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Variation in the realization of /ɛi/ by Dutch youngsters: from local urban dialects to emerging ethnolects?[1]

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Abstract

How do speakers of current Turkish and Moroccan ethnolects of Dutch deal with phonemes that do not exist in their heritage languages and that are at the same time subject to pronounced regional and social variation in the Dutch speech community at large, such as the Dutch diphthong /ɛi/? This diphthong does not occur in Turkish and Berber and it occurs only as a dialectal allophone in certain dialects of Moroccan Arabic.

Data from speakers from the Amsterdam and Nijmegen urban areas are studied. In the Amsterdam dialect, the diphthong is traditionally subject to monophthongization and lowering, yielding realizations as [æ:] or [a:], while in Nijmegen the diphthong is only subject to monophthongization, resulting in the variant [ɛ:]. Recently, a new lowered, diphthongal variant [ai] entered colloquial spoken standard Dutch. Therefore, ethnolect speakers have a wide range of variants to 'choose' from: the traditional standard Dutch variant [ɛi], the new variant [ai], which is expanding areally and socially, and the monophthongal variants of the surrounding urban dialects.

Two variable properties of /ɛi/ are examined: (1) height of the prominent first element, and (2) the degree of monophthongization. The urban dialect features which had developed into sociolect features over the past generations appear to be undergoing social redistribution to become ethnolect markers.

1 Introduction

Ethnolects are a new domain in the study of language contact and bilingualism, where they have so far mainly been looked at from an ethnographic angle (see Section 2 below). The present contribution focuses on analyzing patterns of linguistic variation from a language centred, sociolinguistic perspective using quantitative tools to analyze patterns of linguistic variation.

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The past and present-day emergence of Dutch ethnolects is detailed in Hinskens (2011) and Muysken (2013); among the historical ethnolects is Jewish Dutch, while Surinamese Dutch is one of the modern ethnolects. In this contribution, we present findings from a recent research project based on data from speakers of Moroccan and Turkish ethnolectal varieties of Dutch living in the cities of Amsterdam and Nijmegen. These ethnolectal varieties of Dutch originated in labour migration which occurred in the 1970s (Hinskens 2011; Muysken 2013). Moroccan-Dutch and Turkish-Dutch are, therefore, 'immigration varieties'. Both ethnolectal varieties have been investigated by several researchers, with Dorleijn & Nortier (2006), El Aissati, Boumans, Cornips, Dorleijn & Nortier (2005), Nortier & Dorleijn (2008), van Krieken (2005), van Lier (2005) all giving overviews of some features of Moroccan-Dutch and Turkish-Dutch. Other researchers have investigated these new ethnolects in relation to the notions of stylization and identity (cf. Flanders: Jaspers 2006, 2008; Jaspers & Aertsen 2004; Netherlands: Nortier & Dorleijn 2008).

In previous research, we reported a dental, voiced /z/ as a characteristic of the Dutch ethnolects of Turkish-Dutch and Moroccan-Dutch speakers in the cities of Nijmegen and Amsterdam (van Meel, Hinskens & van Hout, in press). This dental realization has its origin in the Moroccan languages and is not part of the dialectological and/or sociolinguistic patterns of variation of traditional endogenous Dutch.

In the present study, we use the same corpus to investigate how speakers of current Dutch ethnolects deal with Dutch phonemes which do not occur in the heritage languages involved, but are marked by intricate regional and social stratification patterns in varieties of Dutch. A phoneme that unequivocally meets these criteria is the Dutch diphthong /ɛi/ that belongs to the set of three diphthongs of modern Dutch, all of which are mid-high closing, the first element being the prominent one. Such a diphthong does not occur in Turkish and Berber and does not belong to the phoneme inventory of the Moroccan Arabic dialects either (see Sections 3.2 and 3.3 below). Therefore, its absence from the heritage languages involved seems to preclude substrate effects.

The Dutch diphthong /ɛi/ can be pronounced in varying ways. A first relevant distinction is the one between the urban dialects of Amsterdam and Nijmegen (i.e. the two cities of our study). In Amsterdam, this diphthong is subject to monophthongization and lowering, leading to realizations as [æ:] or [a:] (Brouwer 1989; Schatz 1986). In Nijmegen, the diphthong is just subject to monophthongization, leading to the variant [ɛ:] (van Hout 1989, 1999); both variants have low overt (and no covert) prestige. A second relevant distinction concerns the spoken standard variety. From the early 90's onwards, a new variant of the diphthong /ɛi/ has been observed in colloquial

standard Dutch: the lowered, diphthongal variant [ai]. This change in the colloquial standard Dutch pronunciation of /ɛi/ has been claimed to have been propelled by well-educated young women and is seen by some linguists as typical of a new, relatively informal standard Dutch variety called 'Polder Dutch' ('Poldernederlands', cf. Stroop 1998). This variant also serves as the perfect 'compromise' between traditional dialect variants (which are subject to generally ongoing processes of dialect levelling – Hinskens, Auer & Kerswill 2005), on the one hand, and the variant which is in line with the standard norms, on the other. All this means that ethnolect speakers have a pool of variants they can 'choose' from: the traditional standard Dutch variant [ɛi], the new, expanding variant [ai], and the local monophthong variants marking the dialects of Amsterdam and Nijmegen.

By the end of the 19th century, standard Dutch had started to take root in oral usage in the higher status groups. As a result, especially urban dialects increasingly became sociolects, marked by a socially stratified linguistic continuum between the urban dialect and standard Dutch. Nowadays, urban dialects are spoken in their most pronounced form in the low-income neighbourhoods of Nijmegen and Amsterdam (cf. Brouwer 1989; Schatz 1986 for Amsterdam; Van Hout 1989, 1999 for Nijmegen) and their prestige is relatively low.

Former immigrants from Turkey and Morocco and their families typically live in densely populated neighbourhoods with cheaper housing, lower incomes, higher unemployment rates and reduced access to infrastructure. Growing up in these areas situated at the lower ends of the socio-economic continuum brings the second and third generation immigrants into contact with peers of Dutch descent who use urban dialect as their native speech in the neighbourhood as well as in school. This situation of long-lasting intensive exposure seems to be an ideal context for youngsters with a different ethnic background to converge to the surrounding local urban dialect. If they did not simultaneously develop or adopt additional ethnic linguistic markers, they would become undistinguishable from 'white' speakers of the local urban dialects. However, if at the same time their white peers were decreasing the distance to the standard language by using more standard language features, then local markers would become ethnic markers. The end effect would be a social-cultural redistribution of variants: urban accent variants would become ethnic markers.

The main question we will try to answer is whether /ɛi/ is involved in processes of local redistribution. We will test the assumption that the variation patterns in the realization of the diphthong will have their main origin in the local urban dialects of Nijmegen and Amsterdam. Since these local urban dialects are socially stratified plus the norms for spoken colloquial standard Dutch are changing, we *hypothesize* that

1. white Dutch boys will target the more prestigious standard forms of standard Dutch (local divergence, upward convergence toward the standard norm),
2. leaving the traditional dialect to the ethnic groups (local convergence towards the socially low prestige urban dialect). Urban dialect variants become part of the ethnolects. This would amount to a two-step resetting of the social distribution of the variation in the realization of /ɛi/. Local dialect variants would, thus, change from sociolectal to ethnic markers. Since there is no reason to expect any substrate effects with respect to the realization of this diphthong, we hypothesize
3. that there will be no differences between both ethnic groups, resulting in a multi-ethnolect feature (inter-ethnic convergence).

The design of our database (which will be presented in Sections 4.1 and 4.2 below) enables us to test our hypotheses, taking into account the role of linguistic conditions (the linguistic embedding, including substrate effects), and the way variation may play an active role in face-to-face interaction (style shifting dependent on the interactional embedding, determined by the background of the interlocutor).

