

“Ash” [æ] sound then and now: An overview of the current state of knowledge

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ABSTRACT

The objective of this article is to review the existing studies on the British Received Pronunciation “ash” [æ] sound, as well as its variations outside the United Kingdom. It starts with a short analysis of sociolinguistic aspects of the Received Pronunciation accent, then it points out the most conspicuous differences between the Received Pronunciation and General American vowel systems. Then, it presents the early beginnings and the further developments of [æ], and finally, it discusses the alternations in the pronunciation of this sound and the most important examples of phonological variations for [æ] outside the UK.

1. Introduction

The “ash” [æ] vowel is one of the pure English vowels both in the Received Pronunciation (RP) and in the General American (GenAm) vowel systems. Its IPA code is 325 (International Phonetic Association, 1999, p. 166). This vowel can be found in words such as *hand*, *marry* or *sat*. Its vowel backness can be described as “front”, its vowel height as “near-open” (the tongue is raised in-between the position open and mid-open) and it is unrounded. It is traditionally considered as a short vowel, but in RP it is lengthened in some contexts, e.g. before voiced consonants, as in *cab* or *bad* (Cruttenden, 2014).

This article presents the earliest possible beginnings of [æ], starting from runes used by the Anglo-Saxons as an alphabet in their writing systems, then, its developments throughout time and places, to finally describe various alternations in the pronunciation of this sound. Moreover, the paper presents the four most important examples of phonological variations for [æ], which are documented for different varieties — not only those

spoken in England, but also in the United States of America, New Zealand, Australia, and Africa.

2. Pure English vowels: An overview

In the RP sound system, there are 12 pure vowels (monophthongs), including /ə/, which occurs only in unstressed syllables, but excluding other weak vowels, which will not be discussed in this paper. Six of the pure vowels are referred as to short vowels /ɪ, e, æ, ʌ, ɒ, ʊ/, and five corresponding to them in identical surroundings with long vowels whose duration is longer /ɜː, iː, ɔː, uː, ɑː/ (Wells, 1982a). Wells (1982a) distinguishes the other two types of vowels: checked and free, depending on the checking pulse of the air or its absence at the end of the word. These two types of vowels occur only in stressed syllables. Checked vowels commonly occur in a closed syllable, ending with a checking consonant, while free vowels stand in an open syllable. In the GenAm vowel system, also referred to as Standard American English, there are 13 pure vowels, including /ə/ and /ɚ/, which appear only in unstressed syllables. Differently from RP, vowel duration is not distinctive, because vowel duration is context-dependent. As far as RP pure

vowels are concerned, there are some interesting characteristics specific for this accent and distinguishing it from GA variation. For example, despite being traditionally classified as a short vowel, /æ/ in RP tends to be lengthened, especially when it stands before lenis consonants, such as /b, d, g, m, n, dʒ/ (Gimson, 1980). Another noticeable RP characteristic observed in similar clusters is the inconsistent use of /æ/ and /ɑ:/ in words containing /f, θ, s, ð/ following the vowel or a vowel followed by nasal consonant+consonant (Gimson, 1980). Pronouncing /ɑ:/ instead of /æ/, e.g. in *gymnastic* or *Atlantic*, distinguishes RP from other accents. The comparison of these two vowel systems, i.e. RP and GenAm, points to other striking similarities. For instance, the /i:/ sound in RP corresponds to /i/ in GenAm and vice versa, as in *creep*, *sleeve*, *key*, *people* (after: Wells, 1982a, p. 122). It is the only one-to-one match within the groups of pure vowels; the other matches are of the two-to-one or one-to-two type. RP /ɒ/ in some words corresponds to Standard American English /ɑ/ and in other words to /ɔ/. The one-to-two match is also an instance of GenAm /ɑ/ which can correspond to either RP /ɒ/ or /ɑ:/ as in *lot* (RP /lɒt/, GenAm /lat/) or *palm* (RP /pɑ:m/, GenAm /pam/). Wells proposes standard lexical sets of keywords which result from matching the RP and GenAm vowels as is used for analysing the lexical incidence of vowels.

In the set, there are 24 matching pairs of RP and GenAm vowels. The main contrast between these two accents pertaining to pure vowels is that Received Pronunciation “[h]as a systemic contrast between /ɒ/ and /ɑ:/ which is lacking in GenAm” (Wells, 1982a, p. 124). An important phonotactic difference between the two accents in question is the distribution of /r/. In RP /r/ occurs only before a vowel. Pre-consonantal and word-final /r/ disappeared completely in the 18th century. This phenomenon is referred to as r-dropping:

In RP the liquid /r/ is subject to the severe phonotactic constraint that it can occur only before a vowel: the sequences /rC/ and /r||/ are excluded. GenAm is not subject to any such constraint. Thus where GenAm has /r/ followed by a consonant, RP lacks it [...]. Where GenAm has word-final /r/, RP lacks it unless the next word follows closely and begins with a vowel [...]. Where GenAm has

/r/ followed by a vowel, so does RP (Wells, 1982a, p. 126).

