21. Holland and Utrecht: Phonology and phonetics

1. Introduction

In many languages of the world, the name for The Netherlands is something similar to *Holland*. In Dutch, however, *Holland* usually refers only to a specific part of the country, viz. the two provinces Noord- and Zuid-Holland. These contain the three largest cities, Amsterdam, Rotterdam and The Hague, and have formed the national cultural and economic centre for many centuries. Informal observation suggests that in the parlance of some dialect speakers outside of Holland, the name *Holland* refers to all of the Netherlands outside the own region; e.g., for the Limburg speaker, 'Holland' might be all of the Netherlands but Limburg.

This explains the pars pro toto of the toponym, but also the special status of the dialects spoken in this region. For the outside observer, Noord-Holland (hosting Amsterdam) and Zuid-Holland (hosting Rotterdam and The Hague) as well as the neighbouring very small province of Utrecht (with the capital city of the same name) are strikingly underrepresented in the literature on Dutch dialectology. The network of informants assigned to these provinces in recent dialect atlasses FAND, MAND and SAND is for instance less finely-grained than that for other parts of the Netherlands; and this in spite of the fact that it is the most densely populated area. People familiar with the cultural and political situation in the Netherlands know the reason behind this apparent paradox: Holland and Utrecht, having been the socioeconomic superpowers for a long time, have therefore influenced the formation of the standard language over a considerable time span, and thus are deemed to hardly speak dialect. Another, related, reason may be that in particular the urban dialects have changed their function into sociolects, spoken by the working classes exclusively, or at least associated to them in the minds of most speakers.

If it is difficult to find grammatical descriptions of these dialects already, purely phonetic work specifically on these dialects is even more difficult to find; we concentrate here mostly on the phonology. The phonological literature is also scarce, and usually consists of small sections in larger descriptions of the dialect for a broader audience.

There are two ways to divide the dialects in this area. According to traditional dialectology (e.g. Jo Daan's 1969 classification), there are two main groups: on the one hand there are the 'Holland' dialects, which can be subdivided further into the Zuid-Holland varieties (spoken in the province of Zuid-Holland), the Westhoek varieties (spoken in Noord-Brabant), the varieties spoken in Waterland and Volendam, Zaanstreek, Kennemerland, West-Friesland (all spoken in Noord-Holland) and the Hollandic/Frisian mixed systems known as Bildts, Midslands, Stadsfries and Amelands (spoken in the province of Frisia, mostly on the Frisian islands - cf. Bloemhoff, De Haan & Versloot, Ch. 38 in this volume). On the other hand, there is the group of 'Northern-Central' dialects, including Utrecht and the Eastern part of Zuid-Holland and the Gooi region of Noord-Holland.

A distinction which may be even more alive today is the one between urban dialects and rural dialects:

(a) Urban dialects which have received treatment are those spoken in Amsterdam (Daan 1948, Schatz 1987, Brouwer 1989, Berns 2002), Rotterdam (Van Oostendorp 2002), The Hague (Elias 1977, 2002), Utrecht (Van Veen 1964, Martens van Vliet 2000). Of the smaller cities, some attention has gone to Leiden (Wortel 2002, Heestermans 2007). Most of these publications are directed towards a general audience. A special position is taken by Haarlem, about which there is an urban myth that it does not have its own dialect. Winkler (1874) claimed that 19th century Amsterdam still contained many different dialects, but already pointed out that these were mostly quickly disappearing. The later sources on Amsterdam just mentioned no longer recognize this distinction.

(b) Of the more rural areas, three have received specific attention: (i) West-Friesland (for which Pannekeet 1991 gives an impressive overview), (ii) the Northsea coast dialects of Katwijk (Overdiep 1940, De Vink 2004), Zandvoort (Van den Berg 1959), etc.) and (iii) the Waterland dialects, immediately north and north-east of Amsterdam (Van Ginneken 1954). Texel can be included into this group as well; the other Holland island (Vlieland) has lost its dialect in the 19th century. One of the very few locations which cannot be grouped in either (i), (ii) or (iii) but has received serious treatment in the form of a monograph, is the traditional dialect of Zoetermeer (Goeman 1984).

It is usually assumed that the phonology of the Holland and Utrecht dialects is not too distant from that of standard Dutch. The segment inventory seems by and large the same (potential differences in the vowel and consonant inventories are discussied in sections 2.1. and 2.2, respectively), and it is difficult to mark anything as specific for the Holland and Utrecht dialects and as opposed to other dialects on the one hand and the standard language on the other. Most of the features discussed in this chapter can be found in other regions as well, although obviously the specific cocktail of features is unique to Holland and Utrecht, and I have tried to concentrate on those which seem to have a clear 'centre' in the area under discussion.

It goes without saying that even within these larger regions we find quite some variation, in particular on the phonological and phonetic levels. Some of this has also received at least some attention in the literature and we will note this in the following text. In this overview article, we concentrate mostly on this, known, work in section 2. Section 3 will be devoted to listing some desiderata for the study of the Holland dialects.

I have decided to concentrate here on synchronic rather than diachronic phonology. This means that the discussion will not concentrate on historical processes of rounding or unrounding or raising and lowering affecting all words without any exceptions, but in particular on those aspects which have led to alternations in the synchronic phonologies. I make a few exceptions for diachronic changes which have led to discussion also in the synchronic phonology literature, or where it has led to interesting patterns from a synchronic perspective. Furthermore, I concentrate on phenomena which involve more or less the whole area, except where noted explicitly. Given the weakness of dialect and dialect study in this region, it is next to impossible to distinguish large isoglosses *within* the area in question.

2. Phenomena

We discuss the most relevant older and recent work which deals with the phonology of the dialects of both groups. I will first (2.1) discuss certain phenomena related to vowels, then (2.2) phenomena related to consonants and finally (2.3) I will devote a few words to the little that is known about specific Hollandic phenomena at the suprasegmental level.

2.1. Vowels

2.1.1 The alternation between [jə] and [i]

One of the most typical phonological phenomena found in this area is the alternation between the consonant-vowel sequence [jə] and the single vowel [i]. The first formal treatment of this phenomenon was given by B. van den Berg in an article in the general linguistics journal *De Nieuwe Taalgids* in 1973. Van den Berg discusses the alternation within the diminutive suffix in "the common language of families in the Randstad" (p. 133).

