

Periphrastic tense and the nature of verb movement

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1. The two past tenses in Dutch

- (1)
- | | VERB | | SIMPLE PAST | | PERIPHRASTIC PAST |
|----|----------|------------|--------------|--|----------------------|
| a. | wandel-t | 'walk' | wandel-de | | heeft ge-wandel-d |
| | walk-3SG | | walk-PAST.SG | | AUX:3SG GE-walk-PART |
| b. | loop-t | 'walk' | liep | | heeft ge-lop-en |
| | walk-3SG | | walk:PAST.SG | | AUX:3SG GE-walk-PART |
| c. | gebeur-t | 'happen' | gebeur-de | | is ge-beur-d |
| d. | kom-t | 'come' | kwam | | is ge-kom-en |
| e. | ontdek-t | 'discover' | ontdek-te | | heeft ontdek-t |
- (2) simple past: event **cotemporaneous** with reference point in the past
 periphrastic past: event **prior** to reference point (specified by the tense of the auxiliary)
- (3)
- | | PERIPHRASTIC PAST (PRESENT) | | PERIPHRASTIC PAST (PAST) |
|----|-----------------------------|--|---------------------------|
| a. | heeft ge-wandel-d | | had ge-wandel-d |
| | AUX:3SG GE-walk-PART | | AUX:PAST.3SG GE-walk-PART |
| b. | heeft ge-lop-en | | had gelopen etc |
- (4) [Toen ik binnen kwam] ...
 when I in come:PAST.SG
 a. ... sliep hij b. * ... heeft hij ge-slap-en
 sleep:PAST.SG he AUX:3SG he GE-sleep-EN
 'When I came in, he was asleep.'
- (5) Ik zie dat je het { ge-vond-en hebt / *vond }
 I see that you it GE-find:PAST-EN AUX:3SG find:PAST.SG
 'I see that you found it.'
- (6) *Anteriority not a feature of the English perfect*
 a. I have lived in Boston for 7 years (and I still live there/#but now I've moved to LA)
 b. Ik heb 7 jaar in Boston ge-woon-d ...
 I AUX:1SG 7 year in Boston GE-live-D
 'I've lived in Boston for seven years ...'
 (i) ... maar nu woon ik in LA '... but now I live in LA.'
 but now live:SG I in LA
 (ii) ... # en ik woon er nog steeds '... and I still live there.'
 and I live:SG there still

☐ Dutch periphrastic past = relative past (anterior tense), not an aspect (cf. Verkuyl 2008)

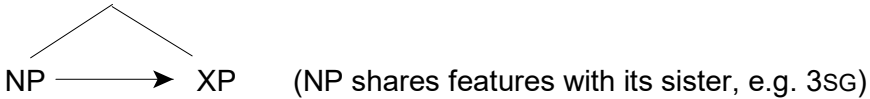
2. The relation between syntax and morphology

- (7) *assumptions (in line with current minimalism)*
- a. syntax = lexemes and features
 - b. morphology after syntax (realizational morphology, cf. Beard 1990)
 - c. only syntactic operation is merge

- (8) *consequence*
- no inflectional morphemes in functional heads
 - no movement to unite stems and morphemes

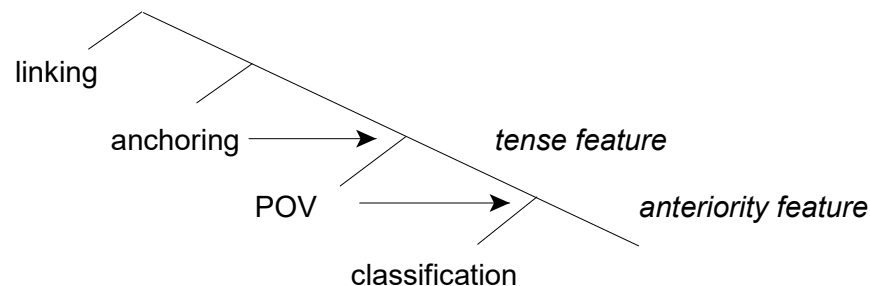
- (9) *dependency as a function of merge*

CONTROLLER *merged with* DEPENDENT *followed by* FEATURE SHARING

- (10)
- 
- NP → XP (NP shares features with its sister, e.g. 3SG)

- (11) We need features for TENSE (unmarked/past) and ANTERIORITY (unmarked/anterior)

- (12) Wiltschko (2014:75): designated elements in the functional spine
TENSE = anchoring
ANTERIORITY = point-of-view



