

# Remaking and Spiral Development: Language Internal Creativity Surviving through Time

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## Abstract

This historical linguistic inquiry has as its main purpose the development of a serious debate on the tendency for a linguistic form or structure to revert to a historically antecedent model and remake itself in its older image. The undertaking is ambitious enough to advance the following line-up of propositions: 1. the paper takes an analytical look at a distinct number of hard facts adducible in support of the view that the above-synopsized tendency, termed *remaking*, is a dynamic and pervasive driving force motivating language change; 2. based on the scrutiny of marked examples available to observation, the paper argues that the same tendency is ineluctably accountable for the uninterrupted revitalization of language and its perpetual vibrancy and reasons that this movement towards self-regeneration innate in language should be defined as language-internal creativity surviving through time; 3. it is maintained that almost like a design feature, the tendency in question is intrinsic to language and is set in motion whenever the need for it is felt. Amid the plurality of comparable postulates and proposals already known to the realm of historical linguistics, the contention here is unmatched in the extent to which it stresses and dilates on the incrementally procreative regeneration (*spiral development*) recognizable in the predominant type of recurrence of antecedent models.

**Keywords:** remaking, spiral development, uniformitarianism, exaptation, linguistic cycle, fossilized forms

## 1. Introduction

As a device for enlarging the vocabulary of English, ‘compounding’, that is, combining two existing roots with a view to coining a new word has been adopted extensively over the long span of its history. To our understanding of the English language in its very initial stage of growth (449 CE–1100), in particular, a fuller attention to this process of word formation holds the key inasmuch as Old English owes no small amount of its lexical purity as a Germanic language to compounding new forms from native pre-English and English resources. Examples of Old English compounds are numerous, but for the current purposes, suffice it to review but a few, such as *ærmorgen* ‘early morning’ (from *æ*r ‘before’ and *morgen* ‘morning’), *tungolwitega* ‘astrologer’ (from *tungol* ‘star’ and *witega* ‘wise man’), and *bōccræft* ‘literature’ (from *bōc* ‘book’ and *cræft* ‘art’).

‘Derivation’ (also ‘affixation’), which means adding an affix to an already existing word to thereby shape a new word, is another of the oldest and commonest means by which English has enriched its vocabulary. A kind of affixation called ‘prefixation’ is involved in the formation of such

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historical words as *ārīdan* 'ride out' (from *ā-* and *rīdan*), *bestandan* 'stand round' (from *be-* and *standan*), and *gedōn* 'done' (from *ge-* and *dōn*), while *dēope* 'deep' (from *dēop* and *-e*), *frēondscipe* 'friendship' (from *frēond* and *-scipe*), and *prēosthād* 'priesthood' (from *prēost* and *-hād*) are products of the kind of affixation called 'suffixation'.

Besides compounding and derivation, which are widely recognized as the two most important means of word formation in many languages including English (see Trask, 1992, p. 78; Trask, 1994, p. 22; Pyles and Algeo, 1982, pp. 264-274; Brinton and Arnovick, 2006, pp. 172-176), 'borrowing' could be added as another device of far-reaching consequence for obtaining new words, especially where the history of English is concerned. In the history of English, not only is borrowing almost as old as the foregoing two processes of vocabulary-building but it has also kept contributing an ever-increasing number of loanwords to the language, with a result that over 70 percent of Modern English vocabulary is accounted for by words borrowed from various foreign sources (see Schmitt and Marsden, 2006, p. 84, for instance). Massive borrowing is therefore very much a salient feature of the growth of the English lexicon.