In Van den Bergs view, the diminutive suffix has two variants (I follow his transcriptions; as will become clear below, Van den Berg considers the vowel in the diminutive to be front rounded and not schwa; although this is no longer a majority view, I stick to it here, as it does not seem very important):

- a. *tje* [tjü] (where [ü] is a mid central rounded vowel) after a vowel, a diphthong or the sonorants *j, w, r* and the nasals (see (1a))
- b. *je* [jü] after a basic morpheme ending in [t] (either derived from /d/ by final devoicing or underlying) (see (1b))
- c. *ie* [i] after the voiceless consonants p, f, s, k, x (see (1c))

The following examples may clarify this distribution. I give the standard Dutch form of the stem in parentheses:

(1)   a.   *paatje* (*pa*) 'father', *zeetje* (*zee*) 'sea', *eitje* (*ei*) 'egg', *kooitje* (*kooi*) 'cage', *paartje* (*paar*) 'pair', *kraaltje* (*kraal*) 'bead', *mannetje* (*man*) 'man', *vlaggetje* (*flag*) 'flag'[1]
   b.   *liedje* (*lied*) 'song', *ratje* (*rat*) 'rat'
   c.   *koppie* (*kop*) 'cup', *stoffie* (*stof*) 'piece of textile', *jassie* (*jas*) 'coat', *hakie* (*haak*) 'hook', *vliegie* (*vlieg*), 'fly'

The forms are basically the same, and have the same distribution as they have in standard Dutch, except that in the latter variety the (1b) form is also used after non-coronal consonants (i.e. where the Randstad dialects have *ie)*. We will not discuss these rules here, therefore. Of interest are in particular the (1c) forms, for which Van den Berg (1973) provides the following rule:

1

   :   The latter two examples involve schwa insertion, as mentioned by Van den Berg. The process is not further discussed by Van den Berg, probably because it is irrelevant to the alternation at hand.

(2) je -> ie / X   { [p] } ___ #
                       { [k] }
                       { [f] }
                       { [s] }
                        { [x] }

Van den Berg then goes on to discuss the nature of this rule, and concludes that it is a kind of 'reduction' in which two segments ([j] and [ü]) are reduced to one, e.g. by deleting the roundedness feature of the [ü]). The reason for this reduction according to Van den Berg is the 'low sonority' of word-final unaccented [jü].

An important question now is why the context after voiceless coronal plosive [t] (i.e. (1b)) is excluded from (2). Van den Berg (1973) argues that /t/ and /j/ get merged to a palatal plosive and that this in turn blocks the 'reduction' in (2).

De Wilde - Van Buul (1943) has pointed out a similar reduction process, with a somewhat narrower geographical distribution, viz. the city dialect of Rotterdam. This concerns the second person (singular) clitic *je*. Van Oostendorp (2000) discusses her data and provides some additional ones (based on some limited fieldwork). In essence the phonological distribution is the same as for the diminutive: we find *je* after coronal obstruents and *ie* almost everywhere else. Below, we have summarized the main findings of Van Oostendorp (2000). Notice that Van Oostendorp assumes that the vowel in the 'full' form is not [ü] but [ə], and furthermore writes the palatal consonant as [c]:

(3) a. [i]
         - after consonants which are not coronal obstruents: *hebbie* 'have you', *hoop ie* 'hope you', *pakkie* 'take you'
     b. [jə]
         - after non-high vowels: *ga je* 'go you', *ree je* 'drove you'
     c. variation between [i] and [jə]
         - after high vowels: *doe je/doewie* [dujə duwi] 'do you', *nu je/nuwie* [nyjə / nywi] 'now you'
         - after coronal fricatives, nasals and /l/: *leesje/leessie* [leʃə / lesi] 'read you', *ben je* /*bennie* 'are you', *willie/wil je* 'want you'
     d. [cə]
         - after (and merging with) coronal plosives
         haat je [hacə] 'hate you', *wed je* [wɛcə] 'bet you'

Another important observation is that final devoicing is blocked in these cases. The second person singular form of 'to have' is *hebbie,* not **heppie. Hopie* rather than **hobie* shows that this is not a matter of intervocalic voicing One might try to relate this to the fact that *heppie* has a different meaning, viz. 'he has' (presumably from *heb tie*). This contrasts with other clitic forms in which devoicing seems optional (Booij 1995): *heb ik/heppik* [hɛbɪk / hɛpɪk] 'have I'. Another observation is that the alternation still is specific to the diminutive suffix and the personal pronoun; it does not apply to lexical words (*jenever* 'Dutch gin', [jənevər]/*[inevər]; *idee* 'idea' *[jəde]/[ide]).

Van Oostendorp (2000) provides an analysis of these facts in terms of feature geometry and Optimality Theory, which is similar in spirit to Van den Berg's (1973) proposals. The underlying form is /jə/ which is however optimally realized as [i], except where this would cause a hiatus (after non-high vowels) or where the /j/ merges with a [t]. The reason why there is variation (or optionality) after high vowels is that those can also solve the problem of hiatus by glide insertion; the variation in the case of coronal fricatives may indicate that somehow the palatal fricative counts as more marked than the palatal stop, which does not alternate.

Van Oostendorp (2000) also notes that there seems to be regional variation: in certain areas close to Rotterdam, the accepted form for the diminutive is also *tie*, such as in *dochtertie* 'daughter'. On the other hand, also the reduction of the second person singular clitic seems to be regionally bounded: *hebbie* with the auxiliary 'have' has a wider regional distribution than other forms. However, these statements are not empirically substantiated in Van Oostendorp (2000), and I have not been able to find other sources which do, although I do not exclude the possibility that careful study of some of the larger databases might shed light on this issue.

