法政大学学術機関リポジトリ

HOSEI UNIVERSITY REPOSITORY

PDF issue: 2025-02-06

L2 'Native' and L1 'Non-native' Speakers of English: A Perceptual Criterion of Native-likeness

WATANABE, Yutai

```
(出版者 / Publisher)
Department of Global and Interdisciplinary Studies, Hosei University
(雑誌名 / Journal or Publication Title)
GIS journal: the Hosei journal of global and interdisciplinary studies / GIS journal: the Hosei journal of global and interdisciplinary studies
(巻 / Volume)
2
(開始ページ / Start Page)
87
(終了ページ / End Page)
105
(発行年 / Year)
2016-03
(URL)
https://doi.org/10.15002/00012848
```

L2 'Native' and L1 'Non-native' Speakers of English: A Perceptual Criterion of Native-likeness

Yutai WATANABE

Abstract

To verify the increasingly common notion that advanced L2 users can pass for native speakers, this article analyses comparatively late learners, early bilinguals and monolingual speakers of English with regard to the degree of native-likeness perceived by L1 English speakers in New Zealand. No late learners sounded native to the judges in a test environment, but the bilinguals were variably rated near the boundary between simultaneous and sequential bilingualism. Notably, a monolingual speaker of a lesser-known variety of English and bilinguals of Outer Circle English were often perceived as L2 accented. The yardstick for native-likeness is affected by judges' familiarity with the target accents; identification as 'native speakers' differs greatly in listeners' ears, regardless of the speaker's actual proficiency.

Key words: accent perception, bilingualism, native vs. non-native speakers, second language acquisition

1. Introduction and previous studies

1.1 L2 acquisition and the critical period

'The earlier the better' has long been considered an effective and well-founded strategy for L2 acquisition. 'Early' is most commonly interpreted as 'before the onset of puberty' under the critical period hypothesis (CPH) popularised by Lenneberg (1967), which claims that children who have not begun to learn an L2 by that early age will either be unable to attain native proficiency in that language or have extreme difficulty attaining it, especially in their speech production (e.g., Patkowski, 1990, 1994; Scovel, 1988, 2006; Seliger, 1978). A weaker version of the CPH was proposed by Oyama (1976): according to the sensitive period hypothesis, L2 acquisition capacity does not decrease abruptly after a particular cut-off point but declines

gradually during a short span of middle to late childhood (e.g., Long 1990, 2005; Tahta, Wood & Loewenthal, 1981).

However, the amount of inconclusive evidence on the CPH or even counterevidence has recently increased: some scholars claim a linear or sigmoid regression of accent-free L2 acquisition before, during and even after puberty (e.g., Flege, Munro & MacKay, 1995; Munro & Mann, 2005; Yeni-Komshian, Flege & Liu, 1997). Others attribute the retained foreign accent to factors other than or in addition to age, such as the continued frequent use of the L1 after learning the L2 (Flege, Frieda & Nozawa, 1997), less consistent and incomplete L2 input (Flege et al., 2006) and unsuccessful acculturation to the society of the target language (Lybeck, 2002). From this perspective, a learner's age of initial exposure to L2 is not a unitary explanation for native-level mastery, and his/her positive experience and orientation towards the L2 is central to a successful outcome (Moyer, 2013, 2014).

1.2 Late L2 English learners passing for native speakers

As empirical evidence against the CPH, a considerable number of cases of late L2 learners passing for native speakers have been reported. The following is a brief review of some studies in which L2 English users' pronunciation was judged to be native-like by L1 English listeners. Among the earliest studies pointing to this phenomenon was the work of Seliger, Krashen and Ladefoged (1975). It showed that seven out of 117 immigrants (6%) arriving in the USA at age 16 or over and 27 out of 70 subjects (39%) arriving between the ages of 10 and 15 were perceived as native English speakers. The first group and several members of the latter were beyond puberty at the time of their arrival. Notably, successful late learners were very limited in number, however, and the criterion of native-likeness was not strictly controlled, as the analysis was based on the interviewees' self-assessments of pronunciation through the following question: 'Do you think most ordinary Americans could tell now that you are not a native speaker of English?'

The seminal work of Bongaerts, Planken and Schils (1995) challenged the CPH, featuring 'highly successful' Dutch late learners of English who were evaluated by four British judges. The pronunciation of ten participants who had not been exposed to English until approximately 12 years of age was perceived as indistinguishable from that of L1 English speakers, and four individuals in particular were assigned even higher scores than anyone in the control group coming from South England or the Midlands. In an extended study with 13 judges (Bongaerts, 1999), five of 11 advanced learners were again judged to be statistically in the same range as

the group speaking Received Pronunciation (RP). In addition to the learners' high motivation to master their L2 and intensive pronunciation tutorials, the authors noted that the typological similarity between English and Dutch languages may have contributed to this unexpected outcome (Bongaerts et al., 1995, p. 47).