In this contribution, we first will zoom in on the ethnolect concept and some of the main recent studies (Section 2), the different realizations of /ɛi/ and sketches of the phonetic and phonological characteristics of the diphthong /ɛi/, of its variants in the Amsterdam and Nijmegen dialects, and its nearest neighbours in the languages at issue (Section 3). The methods are discussed in Section 4, followed by a presentation of the main results in Section 5. Section 6 contains the discussion and conclusions.

2 Ethnolect: concept and scholarship

There has been heated debate on the definition of the notion of ethnolect and its relation to concepts such as youth language and nativized varieties. The notion of ethnolect was introduced in the late 1970's to refer to "the English of the descendants of immigrant families long after their original language is lost" (Carlock & Wölck 1981, via Wölck 2002: 157). Danesi (1985: 118) has defined ethnolect as "the variety of a language that results when speakers of different ethnolinguistic backgrounds attempt to speak the dominant language (e.g. Chicano English)". Unlike dialects, koinès (or 'regiolects'), and other homegrown varieties of a language, and unlike most transplanted varieties,[2]

[2] I.e. varieties of a language which are spoken in a community outside the original speech community, such as the descendants of Dutch dialects spoken in Iowa (Smits 1996).

ethnolects typically are not the mother tongue of the first generations of speakers. Unlike transplanted varieties and 'daughter languages', as products of language shift, ethnolects commonly develop in the language area or at least in the interaction with native speakers of the language. Ethnolects are not necessarily learners' varieties as many speakers have a command of the standard variety. For such speakers, it is not a matter of not being able to speak the standard, but rather of not wishing to speak the standard variety in certain domains or settings.

Most definitions of the ethnolect concept are stipulative (rather than descriptive); they do not describe empirically established distinctive features, rather, they are conventions on what is meant by that notion. Clyne (2000: 86), for instance, has defined ethnolects as "varieties of a language that mark speakers as members of ethnic groups who originally used another language or distinctive variety". Androutsopoulos (2001: 2) defined an ethnolect as "a variety of the majority language (or 'host language') which is used and regarded as a vernacular for speakers of a particular ethnic descent and is marked by certain contact phenomena". According to Auer (2003: 256), "an ethnolect is a way of speaking (a style), which by the speakers themselves or by others is associated with one or more non-German ethnic groups" [our translation]. In Auer's conception, an ethnolect (also) concerns grammar, as opposed to the known innovations of youth language, which does not. Muysken (2013) describes more such oppositions; in his view, ethnolects are more or less stable and their usage is at most semi-conscious; ethnicity plays an inherent role; and the features involved are phonology and syntax. In Muysken's view, youth language is dynamic and its usage is (semi-) conscious; ethnicity plays a role only temporarily and the features are usually lexical and pragmatic in nature (cf. Auer 2003: 256). Youth language[3], thus, seems to be more of a register or even jargon.

With regard to the functional dimension, the question arises as to whether ethnolects are Mediums for Inter-ethnic Communication or rather Mediums for Community Solidarity, in Baker's (2000) terminology. In the latter case, ethnolects will probably function mainly or merely as in-group codes; in that case, the emblematic value of the ethnolectal variants, which are often quite distinct from the prestigious norm, is mainly defined by their signaling ethnic identification and solidarity. This is line with Benor's (2010: 160) concept of ethnolinguistic repertoire "as a fluid set of linguistic resources that members of an ethnic group may use variably as they index their ethnic identities".

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[3] Dutch: jeugdtaal. The late modern urban manifestations are also referred to as straattaal, lit. 'street language'; cf. Van Lier 2005.

Features which originated in the language contact situation underlying the development of a specific ethnic variety sometimes spread to other ethnic groups to become (what has been referred to as) 'multi-ethnolect' features (Clyne 2000; Quist 2000; Wiese 2009, 2013). Multi-ethnolect features can also be stabilized second language acquisition phenomena and they, thus, need not be specific to any ethnic group. An example is variation in the marking of Dutch grammatical gender (Hinskens, van Hout & van Wijngaarden 2014).

Generally, two approaches to the study of ethnolectal variation can be distinguished: the language centred and the ethnographic approach. Whereas the ethnographic approach conceives language systems as infinite resources from which speakers may freely[4] choose to construct their identity, the language centred approach tries to disentangle the laws, generalizations and restrictions on these resources, with a distinct emphasis on linguistic embedding. Terminology such as 'ethnolect', 'multi-ethnolect' and 'multicultural variety' is characteristic of the language centred approach. This approach, which highlights features of linguistic structure, their origin and distribution, is quantitative – often in the Labovian tradition. The features' patterns of use are usually viewed from a rather macro-social angle (e.g., Hoffman & Walker 2010; Cheshire et al. 2011). The ethnographic approach, in contrast, which stands out by terminology such as 'style' and '(pan-) ethnic style' (see Kern 2011: 9 and the reference cited there), is typically couched within the Gumperzian concept of style as a comprehensive and 'weak' concept. In this view, styles have a prototype organization. Accordingly, 'ethnic ways of speaking' are seen as "rather fuzzy phenomena with some core linguistic features and more variable features at the boundaries" (Kern 2011: 9). Styles are not determined; they are continuously being constructed as socially and interactively significant products (cf. Eckert's (2008) view that ethnolects are fluid rather than fixed entities). Both reactive and initiative uses of linguistic and paralinguistic features are analysed; in the latter case, speakers proactively select from various linguistic resources – possibly for the purpose of changing the situation or presenting themselves in a certain way. The angle is micro-social and interpretive (e.g., Benor 2010; Keim & Knöbl 2007; Kern & Selting 2011). In contrast to the language centred approach, in the ethnographic approach language change is not a central concern.

What is also illuminating is the diverging view on ethnicity characterising both approaches. Whereas the language centred approach tends to employ an 'etic', 'objective' definition of ethnicity (operationalized through variables such as language, race, and descent), the ethnographic approach typically applies an 'emic', 'subjective' definition of ethnicity as a social construction, in which perception plays a crucial role as well.

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[4] Linguistically free, i.e. without discernable internal conditioning – as in the structuralist concept of 'free variation'.

3 The /ɛi/ in the languages involved

Some of the earlier mentioned studies discuss the diphthong /ɛi/. According to El Aissati et al. (2005: 162), members of the first generation of Moroccan and Turkish speakers realise the sound as [e:i], [ɑi] or [a:i], while the second generation speakers in their study used the plain standard Dutch [ɛi]. Referring to El Aissati et al. (2005), Nortier & Dorleijn (2008) discuss the language use of Moroccan Dutch of the second generation; the authors point out that "their pronunciation of tense vowels and diphthongs is consistent and indistinguishable from native speakers" (p. 130). Van Krieken (2005: 62) carried out a pilot study of variation in the realisation of /ɛi/ in Moroccan Dutch in Nijmegen. Only 11.8% of the cases were monophthongized, i.e. [ɛ:] (cf. the sketch of the dialect of Nijmegen in Section 3.1.3), and she did not find any style effects for the variable /ɛi/. In this section, we overview the /ɛi/ in the languages involved.