The SAND and GTRP databases do not give us sufficient evidence on the distribution of the second person clitic. The forms in SAND have not been transcribed phonologically and are therefore difficult to search. The only relevant sentence in GTRP contains the sequence *wil je* (*Wat wil je met dit brood doen?* 'What do you want to do with this bread?'). This form shows a few entries for [i] in South Holland, but since there is already internal variation after a lateral in Rotterdam, and internal variation is not systematically noted, it is not so clear how to interpret this map.
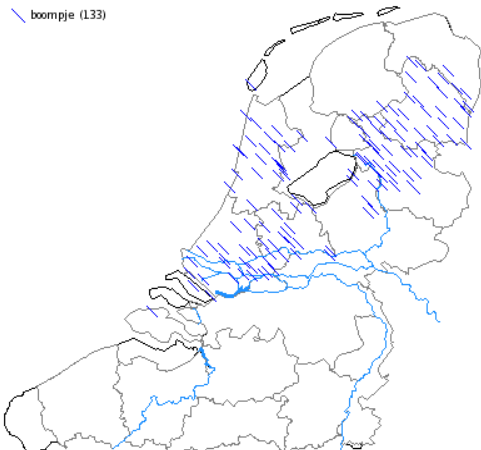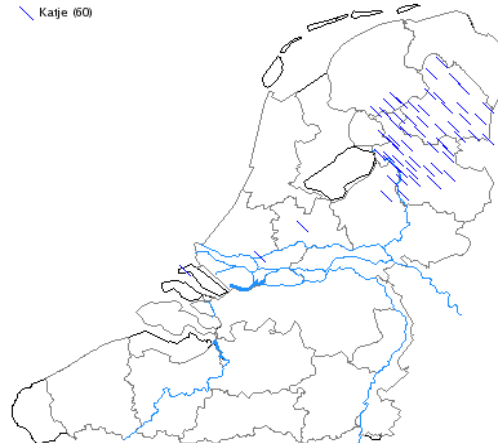
The maps we can create about diminutive forms are more interesting. The following comparative map for *boom* 'tree' and *kat* 'cat', for instance, shows that the

alternation between *je* and *ie* is indeed typical and distinctive for the dialects of Utrecht and Holland. Within this region, but not outside it, we find an –ie form in the former case and at the same time a –je form in the latter, but elsewhere we do not find this alternation (in the North-East of the Netherlands, there is a large area where there is a non-alternating form (with) *ie* for the diminutive). On these maps we noted diminutives for *boom* 'tree' with [pi] and for *kat* 'cat' with [ti].

The GTRP data for *dochter* 'daughter' show a case where the vowel of the stem-final syllable is schwa, and a rather large region (from Zeeland across the south of Holland towards Utrecht) shows a [ti] form. It would be worth exploring more what is going on in cases like this (it could be the case that these varieties try to avoid having to schwa syllables in a row) -.

There are some indications that the phenomenon is not entirely free, and that certain syntactic boundaries tend to be respected. Van Oostendorp (2001) gives the following examples:

(4)   a.   *Doet een sjaal om*[i] *nek.*
             do a scarf around-your neck
             'Put a scarf around yur neck'
       b.   *Om*[i] *oma komp, moete we stil zijn.*
             becayse-your grandmother comes, must we silent be
             'We must be silent, because your grandmother will come.'
       c.   *Azz*[i] *alles wat je heb* [jə]*[i] *oma moe geve, be je snel arm.*
             If-you everything what you have your grandmother must give, are you
quickly poor
             'If you have to give everything you have to your grandmother, you will
soon be poor.'

(4a) and (4b) show how a second person possessive pronoun can encliticize to the preceding preposition or complementizer; (4c) shows that this is not possible between the head of a relative clause modifying a direct object and the possessive pronoun in the indirect object. One might suspect that the reason for this is that the (syntactic or prosodic) phrase boundaries between the two words are too deep. However, this has never been systematically investigated.

2.1.2. The realisation of tense mid vowels and diphthongs

One rather salient property of Randstad dialects for speakers from other regions is the pronunciation of diphthongs and tense mid vowels. The latter are characterised as having a slight afterglide, making them more diphthongal, whereas the vowels which are diphthongs also in other varieties, including the standard variety, are more open in their first part.

These data are easily verifiable, both in the FAND and in the GTRP database. The following map shows the distribution of diphthongal realisations of /e/ in *zee* 'sea' and (the first syllable of) *regen* 'rain'. It is easy to see that in word-final position diphthongisation is quite widespread (Swets 2004), whereas in word-internal position it is

mostly restricted to Holland, Utrecht and Zeeland (FAND II/III shows a very similar pattern for words such as *ezel* 'donkey' and *zeker* 'sure').

   [INSERT MAP ZEE-REGEN.SVG ABOUT HERE]

FAND II/III notes (map 30) that the same region has diphthongisation of tense long *o* in *geschoten* 'shot'. It refers to Goeman (1984:54-55) for support of the claim that this diphthongisation is due to influence of the standard language. Goeman gives an overview of the sound system of Zoetermeer in the course of roughly the first 80 years of the 20th century, based on a variety of sources. From these sources, we can indeed learn that around 1885 diphthongisation was virtually absent in Zoetermeer. It therefore is a fairly recent characteristic of at least this town dialect, but it is not clear to me to what extent this should be ascribed to an influence of standard Dutch in the whole region. In the first place, standard norms for pronunciation are fairly weak and -in fact- diphthongisation of the tense mid vowels arguably goes *against* the standard norms, and in the second place they are based to a large extent on Randstad varieties.
       If we suppose that diphthongisation in Holland dialects is due to standard influence, the question arises where the standard language in turn got the diphthongisation from. It is also possible that the diphthongisation is an urban development, having arisen first in Amsterdam, Rotterdam, The Hague and/or Utrecht, and spreading from there to other Holland and Utrecht towns as well as to the standard language. In order to test this, we would definitely need more historical material from various parts of the region.
       It is interesting to note that so far the change seems to be purely phonetic. According to all phonological tests available to us, /o^u/, /e^i/ and /ø^y/ still behave as monophthongs. For instance, they fill clear gaps in the phoneme system as mid counterparts to high /i, y, u/ and low /a/ or as tense counterparts of /ɔ, ɛ, ʏ/. Furthermore, the Dutch stress system is usually described as quantity sensitive (Kager 1989, Booij 1995), with monophthongs counting as light and (true) diphthongs counting as heavy. The diphthongisation of /o^u/, /e^i/ and /ø^y/ so far has not led to any reorganisation of the stress system or of stress on individual words, as far as I am aware.
       A third test works out in a slightly more complicated way. Trommelen and Zonneveld (1980) point out that diphthongs cannot occur before /r/ in Standard Dutch. Diphthongisation of the tense mid vowels has a similar restriction, witness e.g. map 31 in FAND II/III on the verb *boren* 'to drill'. Here we find monophthongal realisations almost exclusively, showing perhaps that the constraint against diphthong+/r/ combinations has a phonetic basis, rather than a purely phonotactic one. (Another observation we can make is that in many varieties the mid vowels before /r/ are actually lax, rather than tense.)
       Moving to the 'real' diphthongs (i.e. those sounds which are also diphthongs from the point of view of the phonological criteria just outlined), the picture is slightly less clear, mostly because heavy diphthongisation (i.e. extreme lowering of the first half of the diphthong) is also found outside of the Holland-Utrecht area. Furthermore, the traditional dialects of Amsterdam and The Hague had monophthongal realisations of /ɛi/: [a:] in the former case (Daan 1948) and [ɛ:] in the latter (Elias 1977, 2002).
       Diphthongs have been studied quite intensively in the so-called West-Frisian dialects (a group of Holland dialects with Frisian roots); this is true in particular for the

