# Low Saxon possessive pronominals 

Syntax and phonology

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## 1. Introduction ${ }^{1}$

In Standard Dutch, possessive pronouns can be used in combination with an overt noun, in which case no inflectional ending is allowed (1a), or without such a noun, in which case an inflectional ending is obligatory (1b): ${ }^{2}$
a. mijn-(*e) boeken my books
b. de mijn- ${ }^{*}(\mathrm{e})$
the my-INFL

If we look at traditional dialects of Dutch, in particular those of the northern and eastern regions of the Netherlands - a group of dialects sometimes referred to as Low-Saxon - we observe that the substantively used possessives take a markedly different shape. Consider the following paradigm, from the Groningen dialect, as an example (Ter Laan 1953):
(2) attributive use substantive use:

| a. | mien | a.' | mienent |
| :--- | :--- | :--- | :--- |
| b. | dien | b.' | dienent |

The orthographic sequence <en> denotes a syllabic nasal [n], and we can thus conclude that two segments are added to the end of a substantively used possessive pronoun: the syllabic coronal nasal, and a voiceless coronal stop [ t ]. Instead of the voiceless stop we also sometimes find the sequence [də] and in this article we will assume that these surface forms are 'the same thing'.

The final stop is sometimes seen as 'paragogic' (Van Haeringen 1938), and it is supposed to have a phonological origin. Paragogy of [ t ] after coronal sonorants is a wide-spread phenomenon in all varieties of Dutch; it can be found in words of all kinds, preferably after coronal sonorants such as $l, n$ and $r$ :
(3) ieman-d (somebody), aren-d (eagle), dubbel-d (double), kroos-t (children), genog-t (sufficient)

This might lead one to expect that the reason for inserting a $[t$ ] is a phonological one in (2) as well. On the other hand, there are indications that syntax should be at play, such as the fact that a definite determiner is obligatorily absent in these constructions in Groningen (Ter Laan 1953:140).
(4) a. (*'t) mienent (e.g. my horse; horse $=$ neuter) the ${ }_{\text {neut }}$ my-en-t
b. (*de) mienent (e.g. my cat; cat = non-neuter) the ${ }_{\text {non-neut }}$ my-en-t

In this article, we will consider the interplay between syntax and phonology in the formation of substantively used possessive pronouns in Groningen and related Low-Saxon dialects. In the next section, we give an overview of relevant data from a number of dialects, before turning to the phonology and the syntax of these constructions in Sections 3 and 4 respectively. The last section will be devoted to a conclusion.

## 2. Microvariation in substantive possessive pronominals

As far as we are aware, the first cross-dialectal survey of the form and structure of Dutch possessive pronominals was the so-called Goeman-Taeldeman-Van Reenen project (GTRP). ${ }^{3}$ An overview of the most relevant facts will be presented in the second volume of the Morphological Atlas of Dutch Dialects, due to appear in 2006, of which this section can be seen as a prepublished resumée. Consider the following template:
(5) de mien n t

A B C
We have seen that Groningen fills the slots B-C (but not A) of this template. We can write this as ØBC. Seen in this way, there are eight possible instantiations of the template, and it turns out that seven of them actually occur (the
following all are translations of '(that is) mine'). The data are from the GTRP, unless noted otherwise:
(6) a. ØØØ not attested
b. ( $\quad$ (dat is) mien-de Giethoorn
c. ØBØ (dat is) mien-en Anloo
d. ØBC (det is) mien-n-de Ruinen (Sassen 1953)
e. AØØ (da is) de mien Zalk
f. AØC (dat is) de mien-de Meppel
g. ABØ (dat is) de mien-n Vorden
h. ABC (dat is) de mien-n-t Steenderen

The form which is not attested is the one without any filled position. This gap might be specific for the Low Saxon area, and even accidental, since there are reportedly dialects outside of this area which have this phenomenon, e.g. in Holland and Limburg varieties: ${ }^{4}$
(7) ØØØ (da’s) mijn Katwijk (Overdiep 1937, De Vink 2004) das mein Vliermaalroot

## 3. The phonology of paragogic $t$

From a phonological point of view, there is one observation to be made about the segments which appear in the endings of the previous section: they are $/ \mathrm{t}$, d, s, n, ə/. These segments do not form a natural class at first sight. However, we may observe that the consonants are all coronal, and they are unspecified for [voice] under a plausible hypothesis of monovalent feature specification (/d/ only appears after voiced consonants and sonorants, and may be argued to derive its voicing from assimilation). Assuming that Coronal is the least marked (or unmarked) place feature (cf. Lombardi 2001), and observing that schwa is the least marked vowel, we get the following.
(8) Paragogic elements are the least marked stops, fricative, sonorant and vowel of Dutch.

