation:	East Baltic.

6.10. Superiority vs. Equality

(183) Lithuanian (cf. Žindžiutė-Michelini 2007:56)

Jis	*gudresnis*	*kaip*	*tu.*	‘He is cleverer than you.’
he-NOM.SG	cleverer-NOM.SG	as, like	you-NOM.SG	

(184) Lithuanian

Jis	*taip*	*gudrus*	*kaip*	*tu.*	‘He is as clever as you.’
he-NOM.SG	as	clever-NOM.SG	as, like	you-NOM.SG	

(185) Old Lithuanian: Jacob Brodowski, *Lexikon Germanico-Lithuanicum et Lithuanico-Germanicum* I 153 [1713-1744]

Ketures	*Akkis*	*daugiaus*	*máta*	*ne*	*wiena.*	‘Four eyes see more than one.’
four-NOM.PL	eyes-NOM.PL	more-ADV	see-IND.PRS.3	NEG	one-NOM.SG	

(186) Old Lithuanian: Jacob Brodowski, *Lexikon Germanico-Lithuanicum et Lithuanico-Germanicum* I 151 [1713-1744]

Auga	*waikai*	*ne*	*Girroj’*	*Médʒei.*
grow-IND.PRS.3	children-NOM.PL	NEG	forest-LOC.SG	trees-LOC.SG

‘Children grow up like trees in the forest.’

• Cf. Hittite *takk-* ‘to be like, to resemble’; Gothic *galeiks* ‘similar to’ + dat.

• Hermann Ziemmer (1884): standard of comparison = ablative.

7. Conclusion on the comparative method

• Robert J. Jeffers (1976:5): ‘A straightforward transfer of the principles of the comparative method to the reconstruction of syntax seems totally inappropriate’.

• Antony Fox (1995:140): ‘mistake our idealisations for reality’.

B. PRINCIPLES OF SYNTACTIC CHANGE

1. The causation of syntactic change

1.1. Syntactic Change and Simplicity: the Fate of the PIE Supine

(1) Latin: Terence, *Eunuchus* 600

Abeunt	*lauatum.*	‘They go out to wash.’
they go out-IND.PRS.3PL	to wash-SUP	

(2) Latin: Plautus, *Mercator* 857

Cogito	*quonam*	*ego*	*illum*	*curram*	*quaeritatum.*
think-IND.PRS.1SG	where	I-NOM.SG	him-ACC.SG	will run-IND.FUT.1SG	to look for-SUP

‘I am thinking which way I will run to look for him.’

(3) Old Church Slavic: *Lk.* 1, 59

Придѧ	обрѣзатъ	отрочѧте.	‘They came to circumcise the child.’
Pridę	*obrězatъ*	*otročęte.*	(= Gr. ἦλθον περιτεμεῖν τὸ παιδίον)
they came-IND.AOR.3PL	to circumcise-SUP	child-GEN.SG	

(4) Old Church Slavic: *Lk.* 8, 5

Изиде	сѣѩн	сѣатъ	сѣмене	своего.
Izide	*sějęn*	*sějatъ*	*sěmene*	*svoego.*
went out-IND.AOR.3SG	sower-NOM.SG	to sow-SUP	seed-GEN.SG	his-GEN.SG

‘A sower went out to sow his seed.’ (= Gr. ἐξῆλθεν ὁ σπείρων τοῦ σπεῖραι τὸν σπόρον αὐτοῦ)

(5) Slovenian (cf. Priestly 1993:436)

Spât	*hǫ́dim*	*prȅd*	*deséto*	*zvečęr.* ‘I go to bed before ten at night.’
to sleep-SUP	I go-IND.PRS.1SG	before	ten-ACC.SG	at night

(6) Slovenian (cf. Arkadiev 2014:72)

Šel	*je*	*gledat*	*novi*	*film.*
gone-PART.NOM.MASC.SG	is-IND.PRS.3SG	to see-SUP	new-ACC.SG	film-ACC.SG

‘He went to watch the new film.’

(7) 16th century Slovenian: Primož Trubar, *Ta Celi Novi testament* (1582), *Lk.* 8, 5

En	*seivec*	*gre*	*vunkai*	*seiati*	*suie*	*seime.*
one-NOM.SG	sower-NOM.SG	goes-IND.PRS.3SG	out	to sow-INF	his-ACC.SG	seed-GEN.SG

‘A sower went out to sow his seed.’

(8) Lower Sorbian

Źom	*spat.*	‘I am going to sleep.’
I go-IND.PRS.1PL	to sleep-SUP	

(9) Lower Sorbian (cf. Steenwijk 2003:333)
Witśe *pojědu* *Lenky* *pytat.* 'Tomorrow I will go to look for Lenka.'
tomorrow I will go-IND.FUT.1PL Lenka-ACC.SG to look for-SUP

(10) Old Polish: Jakub Wujek, *Nowy Teſtament Páná náſzego Iesusa Christusa* (1593, *Mt.* 28, 1)
Przyſzłá *Mária* *Mágdálená* *y* *druga* *Mária*
came-IND.PST.3SG Maria-NOM.SG Magdalena-NOM.SG and other-NOM.SG Maria-NOM.SG
oglądáć *grob.*
see-INF sepulcher-ACC.SG
'Maria Madgalena and the other Maria came to see the sepulcher.'

(11) Old Lithuanian: Jonas Bretkūnas, *Biblia tatai esti Wissas Schwentas Raschtas* (1579-1590, *Mt.* 13, 3)
Ischeijo *Seieias* *setų.* 'A sower went forth to sow.'
went out-IND.PST.3SG sower-NOM.SG to sow-SUP

(12) Old Lithuanian: Martynas Mažvydas, *Catechismusa Praſty Szadei* (1547:22$_3$)
Iſch *te* *ateis* *ſuditu* *giwu* *ir* *numiruſuiu.*
from there he will come-IND.FUT.3 to judge-SUP living-GEN.PL and the dead-GEN.PL.DET
'From there he will come to judge the living and the dead.'

(13) Lithuanian (cf. Ambrazas 2006:321)
Aš *eisiu* *į* *kalnelį* *gelsvų* *kviečių* *kirsti.*
I-NOM.SG will go-IND.FUT.1SG to mountain-ACC.SG yellow-GEN.PL hay-GEN.PL cut-INF
'I will go to the mountain to cut the yellow hay.'

(14) Dialectal Latvian: Barons, Wissendorff, *Latwju dainas* 27067 (*BW* III [1909]), cf. Gāters (1993:347)
Uſ *krodſiņu* *dſertu* *gahju.* 'I went to the pub to drink.'
to pub-ACC.SG drink-SUP I went-IND.PST.1SG

(15) Latgalian: *Svātī Roksti* (1933), *Lk.* 8, 5
Sējējs *izgōja* *sovas* *sāklas* *sātu.*
sower-NOM.SG went out-IND.PST.3 his-GEN.SG seed-GEN.SG to sow-SUP
'A sower went out to sow his seed.'

(16) Old Prussian: *Third Catechism, Enchiridion*, 127$_{15}$ (1561)
Stwendau *wīrſt* *pergūbons* *preilīginton*
then he will-IND.PRS.3 come-PART.NOM.SG to judge-SUP
ſtans *geīwans* *bhe* *aulauſins.*
the-ACC.PL living-ACC.PL and dead-ACC.PL
'Then he will come to judge the living and the dead.' (= German *Von dannen er kommen wirdt zu richten die Lebendigen vnd die Todten*)

(17) Old Prussian: *Third Catechism, Enchiridion*, 105$_4$ (1561) (see Kortlandt 1990)
Tu *turrī* *ſen* *Gulſennien* *malnijkans* *gemton.*
you-NOM.SG have-IND.PRS.2SG with suffering-ACC.SG young-ACC.PL bear-SUP
'You must bear children with suffering.' (= German *Du ſolt mit ſchmertzen Kinder geberen*)

(18) Vedic Sanskrit: *RV* V 36$_1$
Sá *á́* *gamad* *Índro* [...] *vásūnām* [...] *dā́tuṃ.*
PCLE PCLE come-INJ.PRS.3SG Indra-NOM.SG treasures-GEN.PL give-SUP
'May Indra come to give forth treasures!'

(19) Vedic Sanskrit: *RV* I 164$_4$
Kó *vidvā́ṅsam* *úpa* *gāt* *práṣṭum* *etát?*
who-NOM.SG wise-ACC.SG towards went-IND.AOR.3SG to ask-SUP that-ACC.SG
'Who went to the wise to ask this question?'

(20) Pāli: *Suttanipāta, Daniya-Sutta*, 9$_3$ (cf. Mayrhofer 1951:II 8)
Munjamāyā *navā* *susanathānā* *na* *hi* *sakkhinti*
muñja-grass halters-ACC.PL new-ACC.PL well-woven-ACC.PL NEG PCLE will be able-IND.FUT.3PL
dhenupāpi *chettum.*
calves-NOM.PL=even to break-INF
'The new muñja-grass halters, well-woven, not even calves could break them.'

Latin 'secondary supines' and the Romanian supine

(21) Latin: Cato, *De Agricultura* 5, 5

Primus	*cubitu*	*surgat,*
first-NOM.SG	from lying down-ABL.SG	let him get up-SUBJ.PRS.3SG
postremus	*cubitum*	*eat.*
last-NOM.SG	to lie down-SUP	let him go-SUBJ.PRS.3SG

'Let him get up the first out of bed, let him go to bed the last.'

(22) Old Romanian: Mihail Moxa, *Cronica Universală* 60v [1620] (cf. Pană-Dindelegan 2016:253)

Se	*duseră*	*la*	*vânat.*	'They went hunting.'
REFL	went-IND.PST.3SG	at	hunt-SUP	

(23) Romanian (cf. Hill 2013:234)

Am	*terminat*	*de*	*spălat*	*podelele.*
I have-IND.PRS.1SG	finished-PART.NOM.SG	from	washing-SUP	floors-GEN-DAT.PL=DEF.ART

'I have finished to wash the floors.'

(24) Romanian (cf. Hill 2013:233)

Spălat-ul	*podele-lor*	*m-a*	*obosit.*
washing-SUP.NOM.SG=DEF.ART	floors-GEN-DAT.PL=DEF.ART	me-ACC.SG=has-IND.PRS.3SG	tired-PART.NOM.SG

'The washing of floors tired me.'

PIE *-*tum*	PIE *-*tum*	+INTRODUCED BY VERBS OF MOVEMENT	+ GENITIVE OBJECT
Vedic Sanskrit	+ (-*tum*)	+	+ (gen.) > – (acc.)
Pāli	+ (-*tum*)	–	– (acc.)
Latin	+ (-*tum*)	+	– (acc.)
Romanian	+ (-*t*)	–	– (acc.)
Old Church Slavic	+ (-тъ)	+	+
Slovenian	+ (-*t*) > – (inf. in -*ti*)	+	+ (gen.) > – (acc.)
Lower Sorbian	+ (-*t*)	+	– (acc.)
Old Russian	+ (-*tъ*) > – (inf. in -*tь*)	+	+ (gen.)
Modern Russian	– (inf. in -*t'*)	–	– (acc.)
Polish	– (inf. in -*ć*)	–	–
Old Lithuanian	+ (-*tų*)	+	+
Modern Lithuanian	– (inf. in -*ti*)	+	+
Latgalian	+ (-*tu*)	+	+
Latvian	– (inf. in -*t*)	–	–
Old Prussian	+ (-*tun*, -*ton*)	–	–

Origin of the genitive object

(25) Old Church Slavic: *Jn.* 21, 3

Идѫ	рыбъ	ловить.
Idǫ	*rybъ*	*lovitь.*
I go-IND.PRS.3SG	fishes-GEN.PL	to catch-SUP

'I am going fishing.' (= Gr. ὑπάγω ἁλιεύειν)

1.2. Elimination of Redundancy: Adjective Agreement in Celtic

(26) Celtiberian: *AL.R.*2.10 (cf. Jordán Cólera 2004:392)

VIROS	VERAMOS	'supreme man, leader.'
man-NOM.MASC.SG	supreme-NOM.MASC.SG	

(27) Gaulish: *RIG* G-203 (Nîmes)

ματερβο	ναμαυσικαβο	'to the Mothers of Nimes' (lit. 'to the Namausian Mothers')
matrebo	*namausikabo*	
mothers-DAT.FEM.PL	of Namausis-DAT.FEM.PL	

(28) Old Irish: *Würzburg Glosses* 24c 2 (ed. Stokes 1887:140)

airde	*serce*	*móre*	'a sign of great love'
sign-NOM.SG	love-GEN.NEUT.SG	great-GEN.NEUT.SG	

(29) Modern Irish (cf. Mc Cone 2005:128)

fear	*maith*	*fir*	*mhaith*	*fir*	*mhaithe*
man-NOM.SG	good-NOM.SG	man-GEN.SG	good-GEN.SG	man-NOM.PL	good-NOM.PL
‘good man’ (nom.sg.)		‘good man’ (gen.sg.)		‘good men’ (nom.pl.)	

(30) Welsh (cf. Williams 1980:26-31)

gŵr	*mawr*	*merch*	*fawr*	*gwŷr*	*mawrion*
husband-MASC.SG	big-MASC.SG	girl-FEM.SG	big-MASC.SG	husbands-MASC.PL	big-MASC.PL
‘big husband’ (masc.sg.)		‘big girl’ (fem.sg.)		‘big husbands’ (masc.pl.)	

(31) Cornish (cf. Jenner 1904:63)

tâs	*mas*	*tassow*	*mas*
father-MASC.SG	good	father-MASC.PL	good
‘good father’ (masc.sg.)		‘good fathers’ (masc.pl.)	

(32) Cornish (cf. Jenner 1904:63)

mergh	*vas*	*merhes*	*mas*
daughter-FEM.SG	good-FEM.SG	daughter-FEM.PL	good-FEM.PL
‘good daughter’ (fem.sg.)		‘good daughters’ (fem.pl.)	

Stage I (Old Celtic, Irish): maximal redundancy (Noun marked for case, gender and number + Adjective marked for case, gender and number)

Stage II (Welsh): less redundancy (Noun marked for gender and number, unmarked for case + Adjective marked for gender and number, unmarked for case; + increasing invariability)

Stage III (Cornish): less redundancy (Noun marked for gender and number, unmarked for case + Adjective unmarked, except for isolated forms)

Stage IV (Breton): minimal redundancy (Noun minimally marked for gender and number, unmarked for case + Adjective unmarked)

1.3. Elimination of Redundancy: the ‘Pro-drop’ Phenomenon

• Cf. Noam Chomsky (1981), Luigi Rizzi (1986): referential pro, quasi-argumental-pro and expletive pro

(33) Italian

Penso	*che*	*parta*	*oggi.*	‘I think he is leaving today.’
think-IND.PRS.1SG	that	leaves-IND.PRS.3SG	today	

(34) French

Je	*pense*	*qu’il*	*part*	*aujourd‘hui.*
I-SUB	think-IND.PRS.1SG	that he-SUB	leaves-IND.PRS.3SG	today

‘I think he is leaving today.’

(35) Vedic Sanskrit: *RV* I 46$_1$ (no overt subject pronoun)

Stuṣé	*vām*	*aṣvinā*	*bṛhát.*
glorify-IND.PRS.1SG	you-ACC.PL	Aśvins-NOM.DU	high-ADV

‘High I glorify you, o Aśvins’

(36) Vedic Sanskrit: *RV* I 44$_5$ (overt subject pronoun)

Staviṣyā́mi	*tvā́m*	*ahám̥*	*víṣvasyāmr̥ta*	*bhojana.*
will glorify-IND.FUT.1SG	you-ACC.SG	I-NOM.SG	of all-GEN.SG=deathless-VOC.SG	nourisher-VOC.SG

‘I will glorify you, deathless nourisher of all things!’

(37) Russian

Люблю	тебя.	‘I love you.’
Ljublju	*tebja.*	
love-IND.PRS.1SG	you-ACC.SG	

(38) Russian

Я	люблил	тебя.	‘I loved you.’
Ja	*ljublil*	*tebja.*	
I-NOM.SG	loved-PART.PERF.NOM.SG	you-ACC.SG	

1.4. Avoidance of Ambiguity: Prepositions in Romance

• Late Latin acc. **muro* (< Latin *mūrum*) and dat. **muro* (< Latin *mūrō*). But Romanian nom.-acc. *ţara* 'earth' (< nom. *terra*, acc. *terram*) and gen.-dat. *ţare* (< gen. *terrae*, dat. *terrae*)

(39) Romanian (cf. Mardale 2007:202)
fiul *regelui* 'the son of the king, the king's son'
the son-NOM-ACC.SG=DEF.ART of the king-GEN-DAT.SG

(40) Romanian (cf. Mardale 2007:202)
fiul *de* *rege* 'the son of a king, the king's son'
the son-NOM-ACC.SG=DEF.ART of the king-NOM.-ACC.SG

(41) Old French: Chrestien de Troyes, *Perceval*, 2314 (ca 1180)
an *la* *prison* *le* *roi* *Artu*
in the-OBL.SG jail-OBL.SG the-OBL.SG king-OBL.SG Arthur-OBL.SG
'in King Arthur's jail'

2. Language contact

2.1. The Role of Language Contact

• Claire Bowern (2008:187): 'any detailed account of language change (no matter what the framework) must address the role of language contact'.