In Nikolov (2000), L1 Hungarian participants' storytelling in English was rated by 36 L1 English residents in Leicester, UK, who were13-year-old children or two sets of postgraduate students. Three out of 13 participants who started to learn English after puberty were often mistaken for native speakers: by 89%, 56% and 50% of all judges (specifically, by 95%, 62% and 76% of adult judges, respectively). All of these exceptionally successful learners were teachers of English with strong motivation to improve their proficiency and with study abroad experience in the USA. Nevertheless, one could still dispute whether only one participant scoring 89% could be reasonably regarded as a native-like or near-native speaker.

Piller (2002) employed an ethnographic approach to study the native-like attainment of L2 speakers by analysing their introspective dialogues with partners about their first and/or service encounters with L1 English speakers. She also cited her own experience of being mistaken for an Irish in the USA and American in Australia despite her actual identity as a non-native. These insider descriptions again confirm that learners' motivation is more crucial than their age of initial exposure to the target language. Among the most noteworthy of her findings is that passing involves temporary and context-/audience-specific performance rather than stable capacity: "Native speaker" is no longer an identity category, and rather than being something that someone is, it becomes something that someone does' (Piller, 2002, p. 201).

Muñoz and Singleton (2007) focused on the native-like attainment of English by two adult L1 Spanish/Catalan-speaking women in Ireland. Their insatiable thirst for English mastery was judged to be a driving force of their success as late learners. For example, one of the women had intentionally avoided any contact with Spanish-speaking people except telephone conversations with her family in Spain, and this approach may have prevented the often cited negative effect of frequent L1 use on L2 acquisition (cf. Flege et al., 1997). Both women self-acknowledged having a 'special aptitude for' or 'love of' the target language. Notably, they were also outstanding achievers, as they were the top two out of twelve participants who were all advanced learners carefully recruited for the test.

1.3 L1 English speakers perceived as non-native

Converse phenomena in perception have also been observed. Some studies have indicated that

L1 English speech sounds more or less non-native to L1 English judges under certain conditions. Through a series of research on American attitudes towards L2 English-speaking academic staff and medical practitioners, Rubin (1992) and Rubin, Healy, Gardiner, Zath and Moore (1997) characterized reverse linguistic stereotyping (RLS) in which 'listeners ascribe stereotyped characteristics to speech . . . based on information supplied about the speaker's social identity even before hearing the speech' (Kang & Rubin, 2014, p. 242). RLS occurred, for example, when a slide photograph of a Caucasian person was shown to one group and a photograph of an Asian person to a second group, while each group listened to the same recorded lecture delivered in a mainstream American accent. The latter group perceived the speaker projected on the screen as more foreign accented than the former group did. This process suggests that the invisible L1 English speaker was essentially mistaken for non-native by some of the judges in the latter group. Nevertheless, this result is likely not an issue of pure accent perception but an instance of the Colavita visual dominance effect in which visual stimuli can influence auditory stimuli (Colavita, 1974).

Another conflicting case of passing was reported by Nikolov (2000), who, using the aforementioned perception test, observed the rating of eight L1 English speakers in a comparison with targeted L2 learners. Four British and two Americans were taken for non-natives by one to three of 36 judges (with a 3% to 8% probability of misidentification). The researcher noted that this unexpected result was attributable to the speakers' hesitation and false starts in speech. Although these para-phonological features are common in any interlocution, whether in one's L1 or L2, listeners in a test environment tend to become sensitive to them as possible clues to L2 speech.

2. Aim and research questions

To extend the previous findings, this study aims to examine whether late learners of English with a large variety of L1 backgrounds can pass for native English speakers phonologically. These learners are compared to monolingual and bilingual speakers of English in the degree of perceived native-likeness to gain insight into the validity of the native and non-native dichotomy prevalent in ESL learning/teaching environments. Moreover, this study focuses on which variety of English each speaker acquired, either as an L1 or L2, and how it may affect listeners' assessments of his/her native-likeness. The data collection was conducted in New Zealand (NZ), another Inner Circle English-speaking country (Kachru, 1985). In this country,

General American (GA), which was frequently used as the control accent in past studies, should sound like native English but not like local listeners' own voice. To address this overall aim, the following research questions are investigated:

- RQ 1: Can a late learner of English pass for an L1 English speaker in NZ?
- RQ 2: Conversely, can a monolingual English speaker be perceived as non-native?
- RQ 3: Are early bilinguals rated in the middle range between late learners and monolingual speakers of English in the degree of native-likeness?
- RQ 4: Can the perception of native-likeness be affected by which language or variety of English a participant speaks as an L1?

3. Methodology

3.1 Test material

A comprehensive research project on NZ attitudes towards and perceptions of a variety of English accents was originally conducted in Christchurch, NZ, in 2003 (for full details regarding the research concept, see Watanabe, 2008). The data collected at that time are analysed from a new perspective to assess the perception of native-likeness in speech. All L1/L2 English-speaking participants were recorded while reading a 128-word passage (as reprinted in Appendix A) at a rate that they felt was natural and comfortable. The same text was used to focus listeners' attention on purely phonological features rather than on possible syntactic, lexical and/or pragmatic deviations from the standard variety. The passage was designed to contain a number of English phonemes known to be difficult for many L2 learners to produce accurately, such as the dental fricatives /θ/ and /ð/, the liquids /l/ and /r/, and consonant clusters. The participants read the passage in 41–65 seconds, which was a sufficient amount of time to assess their native-likeness, given Scovel's (1981) finding that L1 speakers can detect a non-native accent within eight seconds.

