

## Vowel Shifts of English (特集 英語モジュールと 社会言語学的変異研究)

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SAITO Hiroko

## Introduction

One of the causes that have created the differences of pronunciation among major present-day regional varieties of English such as North American English or Australian English can be traced by going back to when that kind of English first started: that is to say, when and what kind of English was “transplanted” in a faraway land is the starting point of that particular variety of English. For example, the rhotic variety of English spoken in the USA today has its roots in the 17<sup>th</sup> century pronunciation that was brought over from the British Isles before the dropping of pre-consonantal or word-final /r/ occurred in the 18<sup>th</sup> century. Canadian English is similar to General American (GA) because both varieties started out with the same kind of English at the same time; the first fleets to Australia and New Zealand left Britain almost two centuries after the first settlement was established in North America, by which time /r/-dropping had occurred (post-vocalic /r/ is not pronounced in *beer*, *park*, *four*, etc.) and certain words containing /æ/ had acquired a retracted and lengthened [ɑ:] pronunciation in south-eastern parts of England (a set of words like *ask*, *path*, *can't*, etc., known as ASK-words, decided to take on /ɑ:/ instead of /æ/). In fact, we know that the glottal stop pronunciation for inter-vocalic /t/ found in London Cockney English did not establish itself until well into the 19<sup>th</sup> century, because it is not found in the Englishes that had left Britain before then (Wells 1982).

In English, pronunciation differences among dialects are mostly differences of vowels; consonants (with the exception of post-vocalic /r/ and also /t/) are on the whole stable and homogeneous across various accents. Moreover, because vowels of a language are produced

along a continuum of vertical and horizontal space in the mouth, a slight change in the position of the tongue for the pronunciation of one vowel sometimes exerts a domino effect on other vowels, as can be observed in various vowel shifts.

Changes in pronunciation occur all the time. Sometimes, a change recurs: some changes seem to be cyclic. There are tendencies to be observed among the changes, but they may go in opposite directions in different vowel systems: tense high vowels tend to diphthongize, and yet diphthongs tend to monophthongize; lax vowels often move to a higher point in the mouth, but the opposite, lowering, can also be observed.

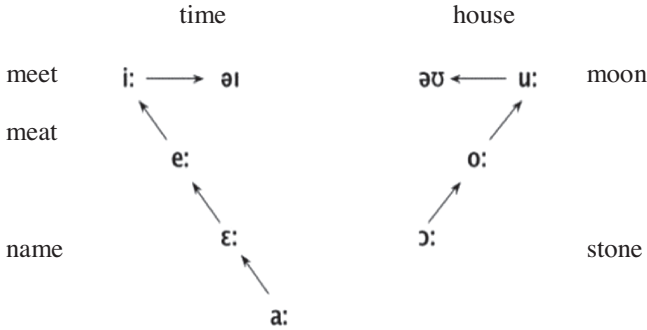
In this article, we shall be looking at some of the changes that have occurred to the vowel systems of GA, Canadian English, Standard Australian English (SAE)<sup>1)</sup> and Non-Regional British English (NRP)<sup>2)</sup> in order to see the relationship among the varieties as well as to catch a glimpse of the tendencies of change.

For reasons that have already been mentioned, it should be understood that most of the descriptions for GA would be true for Canadian English, and similarly, explanations for SAE go for New Zealand English as well,<sup>3)</sup> unless specified.

### **The Great Vowel Shift**

The Great Vowel Shift was a series of sound changes that occurred in English at the start of the 15<sup>th</sup> century of the then long vowels of English, in the form of a chain shift. The answer to the question of which move triggered this classical change has not been answered yet: did the high vowels diphthongize and pull up the lower vowels (the “pull-chain” or “drag-chain” shift), or did the tongue position for the realization of /e:/ and /o:/ become higher and push up the higher vowels in turn to make itself room (the “push-chain” shift)? By looking at other, more recent vowel changes, we might be able to find a hint to answer this question.