• Alice Harris & Lyle Campbell (1995:120): 'Syntactic borrowing is perhaps the most neglected and abused area of syntactic change. Excesses in the past are well known and require little comment here; more disturbing is that such problems persist even to the present day. Current views range from the extremes on the one hand, that syntactic borrowing is either impossible or is very rare, to on the other hand fanciful explanations that all otherwise unexplained syntactic eccentricities in a language may be due to foreign influence'.

• Edward Sapir (1921:220): 'Language is probably the most self-contained, the most massively resistant of all social phenomena'.

2.2. Nominal Classifiers in Modern Indo-Aryan and their IE Prehistory

(42) Assamese (cf. Kakati 1941:267)
mānuh-jan 'the man' *rajā-janā* 'the king'
person=human being-CL king=human being-CL

(43) Bengali (cf. Hackstein 2010:9, from Dasgupta 1983:20)
śromik-car-jon 'the four labourers'
labourer=four=human being-CL

(44) Hittite: *KUB* 12.126 i27, *KUB* 24.9 ii 27.50 (cf. Hackstein 2010:14)
^{LÚ}*UR.GI$_7$-aš* *pešnaš* 'hunter'
hunter-NOM.SG man-NOM.SG

(45) Oscan: *Cp* 25 from Capua (cf. Hackstein 2010:15, from Rix 2002:99)
minateís **ner(eís)** 'of the leader/hero Minatus'
Minatus-GEN.SG man-GEN.SG

(46) Homeric Greek: ξ 102, ρ 200 (cf. Hackstein 2010:15)
βώτορες ἄνδρες 'herdsmen'
bṓtores *ándres*
herdsmen-NOM.PL men-NOM.PL

(47) Homeric Greek: Γ 170 (cf. Hackstein 2010:36)
βασιλῆι ἄνδρι 'to the king'
basilẽi *ándri*
king-DAT.SG man-DAT.SG

(48) Vedic Sanskrit: *RV* VI 2$_{3c}$ (cf. Hackstein 2010:9)
mā́nuṣo *jánaḥ* 'a man'
man-NOM.SG human being-NOM.SG

2.3. Sinhalese *da* (Slade 2013)

(49) Colloquial Sinhalese (cf. Slade 2013:248)
Chitra monəwa də gatte?
Chitra what PCLE bought-IND.PST.3SG
'What did Chitra buy?'

(50) Colloquial Sinhalese (cf. Slade 2013:250)
Gunəpālə də Chitra də Ranjit də gaməṭə giyē?
Gunapala PCLE Chitra PCLE Ranjit PCLE village-DAT went-IND.PST.3SG
'Was it Gunapala or Chitra or Ranjit who went to the village?'

(51) Sinhalese (cf. Slade 2013:246-247)
Yam kumariyak ohu duṭuvā da oo ohu kerehi piḷiñda
REL princess-INDEF him sees-IND.PST.3SG.FEM PCLE she him towards connected
sit ætikara gattāya.
mind developed got-IND.PST.3SG.FEM
'Whatever princess saw him fell in love with him.'

(52) Sinhalese (cf. Slade 2013: 249)
Mokak də wætuna.
what PCLE fell-IND.PST.3SG
'Something fell.'

• Sinhalese *da* < *utā́ho* (< *utá* 'and' + *ā́ho* 'or'). Cf. the same polysemy in Tamil and Malayalam *oo*.

(53) Classical Sanskrit: *Bhāgavata-Purāṇa* 7, 5, 10 (cf. Slade 2013: 256)
Buddhi-bhedaḥ para-kṛ̥ta utāho te svato 'bhavat?
intellect-pollution-NOM.SG enemy-do-PST.PART.NOM.SG or-PCLE you self-GEN.SG become-IND.PST.3SG
'Has the pollution of your intellect been brought about by enemies or by you yourself?'

(54) Pāli: Buddhaghosa's commentary on the *Dhammapada* ii, 96 (cf. Slade 2013:256)
Kiṃ amhehi saddhiṃ āgamissasi udāhu pacchā?
INTERR.PCLE us with you will come-IND.FUT.2SG or-PCLE later
'Will you come with us or later?'

disjunctive question ('or')	> interrogative particle	(internal evolution)
relative clause-closing particle	> indefinite particle	(contact-induced evolution)

2.4. 'Linguistic Areas' (Germ. *Sprachbünde*)

• Kristian Sandfeld (1930): Balkan languages (Romanian, Serbo-Croatian, Albanian, Bulgarian, Macedonian, Modern Greek)

- Reduplication of the object (Romanian, Albanian, Bulgarian, Macedonian, Modern Greek)
- Merging of genitive and dative (Romanian, Albanian, Modern Greek)
- Use of enclitic pronouns in the function of possessive adjectives (Romanian, Bulgarian, Macedonian, Modern Greek)
- Constraining use of definite nouns after the preposition 'with' (Albanian, Romanian)
- Loss of the infinitive (Romanian, Albanian except for the Gheg dialects, Bulgarian, Macedonian, Modern Greek)
- Postposition of the definite article (Romanian, Albanian, Bulgarian, Macedonian).

• Helmut Schaller (1975:100-101): 'primary balkanisms' (*primäre Balkanismen*) and 'secondary balkanisms' (*sekundäre Balkanismen*)

2.5. The Construction of the 'Presentative Particle'

(55) Modern Greek
Νά ὁ Γιάννης. 'Here is John.'
Ná ho Giánis.
here the-NOM.SG John-NOM.SG

(56) Modern Greek

Νά	τον.	'Here he is.'
Ná	*ton.*	
here	him-ACC.SG	

(57) Modern Greek

Νά	με.	'Here I am.'
Ná	*me.*	
here	me-ACC.SG	

• Origin of νά *ná* : 1° νά *ná* 'that' (< Ancient Greek ἵνα *hína* 'in order to, so that')

2° νά *ná* < *ἠνίδε **ēníde* (< presentative particle ἦν *ḗn* 'here' + aorist imperative ἰδέ *idé* 'see', reduced to *ἠνί **ēní* through metanalysis of *ἠνίδε **ēníde* as *ἠνί-δε **ēní-de*) and then altered to *ἠνί **ēní* > *νί **ní* by regular aphaeresis and finally to νά *ná* by analogy to other adverbs in -α *-a* (like δά *dá* 'so' < δέ *dé*, ἀκόμα *akóma* 'still, yet' < ἀκόμη *akómi*)

3° Brian Joseph (1981): South Slavic particle *na* 'here' (Serbo-Croatian *nâ*, *nȁ*, Slovenian *nâ*, cf. Russian на *na*, Polish *na*, Czech *na* < PIE **nō*, cf. Gr. νή *nḗ*, Lat. *nē*)

(58) Bulgarian (cf. Joseph 2001:253)

Ето	го.	'Here he is.'
Eto	*go.*	
here	him-ACC.SG	

(59) Macedonian

Ене	го.	'Here he is.'
Ene	*go.*	
here	him-ACC.SG	

(60) Serbo-Croatian

Ево	ме.	'Here I am.'
Evo	*me.*	
here	me-ACC.SG	

(61) Romanian (cf. Maiden 2006:55)

Iată-le.	'Here they are.'
here=them-OBL.PL	

(62) Albanian

Ja	*njeri-u.*	'Here is the man.' (= Lat. *Ecce homo*.)
here	man-NOM.SG=DEF.ART	

(63) Ancient Greek: Aristophanes, *Lysistrata*, 925

Ἰδοὺ	ψίαθος.	'Here is the rush-mat.'
Idoú	*psíat^{h}os.*	
here	rush-mat-NOM.SG	

(64) Lithuanian (cf. Petit 2010:158)

Šè	*rañką.*	'Here is my hand.'
here	hand-ACC.SG	

(65) Latvian (cf. Petit 2010:158)

Šè	*rùoka.*	'Here is my hand.'
here	hand-NOM.SG	

(66) Latin: Cicero, *Attica*, 13, 16

Ecce	*tuae*	*litterae*	*de*	*Varrone.*	'Here are your letters from Varro.'
here	your-NOM.PL	letters-NOM.PL	from	Varro-ABL.SG	

(67) Latin: Plautus, *Cistellaria*, 283

Ecce	*me.*	'Here I am.'
here	me-ACC.SG	

3. Gradualness

• Henrik Birnbaum (1984:29): 'A syntactic innovation is introduced, enters into competition with earlier existing forms and sequences, spreads, and, eventually, may entirely supersede any previous one'.

3.1. 'Negative Genitive' (Olga Kagan 2007)

(68) Polish

Czytam	*książkę.*	'I read a book / the book.'
I read-IND.PRS.1SG	book-ACC.SG	

(69) Polish

Nie	*czytam*	*książki.*	'I do not read any book / the book.'
NEG	I read-IND.PRS.1SG	book-GEN.SG	

(70) Lithuanian

Skaitau	*knygą.*	'I read a book / the book.'
I read-IND.PRS.1SG	book-ACC.SG	

(71) Lithuanian

Neskaitau	*knygos.*	'I do not read any book / the book.'
NEG=I read-IND.PRS.1SG	book-GEN.SG	

Language	**Genitive of negation**
Slavic languages	
Old Church Slavic	Obligatory
Slovenian	Obligatory
Polish	Obligatory
Russian	Optional
Ukrainian	Optional
Belarussian	Optional
Slovenian	Optional
Serbo-Croatian	essentially absent
Czech	essentially absent
Baltic languages	
Lithuanian	Obligatory
Latvian	Optional
Old Prussian	Absent

(72) Old Czech: *Bible Kralická* (1579, Jn 2, 4)

Vina	*nemají.*	'They do not have wine.'
wine-GEN.SG	NEG=they have-IND.PRS.3PL	

Cf. Josef Dobrovský (1809:371): 'In common usage this rule is not so strictly observed'.

(73) Modern Czech

Jím	*maso.*
I eat-IND.PRS.1SG	meat-ACC.SG

'I eat meat / the meat.'

(74) Modern Czech

Nejím	*maso.*
NEG=I eat-IND.PRS.1SG	meat-ACC.SG

'I do not eat meat / the meat.'

• Olga Kagan (2007:155) about Russian: 'an NP may appear in this Case [the genitive] if and only if it lacks commitment to existence in any given possible word that is made salient in the given sentence'.

3.2. Lexical Diffusion: the Indo-Aryan Particle *kam*

• Alice Harris & Lyle Campbell (1995:49): 'some syntactic phenomena spread from lexical item to lexical item'.

(75) Vedic Sanskrit: *RV* II 28_8

Tvé	*hí*	*kam*	*párvate*	*ná*	*śritā́ny*	*ápracyutāni*
you-LOC.SG	thus-PCLE	well-PCLE	mountain-LOC.SG	like	leaning-NOM.NEUT.PL	immovable-NOM.NEUT.PL
dūḷabha	*vratā́ni.*					

o invincible-VOC.SG laws-NOM.NEUT.PL
'On you as on a mountain the Laws lean, immovable, o invincible!'

(76) Vedic Sanskrit: *RV* X 13_4

Devébhyaḥ	*kám*	*avr̥ṇīta*	*mr̥tyúm*
gods-DAT.PL	PCLE	preferred-IND.IMPERF.3.SG	death-ACC.SG
prajā́yai	*kám*	*amŕ̥taṃ*	*nā́vr̥ṇīta.*
gods-DAT.PL	PCLE	immortality-ACC.SG	NEG=preferred-IND.IMPERF.3.SG

'For the Gods' sake, he chose death, he did not choose immortality for his descendants' sake.'

• Nicholas Sims-Williams (1986): *kám* 'to' < relative adverb ('where' < PIE **k$^{\mu}$om*) with ellipsis 'to the gods' < 'where the gods are'.

(77) Avestan (Old Iranian): *Yasna* 44, 20

Aṯ	*īṯ*	*pərəsā*	*yōi*	*pišiieintī*	*aēibiiō*	*kąm*
and	PCLE	I ask-IND.PRS.1.SG	who-NOM.PL	see-IND.PRS.3.PL	those-DAT.PL	PCLE

yāiš	*gąm*	*karapā*	*usixš-čā*
by which means-INSTR.PL	cattle-ACC.SG	the Karapan priest-NOM.SG	the Usig priest-NOM.SG=and

aēšəmāi	*dātā.*
violence-DAT.SG	give-IND.PRS.3PL

'And I ask those who see how for their sake (for the Daevas' sake) the Karapan priest and the Usij give the cattle to violence.'

(78) Sogdian (cf. Gershevitch 1954:235)

Kww	*myδ'n*	*šwt̲.*	'It goes up to the waist.'
to	waist	it goes-IND.PRS.3.SG	

(79) Sogdian (cf. Yoshida 2009:331)

'Rt̲yxw	*mr'z*	*mrt̲yy*	*kw*	*xt̲w*	*s'r*	*w'nw*	*pt̲yškwy.*
and=the	hired labour	man	to	judge	towards	thus	said-IND.IMPERF.3.SG

'And the hired labourer addressed the judge thus.'

• Berthold Delbrück (1888:150): benefactive particle with datives of persons (*dativus commodi*) or abstracts (final dative) = 'for the sake of' > dative marker

3.3. Syntactic Synonymy

- Stage 1: construction A (B not used)
- Stage 2: construction A unmarked (construction B used in marked contexts)
- Stage 3: construction A and B interchangeable
- Stage 4: construction B unmarked (construction A used in marked contexts)
- Stage 5: construction B (A not used)

4. Regularity

4.1. Linguistic 'Universals'

• Gabriel Girard, *Vrais Principes de la Langue françoise* (1747:23-25):

a. the 'analogue languages' (*langues analogues*), reproducing 'the natural order and gradation of the ideas' (*l'ordre naturel & la gradation des Idées*), i.e. SVO, and possessing a definite article, e. g. French, Spanish and Italian.

b. the 'transpositive languages' (*langues transpositives*), following in their syntax 'the fire of imagination' (*le feu de l'imagination*) in that they have a case system, but no fixed word order, and lacking a definite article, e.g. Latin and Slavic.

c. the 'mixed or amphilogic languages' (*langues mixtes ou amphilogiques*), corresponding to the analogue languages in that they possess a definite article and to the transpositive languages in that they have a case system and no fixed word order, e.g. Ancient Greek.

• Wilhelm von Humboldt, August Schleicher: 'monosyllabic languages' (Chinese), 'agglutinating languages' (Turkish), 'inflectional languages' (Sanskrit)

• Joseph Greenberg (1966):

	Unconditional	Implicational
Absolute	*Any language has* x	*If a language has* x, *it also has* y
Statistical	*The majority of languages has* x	*If a language has* x, *it is likely to have* y

4.2. Unconditional Absolute Universals: Interrogation

(80) Classical Armenian: *Jn.* 18, 33

Դու	ես	թագաւոր-ն	հրեից.
Dow?	*es*	*t'agawor-n*	*hreic'.*
you-NOM.SG	are-IND.PRS.2SG	king-NOM.SG=DEF.ART	Jews-GEN.PL

'Are you the king of Jews?' (= Gr. σὺ εἶ ὁ βασιλεὺς τῶν Ἰουδαίων ;)

(81) Old High German: Otfrid von Weißenburg, *Iesus fatigatus ex itinere*, II, 14, 89

Scal	*iz*	*Krîst*	*sin,*	*fro*	*min?*
shall-IND.PRS.3SG	it-NOM.SG	Christ-NOM.SG	be-INF	lord-NOM.SG	my-NOM.SG

'Shall it be Christ, my Lord?'

(82) Modern Lithuanian (cf. Ambrazas, ed., 1997:712)

Ar	*tu*	*ateisi*	*vakare?*	'Will you come in the evening?'
INTERR	you-NOM.SG	will come-IND.FUT.2SG	evening-LOC.SG	

(83) English

Does	*John*	*swim?*
does-IND.PRS.3SG	John	swim

4.3. Singular vs. Plural: the *τὰ ζῷα τρέχει tà zṓia trék^{h}ei*-rule

(84) Ancient Greek: Homer, *Iliad*, B 396

Τὸν	δ'	οὔ	ποτε	κύματα	λείπει.	'The waves never leave [leaves] him.'
Tòn	*d'*	*oú*	*pote*	*kúmata*	*leípei*	
him-ACC.SG	PCLE	NEG	ever	waves-NOM.NEUT.PL	leaves-IND.PRS.3SG	

(85) Avestan (Old Iranian): *Yašt* 29, 4

Vīspa	*anaγra*	*raočå*	*usraočaiieiti.*
all-NOM.NEUT.PL	beginningless-NOM.NEUT.PL	lights-NOM.NEUT.PL	is shining-IND.PRS.3SG

'All the beginningless lights are [is] shining.'

