A Sociophonetic Analysis of the Role of Cultural Identification in L2 English Speech Production

Jaana Kalev
A Sociophonetic Analysis of the Role of Cultural Identification in L2 English Speech Production

Jaana Kalev

Abstract

Research in the relationship between second language (L2) production and study abroad has largely focused on establishing a connection between exchange studies and the success rate of second language acquisition. This Bachelor's thesis investigates L2 production by studying L2 English speakers' attitudes regarding the target language culture in relation to their production of a regionally typical phoneme by formulating the research question “How does cultural identification with the target language environment influence L2 phonetic production in the L1 language community?” in hopes of contributing to sociophonetic studies. This is done by conducting a qualitative study based on the phonetic production of rhoticity and the experiences of nine Swedish former exchange students to the United States. The study draws on existing research that highlights the saliency of rhoticity, as well as provides insight into the importance of identity in language use and into the relevance of motivation and the establishing of social networks for L2 gains during study abroad. To provide a framework for understanding these issues, the Social Network Strength Scale is applied. The results and data analysis suggest that, opposite to expectation, there is no clear relationship between cultural identification and L2 phonetic production for speakers who are no longer immersed into the L2 environment. However, the results establish a possible connection between maintaining a dense social network with native speaker members of the L2 community, as well as of having an awareness and capacity to understand the L2 culture, and a higher percentage of phonetic production of sounds typical for the L2 environment.

Keywords
Rhoticity, sociophonetics, social network theory, study abroad, cultural identification.
Contents

1. Introduction ...................................................................................................................... 1
   1.1 Problematization ............................................................................................................ 1
       1.1.1 Research Question, Purpose of Study and Hypothesis ........................................... 2
2. Literature Review .............................................................................................................. 2
   2.1 Rhoticity ......................................................................................................................... 2
   2.2 Cultural Identification .................................................................................................... 3
   2.3 Study Abroad and L2 Production ................................................................................. 4
   2.4 Social Network Theory ................................................................................................. 5
       2.4.1 Social Network Strength Scale ............................................................................... 5
3. Research Design ............................................................................................................... 6
   3.1 Methodological Perspective .......................................................................................... 6
   3.2 Data Collection .............................................................................................................. 6
   3.3 Data Analysis ................................................................................................................ 7
   3.4 Source Criticism and Research Ethics ............................................................................ 7
4. Results and Analysis ....................................................................................................... 8
   4.1 Production of Rhotic and Non-Rhotic /r/ ................................................................. 8
   4.2 Thematic Analysis of Semi-Structured Interviews ....................................................... 9
       4.2.1 Cultural Awareness ................................................................................................. 10
       4.2.2 Density and Multiplexity of Social Networks ...................................................... 11
       4.2.3 Identification with Values in the L2 Community ................................................... 12
       4.2.4 Motivation to Participate in L2 Community ......................................................... 13
       4.2.5 Changes in L2 Production ...................................................................................... 14
   4.3 Summary of Results .................................................................................................... 15
5. Discussion ........................................................................................................................ 16
6. Conclusion ........................................................................................................................ 17
References .............................................................................................................................. 18
Appendix A ............................................................................................................................. 20
Appendix B ............................................................................................................................. 21
1. Introduction

In today's world, English is inarguably the global lingua franca, as well as the second language (L2) for millions of people (Nihalani, 2008). While English as a lingua franca could arguably be considered a variety in itself (Nihalani, 2008), it is worth noting that many, especially in Europe, receive their formal language training according to the grammar and pronunciation of the British English variety (Lewandovski, 2017). On the other hand, much of the popular culture which the same L2 English learners are exposed to, e.g. blockbuster movies and hit television series, is created in the United States (Rindal, 2010). Therefore, while many speak what might called the lingua franca variety, L2 learners are likely to encounter both British and American English, and acquire traits from both standards, i.e. General American (GA) and Received Pronunciation (RP), to use in their own speech, and thus to construct their personal linguistic identity (Eckert, 2005). As such, it is relevant to question what the multiple aspects are that influence the occurrence of different phonetic features in L2 English speakers' speech.

According to existing research, exposure to different varieties of English can have an impact on the speech of L2 English speakers - the prestige and status attributed to a certain variety may increase the production of phonetic features associated with that variety (Eckert, 2005). In addition, previous studies in sociophonetics, i.e. the subfield of phonetics that treats phonetic variation as socially conditioned by combining sociolinguistics and phonetic analysis (Hay & Drager, 2007), suggests that the production of native-like phonetic variants is connected to the degree of acculturation a speaker feels in the L2 environment (Lybeck, 2002). But what is the influence of the identification an individual speaker feels with a certain language environment on their phonetic production when they are not actively participating in it? The relationship between L2 proficiency and speakers' experiences with the target language culture has been a subject of interest in study abroad research (Baker-Smemoe et al., 2014; Knouse, 2012) and sociophonetic studies (Lybeck, 2002; Rindal, 2010), yet not in a manner which combines the two fields. By studying from a sociophonetic perspective the experiences of former exchange students, the present study aims to fill this gap in existing research. Thus, this study focuses on Swedish exchange students' perceived level of acculturation in their former hosting country - the United States - in relation to their production of the rhoticity.

