# TRANSFER IN FINNISH EFL LEARNERS' PRONUNCIATION OF ALVEOLAR AND POST-ALVEOLAR FRICATIVES AND AFFRICATES

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#### Tiivistelmä – Abstract

Suomalaiset puhuvat englantia yleisesti ottaen hyvin. Suomalaisten puhumaa englantia kuitenkin varjostaa rallienglantina tunnettu aksentti, jonka muodostaa pitkälti suomen kielen äänteiden, etenkin konsonanttien, siirtäminen englannin kieleen. Tämä siirtovaikutuksena tunnettu ilmiö saattaa vaikuttaa paitsi siihen, kuinka ymmärrettävää suomalaisten puhuma englanti on, myös siihen, millainen mielikuva Suomesta ja suomalaisista muodostuu kansainvälisesti.

Tämän tutkimuksen tarkoituksena oli kartoittaa, mitkä Englannin kielen konsonantit ovat suomalaisille englanninoppijoille erityisen haastavia ja mitä äänteitä suomalaiset käyttävät niiden sijasta. Tutkimus keskittyi niihin frikatiiveihin ja affrikaattoihin, jotka eivät esiinny suomessa mutta joilla on merkittävä rooli englannissa. Osallistujiksi valikoitui 14 7-luokkalaista, jotka lukivat ääneen tutkijan laatiman englanninkielisen tekstikatkelman.

Tallenteista paljastui samansuuntaisia tuloksia kuin aiemmissa tutkimuksissa: soinnilliset postalveolaariset konsonantit, eli frikatiivi /ʒ/ sekä affrikaatta /dʒ/, osoittautuivat vaikeimmiksi äänteiksi. Osa oppilaista äänsi soinnilliset konsonantit "oikein", eli kuten englantia äidinkielenään puhuvat, mutta osa korvasi ne puheessaan soinnittomilla vastineilla tai suomesta tutuilla /s/- ja /ts/-äänteillä. Joissakin tapauksissa oppilas käytti "oikeaa" äännettä yhdessä sanassa, mutta myöhemmin korvasi sen toisella.

Tulosten perusteella voidaan arvella, että kaikki ääntämisvirheet eivät johdu kykenemättömyydestä tuottaa tiettyjä äänteitä, vaan tietämättömyydestä tai epävarmuudesta siitä, mitä äännettä kussakin kontekstissa tulisi käyttää. Olennaisena osana ääntämisen opetusta voidaankin nähdä monipuolinen ja auditiivinen sanaston syöte.

Avainsanat: fonetiikka, siirtovaikutus, interferenssi, kielenopetus, englanti, ääntäminen

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#### 1. Introduction

Finnish people speak English relatively well. In 2022, Education First ranked Finland in eighth place out of 111 countries in their English Proficiency Index, placing the country in "Very High Proficiency" (Education First 2022: 6). There are several reasons for this proficiency, but it is generally recognised that the Finnish school system plays an important role (Leppänen et al. 2011: 22). English as a Foreign Language (EFL) tuition in Finland is generally thought to be communicative in nature, with emphasis on using the language to convey messages instead of aiming to produce perfect, native-level English. The communicative method has many benefits: it allows for an increased focus on content (Breen & Candlin 1980: 102) and has been found to have positive results on language acquisition in general (Brandl 2021: 18). It has brought with it a greater tolerance towards errors made by students (Meriläinen 2010: 52). However, its effects on pronunciation and the clarity of spoken language have not been exhaustively studied. As Trofimovich and Isaacs (2012) state, there are several aspects of spoken English that may impact its intelligibility, but these mechanisms are not yet perfectly understood. In addition, even though messages can be intelligibly conveyed in many ways, in an authentic community, different accents have their own connotations of "prestige and stigmatisation" (Mullany 2010: 95). Therefore, it is not insignificant how EFL learners are taught to pronounce English. According to Henderson et al (2012: 12), EFL teachers in Finland hold the teaching of pronunciation in high regard and deem their own pronunciation skills good. However, this does not mean EFL teaching in Finland is perfect and should not be developed further.

Between 2020 and 2022, Finland's English Proficiency Index dropped from 631 points to 615 points, falling from being the 3<sup>rd</sup> best in the world to 8<sup>th</sup> place (Education First 2020: 6, 2022: 6). In addition, a common feature of Finns' English is the prevalence of phonological transfer that creates a distinct accent known as 'rally English' (Kivistö 2016). This does not necessarily decrease the intelligibility of the spoken English, but may, in certain contexts, carry stigmatisation that can impact communication with native English speakers or even other EFL speakers. This study aims to increase our understanding of this transfer from Finnish to English from the viewpoint of pronunciation, specifically in the age group 13-15. Precise information about which aspects of pronunciation pose challenges for Finnish EFL learners can help educators focus their limited time and resources appropriately.

