## Dutch past tense infinitives and the nature of finiteness

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## 1. Introduction

the feature [PAST] in infinitives is expressed by perfective morphology

(cf. Hoffmann 1966:8, Palmer 1974:54-55, Landau 2004:838, Stowell 2006)

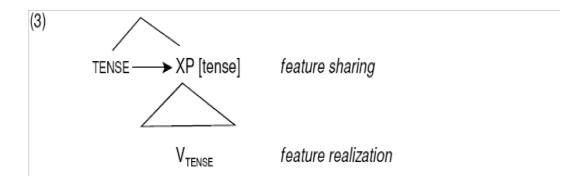
- (1) John claims to have been asleep when I came in
  - analysis of the Dutch tense system
    - -definition of the Dutch perfect
    - -the relevance of 'aspect'
    - -contexts distinguishing past and perfect (finite and nonfinite)
  - alternative: infinitival perfect = 'aspect' (no tense in infinitives)
  - further aspects:
    - -sequence of tense effects
    - -the present perfect puzzle
  - the nature of finiteness

infinitival perfect can of course also express the perfect (anteriority)

(2) John expects to have finished the book by noon tomorrow

#### STARTING POINTS

- morphosyntactic categories are clause-level operators (functional heads)
- dependency marking via sisterhood
- morphological realization as part of Spell-Out



(4) Ngada bule-thur yak-ur
I catch-FUT fish-FOBJ
'I will catch the fish.' (Hale 1997:36)

(Lardil)

a clause is tensed if it realizes a [TENSE] feature opposition in the morphology of any of its terms

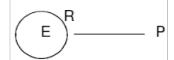
# 2. The Dutch perfect tense

(5)

\ /			
wandelen 'walk'	SIMPLE TENSE	PERFECT TENSE	
PRESENT	wandel-t walk-PRES.3SG	heef-t have-PRES.3SG	ge-wandel-d GE-walk-D
PAST	wandel-de walk-PAST.SG	had have:PAST.SG	ge-wandel-d GE-walk-D

- (6) a. E (event time, the time during which the event unfolds)
  - b. R (reference time, the time to which adverbs refer)
  - c. P (perspective time, the "now" of temporal deixis, the "here and now") (Kiparsky 2002)
- (7) PRESENT  $E \subseteq R$   $P \subseteq R$
- (8) (E, I

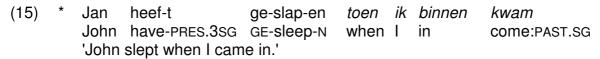
- (9) PAST
- R—P E ⊆ R
- (10)



- (11) a. Jan slaap-t John sleep-PRES.3SG 'John is asleep.'
  - b. Jan sliep / \*slaap-t toen ik binnen kwam
    John sleep:PAST.SG/PRES.3SG when I in come:PAST.SG
    'John was asleep when I came in.'
- (12) PRESENT PERFECT E R  $R \subseteq P$
- (13) F



(14) Jan heef-t ge-slap-en John have-PRES.3SG GE-sleep-N 'John slept.'



(18) Jan had ge-slap-en toen ik binnen kwam
John have:PAST.SG GE-sleep-N when I in come:PAST.SG
'John had slept when I came in.'

#### DIFFERENCE BETWEEN DUTCH AND ENGLISH PERFECTS

- perfect time span (PTS) runs up to the here and now in English
- PTS is anterior to the here and now in Dutch (and German)
- (19) a. I have lived here for years (\*but not anymore)
  - b. Ik heb hier jaren ge-woon-d (maar nu niet meer)
    I have:PRES.1SG here years GE-live-D but now not anymore
    'I have lived here for years (, but not anymore).'
- (20) Ik woon hier al jaren (\*maar nu niet meer) I live:PRES.1SG here already years but now not anymore 'I have lived here for years (, but not anymore).'

Tests bringing out the Universal Perfect (event applies to entire PTS)

- (21) I have always lived in Boston (U-perfect)
- (22) For two weeks, John has been in Boston (U-perfect)
- (23) John has always claimed that Mary was brilliant (U-perfect, no SOT-effect)
- (24) John has occasionally claimed that Mary was brilliant (E-perfect, SOT)
- (25) Ik heb altijd in Boston ge-woon-d I have:PRES.1SG always in Boston GE-live-D

maar nu woon ik in Cambridge (no U-perfect) but now live:PRES.1SG I in Cambridge

'I have always lived in Boston, but now I live in Cambridge.'