1.1 Problematization

As discussed by Love and Walker (2012), rhoticity is a phonological variable that is strongly associated with GA pronunciation. While the realization of the rhotic /r/ is subject to region-based variation, its existence or lack thereof is commonly used for classifying the standard variety in English speaking countries as ‘rhotic’ or ‘non-rhotic’ (Sundkvist & Gao, 2016). Therefore, due to its prevalence as a prominent characteristic of GA - a rhotic variety of English -, it is a relevant phonetic feature to observe as a measure for studying the relationship between speech production and identification with the United States and its culture.
Previous studies in study abroad research tend to focus on establishing a relationship between study abroad and the success rate of second language acquisition (SLA) (Baker-Smemoe et al., 2014; O’Brien, 2004). However, this Bachelor's thesis is interested in investigating L2 production from a sociophonetic perspective, by studying L2 English speakers' attitudes in relation to their production of a regionally typical phoneme. Much of the research in study abroad programs and SLA suggests that the strongest predictors for language gains lie in speakers' cultural sensitivity and social networks (Baker-Smemoe et al., 2014). As such, the importance of the relationship between the L2 speaker and their acculturation into the language environment should not be underestimated.

In this context, high school exchange students are arguably an interesting subject of study: they spend a standard period of time (e.g. one year) immersed in an initially foreign and unfamiliar L2 environment, living in a local host family and attending a local school, while ultimately having an entirely unique experience in the host country and oftentimes developing a sense of identification with the L2 culture. Thus, this Bachelor's thesis will study the L2 phonetic production of former exchange students to the United States to increase the understanding of the impact of cultural identification on L2 phonetic production.

1.1.1 Research Question, Purpose of Study and Hypothesis

The present study aims to investigate the described issues of phonetic production and cultural identification by formulating the following research question:

“How does cultural identification with the target language environment influence L2 phonetic production in the L1 language community?”

In attempting to answer the aforementioned question, this thesis hopes to contribute to the field of sociophonetics by increasing the understanding of the connection between speech production and cultural identification in the context of the speaker not being present in the target language environment. Based on existing research (Lybeck, 2002; Knouse, 2012; Kennedy Terry, 2017), the underlying expectation of this essay is that attitudes and social networks bare an influence on L2 speech production even when the speaker is no longer in the L2 environment. This is investigated by using social network theory (Milroy and Milroy, 1992; Kennedy Terry, 2017) in conducting a study among nine Swedish L1 former exchange students to the United States.

2. Literature Review

In this section the main areas of interest relating to the research question - rhoticity, cultural identification, study abroad research and social network theory - are discussed by providing a thematic overview of existing research regarding these topics.

2.1 Rhoticity

The phonetic production of rhoticity has long been an object of interest for researchers. For example, William Labov’s (1966, 1972) sociolinguistic research of the fluctuation of rhotic and non-rhotic /r/ in New Yorkers' speech is considered groundbreaking work in socially conditioned variation (Aitchison, 2001; Hay & Drager, 2007). Also taking
New York as the setting, Becker (2009) studied the phonetic production of /r/ in the context of identity construction by relating it to speakers' sense of localness and authenticity in the Lower East Side. Additionally, Love and Walker (2012) used the realization of /r/ to measure the effect of topic, in their case American and British football, on phonetic variation. As such, existing research seems to provide a thorough understanding of how phonetic production, exemplified by the rhotic and non-rhotic /r/, can relate to social status, identity building, as well as code switching. However, the aforementioned studies take a sociophonetic perspective that mostly considers native speakers of English. Therefore, it would be worthwhile to discuss the implications of previous sociophonetic findings, which suggest a strong relationship between identity, sense of belonging and phonetic variation (Becker, 2009), in the context of L2 English speakers' use of rhoticity.

RP and GA are the two major accents of English that most Northern European L2 English speakers are exposed to (Lewandovski, 2017). Rhoticity is one of the most distinguishable features between the two varieties (Love & Walker, 2012): in GA, which is a rhotic variety of English, an overt /r/ is pronounced in pre-vocalic positions (e.g. parrot), as well as when it is followed by a consonant (e.g. barn) or occurs in the end of an utterance (e.g. bar), while in RP, a non-rhotic variety, /r/ is pronounced only when it is followed by a vowel (e.g. parrot) (Sundkvist & Gao, 2016).

As argued by Sundkvist and Gao (2016), rhoticity is “one of the most salient variables among spoken forms of English across the world” (p. 44). Therefore, as in earlier research that has looked at /r/ variation in the language of native English speakers, the production of rhoticity is of interest in L2 speakers' speech. Of course, in studying L2 rather than L1 speech, additional factors may influence phonetic production, such as phonotactic constraints and transference relating to speakers' L1 (Sundkvist & Gao, 2016) or mimicry ability (Thompson, 1991). In addition, GA is an idealized concept. While it clearly does not reflect the non-rhotic dialects found in some subareas Southern and Eastern parts of the United States, it also cannot be linked to any specific area or people (Preston, 2005). As such, the generalization that rhoticity is a characteristic of American English also creates implications for the idea that cultural identification has an impact on phonetic production. For example - in using rhoticity is the speaker identifying with a stereotypical view of the language environment or being influenced by the vernacular of a specific place and people?