(86) Hittite: *Kbo* 3.34 ii 18 (cf. Hoffner & Melchert 2008:240)

^{m}*Āškali=ma*	*uddār*	*arāiš.*	'Accusations arose against Aškali.'
Aškali-DAT-LOC.SG=and-PCLE	words-NOM.NEUT.PL	arose-IND.PST.3SG	

4.4. Implicational Universals

• Bernard Comrie (1981:6): 'An implicational universal always involves at least two linguistic properties, which we may symbolize as *p* and *q*, related to one another as an implication (condition), i.e. 'if *p*, then *q*'.'

• William Croft (1990:47): 'Implicational universals differ from unrestricted universals in that they do not assert that all languages belong to one type. Instead, they describe a restriction on logically possible language types that limits linguistic variation but does not eliminate it'.

4.5. Long-distance Relativization (Comrie 1981:154)

(87) Persian (cf. Mahootian 1997)

Mašin-i(-ro)	*ke*	*pedær-æm*	*zæd.*	'the car that my father hit'
car=DEM.(-OM)	that	father=POSS.1SG	hit-IND.PRS.3SG	

(88) Persian (cf. Mahootian 1997)

Mašin-i(-ro)	*ke*	*goft-æm*	*pedær-æm*	*zæd.*	'the car that I said my father hit'
car=DEM.(-OM)	that	said.IND.PST.1SG	father=POSS.1SG	hit-IND.PRS.3SG	

(89) Latin: Cicero, *Catilina* 3, 27

Magna	*uis*	*conscientiae*	*quam*	*qui*	*neglegunt,*
great-NOM.SG	power-NOM.SG	conscience-GEN.SG	which-ACC.SG	those who-NOM.PL	neglegt-IND.PRS.3PL

cum *me* *uiolare* *uolent,* *se* *ipsi* *indicabunt.*
when me-ACC.SG attack-INF want-SUBJ.PRS.3PL REFL.-ACC.SG themselves-NOM.PL betray-IND.PRS.3PL
'there is great power in conscience, and those who neglegt it when they want to attack me betray themselves.' (lit. 'in conscience, which those who neglegt...')

(90) Ancient Greek: Lysias, *On the Refusal of a Pension* 6
Πρόσοδός μοι οὐκ ἔστιν ἄλλη πλὴν ταύτης,
Prósodós *moi* *ouk* *éstin* *állē* *plḕn* *taútēs,*
income-NOM.SG to me-DAT.SG NEG is-IND.PRS.3SG other-NOM.SG besides this one-GEN.SG
ἣν ἂν ἀφέλησθέ με,
hḕn *àn* *ap^{h}élēst^{h}é* *me,*
which-ACC.SG if you deprive-SUBJ.AOR.2PL me-ACC.SG
κινδυνεύσαιμ' ἂν ὑπὸ τῇ δυσχερεστάτῃ γενέσθαι τύχῃ.
kinduneúsaim' *àn* *hupò* *tẽ̃i* *dusk^{h}erestátēi* *genést^{h}ai* *túk^{h}ēi.*
I would risk-OPT.AOR.1SG PCLE under the-DAT.SG most grevious-DAT.SG become-INF plight-DAT.SG
'I have no other income besides this one, and, if you deprive me of it, I might be in danger of finding myself in the most grievous plight.' (lit. 'this one, which, if you deprive me of...')

(91) Old Icelandic: *Heimskringla* I 6$_4$ (cf. Faarlund 2004:262)
þau *verk* *hans,* *er* *allir* *þeir,* *er* *heyrði,*
those-NOM.PL deeds-NOM.PL of him-GEN.SG which all-NOM.PL those-NOM.PL which heard-SUBJ.3PL
vissi, *at* *hégómi* *væri*
knew-IND.PST.3PL that nonsense-NOM.SG were-SUBJ.3PL
'those deeds of his, which all those who heard them knew that they were nonsense'

(92) Russian
девушка, которую я люблю 'the girl that I love'
devuška, *kotoruju* *ja* *ljublju*
girl-NOM.SG that-ACC.SG I-NOM.SG love-IND.PRS.1SG

(93) Russian
†девушка, которую ты думаєшь, что я люблю
†*devuška,* *kotoruju* *ty* *dumaješ',* *čto* *ja* *ljublju*
girl-NOM.SG that-ACC.SG you-NOM.SG think-IND.PRS.2SG that I-NOM.SG love-IND.PRS.1SG
'the girl that you think I love'

• If a language has long-distance relativisation of direct objects, it must have immediate relativisation of direct objects.

4.6. NDem vs. NRel (Comrie 1981:47)

• John A. Hawkins' Universal XI': 'If a language has noun before demonstrative, then it has noun before relative clause'.

1. demonstrative and relative clause both follow the noun (NRel, NDem);
2. relative clause follows the noun and demonstrative precedes the noun (NRel, DemN);
3. *relative clause precedes the noun and demonstrative follows the noun (RelN, NDem);
4. demonstrative and relative clause both precede the noun (RelN, DemN).

	NRel	RelN
NDem	+	-
DemN	+	+

(1) [NDem → NRel]: Middle Welsh

(94) Middle Welsh (cf. Morris-Jones 1913:294-295)
y *gŵr* *hwn* 'this man'
the man this

(95) Middle Welsh (cf. Morris-Jones 1913:284)
y *dyn* *a* *wnelo* *hyn* 'the man who does this'
the man REL does this

(2) [DemN → NRel]: Modern Bulgarian

(96) Modern Bulgarian (cf. Scatton 1983:150)

тази	книга	‘this book’
tázi	*knígа*	
this	book	

(97) Modern Bulgarian (cf. Scatton 1983:381-382)

книгата,	която	си	купих	вчера.	‘the book that I bought myself yesterday’
knígata,	*kojáto*	*si*	*kúpíx*	*včéra.*	
book=the	which	REFL	I bought-IND.AOR.1SG	yesterday	

(3) [DemN, RelN]: Hindi

(98) Hindi (cf. McGregor 1972:8)

yah	*laṛkā*	‘this boy’
this	boy	

(99) Hindi (cf. Mahajan 2000:203)

Jo	*Sītā ko*	*acchā*	*lagtā*	*he,*	‘I do not like the man whom Sita likes.’
REL	Sita-DAT	nice	seem-IMP	be-IND.PRS.3SG	
mujhe	*vo*	*ādmī*	*pasand*	*nahī*	*he.*
me-DAT	that	man	like	NEG	be-IND.PRS.3SG

(4) [NDem, RelN]: not attested

5. Directionality

5.1. Definition

- A feature P can historically evolve to Q, but not Q to P.
- If a language has property P, then it also tends to have property Q.

5.2. Synthetic-to-Analytic Trend: the Degrees of Comparison

- Comparison: Eng. *prouder* > *more proud*. Cf. Vedic Sanskrit comparative (e.g. *jávīyāṃs* ‘quicker’) and superlative (e. g. *jáviṣṭha-* ‘quickest’)
- Ancient Greek βαθύ-τερος *bat^{h}ú-teros* ‘deeper’, βαθύ-τατος *bat^{h}ú-tatos* ‘deepest’, but Modern Greek πιο βαθύς *pio bat^{h}ús* ‘deeper’ (besides βαθύ-τερος *bat^{h}ú-teros*), ο πιο βαθύς *o pio bat^{h}ús* ‘the deepest’.
- Latin comparative in *-ior* → Fr. *plus*, It. *più*, Span. *más*, Rum. *mai* ‘more’ + positive.
- Ossetic бæрзонддæр *bærzonddær* ‘higher’, but æппæты бæрзонддæр *æppæty bærzonddær* ‘the highest’ < ‘the most+higher’.
- Celtic Brittonic languages comparatives in **-ākos* (Welsh *-ach*, Corn. *-a*, *-e*, Bret. *-oc’h*), cf. Latvian (Latv. *-āks*) < intensive suffix (cf. Lith. *gerókas* ‘quite good’ from *gẽras* ‘good’).

5.3. Synthetic-to-Analytic Trend: the Passive

- Latin *amatur* ‘he is loved’ > Late Latin *amatus est*.
- Scandinavian **finda(n)* + reflexive pronoun **sik* ‘to find itself’ > **finna-sk* > Old Icelandic *finnaz* ‘to find itself, to be found’ (*Poetic Edda, Vǫlospá*, 61, 2), then Swedish *baka-s* ‘to be baked’, *läsa-s* ‘to be read’.

5.4. Implications: OV = VNeg vs. VO = NegV

• Jan T. Faarlund (1990:9): a language with VO and postpositions ‘will change from postpositions to prepositions in order to conform to the universal implication *P* > *Q*’.

- VO-language (Verb-Object) = NG-language (Noun+Genitive), since [Operand-Operator]
- OV-languages (Object-Verb) = GN-languages (Genitive+Noun), since [Operator-Operand].

• John Hawkins’ ‘Principle of Crosscategorial Harmony’ (1983)

OV-languages	**VO-languages**
Noun+Postposition	Preposition+Noun
Genitive+Noun	Noun+Genitive
Adjective+Noun	Noun+Adjective

Suffixes	Prefixes
Main verb+Auxiliary verb	Auxiliary verb+Main verb
Adverb+Verb	Verb+Adverb
Verb+Negative	**Negative+Verb**

(1) VO = NegV: Italian

(100) Italian (cf. Maiden, Robustelli, [2]2007:356)

Paolo	*mangia*	*la*	*carne.*	'Paolo eats the meat.'
Paolo	eats-IND.PRS.3SG	the	meat	

(101) Italian (cf. Godard, Marandin 2006:175)

Paolo	*non*	*viene.*	'Paolo does not come.'
Paolo	NEG	comes-IND.PRS.3SG	

(2) OV = NegV: Sinhalese

(102) Sinhalese

Mama	*bat*	*kanavā.*	'I eat rice.'
I	rice	eat-IND.PRS.1SG	

(103) Sinhalese (cf. Masica 1991:391)

Mama	*giyē*	*nǣ.*	'I did not go.'
I	went-IND.PST.1SG	NEG	

(3) VO = VNeg: Swedish

(104) Swedish (cf. Holmes, Hinchliffe 1997:105)

John	*köpte*	*huset.*	'John bought the house.'
John	bought-IND.PST.3SG	house=DEF.ART	

(105) Swedish

John	*köpte*	*inte*	*huset.*	'John did not buy the house.'
John	bought-IND.PST.3SG	NEG	house=DEF.ART	

(4) OV = NegV: Gujarati

(106) Gujarati (cf. Cardona, Suthar, 2003:691)

Hũ	*pəysa*	*apũ.*	'I will give the money.'
I	money	give-IND.PRS.1SG	

(107) Gujarati (cf. Cardona, Suthar, 2003:694)

Kale	*Aruṇa-bɛn*	*gam*	*nə*	*gəyã.*	'Aruna did not go to the village yesterday.'
yesterday-LOC	Aruna-HON	village	NEG	go-PERF.NEUT.PL	

5.5. Disharmony > Harmony?

Disharmonic correlation		Harmonic correlation		
VO-VNeg	>	(a)	VO-NegV	(with VNeg > NegV)
		(b)	OV-VNeg	(with VO > OV)
OV-NegV	>	(c)	OV-VNeg	(with NegV > VNeg)
		(d)	VO-NegV	(with OV-NegV)

(1) [VO-VNeg] > [VO-NegV]: not attested

(2) [VO-VNeg] > [OV-VNeg]: not attested

(3) [OV-NegV] > [OV-VNeg]: Sinhalese and Bengali

• Sinhalese postverbal negation *nǣ* < Middle Indo-Aryan preverbal negation **na* (< PIE **ne*-). Cf. Tamil *vare-la* 'he cannot come'.

• Old Bengali preverbal negation *na* (e.g. *na jani* 'I don't know', cf. Sen 1958) > Modern Bengali postverbal negation (e.g. *jani na* 'I don't know').

(4) [OV-NegV] > [VO-NegV]: Romance languages

(108) Latin: Caesar, *De Bello Gallico*, 1, 20, 5 (cf. Devine & Stephens 2006:37)

Caesar	*eius*	*dextram*	*prendit.*	‘Caesar takes his right hand.’
Caesar-NOM.SG	his-GEN.SG	right hand-ACC.SG	takes-IND.PRS.3SG	

(109) Italian

Cesare	*prende*	*la*	*sua*	*destra.*	‘Caesar takes his right hand.’
Caesar-SG	takes-IND.PRS.3SG	the-SG	his-SG	right hand-SG	

(110) Latin: Caesar, *De Bello Gallico*, 5, 14, 2

Interiores	*plerique*	*frumenta*	*non*	*serunt.*
interior-NOM.PL	most-NOM.PL	corn-ACC.PL	NEG	sow-IND.PRS.3PL

‘Most of the inland inhabitants do not sow corn.’

(111) Italian

Gli	*abitanti*	*dell’interno,*	*per*	*la*	*maggior*	*parte,*
the-PL	inhabitants-PL	of=the interior-SG	for	the-SG	greater-SG	part-SG
non	*seminano*	*grano.*				
NEG	sow-IND.PRS.3PL	corn-SG				

‘Most of the inland inhabitants do not sow corn.’

5.6. Harmony > Disharmony?

Harmonic correlation		Disharmonic correlation		
VO-NegV	>	(a)	VO-VNeg	(with NegV > VNeg)
		(b)	OV-NegV	(with VO > OV)
OV-VNeg	>	(c)	OV-NegV	(with VNeg > NegV)
		(d)	VO-VNeg	(with OV > VO)

(1) [VO-NegV] > [VO-VNeg]: French

(112) Middle French: Jehan de Joinville, *Livre des saintes paroles et des bons faiz noster roy saint Looys*, VI, 37 [1309]

Après	*ces*	*choses,*	*messires*	*li*	*roys*
after	these-OBL.PL	things-OBL.PL	mister-NOM.SG	the-NOM.SG	king-NOM.SG
appela	*monsignour*	*Phelippe*	*son*	*fil.*	
called-IND.PST.3SG	monsignor-OBL.SG	Philip-OBL.SG	his-OBL.SG	son-OBL.SG	

‘After these things the King called his son Philip.’

(113) Middle French: Jehan de Joinville, *Livre des saintes paroles et des bons faiz noster roy saint Looys*, II, 12 [1309]

Je	*ne*	*sai*	*autre*	*raison*
I	NEG	know-IND.PRS.1SG	other-OBL.SG	reason-OBL.SG

‘I don’t know any other reason.’

• Negative quantifiers *pas* < ‘step’ and *point* < ‘point’

(114) Middle French: Christine de Pisan, *Le tresor de la cité des dames de degré en degré* II, 9 [1405]

Dieu	*ne*	*fist*	*pas*	*justice.*	‘God didn’t do justice.’
God-SG	NEG	did-IND.PST.3SG	NEG	justice-SG	

(115) Modern Colloquial French

C’est	*pas*	*rigolo.*	‘It’s not funny.’
it=is-IND.PRS.3SG	NEG	funny	

• Middle French [VO-NegV] > Modern colloquial French [VO-VNeg].

(2) [VO-NegV] > [OV-NegV], [OV-VNeg] > [OV-NegV]: not attested

(3) [OV-VNeg] > [VO-VNeg]: Kashmiri

(116) Kashmiri (cf. Wali, Nath Koul 1997:117)

Kẽh	*ləḍkɨ*	*gəyi*	*nɨ*	*garɨ.*	‘Some boys did not go home.’
some-PL	boys	went	NEG	home	

(117) Kashmiri (cf. Wali, Nath Koul 1997:83)
Me *por* *akhbār.* ‘I read the paper.’
I-ERG read paper

(4) Complex evolutions: Scandinavian languages [OV-NegV] > [VO-NegV] > [VO-VNeg]

(118) Gothic: Wulfila’s *New testament*, *Jn.* 13, 38
Hana *ni* *hrukeiþ.* ‘The cock will not sing.’ (= Greek οὐ μὴ ἀλέκτωρ φωνήσῃ)
cock-NOM.SG NEG sing-IND.PRS.3SG

(119) Runic Germanic: Gallehus inscription (ca 395 CE)
ek **hlewagastiz** **:** **holtijaz :** **horna :** **tawido** **:**
I-NOM.SG Hlewagastiz-NOM.SG Holtijaz-NOM.SG horn-ACC.SG made-IND.PST.1SG
‘I, Hlewagstiz Holtijaz, made the horn.’