### 2. Background

This section discusses the phenomena relevant to the present study. First, a brief look will be taken into the concept of interlanguage transfer. Second, the phonological differences between Finnish and English languages will be summarised. Finally, the concepts of comprehensibility, intelligibility, and accentedness will be defined and compared.

#### 2.1 Transfer

Yule (2017: 533) defines transfer as "using sounds, expressions or structures from the L1 when performing in the L2". It is a phenomenon that strongly impacts how people learn English as a Foreign Language (EFL) and it has been extensively studied by linguists all over the world (Karim & Nassaji 2013: 118). When transfer impacts the target language in a negative way, it is known as interference (Richards & Schmidt 2002: 323).

According to Kaivapalu (2007: 293-294), linguistic differences between the learner's native language and the target language can affect transfer in several ways. While it was previously believed that differences between linguistically distant languages mainly cause interference, recent studies have indicated that contrastive metalinguistic information can also be successfully used in language teaching (ibid.). On the other hand, challenging interference can occur even between languages that are very similar. A less common form of transfer is intralanguage interference: mistakes made due to the influence of the target language itself (Lekova 2010). An example in the context of phonology might be an EFL learner who has correctly learned that the 'ss' in the word 'pressing' is pronounced as /s/, and thus incorrectly uses the same consonant in the word 'pressure'.

The phenomenon of transfer from a person's first language (L1) to their second language (L2) has been the subject of several studies in the context of Finland and its two official languages: Finnish and Swedish (Meriläinen 2010: 53). As a Germanic language, Swedish is typologically much closer to English than Finnish is to either of the two, possibly making transfer more beneficial. However, in the case of phonology, all three languages differ enough for transfer to cause misinterpretations and misunderstandings (Andersson 2016: 6). It is still unclear what aspects of phonological transfer from Finnish interfere with the comprehensibility of English spoken by EFL learners (Tergujeff 2013: 23).

#### 2.2 Differences between Finnish and English

Phonological differences between Finnish and English can be divided into segmental and suprasegmental features. Segmental phonology analyses single segments of the language, such as vowel and consonant phonemes, while suprasegmental phonology studies the wider phenomena of speech, e.g. intonation (Crystal 2008). Segmental differences are perhaps most noticeable in the phonemes that are represented in both languages by the letter r. The alveolar trill /r/ used in Finnish is very distinct from the postalveolar approximant /ı/ used in most variants of English (Tergujeff 2013: 20, 22).

Lintunen (2004) found that sibilants, affricates, and dentals are the most challenging English phonemes for Finnish speakers. Lintunen also discusses how much young Finns were exposed to English in their daily lives at the time of his study. However, the consumption of foreign language media and entertainment in Finland has continued to increase and English has become ever more present in the past 19 years, possibly making these phonemes more familiar to learners. In addition, many modern teaching materials stress the pronunciation of these consonants from early on by comparing the English phonemes to similar Finnish sounds that students typically use to substitute the target phoneme. For example, the third grade English book Go for it! 3 teaches dentals "with the help of humoristic minimal pairs" (Kanervo et al. 2016: 10). The contrast between  $/\theta$ / and /t/ is demonstrated by the minimal pair 'three houses – tree houses', where the segmental transfer changes the meaning of the phrase (Kanervo et al. 2016: 63). Emphasizing this contrast and its effect on the comprehensibility of the word can make it easier for learners to understand the phonological differences of the two languages.

An example of clearly differing suprasegmental features is intonation, which is much more prevalent in English and poses difficulties for Finnish EFL learners (Tergujeff 2013: 23). In addition, stress in Finnish is always on the first syllable of each word, while in English, its position has more variation. This causes a phenomenon which Peperkamp and Dupoux (2002:223) call 'stress deafness': the difficulty to perceive stress contrast. Stress errors can affect comprehensibility, especially in words where the contrast creates meaning. One example of such a word would be 'record', which is a noun when stress is on the first syllable and a verb when stress is on the second syllable. Also, according to Wang (2022), segmental and suprasegmental features work together to make speech more comprehensible. For the aforementioned reasons, both phonemes and stress are core elements of modern EFL tuition.