equivalent of the Standard Dutch [ɛi] sound, spelled *ij* when it is etymologically a long high vowel or *ei* if it is not. In some West-Frisian dialects (such as that spoken in the town Opperdoes) this etymological distinction is retained: *ij* sounds as [aj] and *ei* as [ɔj]. Pannekeet (1991:131) says that in other dialects the split is more related to syllable structure: [aj] is the variant used in open syllables, whereas closed syllables have [ɔj] (see Jansen 2010 for a similar effect on Ameland). I have the impression that this picture is slightly idealised, and alternations like the following are not exceptionless in any dialect (furthermore [ɔj] can also be found in other Holland dialects, such as Volendam; see Van Ginneken 1954).

(5)   *lijken* 'to seem' [laj.kə] – *(ik) lijk* 'I seem' [lɔjk]

The issue has gained some relevance since the publication of Stroop (1998) in which it is argued that a new variety of Dutch is arising, called Polder Dutch. The main characteristic of this variety is a diphthongisation of mid vowels and a lowering of the onset of 'real' diphthongs. According to Stroop, the change is led by young, professional women, and did not have a clear regional basis; yet, Stroop does not provide a strong empirical basis for these claims. More recently, Jacobi (2009) provides a thorough investigation into the topic, using material mostly from the Corpus Gesproken Nederlands (CGN, Corpus Spoken Dutch -- see http://www.tst.inl.nl/cgndocs/), and concluding that there seems indeed a change going on, which cannot be clearly allocated to a specific region or a gender, but which does seem to be led by higher socio-economic classes. Given the design of the CGN, the conclusions about the regional basis should be taken with some care, however, as Jacobi indicates. In any case, our previous discussion clearly shows that both vowel-related phenomena were present in the rural dialects of Holland and Utrecht before the rise of Polder Dutch. It is of course possible that the latter is an independent, later development – Stroop suggests that lowering of the initial part is a natural movement for vowels to make and that does not seem an absurd claim – but given the economic and social strength of these dialects, the idea that we may be dealing here with a modern instance of "Holland expansion" (Kloeke 1927) cannot be excluded either.

2.1.3. Schwa as a reduced full vowel

Many dialect descriptions of individual dialects note that there is much more reduction in Holland (and Utrecht) dialects than in the standard language. For instance, Van Ginneken (1954) gives the following examples for Volendam:

(6)   *r*[ə]*m*[ə]*tiek* 'rheumatism', *ab*[ə]*dant* 'abundant', *g*[ə]*rdijn* 'curtain'

It should be noted that in the modern phonological literature on Dutch (Kager 1989, Booij 1995, Ernestus 2000) very similar data are often discussed as if they are part of the (informal) standard language.
       It could be interesting to have a precise phonetic survey of ways in which /ə/ is realized phonetically in different regions. We find informal observations in the literature; for instance that schwa is realized as rather front in The Hague, except that the

combination with a final /r/ merges to [ʁ] (*vad*[ʁ] 'father'). Overdiep (1940:90) has a particularly poetic description of schwa in Katwijk (a town at the Northsea coast) and the Holland dialects in general (my translation):

> "Even if the stressless syllable at the end of an affective or emphatic sentence is accentuated, as in the 'sung' or 'chanted' language of the fishermen at sea during their activities, when they are calling another ship or commanding each other, /ə/ sounds like the ordinary *u* of *hut* [i.e. [ʏ]]. Yet /ə/ is the 'tonal' basis of phrasal rhythm and intonational form in every Holland dialect. It's the ever sounding 'voice' in the Hollander's way of talking: supple and rattling, yet also monotonous, musical but also nagging."

At present we would have more precise instrumental means to test claims such as this one: the soundfiles of the GTRP database could form a starting point, but unfortunately, this acoustic work has not been done yet.

2.2. Consonants

2.2.1. Velar fricatives

Another phonetic property which the Holland and Utrecht dialects have in common, is a very back, almost uvular pronunciation of the velar fricative. There is not a lot of concrete data available about this phonetic difference in the literature, for instance because the relevant databases do not show enough phonetic detail to explore the issue directly, but indirectly we can find some evidence. In particular, uvular fricatives are very difficult to produce with voicing (Van de Velde 1996).[2] Now there are many dialects, especially in the Netherlands, in which the contrast between voiced and voiceless fricatives is phonetically blurred, in particular in word-initial position. What is quite specific for Holland dialects, however, is that voiced fricatives even no longer occur in typical voicing contexts, i.e. intervocalically or between a sonorant and a vowel. FAND maps 123 (*dragen* 'to carry'), 139 (*volgen* 'to follow') and 140 (*morgen* 'tomorrow') illustrate this point: we only find voiceless realisations of the fricatives in those positions.

It should be noted that the voiceless realisation of all fricatives is almost a shibboleth for Northern Holland dialects, and in particular Amsterdam. Yet FAND points out that other fricatives do not display a similar behaviour: /v/ and /z/ tend to be voiced in similar positions, even in dialects which elsewhere have no voicing contrast any more (this may thus be a case of intervocalic voicing). Furthermore, hypercorrections are sometimes reported for /f/ and especially /s/ (saying [z]*uiker* for *suiker* 'sugar'), but not for the velar fricatives.