• Swedish postverbal negation *inte*.

Conclusion

• Winfred Lehmann (1973:55): ‘When languages show patterns other than those expected, we may assume that they are undergoing a transitional phase of change’. (!)

C. MECHANISMS OF SYNTACTIC CHANGE

1. General presentation

• Alice Harris & Lyle Campbell (1995:50): ‘reanalysis’, ‘extension’ and ‘borrowing’

• ‘Borrowing is an external mechanism of change, involving motivations towards change from outside the affected language; reanalysis and extension are internal mechanisms’.

• ‘Reanalysis is a change of function without change of surface structure, extension a change of surface structure without change of function’.

	Stability	Reanalysis	Extension	Refactoring
Surface structure	Change -	Change -	Change +	Change +
Underlying structure	Change -	Change +	Change -	Change +

2. Stability

2.1. Animate-inanimate distinction: PIE **kʷis* / **kʷos* ‘who?’ (animate), vs. **kʷid* / **kʷod* ‘what’ (inanimate)

(1) Ancient Greek: Euripides, *Ion*, 258 (feminine agreement)
– Τίς δ’ εἶ; [...] – Κρέουσα μέν μοι τοὔνομ’.
– *Tís* *d’* *eĩ ?* [...] – *Kréousa* *mén* *moi* *toúnom’.*
who-NOM.SG PCLE you are-IND.PRS.2SG Kréousa-NOM.SG PCLE to me-DAT.SG the=name-NOM.SG
‘– Who are you? [...] – Kréousa is my name.’

(2) Ancient Greek: Euripides, *Bacchae*, 1280 (neuter agreement)
– Ἔα, τί λεύσσω ; [...] – Ὁρῶ μέγιστον ἄλγος.
– *Éa,* *tí* *leússō?* [...] – *Horõ̃* *mégiston* *álgos.*
PCLE what-ACC.SG I see-IND.PRS.1SG I see-IND.PRS.1SG greatest-ACC.SG grief-ACC.SG
‘– What do I see? [...] – I see the greatest grief.’

(3) Hittite: *KUB* XLVIII 5 and 13
– *Kuiš=ṷar=an* *ḫaran* ^{d}*pirṷ*[*-aš*] [^{u}]^{ru}*ḫaššuṷaza* *úṷatez*[*zi*]*?* [...]
who-NOM.SG=PCLE=it-ACC.SG eagle-ACC.SG Piruṷa-GEN.SG Ḫaššuṷa-ABL.SG brings-IND.PRS.3SG
– *Úk=ṷar=an* *úṷate*][*mi*]
I-NOM.SG=PCLE=it-ACC.SG bring-IND.PRS.1SG
‘– Who brings it, the eagle of Piruṷa, from Haššuṷa? [...] – I am bringing it.’

(4) Hittite: *KUB* XXIX 1, II 5 and 8
– *Nu* *kuit* *iššanzi?* [...] – *Nu* LUGAL-*ṷaš* MU.KAM.ḪI.A-*uš* *malkiṷanzi.*
PCLE what-ACC.SG they do-IND.PRS.3PL PCLE of the king-GEN.SG years-ACC.PL spin-IND.PRS.3PL
‘– What are they doing? – They are spinning the king’s years.’

(5) Welsh (cf. King 1993:100)

Pwy	*ydy*	*hwnna?*	‘Who is that?’
who	is-IND.PRS.3SG	that	

(6) Welsh (cf. King 1993:100)

Beth	*yw’r*	*lliw*	*’na?*	‘What is that colour?’
what	is-IND.PRS.3SG	colour	that	

(7) Classical Armenian: Mesrop’s *New Testament*, *Mt.* 18, 1

Ով	իցէ	ի	մէնջ	մեծ	յարքայութեան	երկնից
Ov?	*ic‘ē*	*i*	*mēnǰ*	*mec*	*y-ark‘ayowt‘ean*	*erknic‘*
who-NOM.SG	is-SUBJ.PRS.3SG	from	us-ABL.SG	great	in=kingdom-LOC.SG	heaven-GEN.PL

‘Who among us is greatest in the kingdom of heaven?’ (= Gr. τίς ἄρα μείζων ἐστὶν ἐν τῇ βασιλείᾳ τῶν οὐρανῶν ;)

(8) Classical Armenian: Mesrop’s *New Testament*, *Mt.* 9, 5

Զինչ	դիւրին	է	‘What is easier?’ (= Gr. τί γάρ ἐστιν εὐκοπώτερον ;)
Zinč‘?	*diwrin*	*ē*	
what-ACC.SG	easy-NOM.SG	is-IND.PRS.3SG	

(9) Tocharian A: A5a5-10a2, 38 (cf. Pinault 2008:255)

Kuss	*aśśi*	*sās?*	‘Who is that girl?’
who-NOM.SG	then	that one-NOM.FEM.SG	

(10) Tocharian A: A5a5-10a2, 58 (cf. Pinault 2008:256)

Kus	*tāk?*	‘What happened?’
what-NOM.SG	was-IND.PST.3SG	

(11) Lithuanian

Kas	*atėjo?*	‘Who came?’
who-NOM.SG	came-IND.PST.3	

(12) Lithuanian

Kas	*atsitiko?*	‘What happened?’
what-NOM.SG	happened-IND.PST.3	

3. Reanalysis

3.1. General Definition

(13) German (cf. Humboldt 1836:276-277)

Ich	*weiß*	*das:*	*du*	*bist*	*fertig.*
I-NOM.SG	know-IND.PRS.1SG	that-ACC.SG	you-NOM.SG	are-IND.PRS.2SG	ready

‘I know that: you are ready.’

(14) German (cf. Humboldt 1836:276-277)

Ich	*weiß,*	*daß*	*du*	*fertig*	*bist.*
I-NOM.SG	know-IND.PRS.1SG	that-ACC.SG	you-NOM.SG	ready	are-IND.PRS.2SG

‘I know that you are ready.’

[*Ich weiß das:*] [*du bist fertig.*] → [*Ich weiß,*] [*daß du bist fertig.*] → [*Ich weiß,*] [*daß du fertig bist.*]

Reanalysis

Verb-final in subordinate clause

(15) Langacker (1977:62)

I will define “reanalysis” as change in the structure of an expression or class of expressions that does not involve any immediate or intrinsic modifications of its surface manifestation.

- Alan Timberlake (1977:141): ‘the gradual mapping out of the consequences of the reanalysis’.
- Ronald Langacker (1977:64):

resegmentation
- boundary loss
- boundary creation
- boundary shift

(syntactic/semantic) reformulation

3.2. 'Serial Verbs'

• Mark Sebba (1987:2): 'Serial Verb' then has generally been used to refer to a surface string of verbs or verb-like or verb-phrase-like items which occur within what appears to be a single clause'.

• Françoise Rose (2009: 644): 'Serialization can be both viewed as an analytic way of expressing different aspects of the same event ('take-come' for 'bring') and as a synthetic way of expressing complex events that would be expressed with several clauses in other languages ('hit-kill' for 'hit s.o. and kill them')'.

• Silvia Luraghi (1993:268):

a. morphology: either only one verb in the string is inflected, or all verbs display the same morphology;

b. syntax: the construction is paratactic (no subordination); however, there is no overt mark of coordination between the two verbs (therefore no sentence boundaries);

c. semantics: only the last verb in the series displays its full lexical meaning; the preceding one(s) have undergone grammaticalization and often syntactic re-analysis; the two (or sometimes more) verbs are taken as referring to one event.

(16) Hittite: KBo IV 3+i 23-24 (example and translation from Luraghi 1993:271)

N=an	*uu̯ami*	^{LÚ}KÚR-*aš*	*iu̯ar*	GUL-*aḫmi.*	.
PCLE=him-ACC.SG	I come-IND.PRS.1SG	enemy-GEN.SG	as	I fight-IND.PRS.1SG	

'I shall (come and) fight against him as an enemy.'

• Cf. Dorothy Disterheft (1985)

(17) Classical Armenian: Mesrop's *New Testament*, *Lk.* 23, 26, cf. also *Mt.* 27, 2 (cf. Yates 2013:7)

իբրեւ	առին	գնացին	զնա
ibrew	*arin*	*gnac'in*	*z-na*
as	took-IND.AOR.3PL	went-IND.AOR.3PL	OBJ=him-ACC.SG

'as they took him' (= Gr. ὡς ἀπήγαγον αὐτόν)

(18) Ancient Greek: Homer, Iliad, Ω 407

Ἄγε	δή	μοι	πᾶσαν	ἀληθείην	κατάλεξον.
Áge	*dḗ*	*moi*	*pã̃san*	*alētheíēn*	*katálekson.*
lead-IMPER.PRS.2SG	PCLE	to me-DAT.SG	all-ACC.SG	truth-ACC.SG	tell-IMPER.AOR.2SG

'Come now, tell me all the truth.'

(19) Ancient Greek: Plato, *Ion*, 538e

Ἴθι	μοι	ἔξευρε			
Ít^{h}i	*moi*	*ékseure*			
go-IMPER.PRS.2SG	for me-DAT.SG	find out-IMPER.AOR.2SG			
καὶ τὰ	τοῦ	μάντεώς	τε καὶ	μαντικῆς.	
kaì tà	*toũ*	*mánteo͂s*	*te kaì*	*mantikɛ̃̄s.*	
also the things-ACC.PL	of the-GEN.SG	seer-GEN.SG	and	seer's art-GEN.SG	

'Go find out for me also those which are of the seer and the seer's art.'

(20) Latin: Plautus, *Stichus*, 418

Age	*abduce*	*hasce*	*intro,*
lead-IMPER.PRS.2SG	conduct-IMPER.PRS.2SG	these-ACC.PL	inside
quas	*mecum*	*adduxi,*	*Stiche.*
whom-ACC.PL	with me	I have conducted-IND.PERF.1SG	Stichus-VOC.SG

'Go take these (girls) I have brought with me indoors, Stichus.'

(21) Vedic Sanskrit: *RV* VIII 412d = VIII 6410c

Tásya	*ā́*	*ihi*	*prá*	*dravā*	*píba.*
of this-GEN.SG	PCLE	go-IMPER.PRS.2SG	PREV	run-IMPER.PRS.2SG	drink-IMPER.PRS.2SG

'Come run drink of that!'

(22) Classical Armenian: Mesrop's *New Testament*, *Mt.* 8, 4, cf. *Lk.* 5, 14

Երթ	ցոյց	զանձն	ք֊ն	քահանայի֊ն
Ert'	*c'oyc'*	*z-anjn*	*k'o*	*k'ahanayi-n.*
go-IMPER.2SG	show-IMPER.2SG	OBJ=self-REFL	you-GEN.SG	priest-DAT.SG=DEF.ART

'Go show yourself to the priest' (= Gr. ὕπαγε σεαυτὸν δεῖξον τῷ ἱερεῖ)

(23) Hittite: KUB 14.10 + 24-25

Īt-u̯ar-ašta	*párgamuš*	ḪUR.SAG.$^{ḪI.A}$*-ašaš*	*šāḫ.*	.
go-IMPER.2SG=PCLE=PCLE	high-ACC.PL	mountains-ACC.PL	search-IMPER.2SG	

'Go search the high mountains.'

(24) Ancient Greek: Homer, *Odyssey*, γ 332, cf. γ 475 (cf. *Iliad*, Γ 441 and M 348)

Ἀλλ'	ἄγε	τάμνετε	μὲν	γλώσσας,
All'	*áge*	*támnete*	*mèn*	*glṓssas,*
but	go-IMPER.PRS.2SG	cut-IMPER.PRS.2PL	PCLE	tongues-ACC.PL

κεράεσθε	δὲ	οἶνον.
keráesthe	*dè*	*oĩnon.*
mix-IMPER.PRS.2PL	PCLE	wine-ACC.SG

'But come, cut out the tongues [of the victims] and mix the wine.'

(25) Vedic Sanskrit: *RV* VIII 2419

Éto	*nv*	*Índraṃ*	*stávāma.*
come-IMPER.PRS.2PL=PCLE(*éta-u*)	now	Indra-ACC.SG	praise-SUBJ.PRS.1PL

'Come now, let us praise Indra!'

Cf. George Dunkel (1985), Hans Henrich Hock (2002).

(26) Modern Greek (cf. Joseph 1990:83)

Έλα	πές	μου.	'Come on, tell me.'
Éla	*pés*	*mou.*	
come-IMPER.PRS.2SG	tell-IMPER.PRS.2SG	me-GEN.SG	

3.3. Reanalysis with Boundary Creation

• Ronald Langacker (1977:77): 'Selection is the process whereby one portion of a phonological sequence with a given semantic or syntactic role is singled out, or 'selected', and come to stand alone in that role'.

3.4. 'Lexicalization' or 'Degrammaticalization': Modern Irish

(27) Early Modern Irish

molfamaid	'We will praise.'
praise-IND.FUT.1PL	

(28) Contemporary Connemara Irish

molfaid	*muid*	'We will praise.'
praise-IND.FUT.1PL	we	

(29) Contemporary Connemara Irish

Is	*muide*	*a*	*rinne*	*é.*	'It is we who did it.'
be	we-PRON.EMPH.1PL	who	do-IND.PST	it	

• Cf. Muriel Norde (2010:138): 'debonding' = 'shift from bound morpheme (affix, clitic) to free morpheme'.

3.5. 'Lexicalization' or 'Degrammaticalization': Northern Swedish *bö* (Rosenkvist 2010)

• Swedish *behöva* 'to need'> Northern Swedish dialect of Piteå *bö* + *höv*

(30) Northern Swedish dialect of Piteå

Hä	*böhöv'n*	*it*	*djära.*	'He doesn't need to do that.'
it	need=he	not	do	

(31) Northern Swedish dialect of Piteå

Hä	*bö'n*	*it*	*höv*	*djära.*	'He doesn't need to do that.'
it	*bö*=he	not	*höv*	do	

(32) Northern Swedish dialect of Piteå

Hä	*bö'n*	*it*	*djära.*	'He doesn't need to do that.'
it	*bö*=he	not	do	

[böhöv]	⟶	[bö]	[höv]
prefix+root		auxiliary	verb (?)

3.6. Reanalysis with Boundary Creation: Final Infinitives

(33) Vedic Sanskrit: RV VII 573

Samānám	*aṅgy*	*àṅjate*	*śubhé*	*kám.*
same-ACC.SG	ointment-ACC.SG	they anoint themselves-IND.PRS.MED.3PL	shining-DAT.SG	PCLE

'They anoint themselves in the same anointment in order to shine [for the shining]'

(34) Vedic Sanskrit: RV III 381

Kavíñr	*icchāmi*	*saṁdr̥śe*	*sumedhā́ḥ.*
poets-ACC.PL	I wish-IND.PRS.1SG	seeing-DAT.SG	wise-NOM.SG

'I, the wise one, wish to see the poets.'

(35) Vedic Sanskrit: RV I 3012

yáthā	*ta*	*uśmasi*	*iṣṭáye.*
when	you-DAT.SG	we wish-IND.PRS.1PL	hasten-DAT.SG

'when we wish that you hasten [we wish for you to hasten]'

(36) Vedic Sanskrit: RV I 501

Úd	*u*	*tyáṁ*	*jātávedasaṁ*	*deváṁ*	*vahanti*
there	PCLE	this-ACC.SG	Jātavedasa-ACC.SG	god-ACC.SG	carry-IND.PRS.3PL

ketávaḥ	*dr̥śé*	*víśvāya*	*sū́ryaṁ.*
rays-NOM.SG	seeing-DAT.SG	all-DAT.SG	sun-ACC.SG

'The rays carry the god Jātavedasa there in order that all may see the sun.'

(37) Old Church Slavic: *Suprasliensis* 90, 6

Се	поле	сътворено	бѣ	конѥмъ	тешти.
Se	*pole*	*sъtvoreno*	*bě*	*konjemъ*	*tešti.*
this-NOM.SG	field-NOM.SG	created-NOM.SG	was-IND.IMPERF.3SG	horses-DAT.PL	run-INF

'This field was created for horses to run.'

(38) Lithuanian

Įpyliau	*pieno*	*kačiukams*	*užlakti.*
I poured-IND.PST.1SG	milk-GEN.SG	kittens-DAT.PL	to lap up-INF

'I poured milk for kittens to lap up.'

(39) Hittite: *KUB* 39.71 i 24-25

N=aš	*šeḫḫiliia̯š*	*u̯etenaš*	*ḫanuu̯anzi*	*paizzi.*
PCLE=she-NOM.SG	purification-GEN.SG	waters-DAT.PL	to draw-INF	goes-IND.PRS.3SG

'She goes to draw the waters of purification.'

