

A Socio-historical Study of Vowel Raising in Australian and Canadian English

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Lee, Hak-Moon. (2023). A Socio-historical study of vowel raising in Australian and Canadian English. *The Linguistic Association of Korea Journal*, 31(4), 137-152. This study presents a comparative analysis of Australian English (AE) and Canadian English (CE) related to Vowel Raising in a socio-historical aspect. AE and CE differ in many ways. In particular, among the characteristics of CE, Canadian Raising (CR) is relatively well known for its difference in pronunciation due to the influence of the Great Vowel Shift (GVS). However, little research has been done on whether there is a similar vowel raising in AE, and it is linguistically meaningful to identify the differences by considering the characteristics. In particular, among many differences, when pronouncing the vowel in "Price" when a voiceless consonant comes after a diphthong, the CR phenomenon occurs in Canadian English compared to American English or British English. Through the comparison and analysis, we investigate whether the CR phenomenon is occurring in Australia, a commonwealth country. If the differences between AE and CE, which are the mother tongues of the world Englishes, are recognized, it will be evident that students benefit a lot from them.

Key Words: CR, GVS, Canadian English, Australian English, American English, diphthongs

1. Introduction

There may be several reasons for the comparative study of the vowel raising phenomenon in Australian English and Canadian English.

First, to understand language variation and diversity, languages can vary across regions and cultures, and AE and CE are examples of such variation. Through the

research comparing vowel raising, we can understand the differences and diversity of pronunciation between the two dialects.

Second, from a sociolinguistic perspective, vowel raising may be closely related to the social background of language users. By studying language variation that reflects cultural and social differences in Australia and Canada, we can understand language use and social interaction in these regions.

Third, in terms of regional influences, although Australia and Canada are part of the Commonwealth, they are geographically distant regions, which can lead to certain linguistic differences in the use of English even between the two countries. By comparing and analyzing these characteristics through the phenomenon of vowel rasing, we can understand how regional influences affect language.

Language changes and develops over time. A comparative study of the phenomenon of vowel rasing in AE and CE provides insight into how the two languages change over time and space.

For these reasons, linguists can conduct the research on vowel raising in AE and CE to deepen our understanding of language variation and development. Such research can also aid language teaching and cultural understanding.

CE has been relatively well studied, but the research on AE began in the 1950s. It can be naturally predicted that Australian English, which is based on RP English, may have language changes depending on the environment, some influence, and the region, just like other languages.

In AE, vowel pronunciation occurs due to the tendency for the lips and teeth to close, called 'lip-laziness'. It is often pronounced by not opening the mouth sufficiently, not using the nasal passages, and with the soft palate in the wrong position. Even to Australians, AE is considered a synonym for 'vulgarity', and it was believed that British English should be used as the standard. (Ronowica & Yallop, 2007, p. 115). AE is classified into Cultivated, General, and Broad AE. Cultivated English is preferred by a few conservative older people and is closer to RP, British English. Cultivated English is preferred by the educated and high class. On the other hand, the Broader Australian accent was considered a 'bogan' belonging to the uneducated low class. Some even argued that even if AE existed, it should be revised and corrected for the desirable pronunciation (Yallop, 2003, p. 129).

However, many studies have been conducted, including Mitchell (1946; 1965), Delbridge (1965), Cox (1999; 2011), Trudgill (2007), and Wells (1996) as scholars defending

and researching the existence of AE. AE vowels tend to have a more forward, closed, or raised pronunciation than British English (Mitchell & Delbrige, 1965, p. 35). In other words, it tends to be pronounced upward and forward as a result of the drag-chain. In the case of diphthongs, the first element has the characteristic of extra duration (Wells, 1996, p. 594).

Several factors to consider include language geographical locality and sociolinguistic factors, data limitations, temporal constraints on the research. In general, the education in Korea focuses on American English. Previously, TOEIC or TOEFL questions were focused on American English, but now, variants of World Englishes are appearing. The unique characteristic of vowel pronunciation in CE that differs from American English is the pronunciation of the diphthongs /ai/ and /au/. While American English begins with a low vowel, CE begins with the middle vowel /ə/ and moves the tongue toward the frontal high vowel and toward the posterior high vowel to produce /əi/ and /əu/, respectively. This phenomenon is explained by CR.