The point to note in the present context is simply this: as has been reaffirmed by historical linguists (see, for instance, Pyles and Algeo, 1982, p. 290; McMahon, 1999, p. 191), the history of vocabulary expansion in any language is not the process of *making* but rather the one of *remaking*. Indeed, that is exactly what has been revealed by virtue of the foregone explication of roles played by compounding and derivation in the history of English, for neither of these principal ways of acquiring new words concerns the making from scratch of brand-new words, but instead they involve combinations. This brings distinctly into view the adaptability of English words to being rebuilt on the previously existing lexical and morphological resources. In this regard, borrowing is no exception to the same rule because this term is none other than a reference to the process through which a word loaned from one language is more or less remade phonetically, morphologically or semantically in another language. Consider also conversion (*gift* as a noun > *gift* as a verb), blending (*gigantic* + *enormous* > *ginormous*), clipping (*alligator* > *gator*), back-formation (*uncouth* > *couth*), acronyming (*personal identification number* > *PIN*), commonization (Mentor > *mentor*), missegmentation (*Hamburg* + *-er* > *ham* + *-burger*), and other word-forming innovations that the later stages of the evolution of English added to the catalogue of conventional word-formation processes. The fact remains that including compounding, derivation and borrowing, all these terms as duly defined are revealing of the extent to which speakers of English—and presumably of many other kindred languages—have tended to remould a new word out of the pre-existing lexical clay rather than mould anything brand-new *ex nihilo*. As McMahon (1999, p. 191) comments after citing *blurb* (coined by American humorist Gelett Burgess, 1907) and *Kodak* (coined by American manufacturer George Eastman, 1888) as instances of *ex nihilo* formation, "such neologisms are so rare and found primarily in brand and business names".

Is it that all this consideration applies only to the lexicon or that it holds across different levels of an individual language, including phonology, morphology, syntax, orthography and other manifestations of it? In the face of this question, we have in effect no option but to subscribe to the

view that not just vocabulary but the entirety of a language is designed to revert to its antecedent models of various magnitudes to renew itself for further growth, for the very reason that language is defined unequivocally in modern linguistics as a human invention, owing nothing whatsoever to superhuman or mystical beings capable of *ex nihilo* creation. For instance, the avowal made by Edward Sapir, which sounds profoundly typical of modern thinking about language, is apposite in this respect: “Language is the most massive and inclusive art we know, a mountainous and anonymous work of unconscious generations” (Sapir 1921 [2004], p. 182).

At the dawn of the age of comparative philology, the Western tradition of viewing language and cogitating about its change much tinged by mythological beliefs, theological convictions and philosophical contemplations was succeeded by a scrupulously scientific way of looking at language and its change. Given that radical departure from the long-lived tradition of pre-philological accounts of things linguistic, it comes as no surprise that much under the influence of natural scientific approaches<sup>2</sup> to historical change, the preservative and recursive instinct of language has been brought to the forefront of the intellectual consciousness of modern linguists as a linguistic explanation of the invisible driving force motivating language change. Consequently, language change should now be viewed as a process by which language is perpetually *remade* in its older image. Uniformitarian principle, linguistic cycle hypothesis and exaptation are among the noteworthy approaches to historical change, reflecting such an interpretation of the role assigned to remaking in language change. For the specific purpose of stressing and dilating on the incrementally regenerative tendency discernible in the predominant type of recurrence of antecedent models, this paper focuses on *spiral development*, which is inextricably intertwined with *remaking*.

Hence, the main objectives of this paper are: (i) the development of a serious debate on the tendency for a linguistic form or structure to revert to a historically antecedent model and remake itself in its older image (*remaking*) in uninterrupted pursuit of a further growth of the language concerned (*spiral development*); and (ii) the advancement of a train of arguments against the backdrop of the historical tension in the Western tradition of linguistic thought between the pre-philological and modern linguistic views of language and its change.

In our intellectual odyssey about to unfold, the main discussion therefore is intended to convince the reader of the cogency of the above-synopsized interpretation as central to our grasp of language change. The argument proceeds within the following confines: first, on the premise that to a considerable degree what is true of English is likely to be true of many Indo-European compeers of the language, the range of discussion is restricted to the English language; second, this paper is single-mindedly concerned throughout with grammatical examples of spiral development and leaves other kinds of examples dodged in the hope and expectation that the time will be ripe, sooner than later, for changes in the other components of English to be illuminated in the same light.