**Figure 1:** The Great Vowel Shift 1400–1700



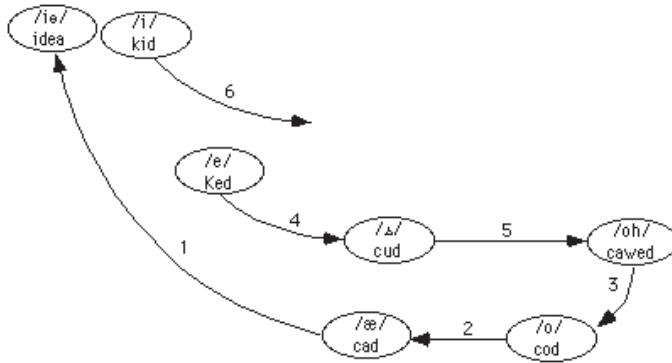
What concerns us here is that most of these changes will have been completed by the time the first fleet of permanent settlers arrived in Jamestown North America, in 1607. That is, the kind of English that the settlers took with them to America would have been the one that had undergone the Great Vowel Shift.

### The Northern Cities Shift

A hundred and seventy years had passed after the “shipping” of English across the Atlantic when America became independent and Canada came into being, and by then and afterwards, various changes in pronunciation of the varieties of English spoken in the two countries occurred. Among the newer changes, the Northern Cities Shift, a series of changes of vowels pronounced by speakers living in the inland-northern industrial cities of the USA, has produced an accent of English strikingly different from Canadian English and from GA as well.

This series of vowel changes is said to have started with the raising and diphthongizing of the  $/\text{æ}/$  phoneme to something like  $[\text{ɛ}\text{ə}\sim\text{e}\text{ə}]$ , which was followed by the fronting of the low-back vowel  $/\text{ɑ}/$  to fill in the empty space. This subsequently pulled the higher front vowels downwards and backwards as shown in figure 2.

**Figure 2:** The Northern Cities Shift from Labov (1996)  
 taken from [http://www.ling.upenn.edu/phono\\_atlas/ICSLP4.html](http://www.ling.upenn.edu/phono_atlas/ICSLP4.html)



### The Canadian Shift

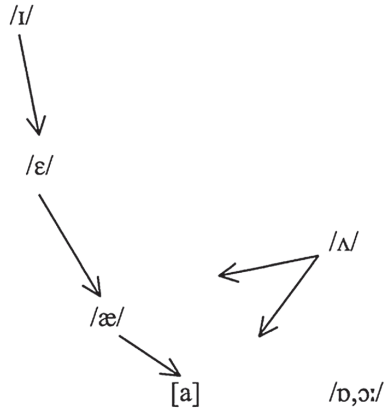
It seems that not all vowel changes in English involve raising of the low-front /æ/ as in the Northern Cities Shift—or for that matter, the Great Vowel Shift—and moreover, not all shifts move in the same direction in dialects of nearby regions. Clarke et al. (1995) found that in Canada, the low-front vowel /æ/ was retracting to the low-central space created by the low-back merger of /ɒ/ and /ɔ:/, and as a consequence, the higher front vowels /ɪ/ and /ɛ/ were also being lowered. This series of changes was named the Canadian Shift (figure 3).

The Canadian Shift and the Northern Cities Shift combined have caused two neighboring dialects of English to drift apart remarkably.

### Australian English Monophthongs

The Australian-English diphthong /eɪ/ is usually described as having a lower and more dorsal starting point compared to other accents such as GA or NRP: that is, something like [ɛɪ]. Thus, the Australian *today* sounds like *to die* to speakers of other accents. However, this is only a part of the series of diphthong shifts, involving not just this pho-