CR is a phonological process characteristic of one variety of CE, in which the onesets of the diphthongs /ay/ and /aw/ raise to /ʌy/ and ./ʌw/. The inception of the GVS continues to be a well-known controversy between adherents of the “pull-chain” and “push-chain” hypotheses.

Related to the CR phenomenon explained in the existing research, we will consider whether the corresponding ‘Vowel Raising of Australian English (AR)’ appears in Australia, and what its characteristics are. We will compare and analyze the difference between AR and CR by comparing the characteristics and differences of diphthongs, [ai], [au], etc.

We compare and analyze whether the CR phenomenon occurs among the diphthongs of AE. In particular, we will compare the characteristics of AE and CE regarding the characteristics of the CR phenomenon that appears in the diphthongs [ai] and [au] in “rice,” “house,” etc.

The goal is to compare the vowel raising in AE and CE to understand what aspects of these languages are different from each other or what they have in common. The vowel raising is a change in pronunciation where a specific vowel is uttered at a higher vowel than before.

This research may have several purposes: AE and CE are both different varieties of English and have unique characteristics. By analyzing the causes and processes of the vowel raising, we can understand sound changes in language.

Each has a unique culture and history, and these differences also affect their languages.

By comparing vowel raising phenomena, we can identify the characteristics of regional languages.

AE and CE are both based on the English language, but have developed due to different cultural and geographical factors. These comparisons can reveal similarities and differences between different language varieties.

These comparative studies can provide new knowledge to the field of linguistic research. In particular, sound changes such as vowel raising play an important role in understanding language evolution and change.

In this way, by understanding sound change, identifying regional language characteristics, and contributing to language research through comparisons between AE and CE, this study allows us to understand the diversity and change of each region's English as a world English. You can see how it affects your community and culture.

2. Historical Consideration

2.1. The Origin and Characteristics of Canadian English

Canada's name comes from Kanata, which means 'village' in Iroquois-Huron, the language of the indigenous Iroquois tribe. CE is historically and geographically a mixture of American English and British English. For example, let's look at the word for driver's license:

- (A) Driver's Licence – Canada
- (B) Driver's License – America
- (C) Driving Licence – Britain

As a comparison of words that show the characteristics of CE, while American vocabulary is used, the spelling of British English is used interchangeably, resulting in a mixture of American English and British English. In other words, the spelling tends to follow the British style, and the pronunciation is mainly American, including American pronunciation.

After the Treaty of Paris in 1763, Britain took over management of Canadian territory, and showed respect and tolerance for the use of French in Quebec by French immigrants.

From before the American War of Independence, black people also immigrated to Canada in search of freedom through organizations such as "the Underground Railroad". During the Independence War, many British Americans historically immigrated from the United States to Canada, and British English and American English naturally have been mixed and composed of CE.

As the vowel raising in CE, the pronunciation changes such as /ai/ → /ɛɪ/, /au/ → /ʌu/ appear in words such as "rice, house, price, and clout". Americans sometimes imitate the Canadian pronunciation with the pronunciation of "about" instead of the pronunciation of "about". In American English pronunciation, the position of the tongue changes the place of articulation significantly, whereas in CE, the place of articulation tends to be less moving and more rounded.

2.2. Origin and Characteristics of Australian English

Australia's name comes from the Latin phrase "terra australis incognita" (unknown southern land), which geographers used to describe the continent they believe to exist south of Africa and Asia.

As a British colony established in 1786, it became a self-governing territory of the British Empire in 1901 and has developed into an independent nation today. Human languages have been used in Australia for 40,000 years and many indigenous languages are extinct or at risk of extinction. And enough time has passed to develop a unique accent that is different from current British English, so Australia's native language has become AE.