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<sup>2</sup> Jespersen (1964, pp. 65-6, 71-4), among many others, details the profound influence of natural science on linguistics at the beginning of the 19th century.

## 2. Review of Past Discussions

With the aim of bringing to the reader's attention an unassuming number of historical linguistic theses bearing on the basic tenet of this paper, varying amounts of mention will be made in this section of Uniformitarian Principle, Exaptation, and Linguistic Cycle Hypothesis in that order.

Admittedly, the Uniformitarian Principle (UP), which is the assumption that the general processes of change in language have been the same (and hence uniformitarian) throughout human history and prehistory (see Matthews, 2007, *s.v.* 'uniformitarian principle'), deserves special mention at the outset of this section as it is virtually one of the oldest linguistic principles closely related to our focused concern with remaking and spiral development. Tempting as it may be to speak with the benefit of hindsight of its failings and shortcomings as a diachronic linguistic principle (for discussion on its defects, see for instance Trask, 2000, *s.v.* 'uniformitarian principle'), Indo-Europeanist William Whitney, who is credited with introducing uniformitarianism as a geological principle into linguistics in the latter part of the 19th century, found the systematic use of the principle richly rewarding. This was precisely because the fundamental synonymy of unattested changes of the dim past and attested changes of historical times as premised by the principle of uniformitarianism wedged open technical barriers and paved the way for inferring the changes in "ante-historic periods" (Whitney, 1884, p. 287) on the strength of observations of tangible linguistic data in "later recorded" (Whitney, 1884, p. 253) periods. It is indeed an exhilarating experience to read, for instance, an account of his UP-based deduction about the pronominal character of original endings appended to finite verbs (as in, *-m* of *am* 'am-I'): "[I]t would have seemed as superfluous, in using these forms, to put the subject pronouns a second time before them [*I am* 'I am-I', for instance], as it would seem to us now to say *I did loved*, for *I loved*. (...) At first added occasionally, for greater emphasis, they had, as the pronominal character of the endings faded altogether from memory, become customary attendants of the verb in all the persons – save that, in the third person, their place was taken by the more varied subjects" (Whitney, 1884, pp. 75-76). To all intents and purposes, the theoretical core of uniformitarian linguistics as founded by William Whitney resides in the positivist use of the attested to approach the unattested.

In the 1970s sociolinguist William Labov not only rekindled interest in the UP, but also gave something of a new lease of life to it. Labov's definition of uniformitarianism depicts it as "the claim that the same mechanisms which operated to produce the large-scale changes of the past may be observed operating in the current changes taking place around us" (Labov, 1972, p. 161). While the synonymy of the processes of "ante-historic" (Whitney, 1884, p. 287) changes and those of "later recorded" (Whitney, 1884, p. 253) changes was crucial to Whitney's interpretation and application of uniformitarianism, Labov's definition substitutes "past" and "current" changes for Whitney's "ante-historic" and "later recorded" changes respectively, thereby extending the applicability of uniformitarianism in such a manner that any two (or more) periods can be compared from a uniformitarian point of view, whether the comparison be between oral and literate periods or between different literate periods (see Labov, 1994, pp. 20-23). This makes it possible for us to bring into comparison, for instance, Early Modern English where, as illustrated by Proteus' question

“Who wouldst thou strike?” in Shakespeare’s *The Two Gentlemen of Verona*, the use of ‘who’ before the verb was normal colloquial practice (see Algeo and Butcher, 2014, p. 184; Brinton and Arnovick, 2006, p. 335) and Present-day English that is increasingly casting off the yoke of the prescriptive ‘whom’ and becoming accommodating to sentences such as “Who did you dine with?” Hence it is possible to use one historical period (the Present-day English period) to know better about the other (the Early Modern English period) or vice versa. If William Whitney is hailed as the founding father of uniformitarian linguistics, William Labov should go down in posterity as a reformist of uniformitarianism. When he proclaimed at the beginning of a seminal study on linguistic change: “The uniformitarian principle is the necessary working assumption for all the investigation to follow” (Labov, 1994, p. 23), Labov emancipated the principle from the remoteness of prehistory and made it amenable to the sociolinguistics, dialectology and historical linguistics of his day.