(26) Twee weken is Jan in Boston ge-wees-t two weeks be:PRES.3SG John in Boston GE-be-D

maar nu is hij terug (no U-perfect) but now be:PRES.3SG he back

'For two weeks, John has been in Boston, but now he is back.'

(27) Jan heeft altijd ge-zeg-d dat Marie briljant John have:PRES.3SG always GE-say-D that Mary brilliant

was (SOT-effect)

be:PAST.SG

'John has always claimed that Mary was brilliant.'

**Dutch perfect = anterior tense** 

## 3. Aspect

- present perfect = tense + aspect ?
- 'aspect' = not:
  - -SITUATION ASPECT (state, activity, achievement and accomplishment), or -VIEWPOINT ASPECT (completed—'perfective'— vs. ongoing—'imperfective')

but:

- -relation of the eventuality to the Perfect Time Span
- Dutch: PTS precedes the here and now, so 'aspect' reduces to ANTERIORITY

No 'present perfect puzzle' (cf. Pancheva & Von Stechow 2004)

- (28) Ik heb hem gisteren ge-zie-n I have:PRES.1SG him yesterday GE-see-N 'I saw him yesterday.'
- (29) Gisteren was het mooi weer yesterday be:PAST.SG it nice weather 'The weather was nice yesterday.'
- perfect entails resulting state (POST-STATE, cf. Musan 2002, Vlach 1993)
   a function of the PTS preceding the reference time

the defining property of the Dutch perfect is ANTERIOR TENSE

## 4. Past vs. perfect

- 4.1 Cotemporaneity with a reference point in the past
- (30) Jan beweert [ dat hij sliep / \*ge-slap-en heeft
  John claims that he sleep:PAST / GE-sleep-N have:PRES.3SG

toen de telefoon ging ] when the phone go:PAST.SG

'John claims that he was asleep when the phone rang.'

- 4.2 Ongoing event in the past
- (31) a. Jan beweer-t [ dat hij het boek las ]
  John claim-PRES.3SG that he the book read:PAST.SG
  'John claims that he was reading the book.' (reading = ongoing)
  - b. Jan beweer-t [ dat hij het boek ge-lez-en heeft ]
    John claim-PRES.SG that he the book GE-read-N have:3SG
    'John claims that he has read the book.' (reading = finished)

#### 4.3 The 'accessibility' reading

- (32) a. Jan speel-de viool toen de bom ontplof-te
  John play-PAST.SG violin when the bomb explode-PAST.SG
  'John was playing the violin when the bomb exploded.'
  (events include each other)
  - b. # Jan heeft viool ge-speel-d *toen de bom*John has:PRES.3SG violin GE-play-D when the bomb

ontplof-te explode-PAST.SG

*not*: 'John was playing the violin when the bomb exploded.' (playing event follows exploding event)

- (33) Jan heeft zijn aandelen ver-kocht John have:PRES.3SG his stocks GE-sell:D 'John sold his stocks...'
- a. ... zodra ze op 30 stond-enas soon as they at 30 stand:PAST-PL'...as soon as they did 30.'
- b. \* ... zo lang ze op 30 stond-en as long as they at 30 stand:PAST-PL '... while they did 30.'
- 4.4 The lifetime effect
- (34) a. Scriabin was een genie Scriabin be:PAST.SG a genius 'Scriabin was a genius.' (Scriabin is no longer alive)
  - b. ?? Scriabin is een genie ge-wees-t Scriabin be:PRES.3SG a genius GE-be-D 'Scriabin has been a genius.'
- (35) Scriabin is altijd een genie ge-wees-t Scriabin be:PRES.3SG always a genius GE-be-D 'Scriabin has always been a genius.' (Scriabin is still alive)

- 4.5 The past-shifted reading (36)Jan hij Chomsky daarvoor zei dat al he Chomsky before that John say:PAST.SG that already ken-de / \*ge-ken-d heeft } know-past.sg/ge-know-d have:pres.3sg 'John said that he already knew Chomsky before that.' 5. The infinitival perfect Cotemporaneity with a reference point in the past 5.1 (37)beweer-t ge-slap-en te heb-ben Jan Γ John claim-PRES.3SG GE-sleep-N to have-INF toen de telefoon ging ] when the phone go:PAST.SG 'John claims to have been asleep when the phone rang.' 5.2 Ongoing event in the past [ het boek ge-lez-en (38)beweer-t te heb-ben 1 John claim-PRES.3SG the book GE-read-N to have-INF 'John claims that he was reading the book.' 'John claims that he has read the book.' 5.3 The accessibility reading beweer-t [ viool ge-speel-d te hebb-en (39)Jan John claim-PRES.3SG violin GE-play-D to have-INF toen de bom ontplofte ]
- when the bomb exploded

'John claims to have been playing the violing when the bomb exploded.'