2.2 Cultural Identification

Acculturation could be defined as “the contact between cultures and the dynamic psychosocial changes among the people involved” (Berry 1980, 1995, as cited in Jing et al., 2009, p. 482). Interestingly, researchers have found that successful immersion into one society does not necessitate a decrease in involvement with another (Jing et al., 2009) - the level of acculturation is found to depend on the belief in one's own capability of establishing social networks and the desire to affiliate with a language community and culture (Lybeck, 2002; Moyer, 2014). Therefore, L2 speakers' phonetic production could be influenced by the target language environment even when they are no longer physically present in it, as long as they continue to identify with the L2 culture and maintain social networks within it.
As discussed by Eckert (2005), studies in speech variation can be described according to three waves: the first wave established a correlation between speech and primary social categories, the second wave focused on ethnographic studies of locally-defined groups, and the most recent, third wave, places emphasis on “variation not as a reflection of social place, but as a resource for the construction of social meaning” (p. 1). Therefore, in keeping with the latter perspective, language is a tool that is used to build an identity in a community of practice. Cultural identification, then, could be interpreted from a sociolinguistic perspective as the construction of a linguistic persona according to identification with a target culture. Similarly, Lybeck (2002) describes cultural identification in terms of L2 acquisition as the identification with communication styles and with the idea that acquiring the language of a second culture is integral for fully understanding and participating in the culture.

Of course, the use of linguistic variables is also relevant as a resource for identity building in terms of more specific communities of practice than the vast category of culture. Love and Walker (2012) found that American and British football fans seem to view their allegiance to a team as an aspect of their identity, and that the fans' production of rhoticity is dependent on their identification with sports teams. Based on her studies of high schools in the suburban areas of Detroit, Eckert (2005) observed that adolescents' vowel production is in accordance with their social groups, and that the variation in language is linked to categories, e.g. jocks and burnouts, through identity constructing practices. Therefore, it follows that phonetic production can vary in a single person depending on the social context and the identity they perform in that setting. However, it is still worthwhile to consider culture as a relevant category of community of practice, particularly for L2 English speakers, as immersion into the target language environment helps to develop a sense of identity in the L2 (Moyer, 2014). As such, the significance of cultural identification as an influence of phonetic production is likely particularly relevant for those L2 speakers who have had extensive contact with the target culture and established social networks within it, for example high school exchange students.

2.3 Study Abroad and L2 Production

Research within the study abroad context indicates that the development of social networks is one of the most important indicators for acquiring sociolinguistic competence in the L2 environment (Kennedy Terry, 2017; Baker-Smemoe et al., 2014). Kennedy Terry's (2017) study on English-speaking exchange students' elision of French /l/ in third-person subject clitic pronouns, a feature that shows socio-stylistic variation in native speaker speech, suggests that immersion into the L2 culture and community increases the usage of phonetic features which are characteristic to a particular area and people. Similarly, in a study of American students' acquisition of the Spanish regional phoneme /θ/ during a 6-week language course, Knouse (2012) found that study abroad students mastered the Castilian /θ/ with greater success than students who participated in the same language course at an at-home program, and that the usage of the phoneme was connected with exposure to real-world contexts outside of the classroom. Thus, L2 speakers who establish relationships with native speakers are likely to be able to develop socio-stylistic variation in their own L2 speech thanks to communicating with native speakers in the L2 environment.
The acquisition of specific linguistic variants has been shown to be not only linked with the creation of social networks with native speakers (Kennedy Terry, 2017), but also with an interest and motivation to integrate into the target language culture: speakers who are willing to overcome cultural differences between their own and the hosting culture are more likely to integrate and use the L2 in versatile situations (Baker-Smemoe et al., 2014). An investment in the target language community is emphasized as a necessary quality for exceptional L2 learners (Moyer, 2014). Exchange students are arguably particularly likely to experience this type of motivation in the L2 community, as participation in such programs is generally voluntary and motivated by a personal interest in language and culture.

The acquisition of a regional phoneme or other linguistic markers could also enhance the speaker's possibilities of being accepted culturally and socially into the L2 community (Knouse, 2012). As such, study abroad participants who are motivated to integrate into the target culture are likely to develop a linguistic style that fits into the L2 community. According to Eckert (2005), individuals construct linguistic identities to participate in communities of practice. Study abroad programs provide a backdrop for discussing the effects of both the learning context as well as speaker motivation on SLA and linguistic persona development.

2.4 Social Network Theory

According to Kennedy Terry (2017), “social network theory examines the relationships that an individual contracts with others in order to explain his or her language behavior” (p. 555). The founders of social network theory are considered to be Lesley and James Milroy, who were the first to systematically research how social networks facilitate linguistic variation in their 1978 study of working-class speakers in Belfast (Milroy, 2002). Since then, social network theory has been adapted and applied by a number of researchers within the context of L2 learning. For instance, Lybeck (2002) used social network theory to assess the degree of social and psychological distance between the learner and the target culture. Kennedy Terry (2017), on the other hand, adjusted the theory specifically for the study abroad learning environment. The present research draws on both aforementioned versions of the social network theory in order to best study the relationship between identification with the L2 culture and phonetic production.

2.4.1 Social Network Strength Scale

As discussed by Milroy (2002), “a major challenge for variationist researchers is to devise a procedure for characterizing differences in network structure which reflects the everyday social practices of speakers” (p. 554). For the purpose of measuring social network structure Milroy and Milroy developed a Social Network Strength Scale (SNSS) during the 1978 Belfast study, which assesses speakers’ network characteristics on indicators of multiplexity and density.

The concepts of multiplexity and density accordingly refer to the types of relationships an individual has with another person and to the ties that link many people in a similar situation to one another (Kennedy Terry, 2017). As described in Milroy and Milroy (1992), “in a maximally dense and multiplex network, everyone would know everyone else (density), and the actors would know one another in a range of capacities.
The concept of an indicator refers to the various relationships of kin, work and friendship that could be considered significant for a speaker. Each indicator is assigned a score of one or zero according to the speaker's interactions, making it possible to calculate a total SNSS score for an individual speaker (Milroy, 2002).