3.1 *Dutch*

3.1.1 *Standard Dutch.* Dutch has one reduced vowel (/ə/) and fifteen full vowels (excluding loan phonemes) which can be subdivided into five lax vowels (/ɛ, ɪ, ʏ, ɑ, ɔ/), seven tense vowels (/i, y, a, u, e, o, ø/) and three diphthongs (/ɛi, œy, ɔu/) (Booij 1995; Gussenhoven 1999). The three diphthongs can be defined as sequences of two non-identical vowels (Booij 1995). The two vowels within a diphthong only differ in height. The first vowel has the features [-high] and [+mid], and the second one [+high] and [-mid] (Booij 1995). Graphic representations can be seen in Gussenhoven (1999: 76) and (based on acoustic measurements) in Van der Harst (2011: e.g. 328). Phonologically, the two elements of the diphthong are identical with respect to [back] and [round], i.e. the diphthong /ɛi/ is [-back] and [-round]. The diphthongs must be distinguished from vowel + glide combinations such as /ɑj/ that occur in a few Dutch words such as *mais* /mɑjs/ 'corn' (Booij 1995).

In Dutch, the diphthong /ɛi/ can be represented orthographically in two ways: <ei> and <ij>, since two etymologically and phonologically distinct historical vowels have merged in the dialects which were eventually promoted to standard Dutch. While the written forms may have distinct lexical meanings, as in *reizen* 'to travel' and *rijzen* 'to rise', the pronunciation is homophonous, i.e. [rɛizə]. The distinction in writing is due to the fact that in an older historical phase, <ei> was pronounced as [ai] and <ij> as [i:] (cf. Spiegel 1962 [1584]: 20, 26). From the second half of the 16th century onwards, a standardization process took place in the Low Countries (cf. van der Wal 1992) and the two sounds merged, resulting in Standard Dutch [ɛi]. In other words, the distinction between <ei> and <ij> is etymological and orthographic. However, in many Dutch dialects the distinction between <ei>

and <ij> is still phonological (cf., e.g., maps no. 56, 57, 60, 61 of the "Fonologische Atlas van de Nederlandse Dialecten (FAND)" [Goossens, Taeldeman & Verleyen 2000]).

As noted in Section 1, Stroop (1998) noticed a lowered variant of the diphthong /ɛi/ pronounced mainly by well-educated young women in standard Dutch. He dubbed the standard language variety spoken by these women 'Polder Dutch'.[5] This process of a lowering diphthong had already happened in the languages of our neighbours: English and German as well as in a subset of Hollandic dialects. These languages have a diphthong starting with a low front vowel [aɪ], i.e. compare English <wine> [waɪn] and German <Wein> [waɪn] with Dutch <wein> [wɛin].

Applying acoustic analyses, Jacobi (2009) examined the Dutch diphthong /ɛi/ in the Spoken Dutch Corpus (Oostdijk et al. 2002), a large corpus of standard Dutch in which many speakers with different backgrounds participated. She found that there was no difference between men and women in her study, and she therefore rejected Stroop's hypothesis that women are leading (however, see van Heuven, van Bezooijen & Edelman 2005 for a finding which is line with Stroop's claims). Jacobi did find differences between social classes. Speakers with a strong educational and occupational background were found to have both a lower onset and stronger diphthongization than speakers with a more limited educational background.

3.1.2 *The local dialect of Amsterdam.* The Amsterdam vernacular is characterized by (a) lowering of the prominent first element of the diphthong and (b) monophthongization. Example (1a) shows an example of pure monophthongization. In examples (1b) and (1c), lowering took place in addition to the monophthongization; in addition (1c) shows retraction.

(1) Examples of the Dutch word [pɛin] 'pain' pronounced in the dialect of Amsterdam (Brouwer 1989: 29–30; Schatz 1986: 65):

a) /ɛi/ → [ɛ:]	[pɛ:n]
b) /ɛi/ → [æ:]	[pæ:n]
c) /ɛi/ → [ɑ:]	[pɑ:n]

3.1.3. *The local dialect of Nijmegen.* In the Nijmegen dialect, /ɛi/ used to be pronounced as /i(:)/. Nowadays, however, this old variant hardly occurs in spontaneous speech anymore[6] (van Hout 1989: 86–87). Instead, the standard Dutch variant [ɛi] is used, as well as a monophthongized variant (see 2b).

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[5] More on Polder Dutch on Stroop's website: http://cf.hum.uva.nl/poldernederlands/english/main_engels.htm, http://cf.hum.uva.nl/poldernederlands/index.html.

[6] In reading tasks, the old variant [i(:)] certainly is no longer used (van Hout 1989).

(2) Examples of the Dutch word [pɛin] 'pain' pronounced in the dialect of Nijmegen:

a) /ɛi/ → [ɛi] [pɛin]
b) /ɛi/ → [ɛ:] [pɛ:n]

3.2 *Turkish*

Turkish has eight phonemic vowels: /a, ɯ/ı, o, u, e, i, ø/œ, y/. Turkish does not have diphthongs with phonemic status (cf. Comrie 1997; Göksel & Kerslake 2005; Kornfilt 1997; Lewis 2000 [1975]). Swift (1963: 11) states that "Turkish has a few diphthongs", but he does not include them in the list of phonemes. This statement seems to be grounded in the observation that "most vowels may be followed by /y/ [i.e. [ɪ], LvM] with a diphthongal result much like the diphthong sound of English *say*".

3.3 *Moroccan languages*

Morocco is a multilingual country. Both Moroccan Arabic and Berber languages are used as mother tongue(s) by Moroccans (cf. El Aissati et al. 2005: 150; El Aissati & E-rramdani 2001: 63).

Moroccan Arabic consists of several dialects which are mutually intelligible. The Berber languages can be divided into three main groups: 1. Tarifit, 2. Tachelhit (also written as Tachelhiyt or Tashelhiyt), 3. Tamazight (Central Atlas). These three language groups are not mutually intelligible.

According to a rough estimation by El Aissati et al. (2005: 150), some 60 percent of Moroccans in the Netherlands speak Tarifit, 10 percent speak Tachelhit and the remaining 30 percent speak a Moroccan Arabic dialect as their mother tongues.

In the next two sections, the vocalic phonemes as well as the diphthong /ɛi/ are discussed for Moroccan Arabic and for the Berber languages Tarifit and Tachelhit.

3.3.1 *Moroccan Arabic.* The dialects of Moroccan Arabic have three full vowels in common: /i/, /u/ and /a/, which are considered to be vocalic phonemes. Besides these phonemes, there are many vowel allophones which can vary among dialects (Abdel-Massih 1973: 23 lists about 12 of them).

Moroccan Arabic also has diphthongs or diphthongal elements, but the dialects differ in their realization and structural status. A diphthong in one dialect can correspond to a monophthongized element in another; e.g. different forms for 'eggs' (Heath 2002: 199) are *bayṭ* (northern, Jebli), *bəyḍ* ~ *bǎyḍ* (rural belt, Atlantic strip), *biḍ* (urban belt), and *bǎyð̣ [bɛ:ð̣]* (Saharan dialects). If a dialect has the diphthongal element *ay*, it depends on the dialect whether it has phonological status (Heath 2002: 197). In some dialects, the

short diphthongs {*ey ew*} and {*ăy ăw*} are often pronounced as [e:], [o:], [ɛ:] or [ɔ:], but, according to Heath (2002: 198), "a diphthongal phonemic representation {*ăy ăw*} still seems appropriate". Other dialects with diphthongal elements have long diphthongs with a full /a/ vowel {*ay aw*}. In other words, if dialects have diphthongal elements, these elements can be either short, i.e. *ey ew ăy ăw*, or long, i.e. *ay aw*. These six diphthongal elements are also mentioned by Harrell (1962: 14–15, 1965: 8) who describes their pronunciation. According to Abdel-Massih (1973: 31), Moroccan Arabic has five diphthongs: *aw, ay, iy, iw, uw*.