[ zijn aandelen (40)ver-koch-t te heb-ben Jan beweer-t John claim-PRES.3SG his stocks GE-sell-D to have-INF

> op 30 stond-en ] zodra / zo lang ze as soon as/ as long as they at 30 stand:PAST-PL

'John claims to have started selling his stock as soons as they did 30.' 'John claims to have kept selling his stock while they did 30.'

- 5.4 The lifetime effect
- ge-acht (41)Scriabin word-t Scriabin become-PRES.3SG GE-consider:D

een genie ge-wees-t te zijn a genius GE-be-D to be:INF 'Scriabin is considered to have been a genius.'

- 5.5 The past-shifted reading
- (42) Jan beweer-de [ Chomsky daarvoor al ge-ken-d John claim-PAST.SG Chomsky before.that already GE-know-D

te hebb-en ]

to have-INF

'John claimed to have known Chomsky already before then.'

#### 5.6 Conclusion

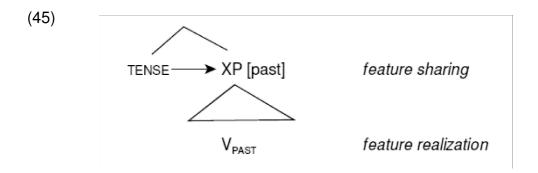
- the infinitival perfect is used as a nonfinite counterpart to the simple past
- (43) a. Jan beweer-t [ rijk te zijn ]
  John claim-PRES.3SG rich to be:INF
  'John claims to be rich.'
  - b. Jan beweer-t [ rijk \*(ge-wees-t) te zijn *voor* John claim-PRES.3SG rich GE-be-D to be:INF before

de oorlog ] the war

'John claims to have been rich before the war.'

- (44) a. Jan is / \*was rijk
  John be:PRES.3SG / be:PAST.SG rich
  'John is rich.'
  - b. Jan was / \*is rijk voor de oorlog
    John be:PAST.SG / be:PRES.3SG rich before the war

    'John was rich before the war.'



# 6. An alternative analysis

- infinitives invariably lack tense (Wurmbrand 2007)
- infinitival perfect = aspect tense, i.e. PURE ANTERIORITY

## Argument # 1: relation between Event Time and Reference Time

PAST E, R
PERFECT E—R

(37) Jan beweer-t [ ge-slap-en te heb-ben John claim-PRES.3SG GE-sleep-N to have-INF

toen de telefoon ging ] when the phone go:PAST.SG

'John claims to have been asleep when the phone rang.'

(46) \* Jan beweer-t [ te slap-en John claim-PRES.3SG to sleep-INF

toen de telefoon ging ]
when the phone go:PAST.SG
'John claims to have been asleep when the phone rang.'

Argument # 2: true tenseless infinitives (nominalizations)

(47) [ Dat slap-en toen de telefoon ging ]

DEM sleep-INF when the phone ring:PAST.SG

was een slecht idee be:PAST.SG a bad idea

'Sleeping when the phone rang was a bad idea.'

(48) [ Dat ge-slap-en heb-ben toen de telefoon ging ]

DEM GE-sleep-N have-INF when the phone ring:PAST.SG

was een goed idee be:PAST.SG a good idea

'To have slept when the phone rang was a good idea.'

Argument # 3: absence of resulting state

- (49) Jan liep naar huis *toen de bom ontplof-te*John walk:PAST.SG to house when the bomb GE:explode-PAST.SG
  'John was walking home when the bomb exploded.'
- (50) a. Jan **is** naar huis ge-lop-en (resultative) John be:PRES.3SG to house GE-walk-N 'John walked home.'

- b. Jan **heeft** naar huis ge-lop-en (durative)
  John have:PRES.3SG to house GE-walk-N
  'John walked home.'
- (51) Jan beweer-t naar huis ge-lop-en te { heb-ben / \*zijn } John claim-PRES.SG to house GE-walk-N to have-INF / be:INF

toen de bom ontplof-te (durative) when the bomb explode-PAST.SG

'John claims that he was walking home when the bomb exploded.'