Even between Sydney and Perth, which are geographically separated by 30,000 km, AE shows homogeneous and uniform characteristics. Initially, there were very few ports where immigrants arrived and close linguistic contact took place through these ports. So, social and linguistic solidarity was formed through high mobility and mixing.

AE, which has many similarities to New Zealand English, is made up of three main dialects: Cultivated, General and Broad Australian English. Vowel sounds are different in quality one another.

- 1) Upper class Australian English - minority pronunciation, very similar to snobbish RP, Near-RP.
- 2) General Australian English - middle-class pronunciation, strong vowel movement

similar to south-eastern England

- 3) Lower class Australian English - strong pronunciation of rural and working class people. Lengthening the initial sound of diphthongs

They constitute social dialects, not regional dialects. Southern Hemisphere English is characterized by early 19th century southeastern British English, including non-rhoticity and raising of short front vowels. In particular, the diphthong shifts of AE are very similar to Cockney, except that the vowelization of glottal stops and /l/ is absent.

[<http://www.ifla.uni-stuttgart.de/~jilka/>]

3. Vowel Raising in English

3.1. Vowel Raising in Canadian English (CE)

Let's take a look at the typical vowel raising in CE. A phenomenon known relatively widely as CR appears in CE. In reality, there are many different starting points, but the shape can be simply described as follows (Rogers, 2000, p. 124).

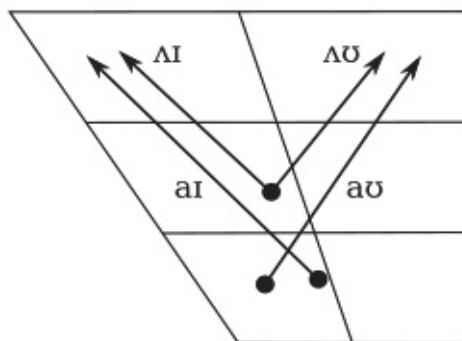


Figure 1.

CR, also known as English diphthong raising, is a phenomenon that occurs in Canada among the various phonological rules in North American English. When pronounced before voiceless consonants, CR is a phenomenon that changes the pronunciation as a starting point from the open vowel of /ai/ or /au/.

In American English, it is pronounced as /ai/ or /au/, but in CE, the pronunciation is raised and pronounced as [eɪ], [ʌɪ], or [əɪ]. CR appears in words such as “height, life, house, and south”. [https://en.wikipedia.org/wiki/Canadian_raising]

By exaggerating the pronunciation of “*about* [ə'baʊt] → [ə'baʊt̩]” and pronouncing it as “*aboot*”, Stereotypical Americans exaggerate Canadians. Although regional and social dialects exist, and therefore this regular vowel raising may not be completely accurate, it is true that the vowel sounds of /ai/ or /aʊ/ are raised, resulting in CR pronounced as [ʌɪ] or [ʌʊ] in Canadian English. The [ʌ] phonetic symbol is defined as an open-mid back unrounded vowel in the International Phonetic Alphabet (IPA).

3.2. Vowel Raising in Australian English (AE)

The AE vowel consists of 18 stressed vowels, 6 long vowels /i: e: ə: o: ɔ: ɜ:/, and 6 short vowels /ə ɛ ɔ ʊ ʊ ɑ/ (Figure 1; see also Cox, Cox, 2006; Cox & Fletcher, 2017);

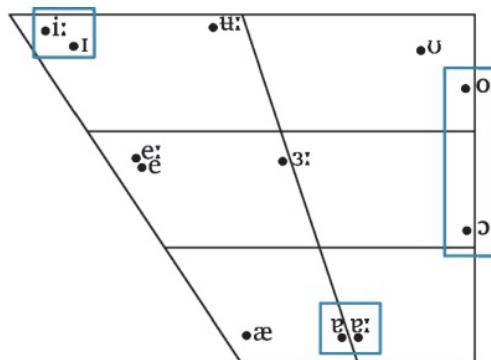


Figure 2.