In the previously described study by Kennedy Terry (2017), an SNSS tailored specifically for the study abroad L2 learning environment was developed. This involves assessing two density and two multiplexity measures to accordingly gauge the level of interaction the L2 speaker has with native speakers and the depth of the learner's L2 output (Kennedy Terry, 2017, pp. 559-60). As such, the social network theory provides an appropriate theoretical framework to discuss the relationship between L2 phonetic production and acculturation. However, within the context of the present study, the social network measures for the SNSS are gathered as estimates through semi-structured interviews as done by Lybeck (2002) rather than by using written surveys as in Kennedy Terry (2017) to allow for flexibility in gathering data. The reasoning behind this decision is that the participants of the present study are better positioned to look back on their social interactions in the L2 environment in a more generalized than precisely measured manner, and to be able to acquire better insight regarding participants' cultural identification with the target language community.

3. Research Design

3.1 Methodological Perspective

Recent studies in language variation have been increasingly less interested in defining variation in terms of the speakers, but rather aim to understand the meanings that motivate the production of one linguistic variable over another (Eckert, 2005). The present study also focuses on meanings - the influence of attitudes and stances on L2 speech. As socially rendered variation in phonetic production has been found to be highly systematic (Hay and Drager, 2007), the SNSS is used as a backdrop to provide clarity and structure to the analysis of the collected data. Therefore, this study can be understood as belonging in a qualitative paradigm, while making use of a theoretical tool that seeks to categorize participants' attitudes. However, ultimately, the notion of cultural identification is a subjective concept. Thus the researcher's findings should be understood as interpretations of the study participants' interpretations (Slevitch, 2011).

3.2 Data Collection

The empirical data for this study was collected in February 2017 in Stockholm through interviews with nine participants. The participants were selected by means of judgement sampling, which requires the researcher to make a judgement as to the individuals that fulfill required criteria and represent a population of interest (McCormack and Hill, 1997). The criteria for participants consisted of three conditions: he or she should be a native speaker of Swedish, he or she had completed an exchange year in the United States at high school level, and he or she had returned to Sweden within one year of the interview taking place. Other criteria, such as gender and age, were not taken into
consideration, although it should be mentioned that the participants were between 17 and 19 years of age, with two of them being male and seven female.

The participants were found through personal connections with the non-profit student exchange organization Youth for Understanding. However, the researcher had not met any of the participants prior to the study, nor had any knowledge regarding their English language skills, experience in the United States or attitudes towards American culture.

The data collection process was twofold: first, each participant was asked to complete a reading task to ensure the elicitation of the production of /r/; second, a semi-structured interview was held with each participant to gauge her or his attitudes towards American culture and their identification with it. The interviews and reading tasks were recorded using an iPhone 6S, which was tested prior to the interviews for its appropriateness for yielding sufficiently good sound quality. The final recordings resulted in 16 to 30 minutes of audio data per participant, with the total data amounting to 192 minutes and 35 seconds.

3.3 Data Analysis

The first task was administered with the intention to ensure the elicitation of speech data involving the production of /r/ sounds. The reading task differed from the semi-structured interview in that it represented a more formal speech style, thus allowing for some insight into the relevance of formality as a motivator for speech variation (Sundkvist and Gao, 2016). The passage *The North Wind and the Sun* (Appendix A) was chosen based on its previous use in phonetic studies (Gut, Fuchs and Wunder, 2015).

The semi-structured interview, unlike a highly structured or unstructured interview, combines open-ended and closed questions (Merriam, 2010), thus allowing for flexibility in the interview process while giving it direction to ensure that relevant information is obtained. As such, the semi-structured interview was the main tool used for collecting data regarding participants' attitudes towards American culture and their sense of identification with it (see Appendix B for interview guideline). The semi-structured interviews, unlike the reading passage, were not analyzed in terms of the participants' production of rhotic and non-rhotic /r/ due to the limited scope of the research.

The data analysis was conducted in two parts. Firstly, a summarization of the phonetic production was made by making note of and categorizing where the rhotic and non-rhotic /r/ sounds produced by each participant in the reading task occur based on auditory analysis. For the purpose of the analysis the occurrences of /r/ sounds were counted if they appeared in the following positions: when followed by a consonant or when occurring in the end of an utterance. Thereafter, the semi-structured interviews were transcribed and thematically categorized and analyzed.

3.4 Source Criticism and Research Ethics

The present study focuses on a relatively small amount of data, and is therefore limited in its scope. In addition, the analysis relies on processes that are common for a qualitative approach - on interpretations and intuitive understandings (Merriam, 2010). As such, the discussion and results of the research should not be interpreted as
generalizable. Rather, the study should be seen as a small-scale contribution to existing research, which aims to provide a transparent qualitative analysis of the relationship between cultural identification and L2 phonetic production through the use of existing theoretical frameworks and concepts, such as SNSS.

In considering the ethical aspects of conducting qualitative research, the participants were provided with a description of the purpose of the study and were asked for permission to record the interviews, as well as given anonymity.

4. Results and Analysis

4.1 Production of Rhotic and Non-Rhotic /r/

The results of the reading task were summarized by identifying those positions where only rhotic accents would pronounce an /r/, i.e. when followed by a consonant or when occurring in the end of an utterance, and by counting the number of instances when /r/ was actually pronounced in those positions. Based on these results, the percentage of rhoticity was established for each participant.