## 7. Sequence of tense (SOT) effects

- (52) John said [ that he was sick ]
- (53) i. the SIMULTANEOUS reading: the event of being sick is cotemporaneous with the event of John's saying
  - ii. the PAST-SHIFTED reading: the event of being sick precedes the event of John's saying
- (54) John claims [ that he was sick ]
- (55) John says [that he is sick]
- (56) Jan beweer-de [ ziek te zijn ge-wees-t ]
  John claim-PAST.SG sick to be:INF GE-be-D
  'John claims that he was sick.' (\*past shifted / \*simultaneous)
- (57) Jan beweer-de [ ziek te zijn ]
  John claim-PAST.SG sick to be:INF
  'John claims that he was sick.' ('simultaneous)
- Does this show that infinitival perfects are not pasts?

No, because the embedded clause does not have R—P (= PAST, cf. (9))

The finite past form has a wider use (quasi-past)

(58) childplay register

Ik was de vader en jij was de moeder. I be:PAST.SG the father and you be:PAST.SG the mother

Ja. En ik had een hond en daar yes and I have:PAST.SG a dog and DEM

was jij bang voor. be:PAST.SG you afraid for

'[We play that] I am the father and you are the mother. Yes, and [we play that] I have a dog and you are afraid of it.'

(59) hypothetical childplay register

Ik dacht bang te zijn ( \*ge-wees-t)

I thought afraid to be:INF GE-be-D

'[We play that] I figured that I was afraid.'

irrealis

- (60) Ik wou dat ik rijk was I want:PAST.SG that I rich be:PAST.SG 'I wish [lit. wished] I were rich.'
- (61) Was ik maar rijk! be:past.sg I but rich 'If only I were rich!'
- (62) Als dat eens kon!
  if DEM once can:PAST.SG
  'If that were possible!'
- (63) Ik meen { te wil-len / \*ge-wil-d te heb-ben }
  I think to want-INF GE-want-D to have-INF

  dat ik rijk was
  that I rich be:PAST.SG

'I think I would like to be rich.'

(64) O, rijk te zijn ( \*ge-wees-t)

EXCL rich to be:inf GE-be-D

'O, to be rich!'

Nonfinite only register

- (65) Mij bang zijn I:ACC afraid be:INF 'I am afraid.'
- (66) Hiawatha-s grootvader dappere krijger ge-wees-t zijn Hiawatha-POSS grandfather brave warrior GE-be-D be:INF 'Hiawatha's grandfather was a brave warrior.'
- (67) Sjimmie erg bang ge-wees-t zijn Sjimmie very afraid GE-be-D be:INF 'Sjimmie was very much afraid.'

## 8. The present perfect puzzle

given that the present perfect refers to an eventuality in the past (anterior tense), why cannot the exact location in time of the anterior eventuality be made explicit by a time adverbial like *yesterday*?

- (68) John has left Boston (\*yesterday)
- (69) John appears to have left Boston yesterday
- (70) John had (already) left Boston yesterday when I arrived
- General explanation: PTS runs up to the here and now in English (Pancheva & Von Stechow 2004)
- Specific explanation for (69): infinitival clause contains [PAST], not [PERFECT]
- (71) John left Boston yesterday

#### 9. The nature of finiteness

- tense needs to be distinguished from finiteness
- (72) cf. Wiklund 2005: only in [-tense] complement clauses
- a. TMA copying construction

han **försök-te** o **skrev** ett brev (N. Swedish dialects) he try-PAST LINK write:PAST a letter 'He tried to write a letter.'

b. Participle copying construction

han hade **kunnat skrivit** he have:PAST can:PART write:PART 'He had been able to write.'

- c. Pseudocoordinating copying construction
  - han **satt** o **skrev** dikter he sit:PAST LINK write:PAST poem:PL 'He was writing poems.'
- tense is not a function/projection of finite morphology
- finiteness requires the presence of a subject
- (73) John buy a house ? (Forget it!)
- (74) John { bought / is buying / will buy } a house
- (75) John tried [PRO to buy a house]

