A SHIBBOLETH UPON THEIR TONGUES:
EARLY ENGLISH /r/ REVISITED

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> … the Natives of this Country, of the antient original Race or Families, are distinguished by a Shibboleth upon their Tongues in pronouncing the Letter R…
> (Defoe 1724-27: 232-233).

ABSTRACT

This article discusses the pronunciation of the rhotic phoneme /r/ in early English. The traditional belief that the dominant pronunciation in Old and Middle English was [r] (an apical trill) is still supported by some authors, but there is growing consensus that there was a fairly wide range of /r/ realisations already in early Germanic, and that the pronunciation of /r/ in Old English was about as variable as it is in present-day English. The article defends this view and goes a step further, suggesting that the modern distribution of variant rhotic pronunciations in British English reflects to some extent the distribution of very similar sounds in Old English.

1. Introduction: What makes a sound rhotic?

The notion of "rhotic" is notoriously controversial and hard to formalise. A variety of segments with diverse articulations, including those symbolised as [r, ɹ, ɾ, ɻ, ɽ, ʀ, ʁ, ɥ, ɣ, χ, ʋ, ɚ, ɝ, ...], with or without diacritics, may be described as rhotic, though it is difficult to see what properties unify them as a natural class – *if* rhotics constitute such a class in the first place. To aggravate the taxonomic difficulties, there is a good deal of overlap (and of cross-linguistic ambiguity) between rhotics and other sounds. For example, the apico-alveolar tap [ɾ], though usually regarded as a rhotic, may function as an allophone of apical stops (/t/ or /d/) in some languages (including American English), and sounds

such as [ɹ, ʁ, ɣ] may well function as rhotic "liquids" in one language but as fricatives in another.[1] There have been attempts to define rhotics in terms of shared physical correlates, but the similarity between them, while hard to deny, is frustratingly elusive. For example, while many rhotics exhibit a conspicuously lowered third formant (F3) of their acoustic spectrum, such a "dip" is not characteric of rhotics in general:

> Uvular *r*-sounds have a high third formant, sometimes close to the fourth formant. Dental *r*-sounds also have a relatively high third formant, though not so high as the uvulars   (Lindau 1985: 165).

Some authors flatly deny the existence of any phonetic basis for defining rhotics; that is what Lindau emphasises in her seminal article:

> But there is no physical property that constitutes the essence of all rhotics
> (Lindau 1985: 166).

One desperate solution, in the face of such difficulties, would be a cover feature with a circular definition (in brief, a rhotic is [+rhotic]), amounting in fact to an admission of defeat. According to Lindau (1985: 167), what underlies the class of rhotics is their "phonological behaviour" and "family resemblance". Ladefoged – Maddieson (1996: 215) content themselves with a shockingly informal description of rhotics as a class of sounds unified mostly by historical connections and the choice of the letter *r* (or Greek *ρ*, or the phonemic symbol /r/) to represent them.

Wiese (2001) proposes to define rhotics in terms of phonotactic patterning, as a point on the sonority scale between laterals and glides (semivowels), but, apart from the question whether such a definition is methodologically acceptable, it is far from evident that all glides are inherently more sonorous than all rhotics; many of the latter have glide realisations such as [ɚ, ɻ̝] etc. Worse still, the universal sonority hierarchy may be at odds with the language-specific phonotactic behaviour of "glides" vs. "liquids"; in Old English, for example, /wr/ and /wl/ are permissible word-initial clusters. Oostendorp (2001) argues that rhotics have no fixed sonority value and are instead characterised by "chameleonic" adaptability: the more consonantal position a rhotic occupies, the less sonorous it is.

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[1] This ambiguity is by no means unique to rhotics, and is the inevitable consequence of trying to reconcile a binary phonological contrast [±sonorant] with a scalar dimension (the openness of stricture and the degree of airflow obstruction). Other approximants similarly "shade into" fricatives as the constriction of the vocal tract is narrowed. The means by which IPA distinguishes degrees of constriction are very inconsistent: in narrow phonetic transcription [ɹ, ʁ, ɣ] are symbols for fricatives, whereas [ɹ, ʁ̞, ɰ] stand for the corresponding approximants.