3.3.2 *Berber.* The dialect variation in the Berber phonological systems is large. Just like Moroccan Arabic, most Berber dialects have three vocalic phonemes: /i/, /u/ and /a/ (Kossmann & Stroomer 1997: 463). Lafkioui (2007: 17) also mentions these three 'voyelles de base' for the varieties of Tarifit (i.e. 'variétés berbères du Rif'): /i/ is pronounced basically as [ɪ] and in certain conditions as [ɪˈ], [e] or [eˈ]; /u/ is basically realized as [ʊ] and in specific contexts as [ʊˈ] or [o]; /a/ is basically pronounced as [æ] or [ɛ] and in particular environments as [æˈ], [ɛˈ], [a], [ʌ] or [ʌˈ]. McClelland (2008) also states that there are three vocalic phonemes in Tarifit, but instead of /a/, he claims the third vocalic phoneme is /æ/ (i.e. the three are /i/, /u/ and /æ/). He lists ten 'vocalic phones' that are known for this dialect group (McClelland 2008: 26).

As regards diphthongs, Lafkioui (2007) and McClelland (2008) do not list any, and Kossmann & Stroomer (1997) explicitly claim that there are no diphthongs (and that Berber does not have vowel clusters either).

4 Methods

4.1 *Participants*

Table 1. Overview of the research design and the number of participants

Background	Moroccan-Dutch		Turkish-Dutch		white Dutch			
Inter-ethnic ties?	Yes		Yes		Yes		No	
Years of age	10–12	18–20	10–12	18–20	10–12	18–20	10–12	18–20
Amsterdam	3	4	3	4	2	3	3	3
Nijmegen	3	3	3	3	3	3	4	4

Data were collected from 51 youngsters from three different groups: Moroccan-Dutch, Turkish-Dutch and white Dutch. The groups were controlled for age (10–12 versus 18–20 years old), residence (Amsterdam vs. Nijmegen) and, in the case of the white Dutch speakers, the presence or absence of regular contacts with Turkish-Dutch and Moroccan-Dutch friends. Table 1 presents the speaker design.

The participants with a Moroccan or Turkish background were born in the Netherlands and have at least one parent who immigrated from Morocco or Turkey respectively. All participants grew up in their place of residence (either Amsterdam or Nijmegen). The Dutch group was separated into two groups, those with ethnic ties and those without, that is those who have friends in their social networks with a Moroccan or Turkish background or not. We will refer to the participants with Moroccan and Turkish backgrounds as Moroccan-Dutch and Turkish-Dutch . The two groups with an entirely Dutch background will be referred to as white Dutch, i.e. either with (D-group) or without inter-ethnic ties (C-group).

Due to unanticipated complications during the fieldwork sessions, there is only scant information available about the language skills and linguistic profiles of the speakers in our sample. The information available is detailed in van Meel, Hinskens and van Hout (in press). In short, all Turkish-Dutch speakers reported knowledge of Turkish and all Moroccan-Dutch speakers reported knowing either one or more of the Moroccan languages. No reliable information regarding the speakers' relative proficiencies in the languages mentioned is available – nor in the varieties of the languages mentioned.

4.2 *Material and data*

The participants had free conversations of about one hour with a partner. Each conversation involved two peers of the same age group (either two 10–12 year olds or two 18–20 year olds).

The speakers with a white Dutch background with inter-ethnic ties as well as those with a Moroccan-Dutch or Turkish-Dutch background were recorded in at least one in-group conversation and two different out-group conversations. In an in-group situation, the conversation partner was a peer from their own ethnic group, while in the out-group situations, they talked with a peer from the other two ethnic groups. The recordings last about one hour for each pairing, so for each of these speakers in total approximately three hours of conversational speech were recorded.

The white Dutch participants with no inter-ethnic ties (C-group) were merely recorded in in-group conversations with fellow Dutch participants that equally have no inter-ethnic ties. They serve as the control group for the white Dutch participants with strong inter-ethnic ties (D-group).

The majority of the speakers attended the same school as their conversation partners, and many of them were classmates (especially so in the case of the 10–12 year olds). The interviewer was only present at the beginning and the end of the conversation to ensure a more natural conversation. However, especially so in the case of the 10–12 year olds, additional guidance was

needed to keep them talking for one hour (i.e. suggesting topics to talk about, introducing card games).

The conversations were recorded on a Marantz Professional CD recorder CDR300. Ten to 15 minutes of each recording was transcribed using the multimedia annotator Elan (cf. Brugman & Russel 2004). These transcriptions were checked by a second transcriber.

The first three minutes of each conversation were skipped to give the participants some time to get used to being taped and pay less attention to their way of speaking. We defined a set of criteria to select proper /ɛi/ words, excluding variation (e.g., shortening) that was not relevant in investigating patterns of monophthongization and lowering. The /ɛi/ words had to meet the following criteria:

1. /ɛi/ must be followed by a plosive or a fricative.
2. /ɛi/ must have either primary or secondary stress.
3. No /ɛi/ from the suffix *-heid* was selected as this is a frequent derivational affix which never has main stress.
4. Words with an orthographical <ij> or <ei> which according to the standard norms are not realized with [ɛi] were excluded (e.g. *bijzonder* /bizɔndər/ 'special', *vriendelijk* /vri:ndələk/ 'friendly').
5. Reduced realizations were excluded as well (e.g. *zijn* 'are/to be' reduced to *z'n* [zən], *altijd* 'always' reduced to *alt'*).
6. To ensure the data were not biased by a specific high frequency word, a word was selected at most three times for a given speaker in a given conversation.
7. Words which were read from, for example, (news)papers and magazines were not taken into account.
8. Words which were uttered in an (intentionally) conspicuous way were not selected either. For the most part, these were imitations.

From each conversation, 6 to 13 /ɛi/-words per speaker were selected, with a mean of 9,89.

4.3 Variants and coding

The transcription and coding of the realization of /ɛi/ was done by the first author. The realizations were rated for height of the first, prominent element and for the degree of monophthongization. The height of the first, prominent

element was coded on a four-point scale and the degree of monophthongization on a three-point scale.[7] Both scales are shown in Table 2. An /ɛi/ pronounced according to traditional Standard Dutch norms, i.e. [ɛi], (see Section 3.1.1) was coded as height 2 and monophthongization 1.

Table 2. Coding schemes for (a) height and (b) monophthongization

(a) Height			(b) Monophthongization	
1	e or ɪ	(mid-)high / close	1	No monophthongization (Clear diphthong)
2	ɛ	Mid	2	Slightly monophthongized (Minor diphthong)
3	æ or ɑ	mid-low / near open	3	Monophthongized
4	a	low / open		

The reliability of the coding was tested by having 261 realizations coded by a second rater, a trained phonetician, who did not know the previous ratings. The realizations were coded by the second rater in their original context. These realizations were selected from the in-group data of the 20-year-olds. Realisations by younger speakers were not analysed, as their higher voices may cause problems in carrying out acoustic analyses. This resulted in six to twenty /ɛi/s per speaker. The inter-rater reliability was checked by calculating Cronbach's alpha. The reliability value was high (.888) for height and had an even higher value (.951) for monophthongization.

Acoustical measurements were carried out. To this end, two realizations of /ɛi/ per speaker were selected from the realizations that had been checked by the second rater. The selected realizations had to meet the criterion of being scored identically by the first and the second rater. From each speaker, two tokens of the vowel /a/ and two tokens of the vowel /i/ were also selected. The word in which a token occurred was either a noun, a verb or an adjective, and the vowel (a) was followed by an obstruent, (b) occurred in a stressed syllable, and (c) was not reduced audibly. Six vowels per speaker were measured using the default settings for measuring formants in Praat (Boersma & Weenink 2010).[8] The vowel /ɛi/ was measured at 25 and 75 percent of the duration of the vowel (cf. van der Harst 2011). The vowels /a/ and /i/ were measured at 50 percent of the duration. The outcomes of the analysis of Praat were checked

[7] Originally, we had a four-point scale, distinguishing shortened and normal monophthongized variants. In the analyses, we excluded the shortened forms.

