ROCZNIKI HUMANISTYCZNE
Tom LX, zeszyt 5 – 2012

JERZY WÓJCIK

METATHESIS IN THE HISTORY OF ENGLISH

A b s t r a c t. The paper provides an analysis of two types of metathesis involving the liquid *r* in the history of English. The two kinds of metathesis discussed appear to employ two opposing tendencies – to eliminate a TR cluster and replace it with a RT combination, as in *brid bird* and to eliminate a RT cluster creating a TR sequence instead, as in *byrht bryht*. The most important finding of the paper is that, despite the apparent incompatibility of the opposing tendencies visible in the English *r* metathesis, the change can be viewed as resulting from the weakening of the licensing potential of nuclear positions in the history of English. This aspect of the analysis allows us to place metathesis among other frequently attested English historical developments whose primary motivation lies in the weakening of nuclei.

1. INTRODUCTION

In this paper we shall look into the properties of metathesis — one of the less studied developments in the history of English. Perhaps one of the reasons for this state of affairs is that "metathesis […] is not only poorly understood, but perhaps misperceived as a marginal or even nonexisting process" (Hume 1998: 147). As observed by Blevins and Garret (1998), the beginnings of treating metathesis as a problem for linguistic theory can be traced back to the neogrammarian movement (e.g., OSTHOFF and BRUGMAN 1878) since metathesis did not fit easily into the neogrammarian ideal of phonetic graduality and regularity of sound change. The linguistic tradition which espoused neogrammarian ideas further strengthened the notion of metathesis as a highly irregular development. For example, Bloomfield (1933) notes that metathesis is incompatible with the view of sound change as a gradual drift in performance and concludes that it is not a sound change. With the

Dr. JERZY WÓJCIK – Assistant Professor in the Department of English Historical and Applied Linguistics at the John Paul II Catholic University of Lublin; address for correspondence: IFA, Al. Racławickie 14, 20-950 Lublin; e-mail: jwojcik@kul.pl

advent of generative phonology (CHOMSKY and HALLE 1968) gradualness of sound change was no longer assumed simply because the phonological component started to be perceived as consisting of an ordered set of rules that mapped underlying representations onto surface representations. When applied to diachronic processes, this meant that changes can be affected by influencing the rule system of the language, so that the addition of a single rule of metathesis to the grammatical system could bring about an abrupt phonetic effect. More recently, the tendency started within generative phonology to treat metathesis as a process with a primarily phonological motivation continues. The change is usually viewed as resulting from some kind of phonotactic optimisation which produces a better or more optimal syllable structure (ULTAN 1978, HOCK 1985, MCCARTHY 1995, FLEMMING 1996).

In this paper we will present an analysis of metathesis in the history of English, employing the theoretical apparatus of Government Phonology. It will be argued that metathesis results from changes affecting the status of nuclei as licensors of consonantal clusters. As a result of the weakening of nuclei the syllabic material which they license has to be reduced. Although metathesis is not usually associated with reduction or simplification, this view of metathesis emerges from the analysis presented below. This seems an attractive possibility since developments associated with the loss or weakening of vowels in the history of English are very common. Consequently, metathesis in English can be treated as yet another development whose origin is rooted in the weakening of vowels in the history of English.

The paper is organised as follows. Section 2 presents the necessary data, illustrating the operation of metathesis in different periods in the history of the English language. In section 3 we will introduce certain aspects of the analysis of metathesis in the history of Slavic, as presented in Cyran (2003), who claims that metathesis results from shifts in the strength of nuclear positions responsible for the licensing of consonantal clusters. Some elements of the theoretical model of CVCV phonology and the notions of complexity scales and licensing strength will be presented. Section 4 will provide an analysis of English metathesis. It will be demonstrated that cases of metathesis attested in the history of English can also be viewed as resulting from changes in the strength of nuclear positions. Finally, section 5 will offer some conclusions.

2. THE DATA

The process of metathesis, whereby the sequential order of segments in a word is re-arranged, is a phonological development which occurred at various moments in the history of English, cf. Jordan (1974: §164-166), Campbell (1959: § 459-460), Luick (1964: § 714-716), Hogg (1992: § 7.93-7.97), Jones (1989: 190-195), Hogg (1977), Wełna (2002). It is generally agreed that the most common type of metathesis which can be observed in the history of English involved the sonorant *r*, which changed position with the neighbouring vowel.[1] According to Jordan (1974: § 165), *r* metathesis in Old English was confined to Northumbrian and started to spread southwards in Middle English. Hogg (1992: § 7.94) claims, however, that the change spread southwards already in the Old English period but operated in more contexts in the Northumbrian dialect, where the general context involving *r* followed by a short vowel followed by a dental or alveolar consonant, usually *n* or *s* as in *ærn* 'house', *bærst* 'he burst', was extended to include also *d*, Northumbrian *bird* 'bird', *ðirda* 'third'. Wełna (2002) attempts to provide a detailed analysis of the process, taking into account the temporal and spatial development and spread of the change. He distinguishes two kinds of metathesis in the history of English, which he refers to as permanent and sporadic metathesis and which are differentiated by the presence of metathesis in a Modern English reflex of an Old English word (i.e. permanent metathesis) or lack of a metathesised reflex (i.e. sporadic metathesis).

