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Title	Telling a lie vs lying : exaptation of the spelling <y> in the history of English
Sub Title	
Author	堀田, 隆一(Hotta, Ryūichi)
Publisher	慶應義塾大学藝文学会
Publication year	2017
Jtitle	藝文研究 (The geibun-kenkyu : journal of arts and letters). Vol.113, No.2 (2017. 12) ,p.17- 28
JaLC DOI	
Abstract	
Notes	The decay of lying? : essays in honour of professor Keiko Kawachi
Genre	Journal Article
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=AN00072643-01130002-0017

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Telling a Lie vs *Lying*: Exaptation of the Spelling <y> in the History of English

Ryuichi HOTTA

1 Introduction: *lie* vs *lying*

In learning the English language, many people, native speakers or not, suffer from the spelling-pronunciation gap. This has been in fact as one of the oft-mentioned liabilities of the language. To many, the relationship between pronunciation and spelling looks chaotic. To be sure, there are certain rules that govern the English orthography, but since we frequently encounter irregular or unpredictable ways of spelling, the reliability of such rules should be impaired.[1]

This paper focuses on two related spelling habits, both involving *y*, that negatively contribute to this reliablity: an alternation between *lie* and *lying*, and one between *try* and *tried*. The two alternations are expected to be learned at a relatively early stage of learning, but they are too unreasonable to be readily accepted since they face the opposite direction. To turn *lie* to the *-ing* form (whether as a present participle or a gerund), the rule is to change final *ie* to *y*, and then add the suffix *-ing*. To turn *try* to the past (participle) form, on the other hand, the rule is that the final *y* be changed to *i*, and then the suffix *-ed* be attached.

Most learners learn each of these spelling rules separately, but if they ask themselves how the rules can be reconciled, they must remain silent. The present paper makes an inquiry into the matter from a historical point of view, in an attempt to clarify the relationship between the two letters *i* and *y*. In Section 2, I outline how the usage of the letter *y* had changed by the end of the Old English period. Section 3 describes the situation in Middle English where the letters *i* and *y* fluctuated while *y* was acquiring a new role. Section 4 takes

up their continued fluctuation in Early Modern English, before we move on to Section 5, which discusses how the Late Modern English period saw an emergence of orthographic rules that have become familiar to us. The final section summarises the historical accounts for alternating spellings such as *lie*/*lying* and *try*/*tried*. The notational convention in what follows is that letters (graphemes) are surrounded by angle brackets (e.g. <lie>, <try>), while sounds (phonemes) by square brackets (e.g. [laɪ], [traɪ]).

2 Old English: <y> becoming systemically unnecessary due to sound change

To address the questions posed in the introduction from a truly historical point of view, it would be necessary to go back to the origin of alphabetic writing around BC 1700. For the purpose of this paper, however, it will suffice to say that the letter <y> derived from the letter named "wāu" in the original Semitic alphabet. The original letter later brought into being <f>, <u>, <v>, and <w>, all of which are therefore sisters to <y>.

We may usually associate <y> with <i> for their common phonemic values (typically [ɪ] and [aɪ] in Present-Day English). Historically, however, <y> was more closely associated with <u>. The close association of the two letters should be clear when we compare the upper-case and lower-case shape of the twentieth letter of Greek alphabet, "ypsilon": <Υ> and <υ>. In ancient Greek, this letter was used to represent the pronunciation of the "rounded front high vowel" [y], as found in modern French and German, but not the pronunciation of [i] and [u] as might be expected. This vowel can be articulated when one tries to utter [i] with the tongue and lips in a position for the articulation of [u]. It is, as it were, an intermediate vowel between *u* and *i*. In fact, one of the accounts for the English name [waɪ] (former [wi:]) for the letter <y> is that it comes from U ([u:]) + I ([i:]).

