Second language development in the Dutch context: First generation Turkish immigrants

GÜLSEN YILMAZ and MONIKA S. SCHMID

Abstract
This study explores the extent to which L1 (first language) versus L2 (second language) use and emotional attachments to native versus majority language and culture influence the proficiency in the L2 Dutch among the Turkish-Dutch bilinguals. The community under investigation is of particular significance because it represents the largest non-Western ethnic group in the Netherlands and it has often been discussed in the context of the group members’ ethnic and linguistic attachments as opposed to their perceived unwillingness to adopt the cultural norms and values of Dutch society. What makes this immigration setting interesting is that the shift from tolerance to startling levels of restrictiveness in policies of cultural and linguistic integration has nowhere been as fast as in the Netherlands, where successful L2 acquisition is now regarded as the primary indicator of integration. This article provides a critical analysis of the sociopolitical context in the Netherlands and the L2 development of the first generation Turkish migrants in relation to asymmetrical socio-political relations between the two communities.

Data are collected from first generation Turkish immigrants (n=45) who migrated to the Netherlands after the age of 15 and lived there for 10 years or longer and native Dutch speakers (n=39) via an elicited speech task, a lexical naming/recognition task and a sociolinguistic background questionnaire. The a set of correlation analyses reveals several links between the individual variables (i.e., L1 use in the family and with friends, L2 use at work, level of education, length of residence and cultural preference) and different aspects of L2 proficiency. However, the effect sizes of these correlations are weak to moderate. The second set of analyses applies a discriminant analysis where proficiency in the L2 has been established as one integrated score. In this analysis, only preferred language emerges as the best predictor of language development.

1. Introduction
As a consequence of large-scale mobility by international migration, integration of the immigrants into the host countries has become a central policy concern. In general, migrants of all origins are surrounded by economic, social and political pressures to integrate both linguistically and culturally (e.g., Extra & Yağmur, 2004; van Oudenhoven et al., 2006) and successful acquisition of the host country language and integration into the host society have come to be regarded as two sides of the same coin across Europe (Extra et al., 2009; Stevens, 1992). Likewise, the use of the home country language and the maintenance of strong ties with the ethnic culture is considered a sign of resistance and is seen to impede linguistic and cultural integration (Bijl & Verweij, 2012; Chiswick & Miller, 2001; Portes & Rumbaut, 2001). The
typical reality is for adult immigrants to acquire the host language through interactions in their social environments and not every one of them is fortunate enough to have the circumstances that would allow them to become fully proficient in the host society language. The eventual level of second language (L2) proficiency which an individual reaches depends on a combination and interaction of several factors as confirmed by decades of research into various language pairings, linguistic structures and modalities (e.g., input, native language, motivation, age, education, personality and so on; de Bot, 2008; de Bot et al., 2007 Herdina & Jessner, 2002).

The present study investigates which factors impact the development of Dutch L2 among Turkish immigrants who arrived in the Netherlands as adults. Where this population is concerned, identification with the Dutch language and culture have been voiced as a major source of concern, more so than for other substantial minority groups (i.e., Moroccans, Surinamese and Antilles) (e.g., Dagevos & Gijsberts, 2007). Public criticisms of perceived ‘chauvinism’ abound, for example in response to demands by some Turkish groups to reinstate the mother-tongue education programs in primary schools which were summarily abolished in 2004. It is doubtful, however, whether the widely-held stereotype of the Turkish population as refusing to engage with Dutch language and culture is both accurate and an actual obstacle to L2 acquisition. Therefore, we investigate the role of predictors pertaining to social life, cultural orientation, adherence to the traditional values and ethnic identity, as well as L1 and L2 use in informal and professional settings and demographic factors and ask to what extent these factors can accurately predict levels of L2 proficiency.

2. Acculturation in relation to L2 acquisition

the concept of acculturation denotes a two-way process within which groups of individuals with different cultures and languages are influenced by one another and transformed together by mutual intercultural contacts (Berry and Sam, 1997; Sam & Berry, 2006). For the encounter of migrant and host societies, the extent to which the immigrant group wants to preserve its cultural roots and its own language and to which the group members want to interact with the majority members is crucial in the process of the acculturation of immigrant individuals (Berry, 1997). Second language acquisition has also been predicted to play a pivotal role in sociocultural adaptation into a new society (Schuman, 1978; Ward et al., 2001; Ward & Kennedy, 1999). Depending on favorable or unfavorable attitudes, four outcomes can be identified: integration, assimilation, separation, and marginalization (Berry et al., 1986; Berry et al., 1987). Individuals who maintain their own cultural identity and also extend relations in the host society and incorporate elements of the host culture are considered to have an integrated acculturation attitude. At the opposite end is marginalization which involves weak connections with both the host society and the original culture where individuals are more oriented towards achieving personal goals. Assimilation is the preference to adopt the collective identity of the host society and abandon that of origin. The last strategy, separation, entails rejection of the key features of the host culture, preserving own cultural
heritage and limited contact with the host society (Sam & Berry, 2010). The host society, too, has a preference for one of the acculturation strategies i.e., integration, assimilation, segregation (which is equivalent to separation) or exclusion (which is equivalent to marginalisation) (Bourhis et al., 1997) depending on whether the immigrant group is valued or devalued (Montreuil & Bourhis, 2001; Sniderman et al., 2004) and whether it is a situation of economic downturn or affluence (Horowitz, 1985; Sniderman et al., 2004). Often, immigrants are aware of majority members’ perceptions and their own acculturation strategies are influenced by these attitudes towards them (Bourhis et al., 1997; van Tubergen & Kalmijn, 2005).

A major factor within the framework of acculturation that is assumed to impact the degree of language acquisition is the perceived socio-cultural distance between the immigrant and the host community (e.g., Clyne, 1991; Schuman, 1986). While shared heritage and culture between migrant and local communities promotes linguistic and social integration, differences (e.g., socio-economic background, physical appearance and religion) minimize social interactions and heighten negative sentiments between the communities (Sniderman et al. 2004). Under such circumstances, learners are predicted not to progress much beyond the initial stages of language acquisition. Likewise, adherence to own ethnic culture, a perceived threat to ethnic identity, large community size, temporary intended length of stay in the L2 country or a lower status in relation to the majority group also present obstacles to learning the target language (Schuman, 1978; 1986). On the other hand, positive attitudes towards a language and a high level identification with the L2 culture and society would facilitate learning (integrative motivation). In addition to the integrative motivation, the presence of utilitarian objectives such as economic or educational opportunities and social status (instrumental motivation) is also related to high levels of L2 achievement (e.g., Dörnyei & Ushioda, 2009; Gardner, 1985; Gardner & Lambert, 1972; Krashen, 1981; Schuman, 1986).

Among the acculturation strategies, Schuman (1986) suggests that the assimilationist strategy is the one that yields the highest level of success in L2 proficiency because original culture and language will be replaced by host society culture and language. Integration is the second best strategy to the extent that the individual interacts with the native speakers and adopts their values and way of life (in addition to hers). Indeed, social interactions with the native population and workplace socializations are reported to be of profound importance (e.g., Birdsong & Molis, 2001; Chiswick et al., 2004; Dustmann, 1994; Espenshade & Calhoun, 1993; Flege & Liu, 2001; Flege et al., 1999; Stevens, 1999; van Tubergen & Wierenga, 2011) in particular in the acquisition of the target pronunciation (e.g., Bongaerts et al., 1997; Flege et al., 1999; Flege & Lui 2001; Flege et al., 2003) supporting Schuman’s view on the role of interaction with native speakers. The role of the preinstantiated L1 on the other hand, is far from being clear. It has been assumed that it can be both conducive (positive transfer) and detrimental (negative transfer) to L2 acquisition. It is widely accepted that while learning another language, L2 learners benefit from their
existing language skills and strategies, and it has never been demonstrated that retaining use of the L1 would hinder second language acquisition (e.g., Cummins, 1981; Dustmann, 1994; Jiang, 2004; O'Malley & Chamot, 1990). This suggests that the often repeated demand by politicians that migrants should switch to the host language even in private interactions in order to integrate more quickly and easily is rather questionable.