Reduced to its essentials, uniformitarianism is the name given to the tendency for history to wheel full circle linguistically and neither ‘spiral circuitousness’ nor ‘incremental development’ is connoted by the concept. In pursuance of a theorization of the repetition of history not for repetition’s sake but as an impetus for a further development of the language concerned, exaptation may present itself to our mind as a process more explicitly relevant to our current attention to remaking and spiral development. Exaptation is the term introduced from the source of evolutionary biology into linguistics by Roger Lass in the 1990s and denotes the “use by a language for new purposes of junk, more or less functionless material left over from the decay of earlier systems” (Trask 2000, *s.v.* ‘exaptation’). One of Lass’s examples is the reuse for affective purposes of the historical singular/plural opposition in the second-person pronouns of English, i.e. *th*-forms vs. *y*-forms. For another instance, the following species of left-dislocation, extremely common in Present-day spoken English discourse, might well be cited as an exaptation of the now historical *his*-genitive:

-One of the men, *his* wife was a swimming instructor, and she said to me... (Author’s italics)

-Not all that long since, perhaps ten years ago, this friend of mine, *her* son was in hospital, and he’d had a serious accident, and he was unconscious for a long time... anyway, she went to see him one day and she said ‘Has anybody been to see you?’, and he says ‘No, but a right nice young lady came to see me’, he said, ‘she was lovely, she stood at the foot of me bed, you know, she...had a little word with me’. (Author’s italics)

Source: Michael McCarthy, *Discourse Analysis for Language Teachers*. 1999, pp. 54-55

A period of some 350 years, from the 15th to mid-18th centuries, is the heyday of *his*-genitive in the history of English. After God, Christ, biblical figures, kings, emperors (e.g. ‘And this we beg for Jesus Christ his sake’, *OED* dated 1662, ‘the Horseleech his two daughters’, *OED* dated 1648, ‘King Edward the Fourth his death’, *OED* dated 1767), names ending in a sibilant (e.g. ‘To forsake Syr Sathanas his werkus’, *OED* dated 1426, ‘Moses his Meekness’, *OED* dated 1694) or

“when the inflectional genitive would have been awkward” (*OED*, s.v. ‘his’), this striking construction was common, especially in the 16th and 17th centuries. Later in the heyday, *her* (e.g. ‘the Queen her private practice’, *OED* dated 1655) and *their* (e.g. ‘These travellers their report’, *OED* dated 1645) also came to be substituted for the inflected genitive *-s* where a female singular noun phrase and a plural noun phrase were concerned respectively by analogy with *his*-genitive.

The *New English Dictionary on Historical Principles* [*N.E.D.*] (1898) is quoted as stating: “Archaically [*his*-genitive is] retained in Book-keeping and for some other technical purposes” in the *Oxford English Dictionary*, which supplies such examples of Present-day English printed bookplates as ‘John, His Book’ (*OED* dated 1922) and ‘William, his book’ (*OED* dated 2007). As the *N.E.D.* and the *OED* note, though, these are archaisms, that is, idiomaticized remnants of the now abandoned syntax, and no longer part of the living English grammar. Contemporary English has ousted *his*-genitive from the position of a grammaticized construction. However, is it not worth arguing that the left-dislocation of the kind instanced above is an exapted use of *his*-genitive?