At first sight, this paves the way for a phonological analysis, since it is not uncommon to assume that unmarked segments are the most suitable candidates for epenthesis. We could for instance set up a purely phonological analysis for Utrecht Dutch words such as brommert (< brommer 'moped') and gozert (<
gozer 'bloke') (cf. Van Oostendorp 2000) along the following lines. First, we assume that a paragogic obstruent is inserted at the end of a word, because of a general tendency in Dutch dialects (as well as many other languages) to end in a segment which is as consonantal as possible. Following Swets (2004), we might subsume this under the principle which is called FinalC in the OT literature.

Next, we assume that these segments are adjoined to the phonological word (which is reasonable, because they do not affect stress and can create syllables which are even longer than superheavy). The following gives the structure for brommert; PW is a phonological word:

$$
\left.\left[\begin{array}{llllll}
{[b} & r & \rho & m & \partial & r \tag{9}
\end{array}\right]_{P W} t\right]_{P W}
$$

For the epenthesis of several segments, we will have to assume that more than one consonant can occur in this adjoined position; and we also have to assume that whole syllables ( $-d e$ and possibly syllabic $n$ can be inserted). The reason to have adjunction here, could be summarised as in (10); the reason why we only find coronals and schwa could be (11):
(10) Only segments belonging to the morphological specification of lexical words can project their own PW.
(11) No marked phonological features are licensed in an adjoined position.

In principle, this could also account for the phonology of paragogic /t/ (although note that it would leave the occurrence of syllabic $n$ unexplained, as well as the reason why /t/ sometimes shows up as [də]). However, we have also seen that in the cases at hand, there is reason to assume a syntactic conditioning (cf. (4a)). Phonological rules which are subject to such specific syntactic contexts are suspicious.

Furthermore we can observe many functional elements in Dutch are taken from the same set as those in (8) (cf. Hoekstra 2000). How can we explain this similarity? Van Oostendorp (2004) argues that function words and affixes are preferably in a phonologically adjoined position in Dutch. The reason for this can now be summarised as (10): their segments do not belong to lexical words, hence they cannot project their own word. While lexical words project their own phonological word, clitics, functional heads and inflectional elements have to be adjoined to the phonological word of the stem (Booij 1990). However, here they are subject to the requirement in (11). Phonologically epenthetic material and functional elements thus all are in an adjoined position, and they are hence formed from the limited pool of phonologically unmarked segments.

This explains their superficial formal similarity, and possibly also how one can diachronically change into the other. For instance, it is possible that words ending in a sonorant develop a paragogic [ t ] for the purely phonological reason of FinalC. However, there is a disadvantage to the structure in (9): it has a phonological complexity which does not mirror morphological complexity (there is only one word). This may then lead to a reanalysis, where the [ t ] is viewed as a suffix, if this is possible, so that we will have a truly mirrored structure as in (10). Inversely, it is possible that an originally syntactic ending [ t ] gets reanalysed as purely phonological, for instance because the morphological ending is lost; we then might see a subsequent tendency to loose the marked adjunction structure in the phonology, causing the loss also of phonological [ t$]$.

Yet in any individual case, the phonological analysis on its own cannot decide between the two structures, because purely phonologically they are virtually identical. Only fine-grained morphological and syntactic analysis can tell us what the synchronic status of a given element is.

## 4. Towards a syntactic analysis

In this section we will explore the syntax of substantively used possessive pronominals in Low-Saxon by addressing the following two questions: (a) What is the syntactic status of the syllabic coronal nasal [n] (i.e. the orthographic sequence <en> in (2))? And (b) what is the syntactic status of the paragogic [t] at the end of the word?