As for the relationship between language and group identification in general, to what extent becoming competent in the L2 guarantees embracing the culture and the values of the host community and acceptance by the host society is unclear (see Collin & Karsenti, 2012; Crawford, 1995; Espinosa & Massey, 1997; Nesdale, 2002; Skronabek, 2009). For instance, in the U.S., learning English has enabled many white and Protestant Northern European migrant groups to assimilate smoothly and comparatively quickly into the Anglo-Protestant American society both linguistically and culturally; however, groups from different racial, cultural and religious backgrounds (e.g., Latinos and Asians) have often been less successful in economic and social integration though they left their native language and cultural connections behind and learned English fluently (e.g., Boyer, 2009; McDonald & Balgopal, 1998; Tolsma et al., 2012). There are also examples of immigrant groups continuing to speak their mother tongue over generations and living according to native cultural norms, but attaining high levels of linguistic integration (e.g., Mexicans, Citrin et al., 2007). On the other hand, a connection has been evidenced by a significant (negative) correlation between L2 proficiency and home culture attachment among English learners of Chinese in Canada and Hebrew and Russian learners of English in Israel (Noels et al., 1996; Ellinger, 2000, respectively). Similar associations have also been found in some phonetic studies (e.g., Gatbonton & Trofimovich, 2008; Gatbonton et al., 2011).

Besides these largely attitudinal factors, a number of personal background predictors have also been found to be important in attaining success in L2. Among these is the level of education (e.g., Chiswick & Miller, 2001; Clyne, 1991; Dustmann, 1994; Espenshade & Fu, 1997; Shields & Price, 2002; van Tubergen, 2010; van Tubergen & Kalmijn, 2009). Individuals with more schooling are better equipped with studying and learning skills which makes them better language learners. Similarly, the professional and social networks they become involved with are usually favorable environments to further improve their language skills, and their employment opportunities typically demand higher proficiency levels in the dominant language than lower skilled occupations.

A further factor associated with a good command of the host language is the duration of stay in the country of immigration (e.g., Chiswick & Miller, 2001; Dustmann, 1994; Shields & Price, 2002; van Tubergen & Wierenga, 2011). The impact of this factor is not, however, a linear one, and it is probable that 10 years is a threshold after which the time factor is no longer significant (van Tubergen, 2010). Instead, the intention to stay might be influencing the perceptions about the L1 and L2 and hence
respective motivations. Likelihood of return migration or uncertainty about future settlements and long term investments has been acknowledged to play a more prominent role than the length of stay (Chiswick & Miller, 2001; Espenshade & Fu, 1997; van Tubergen & Kalmijn, 2009).

3. The Turkish community in the Netherlands
The Turkish community is at present the largest non-Dutch ethnic group in the Netherlands. Around 400,000 Turkish immigrants live here, representing about 2.3 per cent of the Dutch population (CBS, 2010). There is a widespread belief in the Netherlands (and elsewhere in Europe) that immigrants of Turkish origin, in particular the first generation, have a relatively poor command of the majority language. Among the major non-Western migrant communities in the Netherlands, they are reported to have the most language-related problems.

In the early years of mass migration (1960s and early 1970s), Turkish immigrants usually neither had Dutch language knowledge nor any foreign language education upon their arrival but this did not matter since they were employed in low wage jobs (e.g., restaurants and production lines of factories) which required minimal language skills (Akgündüz, 2007). They did not have optimal conditions for learning Dutch (e.g., unfavorable conditions both at home and in the workplace, low availability of language training programs, few opportunities for L2 use). The partners of the migrant workers were mostly housewives who had limited or no professional skills and thus had no need to learn more than basic Dutch since they mainly interacted with family, relatives and other Turkish friends (Smets & Kreuk, 2008).

There are a number of strong assumptions about members of the Turkish community, such as that they have stronger familial, ethnic and linguistic affiliations compared to other immigrant groups in the Netherlands (Durgunoğlu & Verhoeven, 1998; Ersamılı, 2010; Yılmaz & Schmid, 2012). They are furthermore perceived as having a tendency to maintain close ties with their fellow immigrants and live in the proximity to their relatives and acquaintances (Vervoort et al., 2010; Smets & Kreuk, 2008), and to preserve relations with their hometowns with the availability of widespread immigrant organizations, community networks and mass media and the affordability of communication and travel (Backus, 2004). Despite recently increasing exogamy, spouses are still predominantly chosen from the same ethnic background (Dagevos et al., 2003; Gijsberts, 2004; Hooghiemstra, 2003). There is also the stereotype that Turkish migrants in general do not prefer to live according to the norms of the Dutch society in the family domain and in their primary network as they often find the differences in cultures too large to

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1 The size of the Turkish community is likely to be much bigger because the third generation Turkish population is not included in the government statistics as Turks because of birth country and nationality based statistics (Extra, 2005).
2 While it is generally assumed that migrants choose to live close to their countrymen and hence settle in the nearby neighborhoods, they in fact have limited options due to a strictly controlled housing market and unfavorable socioeconomic conditions (Schaake et al., 2010).
incorporate the Dutch societal norms (Backus, 2004; Boeschoeten et al., 1993; van den Broek & Keuzenkamp, 2009).

The problem with such stereotypical notions is that they fail to acknowledge the diversity within the migrant community. They are mostly based on small scale studies and do not capture within-group variation among the Turkish community (at the socio-cultural, economical and political level). Not all Turks are the same with respect to their language skills/use and lifestyle (Backus, 2004). The findings we present below suggest that, as members of the community gradually start working in diverse areas of economy and join the middle class, they come into closer contact with the Dutch people. They lead a more balanced life and are better adjusted into the Dutch society. In general, there is an increasing awareness among the community as to the importance of language skills (Dagevos et al., 2003). On the other hand, some individuals do indeed have large ethnic networks and prefer to live in concentrated neighborhoods. For some families a basic level of Turkish is enough for their children as they give priority to the acquisition of Dutch and speak mostly Dutch at home; but others speak Turkish predominantly. As for living in the Netherlands, it appears from our interactions that most members of the community consider themselves as a part of the society and the Netherlands their home. They are quite positive about living together with Dutch people and appreciate the economical benefits, political rights and freedom in the Netherlands (Gijsberts & Schmeets, 2008). They are open to closer interethnic relations (Yılmaz & Schmid, 2012) and do not regard religious differences as a problem that dissociates them from the mainstream society (Dagevos & Gijsberts, 2007; Phalet & ter Wall, 2004; Verkuyten & Yıldız, 2007).

Nevertheless, the Turkish community’s connectedness to the Dutch society, culture and language has not grown as strongly as desired by the Dutch population and government and their retention of their cultural and linguistic heritage is often interpreted as evidence for their unwillingness to integrate fully into the Dutch society. At the public level, unfavorable attitudes towards migrants and religions in general and the Turkish community and Islam in particular are widespread (ECRI, 2008; HRW, 2008; Gijsberts & Dagevos, 2009; Knippenberg, 2009; Smets & Kreuk, 2008). The prevailing expectation is that migrants should blend into the Dutch society as soon as possible (Arends-Tóth & van de Vijver, 2003; Gijsberts & Dagevos, 2010; Schalk-Soekar & van de Vijver, 2008) and otherwise the widespread orientations towards migrants is separatist (Entzinger, 2006; Kunovich, 2004; Schaake et al., 2010; Zorlu & Latten, 2007). Lack of respect and assimilative orientations on the part of the Dutch society inevitably distance the immigrants of Turkish and other backgrounds from the Dutch mainstream society (Maliepaard & Gijsberts, 2012; Verkuyten & Yıldız, 2007).