Consider first the forms in (1), which provide examples of words with the original *r*V sequence, in which this combination is preserved in MnE, but which displayed metathesised V*r* forms in Old or Middle English. The data in (1) to (3) are quoted after Wełna (2002: 508) and Jones (1989: 191-195).

(1)

PGmc	**→ OE**	**→ MnE**
***TRAT**[2]	**→TRAT or TART**	**→TRAT**
PGmc *frustaz	→OE frost/forst	→MnE frost
PGmc *grasam	→OE græs/gærs	→MnE grass
PGmc *kras-j-on	→OE cresse/cærse	→MnE cress
Rom. *friscu-s	→OE fersch/ME fresch	→MnE fresh

[1] In our discussion we will concentrate only on metathesis involving the liquid r, leaving aside s metathesis, which, according to Hogg (1992: § 7.96) is largely restricted to late West-Saxon and can be found in words like *wlisp* > *wlips* 'lisping', *askian* > *axian* 'ask'.

[2] Throughout the discussion we shall use a convention whereby T represents any consonant (a governor in a governing relation), R stands for a liquid (a governee), A indicates any vowel

According to Wełna (2002: 505), the words in (1) developed forms with metathesis quite early in the Old English period and show strong consolidation of metathesis between 1250 and 1400. Nevertheless, the metathesised forms failed to survive into Modern English.

The next group are those words in which the original *r*V sequence was metathesised and preserved in the MnE reflex. The relevant examples are presented in (2).

(2)

a.	**PGmc**	**→ OE**	**→ MnE**
	***TRAT**	**→TRAT**	**→TART**
	PGmc *krat-	→OE cræt	→MnE cart
	PGmc *þri-	→OE þritig	→MnE thirty
b.	**PGmc**	**→ OE**	**→ MnE**
	***TRAT**	**→TRAT /TART**	**→TART**
	PGmc *brid-	→OE brid/Nbr bird	→MnE bird
	PGmc *þriđjaz	→OE þridda/Nbr þirda	→MnE third
	PGmc *bren-	→OE birnan	→MnE burn
	PGmc *brestan	→OE berstan	→MnE burst

Wełna (2002) claims that the main difference between the words in (1) and (2) follows from the fact that those illustrated in (2) show the tendency to develop forms with metathesis at a relatively later date. From the 15th century onwards those metathetic forms spread, replace the original non-metathetic configurations, and are preserved in the MnE reflexes. What Wełna seems to suggest, then, is that the tendency to preserve the metathesised reflex of the original *r*V sequence depends on the time when the change of metathesis affected a given word. The general observation being that the earlier the metathesised form appears in the language the less likely it is for it to be preserved. It should be clear, however, that these observations point only to some general tendencies and cannot be treated as absolute laws. Perhaps the best illustration of this point is the fact that words like OE *brid* 'bird', classified by Wełna as belonging to the second category, i.e. words which developed metathesised forms at a relatively late date and hence preserve metathesis in Modern English did have metathesised variants already in Old English, as observed by Hogg (1992), who quotes Northumbrian *bird* 'bird' or *ðirda* 'third'. The general observation that we would like to make, then, is that the two groups of words under (1) and (2) both illustrate a tendency to do away with a TR cluster so that the original TRAT configuration is modi-

fied into TART. Whether such a modified form survives into Modern English or not is a different matter, whose precise conditioning would require a detailed study of Old and Middle English dialects as well as conditions which governed the spread of a particular dialectal form.

Finally, there are words where metathesis affected the original sequence in which the vowel was followed by *r*, i.e. V*r*. The major tendency observed in these cases is for the metathesised forms to be preserved till Modern English times. Consider the forms in (3).

(3)

PGmc	**→ OE**	**→ MnE**
***TART**	**→TART/TRAT**	**→TRAT**
PGmc *þurx	→OE þurh	→MnE through
PGmc *wurxt-	→OE worht	→MnE wrought
PGmc *berxtaz	→OE beorht/bryht	→MnE bright
PGmc *þersk-	→OE þerscan	→MnE thresh
PGmc *þyrhil	→OE þyrlian	→MnE thrill
PGmc *furht-	→OE fryhto/fyrhto	→MnE fright

As can be seen from the inspection of the forms in (3), the original V*r* sequence tends to be metathesised in the MnE reflexes of the words in question. As pointed out by Wełna (2002), the data suggest that the majority of forms with metathesis appear between 1250 and 1400, although cases of forms with metathesis are also attested in OE, as evidenced by, for example, OE *fryhto/fyrhto*, OE *beorht/bryht*.