3.2 Participants

Three groups of participants were included in the study: five late learners, four bilinguals and three monolingual speakers of English, as listed in Table 1. All participants, except Participant 7, were university students or academics in their twenties to early forties who had been using English consistently for research and educational purposes. Participants 4 and 9 did not wish to disclose their exact age for privacy reasons, and Participant 7 was a 16-year-old NZ high

Table 1: Information pertaining to 12 participants

#	Gender	Occupation	Status	L1 ^b	L2 ^b	Years of English ^c	
"	(Age)	Occupation	Status	21	22	Tours of English	
1	F	Postgraduate	LL	German	EngE	1 year	
•	(26)	student	22	Commun	NZE	1) 041	
2	F	Postgraduate	LL	Spanish	NZE	1.5 years	
	(29)	student				,	
3	È ´	University	LL	Japanese	NIrE	2 years	
	(33)	lecturer		•		•	
4	È	Undergraduate	LL	Korean	NZE	8 years	
	(20s)	student				•	
5	F	Undergraduate	LL	Cantonese	NZE	2 years	
	(23)	student					
6	M	Undergraduate	BL (SQ)	Malay	MalE	Over 10 years	
	(23)	student			NZE		
7	F	High school	BL (SQ)	Japanese	NZE	6.5 years	
	(16)	student					
8	F	Associate	BL (SM)	USE		12 years	
	(41)	professor		Japanese			
9	F	Undergraduate	BL (SM)	KenE		22.5 years	
	(20s)	student		Swahili			
10	F	Postgraduate	ML	NZE		25 years	
	(25)	student					
11	M	Associate	ML	USE		41 years	
	(41)	professor					
12	F	Research	ML	TdCE		24 years	
	(24)	assistant					

^aStatus: LL = Late L2 learner, BL (SQ/SM) = (Sequential or simultaneous) bilingual speaker, ML = Monolingual speaker.

^bL1 and ^bL2: EngE = English English, KenE = Kenyan English, MalE = Malaysian English, NIrE = Northern Irish English, NZE = New Zealand English, TdCE = Tristan da Cunha English, USE = United States English.

^cYears of English = Number of years lived in a primarily English-speaking environment.

school student. The first group's L1s were German (Participant 1), Spanish (Participant 2), Japanese (Participant 3), Korean (Participant 4) and Cantonese (Participant 5). The German speaker was included for a comparison with L1 Dutch and L1 German speakers of English in Bongaerts' (1999) and Piller's (2002) studies, with the purpose of verifying a possible effect of typological similarity between L1 and L2 on acquisition; both German and Dutch are West Germanic languages along with English. As of 2003, when the original test was conducted, Japanese, German and Spanish were respectively the second, third and fourth most popular foreign language subjects in NZ secondary schools, with French being the most popular (Ministry of Education, 2004).

Three Asian languages were added to the list of L1s because they were commonly heard in tourist destinations and on university campuses in NZ as a result of the massive influx of visitors and students from Japan, South Korea and China since the end of the last century (Statistics New Zealand, 2004). All participants in this group had first learned English in a classroom setting during their secondary education and had subsequently studied abroad in NZ and/or the UK for a few years. Notably, Participant 3 was a lecturer of English literature and ESL in a Japanese university at the time of testing. As they had been initially exposed to English after the onset of puberty and demonstrated an advanced level of English proficiency, they could be categorized as *late bilinguals* (Valdés & Figueroa, 1994, p. 11) or *adolescent bilinguals* (Hamers & Blanc, 2000, p. 26). However, because SLA researchers have yet to achieve consensus on the exact criterion for bilingualism, ² this group continues to be described simply as *late learners* (of English) to avoid complicated terminology.

Among the four early bilinguals, Participant 6 was a sequential bilingual who spoke Malaysian English as an L2 and Bahasa Malaysia (hereafter referred to as Malay) as an L1. Before his study at a NZ university, he had completed his secondary education in Malaysia with English as the medium of teaching, but it is strongly inferred through a background questionnaire and interview that he had already been exposed to English before the onset of puberty. Participant 7, another sequential bilingual, moved to NZ at the age of ten years as an L1 Japanese speaker. She had lived in NZ for three and a half years during the later stage of her primary education and during part of her secondary education. For three years, she attended an international high school in Japan, where class instruction and communication among classmates were predominantly in English. Participant 8 was born and raised in California as a simultaneous bilingual of US English and Japanese, and she moved to Japan when she was twelve years old. She was an associate professor of American literature and ESL at a Japanese

university at the time of testing. Participant 9 was also confirmed as a simultaneous bilingual who had spoken English and Swahili since infancy; she was educated in English in Kenya from pre-school to secondary school and received tertiary education in Australia and NZ for more than four years. The exact number of English speakers in Kenya has not been released, but the country has witnessed an increasing number of bilingual/multilingual speakers of English and other language(s).³ Although evidence on Kenyan English with particular reference to phonology has surfaced only in the past few decades (cf. Schmied, 2012; Wolf, 2010), this variety of English has been analysed as clearly distinguishable from all known Inner Circle English models. Most New Zealanders were likely unfamiliar with Kenyan English.