Perhaps, then, the relative colourlessness of rhotics is precisely what characterises them. Thus defined, they do not constitute a natural class;[2] "rhotic" is merely a cover term for minimally specified consonantal sonorants[3] – a subset of those that do not fit into the classes of nasals and laterals and so lack any manner specification.[4] That puts them on a par with typical "semivowels" (or "glides") such as [j] and [w]. The latter are distinguished by the same features as the close vowels to which they are related (i.e. [+high, +front] and [+high, +round]), while typical rhotics lack those salient combinations of features and are phonetically akin to unrounded non-front vowels such as [ɨ, ɯ, ɤ, ə, ɜ, ʌ, ɑ].[5] The old description of /r/ as *littera canina* 'dog's letter' (i.e. a "growling" sound) alludes at the same time to the central-vowel timbre of many rhotics and to the frequent occurrence of trills among them.

Because of their underspecification, rhotics rarely contrast with one another within the same system; I shall therefore follow the usual practice of employing /r/ as a convenient phonemic transcription if the language in question has only one "rhotic" phoneme, no matter what its realisation. It must be noted that, thanks to the articulatory diversity of "basal" sonorants, phonetic realisations of /r/ will often vary allophonically and dialectally as well as idiolectally.

2. The traditional view of early English rhotics

The apical trill [r] is commonly regarded as the prototype of the whole category. It is also rather common cross-linguistically; hence the widespread tendency to believe that any other phonetic realisations of /r/ must be modern corruptions of an original trilled pronunciation.[6]

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[2] That is, in a system with two or more rhotics they will not pattern together to the exclusion of other sonorants (but see fn. 4).

[3] Or, as Oostendorp (2001: 121) puts it, "segment[s] with a phonologically (almost) empty specification".

[4] This will be true of most phonological inventories; however, [±trill] should perhaps be introduced as a manner-of-articulation feature in systems that contrast trilled rhotics with non-trilled ones. Czech distinguishes trilled and non-trilled fricatives, just as some languages distinguish lateral fricatives from non-lateral ones. If accepted, such a feature would make *trills* (but not "rhotics" in general) a well-defined natural class.

[5] Of course, palatalised and labialised rhotics occur in some systems, but such secondary accompaniments should be representationally distinguished from [j] and [w] as independent segments.

[6] See Erickson (2003) for a modern variant of this position. Erickson argues that an original [r] would be capable of producing all the modern types of English /r/ through perfectly natural developments, which is no doubt true, but the same, in principle, could be claimed of many other rhotic pronunciations, and Erickson's analysis does not rule out other possibilities.

It is still commonly believed that /r/ "ought" to be rolled in English, a belief no
doubt stemming from the Italianate tradition in the teaching of singing…

<div align="right">(O'Connor 1973: 150).</div>

In studies of English historical phonology the assumption that the modern
realisations of /r/ have developed from a trill is often simply taken for granted,
the only question being how long ago /r/ became "untrilled". Many, perhaps
most, historical phonologists would probably favour a trilled articulation as the
expected value of Proto-Indo-European and Proto-Germanic *r – in deference to
traditional scholarship. Jespersen (1909) ascribes it to Old and Middle English
as well:

> The OE and ME /r/ was probably a strongly trilled point-consonant everywhere.
> The first indications of a weakening of /r/ are found towards the end of the 16th c.
> … Ben Jonson († 1639) is the first to recognize a difference according to its posi-
> tion…; initial /r/ he distinctly describes as point-trilled
>
> <div align="right">(Jespersen 1909: 318 [§11.11]).</div>

> In the early 17th c. r was probably a trilled point-/ʀ/ [= IPA [r] – PG] (like the
> Scotch) before a vowel, and before a consonant an untrilled consonantal /r/ very
> much like the sound now given to r before a vowel in South England
>
> <div align="right">(Jespersen 1909: 358 [§13.21]).</div>

The much-cited passage by Ben Jonson is also the foundation of Sweet's
(1888) opinion on the pronunciation of early Modern English /r/ (trilled ini-
tially, untrilled in rhyme positions):

> R is the *Dogs* letter, and hurreth in the sound; the tongue striking the inner palate,
> with a trembling about the teeth. It is sounded firme in the beginning of the words,
> and more *liquid* in the middle, and ends: as in *rarer. viper*. and so in the Latine
>
> <div align="right">(Sweet 1888: 263-264 [§900]).</div>