The overall results of the reading task show that participants pronounce /r/ in the majority of phonetic environments where it is only possible in rhotic accents: on average, rhoticity was produced 86.6 percent of possible instances in comparison to no /r/ occurring in such environments only 13.4 percent of the time. While almost all participants acknowledged being taught British English in school, the overall high percentage of the production of rhotic /r/ is not surprising, as existing research suggests that immersion into target language culture is connected to a higher usage of regionally preferred phonemes (Knouse, 2012). Although it is not known what the participants' production of rhoticity was like prior to the study abroad experience, the initial results of the auditory analysis seem to encourage the idea that participants continue to experience identification with the American English language environment.

Table 1 provides a summary of /r/ sounds as uttered by the nine participants in the reading task. The total number of possible rhotic tokens was 29, except for one participant (P3) who omitted one token from the reading. None of the participants uttered a rhotic /r/ on more than 27 or less than 21 occasions, which accordingly amounts to 96.4 percent and 72.4 percent.

Table 1. Rhoticity.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>/r/ pronounced</td>
<td>26</td>
<td>27</td>
<td>21</td>
<td>26</td>
<td>25</td>
<td>23</td>
<td>27</td>
<td>27</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>No /r/ pronounced</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>
As such, the participants were generally quite consistent in being rhotic over preferring the non-rhotic variety. However, four participants (P3, P5, P6 and P9) had a slightly lower percentage of rhoticity, with all of them pronouncing /r/ less frequently than the overall average. Of those four participants, three (P3, P6 and P9) stand out by the percentage of rhoticity being under 80 percent.

In order to provide additional depth to the slight variation in the participants’ phonetic production, the results might be considered in terms of other variables, such as stress, which might have affected the likelihood of a rhotic /r/ being pronounced. For example, in their auditory analysis of readings of *The North Wind and the Sun*, Gut, Fuchs and Wunder (2015) found rhoticity to be more common in stressed than unstressed positions.

### Table 2. Rhoticity in stressed and unstressed positions

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhoticity in stressed positions</td>
<td>13</td>
<td>15</td>
<td>11</td>
<td>15</td>
<td>12</td>
<td>10</td>
<td>10</td>
<td>14</td>
<td>9</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>86.7</td>
<td>100</td>
<td>73.3</td>
<td>100</td>
<td>80.0</td>
<td>66.7</td>
<td>66.7</td>
<td>93.3</td>
<td>60.0</td>
<td>80.7</td>
</tr>
<tr>
<td>Rhoticity in unstressed positions</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>11</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>13</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>92.9</td>
<td>92.3</td>
<td>78.6</td>
<td>78.6</td>
<td>92.9</td>
<td>92.9</td>
<td>92.9</td>
<td>92.9</td>
<td>100</td>
<td>90.4</td>
</tr>
</tbody>
</table>

As seen in Table 2, there were a total of 15 /r/ tokens in stressed positions and 14 /r/ tokens in unstressed positions (except for P3 who omitted one token). Interestingly, in general, the production of rhoticity was more common in unstressed positions by almost ten percent. In particular, the three participants with the lowest production of rhoticity – P3, P6 and P9 – also had a particularity low score of /r/ tokens in stressed positions, while P6 and P9 had a notably high percentage of rhoticity in unstressed positions. Thus, there might be some connection between the participants’ production of rhoticity and whether the /r/ occurs in stressed or unstressed syllables.

It should also be taken into consideration that while the study did not consider extra-linguistic factors, e.g. gender, age and formal L2 instruction, such issues might also have bared an impact on the slight variation in the results of the reading task.

### 4.2 Thematic Analysis of Semi-Structured Interviews

In this section the empirical data from the nine interviews is presented and analyzed. The analysis is divided into five sections – cultural awareness, density and multiplexity of social networks, identification with American values, motivation to participate in the
L2 community, and self-evaluation of changes in L2 production – which represent themes that emerged from the data and relate to different aspects of the research question (“How does cultural identification with the target language environment influence L2 phonetic production in the L1 language community?”). At the end of each section the Social Network Strength Scale (SNSS) is considered as the theoretical framework for the creation of relevant indicators and each participant is assigned a score of zero or one. At the end of the chapter the scores are summarized and presented in relation to the results of the reading task.

4.2.1 Cultural Awareness

During the interviews, several of the former exchange students brought up interlinked issues having to do with American culture. This awareness of cultural concerns could be described as profound in terms of the participants' capacity to establish connections between different issues within the L2 environment. For instance, when talking about the most difficult aspects of the study abroad experience, one of the participants brought up her observations of American culture, which intertwine politics and core values:

“The political system is kind of hard to understand. Not just how it works... I had family friends that I spent a lot of time with, and they were Republican. And [they] voted for Donald Trump, not because they believed in Donald Trump – they hated Donald Trump – but they voted for him anyways, because he’s the Republican. [...] You identify so strongly with your political view, you identify so strongly with America, and with being a patriot and everything. you agree with everything America’s done throughout history, basically. [...] We had a lot of discussion about the atomic bombs and we had a group discussion if the [...] atomic bomb was necessary [...], and I was the only one that thought that none of them were necessary. And then my teacher [...] was like “yeah, I just wanna point out that you all have been taught since you were kids that you have to agree with what America does cuz otherwise you’re not American. Cuz you have to believe in America and otherwise you’re not a patriot... and now we have someone who hasn’t been taught that, and they don’t agree”. (P1)

Several of the former exchange students discussed noticing an ‘America-is-best’-type of attitude as an underlying value, which affects personal relationships, as well as family dynamics and politics. However, interestingly, most of the participants also acknowledged that they learned to understand, although perhaps not agree with, this perspective. For example:

“I thought I was so open minded, you know. But, turned out, I wasn’t. Because I had this fixed mind that Republicans who vote Donald Trump - they must be evil people. But they turned out not to be, and they were my neighbors, my friends. And we had open discussions about it. And I saw their reasoning, and I saw why they thought the way they did. Because that’s how they grew up. And I had my opinions, because of the way I grew up. That was very interesting.” (P6)

“I didn’t agree with them, but I tried to listen to them and understand why they think what they’re thinking, and how they’ve come to this conclusion and how life is for them.” (P5)
Therefore these participants described behaviors that could be interpreted as an overcoming of cultural differences and as a sign of integrating into the hosting culture and establishing profound social relationships (Baker-Smemoe et al., 2014).