Participant 10, a monolingual speaker of NZ English (more specifically, General NZ English), was considered a control criterion, while Participant 11 represented GA, the mainstream form of American English. With its increasing presence in mass media and pop culture worldwide, GA is now among the most commonly heard overseas L1 varieties of English in NZ. Participant 12 was a monolingual who spoke Tristan da Cunha (TdC) English, one of the least-known varieties of English in the world. TdC is reputed to be the most remote inhabited island on earth, situated between the African and South American continents. Because of its geographic isolation and the diversity of its settlers' homelands (the British Isles, Europe, North America, South Africa and St Helena), a unique variety of English developed there through a koinéisation process. TdC English is distinguished from any other known dialect of English phonologically, morpho-syntactically and lexically (for a fuller account, see Schreier, 2003, 2010). Furthermore, because the entire population of the island has been under 300 in past decades, no New Zealanders had heard this accent until the time of testing.

3.3 Judges and test procedure

A total of more than eighty New Zealanders contributed to the data for a comprehensive research project, although a different number of subjects participated in each component. Nevertheless, to make the number of responses equal, the present analysis involves 40 informants who rated all twelve participants' readings simultaneously in the same session. The judges consisted of 38 students and 2 staff members from universities and other academic institutions, and all of them spoke NZ English as their L1. Their mean age was 26.2 years (median = 21, SD = 11.1), and they included 31 females and 9 males. Most students had taken a 100-level linguistics and/or modern language course, but none had participated in a test designed for accent identification. After being briefed on the procedure, the judges completed

the background questionnaire and listened to each participant's reading twice with the transcript provided. If the judges considered a participant to be an L1 English speaker, they were instructed to infer his/her regional accent from nine varieties, including 'other English'. Alternatively, when they perceived a participant's accent as non-native, the judges would choose his/her L1 from a list of 13 languages or describe it in their own words and indicate which words or syllables sounded L2 accented to them. The judges were informed that one-to-one correspondence was not guaranteed between each participant and the L1 or English dialect pre-listed.

4. Results and discussion

4.1 Late L2 English learners

Table 2 indicates the frequency with which the participants were perceived as native English speakers. The answer to RQ 1 is negative: no late learners of English (Participants 1–5) passed as L1 English speakers, regardless of the ESL training that they received during high school and their years of residing in countries speaking Inner Circle English. Participant 3's expertise as an ESL instructor failed to hide her L2 accent, and the typological similarity in phonology between German and English did not lead to Participant 1 being perceived as a native. Three possible reasons might explain this incompatibility with the cases in previous studies (cf. 1.2): (1) most of the native-like performers reported in past studies seem to have been the 'very best' of their kind, carefully chosen from a large pool of highly proficient candidates, whereas the current participants, despite their fluency, still held a mild or moderate degree of foreign accent that could be detected by experienced listeners.

(2) All participants' L1s were identified at a high rate. In particular, Participant 3's Japanese accent was correctly inferred by as many as 17 judges (43%), and the other readers' L1s were identified most or second most frequently. This result suggests that the judges had become rather well acquainted with the segmental and/or suprasegmental features of each L2 accent. Based on the larger data set including Participant 3, Watanabe (2012) found that the /l/ and /r/ conflation was enregistered as a feature of Japanese-accented English in NZ. A number of judges also referred to consonant cluster simplification in the readings of Participants 2 and 4 (e.g., [t] for /kt/ in fact and [s] for /ks/ in exploring) and the replacement of the dental fricative /ð/ with [d] by Participants 4 and 5 (e.g., as in their), which are commonly noted in many L2 accents around the world (e.g., Jenkins 2007; Swan & Smith, 2001). As a result of

Table 2: Frequency with which the 12 participants were perceived as L1 English speakers (N=40)