#### 2.3 Comprehensibility and accentedness

Derwing and Munro (2005: 385) define comprehensibility as "the listener's perception of how difficult it is to understand an utterance". Intelligibility as a term is similar but adds the level of how much of the message is actually understood by the listener. Accentedness, on the other hand, they define as "a listener's perception of how different a speaker's accent is from that of the L1 community" (ibid.). These two do not exclude each other: even heavily accented speech may be perfectly comprehensible in the right circumstances, for example when the context helps in interpreting what is said (Derwing & Munro, 2005: 386). Munro, Derwing, and Morton (2006) found that ESL (English as a Second Language) speakers generally understand each others' speech well.

Tergujeff (2021) studied how well native English speakers comprehend Finnish people by comparing two groups of year 9 students: Finnish speakers and Finland-Swedish speakers. Finns were consistently rated less comprehensible than Finland-Swedish people with similar proficiency in English. This seems to indicate that there is something about Finnish itself that makes Finns' pronunciation of English harder to understand. Several studies have found that vowel substitution has less of an impact on comprehensibility than consonant errors (Suzukida & Saito 2021). Thus, it appears that the consonant phonemes in particular should be studied further in the Finnish context.

Tergujeff (2022) took a closer look at the impact of segmental deviations on the intelligibility of English spoken by native Finnish speakers. According to the study, it was not only significant which target phoneme experienced deviation, but also what sound the target phoneme was substituted with. Substituting a voiced alveolar fricative /z/ with its voiceless counterpart /s/ had a significantly smaller impact on intelligibility than using an affricate /ts/. The position of the deviation within the word was also significant: substitutions towards the end of a word were less likely to cause a misunderstanding than those at the beginning of a word. However, the study recognises that the sample sentences appeared out of context, which may have also impacted the intelligibility.

It should be noted that segmental transfer is not the only thing that causes comprehensibility issues in EFL speech. Trofimovich and Isaacs (2012: 913) found that segmental features mostly impacted perceived accentedness, whereas "grammatical and lexical errors" more strongly affected comprehensibility. The frequency of suprasegmental errors impacts Finns speaking

other languages as well. Heinonen (2021) found that the factor that most limits native Swedish speakers from understanding Finns speaking Swedish was actually sentence stress. The Swedes could generally comprehend the Finns despite phonological interference. However, the pronunciation of vowels and consonants was the factor that determined if the speech was laborious to comprehend for the Swedish listeners. This is another reason why it can be seen as beneficial to teach pronunciation beyond producing intelligible words and sentences. Even if the message can be conveyed, the communication is severely hindered if the listener is forced to strain in order to understand it. Furthermore, this adds to the stigmatisation of the accent. For example, Lev-Ari and Keysar (2010) found that those speaking accented English were consistently rated as appearing less trustworthy.

## 3. Present study

#### 3.1 Aims and research questions

This study aims to expand on previous studies' findings on segmental phonetical transfer from Finnish to English, focusing on marker consonant phonemes that significantly differ between the two languages.

The research questions are as follows:

- 1. What kind of linguistic transfer occurs in a Finnish speaker's pronunciation of English fricatives and affricates?
- 2. Which consonants are particularly challenging for Finnish EFL learners?

Particular emphasis will be put on certain marker phonemes that are present in English but not in Finnish:  $\langle z/, /3/, \text{ and } / \underline{d} 3/.$  This study will not focus on phonemes like  $\langle J/, \text{ that are not present} \rangle$  in standard Finnish but are still used by Finns in varying contexts (Suomi, Toivanen & Ylitalo 2006: 161). The sibilant  $\langle J/, \text{ even has its own name in Finnish: 'suhu-s' (Maamies 1995)}.$ 

#### 3.2 Participants

The study comprised 14 participants, who were 7th grade students, aged approximately 13-14, all of whom were native Finnish speakers. The sample was selected on basis of convenience: the group's teacher was willing to give the participants 15 minutes from the start of the lesson for the purpose of this study.

#### 3.3 Ethics

No names or other data was gathered that might enable the recognition of individual participants, other than the necessary voice recordings. Most students at the school have written permission from their parents for participating in research. The author confirmed this from the principal of the school, and the English teacher of the sample group verified that the students in this group all have this permission. Students were handed a printed notice informing them of the conduction of the study.

#### 3.4 Data gathering

This study was conducted in May 2021 at a Finnish teacher training school. The participants were told the study was about Finnish EFL learners' English pronunciation. They were asked to read the following text out loud:

George is fourteen years old. His favourite subjects are arts and German. George's sister Lisa is seven. She wants to be a zookeeper or a ballet dancer. Their mother is into gardening: she grows cucumbers and tomatoes in the backyard. Their father has a motorbike in the garage and he likes watching sports on the television.