On the other hand, some of the participants noticed similar issues, yet were not able to relate to it:

“I had a lot of discussion with my host family about that... like Americans say they are the greatest country in the world. And the other countries are like, no they are not, you can’t say that. They are more open to the public, but the American bubble – they can’t see, so most of the Americans, they can’t change their minds. If they have something like “this is what I believe”, they can’t change it. Even though you really prove they are wrong.” (P3)

In summary, four of nine participants discussed different facets of American culture in terms of them being interlinked, therefore suggesting a higher degree of acculturation having occurred for these students. Seven of nine participants explicitly claimed to understand Americans' perspective for their behavior and attitudes (see Table 3). As such, almost all participants reflected on the complexity of cultural issues in the United States in some capacity. Thus, most of the participants demonstrated a high degree of awareness of the host culture environment or claimed to be able to understand the L2 community’s perspective.

Table 3. Cultural awareness.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interlinked cultural issues</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Understand L2 community perspective</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

4.2.2 Density and Multiplexity of Social Networks

As discussed in chapter 2, density of social networks refers to the ties that connect many people in a similar situation, while multiplexity has to do with diversity in the types of relationships individuals have with one another (Kennedy Terry, 2017). The participants of the present study discussed their experiences with these interpersonal links in both terms. For example, one participant described his social network as being quite dense, as he interacted with L2 speakers from several different groups. At the same time, his social network was also somewhat multiplex, as there also seemed to be some interpersonal ties between individuals in different social groups:

“I started the year with cross-country, before school had started. So, before school had started I already knew some people in the school, which was great. [...] Most of my friends, I made through the sports. [...] And then, I also met some people through church. My host family went to church and I followed them. So, through the church I met people, and then I met people in my classes. Some of them [knew each other]. Not all of them.” (P4)

More than half of the participants highlighted the relationships they had established with other foreign exchange students rather than with native members of the L2 community. While this might not reflect fluency in L2 English, the participant with the
lowest production of rhoticity in the reading task emphasized the international
dimension of his social network during the study abroad:

“In my school we were sixteen exchange students, or fourteen I think. [...] We got very close. That was very nice because we had, in our school, international nights and stuff like that, and we’d hang out after school. The closest one was another exchange student living in the same family as me. So, it was like a double placement. So, he was like my brother.” (P3)

It is possible that participants who had many social ties with other foreigners might have identified more strongly with the social role of an exchange student in the United States rather than as a member of the local community. While this might not have had a negative influence on their experience or L2 acquisition during the year abroad, it could have impacted the participants’ identification with the target culture and thus the construction of linguistic persona.

Table 4 provides an overview of the participants’ social networks in more detail according to each individual’s description of their interpersonal relationships during the exchange year. Social networks are marked as dense if the participant mentioned at least three different social groups he or she was a member of.

### Table 4. Social networks.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dense social network</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Multiplex social network</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>No mention of significant non-native social network</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

4.2.3 Identification with Values in the L2 Community

Another theme that emerged from most of the interviews had to do with a differentiation between Sweden and America, and more specifically, with values that are associated with each country. Participants were generally critical of some aspects of the L2 culture in comparison to their home country culture.

“And also throughout the year I understood more how social structures worked, like at the high school I was at. If you know someone, you could call them your best friend, but actually you don’t know them at all. Meanwhile, in Sweden if you call someone your best friend, it’s like if you’ve known them for a long time or if you’re like really close.” (P5)

“They’re so full of themselves sometimes. And they think America is the best, and that was really annoying. And also that people my age, they really had not the same mindset as me. I asked them like, “have you ever been abroad” and “where have you been?” Cuz, that’s what I would ask my friends in Sweden. But they’re like “no, no, I went to Oklahoma once”. What! Also the fact they didn’t want to travel. So, I said like, “if you could, where would you go”, and they’re like “Well, I like Texas. I like being here”. [...] So that was completely new to me.
And very difficult to adapt and find friends in all of that, when people are so different from me.” (P6)

On the other hand, some interviewees attributed the host culture more positive qualities than to their home culture:

“It’s just… I love Texas. It feels […] like home. The thing where they’re so close with [their family]. I just really like Texas because of the whole culture. Like, I’m not religious like my family was and stuff like that, but the things that they do in their religion, or they do culturally in their family… I just look up to that.” (P9)

Most participants also described having become more American in some ways during the study abroad. The interviewees’ recognition of qualities in their own behavior, which they describe as being typical to Americans, showcases a desire to continue to affiliate with the L2 language community and culture (Moyer, 2014). For example:

“I feel like I’ve really brought back some of the cultural things from America. The fact that I’m way more open now, I talk to strangers and I feel like America has that openness that Sweden doesn’t really have.” (P1)

In summary, while all of the participants explicitly contrasted American and Swedish culture, customs or values, none claimed one to be ultimately better than the other. In addition, some of the former exchange students mentioned having become and stayed “more American” in terms of their values or personality (Table 5).