All in all, the cases of metathesis attested in the history of the English language present a rather complex picture of a change which operated both in the Old English and Middle English periods, with different dialects showing different preferences for incorporating the change. Generally speaking, two tendencies can be identified in connection with metathesis. First, it seems that the North, being most innovative, first introduced forms with metathesis which started to spread southward (Jordan 1974: § 165), and secondly, the cases of metathesis which developed in Old English are less likely to survive to Modern English times than those which developed in Middle English. In what follows we shall try to provide some suggestions as far as possible motivations for metathesis in the history of English are concerned.

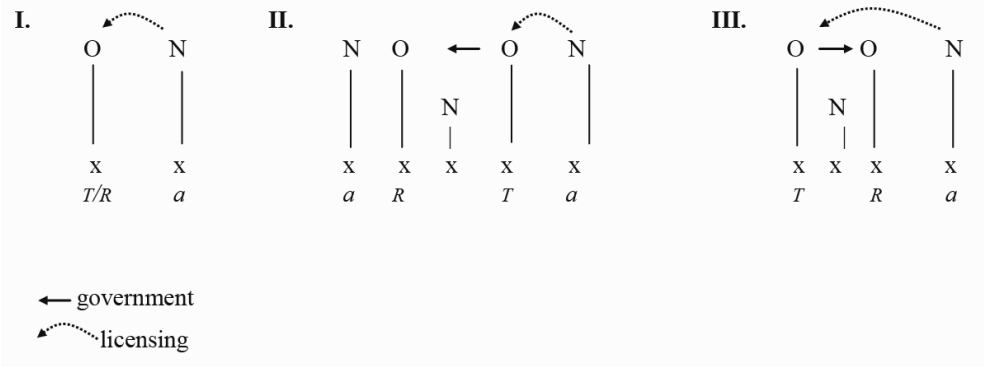
3. CYRAN'S (2003) ANALYSIS OF LIQUID METATHESIS

In our discussion we shall attempt to provide an analysis of different patterns of metathesis in the history of English couched in Government Phonology terms. Specifically, in our account of metathesis we shall follow the analysis of Cyran (2003), who provides a detailed discussion of metathesis in the historical development of Slavic languages within the model of Government Phonology. Before we turn our attention to the English data, let us present the most important aspects of Cyran's (2003) account and some elements of a CVCV framework of Government Phonology (cf. LOWENSTAMM 1996, CYRAN 2003, SCHEER 2004).

The most interesting outcome of Cyran's (2003) analysis of metathesis is the fact that metathesis is no longer seen as a sporadic and largely inexplicable development but receives a principled explanation as a phenomenon with precise phonological conditioning. Most importantly, metathesis is seen by Cyran (2003) as a direct consequence of developments that first affect the prosodic organisation of a language. This, in turn, influences nuclei and their licensing abilities. The next step, which is seen as a reaction to the changing licensing capabilities of nuclei, is epenthesis. Finally, metathesis operates viewed as a kind of repair strategy changing the syllabic structure in view of the weakened capabilities of nuclear positions. As one of the outcomes of the analysis of liquid metathesis in Slavic, Cyran proposes a typology of expected liquid shifts. Before taking a closer look at some of the properties of the system proposed by Cyran (2003), we need to introduce the most important elements of the theoretical model used in his analysis.

A crucial aspect of the system worked out by Cyran (2003) is the model of licensing strength and syllabic complexity which recognises three types of licensers: full vowels, schwas and empty nuclei (a-ə-ø). The licensors differ in terms of their inherent strength with respect to the other licensors, so that the weaker licensors are never allowed to license more complex structures than the stronger licensors. Additionally, three levels of syllabic complexity are recognised: level I (C_), comprising just a simplex onset, level II (RT_), in which we are dealing with the leftward governing relation, and level III (TR_), i.e. the rightward governing relation. The three configurations representing the three levels of syllabic complexity are represented in (4).

(4)



The three types of nuclei mentioned above, i.e. (a-ə-ø) and the levels of syllabic complexity in (4) form two non-rerankable scales. The nuclei are non-rerankable in terms of their strength as licensors from the strongest (a, i.e. a full vowel) to the weakest (ø, i.e. an empty nucleus), while the ranking within the levels of syllabic complexity reflects the inherent complexity of syllabic configurations. As depicted in (4), the first level (I) is least complex since it involves only the relation of licensing between the nucleus and its onset. At the second level of complexity (II), the nucleus licenses an onset but this time the onset enters into a leftward governing relation with the preceding onset position (R→T). In this configuration the final nucleus licenses the entire cluster and the nucleus sandwiched between the cluster has no licensing functions to perform and remains empty. Finally, the third level of syllabic complexity (III) involves the configuration in which a nucleus licenses an onset which enters into a rightward governing relation with the following onset (T←R). The crucial difference between levels II and III follows from the fact that at the second level of complexity the nucleus directly licenses an onset, while at the third level licensing is indirect. The two scales interact and their interaction is the source of variation in syllabic types between languages (CYRAN 2003: 207). By way of illustration, consider the table in (5), where a hypothetical system of possible syllabic configurations depending on the licensing properties of three types of nuclei is demonstrated.