The author created the text specially to contain several instances of the selected marker phonemes while avoiding unusually heavy concentrations or repetition reminiscent of 'tongue-twisters'. The aim of the experiment was to discover several things about the specifics of how the participants pronounce English. The very first word, 'George', gives a first impression of how successfully the participants are able to produce the /dʒ/-sound as well as reveals whether the participants use the post-vocalic /r/. This is followed by more affricates in the words 'subjects' and 'German', which some Finnish speakers may realise as the /ts/-affricate. This would display transfer from Finnish, where /ts/ is commonly used in loan words like 'tsatsiki' or 'tsunami'.

In the third sentence, the focus is on the space between the words 'Lisa' and 'is' and whether the participants will include an intrusive /r/ in this position. The use of this feature varies significantly between different varieties of English (Broadbent 1991). The fourth sentence gives an insight into the participants' use of the /z/-sibilant, which is not a particular focus of the study but helps form a baseline for comparing the prevalence of other phonemes in the

speech samples. The fifth sentence continues the charting of post-vocalic /r/ but it also intends to measure consistency: with several occurrences of the voiced dental fricative, it displays whether the participants repeatedly produce the same sound in all these positions. Finally, the sixth sentence studies the use of the /ʒ/-fricative in the words 'garage' and 'television'.

Thus, the collected speech sample should be representative of the most common fricatives and affricates that have been found to be the most challenging phonemes for Finnish EFL learners (Morris-Wilson 2004, cited in Pelttari 2015: 10). In addition, the brevity of the text and the familiarity of the vocabulary encouraged the participants to focus fully on reading and to read the passage in its entirety.

The data consists of 14 voice recordings of the aforementioned text. To conserve the class's time, the study was not conducted individually with each student; instead, the participants recorded their speech in the hallway with their personal tablet computers issued by the school. Three of the recordings have a significant amount of background noise due to the recording environment, making their analysis somewhat challenging. One of the recordings implied the participant had an apparent speech impediment, as he used a uvular trill /R/ which is atypical for both Finnish and English. In addition, the presence of other students in the recording situation may have disturbed the participants, causing peer pressure and impacting the pronunciation. However, the author deemed all recordings suitable for the purposes of this study, as the phonemes under closer inspection were audible and unaffected.

#### 3.5 Analysis

The data was analysed auditorily with the help of Isotalo's (n.d.) online Interactive IPA Chart. This tool was chosen as it was readily accessible and precedently familiar to the author. The author compared the sounds in the recorded samples to those provided by the online tool in order to transcribe the recordings. The consonant phonemes used by the participants were then auditorily compared with ones typically used by native English speakers. For the purposes of this study, pronunciations matching or close to 'nativelike' or 'target' pronunciation are occasionally referred to as 'good'.

#### 4. Results

The data reveals many varying realisations of the target fricatives and affricates. One of the phonemes with most variation was the  $\frac{d}{d}$ -affricate. Six students produced flawless voiced post-alveolar affricates and a further four used a similar voiced alveolo-palatal affricate, while others replaced them with voiceless equivalents. Certain marker words were selected for closer inspection and are phonetically transcribed in the table below.

Table 1. Realisations of certain marker words in the sample recordings.

	George	German	Zookeeper	Television
Recording 1	[dzodz]	[dzɜːmən]	[zy:ki:pəɪ]	[televisən]
Recording 2	[tsots]	[tʃɜ.ɪmən]	[su:ki:ppəɪ]	[televisən]
Recording 3	[tso:]	[tʃɜ.ɪmən]	[su:kipəɪ]	[televiʃən]
Recording 4	[q301q <u>z</u> ]	[dʒɜ.ɪmæn]	[tsu:ki:pəɪ]	[televisən]
Recording 5	[dʒo:d̞z̞]	[dʒɜ:mən]	[zʉ:kipəɹ]	[televiʒən]
Recording 6	[tso:ts]	[tʃɜ.ɪmən]	[tsu:ki:pah]	[televisiən]
Recording 7	[dzoɪdz]	[dzs.mæn]	[zʉ:kipəɹ]	[televisən]
Recording 8	[tʃo:tʃ]	[tʃɜ.ɪmən]	[su:ki:pə:]	[televisən]
Recording 9	[dʒo:d̞z̞]	[dʒɜ.ɪmæn]	[su:ki:per]	[television]
Recording 10	[q3o1qz]	[dʒɜ.ɪmæn]	[su:ki:pəɪ]	[televisən]
Recording 11	[dzorg]	[dʒɜ.ɪmən]	[zu:ki:pər]	[televiʒən]
Recording 12	[tseortse]	[tserman]	[tʃu:ki:pər]	[televisio]
Recording 13	[dzoɪdz]	[kɜ.ɪmən]	[tʃu:ki:pər]	[televisən]
Recording 14	[tsorts]	[tsermən]	[tsu:ki:pər]	[televissən]