- (13) features are realized on terminals, postsyntactically
- terminals are interpreted by morphology
 - lexeme information accesses a paradigm (set of forms)
 - features determine selection of a form from the paradigm
- (14) e.g. anchoring element = PAST
its sister XP acquires the feature PAST (feature sharing)
XP dominates a terminal lexeme 'walk' which is now also PAST (and 3SG e.g.)
morphology produces the form that best spells out PAST.3SG, i.e. *loopt*
- (15) where does that leave the auxiliary?
- a. it is a terminal in syntax (i.e. it is in the numeration)
 - or b. it is produced in postsyntactic morphology, like inflection morphemes
- (16) the logic of this section seems to dictate (15b), i.e.
☑ the periphrastic tense is simply a spell-out of the feature ANTERIOR

3. Periphrastic tense without anteriority

(17) Anteriority is not an inherent feature of the periphrastic past:

- English: U-perfect (i.e. up to and including the here and now)(6a)
- Southern German: simple past (Präteritumschwund)(18)
- Dutch nonfinite clauses: simple past (19)(cf. Hoffmann 1966 for English)

(18) Als ich herein kam hat er ge-schlaf-en German
 when I in come:PAST.1SG AUX:3SG he GE-schlaf-PART
 'When I came in, he was asleep.' (cf. 4b)

(19) Hij beweert ge-slap-en te heb-ben toen ik binnen kwam Dutch
 he claim:3SG GE-sleep-PART INF AUX:INF when I in come:PAST.SG
 'He claims that he was asleep when I came in.'

▣ Here the construction is unmarked for anteriority, and the verb has just the feature PAST

(20) Why is PAST spelled out sometimes as simple past and other times as periphrastic past?
 ▣ no nonfinite past tense forms in the paradigm

	PRESENT	PAST
FINITE	slaap/slaapt/slappen	sliep/sliepen
NONFINITE	te slappen	(*te sliepen >) geslapen te hebben

▣ Periphrastic tense fills a gap in the paradigm

4. Periphrastic tense in the finite paradigm

(21) Dutch has no synthetic realization of anterior point of view (relative past)

	PRESENT	PAST
UNMARKED	slaap/slaapt/slappen	sliep/sliepen
ANTERIOR	heb/heeft/hebben geslapen	had/hadden geslapen

▣ Periphrastic tense fills cells in the paradigm (specific intersection of features)

cf. Latin (*laudare* 'praise'; *est* = auxiliary 'be'; all forms 3SG)

TENSE \ VOICE	ACTIVE	PASSIVE
PRESENT	laudat	laudātur
IMPERFECT	laudābat	laudābātur
PERFECT	laudāvit	laudātus est

or Burushaski (Lorimer 1935:245; *εtɿs* 'do, make' + a form of the copula; all forms present tense)

PERSON	NUMBER	SINGULAR	PLURAL
1.		εča ba	εča ba:n
2.		εča	εča:n
3. human masc.		εčaii	εča:n
3. human fem.		εču bo	εča:n
3. animate		εči bi	εčiε(n)
3. inanimate		εči bi:la / εči:la	εčitsʌn

(22) Two alternatives

- periphrasis is a *morphological* strategy to fill gaps in the paradigm
- periphrasis is a *syntactic* strategy that blocks synthetic morphology (hence the gaps)

(23) But blocking relations typically work the other way around:
funnier > *more funny

- ☐ If periphrasis is syntactic, the fact that it occurs precisely where we find gaps in the paradigm is accidental (unexplained) [assuming morphology after syntax, cf. Kiparsky 2005]

5. Compositionality

(24) Benveniste (1965 [1974:184]): Indo-European periphrastic perfect is noncompositional (the auxiliary-participle construction shows a clear division of labor (the auxiliary carrying inflection and the participle conveying lexical meaning), but the grammatical property of anteriority arises only as a function of the **combination** of the auxiliary and the participle)
also Ackerman & Stump 2004, Spencer & Popova 2015

(25) Kiparsky (2005:213): it is compositional
(the past participle contributes the meaning PAST [i.e. anteriority], and the auxiliary [through its tense features] the location of the reference point relative to which the anteriority is to be interpreted)

(26) but: - it is not clear that the participle contributes PAST, as it is also used in the passive (Wackernagel 1920:288-289, Aronoff 1994:24-26)
- the reference point is contributed by tense, not by the auxiliary (cf. 21)

(27) what about the origin of the periphrastic past in a possessive construction?
have [the book = read] >> [have read [the book]]
- this may well be right (but see Benveniste 1968:86f for important refinements)
- but it doesn't argue for the syntactic status of periphrasis (pace Harris & Campbell 1995:182f who describe the process as syntactic reanalysis)

(28) important assumption throughout: everything structured is a function of merge
☐ that does not mean that everything is created in a single derivation