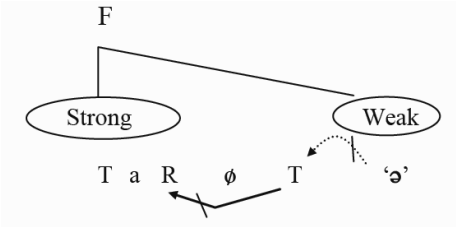
(5)

	a	ə	ϕ
I (C_)	✓	✓	✓
II (rt_)	✓	✓	–
III (tr_)	✓	–	–

A hypothetical system depicted in (5) allows only the least complex structures, i.e. simplex onsets when licensed by an empty nucleus, the schwa is able to license simplex onsets and *RT* clusters, while the highest complexity *TR* clusters have to be licensed by full vowels.

Having presented the major aspects of a theoretical apparatus employed by Cyran (2003), let us briefly present his analysis of metathesis. The author focuses on the Late Common Slavic liquid metathesis, which operated some time between the end of the 8th and the beginning of the 9th century (STIEBER 1979) and forms a part of the so-called Law of Open Syllables (MILEWSKI 1932, STIEBER 1979), whereby liquid diphthongs *ar*, *er*, *al*, *el* got eliminated in closed syllables, as in Proto-Slavic **alkati* → Pol. *łaknąć* 'to hunger', Proto-Slavic **melká* → Pol. *mleko* 'milk'. Cyran (2003) demonstrates that Late Common Slavic liquid metathesis resulted from developments that first affected the prosodic organisation of a language. Specifically, in late Common Slavic there developed a tendency for the recognition of the bisyllabic trochaic foot as a prosodic organiser (BETHIN 1998). This, in turn, affected nuclei and their licensing abilities, so that most of the nuclei which had originally followed the *RT* cluster, for example the vowel *á* in Proto-Slavic **melká*, found themselves in a prosodically weak position, effecting their licensing abilities. The situation can be depicted as in (6), adopted from Cyran (2003: 223).

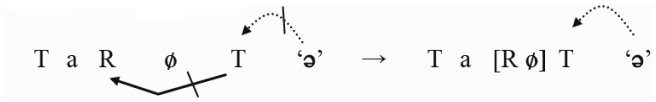
(6)



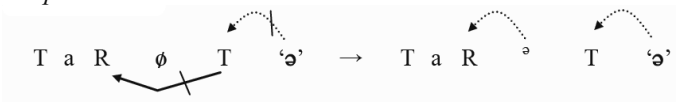
Due to the weakening of the licensing capabilities of the final nucleus, it is no longer able to license the R T governing relation, the situation which has to be resolved somehow. The three possible ways of resolving the situation envisaged by Cyran are represented below.

(7)

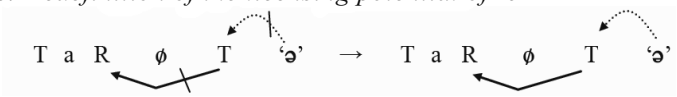
a. *cluster simplification*



b. *epenthesis*



c. *redefinition of the licensing potential of 'ə'*



As remarked by Cyran, all the possibilities depicted in (7) are found in different dialects of Slavic, which show different reactions to the same cause, i.e. the diminished licensing ability of the final nucleus resulting from the change in the prosodic organisation of the language. As we shall see below, a similar situation can be identified in different developments involving clusters containing a liquid in the history of English. The most important strategy from the point of view of metathesis is the one which leads to epenthesis, since it is the epenthetic forms, as the one in (7b), which are further modified by the application of metathesis. This is illustrated in (8).

(8)

Of course, an important question which is raised by the sequence of events represented in (8) is why metathesis follows epenthesis if the first strategy, namely epenthesis, is already a viable solution to the problem of the weaker licensing potential of the final nucleus, which shatters the integrity of the RT cluster. As proposed by Cyran, the explanation lies in the tendency to pre-

serve the binary structure of the foot, which changes into a ternary structure as a result of epenthesis. Viewed from this perspective, metathesis is a repair strategy that deals with the problem of the weakened licensing potential of the final nucleus at the same time preserving the binary structure of the trochaic foot.

Having presented the most important aspects of Cyran's analysis of liquid metathesis in Slavic, let us return to the discussion of cases of metathesis which occurred in the history of English.