**Figure 3:** The Canadian Shift  
reprinted from Clarke et al. (1995: 212)



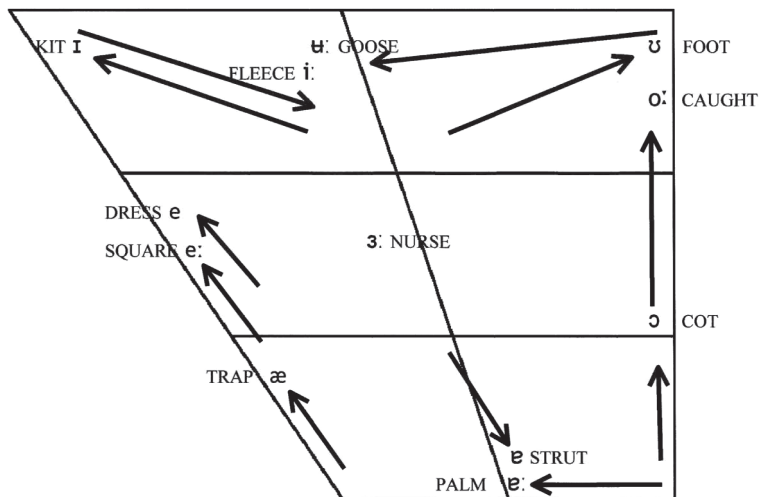
neme but also adjoining diphthongs as well. In the present article though, we shall focus on the monophthongal phonemes of SAE.

The kind of English first taken to Australia from London and surrounding areas in the south-eastern part of England around the end of the 18<sup>th</sup> century was one that had experienced the dropping of post-vocalic /r/ and the retraction of the front /æ/ to /ɑ:/ for ASK-words. However, whereas the monophthongs of the accents back home tended to move in the anti-clockwise direction (/æ/ to [ɐ] and /ɑ:/ to a very back [ɑ:]), /ɑ:/ of the broader varieties of SAE moved forward to [ɛ:] pushing up the front vowels, including /æ/. As a result of this shift, short monophthongs of SAE, as well as that of New Zealand English, are pronounced noticeably closer compared with NRP or GA.

As can be seen in figure 4, the arrows that show the direction of change of monophthongs point upwards except for the two high vowels which go inwards, resembling the arrows in the diagram for the Great Vowel Shift (figure 1).

Because of this, it is often said that the Great Vowel Shift is being

**Figure 4:** Monophthongs of Standard Australian English  
 (The arrows show direction of shift compared with corresponding  
 NRP vowels)



repeated in the English of the Southern Hemisphere.

### Recent Changes in the Pronunciation of Vowels of British NRP

As was noted earlier, the name for a standard variety of English spoken in south-eastern England is being changed from Received Pronunciation (RP) to various other names in order to account for the pronunciation by a larger number of speakers of a wider social and age range compared to RP. By widening the age range to cover the younger generations, the newly-named accents (e.g. General British (Cruttenden 2014), Non-Regional Pronunciation (Collins & Mees 2013), etc.) incorporate the pronunciation changes that have occurred or have been occurring in the speech of “the educated middle and younger generation speakers in England who have a pronunciation which cannot be pinned down to a specific area” (Collins & Mees

2013: 4). Among such changes, those that concern us here are the fronting of the high-back /u:/, lowering of the front vowel /æ/, and the monophthongization of /ʊə/ to /ɔ:/ and of /eə/ to /ɛ:/.

Both Collins & Mees (2013) and Cruttenden (2014), as well as commentaries by other authors on accents of British English, mention the change in quality of /u:/ as moving to a fronted and unrounded [u:] in the pronunciation of younger speakers. Moreover, this phoneme, along with the other high vowel /i:/, is known to be undergoing diphthongization as well, but all such changes were also observed in SAE and in the Great Vowel Shift, as has already been discussed above.

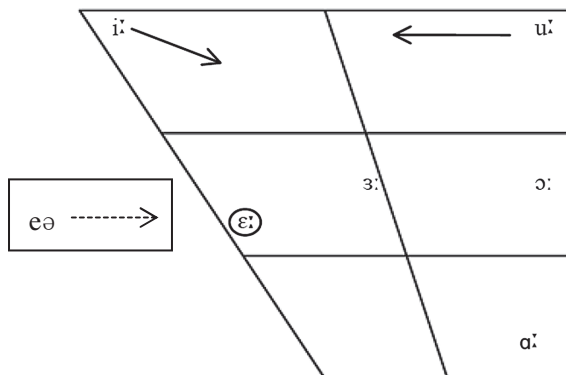
In NRP, the tongue position for the front vowels are becoming low, with /æ/ having been lowered to [a] first and /e/ following to fill the space left by /æ/ (Cruttenden 2014:85), producing pronunciations such as [dræs] for *dress*. This is unlike in SAE, and is more in line with Canadian English.