For our analysis we will base ourselves on recent proposals about the internal syntax of nominal possessive constructions. According to these proposals, nominal possessives have the internal architecture in (12) (cf. Szabolcsi 1994, Schoorlemmer 1998, Van de Craats, Corver \& Van Hout 2000):
(12) $\left[_{\mathrm{DP}}\left[\mathrm{D}^{\prime}, \mathrm{D}\left[\left[_{\text {PosP }} \operatorname{PRON}\left[{ }_{\text {Poss }^{\prime}} \operatorname{Pos}\left[\left[_{\mathrm{NP}} \mathrm{N}\right]\right]\right]\right]\right]\right.\right.$

In this structure, the possessive relationship is configurationally defined by a (functional) possessive head in whose specifier the possessive pronoun is located (We will simply assume here that the possessor is base-generated in Spec, PosP). Thus, in a Standard Dutch construction like (1b), we have the following structure:
(13) $\left[_{\mathrm{DP}}\left[\left[_{\mathrm{D}^{\prime}}\right.\right.\right.$ de $\left[_{\text {PosP }}\right.$ mijne $\left[\right.$ Pos $\operatorname{Pos}\left[{ }_{\mathrm{NP}}\right.$ pro $\left.\left.\left.\left.]\right]\right]\right]\right]$

As indicated, we will assume that the substantively used possessive pronominal contains an empty lexical noun, here represented as pro (i.e. a phonetically empty noun). With Kester (1996), whose analysis is based on Lobeck (1995), we will assume that this empty pronominal is licensed by strong inflection in Standard Dutch, i.e. the overt expression of agreement with phi-features (say $<-\mathrm{e}>)$. Kester assumes that the empty noun raises to a higher functional head (Pos in (13)) whose specifier position contains strong inflection (-e) for licensing of pro. Thus, licensing of pro takes place in a local Spec-head configuration. Schematically (see also Schoorlemmer 1998):
(14) $\left[_{\mathrm{DP}}\left[\left[_{\mathrm{D}^{\prime}}\right.\right.\right.$ de $\left[\right.$ PosP mijne $\left.\left.\left.\left.^{\text {Pos' }^{\prime}} \operatorname{pro}_{\mathrm{i}}+\operatorname{Pos}\left[{ }_{\mathrm{NP}} \mathrm{t}_{\mathrm{i}}\right]\right]\right]\right]\right]$

With this structural analysis in mind, let us turn to the question about the syntactic status of the syllabic coronal nasal in (2). We propose that this [n] is a reduced (i.e. weak) grammatical (i.e. semi-lexical) noun een ('one') in the sense of Emonds (1985), i.e. a noun with little descriptive content, just like one, thing and body in the composite pronouns someone, something and somebody., ${ }^{5,6}$

As noted in Ter Laan (1953: 59), the indefinite pronoun ain ('someone, one') in the dialect of Groningen has a reduced variant $<\mathrm{n}>$, i.e. a syllabic coronal nasal [n]. ${ }^{7}$
(15) a. 't Komt aaltied oet, al zel $n$ 't zulf ook oetbringen it comes always out, though will one it oneself also bring-out
b. Hai is ain van dat soort, doar $n$ aaltied bedrogen mit wegkomt he is one of that sort which one always cheated with away-come

Further evidence for the interpretation of [n] as a reduced variant of the full pronominal form ain comes from the following examples; data based on Ter Laan (1953):
(16) Ik wil wel geern zo ain / zonent hebben I want indeed readily so one / so-n-one-t have 'I would really like to have such a one'
(17) Wat veur ain / Watveurent hest 't laiste? what for one / wat-for-one-t have-you most preferably 'What kind of a one do you prefer most?'
(18) Gainain / Gainent zol dat doun noone / no-one-t will that do 'Noone will do that'