The multitude of different realisations can be seen as particularly noteworthy. In the words 'George', 'German', and 'zookeeper', nearly all the recordings differ. Only the word 'television', which the students have likely encountered numerous times, was relatively similar in all recordings.

Signs of transfer from Finnish are present in all recordings. In many cases, voiced post-alveolar affricates are replaced with voiceless alveolar or palato-alveolar equivalents. This is demonstrated in recording 8, where both George and German are pronounced with voiceless affricates. Recording 9 starts off with a flawless /dʒ/-consonant and overall good pronunciation, but the participant then switches to a more accented English, the word 'sister' already taking

the exaggerated form of [sister:], with a trill transferred from Finnish. In many of the recordings, the voiced alveolar fricative in 'zookeeper' has been replaced with a voiceless counterpart or made into an affricate. This can be explained by the Finnish orthography which occasionally uses the letter z to represent the /ts/-affricate, providing a natural source of transfer. For example, in recording 6, /ts/ was used both in George and Zookeeper. Somewhat inexplicable were the two occasions where the palato-alveolar affricate /tʃ/ was used in the word 'zookeeper'.

Table 2. Realisations of certain marker phonemes in the sample recordings.

Target phoneme	/d3/	/3/	/z/	/ʃ/
Recording 1	/dʒ/, /dٟz/	/s/	/z/	/ʃ/
Recording 2	/tʃ/, /ts/	/ʃ/, /tʃ/	/s/	/ʃ/
Recording 3	/tʃ/, /ts/	/ʃ/	/s/	/ʃ/
Recording 4	/d <sub>3</sub> /	/ʃ/, /tʃ/	/ts/	/ʃ/
Recording 5	/dʒ/	/3/	/z/	/ʃ/
Recording 6	/tʃ/, /ts/	/ts/, /s/	/ts/	/ʃ/, /s/
Recording 7	/dz/	/ʃ/	/z/	/ʃ/
Recording 8	/dz/, /tʃ/	/ʃ/	/s/	/ʃ/
Recording 9	/dʒ/	/ʃ/, /s/	/s/	/ʃ/
Recording 10	/dʒ/	/ʒ/, /ʃ/	/s/	/ʃ/
Recording 11	/dʒ/, /dᢩz/	/3/	/z/	/ʃ/
Recording 12	/ts/, /j/	/s/	/tʃ/	/s/
Recording 13	/dz/, /tʃ/, /k/	/tʃ/, /ʃ/	/tʃ/	/ʃ/
Recording 14	/dz/, /ts/	/ts/, /ss/	/s/	/s/, /h/

Table 2 shows the variation of the pronunciations of marker phonemes inspected in this study. It demonstrates how the participants may have used two or even three different phonemes or allophones to represent the same target sound. Also included is the voiceless post-alveolar fricative /ʃ/ as an example of a sibilant that is familiar to Finnish EFL learners and poses significantly fewer difficulties.

There was significant variety among how participants used the postalveolar approximant /x/. In two recordings, the approximant was used in the word 'German', but replaced with the alveolar

trill /r/ in the word 'zookeeper'. This may be explained by 'German' being a more familiar word for the participants, resulting in a pronunciation more typical for native speakers. In all but one of the recordings, the postvocalic 'r' in 'German' was pronounced, which can be seen as an indicator of American influence in youth culture. Yet, in 'George', half of the participants omitted the postvocalic 'r', displaying a certain level of inconsistency in the pronunciation. In this study, it was not possible to chart consistencies of the pronunciation of the same word in different contexts, as the text passage was relatively concise and contained most words only once.

The transfer of phonemes does not apply only to consonants. For example, in recording 12, the word 'George' is realised with a diphthong in the middle, as [tseortse], following the Finnish rules of one-to-one correlation between phonemes and letters. In the same recording, the word 'Television' is also pronounced with a diphthong, as [televisio]. This is possibly the purest form of transfer in the sample, as that is precisely how the word is pronounced in Finnish.