Participant	1	2	3	4	5	6
Status	LL	LL	LL	LL	LL	BL (SQ)
L1	German	Spanish	Japanese	Korean	Cantonese	Malay
L2	EngE NZE	NZE	NIrE	NZE	NZE	MalE NZE
Reading rate	63.3 sec.	62.2 sec.	62.9 sec.	60.0 sec.	53.3 sec.	58.1 sec.
L1 English total						3 (8%)
NZE						
Australian E						
EngE						
Scottish E						
Irish E						
USE						
Canadian E						
South African E						1
Other E		a (0)		C1 ! (12)	* (1.1)	2
Most frequently	Ger (7);	Spa (8);	Jpn (17);	Chi (13);	Jpn (11);	Swa (10);
identified L1s other	Ara, Dut	Swa (7)	Chi (5)	Kor (10)	Chi (10)	Kor (6)
than English*	(6 each)					
Participant	7	8	9	10	11	12
Status	BL (SQ)	BL (SM)	BL (SM)	ML	ML	ML
L1	Japanese	USE	KenE	NZE	USE	TdCE
	Japanese	Japanese	Swahili			
L2	NZE					
Reading rate	45.4 sec.	64.6 sec.	40.8 sec.	42.6 sec.	61.0 sec.	52.5 sec.
L1 English total	6 (15%)	36 (90%)	17 (43%)	40 (100%)	40 (100%)	30 (75%)
NZE				38	1	
Australian E				1		1
EngE				1		7
Scottish E	1		1			
Irish E	1		8		1	
USE		26	1		29	
Canadian E		9			9	
South African E	3	1	5			21
Other E	1		2			1
Most frequently	Chi, Mal,	Ara, Fre,	Swa (4);			Dut (2);
identified L1s other	(5 each)	Ger, Other	Dut, Tha			Arb, Chi,
than English*		(1 each)	(3 each)			Fre, Ger,
						Jpn, Mal,
						Rus, Other
						(1 each)

^{*}Most frequently identified L1s other than English: Ara = Arabic, Chi = Chinese, Dut = Dutch,
Fre = French, Ger = German, Jpn = Japanese, Kor = Korean, Mal = Malay, Rus = Russian, Spa = Spanish,
Swa = Swahili, Tha = Thai, Other = Other language.

The actual number of identifications is shown in parentheses.

these 'familiar' features, the judges may have found it easier to categorize all the participants as L2 accented than they would have with speakers from a lesser known L1 background.

(3) In the current research, the judges were keenly prepared to detect non-native features in a test environment designed for that purpose; the provided script also enhanced their meticulous attention to phonological idiosyncrasies. By contrast, judgements of native-likeness in the works of Seliger et al. (1975) and Piller (2002) were based on interviewees' experiences of actually (or probably) having passed as natives, but an interlocutor's comment cannot always be taken at face value in an analysis when it arises in daily conversation. After all, 'when they say, "I'm amazed that you sound just like a native!" they are really saying something like "You speak my language brilliantly—especially for a foreigner!" (Scovel, 1988, p. 177).

4.2 Bilingual speakers

Participant 6 was identified as a native English speaker by only three judges (8%). He mentioned in the interview that Malaysian English was most natural and pleasant to him. Interestingly, however, five judges (13%) perceived his L1 as an 'other language' on the list of choices; they specified his L1 as an 'Indian language' in their description, and he was an ethnic Indian Malaysian. As of 2001, English was spoken in Malaysia as an L1 by 1.7% and as an L2 by 31.5% of the population (Crystal, 2003, p. 63). Under strong influence from Malay, Tamil, Cantonese and other languages, Malaysian English is witnessing endonormative development within the socio-educational continuum between acrolectal Malaysian Standard English and basilectal Manglish (Gill, 1999; Schneider, 2007). In addition to his secondary education in standard English, this participant's presumed exposure to other social/ethnic varieties prior to and outside of school may have contributed to the judges' overwhelming impression of him as a non-native speaker.

Six judges (15%) acknowledged Participant 7 as a native English speaker. The low probability is partly attributable to her shorter period of exposure to English compared with the exposure period of the other bilingual participants. Notably, more than a few judges commented that her LI was most difficult to identify, as evidenced by the great dispersion of her L1 (mis)identified as one of 13 languages, including English, among the 14 listed. Furthermore, those judges who perceived her accent as native identified it as a less familiar variety, such as South African English or Scottish/Irish English. This result may also reflect the fact that she spent three years in an international school that represented a 'linguistic mosaic'

with a great number of accents, both native and non-native, from staff and students from around the globe. By contrast, 90% of the judges concluded that Participant 8 had an L1 English-speaking background. New Zealanders had been quite familiar with GA on TV, movies and music as well as with Australian and British English. Once the judges recognized English as Participants 8's L1, they categorically chose North American varieties, albeit with some difficulty in distinguishing between US and Canadian English.

Participant 9 was identified as an L1 English speaker by fewer than half of the judges (43%). Both she and Participant 7 read the passage at nearly the same rate as the control speaker (Participant 10) but did not impress the judges by their fluency. The sociohistorical status of Outer Circle English must have affected them in their assessments. Kenyan English, along with Malaysian English discussed above, has not typically been regarded as a legitimate standard form of English in its own right; rather, it is still often considered 'incorrect' English by the general public. Closely related to RQ 4, this issue will be further discussed in the following section. However, it is unclear why her accent was perceived as Irish at a rate of 20%, but the judges may have applied a process of elimination when they found her speech different from all better-known accents, such as RP, GA or Australian. In sum, the results suggest a largely positive answer to RQ 3: Early bilinguals are rated in between late learners and monolingual speakers of English in terms of native-likeness. Nevertheless, a significant gap between simultaneous and sequential bilinguals is evident, as Participant 8 was considered to be in approximately the same range as the control L1 speaker.