Having interpreted the syllabic coronal nasal [n] as a grammatical noun (i.e. N ), let us consider the syntactic behavior of this element. For this we will consider the pattern $(6 \mathrm{~g})$, de mien-n, which minimally differs from the Standard Dutch pattern de mijne in (13); we will turn later to the pattern mienent from the dialect of Groningen in $\left(2 a^{\prime}\right)$. We propose that just like the phonetically empty noun pro in (14), the weak descriptively empty noun $-n$ raises to Pos. Suppose this head-movement of $-n$ to Pos relates to its weak (i.e. clitic-like) status. The weak noun must find a functional head (a 'host') to which it can attach. Schematically:
(19) $\left[_{D P}\left[_{\mathrm{D}^{\prime}}\right.\right.$ de $\left[\right.$ PosP mien $\left[\right.$ Poss $\left.\left.\left.\left.-n_{i}+\operatorname{Pos}\left[{ }_{N P} t_{i}\right]\right]\right]\right]\right]$

Having determined the categorial status and syntactic behavior of [n], let us next turn to the syntax of paragogic [ t ]. Remember that in the dialect of Groningen, the substantively used possessive pronominal form mienent can never be preceded by a definite article (*de mienent; see (4)). From this, one might draw the conclusion that syntax is involved in the formation of these possessive patterns. More specifically, one might try to explain the complementarity of the definite article and the paragogic [ t ] by assuming that the latter ís the definite article and hence occupies D . The sequence mienent might then be derived along the lines in (20):

$$
\begin{equation*}
\left[{ } _ { \mathrm { DP } } \operatorname { m i e n } _ { \mathrm { k } } [ [ - \mathrm { en } _ { \mathrm { i } } + \operatorname { P o s } ] _ { \mathrm { j } } + - \mathrm { t } ] \left[\left[_{\text {PosP }} \mathrm{t}_{\mathrm{k}}\left[{ }_{\text {Pos' }} \mathrm{t}_{\mathrm{j}}\left[\left[_{\mathrm{NP}} \mathrm{t}_{\mathrm{i}} \mathrm{l}\right]\right]\right]\right.\right.\right. \tag{20}
\end{equation*}
$$

Although this derivation yields the correct surface pattern and accounts for the complementarity of the definite article and paragogic [ t ], we should not jump too quickly to the conclusion that this is the right analysis. For one thing, there are dialects in which we do find the co-occurrence of the definite article and the paragogic [ t ]. Take, for example, the patterns (6f) and (6h). The pattern de mien- $n-t$ in (6h) differs minimally from mien- $n-t$ in (6d). Rather than interpreting - $t$ in the latter example as the instantiation of D (and consequently as the categorial equivalent of $d e$ in (6h)), one might try to develop an analysis in which paragogic - $t$ receives a uniform analysis in all pronominal patterns in (6). In that case, the patterns (6f) and (6h) strongly suggest that paragogic -t is not in D , but occupies a position lower in the nominal structure.

In view of the superficial similarity between the definite article de and the paragogic -de in a string like de mien-de in (6f), one might want to explore an analysis according to which -de is a sort of definiteness marker that realizes the functional head Pos. Paragogic - $t$ could be treated on a par.