[8] In these settings, at first the frequencies above 50 Hz are pre-emphasized, resulting in an amplification of +6 dB for the frequencies around 100 Hz, +12 dB for the frequencies around 200 Hz, and so on. Thereafter the Burg-algorithm is applied to a Gaussian window with a length of 25 ms, which shifts every 10 ms, to obtain the actual formant estimation. The cut-off frequency was set to 5000 Hz and the number of LPC coefficients used is 10.

manually. Pearson correlations showed a strong correlation of .801 between the F1 at 25 percent of the duration and the scores on height. They showed a correlation of .802 as well between the acoustical measure of monophthongization and the expert scores on monophthongization. This relative measure was computed by taking the absolute diphthongization of the /ɛi/-realization, i.e. the F1 at 25% minus the F1 at 75%, and dividing this by the difference of the minimum and the maximum value of F1 of the vowels (at 25% of the duration of /ɛi/ and at 50% of /a/ and /i/); a score of 1 means a consistent use of diphthongs, etc. The acoustic measurements underlined the validity of the rater scores.

In addition to height and monophthongization, the /ɛi/ tokens were coded as well for several linguistic conditions: (1) IJ-EI – i.e. whether /ɛi/ is etymologically/orthographically <ij> or <ei>; (2) word class – i.e. whether the word was a content word or a function word (pronouns and prepositions); (3) open vs. closed syllable – i.e. whether /ɛi/ was in an open or closed syllable; (4) LOG frequency – i.e. the log of the frequency of the citation forms. This latter measure was calculated by adding up the frequencies of all related tokens in the spontaneous conversations and telephone dialogs of the Spoken Dutch Corpus (Dutch Language Union 2004) that belong to the same citation form (lemma) and then applying a logarithmic transformation to the frequency of the citation form.

4.4 *Data analyses*

The data for the auditory ratings concerning height and monophthongization of /ɛi/ were analyzed in order to establish the effects of the factors we defined, in particular the four social factors. We start the analysis with an overall analysis of the performance of the four speaker groups, including the age and city distinctions. The mean value over all tokens was computed per participant. The results will be presented in histograms, followed by an analysis of variance, to evaluate the impact of age, city and the background of the speaker. In the next step, we turn to the impact of the background of the interlocutor. In presenting the results, we first focus on the three groups that interacted with three different interlocutors, excluding the C group (white speakers with no inter-ethnic ties). We will present figures to gain a good impression of the outcomes. The statistical analysis carried out was a repeated measures analysis of variance.

In the final statistical analysis, we included all groups and all factors, applying a mixed model analysis, starting with the social factors. The four linguistic factors as described in Section 4 were included indirectly in this analysis, by controlling them by using citation form (lexical entry) as a random factor. The impact they have will be discussed in the final analysis, where

they are added as separate factors. Implementing the linguistic factors will turn out not to influence the role of the social factors. The outcomes for monophthongization will be presented in Section 5.1, those for height in Section 5.2.

Section 5.3 combines the dimensions of monophthongization and height in a multidimensional scaling analysis which was carried out in order to uncover the position of speakers relative to each other. The aim is to gain an insight into the distribution of the speakers in recognizable subgroupings.

5 Results

5.1 *Monophthongization*

Fig. 1 summarizes the outcomes of monophthongization for the two cities, Amsterdam versus Nijmegen, split up for background of the speaker and age.

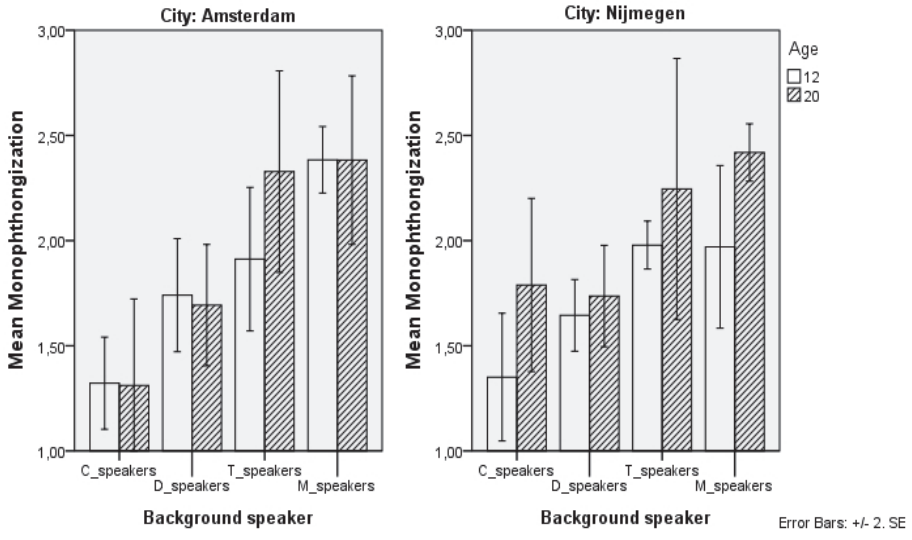

Fig. 1. The mean monophthongization scores in Amsterdam (left) and Nijmegen (right), split up for the background of the speaker and the two age groups; the higher the values the more monophthongization. The C and D speakers are the white Dutch speakers with no inter-ethnic ties (C) and strong inter-ethnic ties (D). The T speakers are Turkish-Dutch; the M speakers Moroccan-Dutch. The speaker variation within the groups is indicated by the error bars.

Fig. 1 shows that the differences between the cities are small overall. In both cities, the white Dutch groups have the lowest scores. No differences between the Turkish-Dutch and Moroccan-Dutch group seem to exist.

The ANOVA results confirm our impression. There is no main effect for city ($F < 1$) and a strong effect for the background of the speaker ($F(3,35) =$

18.617, p=.000, partial eta squared = .615). There is a moderate overall age effect as well (F(1,35) = 4.789, p=.035, partial eta squared = .120), indicating higher monophthongization scores for the 20-year-olds. None of the four interaction effects was significant.

The effect for speaker background was investigated in more detail by applying a post hoc analysis (Tukey HSD). The post-hoc analysis makes plain that statistically there are but two groups: white vs. 'non-white'. Speakers with a Dutch background have a mean monophthongization value of 1.46 (no ethnic ties) and 1.70 (strong ethnic ties), respectively, while the Turkish-Dutch and the Moroccan-Dutch speakers have 2.13 and 2.30 respectively. Therefore, both groups of white Dutch speakers differ significantly from the Turkish-Dutch as well as from the Moroccan-Dutch speakers. The Turkish-Dutch and the Moroccan-Dutch speakers do not differ significantly.

What happens when we include the background of the interlocutor (white Dutch, Turkish-Dutch and Moroccan-Dutch)? Fig. 2 summarizes the behaviour of the three groups of participants with inter-ethnic ties (D, T and M) in each of the three conditions.