4. METATHESIS IN THE HISTORY OF ENGLISH

We begin by looking at the first two groups of words affected by metathesis which were provided in (1) and (2) above. Recall that the first group is characterised by a relatively early date of the appearance of metathesis, the presence of both metathesised and non-metathesised forms in Old and Middle English depending on a dialect, and the lack of metathesis in their modern reflexes. On the other hand, the group of examples quoted in (2) contains words affected by metathesis at a later date in the history of English which exhibit a strong tendency to preserve the metathesised reflex in Modern English. What is common in the case of these two groups of words is that the change applies to words with the original TRAT configuration, which gets modified to TART. The conclusion which suggests itself is that metathesis aims at creating the less complex structure (RT cluster) by eliminating the most complex configuration, i.e. a TR cluster. Some examples of words belonging to this category are repeated in (9) for convenience.

(9)

a.	**PGmc**	**→OE**	**→MnE**
	***TRAT**	**→TRAT or TART**	**→TRAT**
	PGmc *frustaz	→OE frost/forst	→MnE frost
b.	**PGmc**	**→OE**	**→MnE**
	***TRAT**	**→TRAT**	**→TART**
	PGmc *brid-	→OE brid	→MnE bird

An important observation to make at this point is that in the case of some of the words belonging to this category epenthesis is also attested, for example *gares* 'grass', *firesse* 'fresh'. This development is predicted by Cy-

ran's (2003) analysis of metathesis sketched out above. However, one clear difference between the Slavic facts and the English data has to be noted. While the Slavic metathesis operated on the original TART sequence to produce TRAT, metathesis which applied in English did the opposite, i.e. it created the TART configuration containing the RT cluster in place of a complex word-initial onset present in the TRAT sequence. In other words, the English metathesis works in the opposite direction when compared with the Slavic process. A similar situation is reported by Cyran for Irish, where TRAT > TART metathesis can be observed in words like [brdig´] *bradaigh*, [bərdχ] *bradach* 'thieving, gen/nom'. Metathesis in Irish is also assumed by Cyran to be conditioned by the placement of stress and the common feature of both Slavic and Irish metatheses is the fact that the liquid undergoing the shift is moved in such a way as to form a part of a cluster licensed by the strong nucleus. Schematically, the situation can be depicted as in (10), adapted from Cyran (2003: 231), where the underlined nuclei represent vowels in strong positions.

(10)

Slavic	Irish
T<u>A</u>RTə[3] → TR<u>A</u>Tə	TRəT<u>A</u> → TəRT<u>A</u>

As can be seen, the process of metathesis applies and shifts the liquid in both languages so as to create the configuration in which the vowel in a strong position licenses the cluster. Crucially, metathesis in Slavic and in Irish is seen as an effect brought about by the weakening of the licensing status of nuclei, which can no longer support the preceding clusters, resulting in the creation of illicit configurations, i.e. *RTə in Slavic or *TRə in Irish. As we have seen above, the cases of English metathesis illustrated in (9) seem to involve the kind of shift identical to the one attested in Irish, i.e. the one in which a TR cluster is eliminated and RT is created instead. There is an important difference, however, since in English, at least in the Old English period when first occurrences of metathesised forms of the words in (9) appear, stress is placed consistently on the first syllable, making the first nucleus strong and the second weak. It seems, then, that English metathesis

[3] All the occurrences of schwas in schematic representations of metathetic shifts as the ones in (10) are meant to represent vowels whose licensing potential is diminished because they are found in weak positions without making any specific claim as to their precise phonetic realisation. In other words, in languages like Old English these vowels may not have been phonetically realised as schwas. What matters is their presence in a weak position.

should be seen as controlled by factors independent of stress placement, since in English the liquid which is metathesised creates a RT cluster licensed by a nucleus in a weak position and eliminating a TR cluster licensed by a strong nucleus. To add even more complexity to the English data, there are some indications that stress did condition metathesis to some extent at least. Campbell (1959: § 459) remarks that low stress promotes metathesis, quoting *eodorcian* 'ruminate' (cf. *edroc* 'chewing'), or *handwyrst* 'wrist', *cnēowwyrst* 'knee' (with the second, low-stressed, element of a compound showing the metathesised form of *wrist* 'wrist'). The conclusion which suggests itself is that although English metathesis is not immediately connected with stress placement and the resulting fluctuations in the licensing strength of nuclei, the factors which condition its occurrence must be connected with the strength of nuclear licensors and their ability to support syllabic material. Viewed from this perspective, metathesis which occurs under low stress as in *handwyrst* 'wrist' provides tangible evidence that the process has to be treated as resulting from the change affecting the status of a nuclear licensor of a TR cluster, although in the usual circumstances this change is not connected with stress placement. The change in English can be represented as in (11).

(11)

Old English metathesis
TR<u>A</u>Tə → T<u>A</u>RTə
gr æ s ø → g æ r s ø

One comment which has to be made in connection with (11) is that the schwa vowel which appears in the representation of the word is intended to symbolise a weaker nucleus (in Old English the one which does not receive stress), although the precise phonetic realisation of this vowel did not have to involve reduction to a schwa. In fact, it is generally assumed (see, for example, HOGG 1992) that vowels in Old English case endings preserved the full range of contrast, so that in gen. pl. *græsa*, dat. pl. *græsum* the inflectional endings *-a*, *-um* contained full vowels. As a result, Old English metathesis should rather be illustrated as in (12), where <u>A</u> stands for a stressed vowel, while A represents a vowel in an unstressed position.