It is also worth observing that also in this case the phonetic merger of voiced and voiceless (velar) fricatives has not been completely phonologized yet. One process which is sensitive to the voicing specification of (stem-final) fricatives is allomorph selection:

2

       Interestingly, it is sometimes observed that /r/ is pronounced as a voiced uvular fricative [ʁ] ; Fehringer 1999 claims that this is the case for the Amsterdam dialect.

-te is chosen after voiceless obstruents, *-de* is elsewhere. The verb *vlaggen* 'to flag' with an underlying voiced fricative still chooses the *-de* allomorph (*vlagde*), while *lachen* with an underlyingly voiceless segment chooses *-te* (*lachte*), even if both fricatives are realized in exactly the same way.

A completely different aspect of velar fricatives is that they are not always found after *s*; for instance West-Frisian (Pannekeet 1991), Katwijk (De Vink 2004) and Volendam (Van Ginneken 1945) have maintained the (original) [sk] cluster in words like *skool* 'school', and not shifted to [sx]. See FAND IV map 123.

2.2.2 T-insertion and n-insertion

Variable deletion of /t/ is all but specific for Holland and Utrecht dialects, as Goeman (1999) has demonstrated. As a matter of fact, in FAND IV we find for instance much more deletion of suffixal /t/ (denoting third person singulars of verbs, as in *hij hang(t)* 'he hangs' in the east of the Netherlands than in the region which is under discussion here. For some regions – in particular the city dialect of Utrecht – it has been noted (Scholtmeijer 1997, Van Oostendorp 2001) that the deletion of /t/ (7a) is mirrored by a process of /t/ insertion (or *paragoge*, (7b)):

(7)   a.   Optional /t/ deletion: *da*(*t*) `that', *Uterech*(*t*) (toponym), *soor*(*t*) 'type'
        b.   Optional /t/ insertion (after sonorants): *dubbel*(*t*) 'double', *enkel(t)* 'only',
brommer(t) 'motorized bike'

Since both processes are optional, one could say that the choice between which of the two we consider to be real in the dialect (i.e. if we assume underlying t with deletion or underlying zero with insertion) is arbitrary from a synchronic, dialect-internal point of view. In the example in (7) it has been motivated by comparison with other dialects and etymology: I categorized the examples in (7a) as deletion because the /t/ is there in other varieties, and those in (7b) as insertion, because it is not. The insertion cases seem to be found only after sonorants.

Scholtmeijer (2002) reports that after word-final /m/ we can also find a [p] rather than a [t]: *glom(p)* 'glimmered' (etymologically this is a strong past tense form *glom* with a paragogic segment -- a phenomenon which he plausibly understands as place assimilation.

It is my impression that similar phenomena can be found elsewhere in the region. For instance, Heestermans (2008) reports /t/ deletion and insertion in Leiden, with an extra twist: /t/ is also deleted before /s/ (8a); furthermore, according to Heestermans, /t/ insertion is found only in contexts after /s/ (8b):

(8)   a.   *praa(t)s* 'chat', *koe(t)s* 'charriot'
        b.   *gas(t)* 'gas', *kans(t)* 'chance'

Heestermans claims that fricatives can also be optionally deleted before /s/: *sunda(χ)s* 'on Sunday', *stij(f)sel* 'starch'.

Interestingly, in (older varieties of) Utrecht we can also find traces of something similar involving /n/: this consonant is optionally deleted after schwa, but also optionally

inserted after that vowel when it occur in hiatus position. The former process happens in a very large area of the Dutch-speaking world, the latter is more typical of eastern varieties of Dutch (and German),.

(9) a. Optional /n/ deletion: *bovə(n)* 'up', *dekə(n)s* 'blankets', *bə(n)zine* 'petrol'
     b. Optional /n/ insertion: *beurdə(n)ik* 'I earned'

Scholtmeijer (1997) suggests that the existence of this phenomenon classifies Utrecht partly as a rather 'eastern' dialect, but Overdiep (1940) gives examples also from Katwijk (at the Northseacoast, which means the westernmost border of the Netherlands). Also Van Bree (2004) gives similar examples for Zuid-Holland, but without references. He also observes that in auxiliaries /n/ can also be deleted after full vowels: *ben je* 'are you' [bɛjə], which again is something that might have a larger geographic spread.

As to the Katwijk dialect, Overdiep (1940) makes one further observation that is also interesting. He claims that insertion of /t/ (or /d/ word-internally) can have an 'affective or emphatic' effect. As an example, he mentions that the superlative of *innelek* [ɪnələk] 'close to the coast' (presumably from *inner* 'inner' + adjectivizing *lijk*) is *indelekst*.

2.2.3 Voicing assimilation

A process in the city dialect of Utrecht which has received some attention even in the international phonological literature (Bakovic 2007) is voicing assimilation. This phenomenon (Scholtmeijer 1997, 2002, Van Oostendorp 2001) is spectacular for two reasons. First, it seems that both voicing and voicelessness spread (regressively, from the stem to a proclitic); secondly, the voicing can spread across schwas:

(10) a. /də pstɔːr/   'the priest'   [tə pstɔːr]
      b. /də bɑkər/   'the baker'   [də bɑkər]
      c. /tə prɔːtə/   'to talk'   [tə prɔːtə]
      d. /tə bɑkən/   'to bake'   [də bɑkə(n)]

Not many cases are known in the literature where voicing assimilation can cross a vowel; Bakovic (2007) analyses the New Julfa dialect of Armenian (Vaux 1998) in this way, but I am not aware of other cases (indeed Bakovic uses the Utrecht evidence to argue that this Armenian dialect is not alone in having this type of process).