4.3 Monolingual English speakers

As the control speaker, Participant 10 was not only fully identified as an L1 English speaker but also specifically identified as a NZ English speaker by 95% of the judges. New Zealanders had a very sensitive ear to their own voice as distinguished from Australian or other known L1 accents, as demonstrated by Weatherall, Gallois and Pittam (1998) and Watanabe (2008). Similarly, Participant 11 was accurately identified as an L1 English speaker by all and as a North American English speaker by 95% of the judges. Similar to the case with the bilingual Participant 8, there was some difficulty in distinguishing US English from Canadian English; both varieties sounded alike to NZ listeners on the other side of the Pacific.

Most interestingly, Participant 12 was misidentified as an L2 English speaker by no fewer than ten judges (25%). The answer to RQ 2 is certainly yes, but under a certain condition. The participant had lived in TdC for most of her life since birth and had lived in other parts of the

Inner Circle of English only for a few recent years, but more than half of the judges identified her speech as South African accented. Their inference was not a great error as far as the vowel /ɑ:/ was concerned. In her speech, this vowel was realized as a very back and rounded variant [p:] in the pronunciation of *class* in the sample reading; this variation is often observable in Broad South African English (Wells, 1982, p. 615). Nonetheless, it is also logical that the judges may have found her English to be natively proficient but still different from any well-known L1 variety in the British Isles, North America or Australasia, causing them to choose South African English by eliminating less likely alternatives. Of additional interest is that the range of her misidentified L1s was highly diverse, from Dutch to Arabic to Japanese, including nine languages from the pre-listed table. This result suggests that the judges could not find any phonological features that they considered clearly characteristic of any known L2 variety of English. The New Zealanders' unfamiliarity with TdC English arguably led to the lower degree of perceived native-likeness of the speaker. RQ 4 has thus been answered with hard evidence: 'The greater the difference between the speaker's native dialect and the listener's dialect the more likely the listener will judge the speaker as NN [non-native]' (Major, 2001, p. 12).

5. Conclusion

The findings of this research can be summarized in three main points. First, no late learners of English were perceived as L1 English speakers, despite their formal ESL training in schools and several years of immersion in Inner Circle English. Regardless of their L1 background, these speakers were unable to completely discard their L2 accents. In other words, NZ listeners had a good ear for detecting features unique to specific L2 varieties through their frequent contact with overseas visitors speaking with these accents. Second, the bilinguals were identified as native English speakers to a variable extent, with a clear gap between simultaneous and sequential bilingualism. Coupled with the age and amount of initial exposure to English, the variety of English that each speaker acquired greatly affected the listeners' perceptions of the degree of native-likeness. British and American English speakers' intolerance of the usage of Southeast Asians or East Africans, as noted by Kachru and Nelson (1996, p. 81), is comparable to New Zealanders' perceptions of Malaysian and Kenyan English: Outer Circle English is likely to be associated with substandardness. However, listeners do identify an unfamiliar accent as L2 English or as a lesser-known L1 variety if the speaker's reading sounds sufficiently fluent. In this regard, the third noteworthy fact is that a

monolingual L1 speaker is not always perceived as such if his/her variety of English differs greatly from the listeners' variety. TdC English speech was often perceived as L2 accented; by contrast, NZ and North American English speakers were accurately identified as native speakers not merely of English but of each specific variety. Ordinary listeners tend to rely on the stereotypical features of a well-known variety—either of L1 or L2 English—such as the /l/ and /r/ conflation as an enregistered feature of Japanese English (Watanabe, 2012) or rhoticity of US English. The degree of native-likeness may fluctuate according to listeners' familiarity with a speaker's regional accent, regardless of the speaker's actual proficiency. However, an analysis of a larger data set would be indispensable for confirming the current finding with regard both to the range of L1 languages/dialects and the number of judges. Another study would be needed to measure how native-likeness perceived in a carefully designed test environment corresponds to interlocutors' experiences of having passed for a native speaker in a real-life context. Passing for native in such an encounter is likely subject to many factors beyond simply phonological considerations.

Notes

- It has been noted that hyper-articulated pronunciation may lead an audience to perceive a speaker as non-native (Riney & Flege, 1998, p. 237).
- 2. More than three-quarters of a century ago, Bloomfield (1933, p. 56) defined bilinguals as people who had 'native-like control of two languages,' whereas Haugen (1953, p. 7) interpreted bilingualism as 'the point where a speaker can first produce complete meaningful utterances in the other language.' The former focused on the ultimate attainment of proficiency in L2 and the latter on the initial stage of bilingualism. Most L2 speakers would likely find themselves in the latter category, although the question of how to interpret 'complete meaningful utterances' remains debatable.
- Crystal (2003) estimated approximately 8.8% of Kenya's population as L2 English speakers in 2001, which should be understood as including a considerable number of early bilinguals.