The idea that Pos is a potential carrier for definiteness in a language like Dutch has been proposed in Schoorlemmer (1998). She argues that Pos carries an (unvalued) definiteness feature [ $\sim$ def] whose value can be fixed/checked in two ways: (i) $\operatorname{Pos}_{[\sim \text { def] }}$ can raise to D , which contains a fixed feature [def]; (ii) $\operatorname{Pos}_{[\sim \operatorname{def}]}$ gets checked/valued by an empty pronominal N (i.e. pro) which, being pronominal, also carries a feature [def]. The former checking operation is active in a (non-elliptical) possessive construction like (21), the latter checking operation in elliptical environments like (22):
a. $\quad\left[{ }_{D P} D_{[+ \text {def }]}\left[\left[_{\text {PosP }} \operatorname{mijn}\left[\right.\right.\right.\right.$ Pos' $\operatorname{Pos}_{[\sim \operatorname{def}]}\left[{ }_{N P}\right.$ huis $\left.\left.\left.]\right]\right]\right]$
b. $\quad\left[{ }_{D P} \operatorname{Pos}_{[\sim \text { def }] \mathrm{i}}+\mathrm{D}_{[+ \text {def }]}\left[{ }_{\text {PosP }} \operatorname{mijn}\left[\right.\right.\right.$ Pos' $^{\prime} \mathrm{t}_{\mathrm{i}}\left[_{\mathrm{NP}}\right.$ huis $\left.\left.\left.]\right]\right]\right]$
a. $\quad\left[{ }_{\text {DP }} \mathrm{de}_{[+ \text {def }]}\left[{ }_{\text {PosP }} \operatorname{mijne}\left[\right.\right.\right.$ Pos' $\left.\left.\left.\operatorname{Pos}_{[\sim \text { def }]}\left[{ }_{N P} \operatorname{pro}_{[+ \text {def }]}\right]\right]\right]\right]$
b. $\quad\left[{ }_{D P} \operatorname{de}_{[+ \text {def }]}\left[\left[_{\text {PosP }} \operatorname{mijne}\left[\right.\right.\right.\right.$ Pos' $\left.\left.^{\prime} \operatorname{Pro}_{[+d e f] \mathrm{i}}+\operatorname{Pos}_{[\sim \text { def }]}\left[\left[_{\mathrm{NP}} \mathrm{t}_{\mathrm{i}}\right]\right]\right]\right]$

What would this analysis bring us for the substantively used possessive pronominals in (6)? Take, for example, the 'full-fledged' form (6h): de mien-n-t (the $m y-n-t)$. The base structure would be as in (23a). Suppose the weak pronoun $-n$, just like pro, carries a definiteness feature (i.e. [+def]). The weak pronoun raises to Pos and values the feature $[\sim \operatorname{def}]$ on Pos. The definiteness feature on Pos, now specified as [+def], gets realized morphologically in this dialect as the bound-morphemic article $-t$. The definite article $d e$, which is inherently specified as [+def], merges with PosP. The derived representation is given in (23b).

$$
\begin{array}{ll}
\text { a. } & {\left[{ }_{\text {DP }}\left[\left[_{D^{\prime}} \text { de }\left[_{\text {PosP }} \text { mien }\left[\text { Pos' }-\mathrm{t}\left[{ }_{\mathrm{NP}}-\mathrm{n}\right]\right]\right]\right]\right]\right. \text { ('base structure') }}  \tag{23}\\
\text { b. } & {\left[_{\mathrm{DP}}\left[\left[_{\mathrm{D}^{\prime}} \text { de }\left[_{\text {PosP }} \text { mien }\left[\text { Pos' }^{\prime}-n_{\mathrm{i}}+-\mathrm{t}\left[_{\mathrm{NP}} \mathrm{t}_{\mathrm{i}}\right]\right]\right]\right]\right]\right. \text { (derived structure) }}
\end{array}
$$

Thus, in a representation like (23b), definiteness is realized twice within the nominal projection, viz. by the definite article in D and by paragogic [ t ].

Of course, the phenomenon of double definiteness within the nominal domain is well-known from other languages; see for example the Swedish noun phrase den stora bil-en (the big car-the; 'the big car'), where double definiteness is found when an attributive adjective precedes the noun (cf. Santelmann 1992). The question should be raised, though, whether patterns like de mien-n-t in (6h) and de mien-de in (6f) really express double definiteness. More specifically: Are paragogic $-t$ and -de really associated with the grammatical property of definiteness? The existence of forms such as zonent, watveurent and gainent (cf. (16)-(18)), which clearly feature an indefinite determiner-like element, makes this interpretation of paragogic $-t /-d e$ implausible; these elided noun phrases clearly have an indefinite reading. ${ }^{8}$ Notice also that definiteness does not seem to be 'triggered' DP-internally by the (reduced) pronoun -(e)n either. Déchaine
and Wiltschko (2002) state, for the English pronoun one, that this element is a pure spell-out of N and has no referential content. ${ }^{9}$ Lacking referential content (and consequently also lacking the property of definiteness), one cannot enter into a coreference relationship with an antecedent, as is shown for example by the ill-formedness of (24) (taken from Déchaine and Wiltschko 2002): * $[\text { Mary }]_{j}$ thinks [one] $]_{j}$ is a genius

In view of this, we conclude that English one is not associated with the property of definiteness. Given its similarity with the element ain (and its reduced variant $-(e) n)$, we will assume that the latter elements are also in no way related to the definiteness feature. If so, the reduced variant $-(e) n$ should not be interpreted as the 'trigger' for the appearance of paragogic $-t /$-de as a definiteness marker.