The Greek letter was introduced to English at the end of the sixth century by way of Latin. Since in Early OE (*ca*. 700–900) the vowel [i(:)] and [u(:)] were reprsented by the letters <i> and <u>, respectively, one might wonder if the letter <y> was necessary at all. In the period, however, the round front high vowel [y(:)], though unfamiliar to most English speakers today, was current. This is to say that <y> had its proper phonemic function. For example, OE had a pair of <mȳs> [my:s] (pl.) and <mūs> [mu:s] (sg.), which are ancestors of our *mice* and *mouse*.

What happened to pairs such as *mȳs* and *mūs* was that the vowel [y(:)] was unrounded towards the Late OE period (*ca*. 900–1100), with the result of the vowel being merged to the existent [i(:)]. Now the form corresponding to "mice" were not *mȳs* but *mīs*, the latter of which was to change its long vowel to the diphthong [aɪ] via the Great Vowel Shift after the fourteenth century. The unrounding would have made the letter <y> systemically unnecessary so that it should come into disuse. If that were the case, we would not have encountered questions like *lie* vs *lying* and *try* vs *tried* today.

3 Middle English: <y> finding a new role

Despite its functionally marginalised status, the letter <y> survived into the ME period (*ca*. 1100–1500). This survival led to a spelling habit where either <i> or <y> could be used to represent [i(:)] almost interchangeably. In terms of systemic economy, more than one letter for one phoneme will be undesirable, but language does not necessarily follow such economical lines. For instance, in ME there were two graphs and one diagraph coexistent to represent the PDE *th*-sound (i.e. [θ] and [ð]): <þ> "thorn," <ð> "edh," and <th>. The survival of <y> was largely due to the inertia of its OE usage, but it may be defensible to argue for the influence of Latin, in which <y> was available alongside <i>, if mostly in Greek loanwords, and both letters represented one and the same [i(:)] sound.

Thus, there developed over the transitional period from OE to ME a spelling habit of using <i> and <y> interchanbeably. In the meanwhile, <y> was gradually acquiring a new role, motivated by the practical needs of "minim avoidance." The minim is a vertical stroke (like an <i> without its dot).[2] A minim could be either <i> by itself or part of <n, u, m>, etc., the latter letters then not being written with horizontal strokes that connected minims as they are today. This means that the three minims <ııı> could represent any of <iii, in, iu, m, ni, ui>, etc., which situation may well have made the reader wonder how to interpret them. The reader usually made it out with the help of context, but if a larger number of minims were written continually, the reader was subject to more misunderstanding, as was the writer.

Several practical solutions to the minim problem were proposed. One was to place a dot over a minim, as noted above, if it was meant to be an <i> rather than a constituent of <n, u, m>, etc. Another solution was to put a leftward hook below the minim to produce a

<j> (accounting for its historical emergence). Yet another was to capitalise <i> to make it outstanding, hence the capitalised <I>, as for the first person pronoun in ModE.

An additional, and simple, way to avoid a series of minims was to make the best of the then redundant and useless letter <y>. Its letter form, with a long downward protrusion, was suitably outstanding as well as ornamental. This practice transformed the spelling of *minster*, for instance, from the old <ııııııster> to <ıııyııster>, as it did *him* (the masculine dative form of the third person pronoun) from <hıııı> to <hyııı>.[3] The substituion of <y> for <i> was not a perfect solution, but good enough to lessen the burden of the reader/writer in making out what the minims should represent. This is how the once marginalised <y> found its unique role by the middle of the thirteenth century. What makes this development intriguing is that the newly acquired role was not phonetic or systemic, but purely graphetic and practical.