AE uses a vowel length contrast rather than the tense-relaxation contrast that is characteristic of other English varieties, such as American English (Cox & Palethorpe, 2007). This phenomenon is due to the contrastive state of duration that informs the distinction between some vowel contrast pairs. It occurs particularly in /ə:-ə/, /e:-e/, and (for some users) /i:-ɪ/. (Watson & Harrington, 1999; Cox, 2006; Cox & Palethorpe, 2007).

AE shows a push-chain effect phonetically, but not phonologically, in long vowels and diphthongs. In other words, lower-class Australians lengthen the first sound of diphthongs. They pronounce like [əɪ] → [ə:i]. [<http://www.ifla.uni-stuttgart.de/~jilka/>]

(A) 1st chain: /i:/ → [əi] [ɪ] ("see" [səi]), /ɛi/ → [ʌi] ("say" [sʌi]), /ai/ → [ɛɪ] ("sigh" [sɛɪ]), /ɔi/ → [oɪ] ("soy" [sɔɪ])

(B) 2nd chain: /u:/ → [əʊ] ("boot" [bəʊt]), /əʊ/ → [ʌʊ] ("boat" [bʌut]), /au/ → [ɛʊ] ("bout" [bɛut])

In the case of monophthongs, the front vowel is raised, the back vowel changes into the front vowel, and /æ/ is raised to /ɛ/ when followed by a nasal sound:

- raised front vowels: /æ/ → /ɛ/ "man" /men/; /ɛ/ → ("men" /men/); /i/ → /i:/ "fish" [fi: ʃ]
- fronted back vowel: /ɑ/ → /a/ ("car" /ka:/, "palm" /pa:m/)

Some 18th-century /æ/-words (mostly followed by a nasal sound) retained /æ/, which was then pronounced /ɛ/ (e.g. "dance"), others did not, and similar to RP, /ɪ/ has /a/, followed by /a/ (e.g. "last")

The central diphthong is shortened to a long vowel and generally has a rising characteristic.

- /iə/ → /i:/ ("fear" /fi:/),
- /ɛə/ → /e:/ ("shared" /ʃ e:d/), /uə/, /ɔə/ → /ɔ:/
- no smoothing as in RP: "fire" is [fniə]

In the case of weak vowels, the word-final /ə/ vowel is lowered, and the unstressed /i/ vowel is replaced with /ə/. And the word-final "-y" is lengthened.

- word-final /ə/ ("er") lowered to /ə/ "ever" [evə]
- unstressed /i/ usually replaced by /ə/ ("rabbit" /rəbət/, "begin" [bəgin])
- final "-y" is pronounced /i:/ ("happy" [hepi:])

The characteristics of the vowels in AE are as above, and in addition, the intonation is flatter than British English, and it is pronounced as /ʃ,dʒ/ rather than /tʃ, dʒ/ (tune, duke), and /lʃ/ → /ʃ/ (brilliant). AE is non-rhotic and has a /ɹ/ pronunciation of conjunction and insertion. And AE has similar grammar to British English, and treats collective nouns as singular (the government has made a mistake), and 'She' is also used for impersonal or inanimate objects. ("she's a stinker today = She's excessively hot today).

Of course, it is also used in other lexical uses ("footpath" (sidewalk), Goodday/G'Day (hello), "lolly" (any sweets), "picture theater" (cinema), "to chunder" (to vomit), "sheila" (girl), "chook" (chicken), "park" (parking space)). Shortened forms are also used: "uni" (university), "beaut" (beautiful, beauty), "arvo" (afternoon), "Mezza" (Mary). AE is also characterized by loanwords from indigenous languages: "boomerang," "dingo," "jackaroo," and "kangaroo."

4. Comparison and Discussion

We would like to compare AE, CE, American English, and British English in the World English Pronunciation Chart from the OED (Oxford English Dictionary). In particular, we will focus on comparing the diphthongs [aɪ] and [aʊ], which change in CR. And for monophthongs, we will compare the pronunciation at "Start".