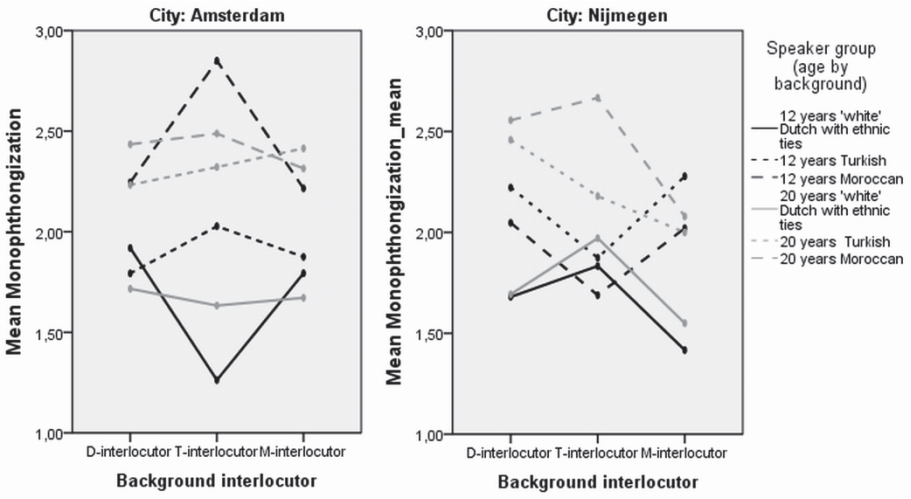

Fig. 2. Mean values of monophthongization in Amsterdam (left) and Nijmegen (right) for the three interlocutor conditions: D is white Dutch, T is Turkish-Dutch, and M is Moroccan-Dutch. The values are given for six groups, i.e. age by background speaker.

For all groups of Amsterdam speakers, the values for the monophthongization indexes in interactions with white Dutch interlocutors hardly differ from those in interactions with Moroccan-Dutch ones. Talking with somebody with a Turkish-Dutch background, however, triggers either the lowest monophthongization indexes (12 and 20-year-old white Dutch speakers) or, on the contrary, the highest ones (almost all other groups of speakers).

For all groups of Nijmegen speakers in conversations with Moroccan-Dutch interlocutors, the monophthongization indexes are lower than in conversations with white Dutch interlocutors – except for the 12-year-old Turkish- and Moroccan-Dutch speakers; for these groups the pattern is reversed. In Nijmegen, the patterns never go monotonically from white Dutch, via Turkish-Dutch to Moroccan-Dutch interlocutors – except for the 20-year-old Turkish-Dutch speakers. The 20-year-old Moroccan-Dutch as well as both the 20-year-old and the 12-year-old white Dutch speakers reach the highest monophthongization values while talking with Turkish-Dutch interlocutors.

It is remarkable that in this respect the Nijmegen white Dutch speakers give the opposite picture of Amsterdam white Dutch speakers. The same also holds for the 20-year-old Turkish-Dutch speakers. It is also striking that the Amsterdam 12-year-old white Dutch participants show clear divergence when paired with the Turkish, while the 12-year-old Moroccans show clear accommodation to the Turkish. The 20-year-olds, in contrast, do not dissociate or accommodate to the same extent.

Only in the case of the 20-year-old Turkish-Dutch speakers in Amsterdam does the variation in the monophthongization of /ɛi/ in speech towards the various groups replicate the relative production of each of those groups. Clear evidence of accommodation in the sense of audience design (Bell 1984) in other groups is scarce, however. The patterns are sometimes hard to interpret because there tend to be several effects at the same time and complex interaction effects.

In the last step of the analysis, we applied mixed model analysis on the data of all speakers and all four social variables (age, city, background speaker, background interlocutor). We started the analysis by using speaker and citation forms as random variables, with random intercepts. The resulting model had an AIC of 3328.816. Including all social variables and their interactions gave an AIC of 3288.840. Removing the four-way interaction to simplify deteriorates the AIC value which becomes 3291.457. That means that this interaction needs to be included in the model plus all other interactions and main effects. The main effects of interlocutor $F(2,1297) = 1.355$, $p = .258$, and city ($F<1$) are not significant. The main effects of background speaker ($F(3,39) = 17.870$, $p=.000$) and age ($F(1,35) = 4.945$, $p=.033$) were significant (as in the ANOVA). Three complex interaction effects produce a significance value of less than .10. These are the three-way interaction between age, city and background interlocutor ($F(2,1297) = 2.612$, $p=.074$ – not significant beyond .05), the three-way interaction between city, background speaker and background interlocutor ($F(4,1298) = 4.005$, $p=.003$) and the four-way interaction between all four social variables ($F(4,1298) = 1.955$, $p=.009$). The effects confirm the impression of specific age- and city-related

style shifting (adaptation to the background of the interlocutor, the background of the interlocutor returns in all three interaction effects).

Adding the four linguistic factors does not change the picture of the social variables. The AIC improves the best by including three linguistic factors (3283.153). Word class was left out. The significant effects were IJ-EI ($F(1,683) = 15.087$, $p=.000$), open vs. closed syllable ($F(1,683) = 5.730$, $p=.017$, and LOG frequency ($F(1,834) = 6.848$, $p=.009$). As to the nature of the effects: there is more monophthongization of etymological <ei> than <ij>, but this effect may well be brought about by single <ei> items such as *eigenlijk*, 'really, actually', which generally attract monophthongization in modern spoken Dutch. As regards the syllable position: there is more monophthongization in closed position than in open position, which makes sense from a phonotactic point of view: the second element of the diphthong is a glide which can serve as a semi-consonant closing the syllable. Monophthongization in this context would result in a long lax vowel in open position, which is a highly marked structure. Finally, monophthongization increases with the frequency of usage of an item; in so far as monophthongization is reduction, this effect is in line with usage-based models such as Bybee (2001; 2006). The fact that word class, i.e. the distinction between content words and function words, does not appear to have a significant effect may be a consequence of the fact that this distinction generally coincides with a distinction in average frequency of usage - with function words being far more frequent than content words (Frisch 2011).

Statistically, it turns out to be worthwhile to include the linguistic factors, although the model improvement is not spectacular. If one looks in more detail, it is hard to interpret the results and the significant effects seem to run parallel to the intricate effects related to the background of the interlocutor. That would lead to the conclusion that specific words are more accessible to style shifting than others. The corpus we have is unfortunately too small to investigate these interesting word-bound effects in more detail.

5.2 *Height*

Fig. 3 summarizes the outcomes for the two cities, Amsterdam vs. Nijmegen, split up for speaker background and age. The most outspoken social effect in Fig. 3 is the effect of city. For all groups, we find that the Amsterdam speakers use more open first, prominent elements of the diphthong (i.e. have a higher mean value) than the Nijmegen ones. Dutch speakers without strong inter-ethnic ties (C) in Amsterdam have a mean value of 2.81 and the C-group in Nijmegen 2.30. The Amsterdam Dutch speakers with strong inter-ethnic ties (D) have a mean value of 2.94, the C-group in Nijmegen 2.25. For the

Turkish-Dutch speakers, the values are 2.71 for Amsterdam and 2.04 for Nijmegen. The values for the Moroccan-Dutch speakers are 2.52 and 1.88 respectively. Hence, for lowering, the overall pattern is white Dutch > Turkish-Dutch > Moroccan-Dutch.

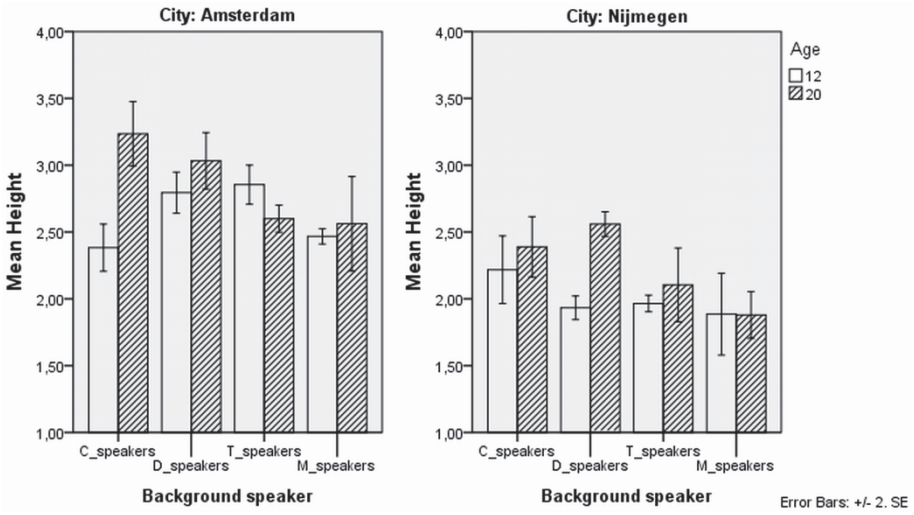

Fig. 3. The mean height scores in Amsterdam (left) and Nijmegen (right), split up for background of the speaker and the two age groups; the higher the values the more lowering. The C and D speakers are the white Dutch speakers with no inter-ethnic ties (C) and strong inter-ethnic ties (D). The T speakers are Turkish-Dutch; the M speakers Moroccan-Dutch. The speaker variation within the groups is indicated by the error bars.