6. Division of labor between morphology and syntax in periphrasis

- (29) Brown et al (2012): criteria for morphological vs. syntactic status of periphrasis
- | | M | S |
|---|---|---|
| a. obligatory form in a particular environment > morphological
<i>environment: presence of tense/anteriority features</i> | ✓ | ✗ |
| b. form expresses contextual rather than inherent features > morphological
<i>tense/anteriority features are not inherent but contextual</i> | ✓ | ✗ |
| c. creation of a word form rather than a new lexeme > morphological
<i>periphrastic tense is a form of the lexeme</i> | ✓ | ✗ |
| d. expression of a paradigmatic opposition > morphological
<i>periphrastic tense expresses opposition for anteriority and/or tense</i> | ✓ | ✗ |
| e. complexity > both morphological and syntactic
<i>periphrastic tense is inherently complex (auxiliary + participle)</i> | ✓ | ✓ |
| f. order flexibility of subparts > syntactic
<i>the auxiliary appears on both sides of the participle and undergoes verb second</i> | ✗ | ✓ |
| g. allowing inflection of subparts > syntactic
<i>the auxiliary is inflected for tense, the participle is not</i> | ✗ | ✓ |

Ad f.

- (30) ... dat hij al { ge-slap-en heeft / heeft ge-slap-en }
that he already GE-sleep-PART AUX:3SG AUX.3SG GE-sleep-PART
‘... that he slept already.’

- (31) Hij **heeft** al ge-slap-en
he AUX.3SG already GE-sleep-PART
‘He slept already.’

- (32) The verb-second property leads Embick (2000:203) and Kiparsky (2005:132) to reject the idea that the auxiliary is produced postsyntactically
☐ but this is no longer forced given Chomsky’s (2001:37) conjecture that verb-second is postsyntactic

Ad g.

- (33) This criterion seems to single out inflection rather than periphrasis
(no reason why a periphrastic expression, generated in morphology, could not single out a subpart for the realization of inflectional morphology)

- ☐ Periphrasis is clearly syntactic in that it shows structure, hence must be formed by merge

Given a periphrastic expression P, consisting of *x* and *p*, featuring in a clause S formed by derivation D out of Numeration N, are *x* and *p* members of N or not?

(try this for compounds, idioms, complex specifiers/adjuncts, coordinations, etc.)

- (34) derivations may feed: a. the Numeration (presyntactic)
b. the interfaces (syntactic)
c. the morphological inventory (postsyntactic)

- ☐ When we say that periphrastic tense is morphological, we mean that it is created in a derivation that feeds the morphological inventory (34c)
> a mapping from morphemes to formations that fill cells in inflectional paradigms
> other verb clusters are crucially different (i.e. either syntactic or presyntactic)

7. Syntactic arguments for the morphological status of periphrastic tense

- (35) a. unclear status of the auxiliary
b. derivation of order variability (cf. 30)
c. deriving the IPP-effect
d. deriving the distribution of mixed cluster orders
e. accounting for auxiliary selection

unclear status of the auxiliary

- (36) a. against T - clause final: head-final TP? (cf. head-initial CP, DP)
- doesn't *have* to be in T (*must have left*)
b. against V - does not lead to biclausal structure
- add-on to VP (Akmajian et al 1979), but now to vP?

derivation of order variability

- (37) a. auxiliary (1) - participle (2)
standard language: free variation (30)
dialects: north/east/southwest 2-1, elsewhere 1-2
b. modal (1) - infinitive (2)
standard language: 1-2
north (Frisian substrate area) 2-1, elsewhere 1-2
three-verb clusters more complicated, see below

- (38) questions: a. basic structure/order (head-initial/head-final)
b. operations (standard/ad hoc)
c. triggers for operations (?)

- (39) ad hoc operations: - rightward movement
- optional movement
- movement of intermediate projections (verb projection raising)
- verb incorporation ('verb raising')
- excorporation (for verb-second)
- reanalysis/restructuring
- roll-up movement
- flipping (inversion)

- (40) morphological analysis
a. just a single terminal (V)
b. acquires relevant features (agreement, tense, anteriority)
c. morphological realization (synthetic or periphrastic, depending on the paradigm)
d. periphrastic form created in separate derivation
e. optional linearization (not ideal, but much better than the syntactic derivation)

▣ the problem is not the order variability, but the derivation of the variability in syntax

deriving the IPP-effect

- (41) auxiliary - participle - infinitive >> auxiliary - infinitive - infinitive
a. ... dat hij het heeft { ge-wil-d / *wil-len }
that he it AUX.3SG GE-want-PART want-INF
'... that he wanted it.'

b. ... dat hij het heeft { *ge-wil-d / wil-len } doe-n IPP
 that he it AUX.3SG GE-want-PART want-INF do-INF
 '... that he wanted to do it.'