According to Sweet, there seems no reason why Jonson's description should
not be taken literally. However, it may appear odd that there should be no doubt
about this particular report while on the same page Sweet rejects Cooper's tes-
timony to the effect that *final* /r/ was trilled:

> But here the mention of the vibration seems to be nothing but a part of the tradi-
> tional definition of *r*. It it remarkable how people cling even now to the idea that
> the E. *r* is trilled, probably confounding trilling with the voice-vibration in the
> glottis. Walker even imagines a trill of the root of the tongue in one of his pronun-
> ciations of *r*
>
> <div align="right">(Sweet 1888: 264 [§901]).</div>

Dobson (1968: 326) makes an observation that gives an ironic twist to the dispute. He remarks that Jonson's celebrated description "seems most interesting, but it is merely translated from Ramus" (i.e. the *French* grammarian Ramée). Further on (Dobson 1968: 946 [§370, fn.]), Dobson dismisses the whole description as worthless and notes again that Jonson "merely plagiarizes Ramée". Dobson's own opinion is that at some indeterminate time in the development of "Standard English" (but not later than the late fourteenth century) there probably was

> … a change in the nature of *r* from a point-trilled consonant to the PresE point-fricative, which has strong guttural quality and is closely allied to the vowel [ə]; but in intervocalic position it commonly remained either a trilled consonant or the PresE 'flap' [r]   Dobson 1968: 945 [§370]).

As for the earliest stages of English, Sweet (1888: 136 [§506]) states: "The OE *r* was no doubt a strong point trill as in the present Scotch dialects".[7] A more cautious opinion is expressed in his *Anglo-Saxon Primer*:

> *r* initially was probably trilled, as in Scots: *rǣd* 'advice', *rīdan* 'ride'. Finally and before a consonant it was probably made with the tip of the tongue curved back, as in south-western dialects of Mn.E. and in American: *ār* 'mercy', *eard* 'country', *feorh* 'life'   (Sweet 1882 [1952]: 3 [§3]).

This remains the standard handbook summary of the Old and Middle English situation. Positional retroflexion is supposed to account for some of the rhotic-conditioned sound changes in Old English (especially pre-/r/ breaking), for rhotic metathesis, and for the wide distribution of [ɻ] in modern times (Mossé 1945). Reszkiewicz (1953) and Fisiak (1967) argue that the "light" (trilled) rhotic (IPA [r]) and the "dark" (retroflex) rhotic (IPA [ɻ]) represent different OE phonemes contrasting in initial position, where ‹r› /r/ is distinguished from ‹wr-› /ɻ/; and if the spelling ‹hr› is taken to represent voiceless [r̥], up to three rhotic phonemes can be posited for Old English.[8] However, their defective distribution and limited contrastive potential, and the fact that Old English alliteration rules treat ‹wr-› and ‹hr-› as clusters, militate against such an interpretation; consequently, Reszkiewicz's theory has not gained wide acceptance.

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[7] Actually, the famous Scottish trill "tends to be restricted to formal or declamatory styles" (Wells 1982: 411), and the mainstream realisations of /r/ in Scotland are a tap [ɾ] and a postalveolar approximant or fricative [ɹ] (preferred in coda positions and frequent initially). The situation in Sweet's times was not much different.

[8] And, similarly, three lateral phonemes, /l, ɫ, l̥ /, represented word-initially as ‹l-›, ‹wl-› and ‹hl-›.

3. Other opinions

In recent decades the realisation of early English (and, more generally, early Germanic) /r/ has become a matter of some controversy, and the traditional reconstruction has been challenged by several authors. The problem is interesting because of the role of /r/ as the conditioning factor of several important sound changes in the history of the Germanic languages. If one wishes to account for those changes in terms of natural phonetic processes conditioned by the presence of a rhotic segment, then an articulation known to cause similar effects in modern languages is obviously preferable as a reconstruction. Thus, Lass – Anderson (1975: 85-89) argue in favour of a back articulation of Old English /r/ (a uvular fricative [ʁ] or trill [ʀ]) on the grounds that Old English front-vowel diphthongisation (breaking) is explicable as a coarticulatory effect caused by members of the natural class of back consonants.[9]