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We do not intend to undermine the findings of these studies because this is unavoidable in investigations that look into general tendencies.
Several studies have attempted to pinpoint what influences the L2 development of Turkish migrants across Europe. They revealed that in general, amount of L2 exposure, social participation in the L2 community, educational background, formal instruction, proficiency in the L1, length of residence, age at the time of immigration, co-ethnic versus local partner and presence of co-ethnics in the neighborhood (residential segregation) impact their language attainment (e.g., in the Netherlands: Ersanilli, 2010 and van Tubergen & Kalmijn, 2009; Germany: Dustmann, 1994; Ersanilli, 2010; in Belgium: van Tubergen & Wierenga, 2011; in France: Ersanilli, 2010). In addition, labor market participation (in Germany and France: Ersanilli, 2010) and settlement intentions (in Germany: Dustmann, 1994 and in Belgium: van Tubergen & Wierenga, 2011) were associated with the degree of linguistic success, too. Orientation of the integration policies in the host countries (i.e., assimilationist or multiculturalist) did not influence their L2 proficiency (in the Netherlands, Germany and France, Ersanilli, 2010).

However, it should be noted that much of the information about their language proficiency is based on evidence from surveys. As far as the Netherlands is concerned, the Institute for Social Research collects data on a large scale basis, basing their estimates of language proficiency on participants’ self-assessments. Within these studies, no actual linguistic data (written or spoken) are analyzed empirically, nor is there a detailed investigation of nonlinguistic variables that influence L2 development. Many investigations into the L2 development of Turkish immigrants mainly focused on initial stages of acquisition (e.g., Jansen et al., 1981) or on isolated aspects of language (e.g., pronominal references, Broeder et al., 1985; word formation, Broeder et al., 1993; spatial reference, Extra & van Hout, 1993; word order, Jansen & Lalleman, 1980; reading comprehension, Hulstijn & Bossers, 1992), can therefore not be generalized to overall command of the L2.

The present study investigates actual language production data from a group of individuals. Each individual is interviewed extensively about their language use patterns (L1 versus L2) both in the personal and in the professional domain, and about cultural attitudes towards the home and host society and language. Level of education, age at immigration, and length of residence in the host country were also included in the analyses.

4. Sociopolitical context in the Netherlands
Since the 1990s, Dutch policy towards immigrants of non-Western origin has become one of the toughest within Europe, and the Turkish community is one of the most strongly affected groups (ECRI, 2008; HRW, 2008). The Dutch became convinced that the liberal integration policies of the 1980s had failed, and began to perceive the multicultural society as a threat to national interests and to the very existence

4 Studies in Western Europe, too, mostly relied on interviews or questionnaires usually conducted in the L1 of the participants where they are asked to evaluate their L2 competence (e.g., in Germany: Dustmann 1994; Ersanilli 2010; in Belgium: van Tubergen and Wierenga 2011; in France: Yağmur and Akıncı 2003).
of the Dutch nation (Gijsberts & Dagevos, 2010; Sniderman & Hagendoorn, 2007). The change in policy was motivated by a concern about loss of national identity and cultural values advocated in particular by populist and conservative politicians. Right-wing contributions to the already existing public discontent have furthered the creation of a vision of immigrants as outsiders and of Islam as a threat to Dutch democracy (Bijl & Verveij, 2012). The most recent culmination of these regrettable tendencies was a widely reported incident following the local council elections in March 2014, at which the leader of the right-wing populist ‘freedom party’, Geert Wilders, asked his assembled party colleagues whether they wanted ‘more or fewer’ Moroccans in their town and in the Netherlands, and had them chant, amidst peals of laughter and applause, ‘minder, minder, minder’ (fewer, fewer, fewer).

After 2000 several measures were taken such as stricter requirements for citizenship, obligatory civic and language courses as well as more constraints on marital migration, dual nationality and the Dutch Civic Integration Abroad Act5 (de Boom et al., 2007; Entzinger, 2006; Vink, 2007). However, a sizable proportion of immigrants did not participate in the courses and many of the ones who did show no significant progress in their language ability (Klaver & Odé, 2007). The current language command of the immigrant population is reported to be below the level required by the labor market or vocational education (Gelderloos & van Koert, 2010). This can partly be attributed to the fact that the courses could not fully address the needs of migrant populations which were profoundly heterogeneous in terms of linguistic, cultural and educational backgrounds (see Vertovec, 2006). The other equally important oversight was not involving the native society in this process (see Kluzer et al., 2011).

As for the minorities’ attitudes, the increasingly tightening regulations and demands for integration, in conjunction with sentiments voiced widely by both the society in general and populist politicians led to an increase in unfavorable sentiments towards the host culture, widening the ethnic gulf. This has arguably not only impeded integration ideals but further contributed to a climate of mutual distrust between migrant and indigenous communities, in particular where Muslims are concerned (Dagevos & Gijsbert, 2007; Karina et al., 2008). Feelings of exclusion have remained high among members of various minority populations leading to a considerable decline in the amount of social contacts with Dutch society and increasing levels of ethnic identification (Dagevos et al., 2003).

In the meantime, some recent wide-scale surveys depict a more unprejudiced and tolerant profile of the Dutch society in general and of highly educated groups in particular and that more members of the Dutch society are supporting multiculturalism than before (Gijsberts & Lubbers, 2010). A number of initiatives

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5 The Act requires that foreign nationals from non-Western countries who wish to migrate to the Netherlands for marriage or to join family members must pass a compulsory civic integration test before entering the country. In 2011, the Supreme Court of the Netherlands ruled that Turkish nationals are exempt from these civic integration requirements, as the act is considered inconsistent with the Association Agreement of 1963 between Turkey and the European Union.
have been launched since the 1990s by the Dutch government, local authorities and voluntary organizations to combat social exclusion of disadvantaged groups and prejudiced attitudes among the society (van Hal, 2002). One of them is the Language Internship Instrument for Integration project by the Verwey-Jonker Institute, established in 2002 and aimed at facilitating integration processes by providing language support to immigrants and encouraging their social participation (see van Hal, 2002 for other examples). It was not easy to find academic articles or government publications about the subsequent decisions taken by the government and the apparent scarcity of such publications is hard to explain, given that the phenomenon is so prominent in the public debate. Therefore, we cannot report how these nation-wide initiatives have been put into action and whether they are being (successfully) implemented at the public level.

5. The Study
The aim of the present study is to assess the impact of the background variables predicting Dutch language proficiency among first generation Turkish migrants who have spent a considerable portion of their lives in the Netherlands. We investigated how strongly both linguistic and non-linguistic factors concerning their experiences as adult migrants and demographic characteristics can predict their Dutch language development. The following research questions are addressed:

1. Are the degree of L1 and L2 use and exposure related to the proficiency in the L2?
2. Are motivation and linguistic and cultural attitudes related to proficiency in the L2?
3. Are age of arrival, length of residence and level of education related to proficiency in the L2?

5.1. Participants
Forty-five Turkish-Dutch bilingual informants participated in this study. They consisted of migrants in the Netherlands who had learnt Turkish as their mother tongue. All participants migrated to the Netherlands from Turkey after the age of 15 and spent at least 10 years there. The recruitment process involved contacting a variety of locations commonly visited by the Turkish people (e.g., community center, mosque, supermarkets and restaurants) and building up a snowball sample through referrals within these people’s social networks. While perfect representativeness of our sample cannot be guaranteed, the variety of initial contacts and their connections still allows us to make good inferences about the larger community. Out of 45 participants 16 were educated to primary school level, 8 completed secondary school, 14 high school or vocational school and 7 university education. The scale

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6 Turkish immigrants in the Netherlands may speak Turkish, Kurdish, Arabic or Azeri (Extra & Verhoeven, 1993). For the purposes of this study, only Turks who learnt Turkish as their mother tongue were included.
7 Out of 16 participants, 3 had not completed the 5 year primary school training but they were all literate in Turkish, though their language skills were possibly not developed high enough to assist them in second language acquisition.
from 1 to 4 represents primary, secondary, high school and university respectively. The Dutch controls matched them on age, gender and education.\footnote{Since compulsory education in the Netherlands covers the secondary school, it was not possible to find perfect matches for our primary school group; so we had to take in whoever has the least amount of schooling.} Participant information is summarized in Table 1.