- (42) generalizations a. absent in dialects without *ge-* on the participle (Hoeksema 1980)
 b. sensitive to linear order (mostly ascending [1-2-3, 3-1-2, etc] order)

(43) morphological approach: these are 2-verb clusters/strings in syntax (i.e. without auxiliary) (clusters when created presyntactically, cf. (34), strings when merged in syntax)

(44) *IPP-effect*
 The relative past of *x* is marked with *ge-* only if *x* is not a verb cluster

(45) historically, *ge-* is an aspectual (completive) marker, clusters lack completive aspect (Zwart 2007)

(46) *morphological realization*
 [wil]_{ANTERIOR} > heeft gewild
 [wil lezen]_{ANTERIOR} > heeft willen lezen

- (47) a. accounts for correlation with *ge*-participles (42a), assuming that the participial ending (*-d* > *-en*) is a later, analogical development (Paul 1920:128)
 b. word order correlation requires more work

(48) *Achterhoeks* (Blom and Hoekstra 1996:76)
 a. ... dat ik schriev-m will-n had (3-2-1, IPP)
 that I write-INF want-INF AUX:PAST.SG
 '... that I wanted to write.'
 b. ... dat ik schriev-m e-wil-d had (3-2-1, no IPP)
 that I write-INF GE-want-PART AUX:PAST.SG
 '... that I wanted to write.'

- (49) possibly: - (48a) presyntactic cluster [*write want*] > (44) applies
 - (48b) two terminals in syntax > *write* and *want* receive separate morphological realizations (*want* anterior tense > *ewild had*)

(50) NB, IPP-effect in 3-1-2 orders requires postsyntactic linearization 1-2-3 > 3-1-2
Austrian Bavarian (Patocka 1997:278)
 ... da ma wås lean-a hett-n soi-n (3-1-2, IPP)
 that we something learn-INF AUX:PAST-PL MOD-INF
 '... that we should have learned something.'

deriving the distribution of mixed order clusters

(51) 1-3-2, 2-1-3, 2-3-1, 3-1-2 all attested across Continental West Germanic
 (2-1-3 rare, but see Zwart 2007, Salzmann 2015)

(52) *Luxembourgish* (Bruch 1973:95)
 ... ob-s de hollänesch ge-leier-t hues schwätz-en (2-1-3, no IPP)
 if-2SG you Dutch GE-learn-PART AUX:2SG speak-INF
 '... whether you learned to speak Dutch.'

▣ If periphrastic tense is postsyntactic, these are 2-verb clusters/strings

(53) Let 1 be a temporal auxiliary, then (ignoring non-mixed orders)

- a. 2-3 is a presyntactically formed cluster > IPP | expect 1-3-2 and 2-3-1 (3-1-2 = 1-2-3)
- or b. 2 and 3 are independently merged in syntax | expect 2-1-3 and 3-1-2

▣ so we have a source for 2-1-3, but it should never show the IPP-effect; that seems right, based on the data in Zwart 2007 and Salzmann 2015

(54) *Swiss German* (Salzmann 2015)

... niä a<g>fang-e ha z rauch-e (2-1-3, no IPP)
never GE-begin-PART AUX:INF INF smoke-INF
'... to never have taken up smoking.'

(55) Let 1 be a modal auxiliary (i.e. temporal aux = 2), then (ignoring non-mixed orders)

- a. 1-3 is a presyntactically formed cluster, arguably no anterior tense feature on 3 alone
- b. 1 and 3 are independently merged in syntax | expect 1-3-2 and 2-3-1 (3-1-2 = 1-2-3)

▣ no source for 2-1-3, so it should never occur with 1 not a temporal auxiliary; seems right again

(56) New generalization: no 2-1-3 when 2 is a temporal auxiliary

*... heb-ben wil ge-slap-en
aux-INF want:SG GE-sleep-PART
[intended] 'wants to have slept'
>> follows from the morphological derivation of periphrastic tense

accounting for auxiliary selection

- (57) a. transitive, unergative > HAVE
b. unaccusative > BE

(58) Hoekstra (1984, 1999): this is a matter of *syntax*, not lexical semantics (pace Kern 1912)

- a. Hij heeft op en neer ge-sprong-en b. Hij is op ge-sprong-en
he AUX:3SG up and down GE-jump-PART he AUX:3SG up GE-jump-PART
'He jumped up and down.' (atelic) 'He jumped up.' (telic)

▣ additional syntactic feature (aspect) goes into the morphological realization of the lexeme (no complication of the syntax to create HAVE out of head movement à la Kayne 1993)

(59) We must allow room for idiosyncrasies of morphological realization:

- HAVE/BE distribution not uniform crosslinguistically (cf. English predominantly HAVE)
- Postma's generalization (1993) on **has been** vs **is geweest** (60)

(60) copular participle suppletive > temporal auxiliary for the copula = BE
(based on 19 Indo-European languages)

▣ suppletion is clearly morphological, then so must be auxiliary selection

8. Conclusion

▣ if the auxiliary is introduced during morphological realization, verb-second must be postsyntactic