References

Bloomfield, L. (1933). Language. New York, NY: Holt, Rinehart and Winston.

Bongaerts, T. (1999). Ultimate attainment in L2 pronunciation: The case of very advanced late

- L2 learners. In D. Birdsong (Ed.), Second language acquisition and the critical period hypothesis (pp. 133–159). Mahwah, NJ: Lawrence Erlbaum Associates.
- Bongaerts, T., Planken, B., & Schils, E. (1995). Can late starters attain a native accent in a foreign language? A test of the critical period hypothesis. In D. Singleton & Z. Lengyel (Eds.), The age factor in second language acquisition (pp. 30–50). Clevedon: Multilingual Matters.
- Colavita, F. B. (1974). Human sensory dominance. Perception and Psychophysics, 16, 409–412.
- Crystal, D. (2003). *English as a global language* (2nd ed.). Cambridge: Cambridge University Press.
- Flege, J. E., Birdsong, D., Bialystok, E., Mack, M., Sung, H., & Tsukada, K. (2006). Degree of foreign accent in English sentences produced by Korean children and adults. *Journal of Phonetics*, 34, 153–175.
- Flege, J. E., Frieda, E. M., & Nozawa, T. (1997). Amount of native language (L1) use affects the pronunciation of an L2. *Journal of Phonetics*, 25, 169–186.
- Flege, J. E., Munro, M. J., & MacKay, I. R. A. (1995). Factors affecting strength of perceived foreign accent in a second language. *Journal of the Acoustical Society of America*, 97, 3125–3134.
- Gill, S. K. (1999). Standards and emerging linguistic realities in the Malaysian workplace. World Englishes, 18, 215–231.
- Hamers, J. F., & Blanc, M. H. A. (2000). *Bilinguality and bilingualism* (2nd ed.). Cambridge: Cambridge University Press.
- Haugen, E. (1953). The Norwegian language in America: A study in bilingual behaviour. Philadelphia, PA: University of Pennsylvania Press.
- Jenkins, J. (2007). English as a lingua franca: Attitude and identity. Oxford: Oxford University Press.
- Kachru, B. B. (1985). Standards, codification and sociolinguistic realism: The English language in the outer circle. In R. Quirk & H. G. Widdowson (Eds.), *English in the world: Teaching and learning the language and literatures* (pp. 11–30). Cambridge: Cambridge University Press.
- Kachru, B. B., & Nelson, C. L. (1996). World Englishes. In S. L. McKay & N. H. Hornberger (Eds.), Sociolinguistics and language teaching (pp. 71–102). Cambridge: Cambridge University Press.

- Kang, O., & Rubin, D. (2014). Listener expectations, reverse linguistic stereotyping, and individual background factors in social judgments and oral performance assessment. In J. M. Levis & A. Moyer (Eds.), Social dynamics in second language accent (pp. 239–253). Berlin: Walter de Gruyter.
- Lenneberg, E. H. (1967). Biological foundations of language. New York, NY: Wiley.
- Long, M. (1990). Maturational constraints on language development. Studies in Second Language Acquisition, 12, 251–285.
- Long, M. (2005). Problems with supposed counter-evidence to the critical period hypothesis. *International Review of Applied Linguistics in Language Teaching*, 43, 287–317.
- Lybeck, K. (2002). Cultural identification and second language pronunciation of Americans in Norway. The Modern Language Journal, 86, 174–191.
- Major, R. (2001). Foreign accent: The ontogeny and phylogeny of second language phonology. Mahwah, NJ: Lawrence Erlbaum Associates.
- Ministry of Education. (2004). *Education statistics of New Zealand for 2003*. Wellington: Data Management and Analysis Division, Ministry of Education.
- Moyer, A. (2013). Foreign accent: The phenomenon of non-native speech. Cambridge: Cambridge University Press.
- Moyer, A. (2014). Exceptional outcomes in L2 phonology: The critical factors of learner engagement and self-regulation. *Applied Linguistics*, 35, 418–440.
- Muñoz, C., & Singleton, D. (2007). Foreign accent in advanced learners: Two successful profiles. The EUROSLA Yearbook, 7, 171–190.
- Munro, M., & Mann, V. (2005). Age of immersion as a predictor of foreign accent. Applied Psycholinguistics, 26, 311–341.
- Nikolov, M. (2000). The critical period hypothesis reconsidered: Successful adult learners of Hungarian and English. *International Review of Applied Linguistics in Language Teaching*, 38, 109–124.
- Oyama, S. (1976). A sensitive period for the acquisition of a nonnative phonological system. *Journal of Psycholinguistic Research*, 5, 261–283.
- Patkowski, M. S. (1990). Age and accent in a second language: A reply to James Emil Flege. *Applied Linguistics*, 11, 73–89.
- Patkowski, M. S. (1994). The critical age hypothesis and interlanguage phonology. In M. Yavaş (Ed.), *First and second language phonology* (pp. 205–221). San Diego, CA: Singular Publishing Group.