<table>
<thead>
<tr>
<th>Personal background variables (include controls?)</th>
<th>Mean</th>
<th>St.Dev.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>43.20</td>
<td>7.78</td>
<td>28-61</td>
</tr>
<tr>
<td>Age of arrival</td>
<td>20.39</td>
<td>5.10</td>
<td>15-42</td>
</tr>
<tr>
<td>Length of residence</td>
<td>22.15</td>
<td>7.87</td>
<td>10-35</td>
</tr>
<tr>
<td>Education</td>
<td>2.69</td>
<td>1.37</td>
<td>1-4</td>
</tr>
<tr>
<td>No. of women</td>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of men</td>
<td>16</td>
<td></td>
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</tbody>
</table>

Among the participants in the present study, 4 continued their education through vocational trainings for 1-2 years after arrival in the Netherlands and 5 of them completed their university education at the Dutch universities. Less than half learnt Dutch by self-study and practicing at the workplace through social contacts with Dutch colleagues and friends. The rest had attended language courses. There was a great deal of variation in the amount of language training they had, ranging from a couple of months to more than two years. What is common to almost everyone is that they could not attend the courses regularly due to other commitments and that the training was frequently interrupted. While it is certainly relevant to assess the impact of attending language schools in the Netherlands, the learners had great difficulty recalling the total amount of course attendance and quantifying the time they spent studying Dutch at language courses. This makes it hard to compare the learners who have attended language courses with those who have not.

\section*{5.2. Procedure}

Our data comprised reaction time measures from a picture naming (lexical) and picture matching (lexical-sound mapping) task (both in Dutch) and elicited free speech (in Dutch) (based on Schmid, 2011). Sociolinguistic and personal background information was collected through a semi-structured interview (administered in Turkish to the L2 learners and in Dutch to the controls).

\subsection*{5.2.1. Sociolinguistic and personal background information}

The personal background interview consisted of semi-structured autobiographical interviews conducted in the L1, comprising sixty-seven questions on speakers' L1 and L2 use patterns, linguistic and cultural
preferences and social networks. Among other things the participants were asked to indicate what language they usually speak with their spouses, partners, siblings, (grand)children, parents, relatives, friends and acquaintances and to quantify the amount of use of each language in various contexts (i.e., family, social settings and workplace). They were also asked how important it was for them that their children learnt and maintained their L1, how often they corrected their children’s Turkish and whether they sent them to Saturday schools⁹ to learn Turkish, how they would feel if their children could not speak Turkish and whether they would regret it if their own Turkish deteriorated. A further set of questions related to their cultural orientations and attitudes toward their home and host countries. For instance, they were asked with which culture and language they felt more at home and more comfortable, which language they preferred to speak, whether they felt themselves to be more Turkish or more Dutch, whether they had more Turkish or Dutch friends, whether they regretted coming to the Netherlands and whether they felt homesick and would like to go back to their hometowns if it was possible. For all of these questions, participants were asked to choose a value from a 5 point-scale. For instance, for the amount of L1 and L2 use, they were asked to choose among: 0 = never L1/always L2; 0.25 = seldom L1 and mainly L2; 0.50 = half the time L1 and half the time L2; 0.75 = mainly L1 and seldom L2; 1 = only L1 and never L2.

In order to reduce the large number of background variables elicited by the sociolinguistic questionnaire, we created two compound variables consisting of a number of factors that were then averaged for each migrant (following the procedure suggested by Schmid & Dusseldorp, 2010). The first pertained to interactive L1 use in all situations. This comprised predictors relating (where applicable) to the use of the L1 (now and previously) with the partner (4 items), with children (4 items), with friends (3 items), with parents and siblings (4 items) and during visits to Turkey (1 item). A reliability analysis established the internal consistency of this scale with a Cronbach Alpha of .890. The second variable pertained to cultural affiliation and comprised 4 items relating to the preferred language and culture as well as the importance of maintaining the L1 and passing it on to the next generation. Reliability for this scale was somewhat lower than for the L1 use variable, but still strong at .637. Other predictors included in the present study were the frequency of use of the L2 for professional purposes, age at emigration, length of residence and education. Table 2 shows the distribution of these predictors across our population. To illustrate the interpretation of the table, the participants tend to use L1 79 % of their time and L2 21 % of their time in their overall social interactions. They tend to value their own culture more highly and identify more with it (70%) than the host society culture (30%).

Table 2 Predictor variables

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⁹ These are also called community or supplementary schools that provide immigrant children with classes to learn their mother-tongue language and about their home country’s culture and history.
<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>St.Dev.</th>
<th>Range</th>
</tr>
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<tbody>
<tr>
<td>Interactive L1 use</td>
<td>0.79</td>
<td>0.14</td>
<td>0.37-0.99</td>
</tr>
<tr>
<td>L1 use for professional purposes</td>
<td>0.20</td>
<td>0.27</td>
<td>0.25-1.00</td>
</tr>
<tr>
<td>L2 use for professional purposes</td>
<td>0.75</td>
<td>0.29</td>
<td>0.00-1.00</td>
</tr>
<tr>
<td>Cultural affiliation</td>
<td>0.70</td>
<td>0.14</td>
<td>0.31-0.88</td>
</tr>
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</table>

5.2.2. Picture naming (lexical) task in the L2

The naming task assessed participants’ speed and accuracy in accessing lexical representations (Glaser, 1992; Levelt, 2001). Participants were presented with a set of experimental stimuli of 78 pictures of high, medium and low frequency selected from the standardized set originally developed by Snodgrass and Vanderwart (1980). The frequency ratings were based on the familiarity index in Snodgrass and Vanderwart. All items were checked for cultural appropriateness, and culture specific items were excluded (e.g., baseball bat). No cognate items across Turkish and Dutch were included. No semantically or phonologically related items followed one another (i.e., ‘cow’ was not followed by ‘goat’ and glas ‘glass’ was not followed by jas ‘coat’. The stimuli were presented in four pseudorandomized orders, which were counterbalanced among the participants. An HP laptop computer with E-Prime software and a serial response box with voice key controlled the presentation of the stimuli and the collection of response times.

The participant’s response was measured in milliseconds (ms), and the participants had a maximum of 3000 ms to respond. The moment from the onset of the stimulus till the onset of the word was registered as the ‘reaction time’. The experimenter (a native speaker of Dutch) noted the responses on a sheet during the experiment (which was recorded to allow later checking). Following Bates et al. (2003), a response was coded as valid if it was the target name and had a valid reaction time. In both analyses reaction times shorter than 250 ms and those which were more than two standard deviations from the mean were excluded. All other responses were categorized as invalid, including incorrect responses or correct responses with invalid reaction times (i.e., false starts, hesitations and coughs), responses which were not loud enough to trigger the voice key as well as correct responses which were not within 3000 ms and trials where there was no response at all.

5.2.3. Picture matching (lexical-sound mapping) task in the L2

The matching task assessed lexical development at the receptive level. This required the recognition of another set of 78 pictures of high, medium and low frequency again from the same list. The pictures were presented simultaneously with a recording of a word and the participants had to decide whether the picture they saw on the screen and the word they heard matched by pressing a yes/no button on the
response box as quickly as possible. Similar to the naming task, the participant’s response was measured in ms, and the participants had a maximum of 3000 ms to respond.

The usual interpretation of the reaction time is that slow responses (high ms) reflect difficulty of the task and rapid responses (low ms) indicate simplicity of the task for the participants.

5.2.4. Free speech
Free speech was elicited by means of a conversation of 20-30 minutes around topics of daily life, trips to the home country and experiences as migrants. The interviewer (a native speaker of Dutch with no knowledge of Turkish) tried to ensure a spontaneous informal conversation by encouraging a natural exchange and helping the participants focus on the topic of the conversation. All interviews were transcribed according to CHAT conventions (see http://childes.psy.cmu.edu). The free speech data were investigated for foreign accent, lexical frequency and overall Dutch proficiency.