Another recent change in the pronunciation of vowels of NRP, which is a systemic change, is the monophthongization of centering diphthongs /ʊə/ and /eə/. Both diphthongs have become monophthongal for most speakers of NRP, the former merging with /ɔ:/ and producing pronunciations such as /pɔ:/, /pjɔ:/, and /tɔ:/ for *poor*, *pure*, and *tour* respectively. As a result, the /ʊə/ phoneme is on the verge of disappearance and *poor* and *pour*, *tour* and *tore* are now homophones in NRP. Another, even more recent change is that of /eə/ being pronounced as a long vowel [ɛ:] and therefore deserving the monophthong-phoneme status and written /ɛ:/. Saito (2007) showed that this was a change following the completed monophthongization of /ɔə/ to /ɔ:/ and a move to fill in the front-vowel space lacking a long-vowel phoneme (see figure 5).

It is interesting to note that as was the case with the diphthongization of /i:/ and /u:/, the monophthongization of /eə/ to /ɛ:/ is a change which has already been experienced by SAE.



**Figure 5:** Long vowels of the Non-regional Pronunciation of British English (The arrows show the direction of an on-going change, and the circled vowel is one of the newer additions to the NRP inventory.)



### Summary and Conclusion

Among the vowel systems of various accents of English we have been looking at, changes, in terms of the height of the tongue, do not always head in the same direction. However, it can be said that the back /ɑ:/ and the front /æ/ are unstable most of the time and in all varieties of English—that is, either of the two tries to fill in the space around the low, central area when it becomes vacant by the other’s moving away from this position. This has a domino effect on other vowels: the fronting of /ɑ:/ triggers the raising of front vowels (SAE), and the raising of /æ/ pushes up higher front vowels (the Great Vowel Shift, Northern Cities Shift, SAE). On the other hand, if /æ/ retracts to fill in the space in the lowest area of the mouth, this prevents the back /ɑ:/ to come forward and instead may even push up the back vowels (Canadian Shift, NRP).

There being a space to fill seems to be a major incentive for starting a vowel shift: diphthongization and centralization of the starting point of high vowels in the Great Vowel Shift, fronting of the low-

back vowel /ɑ:/ in SAE, lowering of the short front vowel /æ/ witnessed in the Canadian Shift and in the change from RP to NRP, and monophthongization of /eə/ to become /ɛ:/ in SAE and NRP were all moves to fill the space unoccupied by other vowels. Although the question of whether the Great Vowel Shift was a pull-chain shift triggered by the high vowels moving inwards or a push-chain shift that began with the high-mid vowels pushing up is still unanswered, the hint may lie in the modern vowel shifts, where trying to fill an empty space seems to be a great incentive for change. The vowel system of English before the Great Vowel Shift consisted of short and long vowels that could be plotted along the outer margin of the vowel quadrilateral with a comparatively vast space in the middle. The high vowels /i:/ and /u:/ becoming diphthongs and gaining a more central starting point so that the empty space would be filled is one plausible explanation for the beginning of this great shift.

### Notes

- 1) Australian English has traditionally been described as being comprised of three social varieties: Cultivated, General, and Broad Australian, but here we will adopt the term Standard Australian English (SAE) as introduced by Cox & Palethorpe (2007:341) as “a sub-class of Australian English [referring] to the majority dialect which contrasts with the other Australian dialects: Aboriginal English and Ethnocultural varieties.”
- 2) What was previously called Received Pronunciation (RP) is increasingly being replaced by other names in recent literature to reflect reality: Standard Southern British English (SSBE), General British (GB), or Non-Regional Pronunciation (NRP) are some of the terms that have been introduced. The last, employed by Collins & Mees (2013), refers to the accent spoken by “educated middle and younger generation speakers in England who have a pronunciation which cannot be pinned down to a specific area.” (Ibidem:4)
- 3) There are, of course, noticeable accent differences between the two regional variations in both pairs: apart from the Canadian Shift mentioned in this article, “Canadian Raising” for Canadian English in certain real-

izations of the diphthongs /aɪ/ and /aʊ/ (although this is also observed in parts of the USA), and the centralization of New Zealand English's KIT vowel to [ɤ~ə] quickly come to mind. However, not all such differences will be taken up in this paper.

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