If $-t /-d e$ are not realizations of a definiteness property associated with the functional head Pos, $-t /-d e$ as a purely paragogic consonant comes into the picture again. Of course, one might still assume that the paragogic consonant realizes (spells out) the functional head position Pos, i.e. a syntactic position. As a matter of fact, the bound morpheme $-s$, which is familiar from possessive constructions like Jan-s boek (Jan-s book), also shows up in certain dialects in substantively used possessive pronouns (see Peters 1937):

$$
\begin{array}{lll}
\text { a. } & \text { Die boeke binnen jouwes } & \text { (dialect of Drechterland) }  \tag{25}\\
\text { those books are your-s } & \\
\text { b. } & \text { Heb je hummes ook gezien? } & \text { (dialect of the Zaanstreek) } \\
\text { have you him-s also seen; 'Have you also seen his?' }
\end{array}
$$

As noted by Peters (1937: 226), these substantively used possessives typically occur without the definite article (i.e. ${ }^{*}$ de jouwes). In this respect, this pattern is quite similar to the pattern mien-n-t from the dialect of Groningen. If $-s$ is a realization of the functional head Pos (see e.g. Van de Craats, Corver \& Van Hout 2000), then the same arguably holds for paragogic $-t /-d e .{ }^{10}$ As such the consonant doesn't seem to be much more than a phonological filler (i.e. a Spell Out) of a syntactic (i.e. functional head) position. ${ }^{11,12}$

Having come to the conclusion that $-t /-d e$ is nothing but a 'filler sound' (i.e. a spell-out of a syntactic position), let us look at the derivation of the various patterns given in (6). In our analysis of these patterns, we will adopt Chomsky's (2001) Uniformity Principle, which states the following: "In the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances." Applying this principle to the patterns in (6), we will assume that all the pronominal patterns
given instantiate the abstract underlying structure in (12). Microvariation resides in the morphophonological realization of certain syntactic positions: i.e. morphological realization of the lexical noun (i.e. pro versus the weak noun $-(e) n)$; phonological expression of Pos (i.e. phonologically empty Pos versus presence of paragogic [ t ] in Pos; morphological realization of D (i.e. empty D versus lexicalized D). Schematically:
(26)

| syntactic <br> position | D | Spec,PosP | Pos | N |
| :--- | :--- | :--- | :--- | :--- |
| Realization | $d e /^{\prime} t$ ('the') | mien/mijn/... | Paragogic $-t /-d e$ <br> or | syllabic nasal $-n$ <br> or <br>  <br>  <br> $e$ or (= empty) |
|  | $e$ (=empty) | $e$ (i.e.pro) |  |  |

Let us start our discussion of the pronominal patterns with the 'full-fledged' form (6h): de mien-n-t (the my-n-t). The 'base structure' is given in (27a). We will assume that the weak pronoun $-n$, just like pro, raises and cliticizes (i.e. left adjoins) to the functional head Pos. The definite article de merges with PosP. When this complex structure is interpreted phonologically, the syntactic head Pos is spelled out as $-t$. The derived representation is given in (27b), with paragogic - $t$ spelled out in Pos.
a. $\quad\left[_{D P}\left[D_{D^{\prime}}\right.\right.$ de $\left[_{\text {PosP }}\right.$ mien $\left[\right.$ Pos' $\left.\left.\left.\left.-\mathrm{t}\left[\mathrm{NP}_{\mathrm{N}}-\mathrm{n}\right]\right]\right]\right]\right]$ ('base structure')
b. $\quad\left[_{D P}\left[D_{D^{\prime}}\right.\right.$ de $\left[{ }_{\text {PosP }}\right.$ mien $\left[\right.$ Poss $\left.\left.\left.^{\prime}-n_{i}+-t\left[_{N P} t_{i}\right]\right]\right]\right]$ (derived structure)