In recent theoretical studies of language change, the term "exaptation" is used to represent a change in which a form whose original function has been nearly bleached acquires a new function, one often unrelated to the original. The term was first developed in the area of evolutionary biology by Gould and Vrba,[4] and was later applied to linguistic evolution by Lass. In Lass's view (80), exaptation in language "is the opportunistic co-optation of a feature whose origin is unrelated or only marginally related to its later use. In other words (loosely) a 'conceptual novelty' or 'invention'." Taking an abstract example of morphological change, Lass (81-82) goes on to explicate the concept as follows:

> Say a language has a grammatical distinction of some sort, coded by means of morphology. Then say this distinction is jettisoned, PRIOR TO the loss of the morphological material that codes it. This morphology is now, functionally speaking, junk; and there are three things that can in principle be done with it: (i) it can be dumped entirely; (ii) it can be kept as marginal garbage or nonfunctional/nonexpressive residue (suppletion, 'irregularity'); (iii) it can be kept, but instead of being relegated as in (ii), it can be used for something else, perhaps just as systematic. . . . . Option (iii) is linguistic exaptation.

I do not know of any study that has treated a functional shift in spelling as a case of linguistic exaptation, but such changes can be found elsewhere. For instance, when the

Greek borrowed alphabet from the Phoenician, they used, for their own vowels, some of the Phoenician consonant letters that they found they didn't need — a case for spelling exaptation. It is defensible to argue, thus, that our case with a functional shift of <y> is another example.

The substitution of <y> for <i> in the context of surrounding minims was not a revolutionary exaptation, however. Solutions to minim avoidance were not consistently practised in ME: there was little systematic effort to standardardise spelling in ME, and almost everything about spelling depended upon individual scribe's habits. One can say for sure that scribes tended to use <y> among a series of minims, but it essentially remained interchangeable with <i> in many of the cases. One may well argue even that the inconsistent resort to these solutions would have augmented unpredictable fluctuation between <y> and <i>.

After all, the innovative role of <y> in ME was not to be handed down to PDE, although there are traces of it in the "<ii> avoidance" rule, as will be taken up in Section 5. Even so, the new role of <y>, which developed during Early ME, contributed to the survival of the letter. While <y> stayed alive thus, it had some time to spare before it eventually found an opportunity to survive into ModE.

4 Early Modern English: expansion and convergence of <y> and <i>

The fluctuation of <y> and <i> continued into the Early ModE period (*ca*. 1500-1700). Even in the 16th century, there were abundant fluctuations observed, including *king* ~ *kyng*, *wille* ~ *wylle*, *roial* ~ *royal*, and *saieth* ~ *sayeth*. In the meanwhile, efforts were steadily made to standardise English spelling in this period. These efforts were to bear fruits, so that criteria for the choice of <y> and <i> were gradually established.

For example, it was becoming common to use <i> in the beginning and middle of a word and <y> at the end of a word, though the tendency had been shown in the previous period. One reason for <i> being avoided word-finally was perhaps that <i> would make word-final positions less clear particularly in the case of minimum spacing between words. The addition of "dummy" <e> or the substitution of <y> was a simple solution.

In addition, as English began to be printed towards the end of the fifteenth century, printers chose any of <y>, <ie>, and <ye> according to the needs to justify the lines. For example, printers spelt the word *pity* in various ways: *pity*, *pitie*, *pitie*, *pytie*, *pittie*, *pyttye*, etc.

Now a new fluctuation of <y> and <ie> was added to the long-standing fluctuation between <y> and <i>, especially at the end of the word. It is ironic that the spread of printing extended and enlivened spelling fluctuation instead of enouraging spelling standardisation.

However, not everyone was satisfied with the inconsistency of English spelling. Richard Mulcastor, don in education in the second half of the sixteenth century, proposed distinction between <y> and <ie> at the end of the word. He suggested using <ie> for weak [i], and <y> for strong diphthong [aɪ] (e.g. *dictionarie*, *gentlie*, *verie* but *cry*, *defy*, *deny*). However, Mulcaster's proposal was not followed in the first monolingual English dictionary *A Table Alphabeticall* published by Robert Cawdrey in 1604, where some words with the suffix *-ly* were spelt with <-ly> (like *abruptly*) and others with <-lie> (like *craftilie*).