- Foreign accent:
In order to assess the speakers’ pronunciation, native raters listened to speech segments lasting approximately 15 seconds. In order to achieve a wide spread of different kinds and degrees of accentedness, the ratings for this study were collected together with ratings of L2 learners of Dutch from a different L1 background (Moroccan Arabic), of long-term attriters of Dutch in an Anglophone setting (from the study described by Keijzer, 2010) and of native Dutch speakers who had lived in the Netherlands all their lives (the latter were drawn from the control group of Keijzer as well as from the control group for the present study). This resulted in a total of 149 speakers (45 L2 speakers of Dutch with Turkish L1, 14 Dutch speakers with Moroccan Arabic L1, 43 Dutch attriters, 47 Dutch controls). The ratings were collected in eight individual sessions, in each of which 24 speakers had to be rated by between 19 and 54 native Dutch raters (all of them students of English at the University of Groningen, the different sizes of the rater populations are due to the fact that the experiment was conducted in different seminar groups).

The raters did not receive any information about the purpose of the study or the background of the participants. For each speech sample they first judged if the speaker could be classified as a native speaker or not and then indicated how confident they were in their judgment on a three-point scale (certain, semi-certain, uncertain), following the procedure suggested by de Leeuw et al. (2010). This resulted in a six-point Likert scale where 1 represents the judgment ‘certain of a native speaker status’ and 6 means ‘certain of a non-native status’.

10 Participants pressed a green (yes) button if they agreed, and a red (no) button if they disagreed. In order to avoid a potential impact of right- or left-handedness, right-handed individuals had the ‘yes’ button on the right and the ‘no’ button on the left of the response box. For left-handed individuals, the ‘yes’ button was placed on the left and the ‘no’ button on the right.
Three Dutch native speakers and one speaker from each of the three bilingual populations were included in each individual rating session in order to establish reliability across the rater populations. This proved to be the case: the average ratings for the six speakers in the eight sessions achieved a Cronbach $\alpha$ of .996, indicating that the ratings were highly reliable across rater populations.

- **Overall proficiency:**
A holistic proficiency score was established for each speaker by three native Dutch raters. They judged the recordings on five subscales: fluency, pronunciation, intonation, syntax and lexicon separately for each speaker. They rated each subscale on a 5-point scale from very basic to native-like. All subscale ratings per individual were added up producing a total combined score potentially ranging from 5 (very poor on all 5 subscales) to 35 (native-like across all subscales). Interrater reliability for this combined score was $\alpha = .940$. The total scores were then averaged across the three raters to produce an average total rating per individual.

- **Lexical frequency:**
A general assumption about lexical diversity is that basic (easy) words occur more often (highly frequent) while advanced (difficult) words occur relatively less often (infrequent), and that the use of advanced words signals high lexical proficiency (e.g., Read, 2000). Since highly frequent items such as function words, can easily distort the picture of lexical diversity, our analysis focused only on nouns, lexical verbs, and adjectives. A complete list of these content words as they occurred in the corpus of interviews collected from both the Dutch native controls and the Turkish L2 speakers was created within Computerized Language Analysis (CLAN) (MacWhinney, 2000). Lemmatization of the list, as achieved with the MOR routine offered in CLAN for Dutch, was checked manually by a native speaker of Dutch. The list was also checked for inconsistencies in spelling to prevent an artificial increase in word types. For every word that each speaker used, it was assessed how often this word had occurred in the entire corpus, which allowed us to calculate the average frequency of all of the lexical items which each speaker had used. In addition, we assessed the proportion of unique lexical items in the repertoire of each speaker (that is, the items which only this person had used) on the assumption that these were indicative of a comparatively sophisticated vocabulary (this procedure was suggested by Paul Meara, pc). The semi-structured nature of the interviews allowed the interviewers to keep the interviews consistent, and the conversations developed into different subjects only very occasionally.

6. Results
6.1. Comparison between L2ers and Controls
For all of the proficiency measures introduced above, it was first assessed whether there was a difference in overall performance between our L2 population and the age- and education-matched Dutch native controls.
Table 3 Comparison of Dutch proficiency between our participants and the Dutch native controls (independent T-Tests) why are there no means etc. for HolProf for the controls? (but there IS a t-value?)

<table>
<thead>
<tr>
<th></th>
<th>Turkish-Dutch bilinguals</th>
<th>Dutch controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>St.Dev.</td>
</tr>
<tr>
<td><strong>Reaction time</strong></td>
<td>1292</td>
<td>146</td>
</tr>
<tr>
<td><strong>Reaction time</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>inacc. responses (%)</strong></td>
<td>37.9</td>
<td>14.1</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>895</td>
<td>121</td>
</tr>
<tr>
<td><strong>Reaction time</strong></td>
<td>816</td>
<td>91.5</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>4.1</td>
<td>4.2</td>
</tr>
<tr>
<td><strong>Perc. foreign accent</strong></td>
<td>5.4</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Av. freq. lexical items</strong></td>
<td>245</td>
<td>28.9</td>
</tr>
<tr>
<td><strong>Unique items (%)</strong></td>
<td>3.2</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Holistic proficiency</strong></td>
<td>14.9</td>
<td>4.4</td>
</tr>
</tbody>
</table>

As these results show, the two populations are consistently different on all tasks, with the natives reliably outperforming the L2ers (p<.001 for all measures). However, it is also evident that there is considerable variability within the L2 population, and that on each task, there are a number of L2 participants who fall within the native range. We can therefore assume that the population investigated here does indeed cover a wide range of proficiency levels, from individuals who are clearly perceived to be non-native and have rather low levels of lexical diversity and are comparatively slow and inaccurate on the naming task up to and including highly advanced speakers whose proficiency levels at the very least approach near-native levels. This variability makes our population suitable for the subsequent investigations of the impact of external factors on proficiency levels.

6.2. Correlations with external variables

As a next step, we wanted to establish which external factors would facilitate or impede linguistic development on features such as lexical access (as measured by reaction times and accuracy on the naming and matching task), perceived foreign accent, holistic proficiency and lexical sophistication in free speech. In order to gain a first global picture, we therefore correlated these scores with the predictor variables summarized in Tables 1 and 2 above.

6.2.1. Correlations between extra-linguistic factors and L2 picture naming and matching tasks

The first set of correlation analyses investigates the connections between socio-linguistic predictors and the ability to recall and recognize words in the L2 in response to a visual and auditory cue (see Table 4 below for details). The analyses revealed that the amount of interactive L1 use is associated with the ability of automatic word recall, recognition and the proportion of accurately recognized items in the L2. Professional use of the L2 at the workplace is related to average reaction time on the naming test. Age of arrival (AoA) was associated with both reaction time and accuracy on the matching test. On the naming
test, it only correlated with accuracy, though. Level of education was found to correlate negatively with average reaction time and proportion of inaccurate responses on the naming task. If we take a global look at all these analyses, we see that the correlation coefficients are weak to moderate (.31 to .43), signaling that these effects, while consistent, are not very strong. Amount of L1 use at work, preferred culture and length of residence (LOR) in the Netherlands turned out to be unrelated to both productive and receptive vocabulary knowledge.