4.1. Australian English

Vowels in AE are classified in the OED as follows. It is a model that seeks to reflect the diversity of the 'General' majority rather than the 'Cultivated' form of the upper class or the 'Broad' form of the lower class. The model is based primarily on the main features of AE described by Horvath (2008), taking into account the contrasts described in the Australian Oxford Dictionary (AOD) by Bruce Moore (2004).

Table 1. Vowels

Symbol	Keyword	Symbol	Keyword	Symbol	Keyword
i :	fleece	ɔ	lot, cloth	ɪə	near
i	happy	ɔ :	thought, north, force	eə	square
ɪ	kit	ʊ	foot	ʊə	cure
e	dress	u :	goose	æɔ	mouth
æ	trap	ɜ :	nurse	oʊ	goat
ʌ :	palm, bath, start	æe	face	ɔɪ	voice
ʌ	strut	æ	pride	ɪ	(ɪl/-ɪəl/-ɪəl)
		ə	letter	ə	

[<https://www.oed.com/information/understanding-entries/pronunciation/world-englishes/australian-english/>]

Looking at the vowels in the context of “Pride” in AE, they are pronounced as [aɪ] → [æ]. Overall, it is different from CR, which is a Canadian vowel raising phenomenon, but a vowel lowering phenomenon appears in the mouth further to the palate, and a vowel lowering phenomenon is observed in “pride”. In “Start”, it is pronounced with a raised vowel compared to the pronunciation in American English.

ar → ae	bite
aʊ → æɔ	mouth
aɪ → ae	pride
ar → ʌ	start

Looking at “bite” (Antonia Andreu Nadal, 2016, p. 12), it can be seen that there is a vowel lowering phenomenon as it is pronounced as [aɪ] → [æ], and “mouth” is changed to [aʊ] → [æɔ], causing a vowel raising, and off-glide appears as a descent. In “pride and bite”, the same pronunciation phenomena appear before a voiced consonant and a voiceless consonant.

4.2. Canadian English

CE has a feature called ‘Canadian Raising’ that applies to the “mouth” and “price” vowels (i.e. when they occur before voiceless consonants), and the similar process to Australian English applies to the “start” vowel. The starting point of the vowel is slightly higher at the highest point of the tongue in the mouth than the same vowel in other positions.

aɪ → ʌɪ	price
aʊ → ʌʊ	mouth
aɪ → ʌɪ	pride, pry
ar → ʌɪ	start

Table 2. Vowels

Symbol	Keyword	Symbol	Keyword	Symbol	Keyword
i	fleece	v	lot, cloth, thought	ɪr	near
i	happy	v:	saw	ər	square
I	kit	ər	nurse, cure, letter	ʌɔ	mouth
e	dress	ʌɪ	price	aɔ	loud, now
æ	trap, bath	aɪ	pride, pry	əʊ	goat
ʌ	strut	er	face	ɔɪ	voice
ʌr	start	ɔ	foot	~ǣ	gratin
ɑr	star	ʊl	goose	~ɒ̄	salon
ɔr	north, force	ə	comma	ɪ	(/ɪ/-/ə/)

[https://www.oed.com/information/understanding-entries/pronunciation/world-englishes/canadian-english/#model]

The CR phenomenon, which shows a context-sensitive rather than context-free phenomenon, and causes vowel raising. And CR in [aɪ] → [ʌɪ], [aɔ] → [ʌɔ], is mainly observed as vowel raising before voiceless consonants.

4.3. American English

In order to compare CR in AE and CE we look at the differences with American English pronunciation as a standard pronunciation.