2.2.4. n+coronal obstruent

A well-known historical phonological process in (mostly) Holland has been velarisation of /n/ after a back vowel and before a coronal obstruent (Van den Berg 1943, Boekenoogen 1897, Daan 1985, 1995, 1997, Hoeksema 1999). An example is [hɔŋt] for *hond* 'dog' or [hɑŋt] for *hand* (id.) One strange thing about the phenomenon is that it seems to have been very widespread in rural Holland in the 17th century, when it was used as a kind of sociolinguistic marker by playwrights who wanted to characterize peasants, but it has all but disappeared since then. Daan (1950) still observed the

phenomenon in Wieringen Dutch and Mittelmeijer (1959) claims to have heard it from a 14-year old in Amsterdam. Overdiep (1940) found a few lexicalized relics in Katwijk, and De Vos (2009) reports it for the dialect of Charlois (close to Rotterdam). Van Oostendorp (2000) gives an analysis of data from most of these sources in terms of Optimality Theory and autosegmental phonology.

The phenomenon had a counterpart of palatalization after front vowels in the 17th century, at least in Waterland, or to be even more precise: at least in the rendering of the Waterland dialect by the comic playwright Bredero. Van Ginneken (1935:312) summarizes as follows (my translation; I also replaced Van Ginneken's orthography by IPA at the relevant points; it should be kept in mind that this is my interpretation):

"Next to [ɑŋd]er *(ander* 'other'*), br*[ɑŋk]t (*brandt* 'burns'), d[ɑŋk]sen (*dansen* 'to dance'), ged[ɑŋ]st (*gedansd* 'danced'), [...] h[ɔŋ]derd (*honderd* 'a hundred'), h[ɔŋ]kt (*hond* 'dog'), m[ɔŋk]t (*mond* 'mouth'), [...] all after velar vowels, as can be seen, after palatal vowels we find k[iɲ]t(s) (*kind* 'child'), D[iɲ]sdaechs (*dinsdags* 'on Tuesday'), l[iɲ]de (*linde* 'linden'), ontb[iɲ]den (*ontbinden* 'decompose'), k[ij]eren (*kinderen* 'children') from k[ɛiɲ]eren en I[iɲ]en (*Indiën,* India)."

I have no indications that the palatalisation can still be found anywhere in the area. On the other hand, things still happen in /Vnd/ and /Vnt/ clusters. Van Ginneken (1954) notes that in Volendam there has been a diphtongisation of certain vowels (/ɑ/ in Volendam, /ɪ/ in Monnikendam) before clusters of this type:

(11) Volendam: l[ɑj]nt 'land', t[ɑj]nt 'tooth', d[ɑj]nse 'dance'
       Monnikendam: w[ɑj]nt 'wind', b[ɑj]nde 'bind', w[ɑj]nter 'winter'

Yet another effect, noted by J. Berns in Spaans (2004) for the coastal dialect of Scheveningen is deletion of 'd' in forms such as *vinnen* 'to find'.
The effect of the cluster that is most active in the present age seems to involve mostly the vowel. Schatz (1987) observes that short vowels before such clusters are lengthened and nasalized, while the nasal consonant itself may disappear or be just barely pronounced; a similar observation is made by Pannekeet (1995) for West-Frisian. See also Hinskens & Van Oostendorp (2004, 2006) for an overview, also outside of the Dutch-speaking area proper.

2.2.5. R

Like in other regions, there is a lot of variation in the production of the /r/ sound, ranging over [r, ɻ, ʀ, ɻ, ʁ, j] and many others. In my view, it is very difficult to say anything about this variation given our current state of knowledge: the sources are very impressionistic, not necessarily consistent with each other and one gets the impression that the phonetic realisation is in a state of constant flux. It would be necessary to have precise acoustic and articulatory measurements, but these are simply lacking. An interesting feature of most dialects is that more vocalized or weakened allophones of the rhotic can only be found in coda position:

(12)   *raar* 'strange' [raːʁ, raːr, *ʁaːʁ, *ʁaːʁ]

The exception is the city dialect of Leiden, which has a rhotic that can possibly be described as retroflex in all positions ([ɻaːɻ]; Wortel 2002).

2.2.6. H

Older descriptions of dialects report absence of *h* for many of them. E.g. Lafeber (1967) says that the present generation in Gouda pronounces this sound, but earlier generations did not. FAND maps 214 and 215 show that the phenomenon can be found at most in a few coastal dialects at present (Gouda is a town right in the heart of Holland, so not close to the coast).

A very intriguing observation (hitherto neglected in the literature) concerning the *h*-less variety of Gouda has been made by Lafeber (1967). He showed that there are quite a few phonological differences between a word like *hout* 'wood' [ɑut] with an etymological *h* and a word like *oud* 'old' [ɑut] without such an etymology. According to all criteria it looked as if *hout* type words started with a consonant (similar to what we know of *h aspiré* in French; I will therefore refer to words of this type as *h aspiré* here as well). Here are a few of Lafeber's observations.

First, word final plosives are (often) voiced when the following word starts with a vowel:

(13)   a.   Laa je an[t] sakke 'Let your hand go down'
        b.   Au je an[d] op 'Raise your hand'
        c.   Eij gee[f] meij boeke 'He gives me books'
        d.   Eij gee[v] en boek 'He gives a book'

However, this is not the case if the following word starts with an *h aspiré:*

(14)   a.   da[t] êêle zaakie 'that whole affair'
        b.   Eij gee[f] em en boek 'He gives him a book'

Interestingly, the final [t] of the negation marker *niet* is insensitive to the presence of *h aspiré* and voices anyway:

(15)   a.   nie[d] oud 'not old'
        b.   nie[d] ange 'don't hang'

Another indication for the *h aspiré* status is that schwas do not get deleted before words with an *h aspiré:*

(16)   a.   nââ d' overkant   'to the other side'
        b.   nââ d[ə] ôôge kant 'to the high side'

It looks thus as if, at least in Gouda, there were still some phonological markers of the historical presence of [h] in the first half of the twentieth century (when Lafeber conducted his study). A clearly pronounced [h] has now filled that position.

The sandhi status of intervocalic voicing, which so far was instrumental in order to establish the presence or absence of (initial) /h/, has also been noted elsewhere in the Holland area. Overdiep (1940) mentions it for Katwijk. In (17a), the [d] is a reflex of the inflectional ending which would normally be transcribed as /t/. However, also here an *h aspiré* can block the voicing (17b) and cf. (14) above:

(17)   a.   't Huisje stae[d] an de Noortkant.
               The house is standing on the Northern side
       b.   Dauw[t] em weg!
               Push him away!