Table 4 Correlations between extra-linguistic factors and picture naming/matching tasks

<table>
<thead>
<tr>
<th></th>
<th>Inter.L1Use</th>
<th>WorkL1</th>
<th>WorkL2</th>
<th>PrefCul</th>
<th>AoA</th>
<th>LOR</th>
<th>Edu</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Picture naming task</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaction time</td>
<td>0.315*</td>
<td>0.142</td>
<td>-0.362*</td>
<td>0.132</td>
<td>0.198</td>
<td>-0.115</td>
<td>-0.214</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.035</td>
<td>0.394</td>
<td>0.024</td>
<td>0.386</td>
<td>0.192</td>
<td>0.452</td>
<td>0.157</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>45</td>
<td>39</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
<tr>
<td>Accuracy</td>
<td>0.289</td>
<td>0.189</td>
<td>-0.209</td>
<td>0.235</td>
<td>0.425*</td>
<td>-0.141</td>
<td>-0.116</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.055</td>
<td>0.257</td>
<td>0.202</td>
<td>0.120</td>
<td>0.004</td>
<td>0.354</td>
<td>0.450</td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>38</td>
<td>39</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
</tr>
</tbody>
</table>

|                  |             |        |        |         |       |       |       |
| **Picture matching task** |             |        |        |         |       |       |       |
| Reaction time    | 0.412**     | 0.001  | -0.187 | 0.290   | 0.432**| -0.152| -0.324*|
| Sig. (2-tailed)  | 0.005       | 0.997  | 0.253  | 0.054   | 0.003 | 0.320 | 0.300 |
| N                | 45          | 38     | 39     | 45      | 45    | 45    | 45    |
| Accuracy         | 0.409**     | 0.003  | -0.184 | 0.288   | 0.432**| -0.154| -0.319*|
| Sig. (2-tailed)  | 0.005       | 0.987  | 0.262  | 0.055   | 0.033 | 0.314 | 0.033 |
| N                | 45          | 38     | 39     | 45      | 45    | 45    | 45    |

*/shaded light grey: Correlation is significant at p<.05 (2-tailed)

**/shaded dark grey: Correlation is significant at p<.01 (2-tailed)

6.2.2. Correlations between extra-linguistic factors and perceived L2 proficiency in free speech

The second set of analyses is concerned with the relations between socio-linguistic variables and the overall performance of the participants in spontaneous speech, as measured by global foreign accent ratings, holistic proficiency ratings and measures of lexical diversity. There was a significant correlation between interactive L1 use and foreign accent, average frequency and overall Dutch proficiency. Professional L2 use correlated with knowledge of advanced lexical items and global mastery of L2 skills. Cultural preference was associated with overall competence in Dutch. Duration of stay was related to the complexity of the vocabulary. Level of education was associated with accent, advanced lexicon and
general L2 competence (see Table 5 for a summary). Again, however, the correlation coefficients are in the same range as was found above (consistently below .5), indicating a weak to moderate effect.

Table 5 Correlations between extra-linguistic factors and perceived L2 proficiency

<table>
<thead>
<tr>
<th>Foreign accent</th>
<th>Pearson Cor.</th>
<th>Inter.L1Use</th>
<th>WorkL1</th>
<th>WorkL2</th>
<th>PrefCul</th>
<th>AoA</th>
<th>LOR</th>
<th>Edu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.011</td>
<td>0.830</td>
<td>0.092</td>
<td>0.071</td>
<td>0.568</td>
<td>0.552</td>
<td>0.033</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>44</td>
<td>38</td>
<td>38</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Average Frequency</th>
<th>Pearson Cor.</th>
<th>Inter.L1Use</th>
<th>WorkL1</th>
<th>WorkL2</th>
<th>PrefCul</th>
<th>AoA</th>
<th>LOR</th>
<th>Edu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.044</td>
<td>0.162</td>
<td>0.050</td>
<td>0.515</td>
<td>0.531</td>
<td>0.050</td>
<td>0.049</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>38</td>
<td>39</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Dutch Proficiency</th>
<th>Pearson Cor.</th>
<th>Inter.L1Use</th>
<th>WorkL1</th>
<th>WorkL2</th>
<th>PrefCul</th>
<th>AoA</th>
<th>LOR</th>
<th>Edu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.001</td>
<td>0.928</td>
<td>0.023</td>
<td>0.010</td>
<td>0.101</td>
<td>0.602</td>
<td>0.033</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>45</td>
<td>38</td>
<td>39</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

*/shaded light grey: Correlation is significant at p<.05 (2-tailed)

/**/shaded dark grey: Correlation is significant at p<.01 (2-tailed).

Overall, our findings so far indicate significant moderate correlations between L2 Dutch proficiency of the Turkish migrant group on the one hand and their L1 and L2 use patterns, education and age of exposure on the other. However, cultural and attitudinal orientations do not seem to play a key role in L2 development.

6.3. Discriminant Analysis (DA)

The correlation analyses reported above give a somewhat scattered and inconsistent picture of the impact of external factors on success in L2 acquisition for our population, and for those relationships that we did detect the effect sizes are weak to moderate. It should be acknowledged, however, that correlation analyses are an extremely limited tool in the context of an investigation that has to consider such a large set of both predictor and outcome variables. While they do allow to explore the bivariate relationship of interval variables, they are not able to detect any interactions or combined effects that might be present in the data beyond the one that they test specifically. Furthermore, in order to limit alpha inflation, it was necessary here to combine a complex set of predictors into a very limited number of averaged factors, which again may not do justice to the data at hand.

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11 Turkish is hardly ever used in professional domains in the Netherlands. The only contexts the participants spoke Turkish were interactions with other Turkish colleagues who worked at the same company.
In order to be able to evaluate the interplay of the predictors and their impact on overall proficiency more thoroughly, we therefore conducted a Discriminant Analysis (DA). As explained by Huberty and Olejnik (2006: Ch.1), this statistical method evolved out of efforts to translate multivariate intergroup distance to “a linear composite of variables derived for the purpose of two-group classification” (p. 4) and was later extended to multiple groups. It was initially mainly used in the biological and medical sciences, but soon spread to other areas of scientific investigation. DA acknowledges the fact that scientific research typically deals with multivariate data sets which have to be analyzed and treated simultaneously. Predictive DA is applicable in cases where a set of outcome variables take the role of predictors and there is one single grouping variable (Huberty & Olejnik, 2006:5). The DA calculates linear combinations of predictors for each of the groups in order to arrive at the best model assigning each individual case that is entered into the model to the correct category.

In order to be able to divide our sample into a limited number of proficiency groups, an overall proficiency measure was first calculated, based on the eight outcome variables described above. All eight variables were first ranked so that the participant(s) in the Turkish group who had attained the best score of the cohort (fastest RT, lowest percentage of inaccurate responses, lowest FAR, highest holistic proficiency rating, lowest average word frequency and highest proportion of unique lexical items) received the value 1 and the one(s) with the lowest score received a 0. Subsequently, these ranked variables were averaged together to create an overall proficiency score for each speaker. This new index had a mean of .48 (Stdev .16) and, as can be seen in the histogram in Figure 1, was normally distributed across the population.

![Figure 1 Distribution of scores on the general proficiency index](image)
The overall proficiency index was then used to divide the entire sample into three equal groups, representing 15 speakers with relatively low, intermediate, and high L2 proficiency, respectively. An overview of the distribution of the proficiency scores across these groups is presented in Table 6.

<table>
<thead>
<tr>
<th>Proficiency group</th>
<th>Mean</th>
<th>St.Dev.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low (n=15)</td>
<td>0.31</td>
<td>0.06</td>
<td>.18-.40</td>
</tr>
<tr>
<td>Intermediate (n=15)</td>
<td>0.46</td>
<td>0.04</td>
<td>.40-.54</td>
</tr>
<tr>
<td>High (n=15)</td>
<td>0.65</td>
<td>0.09</td>
<td>.55-.88</td>
</tr>
</tbody>
</table>

With these newly created proficiency levels as our grouping variable, we conducted the DA. We used the following personal background, language use and attitudinal variables, collected by the sociolinguistic questionnaire, as dependent variables:

Personal background variables:
- length of residence (years)
- age at emigration (years)
- educational level (see above)

Language use variables (all of these were collected on a five-point Likert scale, where 1=(almost) exclusive use of Turkish and 0=(almost) exclusive use of Dutch):
- use of L1 within the family (average of eight questions)
- use of L1 with friends (average of three questions)
- use of L1 with parents and siblings (average of five questions)
- use of L1 in clubs or churches (average of three questions)
- use of L2 for professional purposes (one question)

Attitudinal variables:
- affiliation with L1 (average of four questions pertaining to the importance of maintaining Turkish and passing it to the next generation)
- preferred culture (one question)
- preferred language (one question)
- enjoyment of learning foreign languages (one question)

All of these predictors were entered into the model, we followed the procedure described by Schmid and Jarvis (submitted), setting the DA method to stepwise (only one variable is selected at a time in accordance with the contribution it makes to the strength of the model) and using the default Wilks’ Lambda F values of 3.84 for entry and 2.71 for removal, so that only variables that make a significant
contribution to the strength of the model would be selected, and that they would subsequently be removed if they no longer made such a contribution. The results were cross-validated.