(40) Hieroglyphic Luvian: *KARATEPE* §XL

REL-*pa-wa/i-mu*	POST-*na*	(DEUS)TONITRUS-*hu-za-sá*	(DEUS)*Rú-za-sá-ha*	*sá-ta*
indeeed=QUOT=me	behind	Tarhunzas-NOM.SG	Runzas-NOM.SG=HA	were-IND.PST.3PL

za-ti	"CASTRUM"-*si*	AEDIFICARE-*MI*-*ná.*
this-DAT.SG	fortress-DAT.SG	to build-INF

'Indeed Tarhunzas and Runzas were behind me to build this fort.'

(41) Lycian: *TL* 39, 5, 6

Me=ñne	*ni(j)=esu*	*esedeñnewi*	*epttehi*	*ñtepi=tan(e).*
CONJ=them-DAT.PL	PROHIB-shall be-IND.FUT.3SG	descendants-DAT.PL	their-DAT.PL	into=to put-INF

'Let it not be (permitted) to them to put in their descendants.'

(42) Lithuanian (cf. Ambrazas 2006:319)

Pirkau	*arklį*	*laukams*	*arti.*
I bought-IND.PST.1SG	horse-ACC.SG	for fields-DAT.PL	to plough-INF

'I bought a horse in order to plough fields.'

3.7. Boundary Shift

• [AB] [CD] > [A] [BCD], or [ABC] [D], or [AC] [BD], etc. Cf. German *daß* 'that':

(43) Old High German: Otfried, *Evangelienbuch* II, 2, 8 (ed. Erdmann 1882:69)

joh	*gizálτa*	*in*	*ſar*	*τház*
and	told-IND.PST.3SG	them-DAT.PL	quickly-ADV	that-ACC.SG

τhiu	*ſálida*	*unτar*	*ín*	*uuaſ.*
the-NOM.SG	salvation-NOM.SG	among	them-DAT.PL	was-IND.PST.3SG

'And he quicly told them that: the salvation was among them.'

(44) Old High German: Otfried, *Evangelienbuch* II, 3, 36-37 (ed. Erdmann 1882:69)

uuánτ	*er*	*deta*	*mári*
for	he-NOM.PL	did-IND.PST.3SG	known
τhaz	*druhtin*	*quéman*	*uuari.*
that	Lord-NOM.SG	come-NOM.SG	was-IND.PST.3SG

'For he made known that the Lord had come.'

3.8. The Proleptic Accusative

• Bruce Fraser (2001:7): 'the presence, in a completive construction, of a word or phrase in the main clause, which functions syntactically in it, and is also co-referent with the subject (or sometimes object) of the following subordinate clause'.

(45) Ancient Greek: Homer, Iliad, B 409 (cf. Monro 1891:238)

Ἤδεε	γὰρ	κατὰ	θυμὸν	ἀδελφεὸν
Édee	*gàr*	*katà*	*t^{h}umòn*	*adelp^{h}eòn*
he knew-IND.PLUPERF.3SG	PCLE	in	heart-ACC.SG	brother-ACC.SG

ὡς	ἐπονεῖτο.
hōs	*eponeîto.*
how	he worked hard-IND.IMPERF.3SG

'He knew in his heart how his brother worked hard.'

(46) Ancient Greek: Xenophon, *Cyropaedia*, V, 1, 20

Ἐγὼ	ὑμᾶς	οἶδα	σαφῶς	ὅτι	[...]	ἐξήλθετε.
Egô	*hūmãs*	*oîda*	*sap^{h}ôs*	*hóti*	[...]	*eksélt^{h}ete.*
I-NOM.SG	you-ACC.PL	know-IND.PERF.1SG	clearly-ADV	that		you went out-IND.AOR.2PL

'I clearly know that [...] you went out.'

(47) Sanskrit: *Mahābhārata*, I 156, 9 (cf. Speyer 1896:94 § 293, Gonda 1975:122 [1958])

Anujāṃs	*tu*	*na*	*jānāmi*	*gaccheyur*	*neti*	*vā*	*punaḥ.*
brothers-ACC.PL	PCLE	NEG	I know-IND.PRS.1SG	they go-OPT.PRS.3PL	NEG	or	however-ADV

'But of my brothers I do not know whether they will go or not.'

(48) Old Persian: *DB* 1, 52 (cf. Kent 1953:79)

Mātyamām	*:*	*xšnāsātiy*	*:*	*tya :*	*adam*	*:*	*naiy*	*:*	*Bardiya*	*:*	*amiy.*
lest=me-ACC.SG		know-SUBJ.PRS.3SG		that	I-NOM.SG		NEG		Smerdis-NOM.SG		am-IND.PRS.1SG

'Lest (the people) know me that I am not Smerdis.'

(49) Ossetic (cf. Christol 1989:66)

Фыд	зыдта	рухс	кæсæи	сыд.
Fyd	*zydta*	*ruxs*	*kæcæi*	*cyd.*
father	knew-IND.PST.3SG	light	from where	came-IND.PST.3SG

'The father knew where the light came form.'

(50) Latin: Plautus, *Rudens*, 328 (cf. Gonda 1975:118 [1958])

Num	*quid*	*mihi*	*meliust,*	*quam*	*ilico*	*hic*
now	what	to me-DAT.SG	better=is-IND.PRS.3SG	than	on the spot	here

opperiar	*erum,*	*dum*	*ueniat.*
I wait-SUBJ.PRS.1SG	master-ACC.SG	until	he comes-SUBJ.PRS.3SG

'Now what is better for me than to wait here on the spot until my master comes.'

(51) Italian: Boccacio, *Decameron*, 7, 8, 29 (cf. Fraser 2001:8)

Tu'l	*saprai*	*bene,*	*rea*	*femina,*	*chi*	*è.*
you-SUBJ=him-OBJ	will know-IND.FUT.2SG	well-ADV	lewd	woman	who-REL	he is-IND.PRS.3SG

'You shall soon have cause enough to know him, lewd woman, who he is.'

(52) Occitan (cf. Sauzet 1989:242)

Sabi	*ton*	*pair*	*que*	*vendrà.*
I know-IND.PRS.1SG	your	father	that	he will come-IND.FUT.3SG

'I know that your father will come.'

(53) Colloquial French

Tu vas	*voir*	*ton*	*père*	*ce que*	*je vais*	*lui*	*dire.*
you'll	see	your	father	what	I'm going	him	to tell

'You'll see what I'm going to tell to your father.'

(54) English: Shakespeare, *3 Henry VI*, II, 1, 11-12 (cf. Fraser 2001:8)
I [...] *watch'd him how he singled Clifford forth.*

Analysis

a. reanalysis of a relational accusative: [*he knew about his brother + how he worked hard*] → [*he knew his brother how he worked hard*].

b. 'raising movement' of the subject of the subordinate clause to the function of object in the matrix clause: [*he knew how his brother worked hard*] → [*he knew his brother how he worked hard*].

c. contamination of two distinct syntactic patterns: [*he knew how his brother worked hard*] + [*he knew his brother*]

On b.

(a) he knew how his brother [NOM.] worked hard

(b) he knew his brother [ACC.] how he worked hard

(55) Ancient Greek: Sophocles, *Oedipus Tyrannus*, 767 (cf. Gonda 1975:121 [1958])

Δέδοικ'	ἐμαυτόν,	ὦ	γύναι,		
Dédoik'	*emautón,*	*ō̃*	*gúnai,*		
I fear-IND.PERF.1SG	myself-ACC.SG	PCLE	lady-VOC.SG		
μὴ	πόλλ'	ἄγαν	/	εἰρημέν'	ἦ̃	μοι.
mè	*póll'*	*ágan*	/	*eirēmén'*	*ēi*	*moi.*
that	many things-NOM.PL	too much-ADV		said-NOM.PL	is-SUBJ.PRS.3SG	by me-DAT.SG

'I fear, lady, that many words have been pronounced by me too harshly.'

(56) Colloquial French

Tu vas	*voir*	*ton*	*père*	*ce que*	*je vais*	*lui*	*dire.*
you'll	see	your	father	what	I'm going	him	to tell

'You'll see what I'm going to tell to your father.'

(57) Colloquial French

Ton	*père,*	*tu vas*	*voir*	*ce que*	*je vais*	*lui*	*dire.*
your	father	you'll	see	what	I'm going	him	to tell

'You'll see what I'm going to tell to your father.'

(58) Latin: Cicero, *Attica*, 10, 4, 8 (cf. Bortolussi 2006:33)

De	*Hispaniis*	*non*	*dubitabat*	*quin*	*Caesaris*	*essent.*
about	Spains-ABL.PL	NEG	doubted-IND.IMPERF.3SG	that	Cesar-GEN.SG	were-SUBJ.IMPERF.3PL

'About the two Spains he did not doubt that they were in the hands of Cesar.'

On c.

(a) he knew how his brother [NOM.] worked hard
(b) he knew his brother [ACC.]
→ (c) he knew his brother [ACC.] how he worked hard

(59) Ancient Greek: Aristophanes, *Clouds*, 842

Γνώσει	δὲ	σαυτὸν	ὡς	ἀμαθὴς	εἶ
Gnṓsei	*dè*	*sautòn*	*hōs*	*amat^{h}ès*	*eĩ*
you will know-IND.FUT.2SG	PCLE	yourself-ACC.SG	how	ignorant-NOM.SG	you are-IND.PRS.3SG

καὶ	παχύς.
kaì	*pak^{h}ús.*
and	stupid-NOM.SG

'And you will know yourself how ignorant and stupid you are.'

• Bruce Fraser (2001:10): 'Prolepsis is not the result of movement, or of a regular anaphoric relationship, but is anacoluthic, because the accusative functions in both clauses: it is a real object of the main verb, as well as having a semantic function in the subordinate clause. This double role typically leads to prosodic emphasis.'

(60) Latin: Plautus, *Miles gloriosus*, 1045

Viden	*tu*	*ignauum,*	*ut*	*sese*	*infert?*
see-IND.PRS.2SG=PCLE	you-NOM.SG	fool-ACC.SG	how	himself-ACC.SG	carries-IND.PRS.3SG

'Do you see the fool, how he struts?'

3.9. 'Syntactic/Semantic Reformulation'

(61) Ronald Langacker (1977:79)

Reformulation is reanalysis that involves aspects of structure more abstract than the occurrence and placement of morpheme boundaries; these aspects include rules, semantic and syntactic categories, and semantic or syntactic configurations (such as tree structures).

(62) William Croft (2000:121)

Form-function reanalysis involves the remapping of the relationship between form and function in a grammatical construction.

(63) William Croft (2000:121)

In HYPERANALYSIS, the listener reanalyzes an inherent semantic/functional property of a syntactic unit as a contextual property (usually, a property of another syntactic unit of the construction). In the reanalysis, this inherent property of a syntactic unit is then attributed to the context (often another unit in the construction), and so the syntactic unit in question loses some of its meaning or function.

(64) William Croft (2000:126)

In HYPOANALYSIS, the listener reanalyzes a contextual semantic/functional property as an inherent property of the syntactic unit. In the reanalysis, the inherent property of the context (often the grammatical contexte [...]), is then attributed to the syntactic unit, and so the syntactic unit in question gains a new meaning or function.

3.10. Hyperanalysis: Loss of Governed Oblique Case in Slavic

(65) Russian (cf. Kagan 2013:7)

Он	ждал	чуда.	'He was waiting for a miracle.'
On	*ždal*	*čuda.*	
he-NOM.SG	waited-PART.PST.NOM.SG	miracle-GEN.SG	

• Intensional actions (e.g. требовать *trebovat'* 'demand', искать *iskat'* 'look for') or non-immediate contact (e.g. бояться *bojat'sja* 'be afraid of', избегать *izbegat'* 'escape').

• Alan Timberlake (1977:158): 'the genitive expresses a limitation on the extent to which an object participates in the event'.

(66) Russian (cf. Kagan 2013:96)

Дима	ждёт	русалку.	'Dima is waiting for a mermaid.'
Dima	*ždët*	*rusalku.*	
Dima-NOM.SG	waits-IND.PRS.3SG	mermaid-ACC.SG	

3.11. Hypoanalysis: Indicative Presents > Subjunctives or Futures

• Cf. Martin Haspelmath (1998:36-37)

Middle and Modern Welsh

(67) Middle Welsh: Dafydd ap Gwilym, *Cyfeddach*, 27 (14th century)

Hawdd	*yfaf.*	'Easily I drink.'
easily	I drink-IND.PRS.1SG	

(68) Middle Welsh: Dafydd ap Gwilym, *Y Mwdwl Gwair*, 29 (14th century)

Cymynnaff	*dy*	*gorff*	*adref.*	'I will commend your body home.'
I commend-IND.PRS.1SG	your	body-SG	home	

(69) Middle Welsh: Dafydd ap Gwilym, *Tri Phorthor Eiddig*, 65 (14th century)

Rhydd	*y*	*mae*	*Duw*	*yn*	*rhoddi.*	'God gives me the freedom.'
free	PCLE	is-IND.PRS.3SG	God-SG	in	giving-VERBAL.NOUN	

(70) Modern Welsh (cf. T. A. Watkins 1992:92)

Mae'r	*bachgen*	*yn*	*gweld*	*y*	*dyn.*	'The boy sees the man.'
is-IND.PRS.3SG=DEF.ART	boy-SG	in	seeing	the	man-SG	

Hittite

(71) Hittite: KBo 32.19 II 24 (cf. Hackstein 2004:86)
URU-Eblan *URU-an* *ḫarnikmi.*
Ebla-ACC.SG city-ACC.SG I destroy-IND.PRS.1SG
'I will destroy the city of Ebla.'(note that the text is translated from Hurrian KBo 32.19 I 24: *ardi-ma URU-Ebla fabedau*, with the future *fabedau*)

Gothic

(72) Gothic: Wulfila's *New testament*, *Mt.* 5, 25 (cf. Krause 1968:204)
Jah *in* *karkara* *galagjaza.*
and in jail-ACC.SG you are thrown-IND.PRS.MED.2SG
'And you will be thrown into jail.' (= Greek καὶ εἰς φυλακὴν βληθήσῃ)

Slavic

(73) Russian (cf. Senn 1949:404)

Я	смотрю	в	окно.	'I am looking through the window.'
Ja	*smotr'u*	*v*	*oknó.*	
I-NOM.SG	look-IND.PRS.IMPERF.1SG	in	window-ACC.SG	

(74) Russian (cf. Senn 1949:404)

Я	посмотрю	в	окно.	'I will look (once) through the window.'
Ja	*posmotr'u*	*v*	*oknó.*	
I-NOM.SG	look-IND.PRS.PERF.1SG	in	window-ACC.SG	

3.12. Ambiguity

• Alan Timberlake (1977:148): 'A necessay precondition for reanalysis, I would claim, is an ambiguity in the output'.

4. Extension

• Alice Harris & Lyle Campbell (1995:97): 'change in the surface manifestation of a syntactic pattern that does not involve immediate or intrinsic modification of underlying structure'

• 'Generalisation': extension of a rule to new contexts (rule extension) or loss of a former distinction or removal of exceptions (rule loss).

• Hans Henrich Hock (1986:357): 'reinterpretation-cum-extension'

- extension: A = [– > +], vs. B = [+ > –]
- recession: A [+ > –], vs. B [– > +]
- shift: A [$+_1$ > $+_2$], vs. B [$+_2$ > $+_x$] and C [$+_y$ > $+_1$]

4.1. The Instrumental Case in Old High German

(75) Old High German: *Hildebrandlied* 53 (cf. also *Hildebrandlied* 63)

Nu	*scal*	*mih*	*suasat*	*chind*	*suertu*	*hauwan.*
nun	must-IND.PRES.-PERF.3SG	me-ACC.SG	own-NOM.SG	child-NOM.SG	sword-INSTR.SG	strike-INF

'Now my own child should strike me with his sword.'

(76) Old High German: *Hildebrandlied* 37

Mit	*geru*	*scal*	*man*	*geba*	*infahan*
with	spear-INSTR.SG	must-IND.PRS.-PERF.3SG	one-NOM.SG	gift-ACC.SG	receive-INF

'One must receive a gift by the spear.'

(77) Old High German: *Hildebrandlied* 19 (cf. 26)
miti *Theotrihhe* 'with Dietrich'
with Dietrich-DAT.SG

• Cf. *in pardisu* 'in paradise' (*Muspilli* 16). Modern German *heute* 'today' (< Old High German *hiutu* < **hiu tagu* 'this day'), *heuer* 'this year' (< Old High German *hiuru* < **hiu jāru* 'this year').

4.2. Syntactic Shift

• A construction A shifts from one function ($_1$) to another function ($_2$). As a result, a construction B gives up the function ($_2$) acquired by A, and a construction C acquires the capacity of serving the function ($_1$), lost by A.