### Table 5. Identification with American values.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition of host culture qualities in oneself</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

#### 4.2.4 Motivation to Participate in L2 Community

The fourth theme that frequently came up in the interviews had to do with motivation to continue participating in the L2 environment. Although all of the participants described the study abroad as a positive experience that led to personal growth, the majority acknowledged a lack of interest and motivation in being a long-term member of the L2 culture in the future. While all nine students expressed a wish to visit the United States again or live there for a short period in the future, only two said that they would like to stay there permanently.

“No, I wouldn’t live there. […] I’m not a big fan of everyone walking around with weapons. And I definitely wouldn’t want my kids to grow up there. And it’s so… dangerous, you know. Everything’s so strict. If you want to hop off at another bus stop you have to turn in lots of papers to the principal and call people here and there and get a signature from your parents. […] You’re kind of trapped. I had more freedom when I was twelve years old than when I was eighteen there. […] And even though people only caring about popularity is kind of a high school thing, I still feel like people bring it with them when they’re adults. […] I don’t know if I would want to have my life […] feeling like I don’t really belong. Because I have my
heritage here, I can relate to everyone [...] I still will always feel like a foreigner there. So, it’s definitely a good experience to have for a year but I wouldn’t be in that situation for ten-twenty years.” (P6)

In addition, motivation to participate in the L2 environment could be observed through participants’ continued relationships within their social networks in the United States, excluding communication with other foreign students. While most of the students discussed being in touch with American friends and family weekly or even daily, some described a decrease in communication:

“There are basically only two people I talk to. [...] It’s hard - the time difference and stuff. It’s not really like they could just call you like “what’s up”. Then you’re asleep or I’m asleep, then you’re at school or I’m at school or vice versa. So, it’s hard to have distant relationships.” (P7)

Table 6 provides a summary of the students’ motivation to continue participating in the L2 community with regards to their interest in moving back to the United States and to maintaining relationships within their American social network.

Table 6. Motivation to participate in L2 community.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested in moving</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>back to US</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintained relationships</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>with L2 community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.5 Changes in L2 Production

The former exchange students also reported changes in their L2 English production. While all participants described their post-exchange English as being more fluent than before the exchange year, some also mentioned specific ways in which their L2 English became more American, such as acquiring a regional accent or using American vocabulary:

“It got less Swedish and the British disappeared and I started saying things like “line”, and I started saying “soccer” not “football”, just because that’s how everyone said it.” (P2)

Table 7 provides an overview of self-reported acquisition of American characteristics in participants’ L2 production, excluding improved fluency.

Table 7. Acquisition of American English.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American English</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
4.3 Summary of Results

Based on the five themes that emerged from the semi-structured interviews a total of nine SNSS indicators were created to provide a framework for discussing the participants’ degree of cultural identification with the L2 community in relation to their phonetic production of rhoticity. Table 8 summarizes the total results of the semi-structured interview per participant, while Table 9 compares the SNSS score with the results of the reading task.

Table 8. Interview SNSS scores.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNSS</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>77.8</td>
<td>66.7</td>
<td>55.6</td>
<td>66.7</td>
<td>44.4</td>
<td>66.7</td>
<td>22.2</td>
<td>44.4</td>
<td>55.6</td>
</tr>
<tr>
<td>SNSS %</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

As discussed earlier, the nine participants overall seemed to prefer the rhotic /r/ over the non-rhotic variant, with only three participants having a slightly lower percentage of rhoticity. There was noticeably more fluctuation in the SNSS score, which was used to provide a measure for participants’ sense of cultural identification with the target language community.

Table 9. Results from reading task and SNSS.

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
<th>P6</th>
<th>P7</th>
<th>P8</th>
<th>P9</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNSS %</td>
<td>77.8</td>
<td>66.7</td>
<td>55.6</td>
<td>66.7</td>
<td>44.4</td>
<td>66.7</td>
<td>22.2</td>
<td>44.4</td>
<td>55.6</td>
<td>55.6</td>
</tr>
<tr>
<td>Rhoticity %</td>
<td>89.7</td>
<td>96.4</td>
<td>72.4</td>
<td>89.7</td>
<td>86.2</td>
<td>79.3</td>
<td>93.1</td>
<td>93.1</td>
<td>79.3</td>
<td>86.6</td>
</tr>
</tbody>
</table>

Figure 1. Results from reading task and SNSS.
As seen in Table 9 and illustrated in Figure 1, there is no obvious relationship between the phonetic production of rhoticity and cultural identification for the participants of the present study. Participants with the highest production of rhoticity did not necessarily also experience a high degree of cultural identification according to the SNSS. However, interestingly, of the three participants with a slightly lower percentage of rhoticity, i.e. P3, P6, P9, two (P3 and P9) also scored averagely on the SNSS. Also, some of the indicators reflect the results of the reading task more clearly, e.g. whether the participants had a significant non-American social network (Table 4).

5. Discussion

It should be taken into consideration that while the analysis of the production of rhoticity is subject to linguistic and non-linguistic influences, it is to an extent measurable through auditory analysis. Although the latter is a somewhat subjective measure (Hay and Drager, 2007), the set of indicators chosen for the SNSS are to an even higher degree dependent on interpretations of the data.

The analysis of the empirical data does not provide clear support for existing research that correlates immersion into the L2 culture and a high degree of usage of phonetic features that are characteristic to that particular L2 area. As such, the study fails to provide convincing support for the expectation that there is a clear relationship between establishing social networks and identifying with a target language environment, and speech production, as was set out in the beginning of this thesis.