It has been and still is the general rule of English usage to genitivize classical names ending in a sibilant without the inflected genitive *-s* (e.g. ‘Socrates’ [-tiz] wife’ instead of Socrates’s [-tiziz] wife; ‘Euripides’ [-diz] plays’ instead of Euripides’s [-diziz] plays) for phonetic reasons (see Quirk et al., 1972, p. 195). It is hardly surprising then that grammar-conscious English speakers in former days should have felt induced to introduce *his* (and later *her* and *their* as well) right after the name to indicate their use of genitive manifestly because in ‘Moses Meekness’ (later, ‘Moses’ meekness’), for instance, [məuziz] is not a fully grammatical genitive in the strict sense of the term—regardless of whether it is spelled with an apostrophe (i.e. Moses’) or without (i.e. Moses). Quirk et al. (1972, p. 197) say: “In many other names [e.g. English names] ending in the voiced sibilant, zero is a (less common) variant of the regular [iz] genitive in speech”, suggesting that [dikiniz] is more common than [dikinʒ] for whichever of Dickens’ and Dickens’s. If such is the case, disambiguating genitivization should be described as the chief reason for the introduction of *his*-genitive, and if so, the left-dislocated structure of the type shown above could be called an exaptation of the no longer productive *his*-genitive; but then, the purpose fulfilled by *his* (in ‘his wife’) or *her* (in ‘her son’) in the above examples is provision of “a link” with a main actor “who will take the stage in the story” (McCarthy, 1999, p. 54) and clearly different from the purpose of *his*-genitive, which is disambiguation.

There is no doubt that parallels can be drawn between exaptation and spiral development in that both connote ‘progressive development’ in language change. If there is one thing that sets one apart from the other, it is the definitional restriction of exaptation to the revitalization of junk, i.e. “the decay of earlier systems” (Trask 2000, s.v. ‘exaptation’). In this regard, spiral development is more on the side of linguistic cycle hypothesis in so far as this hypothesis, much like spiral development, can be applied irrespective of whether the source material of the renewed form or structure is a now functionless process (e.g. *his*-genitive) or a still functional process (e.g. synthetic).

In an effort to define ‘synthetic’ vis-à-vis ‘analytic’ as two terms prevalent in the field of historical linguistics, Algeo and Butcher (2014, pp. 4-5) write: “A language that depends heavily on the use of inflections, either internal or affixed, is said to be synthetic; English used to be far more synthetic than it now is” whereas “a language like English whose grammar depends heavily on the use of word order and function words is said to be analytic”. As suggested here, the consensus among historical linguists is that with the 11th century or thereabouts as a watershed the English language has been changing from synthetic to analytic (Sapir, 1921 [2004]; Benveniste, 1974; Blake, 1996; Brinton and Arnovick, 2006; Algeo and Butcher, 2014) and that we can still see the continuation of this long-term trend in the development of Modern English (Barber, 2000, p. 274; Gelderen, 2014, p. 286). At all events, it is scarcely contentious any longer to assume that the history of English since the early part of the Middle English period has been one of decreasing synthetic quality and increasing analyticity.

Curiously enough, though, after reaffirming that we can find in current English more evidence of the drift from synthetic to analytic than that of a countervailing movement, Gelderen (2014, p. 286) adds: “However, there is some evidence that (at least in the verbal system) English speakers are incorporating synthetic forms into their grammars”. This is intriguing because Gelderen appears here to be proposing looking at the history of English in a fresh light by positing the three-stage linguistic cycle from synthetic (before late Old English) to analytic (late Old English to mid-Middle English) and back to synthetic (late Middle English to Modern English) in place of the prevailing two-stage drift from synthetic to analytic. Including the one furnished by Gelderen herself, here are shreds of evidence of an analytic to synthetic movement (late Middle English to Modern English) detectible in the verbal system:

- I shoulda known that. (Dated 1450. *Paston Letters*)
- I coulda gon to Clyrr [code for Cadiz]. (Dated 1656. *OED* as colloq.)
- You shouldda seen him···. (Dated 1933. *OED* as colloq.)
- Man, you shoulda seen them cats. (Dated 1943. *OED* as colloq.)
- My niece said you coulda wanted it to happen. (Dated 1952. *OED* as colloq.)