(12)

TR<u>A</u>TA → T<u>A</u>RTA
gr æ s a → g æ r s a

As can be seen, the process of metathesis in Old English results in the attraction of the cluster to a vowel which stands in a weaker position, but as we have observed above, in Old English the placement of stress did not affect the phonetic realisation of the vowel so that both vowels in the example in (12) were realised as full vowels. Consequently, we can assume that metathesis in Old English is not connected with the dynamic change following from the weakening of nuclear licensors, but rather with the modification of the degree of syllabic complexity that a full vowel can license. It can be imagined that the Northumbrian dialect of Old English, where metathesis was most common, at some point developed a preference for RTA over TRA (RTA > TRA). In other words, a full vowel in this dialect starts to be seen as incapable of licensing the most complex level of syllabic complexity, i.e. a TR cluster. Interestingly, there is some independent evidence in Old English testifying to the tendency to eliminate a word-initial TR cluster, as in late West-Saxon *spæc*, *pætig*, for *spræc* 'twig', *prætig* 'sly' (CAMPBELL 1959: §475). Notice that the forms with epenthesis like *gares* 'grass' or *firesse* 'fresh' should also be seen as attempts to resolve the problem of licensing the most complex TR configuration by severing the governing relation between T and R, which results in epenthesis. Viewed from this perspective, metathesis appears to be just one of the strategies employed, beside epenthesis and the loss of one of the elements of the cluster in situations in which a TR cluster seems to be too complex to be licensed by its nucleus. The three strategies are presented in (13).

(13)

metathesis	TRATA	→ TARTA
	gr æ s a	→ g æ r s a
epenthesis	TRATA	→ TARATA
	gr æ s a	→ g a r e s a
cluster simplification	TRATA	→ TATA
	prætig	→ pætig

A few comments need to be made in the context of the mechanism of metathesis we proposed above. First, it should be observed that the preference for RTA configuration (RTA > TRA) which stands behind the different strategies illustrated in (13) has never been fully implemented in English, or otherwise TR clusters should have become illicit. This probably suggests that the melodic makeup of the consonants in a TR cluster has some

role to play.[4] A similar situation seems to obtain in the context of the reduction of some TR sequences in the history of English, since some combinations (e.g., *hl, hr, kn, gn*) were eliminated from the language, while others were retained (e.g., *br, bl, kr, kl*). Second, it should be remembered that (RTA > TRA) preference developed in one dialectal area in Old English. The model of nuclear strength and syllabic complexity proposed by Cyran (2003), capturing dialectal variation by assuming minute adjustments of nuclear strength which account for interdialectal variation as well as differences between registers. It thus seems possible that in Old English Northumbrian dialect full vowels stopped to be able to license TR combinations (subject to phonotactic restrictions), while in remaining varieties the vowels continued to act as licensors for this level of syllabic complexity. Consequently, the complex picture of the diachronic development of metathesis, where the retention of the change in a modern reflex seems completely unpredictable, reflects the mixed nature of the Modern English standard as regards the dialectal origin of words.

Let us turn our attention to the second type of metathesis attested in the history of English, involving words enumerated in (3) above. This type differs from cases of metathesis discussed so far in that it is the simpler (RT) combination which gets eliminated and a more complex (TR) sequence is created. Some illustrative examples are repeated in (14) for convenience.

(14)

PGmc	**→OE**	**→MnE**
***TART**	**→TART/TRAT**	**→TRAT**
PGmc *wurxt-	→OE worht	→MnE wrought
PGmc *berxtaz	→OE byrht/bryht	→MnE bright

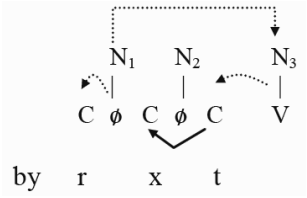
As mentioned earlier, the majority of forms with this kind of metathesis appear between 1250 and 1400, although some cases are also attested in OE. Notice as well that this type of metathesis seems similar to the one attested in the history of Slavic, modifying the original TART sequence and creating TRAT instead. Recall that this type of metathesis can be analysed as originating in the weakening of the nucleus licensing the RT cluster, as depicted below.

[4] An analogical situation can be found in Polish, where the metathesis of l in **dulgu* > *dług* 'debt' is phonotactically conditioned, see Cyran (2003: 253).