3. The development of “ash”

The first traces of [æ] sound preserved in the written form date to the 5th century, but it should have been used as a sound earlier. When it comes to its transcription and transliteration, it might have developed from the ansuz rune (𐌆) in the Elder Futhark, the oldest one amongst the forms of runic alphabets (Hauge, 2004). Anglo-Saxons adopted the Elder Futhark and adjusted it to their own needs, ending up with so-called futhorc runes. The ansuz rune, mentioned beforehand, was adopted in three forms. The first one, ōs (in the symbolic form of ƿ), meant ‘god’ and it was transliterated as [o]. The next one, āc (written with the symbol of ƿ), meant ‘oak-tree’, and it was transliterated as [a]. The third and the most important one for the needs of this study, æsc (𐌆), meant ‘ash-tree’ and was transliterated as [æ]. Modern English [æ] is similar to the vocal representation of this rune (Page, 1999). An important source of Anglo-Saxon runes is the so-called Anglo-Saxon rune poem. Unfortunately, the original manuscript, *Cotton OthoB.x* was destroyed in 1731 during the fire in the Cottonian Library, in which it was stored, but it was possible to reconstruct it, basing on the copy from 1705 provided by the scholar George Hickes. The poem consists of stanzas, of which every one is a riddle to which the name of a rune is the solution. Sixteen of the runes in the poem have Scandinavian origins, eight runes can be traced back to the Elder Futhark, but five runes are innovations in Anglo-Saxon and have no traditions in Scandinavian or continental runes (Dobbie & van Kirk, 1942). One of these five is “ash”, which is the main subject of the present analysis. The Anglo-Saxon runes were also present on the seven rings (the most important ones were Bramham Moor Ring and Kingmoor Ring), and the Ruthwell Cross from the Kingdom of Northumbria and the Sedgeford Handle from Norfolk, which are another significant sources for the Anglo-Saxon runes analysis. All the mentioned items date back to the 8th, some of them 9th or even 10th centuries, so it is not precisely known for how long the runes had been in use and when exactly the Latin alphabet started to be used for the Anglo-Saxon language. It could have happened gradually, as every change in language.

The first Old English alphabet in the form of letters, not runes, was noted in 1011 by the monk Byrhtferð (Piercy, 2012). He provided a list of 24 letters from Latin and added 5 English letters, amounting to 29 symbols in total, with the Æ as the final symbol on this list (majuscule forms): A B C D E F G H I K L M N O P Q R S T V X Y Z & 7 þ ð æ. In the Middle English period, lasting from 1066 up to the late 15th century, the coalescence of Old English vowels [æ] and [ɑ] occurred, and the [æ] itself became obsolete (Dobson, 1968). However, [æ] played an important part in Great Vowel Shift, when in the 1500s it worked as a transition phase in the development of [a:]. It did not last long, as it soon changed to [ɛ:] (Goldsmith, 2010). The coalescence from the Middle English period was fronted during the Early Modern English period. In the majority of environments, it was fronted to [æ], e.g. in southern England. In the contemporary speech, as noted by Cruttenden (2014), some RP speakers in Southern England provide a contrast between [æ] and [æ:] (short and long), such as in minimal pairs *land* (noun) and *land* (verb) or *jam* (verb) and *jam* (noun).

4. The variation of pronunciation of the “ash” sound

The [æ] sound in Modern English also undergoes interesting changes depending on the type of accent. Among the different variations, one may distinguish: the TRAP–BATH split, appearing in RP, in the South-Eastern part of England, New Zealand, and South Africa; the MARY–MARRY–MERRY merger, common for the US speakers; the SALARY–CELERY merger, present for speakers of the certain parts of Australia and New Zealand and, finally, the [æ] raising, common among North American speakers. I follow the use of capital letters to indicate the processes of mergers, as used by Wells (1982a).

4.1. The TRAP–BATH split

An example of variation in [æ] development is the TRAP–BATH split. It is a phonological alternation in which the [æ] sound is lengthened and finally merges with /ɑ:/. It occurs in certain environments and in the words that are supposed to be pronounced with [æ], the sound is developed into a long vowel [ɑ:]. This phenomenon is common for the accents of South-Eastern England, including