With but two exceptions (Amsterdam Turkish-Dutch and Nijmegen Moroccan-Dutch), the 20-year-old speakers have higher height values (i.e. produce lower onsets) than the 12-year-old speakers.

The ANOVA results confirm our impression. There is a strong effect for city ($F(1,35) = 126.825$, $p=.000$, partial eta squared = .784). Age ($F(1,35) = 17.575$, $p=.000$, partial eta squared = .334) and background speaker ($F(3,35) = 10.277$, $p=.000$, partial eta squared = .468) are significant as well. In addition, two significant interactions were found. The first one is the interaction between age and background speaker ($F(3,35) = 6.619$, $p =.001$, partial eta squared = .362), the second one is the three-way interaction between age, city and background speaker ($F(3,35) = 5.487$, $p=.003$, partial eta squared = .320). The interaction between the age and the background of the speaker suggests more growth among the two white Dutch groups than among the Moroccan- and Turkish-Dutch: it seems that, while they grow older, there is a stronger increase in lowering of the diphthongal onset among the two groups of white Dutch speakers than among the Moroccan- and Turkish-Dutch speakers. If, however, we interpret the patterns from the point of view of apparent time change, we establish that in fact there appears to be a development away from

lowering and this tendency is stronger among the white Dutch speakers than among the Moroccan- and Turkish-Dutch speakers. The three-way interaction adds the following pattern to the one revealed by the two-way interaction: in Amsterdam, it is only the Moroccan-Dutch speakers whose lowering decreases somewhat in apparent time, while in Nijmegen only the Turkish-Dutch speakers show some apparent time decrease in lowering.

What happens when we include the language backrgound of the interlocutor (white Dutch, Turkish-Dutch and Moroccan-Dutch)? Fig. 4 summarizes the behaviour of the three groups of participants with inter-ethnic ties (D, T and M) in each of the three conditions.

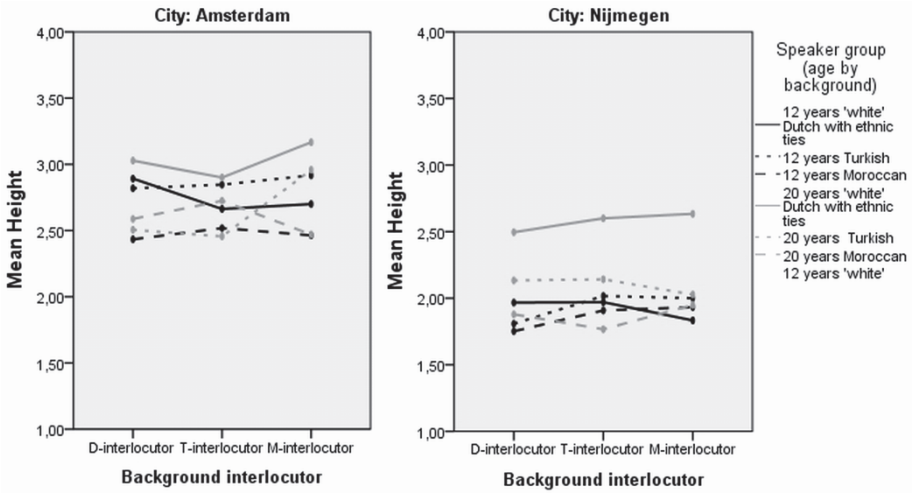

Fig. 4. Mean values of height in Amsterdam (left) and Nijmegen (right) for the three interlocutor conditions: D is white Dutch, T is Turkish-Dutch, and M is Moroccan-Dutch. The values are given for six groups, i.e. age by background speaker.

We see less obvious patterns in relation to the background of the interlocutor than for monophthongization. In both cities, the 20-year-old white Dutch have the highest scores, in particular in Nijmegen, and they perform similarly in the three conditions. That seems to also apply to the other groups.

The results from the mixed models analysis nicely confirm this picture. The AIC value of the model with two random factors (speaker, citation form) is 3299.373. Including the four social factors and their interaction, the AIC improves to 3258.971. Deleting all effects where background interlocutor is involved improves the AIC further to 3245.199. That has the consequence that the same effects remain as we had tested in the ANOVA. The results are in fact the same. Three main effects are significant: city ($F(1,36) = 115.355$, $p=.000$), age ($F(1,36) = 15.678$, $p=.000$), and background speaker ($F(1,36) = 10.237$, $p=.000$), as are two interaction effects, i.e. age by background speaker ($F(1,36) = 5.629$, $p=.003$) and age by city by background speaker ($F(1,36) =$

4.933, p=.006). We have discussed these results in relation to the ANOVA outcomes.

Adding the four linguistic factors does not change the picture of the social variables. The AIC increases (3292.857), which means that the model with only the social factors included is the best one. We found no additional linguistic effects.

5.3 *Variants*

In the previous sections, we examined height and monophthongization separately. When combining the two features (four height levels and three levels of monophthongization), there are 12 possible variants of /ɛi/. In this section, we explore the occurrence of these 12 variants. We used data from the Turkish-Dutch, the Moroccan-Dutch and the Dutch speakers with strong inter-ethnic ties as well as the Dutch with no inter-ethnic ties. At least three out of the 12 variants were used by every speaker, with a mean of 5.9 different variants. The highest number of different variants per speaker was 10 (out of 12), but this speaker used about half of them only once.

The question arises as to whether there are any group-specific effects in the distribution of the variants. A PROXSCAL multidimensional scaling (MDS) procedure with two dimensions was carried out on the percentages of used variants to find similarities between (groups of) speakers. The MDS analysis was carried out with two dimensions, as the elbow in the Scree test (to detect the number of dimensions after which the explained variance does not increase significantly) showed that two dimensions were appropriate.[9] Fig. 5 reflects the MDS analysis with each point representing one of the 51 speakers. The closer speakers are mapped, the more alike they are. Each speaker is marked for city (i.e. grey for Amsterdam, white for Nijmegen) and a white Dutch (round point) or Turkish-/Moroccan-Dutch background (square point).

The two more or less diagonal lines divide the speakers with the lowest means from the speakers with the highest means on Monophthongization and on Height.

Fig. 5 features four ‘groups’: a white Dutch group from Amsterdam, a white Dutch group from Nijmegen, a Turkish-Dutch and Moroccan-Dutch group from Amsterdam, and a Turkish-Dutch and Moroccan-Dutch group from Nijmegen. In Fig. 5, the Dutch are situated more on the top right-hand corner of the figure, while the Turkish-Dutch and Moroccan-Dutch speakers are more on the bottom left-hand corner. This confirms the outcomes of the

[9] The Stress-I was 0.13898, which is sufficient (Borg & Groenen 2005).

mixed model analyses (discussed in Sections 5.1 and 5.2 above) as these analyses made clear that the white Dutch with strong and the white Dutch with no inter-ethnic ties form one group separate from the Turkish-Dutch and Moroccan-Dutch speakers who form another group.