4.3. The Tense System in Armenian

Classical Armenian

• Synthetic present indicative (e.g. ածեմ *acem* ‘I bring, I am bringing’), synthetic present subjunctive (e.g. ածիցեմ *acic‘em*), vs. aorist stem (ind. ածի *aci*, subj. ածդից *acc‘em*).

(78) Classical Armenian: Mesrop’s *New Testament*, *Jn.* 19, 4

Ահա	ածեմ	զնա	առ	ձեզ	արտաքս
Aha	*acem*	*zna*	*ar̄*	*jez*	*artak‘s.*
see	I bring-IND.PRS.1SG	OBJ=him-ACC.SG	to	you-ACC.PL	out

‘See, I am bringing him out to you.’ (= Gr. Ἴδε ἄγω ὑμῖν αὐτὸν ἔξω.)

(79) Classical Armenian: Mesrop’s *New Testament*, *Lk.* 15, 8

Կամ	n	իցէ	կին	որոյ	իցեն
Kam	*o?*	*ic‘ē*	*kin*	*oroy*	*ic‘en*
or	who-NOM.SG	would be-SUBJ.PRS.1SG	woman-NOM.SG	of whom-GEN.SG	would be-SUBJ.PRS.3SG

դրամք	տասն	եւ	եթե	կորուսանիցէ	դրամ	մի
dramk‘	*tasn*	*ew*	*et‘e*	*korowsanic‘ē*	*dram*	*mi*
drachms-NOM.PL	ten-NOM.PL	and	if	would lose-CONJ.PRS.3SG	drachm-ACC.SG	one-ACC.SG

ոչ	լուցանիցէ	ճրագ	եւ	ածիցէէ	աւել
oč‘?	*lowc‘anic‘ē*	*črag*	*ew*	*acic‘ē*	*awel*
NEG	would light-SUBJ.PRES.3SG	lamp-ACC.SG	and	would lead-SUBJ.PRS.3SG	broom-ACC.SG

ի	տան.
ï	*tan.*
in	house-ACC.SG

‘Or what woman, having ten silver coins, if she loses one coin, would not light a lamp and sweep the house?’ (= Gr. Ἢ τίς γυνὴ δραχμὰς ἔχουσα δέκα ἐὰν ἀπολέσῃ δραχμὴν μίαν οὐχὶ ἅπτει λύχνον καὶ σαροῖ τὴν οἰκίαν ;)

(80) Classical Armenian: Mesrop’s *New Testament*, *Lk.* 14, 20

Կին	ածի.
Kin	*aci.*
woman-ACC.SG	I led-IND.AOR.1SG

‘I have married a wife.’ (= Gr. γυναῖκα ἔγημα.)

(81) Classical Armenian: Mesrop’s *New Testament*, *Lk.* 12, 37

Ամէն	ասեմ	ձեզ	զի	գաւտի	ընդ	մէջ
Amēn	*asem*	*jez*	*zi*	*gawti*	*ənd*	*mēǰ*
amen	I say-IND.PRS.1SG	to you-DAT.PL	that	belt-ACC.SG	around	kidney-ACC.SG

ածցէ	եւ	բազմեցուսցէ.
acc‘ē	*ew*	*bazmec‘owsc‘ē.*
he will lead-SUBJ.AOR.3SG	and	he will seat-SUBJ.AOR.3SG

‘I say to you that he will dress himself and seat them at table’ (= Gr. λέγω ὑμῖν ὅτι περιζώσεται καὶ ἀνακλινεῖ αὐτούς.)

Classical Armenian	Present	Aorist
Indicative	Real present	Real past
Conjunctive	Conditional present	Real future

Modern Armenian

• Present subjunctive (conjunctive of գամ *gam* + conjunction ու *u* + present indicative)

(82) Modern Eastern Armenian (cf. Dum-Tragut 2009:239)

Բերեմ	եւս	մեկ	հետաքրքիր	օրինակ.
Berem	*ews*	*mek*	*hetak‘rk‘ir*	*ōrinak.*
I wish to bring-IND.FUT.1SG	yet	another	interesting	example-ACC.SG

‘I wish to bring yet another interesting example.’

(83) Modern Western Armenian (cf. Sakayan 2012:113)

Գրեմ.	‘I wish to write.’
K‘rem.	
I should write-SUBJ.PRS.1SG	

• Present: կայ *kay* ‘there is’ + եւ *ew* ‘and’ + the ancient indicative present.

• Middle Armenian: *kay* + *ew* > particle գու *gow* > գը *gə* > Modern Armenian գը *gə* (+ ind. prs.)

(84) Modern Western Armenian (cf. Sakayan 2012: 12)
Նամակ գը գրեմ.
Namag gə k'rem.
letter-ACC.SG PCLE I write-IND.PRS.1SG
'I am writing, I write a letter.'

• Eastern Armenian: present formation reanalysed as a future (e.g. կբերեմ *kberem* 'I will carry', see below); new present (verbal noun in -ում *-um* + auxiliary 'to be', 1rd person եմ *em*)

(85) Modern Eastern Armenian (cf. Dum-Tragut 2009:217)
Գրում եմ. 'I am writing, I write.'
Grum em.
writing-NOM.SG I am-IND.PRS.1SG

(86) Modern Eastern Armenian (cf. Dum-Tragut 2009:230)
Բերի. 'I carried.'
Beri.
I carried-IND.AOR.1SG

(87) Modern Western Armenian (cf. Sakayan 2012:91)
Բերի. 'I carried.'
Peri.
I carried-IND.AOR.1SG

• Future: գամիմ *gamim* 'to want' + infinitive

(88) Modern Eastern Armenian (cf. Vaux 1995:135)
Կբերեմ. 'I will carry.'
Kberem.
PREF.-I carry-IND.PRS.1SG

(89) Modern Eastern Armenian (cf. Dum-Tragut 2009:233)
Գնալու եմ. 'I will go.'
Gnalu em.
being about to go-PART.NOM.SG I am-IND.PRS.1SG

(90) Modern Western Armenian (cf. Sakayan 2012:136)
Պիտի գրեմ. 'I will write.'
Bidi k'rem.
PCLE write-SUBJ.PRS.1SG

• Bert Vaux (1995:141-142):

1. The classical subjunctive formations (present and aorist) disappeared.
2. The present subjunctive was replaced by the old simple present.
3. The aorist subjunctive (= future) was replaced by a variety of present, desiderative, and obligatory formations.
4. A new (progressive) formation replaced the simple present in the middle Armenian period.
5. The modern dialects created many new progressive and obligatory formations.

5. Syntactic Refactoring

5.1. Categorial Loss: the Distinction between Position and Direction

(91) Vedic Sanskrit: *RV* VII 70_5 (position = locative *duroṇé* 'in the house')
Imá ṛtásya vāvṛdhur duroṇé. 'They grew in the house of order.'
they-NOM.PL order-GEN.SG grew-IND.PERF.3PL house-LOC.SG

(92) Vedic Sanskrit: *RV* VII 60_{4bc} (direction = accusative *chukrám árṇaḥ* 'to the brilliant wave')
Á sū́ryo aruhac chukrám árṇaḥ. 'To the brilliant wave the Sun rose.'
PCLE Sun-NOM.SG rose-IND.AOR.3SG brilliant-ACC.SG wave-ACC.SG

(93) Hittite: KUB 8.41. III 9 (position = dative-locative *ne-pí-ši* ‘in heaven’)
Ne-pí-ši *e-eš*[*-ši.* ‘You sit in heaven.’
heaven, sky-LOC.SG you sit-IND.PRS.2SG

(94) Hittite: KUB 29.30 (+) 35 III 13’ = Friedrich 1959:II, § 54 (direction = allative *ta-a-ak-nạ-ạ* ‘into the earth’)
(GIŠ*el-zi-mi-it-u̯*)]*a* *ta-a-ak-nạ-ạ* [(*ar-ši-*)]*ki-e-it.* ‘Meine Waage ist in die Erde geflossen.’
waage-NOM.SG earth-ALL.SG has run-IND.PST.3SG

(95) Spanish (cf. Butt & Benjamin 1988, [2]1994:420)
Vive *en* *Londres.* ‘He is living in London.’
lives-IND.PRS.3SG in London

(96) Spanish (cf. Butt & Benjamin 1988, [2]1994:420)
Fue *a* *París.* ‘He went to Paris.’
went-IND.PST.3SG to Paris

(97) Modern Greek (cf. Holton, Mackridge, Philippaki-Warburton 1997:402)
Μένω στην Πάτρα. ‘I live in Patras.’
Méno *stin* *Pátra.*
I live-IND.PRS.1SG in=the-ACC.SG Patras-ACC.SG

(98) Modern Greek (cf. Holton, Mackridge, Philippaki-Warburton 1997:402)
Πήγα στην Πάτρα. ‘I went to Patras.’
Píγa *stin* *Pátra.*
I went-IND.PST.1SG in=the-ACC.SG Patras-ACC.SG

(99) Dialectal Latvian: Barons, Wissendorff, *Latwju dainas* 387 (*BW* I [1893]), cf. Gāters (1993:187)
Es *kalnâ,* *tu* *lejâ.* ‘I am on the hill, you in the valley.’
I-NOM.SG hill-LOC.SG you-NOM.SG valley-LOC.SG

(100) Dialectal Latvian: Barons, Wissendorff, *Latwju dainas* 5440 (*BW* II [1909]), cf. Gāters (1993:187)
Rihtu *eeſchu* *baſniʒâ.* ‘Tomorrow I will go to the church.’
tomorrow I will go-IND.FUT.1SG church-LOC.SG

(101) Ancient Greek: Homer, *Odyssey*, ν 294
ἐν σῇ περ ἐὼν γαίῃ ‘being in your land’
en *sẽi* *per* *eôn* *gaiẽi*
in your-DAT.SG PCLE being-NOM.SG land-DAT.SG

(102) Ancient Greek: Homer, *Odyssey*, ζ 119
Τέων αὖτε βροτῶν ἐς γαῖαν ἱκάνω ;
Téōn *aũte* *brotõn* *es* *gaĩan* *hikánō ?*
what-GEN.PL PCLE mortals-GEN.PL into land-ACC.SG I come-IND.PRS.1SG
‘To the land of what mortals am I come?’

(103) Old Lithuanian: Martynas Mažvydas, *Catechismusa Praſty Sʒadei* 54$_5$ [1547]
O *Diewe* *kurſs* *dąngui* *eſʒi.* ‘O God, who are in heaven!’
o God-VOC.SG who-NOM.SG in heaven-LOC.SG are-IND.PRS.2SG

(104) Old Lithuanian: Martynas Mažvydas, *Gesmes Chrikſscʒoniſkas* 292$_{15}$ [1560]
Uſchʒęge *ing* *dąngu.* ‘He ascended to heaven.’
ascended-IND.PST.3 into heaven-ACC.SG

5.2. Development of New Categories: the Celtic Equative

• Old Irish (suffix *-ithir*, cf. *dían* ‘quick’, equative *déinithir* ‘as quick as’ + acc.); Middle Welsh (suffix *-het* and/or prefix *cyn-*, cf. *glân* ‘clean’, equative *glaned* or *cyn glaned* ‘as clean as’ + *â, ag*)

(105) Old Irish: *Togail Bruidne Da Derga* 19-20 (ed. Knott 1936:1, cf. Mc Cone 2005:138)
Batar *gilithir* / *sneachta* *n-oenaichde* *na dí dóit.*
were-IND.PST.3PL as white-EQU snow-ACC.SG ART=of one night-GEN.SG the two hands-NOM.DU
‘White as the snow of one night were the two hands.’

(106) Welsh (cf. Haspelmath & Buchholz 1998:305)
Mae *fy* *mrawd* *yn* *dawnsio* *cyn* *wiched*
is-IND.PRS.3SG my-SG brother-SG PRS dance as splendid-EQU

ag	*y*	*mae*	*fy*	*chwaer*	*yn*	*canu.*
as	that	is-IND.PRS.3SG	my-SG	sister-SG	PRS	sing

'My brother dances as beautifully as my sister sings.'

• Middle Breton **-het*, e.g. *cazr, caezr* 'beautiful', equative *cazret, caezr(h)et*, or analytical construction (*quen* 'as' + positive + *ha(c)* 'and' or *euel* 'as')

• Cornish (*mar* or *maga* 'so, as' + positive + *avel* 'as'), cf. *meur* 'big' / *kymmys, kemmys* 'as much'.

• Modern Welsh *cyn X-ed â* 'as X as' or *mor* + positive + *ag* (e.g. *mor wyn ag eira* 'as white as snow' replacing *cyn wynned â'r eira*).

• Modern Irish *comh deacair le* 'as difficult as'.

• Martin Haspelmath & Oda Buchholz (1998:290):
(i) relative-based equative constructions,
(ii) constructions primarily characterized by a parameter marker,
(iii) constructions exclusively characterized by a standard marker.

(107) English (cf. Haspelmath & Buchholz 1998:291)

My	*sister*	*is*	*as*	*pretty*	*as*	*you.*
my	sister-SG	is-IND.PRS.3SG	as	pretty	as	you

(108) Italian (cf. Haspelmath & Buchholz 1998:291)

Mia	*sorella*	*è*	*carina*	*come*	*te.*	'My sister is as pretty as you.'
my-SG	sister-SG	is-IND.PRS.3SG	pretty-SG	as	you	

(109) Swedish (cf. Haspelmath & Buchholz 1998:294)

Min	*syster*	*er*	*lika*	*vacker*	*som*	*dig.*	'My sister is as pretty as you.'
my-SG	sister-SG	is-IND.PRS.3SG	equally	pretty-SG	as	you	

• Brittonic equative *-het* < **-is-etos* (e.g. Middle Welsh *glaned* 'as clean as' < **glan-isetos* 'cleanest, very clean'); construction *cyn... â* or *ag* (*cyn* 'together' < **kom-* + *â*, *ag* 'with' < **ad-gos*

• Irish equative *-ithir* (e.g. *déinithir* 'as quick as', *leithir* 'as large as', *duibithir* 'as dark as') < **-is-et-eros*

• Kim Mc Cone (2005:139): Old Irish *gilithir sneachta* 'as white as snow' (equative + accusative) < 'very white with regard to snow, like snow'.

5.3. Development of New Categories: the Latvian debitive

• 'Debitive mood' (Latv. *vajadzības izteiksme*).

(110) Latvian (cf. Holvoet 2007:174)

Man	*jābeidz*	*šis*	*darbs.*	'I must finish this job.'
to me-DAT.SG	finish-DEB.PRS.3	this-NOM.SG	job-NOM.SG	

(111) Latvian (cf. Holvoet 2007:174)

Man	*tevi*	*jābrīdina.*	'I must warn you.'
to me-DAT.SG	you-ACC.SG	warn-DEB.PRS.3	

(112) Latvian (cf. Holvoet 2007:173)

Vasarā	*bija*	*agri*	*jāceļas.*	'In the summer one had to rise early.'
summer-LOC.SG	was-IND.PST.3	early-ADV	rise-DEB.PRS.3=REFL	

(113) Latvian (cf. Holvoet 2007:175)

Nav	*jābūt*	*Aristotelim.*	'One doesn't need to be an Aristotle.'
is not-IND.PRS.3	to be-DEB.PRS.3	Aristotle-DAT.SG	

(114) Latvian (cf. Holvoet 2007:187)

**Man*	*nav*	*jā*	*ēst.*	'I do not have what to eat.'
to me-DAT.SG	is not-IND.PRS.3	what-REL.GEN.SG	to eat-INF	(lit. 'To me is not what to eat.')

(115) Polish (cf. Holvoet 2007:187)

Nie	*mam*	*co*	*czytać.*	'I do not have what to read.'
NEG	I have-IND.PRS.1SG	what-REL.ACC.SG	to read-INF	

(116) Old Latvian: Christopher Glück, *Bibele, Jn.* 4, 32 (cf. Holvoet 2007:186)

Man	*ir*	*Barriba*	*jaehd.*	'I have meat to eat.'
to me-DAT.SG	is-IND.PRS.3	meat-NOM.SG	eat-DEB.PRS.3	(lit. 'To me is meat what to eat.')

(117) Latvian

Man	*jāēd*	*barība.*	‘I must eat meat.’
to me-DAT.SG	eat-DEB.PRS.3	meat-NOM.SG	

(118) Latvian (cf. Holvoet 2007: 190)

**Man*	*(ir)*	*maize*	*juo*	*ēst.*
to me-DAT.SG	is-IND.PRS.3	bread-NOM.SG	with which-REL.ACC.SG	eat-DEB.PRS.3

‘I have some bread to eat.’