Table 3. Vowels

Symbol	Keyword	Symbol	Keyword	Symbol	Keyword
i	fleece, happy	ʊ	foot	aɪ	pride
I	kit	u	goose	aɔ	mouth
e	dress	ə	strut, comma	oɔ	goat
æ	trap, bath	ər	nurse, letter	ɔɪ	voice
ɑ	lot, palm, cloth, thought	ɪ(ə)r	near	ã	salon
ɑr	start	ɛ(ə)r	square	ǣ	gratin
ɔ	cloth, thought	ɔ(ə)r	cure	ɪ	(/ɪ/-/ə/)
ɔr	north, force	er	face	ə	(/ɔ/-/ə/)

[https://www.oed.com/information/understanding-entries/pronunciation/us-english-pronunciations/]

ai → ai	price
aʊ → aʊ	mouth
ar → ar	pride, pry
ar → ar	start

In American English, the diphthongs [ai] and [au] appear as open vowels that start with a low vowel. When comparing American English, in AE English, and CE, in general, the phenomenon of vowel raising is mainly observed compared to American English, resulting in "lip-laziness", which is one of the characteristics of AE, and CR in CE also appears. It appears that the pronunciation of AE and CE is less open in the mouth than in American English.

4.4. British English

In order to compare CR in AE and CE, we look at the differences between American English and British English as the standard pronunciation.

Table 4. Vowels

Symbol	Keyword	Symbol	Keyword	Symbol	Keyword
i :	fleece	ə	foot	aʊ	mouth
i	happy	u :	goose	əʊ	goat
ɪ	kit	ə	letter	ɔɪ	voice
ɛ	dress	ə :	nurse	a	gratin
a	trap, bath	ɪə	near	ɒ	salon
ɑ :	start, palm, bath	ɛ :	square	ɪ	(/ɪ/-/ə/)
ɒ	lot	ʊə	cure	ə	(/ʊ/-/ə/)
ɔ :	thought, force, cure	eɪ	face		
ʌ	strut	ʌɪ	pride		

<https://www.oed.com/information/understanding-entries/pronunciation/british-english-pronunciations/>

The main words to be looked at in British English are as follows from the OED and Antonia Andreu Nadal (2016, p. 12).

ai → aɪ	bite
aʊ → aʊ	mouth
aɪ → aɪ	pride
aɪ → a:	start

In the above words, the pronunciations [aɪ] and [au] before voiceless sounds appear in British English without vowel raising. However, in "start", the characteristics of British English appear, with no "r" pronunciation, namely no "r-coloring, and no vowel change."

5. Conclusion

The characteristics of AE, which has been considered a variant of British English and had not been systematically studied, were researched, and as a country in the same Commonwealth, the study mainly examined and compared whether the CR phenomenon in CE appears.

For this purpose, based on the basic pronunciation of American English, the main vowel pronunciations that differ between AE and CE were selected and compared intensively based on the existing OED data. Although the variants in vowels are very diverse, the comparisons were mainly made on prominent vowels.

Although more detailed research should be conducted through extensive data from the OED, Australian movies, or speakers of the native Australian language, the vowel pronunciation characteristics of the unfamiliar AE were compared and analyzed with the CR characteristics of CE based on American English. It is believed that the research will be of great help to English education and learning in identifying and understanding the characteristics of English as a world language.

Ultimately, this phenomenon is different from AE and British English, where the pronunciations of "Start ([ar] → [aɪ] or [a:] and Mouth [aʊ] → [aʊ] or [aʊ])" appear invariably. In CE, the vowel raising phenomenon is characterized as CR, such as " Price [aɪ] → [aɪ], Mouth [aʊ] → [aʊ]" and in Australian English, "bite [aɪ] → [ae], mouth [aʊ] → [æ]" appears. In short vowels, "Start" appears as [ar] in American English, [a:] in British English, and [aɪ] in CE and AE, showing the phenomenon of vowel raising. Although it is less protruded in AE than in CE, the vowel raising is observed in some vowels.

In brief, compared to American English and British English, CE and AE tend to be pronounced with the mouth less open. In other words, it seems that it prefers high vowels over low vowels in monophthongs, and frontal vowels over back vowels. In Canadian English, the first sound rises due to the CR phenomenon in diphthongs, and in Australian English, the second sound lowers, resulting in Australian gliding lowering and narrowing the space in the mouth. So people may describe the characteristics of AE as “drunken British English,” which seems a bit vague with the mouth less open.

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