2.3. Prosodic phenomena

Generally speaking, Dutch dialects do not show a lot of systematic differences in syllable structure or higher-order prosody (the Limburgian dialects show tonal alternations, but even those can be seen as mere segmental interpretations of general prosodic differences; see Hermans, Ch. 18 in this volume.)

There is most probably one important distinguishing feature, which is intonation. Reading dialect descriptions, one finds references to the 'singsong' intonation that many Holland and Utrecht dialects are supposed to have. It is very unfortunate that we do not presently dispose of any published research into this matter.

I know of one description of a metrical aspect of a Holland dialect which is a little different from what we know in the standard language, and presumably other Dutch dialects. This concerns compound stress in West-Frisian. Compound stress in general seems to be a matter of dialectal variation, but Pannekeet (1995) notes that there seems to be some regularity in the exceptionality of stress in West-Frisian. According to Pannekeet, "rather many compounds in West-Frisian have word accent on a different syllable than in corresponding or similar Dutch words. Characteristic of West-Frisian is that in many cases (...) word stress is on the (pre)final syllable." Similar stress patterns can be found in Frisian. In particular this would be the case for compounds "of which the first component is a concrete noun describing objects in and around the house":

(18)   keuken-d ' eur 'kitchen door'
         kelder-tr ' ap   'cellar stairs'
         kamer-l ' amp 'room lamp'

Another category are 'dialect compounds' (presumably, compounds which have no direct equivalent in the standard language; it strikes me that the examples which Pannekeet mentions either could also fit in the previous category or describe human beings):

(19)   *keuke-kl ' eidje*   'kitchen cloth'
         vraaigezellem ' oid   'bachelor girl' (probably: spinster)

3. Desiderata

Very little is known about the sound structure of Holland dialects. Part of the reason for this is that they have not been taken as seriously as the dialects of other regions by dialectologists, which in turn may have been caused by the fact that they are less 'exotic' to the student of standard Dutch — if only for their relative structural closeness to it. They mostly also do not attract the attention of amateurs to the same degree as other dialects, possibly because there is less dialect awareness in these regions. There thus is much to be desired for the person who is interested in these regions, but given the fact that this interest is not widespread it is not clear that those desires will soon be satisfied. In this section, I will give a few suggestions about the most obvious gaps, and ways in which these can be filled.

It should be observed, first, that phonetic studies are all but absent in this region. People interested in phonetic regional variation do sometimes record Randstad speakers as subjects, but only as a benchmark for 'standard' language. This means that next to nothing is known about the real regional variation. Two important databases which may be of help in this respect are the GTRP database and the Soundbites database, both at the Meertens Institute (see Barbiers & Goeman, Ch. 34 in this volume for discussion). Two of the questions which might be adressed are:

- What is the precise realisation of individual segments which are known to vary, such as /r/, schwa, the velar fricatives and the tense vowels?

- What are the characteristic intonational patterns of these dialects? For instance, the patterns of Rotterdam and those of Amsterdam are impressionistically very different, but there is literally no literature on this. (This also holds for all other regions in the Dutch language area, with Limburg as the only exception.)

Secondly, we have very little knowledge of anything going on in rural areas which are not either (a) on the coast or (b) in West-Frisia; let us say in the towns of Alkmaar in Noord-Holland or Alphen aan den Rijn in Zuid-Holland. These are simply white spots on our linguistic maps. Some fieldwork has been done here and there for larger fieldwork projects such as RND and GTRP, but nothing exists that goes into these dialects in some more detail, like a monograph or a grammatical sketch.

Thirdly, even within the areas (a) and (b), just mentioned, and even in the current situation, there is probably still a wide range of phenomena to be studied. We have seen various phenomena above that are quite curious from a typological perspective, such as the voicing assimilation across schwas in Utrecht, the sandhi voicing blocked by *h aspiré*, the multitude of phenomena involving nasal plus obstruent clusters, and the diphthongisation of mid vowels. Holland and Utrecht together host five vibrant linguistic departments (at Leiden University, Utrecht University, the VU University Amsterdam , the University of Amsterdam and the Meertens Institute), so there may be at least some linguists there who develop some interest in the local language varieties. All of these topics deserve further scrutiny. There is still a lot of work to be done.

4. References.

Bakovic, Eric. 2007. A revised typology of opaque generalisations. *Phonology* 24 (2007) 217–259.

Berns, Jan. 2002. *Amsterdams.* Den Haag: Sdu. Taal in Stad en Land. Met medewerking van Jolanda van den Braak.

Berns, Jan. 2004. *Noord-Hollands.* Den Haag: Sdu. Taal in Stad en land. Met medewerking van Sanne Steusel.

Boekenoogen, G.J. 1897 *De Zaansche volkstaal.* Leiden

Booij, Geert. 1995. *The Phonology of Dutch.* Oxford: Oxford University Press.

Brouwer, Dédé. 1989. *Gender variation in Dutch. A sociolinguistic study of Amsterdam speech.* Dordrecht: Foris.

Daan, Jo. 1948. *Hij zeit wat. Grepen uit de Amsterdamse volkstaal.* Amsterdam: KNAW.

Daan, Jo. 1950 *Wieringer land en leven in de taal.* PhD Dissertation, Universiteit van Amsterdam.

Daan, Jo. 1985 Sociolecten en stijlen bij Bredero. *Spektator* 14: 254-260.

Daan, Jo. 1995 Sociolecten in de achttiende eeuw. In: José Cajot, Ludger Kremer, Hermann Niebaum (eds.) *Lingua Theodisca. Beiträge zur Sprach- und Literaturwissenschaft. Jan Goossens zum 65. Geburtstag.* Münster/Hamburg: LIT, 263-269.

Daan, Jo. 1997 Stads- en buitenlui. Typering door velarisering. In: Ariane van Santen en Marijke van der Wal (eds.) *Taal in tijd en ruimte. Voor Cor van Bree bij zijn afscheid als hoogleraar Historische Taalkunde en Taalvariatie aan de Vakgroep Nederlands van de Rijksuniversiteit Leiden.* Leiden: SNL, 183-191.