All the examples shown above revealingly illustrate the way in which the affix *a*, newly derived from an auxiliary *have*, is creating a number of synthetic one-word verbal expressions. The first example, which is found in a collection of correspondences known as *Paston Letters* (1422-1509), is cited in Gelderen (2014, p. 287). When Gelderen (2014, p. 286) states: “However, starting as early as the Late Middle English period (e.g. in the 15th century *Paston Letters*), there are also signs that auxiliaries contract and become more synthetic”, she has in mind this *Paston Letters* example as a starting point of the late Middle English to Modern English reversion to synthetic in the cyclical development of English.

To the above examples, the tabled colloquial expressions (see Table 1) can be subjoined as their Modern English offshoots for one thing because the affix concerned down below is the same

[ə], orthographically represented either as *a* or *er*, and also because, just as the contracted affix in the above examples serves as a tense marker, so too in the tabled Modern English colloquialisms it functions as a tense and/or modality marker.

Table 1

*Expansion of affix [ə] in the Modern English verbal system*

colloquialisms	[ə] as a marker of	notes
be gonna be ganna	tense	The earliest spelling of 'gonna' as recorded by the <i>Oxford English Dictionary (OED)</i> is dated 1913.
hafta hafter haffter	tense and modality	"HAVE TO [hæftə] forms a kind of future of obligation or duty". ( <i>OED</i> , s.v. 'have')
've gotta 've gotter	modality	
gotta gotter	modality	
oughta oughter	modality	

(Author's data, 2019)

Not just the verbal system as exemplified above, but part of the pronominal system can also be observed to be affected by the same move from analytic to synthetic and *you all* [ju: ə:l] as a two-word analytic phrase, for instance, is getting increasingly synthesized as a single-word *y'll* [jɔ:l], although such contractions (see below for more examples) are still more or less restricted to regional varieties of English:

- Good luck to youse. (Dated 1968. *OED* as regional)
- How are you-all [jɔ:l]? (*New Oxford American Dictionary* as southern US)
- We'll put y'uns [juənz] up fer th' nite. (Dated 1921. *OED*)
- We are honored to have you-all's company. (Dated 1934. *OED*)
- Y'all must be some workout warriors. (Dated 2010. *OED*)

*Jullie* as the plural form of the Modern Dutch second-person pronoun, consisting historically of *jou* 'you' and *lieden* 'people', is now a full-grown part of the pronominal system of that language. In a similar way, *y'll* or *you-all* may or may not be implanted in the pronominal system of English as a plural-specific second-person pronoun as distinct from the singular-specific *you*.

This much has been about the species of linguistic cycle that Gelderen's 2014 work focuses on. In that our thinking on remaking tying in with spiral development and Gelderen's version of the linguistic cycle share a common focus on the atavistic nature of the gyration of language history, the two doctrines appear anything else but strangers. Working together, they are not unlikely to render a graphic account of the way the synchronic stage of the English language is part of the

timeless diachrony of the same language stretching back to the far-off past as well as into the dim future. What differs between the two is that as is the case with uniformitarianism, incrementalism (or incremental repetition) as a value attendant on language change, which should be writ large in our proposition of remaking and spiral development, is not fully accounted for in the synthetic-analytic-synthetic cycle (see Figure 1 for pictorial contrast).



