

## Sequencing the discourse: PP-internal particles in Dutch

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**1. The data: the sequencing particle *dan*.** In addition to a temporal reading, the Dutch adverb *dan* ('then') has a non-temporal reading, shown in (1a), in which rather than modifying the temporal coordinates of the predicate *woont* ('lives'), it has a sequencing function of connecting 'ground' to 'figure' and can thus be compared to the more abstract discourse-sequencing interpretation of the German discourse particle *denn* ('then') (e.g., König 1977) or Italian *poi* ('then') (Manzini 2015). (1a) is of interest because, at first sight, such configurations might be taken to violate the V2 constraint, with two constituents, *dan* and the locative PP *naast de kerk* ('next to the church'), preceding the finite verb *woont*. Non-temporal *dan* may also be PP-final (1b):

- (1) a. (En) **dan** naast de kerk woont mijn tante.  
and then next the church lives my aunt  
b. (En) naast de kerk **dan** woont mijn tante.

In Dutch, a pronominal PP-complement takes the form of an R-pronoun (*daar, er* 'there'), which shifts obligatorily to the left of P (Van Riemsdijk 1978) (2). In PPs with R-pronoun complements, *dan* may be initial (3a), final (3b), or 'intrusive', i.e., intervening between R-pronoun and P (3c).

- (2) a. \*naast het/er/daar                      b. **Daar/er** naast  
next it/there                                      there/er next  
(3) a. (En)                      **dan** daar/er naast                      woont mijn tante  
(and)                      then there next                      lives my aunt  
b. (En) daar/ernaast **dan** woont mijn tante  
c. (En) daar/er **dan** naast woont mijn tante

Zwart (2005: 28) briefly discusses the apparent V3 order in (4) (his [42b]), with a locative PP *in dezelfde landstreek* ('in the same area') followed by non-temporal *nu* ('now'). Zwart claims that as an 'extra-dependent', non-temporal *nu* in (4) does not form a constituent with the PP to its left.

- (4) In dezelfde landstreek nu waren herders  
in the-same area now were shepherds  
'Now there were shepherds in that same countryside.'

In our presentation, we first offer empirical evidence to the effect that, contrary to Zwart's claim, non-temporal *dan* in (1) and (3) forms a constituent with the adjacent locative PP (*naast de kerk, daarnaast*). To account for the various positions of *dan* in relation to the PP, we develop an account based on Koopman (2000) and Den Dikken (2010) according to which PP-related *dan* is a functional head with a fixed position in the extended functional projection of the preposition and in which the various permutations are derived by PP-internal XP movement. Our data and approach support proposals for a rich functional makeup of PPs (Aelbrecht & Den Dikken 2013; Broekhuis & Den Dikken 2018; Den Dikken 2010; Koopman 2000; Svenonius 2010). Time permitting, we show that our analysis carries over to non-temporal *nu* in Zwart's (4) as well as what at first sight might appear to be a temporal use of *dan* in (5).

- (5) (En) **dan** op de tweede dag gaan we naar Gent.  
and then on the second day go we to Ghent

**2. Co-constituency of non-temporal *dan* and the locative PP.** The following arguments support co-constituency of *dan* and the locative PP:

- The string with *dan* is the initial constituent of V2 (1, 3).
  - Intrusive *dan* (3) strongly suggests that *dan* is integrated within the PP.
  - The PP containing *dan* may be embedded in a DP (6a, 6b) (cf. Corver 1990: 37-8).
- (6) a. [Het bureau[**daar dan naast**]] is voor de doctoraatsstudenten.  
the office there then next is for the PhD-students

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- b. De doctoraatsstudenten kan je vinden [in [het bureau [**daar dan naast**]]]  
 the PhD-students can you find in the office there then next
- The PP containing *dan* may be extraposed.
- (7) a. De doctoraatsstudenten kan je in het bureau vinden [**daar dan naast**].  
 the PhD-students can you in the office find there then next
- b. Ze hebben een huis gehad **daar dan naast**.  
 they have a house had there then next
- The PP containing *dan* may be the complement of a preposition:
- (8) a. Ik heb dat gekocht [voor [**daar dan naast**]].  
 I have that bought for there then next
- b. Ze hebben een tunnel gegraven [tot [**daar dan achter**]].  
 they have a tunnel dug till there then behind
- The string consisting of the locative PP and *dan* can be dislocated and resumed by the locative D-word *daar* (9). Incidentally, the dislocation data show that a resumption analysis for non-temporal final *dan* in (1b) is not appropriate: there is no prosodic break between the PP and final *dan*, and the designated resumptive for a locative PP is *daar* (10).
- (9) a. (En) **dan** naast de kerk/daarnaast, **daar** woont mijn tante.  
 and then next-to the church/there-next, there lives my aunt
- b. (En) naast de kerk/daarnaast **dan, daar** woont mijn tante.  
 (and) next-to the church/there-next then, there lives my aunt
- c. (En) daar **dan** naast, **daar** woont mijn tante  
 (and) there then next, there lives my aunt
- (10) (En)naast de kerk, **daar/\*dan** woont mijn tante.  
 and next-to the church, there/\*then lives my aunt

**3. The cartography of PPs.** As a starting point, we adopt Koopman's (2000: 223) approach to the cartography of PPs, according to which SpecPlaceP hosts the moved locative (non-directional) R-pronouns within the articulated adpositional system:

(11) [<sub>CP</sub> [<sub>C</sub> C(Place) [<sub>PlaceP</sub> *daar/er*<sub>i</sub> [<sub>Place'</sub> Place [<sub>PP</sub> Spec [<sub>P'</sub> [*naast t<sub>i</sub>*]]]]]]]]

Based on the observation that *dan* does not block the movement of the R-pronoun and is itself incompatible with focus (as encoded by the focus modifier *juist* ['exactly'] or by focal stress), we argue that *dan* is a functional head in the PP left periphery, tentatively labelled 'Top' and we propose the analysis sketched in (12):

(12) [<sub>TopP</sub> {*daar*} [<sub>Top'</sub> *dan* [<sub>PlaceP</sub> {*daar*} [<sub>Place'</sub> Place [<sub>PP</sub> Spec [<sub>P'</sub> [*naast* {~~*daar*~~}]]]]]]]]

Notice that the focus modifier *juist* is compatible with PPs containing *dan*; however, it must precede (13a,b) and cannot follow the preposition (13c) and/or left-adjoin to non-phrasal *dan* (13d,e):

- (13) a. juist daar/er naast                      b. daar/er juist naast  
       just there/there next-to                c. \* daar/er naast juist  
       d. \*daarnaast juist dan                 e. \* daar juist dan naast

Given this data set, we depart from Koopman's analysis of *juist* as a degree modifier and we analyze *juist* as an XP which freely left-adjoins to maximal projections (of different sizes); cf. Buring & Hartmann (2001); Kleeman-Krämer (2010) on an analogous approach to focus particles. Because *juist* can only target maximal and focusable projections, sequences such as (13d,e) are correctly ruled out: *juist* cannot adjoin to the functional head *dan*. In the presentation, we show in more detail how our analysis correctly derives the acceptable orders and excludes those that are not acceptable; we thus open up the possibility of exploring further PP-internal non-temporal uses of (temporal) adverbs (like Zwart's 2005 Dutch *nu* 'now' mentioned above).