finiteness = a particular subject-predicate nexus

#### References

- Alexiadou, Artemis. 2001. Functional structure in nominals: nominalization and ergativity. Amsterdam: Benjamins.
- Brugger, Gerhard. 1997. Event time properties. *University of Pennsylvania Working Papers in Linguistics* 4.2, 51-63.
- De Vuyst, Jan. 1985. The present perfect in Dutch and English. Journal of Semantics 4, 137-163.
- Enç, Mürvet. 1987. Anchoring conditions for tense. Linguistic Inquiry 18, 633-657.
- Hale, Kenneth. 1997. Remarks on Lardil phonology and morphology. In Ngakulmungan Kangka Leman, ed., *Lardil dictionary*, 12-56. Queensland: Mornington Shire Council.
- Halle, Morris and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Ken Hale and Samuel J. Keyser, eds., *The view from Building 20: essays in linguistics in honor of Sylvain Bromberger*, 111-176. Cambridge: MIT Press.
- Haude, Katharina. 2004. Nominal tense marking in Movima: nominal or clausal scope? In Leonie Cornips and Jenny Doetjes, eds., *Linguistics in the Netherlands 2004*, 80-90. Amsterdam: Benjamins.
- Hoekstra, Teun and René Mulder. 1990. Unergatives as copular verbs: locational and existential predication. *The Linguistic Review* 7, 1-79.
- Hoffmann, T. Ronald. 1966. Past tense replacement and the modal system. In Anthony G. Oettinger, ed., *Mathematical linguistics and automatic translation*, VII-1-21. Cambridge: Harvard Computational Laboratory.
- latridou, Sabine, Elena Anagnostopoulou and Roumyana Izvorzki. 2001. Observations about the form and meaning of the perfect. In Michael Kenstowicz, ed., *Ken Hale: a life in language*, 189-238. Cambridge: MIT Press.
- Kiparsky, Paul. 2002. Event structure and the perfect. In David I. Beaver, Luis D. Casillas Martínez, Bradley Z. Clark, and Stefan Kaufmann, eds., *The construction of meaning*, 113-135. Stanford: CSLI Publications. Klein, Wolfgang. 1992. The present perfect puzzle. *Language* 68, 525-552.
- Landau, Idan. 2004. The scale of finiteness and the calculus of control. *Natural Language and Linguistic Theory* 22, 811-877.
- McCoard, Robert W. 1978. *The English perfect: tense-choice and pragmatic inferences*. Amsterdam: North-Holland.
- Musan, Renate. 1997. Tense, predicates and lifetime effects. Natural Language Semantics 5, 271-301.
- Musan, Renate. 2002. The German perfect. Dordrecht: Kluwer Academic Publishers.
- Nordlinger, Rachel and Louise Sadler. 2004a. Nominal tense in cross-linguistic perspective. *Language* 80, 776-806.
- Nordlinger, Rachel and Louise Sadler. 2004b. Tense beyond the verb: encoding clausal aspect/tense/mood on nominal dependents. *Natural Language and Linguistic Theory* 22, 597-641.
- Ogihara, Toshiyuki. 1995. The semantics of tense in embedded clauses. *Linguistic Inquiry* 26, 663-679. Palmer, F.R. 1974. *The English verb*. London: Longman.
- Pancheva, Roumyana and Armin Von Stechow. 2003. On the present perfect puzzle. *Proceedings of NELS* 34, 469-483.
- Poutsma, Hendrik. 1926. A grammar of Late Modern English for the use of continental, especially Dutch, students. Part II: parts of speech, section II: the verb and the particles. Groningen: P. Noordhoff.
- Stowell, Tim. 1995. What is the meaning of the present and past tenses? In P.-M. Bertinetto, Valentina Bianchi, and M. Squartini, eds., *Temporal reference: aspect and actionality, Vol 1: semantic and syntactic perspectives*, 381-396. Torino: Rosenberg & Sellier.
- Stowell, Tim. 2006. Sequence of perfect. Ms., UCLA.
- Van Dijk, Kees. 1998. Het prefix *ge* in het Middelnederlands. In Wim Klooster, Hans Broekhuis, Els Elffers, and Jan Stroop, eds., *Eerste Amsterdams Colloquium Nederlandse taalkunde*, 23-50. Amsterdam: University of Amsterdam.
- Van Swaay, Henricus A.J. 1899. *Het prefix* ga- ge- gi- *en de "Actionsart"*. PhD dissertation, Utrecht University. Vlach, Frank. 1993. Temporal adverbials, tenses, and the perfect. *Linguistics and Philosophy* 16, 231-283.
- Wurmbrand, Susanne. 2007. Infinitives are tenseless. *University of Pennsylvania Working Papers in Linquistics* 13.1, 407-420.
- Zwart, Jan-Wouter. 2006. Local agreement. In Cedric Boeckx, ed., *Agreement systems*, 317-339. Amsterdam: Benjamins.