The findings from the DA showed that the combined predictive power of the model described above is rather low: only 53.7% of all participants were assigned to the correct proficiency level. In particular the intermediate level was apparently difficult to assess, as no speaker was predicted to fall into this category. Thirty-two speakers were predicted to fall into the lowest proficiency level and 13 into the highest, but a comparison of these two new populations revealed a substantial overlap between these groups on the proficiency index on which the original classification was based: the participants assigned to the lower group had a mean proficiency index of .42, with a range of .18-.67, and the ‘high proficiency’ group ranged from .35 to .88, with a mean of .61. The results from the cross-validated categorization are presented in Table 7.

Table 7 Cross-validated categorization from Discriminant Analysis

<table>
<thead>
<tr>
<th>Predicted</th>
<th>Low</th>
<th>Intermediate</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>14</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Original</td>
<td>Intermediate</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>High</td>
<td>5</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

What was even more startling, however, was that of all the predictors entered into the model, the only one that was chosen was the question that pertained to the preferred language of the speaker. All other variables regarding personal background, language use or attitudes and affiliation were excluded from the model, as they did not contribute significantly to the results.

7. Discussion

The purpose of the present study was to determine the factors influencing first generation Turkish immigrants’ overall proficiency in L2 Dutch. The findings appear to suggest an interaction of factors determining the level of success that a speaker has in this process which may be linked more to individual and personal characteristics and less to the factors that are usually invoked by governments and politicians, such as (un)willingness to integrate.

Recall that the first set of analyses reported above, consisting of correlation analyses linking individual predictor and outcome variables, suggested that work-related L2 interactions and professional L2 use seem to be related with enhanced overall proficiency, more sophisticated lexical knowledge, and faster recall of words. L1 use with friends and family was negatively correlated with L2 performance in all domains measured (i.e., automatic word recall/recognition, accuracy in responses, accent, sophistication
of vocabulary, overall competence). Among the demographic variables, age of arrival in the Netherlands and level of education emerged as influential predictors. However, in the second set of analyses, it turned out that only half the speakers were correctly predicted to fall into the appropriate proficiency band based on these predictors, and that the only significant factor in this context was the language that they preferred using, while none of the other variables contributed to the variation in learning outcomes. It is possible that the significance of the correlations that appear in the first set of analyses subsides in this one due to the complexity/uniqueness of the individual circumstances and the interconnectedness of the external variables.

Below, we will attempt to explain how person specific circumstances and/or interactions between the variables lead to unpredicted outcomes with examples. One concerns a speaker in the lower proficiency group. He was nineteen years old at arrival and is a high school graduate. However, the assumed advantages he enjoys based on his comparatively early age at arrival and high education level do not seem to be reflected in his L2 proficiency: he is one of the least successful speakers of this group. He started working immediately upon arrival and did not have a chance to attend language courses. Though he has been working since then, his initial inadequate language skills persisted to a large extent and confined him to work in positions that did not require high levels of Dutch knowledge. There are some other individuals like him in this group, whose L2 does not seem to have developed in the way one would expect from young and educated arrivals. On the other hand, some individuals who only completed primary education turned out to be among the best learners. For instance, two of such participants are currently housewives who have not worked except in temporary employments. One of them migrated to the Netherlands upon marrying and attended language courses, though on and off. Her main motivation was to help her children’s home/schoolwork. The other successful speaker had a brief work experience (less than 2 years) in her late teens and she reported that period as a turning point for her language development. From then onwards, since she enjoyed interacting with people, she gradually became more proficient over the years. Further examples come from the middle proficiency group. Two high school graduates had the poorest performance while two speakers with primary school education outperformed all the rest of the individuals in their category. What is more, our interviews revealed that all of them spoke Dutch at their workplaces equally frequently; but apparently this did not contribute to language development for the two low achieving individuals. One of the two low-achievers is the oldest among four siblings in her family. Upon coming to the Netherlands to live with their father, she might have assumed the role of a caregiver/housekeeper at home because their mother could not join them until many years later. Even though she completed the second half of high school in the Netherlands, which must have provided a good language foundation for her, she probably could not maintain or build upon it because of the circumstances she was in. The other high-achiever in this group is another marriage migrant who is a primary school graduate. She stated that she had been lucky to have a buddy, a native
Dutch speaking person who volunteered to teach her Dutch and help her make a smooth transition into her new life.

Another complicating aspect is the circumstances that come with the age of arrival and amount of schooling. For instance, individuals who migrated at around the age of 15-20 were usually brought by their parents through family reunification, so they had their parents’ financial and social support. This allowed many of them to focus more on learning Dutch and to continue their education. Higher school degrees might have led to better employment opportunities, which in return provided more opportunities to improve language skills. For older arrivals, i.e., the parents, it was mostly the economical priorities that curtailed language development rather than a cognitive/biological decline in their ability to learn languages (in line with, for instance, Bialystok & Miller, 1999). It is also probable that motivations and attitudes develop in different directions among younger and older groups. For older arrivals the motive to stay in the host country is primarily economic (unless they had to flee from their home countries due to political reasons or warfare, which was not the case in the present study) and they often intend to go back. This may make them less willing to make investments in language and make their eventual success more susceptible to personal factors such as willingness to communicate, enjoyment of and aptitude for language learning. Younger immigrants in general tend to be more flexible and open to novel experiences, which makes it easier for them to learn languages.

Another factor which correlated with the learning process positively, language use at work, needs a closer examination because the type of working environment and/or profession clearly makes a difference in this respect. For instance, one of our participants who reported that he often spoke Dutch at work, was leveled in the low ability group. This may be because of the quality of input he got from his colleagues who spoke a mixture of the local dialect and standard Dutch. Similarly, another participant who ran his own business and continuously interacted with customers also had poor command of Dutch, possibly due to his interactions covering a very limited range of topics and most of his customers being non-native speakers of Dutch.

Therefore, it is no wonder that the picture which emerged from the DA with respect to the impact of external variables is quite different from that of correlational analyses. The fact that the DA controls for the combined effects of variables by excluding the weak predictors throws some doubt on the correlational results. Among all demographic, linguistic and attitudinal factors (including the ones which were significant according to the Pearson correlations: language use, education and age), only preferred language emerged as a strong predictor. Arguably, this factor is more a covert measure of proficiency than of any personal or background characteristics, as ‘preferred language’ will usually refer to the language people find easy to speak. For participants who are not very competent in Dutch, it is easier to speak Turkish, while better or advanced speakers probably feel equally comfortable with both languages.
What is even more striking is the fact that neither analysis detected a significant association between attitudinal factors and L2 proficiency, contrary to the widespread opinion held by the Dutch government and society. Our findings suggest that first generation Turkish migrants’ Dutch develops irrespective of their attachment to their mother tongue. Whether they feel closer to the Turkish or the Dutch culture and people and whether or not they would like to endorse the values and the norms of the Dutch society do not influence their proficiency in Dutch, either. Recall that L1 use was found to be negatively correlated with Dutch proficiency. This might be interpreted as validating policies imposing Dutch use on immigrants in all domains, and to imply that banning the mother tongue language in public domains including schools (as has sometimes been called for by some of the more radical politicians) may indeed promote Dutch proficiency. Such an interpretation or understanding, however, ignores the social reality of Turkish migrants. In the family context, where both partners are of usually Turkish origin, it is quite normal to speak their mother tongue with partners and children. Outside the home, native Dutch people, be it friends, colleagues or neighbors, compromise a relatively small proportion of their contacts and their close friends usually come from the same background. Therefore, interactions outside the family are mostly in Turkish, too. The use of Turkish thus seems like a natural reflection of the lifestyle rather than a deliberate intention to avoid opportunities of daily interactions in Dutch or with the Dutch natives or a resistance to integrate into the Dutch society because of strong nationalistic pride (as was, for example, implied by Paul Lieben in his blog on the website of the Dutch news journal Elsevier on Feb. 25th, 2013).