#### 5. Discussion

The data gives new insights into the varied ways in which Finnish EFL speakers pronounce their consonants. Being aware of this variation may be useful for teachers who aim to help their students to get rid of atypical allophones when speaking English. For example, in the case of the marker word 'zookeeper', three participants used the /ts/-affricate, which is particularly likely to cause misunderstandings (Tergujeff 2022: 316). Even if the variation does not necessarily impact the comprehensibility of the speech, it will increase accentedness, and thus the listener may need to pay closer attention compared to a more familiar or native-like pronunciation (Heinonen 2021). One aspect of consideration for further research could be the potential impact of accented speech on the image how Finland and Finnish people are viewed internationally.

In some cases, the reason for segmental transfer does not seem to be the inability to produce the target phoneme but the uncertainty about which phoneme to use in a particular context. One of the examples of transfer in the data was the substitution of the affricate  $\frac{d}{d}$  with the plosive  $\frac{d}{d}$  in the word 'German'. This can be thought of as interference severe enough to hinder comprehensibility. However, this occurred in a sample where the affricate  $\frac{d}{d}$  was also used several times. This indicates that the participant would have been capable of producing a

consonant very similar to the target phoneme, but simply was not certain whether the 'G' in 'German' is a hard or soft 'G', i.e. if it is pronounced as /g/ or /dʒ/. This difficulty is typical for speakers of languages that use a 'shallow orthography', where written graphemes closely correspond to spoken phonemes (Sipra 2013: 121). A part of what is known as a Finnish accent is caused by the different orthographic systems in Finnish and English. The relative unpredictability of English orthography, where the pronunciation of the word is not always immediately decipherable, can cause problems when encountering new words – no matter how perfectly different phonemes are taught. This is especially problematic in words that are written the same way but pronounced differently, such as the present and past tenses of 'read'. However, this can be seen as a necessary part of the learning process: learners make mistakes and learn from them. This only requires attentiveness from the teacher or peers to let the learner know the correct pronunciation of the word in question. Good command of vocabulary and its strengthening with auditory input may also alleviate the issues caused by orthography.

Referring to table 2, the /ʃ/-sibilant was not particularly challenging for the participants. However, in recording 14, it was substituted with the glottal fricative /h/. It should be clarified that this occurred in the word 'she', hinting that the seemingly peculiar substitution was perhaps not caused by a difficulty in producing /ʃ/ but by a confusion between the pronouns 'she' and 'he' in fast speech. This may have been an isolated case of careless reading, which could not be confirmed one way or the other in this study as the short text passage only contained the word "she" once. However, the Finnish language does not have separate pronouns for different genders, which may sometimes lead to pronoun errors when speaking English. Further research is required on how these problems could be mitigated.

It should be mentioned that in some cases, using a Finnish accent can be a conscious choice. Stand-up comedians, for example, can use it as a tool that helps in becoming more recognisable and memorable. In the present study, recording 9 starts off with pronunciation and rhythm similar to native speech, but then turns into a more stereotypical 'rally English'. It is possible that this is caused by the recording environment and peers who may have been present. Studies have shown that occasionally, peer groups discourage academic excellence and have a detrimental effect on students who would like to succeed (e.g. Keletsositse 2021). In the case of recording 9, Finnish accent may have enjoyed higher prestige than native-like accent in the peer group of the participant, therefore pressuring him to adapt his accent in this situation. This

aspect of EFL tuition should be studied further to provide teachers with tools to limit the detrimental effects of peer pressure.

The participants of this study had probably started to study English in third grade, as was typical until 2020 (Ojamies 2018: 4). In 2019, the national core curriculum was changed so that as of 2020, foreign language tuition – typically English – in schools starts on first grade for all pupils in Finland (Opetushallitus 2019). This is not a completely new phenomenon in Finnish schools, as EFL immersion tuition starting in first grade has existed in some schools since at least 1993 (Björklund and Suni, 2000: 206-207), but changes to the core curriculum introduce a formal list of skills and aims that have to be taken into account in foreign language tuition. In terms of pronunciation, these aims include the comprehensible pronunciation of common words and phrases, word and sentence stress, speech rhythm, and intonation (Opetushallitus 2019: 28). A few years from now, the results of this nationwide reform and its impacts on the comprehensibility of English spoken by Finns may be visible. It might be beneficial to redo this study or conduct similar research about the transfer of fricatives and affricates then.