More recently, Lass (1983) attempts to explain not only breaking but a whole variety of disparate sound changes in Old, Middle and early Modern English (vowel retraction, raising, lowering, rounding and centralisation) by reconstructing /r/ as a "multifocal" bundle of components, each of them responsible for some of the observed effects. Lass's /r/ is thus a combination of labial, coronal, velar, palatal and pharyngeal subcomponents that may, at particular times, be selected as the phonological "focus" eliciting a particular sound change. The kind of rhotic that best meets such a description is, in Lass's opinion, virtually identical with the so-called "bunched" /r/ prevailing in Modern American English, i.e. a dorso-prevelar approximant, pronounced with a secondary pharyngeal constriction and often with some lip-rounding (the tongue-blade may be raised as well).[10] Lass speculates that other realisations of /r/ known from various accents of Modern English (alveolar trills and taps, apical or uvular approximants and fricatives) are mostly post-sixteenth-century innovations (Lass 1983: 82).

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[9]   Assuming further that /l/ in syllable codas was velarised ([ɫ]) and therefore also counted as back. The role of backness, however, seems to have been overestimated. Studies of vowel changes in the modern Germanic languages show that uvular rhotics do not tend to produce the desired effect, i.e. the diphthongisation of a preceding front vowel with the retraction of its second portion, while coronal and dorso-prevelar approximants often do (Howell 1991).

[10]   The chief articulatory component of this consonant is an approximant that roughly corresponds to the high central vowel [ɨ]; Lass (1983) describes it as "velar", which is not quite accurate and potentially confusing (the actual articulation can be described as prevelar or, depending on one's preferred terminology, as retracted palatal, midpalatal or "central"). Since IPA lacks a convenient symbol for such a sound, I shall use the *ad hoc* notation [ʒ] (Latin small letter yogh) in this article to refer to "bunched" /r/ and to distinguish it from the genuinely retroflex (i.e. subapico-prepalatal) variety. Laver (1994) uses [ɰ] instead, but in my opinion the symbol proposed here has a mnemonic advantage because of its resemblance to [ɜ] and [ɝ], the typical reflexes of vocalised rhotics.

It should be noted that Lass's reconstruction fails to explain why OE /r/ consistently patterns with coronals. The cluster /rd/ counts as homorganic, producing vowel lengthening, e.g. in OE *beard* › *bēard* › ME *bḗrd* 'beard'. Given the protean character of Lass's /r/, one would expect it to behave like a dorsal as well – in fact, presumably more like a dorsal than anything else – yet we find neither homorganic lengthening before medial -*rg*- /rɣ/ nor Anglian smoothing before -*r(r)* (cf. *dēor* 'animal' vs. *nēh* 'near').

According to Hogg (1992: 40 [§2.74]), the West Germanic merger of **r* and **z* and the present-day pronunciation of English /r/ suggest, as the most likely possibility, a coronal fricative, flap or tap in Old English, with a "velarised" allophone in coda positions – in other words, articulations similar to those found in some varieties of Modern English.

Scepticism about the archetypical status of the alveolar trill has been extended well beyond the Old English chronological horizon. Catford (2001) argues that sound changes in some of the early Indo-European languages are more compatible with the assumption of an approximant articulation, possibly the "bunched" variety ([ɹ]). Denton (2003) examines the various effects of /r/ in early Germanic dialects and concludes that, whereas Proto-Germanic **r* may have begun as an apical trill at least in onset positions, it was definitely weakened in postvocalic positions in North and West Germanic, developing approximant allophones. As for Old English /r/, Denton's conclusions are similar to Hogg's, although she is more specific about the pronunciation of the approximant variant:

> In fact, from the Old English and pre-Old English sound changes considered here, there is not compelling evidence that Old English ever had an apical trill in any environment. On the contrary, the Old English evidence points to a possible apical tap/flap in strong syllable positions and more certainly to a rounded central approximant with a relatively high tongue position in rhyme position, an articulation which may also have been present in Old Saxon and parts of Dutch
>
> (Denton 2003: 39).

Both Denton and Hogg emphasise the natural variability of rhotics. Denton remarks that "the rhotics of the modern European Germanic languages include virtually every conceivable rhotic articulation from labial fricatives to uvular trills and pharyngealized approximants" (2003: 40) and goes on to say that it would be unrealistic to expect the same phonetic value of Germanic **r* across all early dialects. Hogg makes a similar point about internal variation within English:

> One must also accept that it is unlikely that all OE speakers had the same or very
> similar pronunciations of the central approximant, given the variability in the pro-
> nunciation of the sound both in later periods of the language and in PDE [= pre-
> sent-day English – PG]   (Hogg 1992: 41 [§2.74, n.1]).