As the seventeenth century progressed, the persistent fluctuation was gradually calmed down so that the "word-final <y>" rule was largely established. The rule accounts for the *try*/*tried* alternation. The spelling *try* has <y> because of its word-final position, whereas the spelling *tried* has <i(e)> because of its non-word-final position. It is to be noted, however, that the historical fluctuation of <y> and <ie> at the end of the word remains obstinently in several cases. The spelling <ie> is retained in a series of words such as *movie*, *auntie*, *birdie*, *rookie*, and *Susie*, and a group of relatively recent loanwords such as *calorie*, *genie*, *lingerie*, *prairie*, and *zombie*.[5]

In parallel with the "word-final <y>" rule, the "non-word-final <i>" was becoming established. The latter rule, which has continued to this day, is only a lenient one that allows exceptions, so that the fluctuation of <y> and <i> remains in a few words. In PDE, when the adjective/adverb suffix *-ly* is attached, <y> at the end of the base is usually replaced with <i> as in *daily* and *happily*; whereas in short words such as *dry*, *shy*, etc., <y> is left unreplaced, thus *dryly*, *shyly*, etc. In other cases, either spelling is allowed as in *dryer*/*drier*, *flyer*/*flier*, *gypsy*/*gipsy*, *syren*/*siren*, and *tyre*/*tire*. Proper names also show this fluctuation: *Smith*/*Smyth* and the fourteenth-century religious reformer *Wycliffe*/*Wiclif*. Thus, the long tradition of interchangeability between <y> and <i> from ME to Early ModE has no small effect on PDE spelling.

5 Late Modern English: development of modern rules

As the English orthography became standardised from the seventeenth century onwards,

there were a number of spelling habits developed and established. One of them was the "three-letter" rule. The rule has it that content words (ones with lexical meaning) should be spelt with at least three letters, whereas function words (ones that represent grammatical functions) can be spelt shorter. For example, function words such as *a*, *am*, *an*, *at*, *be*, *by*, *do*, *he*, *I*, *if*, *is*, *it*, *me*, *my*, *of*, *on*, *or*, *to*, *us*, and *we* are allowed to be shorter than three letters on account of their more grammatical status (pronoun, article, preposition, conjunction, and auxiliary); in contrast, at least three letters are required for the spellings of content words such as *add*, *bye*, *cue*, *die*, *due*, *ebb*, *egg*, *err*, *eye*, *foe*, *inn*, *lie*, *roe*, *rye*, *see*, *sue*, *tie*, *toe*, and *vie*, what with the doubling of the consonant letter and what with the addition of "dummy" final <e>.[6] The rationale behind the rule is that function words are usually unstressed in pronunciation and unsolid in meaning, and therefore should be spelt correspondingly short; on the other hand, content words are stressed and solid, and therefore should be spelt long enough. It can be safely said that the rule had been almost established by the seventeenth century, though there are a few exceptions to the rule as in *go*, *ax*, and *ox*.

The "three-letter" rule explains why *die* and *try* should be spelt as such. One would expect the spelling **dy*, with the word-final <y> rule applied, but the effect of the "three-letter" rule outweighs so that a dummy <e> is added to produce *die*. As for the spelling *try*, as the word happens to have an onset of two consonants, adding a word-final <y> will appropriately make it three letters long.

Another rule that should be mentioned is the "<ii> avoidance" rule. One may readily notice that there are very few <ii> or <uu> spellings in English spelling, whereas <ee> and <oo> are very common. These spelling habits date back to the ME period when the minim avoidance was developed as we saw earlier. The "<ii> avoidance" rule accounts for our apparently irregular spelling *dying*. The inifinitive spelling of the word is spelt *die*, and its present participle/gerund form would be spelt **diing* if the general rule were to be applied. Since the spelling **diing*, however, would be in conflict with the "<ii> avoidance" rule, the first <i> would need to be replaced by <y>, resulting in the accepted spelling *dying*. It is to be noted that English spelling has also a rule that might be named "<yy> avoindance," which accounts for the spelling *clayey* and *skyey* with dummy <e>'s for the adjevtives corresponding to the nouns *clay* and *sky*.