De Wilde-van Buul, G.. (1953). Het enclitisch pronomen van de 2e en 3e persoon singularis in het Rotterdams. *Tijdschrift voor Nederlandsche taal- en letterkunde* 62: 2090-301.Elias, Michael. 1977. *Plat-Haags : een verkennend onderzoek naar enkele aspekten van het taalgebruik en de taalattitude van mannelijke Hagenaars in en om de Schilderswijk.* Amsterdam: Universiteit van Amsterdam, 1977.

Elias, Michael. 2002. *Haags.* Den Haag: Sdu. In samenwerking met Ton Goeman.

Fehringer, Carol. 1999. *A reference grammar of Dutch.* Cambridge: Cambridge University Press.

Goeman, Ton. 1984. *Klank- en vormverschijnselen van het dialect van Zoetermeer.* Amsterdam: P.J. Meertens-Instituut.

Heestermans, Hans. 2007. *Het Leids woordenboek.* Leiden: selexyz Kooyker.

Hinskens, Frans, and Marc van Oostendorp. 2004. 'Coronale nasaal-plosief clusters in de Nederlandse dialecten. Een verkenning'. In: Caluwe, J. de & M. DeVos & J. van Keymeulen (ed.).*Schatbewaarder van de taal. Liber amicorum Johan Taeldeman.* Gent : Academia Press, 2004, pp. 519-545.

Hinskens, Frans, and Marc van Oostendorp. 2006. 'De palatalisering en velarisering van coronale nasaal-plosief clusters in GTR. Talige, dialectgeografische en onderzoekerseffecten'. In: *Taal en tongval*: 58 (1), 103-122.

Hoeksema, Jack. 1999 Velarisatie van /n/ in plat Hollands. *TABU* 94-96.

Jacobi, Irene. 2009. On variation and change in diphthongs and long vowels of spoken Dutch. PhD Thesis, University of Amsterdam.

Jansen, Mathilde. 2010.

Kager, René. 1989. *A Metrical Theory of Stress and Destressing in English and Dutch*. [Linguistic Models, 14.] Dordrecht : Foris Publications

Kloeke, G.G. 1927. De Hollandsche expansie in de zestiende en zeventiende eeuw en haar weerspiegeling in de hedendaagsche Nederlandsche dialecten: Proeve eener historisch-dialectgeographische synthese

Lafeber, A.P.M. 1967. *Het dialect van Gouda*. Gouda: Oudheidkundige kring 'Die Goude'.

Martens van Vliet, B.J. 2000. De vollekstaol van de stad Uterech. Woorden, gezegdes, uitdrukkingen en zinsneden. Utrecht: Stichting Publikaties Oud-Utrecht. Met medewerking van Harrie Scholtmeijer.

Mittelmeijer, J. 1959. Taalkundige observatie van de schoolgaande jeugd in de Jordaan. BA Thesis, Nijmegen.

Overdiep, G.S. 1940. *De volkstaal van Katwijk aan Zee*. Antwerpen: De Standaard Boekwinkel. Met medewerking van C. Varkevisser.

Pannekeet, Jan. 1991. Het Westfries. Inventarisatie van dialectkenmerken. Wormerveer: Stichting Uitgeverij Noord-Holland.

Schatz, Henriëtte. 1986. *Plat Amsterdams in its social context. A sociolinguistic study of the dialect of Amsterdam*. Amsterdam: P.J. Meertens-Instituut.

Schatz, Henriëtte. 1987. *Lik op stuk. Het dialect van Amsterdam.* Den Haag: BZZTôh.

Scholtmeijer, H. 1997. Aspecten van de klank- en vormleer van het Stad-Utrechts. In: B.J. Martens van Vliet *De vollekstaol van de stad Uterech*. Utrecht: Stichting Publikaties Oud-Utrecht.

Scholtmeijer, Harrie. 2002. *Utrechts, Veluws en Flevolands*. Den Haag: Sdu. Taal in Stad en Land.

Spaans, Piet. 2004. *De spreektaal van de Scheveningse kustbewoners*. Den Haag: De nieuwe Haagsche.

Stroop, J. 1998 *Poldernederlands, waardoor het ABN verdwijnt.* Bert Bakker, Amsterdam.

Van Bree, Cor. 2004. *Zuid-Hollands. Hollands tussen Haringvliet en IJ*. Den Haag: Sdu. Taal in Stad en land.

Van den Berg, B. 1943. Boers en beschaafd in het begin der 17e eeuw. *De Nieuwe Taalgids* 37: 242-246.

Van den Berg, B.. 1959. *Het dialect van Zandvoort en zijn plaats in de Hollandse dialecten*. Amsterdam: Noord-Hollandsche Uitgeversmaatschappij.

Van Ginneken, Jac. 1935. De correlatie van harde en weeke medeklinkers in het Oud- en Nieuwnederlandsch. *Onze Taaltuin* 3.10: 302-317

Van Ginneken, Jac. 1954. *Drie Waterlandsche dialecten. Deel I. Grammatica, phonologie, klankleer*. Alphen aan den Rijn: Samsom. Bezorgd door A. Weijnen.

Van Oostendorp, Marc. 2000a. *Phonological Projection.* Berlin: Mouton de Gruyter.

Van Oostendorp, Marc. 2000b. Wieringse nasaalvelarisering. *Taal en Tongval* 52.1, 2000, 163-188

Van Oostendorp, Marc. 2001. Coronalen in het stad-Utrechts en de structuur van het fonologisch woord. *Taal en Tongval*, 123-145

Van Oostendorp, Marc. 2002. *Rotterdams*. Den Haag: SdU. Taal in Stad en Land.

Van Veen, T. (1964). *Utrecht tussen oost en west. Studies over het dialect van de provincie Utrecht*. Assen: Van Gorcum.

Vaux, Bert (1998). *The phonology of Armenian*. Oxford: Clarendon.
Vink, Leendert de. 2004. *Dialect en dialectverandering in Katwijk aan Zee*. PhD Dissertation, Leiden University.
Vos, Stephan de. 2009. *Sjaarloos woordenboek.* Rotterdam: Stichting Historisch Charlois.

Wortel, Dick. 2002. *Leids.* Den Haag: Sdu. Taal in Stad en Land.