Tristram (1995) analyses the distribution of retroflex [ɻ] in the modern ac-
cents of England and its diffusion across the English Channel into the Breton
and French accents of Trégor. She finds that the area where [ɻ] is, or used to be,
a typical realisation of /r/[11] coincides with the extent of the power of Wessex in
the late 9th c. (including West Mercia). Tristram conjectures that retroflex [ɻ] was
an innovation that arose spontaneously in West Saxon Old English and became
the ordinary West Saxon pronunciation of /r/ in all positions. It freely spread
throughout the area controlled politically by Wessex but was checked at the
border of the Danelaw. Tristram refrains from detailed speculation about the
Danelaw pronunciation in Old English times, but notes that the eventual devel-
opment of /r/ in that area in modern times has been the apico-(post)alveolar
approximant or fricative [ɹ] with a tendency to be weakened and lost in coda
positions (as in Received Pronunciation and other non-rhotic varieties of Eng-
lish). The occurrence of dorso-prevelar [ʒ] in British English is not discussed by
Tristram, and as far as I am aware has not been systematically investigated by
phoneticians. However, given the fact that [ɻ] and [ʒ] are nearly indistinguish-
able even to a well-trained ear,[12] and that [ʒ] had gone practically unnoticed
until the 1950s despite being by far the dominant variant in American English,
it would hardly be surprising if [ʒ] turned out to be a frequent realisation of /r/
in the English West Country (and possibly elsewhere) as well. As Alwan – Na-
rayanan – Haker (1997) point out, the "canonical" retroflex and bunched rhotics
may be treated as two extremes of a continuous spectrum of tongue shapes
rather than discrete articulatory categories. Indeed, it is hard to see what could
compel speakers to select consistently only one of a number of possible articu-
latory strategies that produce practically the same acoustic effects; therefore,
inter-subject and allophonic variability encompassing [ʒ] and [ɻ] as well as any
intermediate articulations involving both dorsal and coronal gestures is probably
their natural mode of existence.

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[11]   Especially in coda positions. Word-initially, retroflex [ɻ] seems to have lost much ground to
the apical approximant [ɹ] of the standard accent, and is now confined to Hampshire, Wiltshire,
Dorset, Somerset, Devon and Cornwall (*LAE*; Wells 1982: 342). Full or variable rhoticity with
final or preconsonantal /r/ realised as the retroflex colouring of vowels occurs throughout south-
western England, according to the *LAE*.
[12]   Except, perhaps, for their different coarticulatory effects (for example, the presence of [ʒ] can
be *suspected* if the /r/ in question has a distinct palatalising influence on a preceding coronal stop,
making the /t/ in /tr/ sound like [tʃ] – a type of pronunciation which is definitely widespread in
Britain.

4. Regional rhotics in Old English?
4.1. West Saxon vs. Anglian

If Old English /r/ was variable, we should consider the possibility that different variants were preferred in different dialectal areas. In order to test this hypothesis, let us see if it offers any insights into dialect-specific sound changes involving rhotics or conditioned by their presence. Pre-*r* breaking seems to have been more consistent in West Saxon than it is in the Anglian dialects. In particular, breaking before *r*-clusters failed in Anglian (but not in West Saxon) if there was an *i or *j in the next syllable, as in *afirran* 'drive out, remove' vs. WS *afyrran* with *y* ‹ *io affected by *i*-umlaut (Hogg 1992: 90 [§5.24], 133 [§5.83]). This suggests that the quality of West Saxon /r/ was more antagonistic to the anticipatory effect of palatal segments. Interestingly, it seems that breaking occurred regularly even in Anglian before *rr ‹ *rz, as in Angl. *iorre* 'anger' ‹ **irzija-*. Denton (2003: 25-27) argues that the Old English rhotic reflex of *z (conjecturally reconstructed by her as a "central approximant", i.e. my [ʒ]) was initially different from inherited *r, and that the difference was still relevant in the ancestor of Anglian at the time of breaking. If the original contrast was between an anterior (apico-alveolar) sound, [r ~ ɾ] or [ɹ], and a posterior (dorso-prevelar or retroflex) one, [ɻ ~ ʒ], it is imaginable that the merger of the two rhotics yielded different results in different dialects, with West Saxon generally favouring the posterior quality (as argued by Tristram 1995) and Anglian retaining the anterior articulation at least in prevocalic positions. Such a scenario would be consistent with the modern dialectal distribution of the realisations of /r/ in British English as described by Wells (1982: 341-343, 368, 372) and mapped in *LAE*.[13]