Consider next pattern (6f), de miende, where we have pro instead of the syllabic nasal [n]. We assume that this pronominal pattern is derived along the same lines as the pattern in (27) featuring $-n$, the only difference being that the pronoun is phonetically empty. Thus, the derived structure looks as follows: $\left[_{D P}\left[D_{D^{\prime}}\right.\right.$ $d e\left[_{\text {PosP }}\right.$ mien $\left.\left.\left[_{\text {Pos' }^{\prime}} \operatorname{pro}_{\mathrm{i}}+-d e\left[{ }_{\mathrm{NP}} t_{\mathrm{i}}\right]\right]\right]\right]$.

Pattern ( 6 g ), de mien-n, features the syllabic nasal - $n$ but lacks a paragogic $-t$. In this dialect, the functional head Pos does not get spelled out by a filler sound. Its derived structure: $\left[{ }_{\mathrm{DP}}\left[\mathrm{D}^{\prime}\right.\right.$ de $\left[{ }_{\text {PosP }}\right.$ mien $\left[\right.$ Pos $\left.\left.\left.\left.^{\prime}-n_{\mathrm{i}}+\operatorname{Pos}\left[{ }_{\mathrm{NP}} t_{\mathrm{i}}\right]\right]\right]\right]\right]$.

Pattern (6e), de mien, is the pattern we found for Standard Dutch: the phonetically empty pronoun pro raises to Pos, where it gets licensed by the agreement morphology on the possessive pronoun. Pos is not filled phonologically. This gives the following structure: $\left[_{\mathrm{DP}}\left[\mathrm{D}_{\mathrm{D}^{\prime}} d e\left[_{\text {PosP }}\right.\right.\right.$ mien $\left[\right.$ Pos $\left.\left.\left.\operatorname{pro}_{\mathrm{i}}+\operatorname{Pos}\left[{ }_{\mathrm{NP}} t_{\mathrm{i}}\right]\right]\right]\right]$.

Let us now turn to the possessive variants in which the definite article is absent: i.e. mien-n-de in (6d), mien-en in (6c) and mien-de in (6b). We will assume that these patterns are derived along the same lines as their counterparts featuring an overt definite article (cf. (6e-h)). In view of uniformity of
phrase structure, we take the position that there is a DP-projection present also in these possessive patterns. The only difference is that $\mathrm{D}_{[+\operatorname{def}]}$ is phonetically empty in those dialects.

Consider, finally, pattern (6a). This pattern is not attested in Low-Saxon dialects, but as we have seen in (7), such 'bare' forms do occur in certain Dutch dialects. We assume that this pronominal pattern has the same structural representation and displays the same movement operation that we find in other substantively used possessive pronominals, viz. movement of the pro to Pos, where pro gets licensed under local Spec head agreement with the possessive pronoun. The distinguishing property of this dialect is that both the determiner position and the Pos-head can remain phonetically empty. Thus: $\left[_{D P}\left[_{D^{\prime}} D\right.\right.$ $\left[_{\text {PosP }} \operatorname{mien}\left[\right.\right.$ Poss $\left.\left.\left.\left.\operatorname{pro}_{\mathrm{i}}+\operatorname{Pos}\left[{ }_{\mathrm{NP}} t_{\mathrm{i}}\right]\right]\right]\right]\right]$.

## 5. Conclusion

In this article, we considered the interplay between syntax and phonology in the formation of substantively used possessive pronouns in the dialect of Groningen and related Low-Saxon dialects. One of the remarkable properties of (some of) these pronouns is the appearance of a paragogic - $t$ at the end of the possessive pronoun. A purely phonological account of this element (e.g. the FinalC principle) turned out to be infeasible. A syntactic analysis according to which this paragogic - $t$ should be interpreted as the realization of a definiteness feature on a functional head Pos faced a number of problems as well. This brought us to an analysis according to which paragogic - $t$ is a filler sound that spells out a functional syntactic position, viz. Pos in substantively used possessive pronominal DPs. ${ }^{13}$