- Piller, I. (2002). Passing for a native speaker: Identity and success in second language learning. Journal of Sociolinguistics, 6, 179–206.
- Riney, T. J., & Flege, J. E. (1998). Changes over time in global foreign accent and liquid identifiability and accuracy. Studies in Second Language Acquisition, 20, 213–243.
- Rubin, D. L. (1992). Nonlanguage factors affecting undergraduates' judgments of nonnative English-speaking teaching assistants. Research in Higher Education, 33, 511–531.
- Rubin, D. L., Healy, P., Gardiner, T. C., Zath, R. C., & Moore, C. P. (1997). Non-native physicians as message sources: Effects of accent and ethnicity on patients' responses to AIDS prevention counseling. *Health Communication*, 9, 351–368.
- Schmied, J. (2012). Standards of English in East Africa. In R. Hickey (Ed.), *Standards of English: Codified varieties around the world* (pp. 229–255). Cambridge: Cambridge University Press.
- Schneider, E. W. (2007). *Postcolonial English: Varieties around the world.* Cambridge: Cambridge University Press.
- Schreier, D. (2003). Isolation and language change: Contemporary and sociohistorical evidence from Tristan da Cunha English. Basingstoke: Palgrave Macmillan.
- Schreier, D. (2010). Tristan da Cunha English. In D. Schreier, P. Trudgill, E. W. Schneider & J. P. Williams (Eds.), *The lesser-known varieties of English: An introduction* (pp. 245–260). Cambridge: Cambridge University Press.
- Scovel, T. (1981). The recognition of foreign accents in English and its implications for psycholinguistic theories of language acquisition. In J.-G. Savard & L. Laforge (Eds.), *Proceedings of the 5th congress of l'association internationale de linguistique appliqué* (pp. 389–401). Québec: Les Presses de l'Université Laval.
- Scovel, T. (1988). A time to speak: A psycholinguistic inquiry into the critical period for human speech. New York, NY: Newbury House.
- Scovel, T. (2006). Age, acquisition, and accent. In C. Abello-Contesse, R. Chacón-Beltrán, M.
 D. López-Jiménez & M. M. Torreblanca-López (Eds.), Age in L2 acquisition and teaching (pp. 31–48). Bern: Peter Lang.
- Seliger, H. W. (1978). Implications of a multiple critical period hypothesis for second language learning. In W. C. Ritchie (Ed.), *Second language acquisition research: Issues and implications* (pp. 11–19). New York, NY: Academic Press.
- Seliger, H. W., Krashen, S. D., & Ladefoged, P. (1975). Maturational constraints in the acquisition of second language accent. *Language Sciences*, 36, 20–22.

- Statistics New Zealand. (2004). Tourism and migration 2003. Retrieved from http://www.stats. govt.nz/browse for stats/industry sectors/Tourism/tourism-migration-2003.aspx
- Swan, M., & Smith, B. (Eds.) (2001). Learner English: A teacher's guide to interference and other problems (2nd ed.). Cambridge: Cambridge University Press.
- Tahta, S., Wood, M., & Loewenthal, K. (1981). Foreign accents: Factors relating to transfer of accent from the first language to a second language. *Language and Speech*, 24, 265–272.
- Valdés, G., & Figueroa, R. A. (1994). *Bilingualism and testing: A special case of bias*. Westport, CT: Ablex.
- Watanabe, Y. (2008). New Zealand attitudes towards foreign-accented English. *Te Reo*, 51, 99–127.
- Watanabe, Y. (2012, November). Japanese-accented English: How it is identified in New Zealand. Paper presented at the 13th Language and Society Conference, Auckland, New Zealand.
- Weatherall, A., Gallois C., & Pittam, J. (1998). Australasians identifying Australasian accents. *Te Reo*, 41, 153–162.
- Wells, J. C. (1982). Accents of English 3: Beyond the British Isles. Cambridge: Cambridge University Press.
- Wolf, H.-G. (2010). East and West African Englishes: Differences and commonalities. In A. Kirkpatrick (Ed.), *The Routledge handbook of world Englishes* (pp. 197–211). Abingdon: Routledge.
- Yeni-Komshian, G. H., Flege, J. E., & Liu, H. (1997). Pronunciation proficiency in L1 and L2 among Korean-English bilinguals: The effect of age of arrival in the US. *Journal of the Acoustical Society of America*, 102, 3138.

Appendix A: Reading material

Currently, we have the technology required to communicate with others no matter where they are in the world, with people who may have very different backgrounds and lifestyles. But more and more people are realizing that technology alone is not enough: nothing is more important than having one or more languages in common. In much of the world English has become the second preferred language, and its advance in status as a global second language appears likely to continue. Recognizing the increasing demand for fluency in English, Alpha Language Academy, established in 1980, goes some way towards meeting this need, and in fact

goes beyond. Numerous practical classes, particularly in speaking, writing and listening, are designed to help prepare students for exploring and using English on their own.