#### 6. Conclusion

This study was conducted to find out what kind of segmental transfer occurs in Finnish speakers' pronunciation of English and which consonant phonemes are particularly challenging for Finnish EFL learners. The data revealed that significant transfer occurs in voiced post-alveolar fricatives and affricates, which Finnish speakers tend to shift towards their alveolar or voiceless counterparts – sounds, which are commonly used in the Finnish language. In this sample, the fricatives and affricates appeared to be the most challenging consonant phonemes for the studied Finnish EFL learners. Possibly increased auditory input and minimal pair training could help make Finns' English pronunciation more intelligible. However, in this study, it was not possible to determine which methods would best achieve this or what effects on comprehensibility were caused by the observed transfer from Finnish. Further research might reveal more about how the limited time and resources of teachers and learners in Finland could better be directed into learning ever more comprehensible pronunciation of English.

# **Bibliography**

Andersson, K. (2016). Explicit and implicit comparison of English and Swedish in English course books for year 7 and year 11 in Sweden. Karlstad University.

Björklund, S. & Suni, I. (2000). The Role of English as L3 in a Swedish Immersion Programme in Finland: Impacts on Language Teaching and Language Relations. In Cenoz, J. & Jessner, U. (eds.), *English in Europe: The Acquisition of a Third Language* (198-221). Multilingual Matters.

Brandl, K. (2021). *Communicative language teaching in action*. Upper Saddle River: Pearson Prentice Hall.

Breen, M.P. & Candlin, C.N. (1980). The essentials of a communicative curriculum in language teaching. *Applied Linguistics*, 1(2), 89-112. <a href="https://doi.org/10.1093/applin/I.2.89">https://doi.org/10.1093/applin/I.2.89</a>

Broadbent, J. (1991). Linking and intrusive r in English. *UCL Working Papers in Linguistics*, 3.1 (1991): 281–302. Milroy, Lesley.

Crystal, D. (2008). *A Dictionary of Linguistics and Phonetics*. Malden, MA: Blackwell Publishing.

Derwing, T.M. & Munro, M.J. (2005), Second Language Accent and Pronunciation Teaching: A Research-Based Approach. *TESOL Quarterly*, 39: 379-397. https://doi.org/10.2307/3588486

Education First (2020). *EF EPI: EF English Pronunciation Index. A Ranking of 100 Countries and Regions by English Skills.* https://www.ef.com/wwen/epi/downloads/

Education First (2022). *EF EPI: EF English Pronunciation Index. A Ranking of 111 Countries and Regions by English Skills*. <a href="https://www.ef.com/wwen/epi/downloads/">https://www.ef.com/wwen/epi/downloads/</a>

Heinonen, H. (2021). Lausepaino-ongelmia: ääntämisen ymmärrettävyyteen voi vaikuttaa se, mitä painottaa ja miten. *Kieli, koulutus ja yhteiskunta*, 12(1).

Henderson, A., Frost, D., Tergujeff, E., Kautzsch, A., Murphy, D., Kirkova-Naskova, A., Waniek-Klimczak, E., Levey, D., Cunningham, U., & Curnick, L. (2012). The English Pronunciation Teaching in Europe Survey: Selected Results. *Research in Language*, 10. <a href="https://doi.org/10.2478/v10015-011-0047-4">https://doi.org/10.2478/v10015-011-0047-4</a>

Isotalo, P. (n.d.). *Interactive IPA chart*. https://www.ipachart.com/

Kanervo, P., Laukkarinen, A., Paakkinen, J., Sarlin, H., & Westlake, P. (2016). *Go for it! 3. – Opettajan materiaali*. Sanoma Pro.

Kaivapalu, A. (2007). Äidinkieli vieraiden kielten opiskelussa – etu vai haitta? Oppijoiden käsityksiä lähdekielen vaikutuksesta kohdekieleen oppimiseen teorioiden ja tutkimustulosten valossa. In Salo, O-P., Nikula, T., & Kalaja, P. (eds.) *Kieli oppimisessa – Language in Learning* (s. 289–309).

Karim, K. & Nassaji, H. (2013). First language transfer in second language writing: An examination of current research. *Iranian Journal of Language Teaching Research* 1(1). University of Urmia.

Keletsositse, O. (2021). Evaluating the Impact of Peer Influence on Student Behaviour and Academic Performance in A Boarding School: A Case Study of a Private School in the Northern Region of Botswana. *International Journal of Education and Research*, Vol. 9 No. 6, 51-60.

Kivistö, A. (2016). The Making of Rallienglanti: Cross-linguistic influence in Finnish speakers' pronunciation of English. University of Jyväskylä.