## Notes

1. We would like to thank the editors of this volume and Hans den Besten for useful comments.
2. Hans den Besten (p.c.) notes that the first person plural possessive pronoun does get inflection preceding nouns (ons boek 'our book' - onze boeken 'our books'). On the other hand second person plural informal jullie never gets inflection and hence is disallowed in context (1b) (*de jullie, *de jullie-e).
3. The database resulting from this project is freely accessible at http://www.meertens.knaw. nl/
4. Other dialects of Dutch also give completely different possibilities, such as a schwa or -s ending. We will not discuss these; see Section 4, though, for a brief remark about -s.
5. Emonds (1985) argues that a composite pronoun like somebody is derived by moving syntactically the grammatical noun body to the quantifying element some. Evidence for this displacement comes from the fact that the composite pronoun must precede simple adjectives (e.g. [Some + body $y_{\mathrm{i}}$ clever $t_{\mathrm{i}}$ ]). This is excluded with regular nouns: cf. some clever boy versus ${ }^{*}\left[\right.$ some + boy $y_{i}$ clever $\left.t_{\mathrm{i}}\right]$.
6. See also Overdiep (1937:285) for an interpretation of $-n$ as a reduced variant of een ('one').
7. The descriptively empty noun ain, and its reduced variant $n$, is comparable to the English semantically empty noun one, which appears in contexts such as those in (i):
(i) a. John bought [a big car] and Sue bought [a small one]
b. I like [this car] better than [that one]

Interestingly, in certain (British and American) English dialects we find substantively used possessive pronominals of the following type (cf. Wakelin (1972), Wolfram and SchillingEstes (1998)):
(ii) a. It is hisn (e.g. his book)
b. It was yourn that I was talking about (e.g. your book)

It is tempting to analyze $n$ as a reduced pronoun 'one'. Obviously, more detailed research of these patterns is needed to draw any firm conclusions.
8. Notice also that ain, the full counterpart of $-(e) n$, can occur as a subject in existential constructions (featuring expletive der 'there'); example drawn from Ter Laan (1953:58):
(i) Der het ain west

There has one been; 'Someone has been here'
9. See also Barbiers (2005) for a discussion of the properties of one in Germanic languages/ dialects.
10. In patterns such as gainent, watveurent and zonent (see (16)-(18)), paragogic - $t$ arguably occupies some other functional head position. In the case of gainent, for example, $-t$ spells out the functional head position $\mathrm{Q}:\left[_{\mathrm{QP}}\right.$ gain $\left.\left[\mathrm{Q}^{\text {, }}-\mathrm{en}_{\mathrm{i}}+-\mathrm{t}\left[{ }_{\mathrm{NP}} \mathrm{t}_{\mathrm{i}}\right]\right]\right]$. Notice also that we expect to find the filler sound -s in these structural contexts. One potential case is a form like zulks (such-s; 'such a thing'), where -s appears on the substantively used pronominal zulk. Compare with zokkent (such-en-t; 'such a thing') from the dialect of Groningen.
11. 'Filler sounds' are also found in child language: as noted in Van Kampen \& Wijnen (2000), there is a stage in the acquisition of the DP at which Dutch children use the sound 'schwa' at the beginning of the noun phrase. With this sound, they mark the functional Dposition, but they do not formally distinguish yet the difference between the definite article (de) and the indefinite one (een). Interestingly, schwa is also used to to fill other functional positions, such as Comp and Aux.
12. This implies that $-t /-d e$ are not located in the lexicon, but are filled in by default. A question which arises is why this phonological spell out is not restricted to the minimal form $-t$. That is, why is it possible to have a syllabic realization -de as well? This is a question for future research. Notice, though, that -de itself constitutes a minimal syllabic spell out.
13. Paragogic - $t$ is found after the weak grammatical noun -(e)n, but not after the full from ain. Thus the forms zo ain, wat veur ain and gainain cannot bear paragogic -t. E.g. ${ }^{*} g a i n$ ain-t. Given the fact that ain, being a full form, does not cliticize to a higher functional head (say Q in this example), we will never obtain a pattern like gain ain- $t$, under the assumption that $-t$ spells out a functional head position (in this case Q ). See footnote 10 for gainent.

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