(15)

Clearly, the mechanism which is at work in (15) can also be applied to English. As is well known, one of the common Proto-Germanic innovations was the fixing of stress on the initial syllable (RINGE 2006: 105), which created a situation in which vowels at the right edge of words found themselves in a position which favoured reduction and loss. However, the situation in the case of words like the ones in (14) was even more complex, since the cluster of consonants preceding the final nucleus in most cases contained three elements, as in *worht* ‘work’, *beorht* ‘bright’ or *þerscan* ‘thresh’. Let us see how the combination of three consonants present in these words might be represented.[5]

(16)



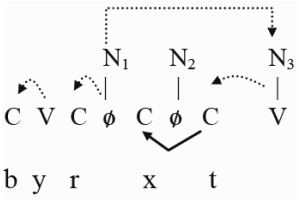
The three-consonant combinations of the type found in (16) are quite rare in Old English. When present they must contain *r* or *l* as the first element of the cluster as in *first* ‘first’, *fylst* ‘help’. This restriction may be seen as following from the fact that the position where *r* is found in *byrht* is licensed by an empty nucleus which has other licensing duties to perform, since it provides (via the final nucleus) additional licensing for the left interonset relation contracted by *xt*. Consequently, only the weakest consonants like *r* or *l* can be supported by the nuclear position under N_1. Another aspect of (16) worth mentioning is that the final nuclear position under N_3 can be filled with phonetic material in an inflected form of *byrht*, e.g., *byrhtes* ‘gen.sg.’ or left

[5] The licensing relation which obtains between the final nucleus N_3 in (16) and the one which separates the *rx* cluster (N_1) represents additional licensing support received by the final nucleus. This configuration represents the so-called double licensing of RT clusters, which attempts to capture the dependency between the kind of vowel preceding an RT cluster and the melodic restrictions obtaining within the cluster in languages like English. For details, see Cyran (2003: 280).

empty as in 'nom.sg.' *byrht*. The configuration in which the final nucleus under N_3 is empty is problematic since we should expect the vocalisation of the empty position under N_1 in reaction to the constraint which disallows two empty nuclei in a sequence *ø-ø [6](CYRAN 2003: 159). It should be remembered, however, that the problem concerns the word-final configurations which are extremely rare in Old English and in the context of our discussion in this paper the precise reasons for the grammaticality of forms like *byrht* can be left for further research. Observe as well that the problem does not appear in the case of some other words from the list in (3) affected by the TART → TRAT metathesis, since in the case of verbs like *þerscan* 'to thresh', *þyrlian* 'to thrill' or feminine nouns like *fyrhto* 'fright' the inflectional ending starting with a vowel is always present so that the nuclear position following the onset occupied by *r* is not expected to be realised phonetically.

Returning to the problem of metathesis, it can be maintained that two conditions are crucial for the operation of metathesis in words like *byrht* 'bright'. First, the gradual weakening of unstressed vowels in the history of English must have affected the phonological status of nuclear licensors in terms of the complexity of syllabic configurations which they can license. This development can be independently observed in the history of English, as evidenced by the reduction of certain final combinations, e.g,. *mb* in *lamb* 'lamb', *g* in *lang* 'long', or the loss of final geminates already in the Old English period, as in *hen(n)* 'hen'. Secondly, the words which were affected by metathesis contained a particularly complex combination of consonants, where a final RT cluster (*xt* in *byrht*) is preceded by another consonant, i.e. *r*. For convenience, let us repeat the relevant representation.

(17)

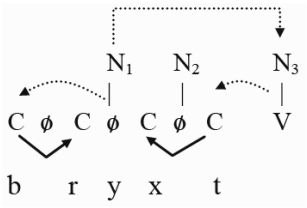


As indicated above, the configuration entails the structure with the double licensing of the *xt* cluster, where both N_1 and N_3 provide the licensing for

[6] Note that an empty nucleus found in N2 is not visible for the *ø-ø constraint because it is 'locked' within the RT governing relation contracted by the *xt* cluster.

this governing relation. Crucially, the vowel under N_1 provides additional support for the immediate licensor of the cluster, i.e. N_3. In view of the weakening of the licensing capabilities of final vowels, the vowel under N_3 needs even more support to sustain the cluster. One of the ways in which this can be done is by filling the N_1 position with melody, since the strong licensor under N_1 could provide the necessary extra licensing needed by N_3. This is precisely what happens, since forms with epenthesis are also attested, e.g., *worohte* for *wyrhte* 'worked', although they are rather infrequent. Apparently, filling N_1 with melody is attained thanks to applying a different strategy,[7] the one whereby metathesis applies shifting the liquid *r* so that it forms a cluster with the initial consonant. This is depicted in (18).

(18)



As can be seen, metathesis in words like *byrht* → *bryht* is a consequence of the weakening of the nucleus under N_3. In view of this weakening the nucleus in N_1, which provides additional licensing for the RT cluster needs to strengthen in order maintain the status quo. This, in turn, is done by shifting the melody of the initial vowel into the N_1 position. All in all, the two types of metathesis discussed in this paper seem to result from changes in the licensing capabilities of nuclei. As such they may be viewed as developments typical of the historical evolution of the English language, which was often effected by changes caused by the weakening of nuclear positions.