One final rule that should be introduced is the "three vowel letter avoidance" rule.

Through the history of English, the spelling system has generally avoided a sequence of three or more vowel letters such as <aie>, <aue>, and <oue>. The likely reason for this is that there was confusion involved in interpretation since <i> and <u> were used not only for vowels but also for the consonants [j] and [v, w], respectively. The rule accounts for the spelling *played*, not **plaied*, for the preterite/past particle of *play* in contrast to *tried* for that of *try*. Since the spelling *play* is allowed with reference to the "word-final <y>" rule, one may expect that its preterite/past participle form would be spelt **plaied*, with <i> restored at a non-word-final position; the "three vowel letter avoidance" rule, however, forces <y> to remain and <i> to be suppressed.[7]

In connection with the preterite/past participle form, let us consider the present third-person singular form. The spellings *try – tries* are closely comparable to *try – tried*, but *play – plays* are not to *play – played*. To understand why this should be the case, two historical backgrounds need to be taken into consideration. First, since the Early ModE period, the present third-person singular has preferred the *-s* ending to *-es*. Secondly, the sequence of a vowel letter followed by <y> has been preferably retained. These spelling habits combined to encourage the spelling *plays* rather than **plais*. One caviat, however, is that <-ies>, where it is not preceded by vowel letters, has been kept alive from the previous periods, thus giving us *tries*, *studies*, *dies*, and *lies*. The same applies to the nominal plural ending *-s* (cf. *boys*, *days*; *cities*, *ladies*).

I will summarise five rules (or should they be called "strong tendencies"?) that I have shown to have been established through the history of English.

	Rules	Explanation	Examples
1.	"minim avoidance" rule	use of <y> instead of <i> among minims	*ıııyıı* > *myn* "mine"; *ııyııı* > *nym* "took"
2.	"word-final <y>" rule	substitution of <y> for <i(e)> in word-final positions	*early*, *family*, *play*, *study*, *try*
3.	"three-letter" rule	at least three letters for content words	*bee*, *die*, *egg*, *eye*, *inn*
4.	"<ii> avoidance" rule	substitution of <yi> for <ii>	*dying*, *lying*, *vying*; *studying*, *trying*
5.	"three vowel letter avoidance" rule	avoidance of three vowel letters on end	*played*, *bowed*; *laid*, *paid*, *said*

6 To understand the relationship between <y> and <i>

We have seen so far that through history, several spelling rules have evolved independently but intertwined with one another to determine the spelling of individual words. As a result, what we have today is a complicated English orthography that cannot be accounted for by any single major rule. Instead, the English spelling system is made up of a group of minor rules that might look chaotic at first sight but are in fact well grounded in history. Now that we have reviewed the history of the English spelling, let us return to the main question of our concern: why *lie* but *lying*; and *try* but *trying*?

In early English, the vowels corresponding to ModE [ɪ] and [aɪ] were represented in principle as <i>. It is true that the <y> vowel became unrounded towards Late OE and then merged into <i>, thus opening the long history of coexistence of both letters, but <y> has remained a minor variant to this day. In the meantime, after ME, <y> was favourably used to avoid minims, gradually occupying a corner that had been once covered by <i>. Towards ModE, word-final <y> gained in popularity perhaps on account of its distinguished letter form. As spelling was standardised from the seventeenth century onwards, there were several minor rules added that helped <y> to occupy further corners that had been historically covered by <i>: "three-letter" rule, "<ii> avoidance" rule, and "three vowel letter avoidance" rule. All in all, it is historically justified to say that <i> was originally ubiquitous, but has been replaced by <y> under certain conditions.