The degree of lip-rounding accompanying the articulation of /r/ (lowering the F3 and thus enhancing the auditory cues for a retroflex or "central" approximant) was perhaps greater in West Saxon as well, hence the frequent *u*-colouring of short vowels and diphthongs (especially *eo*) as a combinative effect of a preceding /w/ and a following /r/ in Late West Saxon (*sweord* ~ *swurd* etc., cf. Hogg 1992: 205-207 [§§5.183-187]).

The transparency of Anglian /r/ with respect to the influence of a following *i or *j suggests a relatively "colourless" rhotic. This explains both why /r/ itself did not cause Anglian smoothing and why an intervening /r/ did not block the monophthongising effect of a following velar (/k, x, ɣ/), as in Angl. *werc* 'work' or *ðwerh* 'crooked'. If Anglian smoothing is interpreted as the rightward spread of a palatalising prosody (cf. Hogg 1992: 143-145 [§5.93]), this and the failure of breaking before **rCi/j* can be viewed as two aspects of the same phenomenon.

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[13]   Especially maps Ph224, Ph225, Ph244 and Ph245.

The lowering and retraction of Middle English /e/, which yields /a/ before preconsonantal or final /r/, was initiated in the North ca. 1300 or earlier (Wełna 1999: 56-57, 60). The diffusion of the change into the southern dialects and London English took place in the course of the fifteenth century. Since a pharyngeal constriction tends to pull vowels in the direction of [ɑ] by lowering their F2 and raising their F1, the effect could be attributed to a pharyngealised rhotic in the source area of the innovation. The retraction of *æ to OE /ɑ/ before /r/, catalysed by the vicinity of a labial consonant (*warþ* 'he became', *harm* 'harm'), is also Anglian (found in Northumbrian and in the early Mercian glossaries, cf. Hogg 1992: 92 [§5.29]).[14] Residual pharyngealisation retained after the loss of the coronal gesture may be responsible for the phonetic alterations (lowering, retraction, diphthongisation with a fairly open [ə]-glide) affecting vowels originally followed by tautosyllabic /r/ in non-rhotic accents of English.

It is perhaps significant that vowel lengthening before OE /rd/ never occurred in distinctively Late West Saxon forms such as *swurd* 'sword' or *wurd* 'word' (here *u* was indubitably a short vowel, cf. Hogg 1992: 213 [§5.203]). If the lengthening effect of /rd/ was stronger in the North, it may have been so because of the stronger articulatory affinity of /r/ and /d/ in the Anglian dialects.

4.2. Northumbrian

The "Northumbrian burr" must be an old phenomenon. As early as the 1720s the inhabitants of Northumberland clearly regarded it as a time-honoured feature of their dialect and were proud of it precisely by reason of its presumed antiquity. So much, at any rate, can be inferred from the earliest known description of the burr, left by Defoe:

> I must not quit *Northumberland* without taking notice, that the Natives of this Country, of the antient original Race or Families, are distinguished by a *Shibboleth* upon their Tongues in pronouncing the Letter *R*, which they cannot utter without a hollow Jarring in the Throat, by which they are as plainly known, as a Foreigner is in pronouncing the *Th*: this they call the *Northumberland R*, or *Wharle*; and the Natives value themselves upon that Imperfection, because, forsooth, it shews the Antiquity of their Blood
>
>   (Defoe 1724-27: 232-233; quoted in Påhlsson 1972).