5. CONCLUSION

In the course of our discussion we have looked into two types of metathesis attested in the history of English involving the liquid *r*. As we have seen, the two kinds of metathesis appear to employ two opposing ten-

[7] As indicated above, the choice of metathesis over epenthesis might follow from the fact that epenthesis adds an extra vowel thus modifying the foot structure of a word in question. To avoid this, an alternative with metathesis is preferred.

dencies – to eliminate a TR cluster and replace it with a RT combination, as in *brid* → *bird* and to eliminate a RT cluster creating a TR sequence instead, as in *byrht* → *bryht*. The most important aspect of the analysis presented above is that, despite the apparent incompatibility of the opposing tendencies visible in the English *r* metathesis, the change can be viewed as resulting from the weakening of the licensing potential of nuclear positions in the history of English. This aspect of the analysis allows us to place metathesis among other frequently attested English historical developments whose primary motivation lies in the weakening of nuclei.

REFERENCES

BETHIN, Ch. 1998. *Slavic prosody. Language change and phonological theory*. Cambridge: Cambridge University Press.

BLEVINS, J. and A. GARRET. 1998. The origins of consonant-vowel metathesis. *Language* 74.3: 508-556.

BLOOMFIELD, L. 1933. *Language*. New York: Holt, Rinehart, and Winston.

CAMPBELL, A. 1959. *Old English grammar*. Oxford: Clarendon Press.

CHOMSKY, N. and M. Halle. 1968. *The sound pattern of English*. New York: Harper & Row.

CYRAN, E. 2003. *Complexity Scales and Licensing Strength in Phonology*. Lublin: Wydawnictwo KUL.

FLEMMING, E. 1996. Laryngeal metathesis and vowel deletion in Cherokee. *UCLA Occasional Papers in Linguistics* 16: 23-44.

HOCK, H. 1985. Regular metathesis. *Linguistics* 23: 529-546.

HOGG, R. 1977. Old English r-metathesis and generative phonology. *Journal of English Linguistics* 13: 165-175.

HOGG, R. 1992. *A grammar of Old English. I: phonology*. Oxford: Blackwell.

HUME, E. 1998. Metathesis in phonological theory: The case of Leti. *Lingua* 104: 147-186.

JONES, C. 1989. *A history of English phonology*. London: Longmann.

JORDAN, R. 1974. *Handbook of Middle English grammar: phonology*. The Hague: Mouton.

LOWENSTAMM, J. (1996). CV as the only syllable type. In J. DURAND and B. LAKS (eds.) *Current trends in phonology: models and methods*. Manchester: Europeans Studies Research Institute.

LUICK, K. 1914-40. (repr. 1964). *Historische Grammatik der englischen Sprache*. Stuttgart/Oxford: Bernhard Tauchnitz/ Basil Blackwell.

MILEWSKI , T. 1932. Rozwój fonetyczny wygłosu prasłowiańskiego. *Slavia* 11: 1-32.

MCCARTHY, J. 1995. *Extensions of faithfullness: Rotuman revisited*. Amherst: University of Massachusetts.

OSTHOFF, H. and K. BRUGMAN. 1878. Vorwort. *Morphologische Untersuchungen* 1.iii-xx.

RINGE, D. 2006. *From Proto-Indo-European to Proto-Germanic*. Oxford: Oxford University Press.

SCHEER, T. 2004. *A lateral theory of phonology. What is CVCV, and why should it be?* Berlin and New York: Mouton de Gruyter.

STIEBER, Z. 1979. *Zarys gramatyki porównawczej języków słowiańskich*. Warszawa: Wydawnictwo Naukowe PWN.

ULTAN, R. 1978. A typological view of metathesis. In GREENBERG, J. (ed.) *Universals of human language, vol. 2, Phonology*. 367-402. Stanford: Stanford University Press.
WEŁNA, J. 2002. Metathetic and non-metathetic form selection in Middle English. *Studia Anglica Posnaniensia* 38: 501-513.

METATEZA W HISTORII JĘZYKA ANGIELSKIEGO

S t r e s z c z e n i e

Artykuł przedstawia analizę dwu typów metatezy w historii języka angielskiego. Obydwa typy dotyczą zmian, w których uczestniczyła spółgłoska płynna *r*, i w których można wyróżnić dwie przeciwstawne tendencje. Pierwsza z nich to tendencja zmierzająca do wyeliminowania kombinacji spółgłoskowych typu TR i zastąpienia ich kombinacjami typu RT widoczna na przykład w *brid bird*, druga to tendencja do wyeliminowania kombinacji RT i zastąpienia ich przez TR, na przykład *byrht bryht*. Najistotniejszym elementem przedstawionej analizy jest wykazanie, że obydwa rodzaje metatezy wynikają z osłabienia zdolności samogłosek do licencjonowania materiału fonologicznego.

Summarised by Jerzy Wójcik

Słowa kluczowe: historia języka angielskiego, metateza, fonologia.
Key words: history of English, metathesis, phonology.