Figure 1: Pictorial representation of contrast between cyclicity and spirality

### 3. Remaking and Spiral Development

The French linguist Émile Benveniste classifies language changes into innovative and conservative types. He defines innovative language change as the class of “transformations caused by the appearance or disappearance of a grammatical process” (*transformations produites par la disparition ou par l'apparition de classes formelles*, Benveniste, 1974, p. 126) and says of conservative language change that the latter “consists in replacing” (*consistent à remplacer*, Benveniste, 1974, p. 127) means of marking a grammatical process. To put it at its simplest, the innovative change is the kind that causes old grammatical processes to be removed from the system or new ones to be added to the system, while the conservative change causes an old means of marking a grammatical process to be superseded by a new means, though the grammatical process concerned remains safe; and thus, things boil down to a matter of whether a grammatical process is affected (innovative change) or the means of marking a grammatical process is affected (conservative change). According to Benveniste (1974, pp. 126-127), the elimination of dual number symptomatic of the history of many an Indo-European language, typifies the innovative change because what is sacrificed here, i.e. dual number, is a grammatical process whereas he cites the “replacement of inflection by periphrasis” (*remplacer une catégorie morphématique par une catégorie périphrastique*, Benveniste, 1974, p. 127) as an illustration in point of the conservative change on the grounds that the change from inflectional/synthetic to periphrastic/analytic should be diagnosed as a methodological shift rather than a paradigm shift.

In their attempt to follow up on Benveniste’s ideas, Brinton and Arnovick (2006, pp. 74-75) note in the first place that finding conservative changes is much eased by the abundance of relevant raw data. Moreover, in keeping with the modern conception of language as a human invention, they rightly hold that as concerns the innovative change, “true additions to the system of a language”,

whereby they mean innovative changes of the additive type as opposed to innovative changes of the subtractive type illustrated above by the elimination of dual number, “are difficult to find, primarily because it seems that grammatical distinctions do not rise out of a vacuum; often they are already present in the language in a somewhat different form”. Here we are brought back to the thinking lying at the very root of remaking and spiral development.

Having thus reasoned about the intrinsic dearth of additive examples of innovative change, Brinton and Arnovick (2006, p. 75) are none the less so daring and observant as to unearth such innovative additions from the resources of English grammar as “the progressive, an article system, a gender system based on animacy, the ‘dummy’ subject *it*, and perhaps the future tense”, although they are not fully convinced of the legitimacy of adducing the future tense as an example of innovative addition, and not without reason. Their misgivings, in their own words, are: just because “Old English does not have any overt verbal marking of the future” it does not follow that the same language “does not have the future” (Brinton and Arnovick, 2006, p. 75). They are not far wrong in being on their guard in this respect. The *Oxford English Dictionary* (s.v. ‘shall’), for instance, informs us that both *sceall* and *wyllan* as full verbs had already served as tense-signs in Old English. To be sure, the periphrastic/analytic future tense forms as in ‘I wyll and shall at all seasons be redy’ (*OED*, c1476) were introduced into the verbal tense system of Middle English consequent on the conversion of *sceall* and then *wyllan* into auxiliary verbs. Still, it is reasonable to argue that the future tense had been “already present in the language in a somewhat different form” (Brinton and Arnovick, 2006, p. 75).

Table 2

*Contrast between innovative addition, exaptation and spiral development*

	<b>innovative addition</b>	<b>exaptation</b>	<b>spiral development</b>
1	Progressive	-	+
2-1	Indefinite article	-	+
2-2	Definite article	-	+
3	Biological gender	+	+
4	Dummy <i>it</i>	-	+

*N.B.* The plus ( + ) denotes “meets the definitional requirement of” and the minus ( - ) “does not meet the definitional requirement of”.

In the expectation that they are potential exemplars of spiral development, four out of the five transformations suggested by Brinton and Arnovick (2006, p. 75) as innovative additions to the system of English grammar are presented in Table 2 for reassessment. As frames of reference, uniformitarianism and linguistic cycle are ruled out of consideration based on a principle of mutual exclusivity: to see these changes in the light of exaptation (i.e. a developmental reuse of an antecedent model) should preclude uniformitarianism (i.e. a mere reuse of an antecedent model), while spiral development (i.e. revitalization of an antecedent model as an impetus for further

linguistic growth) and linguistic cycle (i.e. turn-taking between two alternative models such as synthetic and analytic) should be viewed as a matter of uncompromising either/or.