RP, New Zealand, as well as South Africa. Sometimes it also occurs in American accents, such as Baltimore, New York, or Philadelphia (Wells, 1982b). In the study conducted among the speakers of New Zealand, the split occurred in the words containing voiceless fricatives, i.e. *laugh* was pronounced with /ɑ:/, but it did not occur when it came to words containing nasals, i.e. *sample* was pronounced with [æ] (Trudgill, 1984). When it comes to Received Pronunciation, this split does not occur in all words, and it is not easy to find an obvious explanation or rule for these instances. Simply, the more frequent the word in the common speech, the more likely the change is to appear. It takes place very rarely as far as open syllables are concerned (Clark & Asprey, 2013). As mentioned before, one may distinguish certain environments for the change to happen, which may be as follows: before word-final /-θ/ (*math, bath*), /-s/ (*pass, grass*), /-sp/ (*clasp, grasp*), /-st/ (*hast, fast*); or a vowel followed by: /-ðər/ (*rather*), /-nd/ (*chandler*), /-nt/ (*advantage*), /-v/ (*calve*), /-ft/ (*craft, daft*). Still, the rule is not obvious: in the word-final position /-s/ the split appears in the words such as *grass* or *pass*, but it is not present in *mass* or *morass*. The same appears in the other examples: the split occurs in *rather*, but not in *gather*, in *calve*, *clasp*, *gasp*, *after*, *craft*, *slant*, but not in *asp*, *kaftan*, *kaftan*, *ant*, *scant* or *finance* (Yang, 2021). According to various scholars, the TRAP–BATH split is not welcome by many English speakers and it is associated negatively, as aforementioned viewing of RP as such. As Gupta (2005, p. 25) points out: “Many of the northerners were noticeably hostile to /gra:s/, describing it as ‘comical’, ‘snobbish’, ‘pompous’ or even ‘for morons’”. Petyt (1985) claims that such pronunciation was considered to be incorrect and was disliked by other speakers.

4.2. The MARY–MARRY–MERRY merger

The next development in the pronunciation of [æ] is the so-called MARY–MARRY–MERRY merger. It focuses on the pronunciation of vowels pronounced before intervocalic [r]. This phenomenon, as its name suggests, concerns the merger of the following vowels: /æ/ (as in the word *marry*), /ɛ/ (as in *merry*) with /eɪ/ (as in *Mary*) (Wells, 1982a). It is common for the speakers of GenAm living in the United States. As the *Harvard Dialect Survey* (Vaux & Golder, 2003) shows, the full merger occurs in the speech of 57% of the US speakers,

while it is not found at all in 17% of them. At the same time, the MARY–MARRY merger is found in 16% of US speakers, and the MARY–MERRY merger in 9%, mostly in the Eastern part of the United States. For this survey, 11,422 respondents were asked about their pronunciation of three words: *Mary*, *merry* and *marry* by means of pronouncing the sentence “Mary, dear, make me merry; say you’ll marry me.” Then, the results were put into a map, which led to distinguishing the pronunciation among the various parts of the United States of America. 56.88% of the respondents claimed that all 3 words are the same; 17.34% claimed that all 3 are different; 8.97% stated that *Mary* and *merry* are the same, while *marry* is different; 0.96% declared that *merry* and *marry* are the same, but *Mary* is different; and 15.84% said that *Mary* and *marry* are the same, while *merry* is different.

4.3. The SALARY–CELERY merger

The next alternation in the pronunciation of [æ] is the so-called SALARY–CELERY merger. This phenomenon merges [æ] and [ɛ] when they occur before [l] and as result, salary and celery are pronounced in an identical way, as /sæləri/ (Cox & Palethorpe, 2001). This alternation has not been put under extensive study, it is mentioned in some sociolinguistic publications. This merger mainly occurs in the speakers of New Zealand and some areas of Australia: Melbourne and the state of Victoria (Brynmor, 2003).

4.4. The [æ] raising

The other example of variations on [æ] is the so-called [æ] raising, when [æ] is pronounced with the raising of the tongue. It most often occurs in North American English, both White and African-American. It especially occurs among Detroit African-Americans but is also present in the White variety (Lanehart, 2015). Raising [æ] is a consequence of the Northern Cities Vowel Shift in which some vowels moved from their original locations (McCarthy, 2010). Thomas (2006) claims that the reason for [æ] development lies in the settlement history. As he investigates the pronunciation of Ohioans, he notes that the greater changes in the pronunciation of [æ] in this way are more visible among people from northern parts of the state, which were settled by New Englanders and New Yorkers, while the rest of the state, which was

settled by the pioneers from the South, does not show raising [æ]. According to Labov (2008), the following nasal consonant has a great impact on raising [æ] – “[T]his effect can be accounted for in part by the acoustic effects of opening the nasal cavity” (Labov, 2008, p. 175). Hence, this phenomenon will occur more likely in *fan*, rather than in *fat*. It can be confirmed by the spectral analyses of the given words: F1 and F2 vary, but mostly are around 650 Hz for F1 and 2000 Hz for F2.

5. Conclusion

As a conclusion, one may claim that the “ash” is documented in its written form since the beginning of the English language. At present, it is a common sound both in speech and in writing. Its written realisation has been present since the beginning of the English language. It is a common sound, appearing in many dialects and accents of English, although it undergoes many processes and variations. The TRAP–BATH split, the MARY–MARRY–MERRY merger, the SALARY–CELERY merger and the [æ] raising are the most common variations in RP and GenAm pronunciation of [æ].

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