(119) Latvian

**Man*	*(ir)*	*jā*	*ēst*	*maizi.*	‘I must eat meat.’
to me-DAT.SG	is-IND.PRS.3	from which-REL.ACC.SG	eat-DEB.PRS.3	bread-ACC.SG	

4.4. Development of New Categories: the Albanian Admirative

• ‘Admirative’ (Alb. *mënyra habitore*):

(120) Albanian (cf. Friedman 2004:109)

Ti	*je*	*n’*	*Amerikë.*	‘You are in America.’ (simple statement)
you-NOM.SG.	are-IND.PRS.2SG.	in	America-ACC.SG	

(121) Albanian (cf. Friedman 2004:109)

Ti	*qenke*	*n’*	*Amerikë.*	‘You are in America!’ (surprise)
you-NOM.SG	are-ADMIR.PRS.2SG	in	America-ACC.SG	

(122) Albanian (cf. Friedman 2014: 34)

Ai	*paska*	*një*	*letër.*	‘[Apparently] he has a letter.’
he-NOM.SG	has-ADMIR.PRS.3SG	one-ACC.SG	letter-ACC.SG	

PERFECT	ADMIRATIVE PRESENT
kam qenë ‘I have been’	*qenkam* ‘I am-ADM.’
kam pasur ‘I have had’	*paskam* ‘I have-ADM.’
kam punuar ‘I have worked’	*punuakam* ‘I work-ADM.’
kam marrë ‘I have taken’	*marrkam* ‘I take-ADM.’
kam shkruar ‘I have written’	*shkruakam* ‘I write-ADM.’
auxiliary *kam* + participle	truncated participle + auxiliary *kam*

• Cf. Megleno-Romanian: perfect *aụ vizút(ă)* ‘I have seen’, vs. admirative *vizút-ăụ* ‘I see!’

(123) Old Albanian, Gjon Buzuku, *Meshari*, folio LXVI/2 = Jn 20, 2 (cf. Demiraj 1993:305)

Marechiſneh	*tene Ɛone*	*en*	*vorit.*
they took-ADMIR.IMPERF.3PL	Lord-ACC.SG	in	tumb-ABL.SG

‘They have taken the Lord from the tumb.’ (= Lat. *Tulerunt dominum de monumento*)

6. Grammaticalization

6.1. General Presentation

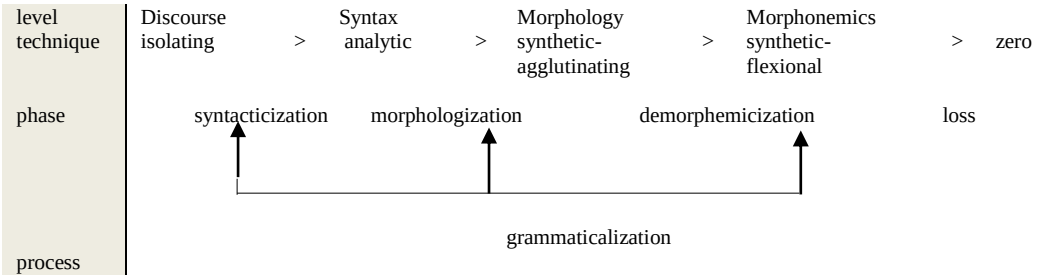
• Antoine Meillet (1922:131 [1912]): ‘le passage d’un mot autonome au rôle d’élément grammatical’.

• Antoine Meillet (1922:140-141 [1912]): ‘Les langues suivent ainsi une sorte de développement en spirale: elles ajoutent des mots accessoires pour obtenir une expression intense; ces mots s’affaiblissent, se dégradent et tombent au niveau de simples outils grammaticaux; on ajoute de nouveaux mots ou des mots différents en vue de l’expression; l’affaiblissement recommence, et ainsi sans fin’.

• Jerzy Kuryłowicz (1965:9): ‘Grammaticalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one’.

• Martin Haspelmath (2004:26): ‘A grammaticalization is a diachronic change by which the parts of a constructional schema come to have stronger internal dependencies’.

• Winfred Lehmann (2002:12):
The phases of grammaticalization



lexical	→	syntactic:	syntacticisation
syntactic	→	morphemic:	agglutinative morphologisation
morphemic	→	inflectional:	inflectional demorphemicisation
inflectional	→	zero	

• Winfred Lehmann: 'This has three principal aspects. First, in order to be autonomous, a sign must have a certain **weight**, a property which renders it distinct from the members of its class and endows it with prominence in the syntagm. Second, autonomy decreases to the extent that a sign systematically contracts certain relations with other signs; the factor inherent in such relations which detracts from autonomy will be called **cohesion**. Third, a sign is the more autonomous the more **variability** it enjoys; this means a momentary mobility or stability with respect to other signs'.

axis **parameter**	**paradigmatic**	**syntagmatic**
Weight	integrity	structural scope
Cohesion	paradigmaticity	bondedness
Variability	paradigmatic variability	syntagmatic variability

• Joan Bresnan *et alii* (2012:8):

axis **parameter**	**paradigmatic**	**syntagmatic**
Weight	Attrition	Condensation
Cohesion	Paradimaticization	Fusion
Variability	Obligatorification	Fixation

6.2. Grammaticalization: Lexical Items > Adpositions

• Benjamin Fagard (2006:95):

Channel 1:	Relational noun > Lexical preposition
Channel 2:	Noun > Genitive construction > Lexical preposition
Channel 3:	Adverb > Lexical preposition
Channel 4:	Verb > Past participle > Lexical preposition
Channel 5:	Verb > Present participle > Lexical preposition
Channel 6:	Verb > Serial verb > Coverb > Lexical preposition
Channel 7:	Adjective > Lexical preposition
Channel 8:	Collocation > Lexical preposition

Channel 1: Relational Noun > Lexical Preposition

• Latin *penes* 'in the possession of, in the house of' (+ acc.) < endingless locative of a noun **pen-e/os-* 'interior' (cf. Lat. *penus* 'the innermost part of a house', hence 'food provisions', *Penātēs* 'deities of the household'); *tenus* 'through, along' (+ gen. or abl.) < noun **ten-e/os* (cf. Latin *tenus* 'cord').

• Romance languages: Old French *lez* 'beside, along' (from Latin *latus* 'side'); French *chez* 'by, at' (from Latin **casīs*, abl. pl. von *casa* 'cabin' > 'house').

• Celtic languages: Welsh *achos* 'because' < substantive *achos* 'cause'; Welsh *parth(ed)* 'towards, as regards' < noun *parth* 'part' (< Latin *partem*); Welsh *cylch* 'about' < Latin *circulus* 'circle', etc.; Old Irish *fíad* 'in the presence of' (+ dat.) < substantive 'presence' (cf. Welsh *gŵydd* 'presence'); Old Irish *la* 'with, among' < noun *leth* 'side'.

• Postpositions: Tocharian A *pkänt*, B *pkante* 'without' < substantive 'obstacle'.

• [BODY PART > LOCATIVE PREPOSITION]: Modern Icelandic noun *bak* 'back' / preposition *bak* 'behind, after'; Albanian, *ballë* 'in front of' (+ acc.) < *ballë* 'forehead'; Hittite *ištarna*, *ištarni* 'between, among, within' < noun **stor-no-* (cf. Greek στέρνον *stérnon* 'breast, heart', Old Church Slavic страна *strana* 'side' < **stor-nā*); Ossetic цæр *sær* 'on, upon' and раз *raz*, размæ *razmæ* 'before' < nouns цæр *sær* 'head, top' and раз *raz* 'front, front side'.

• PIE **h₂enti* 'in front of', locative of a noun **h₂ent-* 'face' (cf. Hittite *ḫanza* 'face' < PIE **h₂ent-s*), preposition in Greek ἀντί *antí* 'for, instead of' (+ gen.), Armenian ընդ *ənd* 'for, instead of' (+ gen.), 'through' (+ acc.), 'from the side of' (+ abl.), 'with' (+ dat.), Latin *ante* '(+ acc.).

Channel 2: Noun > Genitive Construction > Lexical Preposition

• Latin *causā* 'on account of, for the sake of' and *grātiā* 'in favor of, on account of, for the sake of' (+ gen.); Vedic Sanskrit, the preposition *ágre* 'in front of' (+ gen.) < substantive *ágra-* 'tip'.

Channel 3: Adverb > Lexical Preposition

(124) Ancient Greek: Homer, *Iliad*, Γ 384

Περὶ	δὲ	Τρῳαὶ	ἅλις	ἦσαν.
Perì	*dè*	*Trōiaì*	*hális*	*ẽsan.*
around-ADV	PCLE	women of Troy-NOM.PL	in droves-ADV	were-IND.IMPERF.3PL

'And round around in droves were the women of Troy'

(125) Ancient Greek: Homer, *Iliad*, Σ 453

Πᾶν	δ'	ἦμαρ	μάρναντο	περὶ	Σκαιῇσι	πύλῃσιν.
Pãn	*d'*	*ẽmar*	*márnanto*	*perì*	*Skaiẽisi*	*púlēisin.*
all-ACC.SG	PCLE	day-ACC.SG	fought-IND.IMPERF.3PL	around	Scaean-DAT.PL	gates-DAT.PL

'All day long they fought around the Scaean gates.'

• Latin *subtus* 'below, beneath, underneath' (Cato, Varro) > Late Latin preposition *subtus* (+ acc.) > Romanian *supt*, Italian *sotto*, French *sous*, Old Spanish *soto* ('under' is in Spanish *bajo* < 'low').

• Latin *intus* 'inside' > dialectal Italian *ent(o)* 'in'; Old French *enz* still adverbial, but **de-intus* > French preposition *dans* 'in'.

• Sanskrit *purás* 'before' > preposition (+ acc., abl. or loc.).

• German *nach* 'after' (+ dat.) < adverb **nāhwō* 'near' (cf. Old English *nēah* 'near, close'); German *wider* 'against' (+ acc.) < adverb *wieder* 'again'.

• [NOUN] > [ADVERB] > [PREPOSITION]: PIE locative **h₂enti*, adverb in Vedic Sanskrit *ánti* 'before, near, facing', cf. also Hittite *ḫanza* 'in front' (adv.), *ḫanti* 'opposite, against, instead, apart' (adv.), Cuneiform Luvian *ḫanti* 'against' (adv.) > preposition (Greek, Armenian, Latin).

Channel 4 and 5: Participial form > Lexical preposition

• Romance preposition **verso* (> Italian *verso*, French *vers*, Old Spanish *vieso*, Old Portuguese *vesso* 'towards') < Latin *versus*, from *uertō* 'to turn'; cf. adverb (Plautus, *Captiui*, 368: *utroque uorsum* 'in either direction'), accompanying prepositional groups (e.g. Cicero, *Ad Familiares*, 4, 12, 1: *in Italiam uersus* 'towards Italy'), or postposition (e.g. Cicero, *Ad Atticum*, 16, 10, 1: *Arpinum uersus* 'towards Arpinum').

• Italian, Spanish, Portuguese *durante*, French *durant* and English *during*, German *während* < Lat. **dūrāre* 'to last' resp. Germ. *währen* 'to last'.

• Latin *trāns* 'through' (+ acc.), Umbrian *traf* 'through', Welsh *tra* 'beyond' < **ter-* 'to go through' (cf. Latin *intrāre* 'to enter', Sanskrit *tárati* 'to traverse, to cross').

Channel 6: Serial verb > Adposition

• Cf. Chinese *dao* 'to arrive' (serial verb) > 'to' (allative adposition) or *gen* 'to follow' (serial verb) > 'with' (comitative adposition).

• Modern Indo-Aryan languages: postposition**lăg-i* is used with a locative meaning ‘towards, up to’ (allative) or with a more general meaning ‘for’, ‘for the sake of’ (beneficiary and dative) > Nepali *lāi* ‘acc.-dat. marker’ and Awadhi *lai* (Old *lāgi*) ‘up to, for’.

(126) Early Awadhi (cf. Saksena 1937, [2]1971:227)

barahī	*lāgi*	‘for the bride-groom’
bride-groom	for	

• Kellog (1893:88): **lăg-i* < Skr. *lágati* ‘to attach’ (cf. Hindi *lagnā* ‘to be attached to, to be joined to’, Marathi *lāgṇeṃ* ‘to touch, to hit, to agree, to happen’).

Channel 7: Adjective > Adposition

• French *sauf*, Italian *salvo* ‘safe’ (adjective) > ‘except, save, apart from’ (preposition).

• Italian *lungo* ‘long’ (adjective) > ‘along’ (preposition).

• Spanish *bajo* ‘low’ (adjective) > ‘under’ (preposition).

• Old Irish *al, ol* ‘beyond’ (+ acc.) < adjective *oll* ‘full, vaste’ (cf. Old Latin *ollus* ‘that over there’, and compare *ultra* ‘beyond’)

• Old Irish *cen* ‘without’ (+ acc.) < adjective **cen* ‘other’ (cf. Cornish *ken*).

• Albanian *gjatë* ‘along’ (+ dat.) and adjective ‘long’.

• Cf. French *sauf mon père* ‘except my father’ < *‘my father being left save’; French *sauf erreur* ‘unless mistaken’ (not **sauve erreur*). But French *excepté* ‘except’ (*excepté mon père* ‘except my father’, *excepté ma mère* or *exceptée ma mère* ‘except my mother’, *mon père excepté* ‘except my father’).

Channel 8: Collocation > Adposition

• Italian *per via di* ‘because of’, *in mezzo a* ‘in the middle of’, Spanish *de bajo de* ‘underneath’, *a razón de* ‘at the rate of’, Portuguese *ao lado de* ‘next to’, *dentro de* ‘inside, in’, Romanian *cu excepţia* ‘except for’, *în faţa* ‘in front of’, French *à partir de* ‘from’, *au lieu de* ‘instead’.

• Welsh *o flaen* ‘in front of’, Russian в сторону *v stóronu* ‘in the direction of’ (+ gen.), Lithuanian *abìpus* ‘on both sides of’ (+ gen.), Albanian *për shkak të* ‘because of’ (+ gen.-dat.).

• Postpositions: Hindi *ke māre* ‘because of’; Ossetic уæлхъус *uælxъus* ‘by, near’ (< ‘over the ear’).

• Ancient Greek ἐκποδών *ekpodṓn* ‘far’ (adv.) and ‘far from’ (+ gen.) < ἐκ ποδῶν *ek podṑn* ‘away from the feet’.

• Latin *erga* ‘in front of, towards, concerning’ (+ acc.) < **ē rogā* ‘from the direction’; Late Latin *in gīrō* ‘around’ (+ acc. or abl.) < ‘in circle’, *de latus* ‘beside’ (+ gen. or acc.) < ‘from the side’.

• Ancient Greek ἔνδον *éndon* ‘inside, in’ (+ gen.) < **én dom* ‘in the house’; Hittite *andan*?

Observations

• Hittite: *ištarna* vs. *ištarni* ‘between, among, within’ (< **stor-no-* ‘breast, side’?), cf. *aruna* ‘to the sea’ vs. *aruni* ‘in the sea’).

Adpositions and possessive relationships

• Welsh: *o flaen* ‘in front of’, *o’i flaen* ‘in front of him’ (lit. ‘in his front’), *o’i blaen* ‘in front of her’ (lit. ‘in her front’), *o’h blaen* ‘in front of you’ (lit. ‘in your font’).

(127) Modern Welsh (cf. King 1993:294-295)

ar	*ei*	*chyfer*	‘for her’
for	her-POSS.FEM.SG	sake-FEM.SG	

(128) Modern Welsh (cf. King 1993:294-295)

ar	*ei*	*chyfer*	*hi*	‘for her’
for	her-POSS.FEM.SG	sake-FEM.SG	of her-FEM.SG	

• H. Craig Melchert (1984:124-125): Hittite *katta* ‘with’ vs. *katti=šši* ‘with him’ by analogy to *pēdi=šši* ‘in place of him’.

(129) Hittite: *KBo* III 22 I 79 + *KUB* XXXVI 98*b* (Anittas inscription)
[*Pí*]*ram=mit* *kunnaz* *ešari.* ‘Before me to the right he sits.’ (lit. ‘to my front on the right’)
before=my-POSS to the right he sits-IND.PRS.3SG

(130) Hittite: *KUB* XVII 1 I 32
Pēraš=šet ^{GIŠ}*zupari* *ḫarzi.* ‘Before him he holds a torch.’ (lit. ‘to his front’)
before=his-POSS torch-ACC.SG he holds-IND.PRS.3SG

(131) Romanian
împotriva *Mariei* ‘against Mary’
against Mary-GEN.-DAT.SG

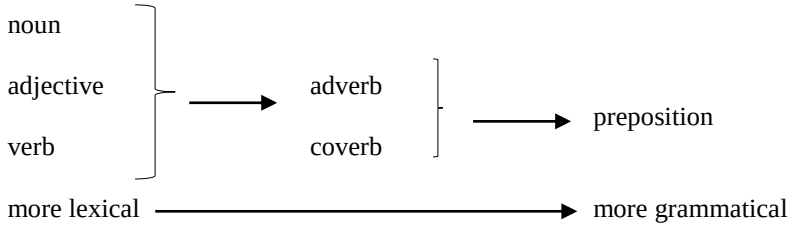
(132) Romanian (cf. Maiden 2015:58)
împotriva *mea* ‘against me’ (lit. ‘my against’)
against mine-NOM.FEM.SG

(133) Romanian
cartea *Mariei* ‘Mary’s book’
book-NOM.FEM.SG Mary-GEN.-DAT.SG

(134) Romanian
cartea *mea* ‘Mary’s book’
book-NOM.FEM.SG my-NOM.FEM.SG

• But Romanian *pentru ea* ‘for her’, *cu tine* ‘with you’, *între noi* ‘between us’.