In light of the default use of <i>, the spelling for "try" should be expected to be **tri*. The "word-final <y>" rule, however, overrides the expectation in favour of *try*. In contract, the preterite/past particle *tried* is accepted because the vowel in question is not at a word-final position now.

As far as *lie* is concerned, its expected spelling should be **li*; however, the "three-letter" rule kicks in to replace it by *lie* with a dummy <e> added. The spelling *dying* derives from the hypothetical **diing* (<di> plus <-ing>), but the latter would be unacceptable according to the "<ii> avoidance" rule, which insists on replacing the first <i> by <y>. Another way out would be **dieing*, which would in turn run afoul of the "three vowel avoidance" rule.[8]

It will be against our intuition to assume that **tri* and **li* should be the default spellings of the words, as we are used to seeing *try* and *lie*, but it is perfectly reasonable both

synchronically and diachronically to assume that <i> is default and <y> is only available under certain conditions. This view is rather contrary to the traditional way of explaining that <y> in *try* should be replaced by <i> when suffix *-ed* is added: what needs explaining is the subsitution of <y> for <i> rather than the other way round.[9]

It is one thing to get a better historical linguistic understanding of apparent spelling difficulties, but it is another whether or not historical explanations should be introduced to English teaching. Rather, many students of English will be at a loss if they are given a detailed historical account for the relationship between <i> and <y> as well as an unintuitive assumption of the default spellings **li* and **tri*. In fact, the application of the historically established minor rules cannot explain all spelling problems that students encounter. The traditional way of teaching to spell *lie*/*lying* and *try*/*tried* will be practically preferable to the historical account given above.

The point I would like to make through the argument is that historical viewpoints may not necessarily be instrumental in helping students of English to improve their learning process, but it is so in convincing them that there are certain historical and orderly reasons for apparently chaotic spellings. Historical viewpoints provide a new way of looking at things for students of English — more important and flexible in the long run than a mere practical and prosaic solution to problems that they face in learning the language.

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Notes

1 There is another view about English spelling, however. Crystal (*The English Language* 72–73), for example, has the following to say.

> English is much more regular in spelling than the traditional criticisms would have us believe. A major American study, published in the early 1970s, carried out a computer analysis of 17,000 words and showed that no less than 84 per cent of the words were spelt according to a regular pattern, and that only 3 per cent were so unpredictable that they would have to be learned by heart. Several other projects have reported comparable results of 75 per cent regularity or more.

2 In fact, it was not until the twelfth century that in Latin the innovation of placing a dot over the minim was introduced to produce the now familiar <i>.

3 To give a further clarification, imagine a word of six minims: <ıııııı>. This might represent either *min* (for "mine") or *nim* (for "took"). Substituting <y> for <ı> would make the word much easier to identify, i.e. <ıııyıı> for *myn* and <ııyııı> for *nym*.

4 Gould and Vrba's account of exaptation in evolutionary biology is well surmarised in Gould (171):

> We wish to restrict the term adaptation only to those structures that evolved for their

current utility; those useful structures that arose for other reasons, or for no conventional reasons at all, and were then fortuitously available for other changes, we call exaptations. New and important genes that evolved from a repeated copy of an ancestral gene are partial exaptations, for their new usage cannot be the reason for the original duplication.

5 There are several "exceptional" words that end in <i> even: *taxi*, *bikini*, *chilli*, *nazi*, and *spaghetti*.

6 Cf. *be*/*bee*, *by*/*bye*, *to*/*too*.

7 Cf. *lay*/*laid*, *pay*/*paid*, *say*/*said*.

8 The same applies to *die*/*dying*. Note, however, that the pair *dye*/*dyeing* represents a special case to distinguish itself from *die*/*dying*.

9 It is often more appropriated to ask "Why are all except X regular?" than "Why is X irregular?" Our spelling examples make such a case, providing a more convincing understanding of the phenomenon from a historical point of view.