However, as discussed earlier, qualitative studies cannot aim to generalize as they are based on interpretations of participants’ interpretations (Slevitch, 2011). Thus, in interpreting the quantitative measures, the individual experiences of the speaker should be taken into consideration. The analysis of the relationship between production of rhoticity and identification with American culture was further complicated by a lack of knowledge regarding the participants’ prior L2 usage, as well as cultural affinity with the United States before and during the study abroad. As such, the data represents a limited insight from one moment in time, rather than continuous observations of linguistic and social behavior. In addition, it could be argued that the high rhoticity scores across all participants suggest that it is a difficult linguistic variable to use for assessing cultural affiliation, perhaps due to it being very widespread in American varieties of English.

As mentioned, all participants used the rhotic variety significantly more often than the non-rhotic variety in the reading task. However none of them were completely consistent in using one over the other. This, in relation to the data from the interviews, encourages the idea that while the participants had constructed an identity within the L2 community that, at least to some extent, pursued assimilation with the local social network (Becker, 2009), there were also other factors influencing phonetic production, such as the stressed or unstressed position of the /r/ tokens.

The participants, in general seemed to have a complicated relationship with cultural identification with the L2 community. According to existing research, acculturation can be seen as a result of establishing social relationships and the motivation to affiliate
with the target language community (Lybeck, 2002; Moyer, 2014). In the present study, however, most of the participants had maintained ties within their generally dense social networks, yet the majority was unmotivated to participate in American culture long term or did not identify American qualities in their own values and behavior. However, it should be taken into consideration that these similarities might reflect an overrepresentation of participants with a similar background and value system.

Perhaps, in conclusion, it could be argued that for L2 English speakers the more significant link connecting phonetic production and identity is being able to understand the target culture norms and values. As discussed by Baker-Smemoe et al. (2014), speakers who are capable of overcoming cultural differences between their own and the hosting culture are more likely to integrate and use the L2 in versatile situations. In the present study nearly all participants demonstrated such ability (see section 4.2.1).

6. Conclusion

The purpose of this study was to contribute to the field of sociophonetics by increasing the understanding of the relationship between L2 speech production and cultural identification in the context of the speaker not being present in the target language environment. This was done by conducting a qualitative study based on the phonetic production of the GA-associated rhotic /r/ and personal experiences of nine Swedish exchange students to the United States. In attempting to answer the research question “How does cultural identification with the target language environment influence L2 phonetic production in the L1 language community?” this Bachelor’s thesis has added to existing research by highlighting the possible connection of maintaining a dense social network with native speaker members of the L2 community, as well as of having an awareness and capacity to understand the L2 culture, with a higher percentage of rhoticity, which is considered to be a stereotypical characteristic of American English.

Based on the results and analysis of the present study, it could be said that while the expectation of finding solid links between speech and attitudes was not met by the results of the study, there are some connections between aspects of cultural identification and phonetic production, such as a lower percentage of rhoticity in the speech of L2 English speakers that have established more profound social relationships with other non-native L2 English speakers. However, such conclusions are subject to interpretation and are not easily measurable, as well as being affected by linguistic variables like stress.

Given these limited findings, further research should be made regarding cultural identification and phonetic production. Future studies could also investigate these matters by taking into consideration non-linguistic matters, such as age and gender, as well as previous L2 instruction.
References


Appendix A

The North Wind and the Sun had a quarrel about which of them was the stronger. While they were disputing with much heat and bluster, a Traveler passed along the road wrapped in a cloak.

"Let us agree," said the Sun, "that he is the stronger who can strip that Traveler of his cloak."

"Very well," growled the North Wind, and at once sent a cold, howling blast against the Traveler.

With the first gust of wind the ends of the cloak whipped about the Traveler's body. But he immediately wrapped it closely around him, and the harder the Wind blew, the tighter he held it to him. The North Wind tore angrily at the cloak, but all his efforts were in vain.

Then the Sun began to shine. At first his beams were gentle, and in the pleasant warmth after the bitter cold of the North Wind, the Traveler unfastened his cloak and let it hang loosely from his shoulders. The Sun's rays grew warmer and warmer. The man took off his cap and mopped his brow. At last he became so heated that he pulled off his cloak, and, to escape the blazing sunshine, threw himself down in the welcome shade of a tree by the roadside.


(Lexical items used in the assessment of rhoticity are in bold)
Appendix B

Interview Guideline

- When exactly did you go on exchange and where in the US were you? Did you stay in the same family the whole year?
- Do you think your English changed in any way during the exchange year?
- How would you say the English in the US differed from what you had learned in school in Sweden?
- Did native speakers of English ever react in any way to your English pronunciation or vocabulary? How? Do you recall if there were different reactions towards the beginning and end of your exchange year?
- What ideas did you have about the US before going on exchange? Did anything surprise you about American culture and/or Americans' behavior?
- What were the most difficult aspects of your personal exchange year experience?
- Did your sense of “fitting into” American culture change throughout the year? How?
- In the end of your exchange year did you (still) feel like you were a foreigner in their culture? How do you feel now when about six months has passed since your return?
- When you were in the US were you sometimes taken for an American? How did you react to that?
- What was your social circle in the US like? Describe the different “groups” that you socialized with, e.g. family, classmates, sports, other exchange students.
- Have you maintained these relationships? Which ones more than others?
- What do you think about Americans in general? Do you think they are different to Swedes? Do you think you identify with both or with one more than the other?
- How did going on exchange to the US influence your post-exchange life?
- Would you like to move back to the US? If yes, why, where, under what circumstances, for how long? If not, why not?