Summary



6.3. Grammaticalization: Verbal Auxiliaries. Periphrastic Perfects

Language	**Structure**
Hittite	• past participle neuter + *eš-* ‘to be’ • past participle neuter + *ḫark-* ‘to have’
Tocharian B	• *nes-* ‘to be’ + past participle
Classical Sanskrit	• *as-* ‘to be’ + acc. of an abstract feminine noun • *kr̥-* ‘to make’ + acc. of an abstract feminine noun
Hindi	• past participle + *honā* ‘to be’
Sogdian	• past particle + *x-* ‘to be’ • past participle + *δār-* ‘to do’
Classical Armenian	• past participle in -եալ *-eal* + եմ *em* ‘to be’
Modern Greek	• έχω *éxo* ‘to have’ + active non-finite in -ει *-ei*
Albanian	• *kam* ‘to have’ + past participle
French	• *être* ‘to be’ + past participle • *avoir* ‘to have’ + past participle
Welsh	• *wedi* ‘after’ + verbal noun
Breton	• *bezañ* ‘to be’ + past participle • *devoud* ‘to have’ + past participle
Swedish	• *har* ‘to have’ + past participle
German	• *sein* ‘to be’ + past participle • *haben* ‘to have’ + past participle
Old Church Slavic	• past participle + бꙑти *byti* ‘to be’
Lithuanian	• *bū́ti* ‘to be’+ active past participle

The Indo-Aryan Periphrastic Perfect

(135) Sanskrit: *Atharva-Veda* XVIII, 2, 27

Asū́n	*pitr̥bhyò*	*gamayā́m*	*cakā́ra.*
living breaths-ACC.PL	fathers-DAT.PL	cause to go-ACC.FEM.SG	he made-IND.PERF.3SG

'He [Death] caused the living breaths [of the corpse] to go to [join] the ancestors.'

• Cf. Germanic weak preterite: Goth. *hausida*, German *ich hörte*, Engl. *I heard* 'I heard' < PIE root *d^heh_1- 'to place, to do, to make'?

The Middle Welsh Periphrastic Perfect

(136) Welsh (cf. King 1993:169)

Mae'n	*cymydog*	*wedi*	*gwerthu*	*ei*	*dŷ.*
is-IND.PRS.3SG	neighbour-SG	after	selling-VERBAL NOUN	his-MASC.SG	house-SG

'Our neighbour has sold his house'

(137) Middle Welsh: Lewis Glyn Cothi, *Y Dospart VII, 10. I Huw Conwy, o Vryn Euryn* 55-56 [15th century]

Da	*oedd*	*cyfion*	*Huw Conwy,*
good	was-IND.IMPERF.3SG	ancestors-PL	Huw Conwy-SG

A	*da*	*yw*	*Huw*	*wedi*	*hwy.*
and	good	is-IND.PRS.3SG	Huw-SG	after	them-PL

'Good were the ancestors of Huw Conwy, and good is Huw after them.'

(138) Welsh (cf. King 1993:169)

Mae'n	*cymydog*	*yn*	*gwerthu*	*ei*	*dŷ.*
is-IND.PRS.3SG	neighbour-SG	in	selling-VERBAL NOUN	his-MASC.SG	house-SG

'Our neighbour is selling his house'

6.4. Grammaticalization: Verbal Auxiliaries. Periphrastic Futures

Language	**Structure**
Classical Sanskrit	• nomen agentis in *-tar-* + *as-* 'to be' (*dātāsmi* 'I will give'< **dātā* (nom.sg. < **-tār*) + *asmi* 'I am giver'
Hindi	• verb + suffix *-gā* < *gata-*, past participle of 'to go'
Sogdian and Khwarezmian	• verb + particle *-kām* (Khwarezmian *k'm*) < noun 'wish'
Romance (except Romanian)	• synthetic formation < infinitive + **habere* 'avoir' (French *chantera*, Sp. *cantará*, Ital. *canterà* 'will sing')
Romanian	• *voi* (< 'I want') + infinitive (or dialectally *mi*-clause)
Modern Greek	• θα *θa* (< θέλω ἵνα *θélō hína* 'I want that') + perfective non-past or imperfective non-past
Tosk Albanian	• *do* (< 'I want') + conjunction *të* + conjunctive present
Gheg Albanian	• *kam* (< 'I have') + infinitive
Slavic	• *bǫdǫ* (< 'I will be') + infinitive (with
Serbo-Croatian	• *ću* or *hòću* (< 'I want') + infinitive or *da*-clause
Polabian	• auxiliary *cą*, 3e sg. *ci* (< 'to want') + infinitive (only for imperfective verbs)
Old Saxon	• *skulan* (< 'I must') + infinitive
English	• *shall* (< 'I must') + infinitive • *will* (< 'I want') + infinitive
German	• *werden* (< 'to become') + infinitive

The Classical Sanskrit Periphrastic Future

	Paradigm	**Origin**
SG 1	*dātāsmi*	**dātā*+*asmi* (nom.sg.+ 'I am')
SG 2	*dātāsi*	**dātā*+*asi* (nom.sg.+ 'you are, sg.')
SG 3	*dātā*	**dātā* (nom.sg.)
PL 1	*dātāsmaḥ*	**dātā*+*smaḥ*(nom.sg.+ 'we are')
PL 2	*dātāstha*	**dātā*+*stha* (nom.sg.+ 'you are, pl.')
PL 3	*dātāraḥ*	*dātāraḥ* (nom. pl.)

(139) Sanskrit: *Mahābhārata* I, 88, 5 (cf. Gonda 1956:161)

Satāṃ	*sakāśe*	*patitāsi.*
virtuous-GEN.PL	in presence of	you will fall-IND.FUT.2SG

'You will fall among virtuous men.'

6.5. Grammaticalization: Verbal Auxiliaries. Periphrastic Presents

Language	Structure
Marathi	• imperfective form of the verb + auxiliary *āhe* 'to be'
Bengali	• suffix *-chi* (e.g. *kinchi* 'I am buying') < **ach-i* 'to be'
Zazaki	• auxiliary *o / ā* 'to be' + present indicative
Italian	• auxiliary *stare* 'to be' + gerund in *-ndo* (*sta leggendo* 'he is reading') • auxiliary *stare* 'to be' + *a* + infinitive (*sta a leggere* 'he is reading')
Spanish	• auxiliary *estar* 'to be' + gerund in *-ndo* (*estoy hablando* 'I am talking')
Brazilian Portuguese	• auxiliary *estar* 'to be' + gerund in *-ndo* (*estou trabalhando* 'I am working')
European Portuguese	• auxiliary *estar* 'to be' + *a* + infinitive (*eu estou a trabalhar* 'I am working')
Old French	• auxiliary *estre* 'to be' or *aler* 'to go' + present participle
Modern English	• auxiliary *to be* + form in *-ing*
Modern Irish	• auxiliary *tá* 'to be' + *ag* 'at' + verbal noun
Modern Welsh	• auxiliary *bod* 'to be' + *yn* 'in' + verbal noun

(140) Ancient Greek: Homer, *Iliad*, E 873

Αἰεί	τοι	ῥίγιστα	θεοὶ	τετληότες	εἰμέν.
Aieí	*toi*	*r^{h}ígista*	*t^{h}eoì*	*tetlēótes*	*eimén.*
always	PCLE	most terribly-ADV	gods-NOM.PL	suffering-PART.PERF.NOM.PL	are-IND.PRS.1PL

'We gods are continually suffering most terribly.'

(141) Ancient Greek: Plato, *Protagoras*, 350b

Οὗτοί	γε	μαινόμενοί	εἰσι.
Hoũtoí	*ge*	*mainómenoí*	*eisi.*
these-NOM.PL	PCLE	becoming delirious-PART.PRS.NOM.PL	are-IND.PRS.3PL

'They are becoming delirious.'

(142) New Testament Greek: *2Cor.* 9, 12

Ἡ	διακονία	τῆς	λειτουργίας	ταύτης	οὐ	μόνον
Hē	*diakoníā*	*tẽs*	*leitourgíās*	*taútēs*	*ou*	*mónon*
the-NOM.SG	administration-NOM.SG	of the-GEN.SG	service-GEN.SG	this-GEN.SG	not	only

ἐστὶν	προσαναπληροῦσα	τὰ	ὑστερήματα	τῶν	ἁγίων,
estìn	*prosanaplēroũsa*	*tà*	*husterḗmata*	*tõ̃n*	*hagíōn,*
is-IND.PRS.3SG	supplying-PART.PRS.NOM.SG	the-ACC.PL	failings-ACC.PL	of the-GEN.PL	saints-GEN.PL

ἀλλὰ	καὶ	περισσεύουσα	διὰ	πολλῶν	εὐχαριστιῶν
allà	*kaì*	*perisseúousa*	*dià*	*pollõ̃n*	*euk^{h}aristiõ̃n*
but	also	abounding-PART.PRS. NOM.SG	through	many-GEN.PL	thanksgivings-GEN.PL

τῷ	θεῷ.
tõ̃i	*t^{h}eõ̃i.*
to the-DAT.SG	God-DAT.SG

'For the administration of this service not only supplies the failings of the saints, but is abundant also by many thanksgivings to God.'

(143) Gothic: Wulfila's *New Testament*, *2Cor.* 9, 12

Andbahti	*þis*	*gudjinassaus*	*ni*	*þatainei*
administration-NOM.SG	of this-GEN.SG	service-GEN.SG	not	only

ist	*usfulljando*	*gaidwa*	*þize*	*weihane,*
is-IND.PRS.3SG	supplying-PART.PRS.NOM.SG	failings-ACC.PL	of the-GEN.PL	saints-GEN.PL

ak	*jah*	*ufarassjando*	*þairh*	*managa*	*awiliuda*	*guda.*
but	also	abounding-PART.PRS. NOM.SG	through	many-ACC.PL	thanksgivings-ACC.PL	God-DAT.SG

'For the administration of this service not only supplies the failings of the saints, but is abundant also by many thanksgivings to God.'

(144) Hindi (cf. McGregor 1972, ^{2}1986:18)

Maiṁ	*bhārat*	*meṁ*	*rahtā*	*hūṁ.*	'I live in India.'
I	India	in	living	am	

6.6. Grammaticalization: Verbal Auxiliaries. Periphrastic Passives

Language	**Structure**
Hittite	• auxiliary *eš-* 'to be' + passive participle in *-ant-*
Hindi	• auxiliary *jānā* 'to go' + perfective participle
Kashmiri	• auxiliary *yun* 'to come' + ablative form of the infinitive
Persian	• auxiliary *šav-, šod/šav-, šud-* 'to become, to get' + past participle
Pashto	• infinitive + auxiliary *keg-, ked-əl-* 'to make, to do'
Balochi	• past participle or infinitive + auxiliary *bay-* 'to become'
Spanish	• auxiliary *ser* 'to be' + past participle
Italian	• auxiliary *essere* 'to be' + past participle (stative) • auxiliary *venire* 'to come' or *andare* 'to go' + past participle (dynamic)
French	• auxiliary *être* 'to be' + past participle (unmarked) • auxiliary *se faire* 'to make oneself, to get' + infinitive (+animacy)
Breton	• auxiliary *bezañ* 'to be' + past participle
Colloquial Welsh	• auxiliary *cael* 'to obtain, to get' + possessive pronoun + verbal noun ('I am seen' < *'I get my seeing')
Old English	• auxiliary *beon* 'to be' + past participle (stative) • auxiliary *weorðan* 'to become' + past participle (dynamic)
English	• auxiliary *be* 'to be' + past participle (stative) • auxiliary *get* 'to get' + past participle (dynamic)
German	• auxiliary *sein* 'to be' + past participle (stative) • auxiliary *werden* 'to become' + past participle (dynamic)
New Norwegian	• auxiliary *vera* 'to be' + past participle (stative) • auxiliary *bli, verta* 'to become' + past participle (dynamic) • auxiliary *få* 'to get' + supine or past participle
Lithuanian	• auxiliary *būti* 'to be' + passive participles
Old Church Slavic	• auxiliary быти *byti* 'to be' + passive participles

(145) Colloquial Welsh (cf. Müller 1999:17)

Cafodd	*y*	*ffermwr*	*ei*	*ladd.*
got-IND.PST.3SG	the	farmer	his	killing

'The farmer was / got killed.' (lit. 'the farmer got his killing')

6.7. Grammaticalization: Verbal Auxiliaries. Observations

• Cf. Old Bengali *shu-ite ach-e*, Middle Bengali *shu-i ach-e*, Early Modern Bengali *shu-i=ch-e*, Modern Bengali *shu-cch-e* 'he is lying down'.

• Romance future (e.g. French *chantera*, Sp. *cantará*, Ital. *canterà* 'he will sing') < infinitive + 'to have' [CANTARE + HABET]:

(146) Portuguese

Dar-ei.	'I will give.'
will give-IND.FUT.1SG	

(147) Portuguese

Dar-te-ei	*um*	*livro.*	'I will give you a book.'
will give=you-SG=-IND.FUT.1SG	a-SG	book-SG	

• Polish *pisał-em* 'I have written (man, sg.)', fem. *pisała-m* 'I have written (woman, sg.)', pl. *pisali-śmy* 'we have written (men or women, pl.)'.

(148) Modern French

J'ai	*cassé*	*la*	*bouteille.*
I=have-IND.PRS.1SG	broken	the-FEM.SG	bottle-FEM.SG

'I have broken the bottle.' (originally: 'I have the bottle broken.')

(149) Modern French

La	*bouteille,*	*je*	*l'ai*	*cassée.*
the-FEM.SG	bottle-FEM.SG	I-SG	it=have-IND.PRS.1SG	broken-FEM.SG

'The bottle, I have broken it.'

6.8. Grammaticalization: Conclusion

• Lyle Campbell (2001:117): 'Grammaticalisation has no independent status of its own; it merely involves other kinds of changes and mechanisms of change which are well understood and are not limited to cases involving grammaticalization: sound change, semantic change, and reanalysis'.

• Henning Andersen (2008:19 and 21): *grammation* = 'a change by which an expression, through reanalysis, comes to carry grammatical content' vs. *regrammation* = 'a change by which a grammatical expression, through reanalysis, is ascribed different grammatical content'.

• Frederik Newmeyer (2001:202-203): 'We have examined the component parts of grammaticalization and found that they all are manifested independently... One obviously has the right to use the term 'grammaticalization' to describe the *conjunction of certain types of historical changes that are manifested independently*. No harm is done as long as the use of the term in such a way does not invite the conclusion that *some dynamic* is at work in grammaticalization *that cannot be understood as a product of these historical changes*.'

• Annette Rosenbach (2004:73): 'Unidirectionality is taken to be *the* cornerstone of grammaticalization, and all success – and failure – seems to lie on its shoulders'.

7. Degrammaticalization

• Muriel Norde (2010:126): 'Degrammaticalization is a composite change whereby a gram in a specific context gains in autonomy or substance on more than one linguistic level (semantics, morphology, syntax, or phonology)'.

(150) Old English: *The Parker Chronicle* Mss. A, fol. 10r (cf. Rosenbach 2002:178)
þæs *cyninges* *þegnas*
the-GEN.MASC.SG king-GEN.MASC.SG thanes-NOM.PL
'the king's thanes' (a thane is a vassal)

(151) English
the Queen of England' *s* *numerous castles*
the Queen of England-FEM.SG CLIT. numerous castles-PL

• Martin Haspelmath (2004:27): 'By this I mean a change that leads from the endpoint to the starting point of a potential grammaticalization and also shows the same intermediate stages. For instance, a change from a case suffix to a free postposition with the intermediate stage of a postpositional clitic would be an antigrammaticalization'.

Grammaticalisation	**Degrammaticalisation**
Phonological attrition	Phonological strengthening
Morphologisation	Demorphologisation
Loss of syntactic autonomy	Increase of syntactic autonomy
Loss of semantic content	Increase of semantic content

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