Påhlsson's (1972) monographic study of the Northumbrian burr confirms that the usual modern pronunciation of burred /r/ is a voiced uvular fricative [ʁ] in all environments. A voiced velar fricative is used by some speakers, and other occasional variants include a uvular tap or even a uvular trill, although the

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[14]   Note also the widespread retraction of early Modern English /æ/ to /ɑ/ before tautosyllabic /r/.

latter is very rare. The burr is nowadays giving way to the mainstream realisa-
tions of /r/ in the north of England. It has already receded from the metropolitan
Geordie accents of Tyne and Wear, where it used to occur. Its present-day range
approximately coincides with the modern county of Northumberland, extending
into northern County Durham and a coastal strip of the southern Borders region.
The accents that have switched to apical [ɹ] have generally become non-rhotic,
whereas those with uvular [ʁ] retain it in non-prevocalic positions, where it
tends to coalesce with the preceding vowel, making it uvularised. This kind of
coarticulation is easy to achieve only if the vowel is back, hence the strong re-
tracting effect of non-prevocalic [ʁ]. Wells (1982: 396) cites [bɔʁːdz] *birds* and
[wɔʁːmz] *worms* as characteristic Northumbrian forms, and *LAE* (maps Ph244
and Ph245) records [ɔʁ] as the normal pronunciation of unstressed *-er* in north-
ern Northumberland. Tyneside accents, although no longer rhotic, show similar
effects in *work* [wɔːk], *first* [fɔːst] etc. (Wells 1982: 374).

Interestingly, in the Northumbrian dialect of Old English (and only there) **e*
was regularly retracted to /o/ in the sequence /wer/ when followed by a coronal
or labial consonant: **werþa-* › *worþ* 'property' = non-Nbr. *weorþ* (cf. Hogg
1992: 93 [§5.30]). The similarity to the modern rounding (which is not condi-
tioned by the consonants preceding the vowel or following the /r/) may be for-
tuitous, but there is another Old English change that suggest a special pronun-
ciation of Northumbrian /r/: rhotic metathesis in /Vrxt/ sequences (*berht* › *breht*
'bright'). It occurs sporadically in West Saxon (e.g. *wrohte* for *worhte*
'worked'), but is otherwise a Late Northumbrian speciality (Hogg 1992: 303
[§7.95]). It is also the only kind of *regressive* rhotic metathesis found in Old
English dialects; the process normally targets prevocalic /r/ (as in **βrannjan-* ›
bærnan 'kindle, burn'). As an alternative to full transposition, Northumbrian
spellings sometimes show an anaptyctic vowel that breaks up the sequence /rx/
(also in early texts: *berec*(*h*)*t* 'bright', *uyrihta* 'maker').[15] It seems that the /rxt/
cluster, while tolerated elsewhere in Old English, was for some reason avoided
in Northumbrian. This would be entirely natural in a dialect with /r/ realised as
uvular [ʁ] or a similar sound, whose combination with a directly following /x/
would be very awkward both articulatorily and perceptually.[16] The Northum-
brian metathesis or anaptyxis affecting /Vrxt/ can thus be explained as a process
akin to dissimilation, eliminating a phonetically difficult cluster. As there is no
reason to believe that /xt/ was pronounced differently in different Old English
accents, the awkwardness of the /rxt/ sequence in Northumbrian is likely to
have been caused by a distinct regional pronunciation of /r/.

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[15]   We are probably dealing with successive stages of a single process: *berht* › *bér*[ə]*ht* › *b*[ə]*réht*
› *breht*.
[16]   Cf. Blevins – Garrett (2004, fn. 14).

5. Conclusion

The picture that emerges from the discussion above is as follows: The pronunciation of /r/ was not uniform across the network of Old English dialects. The prevalent West Germanic value of inherited *r (an apical trill or tap prevocalically, a weakened approximant [ɹ] finally and preconsonantally) was preserved most faithfully in Anglian (and perhaps Kentish). Against this background there arose two local innovations: a posterior realisation of /r/ as [ɻ ~ ʒ], which spread across southern England from its West Saxon birthplace, and a uvular or velar pronunciation in the northeast – the ancestor of the Northumbrian burr. If we assume that by Late Old English times both innovations had already reached the status of regional "shibboleths" well entrenched in their respective home areas, quite a number of phonological peculiarities characterising Old English dialects become easier to explain. While it would be extremely naive to treat a modern linguistic atlas of England as a reliable guide to Anglo-Saxon dialectal geography, one should avoid the other extreme, which would be to deny that there is a strong element of regional continuity despite all the linguistic changes and boundary shifts that have taken place since the Old English period. In fact, there is sufficient evidence to justify the belief that *some* dialectal phenomena, including the distribution of certain characteristic allophones across the regional accents of English, may be older than traditionally believed and surprisingly stable in the historical perspective.

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