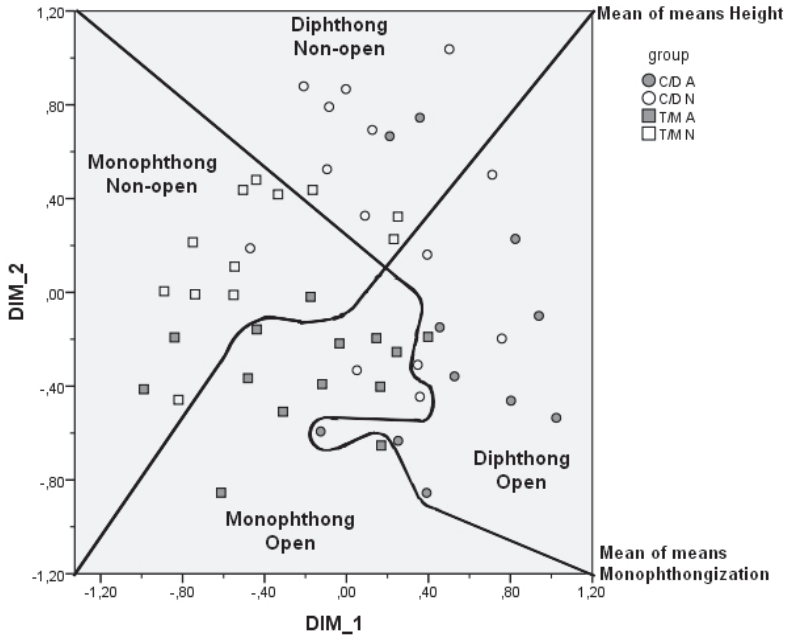

Fig. 5. Positioning the speakers in a two-dimensional space based on the MDS analysis of the usage (in percentages) of variants. A = Amsterdam, N = Nijmegen, C = white Dutch without ethnic ties, D = white Dutch with ethnic ties, T = Turkish-Dutch, M = Moroccan-Dutch.

The mixed model analysis for height also showed a clear main effect of city with the Amsterdam speakers using more open diphthongal variants than the Nijmegen speakers, who mainly use non-open diphthongal variants. This is reflected in Fig. 5 where most Nijmegen speakers occupy the top of the figure and the Amsterdam ones the bottom.

To find out what characterizes each of the four groups, we divided the speakers according to their mean scores on monophthongization (Section 5.1) and height (Section 5.2). This resulted in four groups: a group of speakers who can be characterized as using mainly diphthongs and open variants; a group of speakers who can be characterized as using diphthongs and non-open variants; a group of speakers who can be characterized as using mainly monophthongs and open variants; and a group of speakers who can be characterized as using monophthongs and non-open variants.

The four groups and the four areas match quite closely, as can be seen in Fig. 5. This is even more obvious when we look at Table 3, in which the numbers of speakers per group are crossed with the numbers of speakers per 'area'.

Table 3. Comparison of the four groups of speakers and the four areas of Fig. 5. A = Amsterdam, N = Nijmegen, C = white Dutch without ethnic ties, D = white Dutch with ethnic ties, T = Turkish-Dutch, M = Moroccan-Dutch.

	diphthong + open	diphthong + non-open	monophthong + open	monophthong + non-open	Total
C/D A	**9**	2	0	0	11
C/D N	4	**7**	2	1	14
T/M A	1	0	**10**	3	14
T/M N	0	3	0	**9**	12
Total	14	12	12	13	51

Apparently, the white Dutch speakers mostly use diphthongal variants which are closer to the standard, whereas the Moroccan- and Turkish-Dutch mostly use monophthongal variants which are characteristic of the 'traditional' urban dialects.

6 Conclusion and discussion

The variation in the realization of the diphthong /ɛi/ has several dimensions; monophthongization is sensitive to etymological distinction between <ei> than <ij> (which is phonological in several groups of Dutch dialects), the position vis-à-vis the right syllable boundary and the frequency of occurrence of the citation forms. The lowering of the first, prominent element of the diphthong does not appear to be affected by linguistic variables at all. Linguistically, this finding makes sense in that monophthongization basically changes the phoneme into a sound which is homophonous with the monophthongal phonemic counterparts /ɛ/ and /a/, whereas lowering merely has phonetic consequences.

There are also complex style effects in the variation in the realization of the diphthong /ɛi/ which are connected with the background of the interlocutor. For the monophthongization of /ɛi/ this style-as-accommodation effect is found only in the speech of the 20-year-old Turkish-Dutch speakers from Amsterdam. For lowering, only the 20-year-old Turkish-Dutch cohort from Nijmegen show this style effect.

In Section 1, three hypotheses were developed concerning the relative use of the dialectal, the standard and the younger substandard variants of the diphthong by the members of the various groups in both cities. The outcomes presented in Section 5.1 (monophthongization), 5.2 (height) and 5.3 (the overall picture regarding the distribution of the main variants) above allow these hypotheses to be tested.

According to *hypothesis 1,* the white Dutch boys will target the more prestigious standard forms of the standard Dutch (local divergence, upward convergence toward the standard norm). This hypothesis is borne out for monophthongization (Section 5.1), but not for height (Section 5.2). Underlying this development may be either generally ongoing processes of dialect levelling or a desire for upward mobility on the part of the speakers – or both.

Hypothesis 2 says that the traditional dialect variants are adopted by the ethnic groups (local convergence towards the socially 'low' urban accent). Urban accent variants, thus, become part of the ethnolects. This hypothesis, too, is supported as far as the monophthongization is concerned (Section 5.1).

The outcomes of the MDS, presented in section 5.3, show that there is indeed a very clear tendency towards a double resetting of the social distribution of the variation in the realization of /ɛi/: local dialect variants appear to be changing from sociolectal into ethnic markers.

Hypothesis 3 claims that there will be no differences between both ethnic groups, resulting into a multi-ethnolect (inter-ethnic convergence). This hypothesis is corroborated in all relevant respects; the Moroccan- and Turkish-Dutch speakers are united in their embracing the older local dialect variants of the diphthong.

In sum, there is a social redistribution going on of urban dialect features, which had developed into a sociolect feature over the past generations. The dynamics revealed on the basis of our data show that the 'traditional' urban dialects are being recycled to become an ethnolect marker. Scholars such as Rampton (2011) and Jaspers (2011) have paid attention to the mechanism that linguistic features with urban and socially low indexicalities are taken up by speakers with migration backgrounds.

In Section 2 above, we discussed various definitions of the ethnolect concept; in the same section, we also briefly sketched different approaches to ethnolectal variation. Our language-centred, quantitative approach has revealed ongoing changes in the overall social distribution of variation in the realization of the /ɛi/ diphthong, changes in which the endogenous urban dialects and the ethnolects are involved in a game of musical chairs - showing how intricately dialect variation and ethnolectal variation can be entwined.

In Van Meel, Hinskens & van Hout (in press), we presented our findings for variation in the realization of /z/ by the same speakers. Unlike /z/, and especially the 'exotic' dental variants in its realization, /ɛi/ seems not to be a main candidate sound to become an ethnolect marker, being first of all a dialect marker and a marker of ongoing change in standard Dutch. Nevertheless, it has become part of a process of redistributing the socially emblematic value of different variants, in which immigrant youngsters play the role of the savers of the local urban dialects.

Though statistically significant, both the linguistic and the stylistic effects found are weak and somewhat inconsistent and this may be a consequence of the modest number of speakers studied. A desideratum for further research is, therefore, to broaden the empirical basis of this study by including more speakers for each of the relevant groups defined by the extra-linguistic variables city, cultural background and age group.

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