Leppänen, S., Pitkänen-Huhta, A., Nikula, T., Kytölä, S., Törmäkangas, T., Kari Nissinen, K., Kääntä, L., Räisänen, T., Laitinen, M., Pahta, P., Koskela, H., Lähdesmäki, S., & Jousmäki, H. (2011). National Survey on the English Language in Finland: Uses, meanings and attitudes. *Studies in Variation, Contacts and Change in English 5*.

Lekova, B. (2010). Language interference and methods of its overcoming in foreign language teaching. *Trakia journal of sciences*, 8(3), 320-324.

Lev-Ari, S. & Keysar, B. (2010). Why don't we believe non-native speakers? The influence of accent on credibility. *Journal of experimental social psychology*, 46(6), 1093-1096. https://doi.org/10.1016/j.jesp.2010.05.025

Lintunen, P. (2004). Pronunciation and Phonemic Transcription: A study of advanced Finnish learners of English. *Anglicana Turkuensia* No 24.

Maamies, S. (1995). Suhu-s. Kielikello, 1/1995.

Meriläinen, L. (2010). Syntactic transfer in the written English of Finnish students: Persistent grammar errors or acceptable lingua franca English? *Apples – Journal of Applied Language Studies*, Volume 4 (1), 51-64.

Mullany, L. & Stockwell, P. (2010). *Introducing English language: A Resource book for students*. Routledge.

Munro, M., Derwing, T., & Morton, S. (2006). The mutual intelligibility of L2 speech. Studies in Second Language Acquisition, 28(1), 111-131.

https://doi.org/10.1017/S0272263106060049

Ojamies, M. (2018). Englantia ekalta alkaen. Opettaja, 9/2018, 4.

Opetushallitus (2019). Perusopetuksen opetussuunnitelman perusteiden 2014 muutokset ja täydennykset koskien Al-kielen opetusta vuosiluokilla 1–2.

Pelttari, J. (2015). *Use of phonemic transcription as a teaching method in Finnish schools*. University of Oulu.

Peperkamp, S. & Dupoux, E. (2002). A typological study of stress 'deafness'. In Gussenhoven, C. & Warner, N. (eds.). *Laboratory phonology* 7. De Gruyter Inc, 203-236. https://doi.org/10.1515/9783110197105.203

Richards, J.C. & Schmidt, R.W. (2002). Longman dictionary of language teaching and applied linguistics. New York: Routledge.

Sipra, M.A. (2013). Impact of English Orthography on L2 Acquisition. *English Language Teaching*, Vol. 6, No. 3, 116-124. https://doi.org/10.5539/elt.v6n3p116

Suomi, K., Toivanen, J., & Ylitalo, R. (2006). Fonetiikan ja suomen äänneopin perusteet. Helsinki: Gaudeamus.

Suzukida, Y. & Saito, K. (2021). Which segmental features matter for successful L2 comprehensibility? Revisiting and generalizing the pedagogical value of the functional load principle. *Language Teaching Research*, 25(3), 431–450.

https://doi.org/10.1177/1362168819858246

Tergujeff, E. (2013). English pronunciation teaching in Finland. University of Jyväskylä.

Tergujeff, E. (2021). Second language comprehensibility and accentedness across oral proficiency levels: A comparison of two L1s. *System*, *100*, Article 102567. <a href="https://doi.org/10.1016/j.system.2021.102567">https://doi.org/10.1016/j.system.2021.102567</a>

Tergujeff, E. (2022). Intelligibility and the gravity of segmental deviations in L1 Finnish speakers' L2 English. In Seppälä, T., Lesonen, S., Iikkanen, P., & D'hondt, S. (eds.), *Kieli, muutos ja yhteiskunta – Language, Change and Society. AFinLAn vuosikirja 2022. Suomen* 

*soveltavan kielitieteen yhdistyksen julkaisuja n:o 79.* Jyväskylä: Suomen soveltavan kielitieteen yhdistys AFinLA. 307–324. https://doi.org/10.30661/afinlavk.113491

Trofimovich, P. & Isaacs, T. (2012). Disentangling accent from comprehensibility. *Bilingualism*, 15(4), 905-916. <a href="https://doi.org/10.1017/s1366728912000168">https://doi.org/10.1017/s1366728912000168</a>

Yule, G. (2017). The Study of Language. Cambridge University Press.

Wang, X. (2022). Segmental versus Suprasegmental: Which One is More Important to Teach? *RELC Journal*, 53(1), 194–202. <a href="https://doi.org/10.1177/0033688220925926">https://doi.org/10.1177/0033688220925926</a>