It is also uncertain to what extent the hypothetical use of Dutch with other native Turkish speakers, such as in the home and in social encounters with friends of Turkish origin, would indeed help to improve their proficiency. First, such daily interactions do not usually call for an advanced level of language. Second, massive exposure to “non-native input” may even reinforce language errors (see Ellis, 2005; Muñoz & Singleton, 2007; Ross & Newport, 1996). Therefore, whether policies that encourage or enforce more (or primary) use of Dutch would help to improve their Dutch proficiency is rather questionable.

In sum, while more L2 use, younger age at arrival and more schooling seem to be advantageous for becoming a competent L2 speaker relative to other factors, it is apparent that there is a lot going on in people’s lives in addition to and/or related to these. However, there is no evidence for a strong link between (lack of) L2 development and resistance to or integration into the Dutch society. The only factor whose association with language proficiency has been clearly established is the preferred language – which, as was pointed out above, is probably more a covert proficiency measure than an indication of language habits.

8. Conclusion
Stereotypical images of Turkish labor migrants of 1960s and 1970s with limited command of Dutch language have persisted into the present time among the public and even a number of researchers. It was the aim of the present study to identify the social forces that predict their second language outcomes. In order to do this, we interviewed first generation speakers to learn about their own conceptions about language learning, life experiences and relations with the host society. It turned out that they resemble other migrant groups across the globe (see Berry & Sam, 1997; Esser, 2008; Shohamy, 2006): On the whole, they have functional fluency in the environmental language and the number of high achievers in the second language is relatively small. They tend to live by their own culture and traditions in a foreign and sometimes unfriendly environment. They do adopt some aspects of the host country culture to various degrees but not at the cost of losing their own. They advise newcomer Turkish immigrants to make learning Dutch their first priority and make great efforts to improve their children’s language skills.

Our observations revealed that on the whole, first generation immigrants are able to fully function in social and professional domains. Even though they have grammar mistakes, fossilized structures or a non-native accent in their speech, they hardly ever have communication problems. They are not deeply involved in improving their language skills. The foremost reason is that they do not have an economical, social or personal reason/motivation. Regarding their socio-cultural orientation, a large proportion of the participants seemed to hesitate between the two cultures. While they continued to value their ethnic roots and mother tongue, they were not sure if they fit into the contemporary Turkish culture after having lived abroad for so long. They were also not certain if they belonged to the Dutch society partly because of a general perception that the Dutch society is growing inhospitable towards foreigners. Some of our participants’ anecdotes reveal the shift from an initially warm reception at his arrival around 20 years ago to the contemporary uneasiness in view of the presence of foreigners in the Netherlands. They express that Dutch people ask them about their intentions to return, the shallowness of conversations with the Dutch people, feeling of seclusion, not being accepted and that their culture is not recognized, while the Dutch feel that Turks are making very little effort to integrate. What seems to affect the Turkish people more is the obstacles and restrictive policies about residency rights, naturalization, family reunification and dual nationality (see de Hart et al., 2003; Ersanilli & Koopmans, 2010). Though, not every one has these concerns, such policy measures generate an atmosphere of insecurity. This is probably reinforced further by compulsory Dutch language and culture training programs and disrespect for their mother tongue12, leading to increased feelings of seclusion among the members of the community.

It is interesting to note that the origins of the separation between the Turkish community and the Dutch society can be traced to socio-political dynamics within the Dutch society during the migration flows in 1960s and 1970s. Arrival of these migrants coincided with the period of pillarisation of the Dutch

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12 When Turkish was taught at schools, it never had a status like English or German (along with other minority languages). Lessons were provided outside the curriculum and students did not earn any credits for their study. Later, lessons were scheduled outside the school time until 2004 when the policy was abolished completely.
society. Newly arriving immigrant groups, the Turks being one of them, preferred to stay within their own circles in this society which was already split up into four subcultures (Catholic, Protestant, Socialist, and Liberal). While pillarisation has lost strength over decades and there are no sharp political or religious divisions within the contemporary Dutch society, even the Dutch people themselves have many different conceptualizations of what constitutes the Dutch culture. The ‘Dutch culture’ is immensely rich and varied in itself. For example, the definition/perception of the Dutch culture of someone from Zeelander (south-west) would be different from that of a Frisian (north-west). Likewise, someone from the island of Texel (north-west) would differ from someone who comes from the city of Maastricht (south-east). Given the inherent diversity within the native Dutch society, expecting the migrants to integrating into the Dutch culture is perhaps not a realistic expectation. However, it is always possible to facilitate the process of integration by creating opportunities for migrants to socialize and interact with the host society and by actively involving the members of the host society themselves and institutions (e.g., local residents, employers, schools, social and governmental institutions). Such encounters would promote intercultural communication between the members of the migrant and the host community and foster mutual respect and understanding. There are indeed some positive trends in the realm of daily interethnic contacts at the individual level. For instance, increasing numbers of Turks have started to move into multiethnic neighborhoods. They are willing to interact with their Dutch neighbors and to have closer relations with them and they do not consider language an obstacle for the development of social relations. It is possible that the low levels of interaction between the members of the two communities are simply due to lack of effort rather than a conscious strategy to stay apart (Smets & Kreuk, 2008). The Dutch neighbors have some reservations because of cultural and religious differences and are concerned about language problem but many of them sincerely intend to make overtures for making friends with Turks (Hagendoorn & Sniderman, 2001; Smets & Kreuk, 2008; see Portes & Rumbaut, 2001).

One of the striking implications of the present study relates to the widespread belief in the Netherlands (and elsewhere in Europe) that the rate with which immigrants integrate is closely related to their level of proficiency in the L2 and the use of L1. Current integration policies prefer to ignore the presence of immigrant groups. Migrant languages are devalued with terms such as ‘non-territorial’ or ‘non-indigenous, and seen as obstacles to integration. Their speakers are often perceived as individuals with language deficit in the host country language. Migrant languages are further devalued by being excluded from educational policies. The aim is two-fold: to increase proficiency levels of the parents and to focus children’s attention on second language only (so that the mother tongue will not interfere with their L2 acquisition and/or they will not fall back their native speaker classmates at school). This perspective in fact sadly overlooks the critical role of mother tongue. Mother tongue serves a strong foundation for successful development of a second language. It is the primary means of expressing emotions and ideas and is essential for personality development. It is also through mother tongue cultural values and
traditions are transmitted to future generations. (Cummins, 2000, 2003; Fuligni et al., 2008; Phinney et al., 2001; Saville-Troike, 1978). Besides, bi(multi)lingual individuals have great potential to contribute to socioeconomic development of their society in many ways such as intellectual, cultural, economic and artistic. Therefore, in order to maintain the continuity of multilingual societies migrant languages should be incorporated into economic and social life with institutional support from the governments (Fishman, 1991; Giles et al., 1977).

Indeed, the merits of multilingualism have been recognized by the European Commission long ago (see European Commission 1995, 2005, 2007; e.g., Mercator and Language Rich Europe projects, Oslo Recommendations on the Linguistic Rights of National Minorities of February) and most European states have launched policies to promote the multilingual competence of their citizens (i.e., Whitebook for Trilingualism, which stands for mother tongue plus two foreign languages). However, the contradiction is that migrant languages are bypassed within this policy because the mother tongue is usually the official language of the state involved and the foreign languages are mostly the prestigious languages such as English or German or national languages of neighboring European states but never the mother tongue of the next door immigrant neighbor (Extra, 2005).

We believe that taking into account the knowledge of the social dynamics of migrant communities is of great importance in formulating and/or interpreting policies of integration and multilingualism and a lot more research is necessary to provide bases for designing policies that would facilitate migrants’ L2 development and prevent their social and economic exclusion. This study may be a good reference point for anyone who would like to see a critical analysis of the sociopolitical context in the Netherlands and the portrayal of the first generation Turkish migrants’ language development and life. We hope the present study will remind the importance of the mother tongue among the community members as a means of communication and encourage a reconsideration of perceptions about native languages as obstacles to L2 learning and a sign of disloyalty to the host country.

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