Starting with the change topping the list, the ‘V(erb) *plus* present participle’ structure, it is reported, is nothing new to Modern English but it was in practical existence in Old English (Traugott, 1972, pp. 90-91; Traugott, 1992, pp. 187-190; Lass, 1997, p. 319). Such information does not contravene, however, Brinton and Arnovick’s (2006, p. 75) recognition of the progressive as an innovative addition for the following reason: true enough, the structure now under debate existed as early as the 9th century, but according to Lass (1997, p. 319), it “was used sometimes with a clearly progressive sense, most often not”. Citing examples from Traugott (1972, p. 90) and Traugott (1992, p. 187), Lass is elaborate enough on its Old English usage to assure us that Old English speakers used the structure to describe a habit (as in *se ea bið flowende ofer eal Ægypta land* ‘this river is flowing over all the land of Egypt’) much more often than to talk about a motion in progress (as in *þæt scip wæs ealne weg yrnende under segle* ‘the ship was all the way running under sail’). In the sense that the ‘V *plus* present participle’ is a prime instance of the Old English structure (expressive of a habit) being reused for a different purpose (as an expression of progressive aspect) in Modern English, it comes pretty close to being an exaptation. Alas! The definition of exaptatum inhibits its inclusion as an exaptation, for neither before nor after being recycled for a new purpose is the ‘V *plus* present participle’ (expressive of a habit) as useless as “junk” (Trask, 2000, *s.v.* ‘exaptation’). On the strength of the descriptions cited from Schlauch (1959), Strang (1970) and others, Lass (1997, p. 319) states that since the 19th century the ‘V *plus* present participle’ has been fully grammaticized as the structure expressive of an aspect. Yet even after that recycling, the same construction remains sufficiently current and vital to fulfill the purpose for which it was mainly used in Old English (i.e. as an expression of a habit), as witnessed by the following Present-day English examples:

- John’s always coming late. (Quirk et al., 1972, p. 93)
- She was constantly complaining of the cold. (Zandvoort, 1972. p. 39)
- You are always finding fault with me. (Jespersen, 1933 [1972], p. 266)

A similar discretion is required about 2-1, 2-2, and 4. Just as the ‘V *plus* present participle’ (descriptive of an aspect) as a modern reincarnation of the identical Old English structure (descriptive of a habit) fails to satisfy the definitional criterion of exaptation, likewise the indefinite article of English as a morphophonological offshoot of the numeral *one* falls short of the status of an exaptation in so far as the variant of the numeral *one* has been persistently functional in the same form as the indefinite article (*a* or *an*) throughout the better part of the history of English. When it appears in such Modern English phrases as ‘eight hours a day’, ‘two miles an hour’ and the like, “the *a* or *an* is not exactly an article, but the weakened form of *one*”, remarks William Whitney (1901, p. 87). Never in its lexical career has this weakened form of the numeral *one* been as inert as junk or debris. The same caution should be applied to the definite article of English. While *the* as definite

article of Modern English is developed from the masculine nominative case form *se* of the Old English demonstrative, the neuter instrumental case form *þē* of the same Old English demonstrative remains current as an adverb in such a Modern English sentence as 'The more, the merrier'. Furthermore, the demonstrative *that* of Modern English is derived from the neuter nominative-accusative case form *þæt* of the same demonstrative of Old English. All this speaks to the fact that the addition of the definite article to the inventory of English function words is far from being an exaptation, that is, a recycling of "the decay of earlier systems" (Trask, 2000, s.v. 'exaptation').

It is "towards the end of the Middle English period" (Rissanen, 2009, p. 250) that the so-called dummy *it* subject, as in "*it semed me*" (cited from Brinton and Arnovick, 2006, p. 289), made its way into the history of English, justifying Brinton and Arnovick's inclusion of the dummy *it* as an innovative change of the additive type. As regards the reason for its addition to the system of English, the generally accepted explanation is that due to the 12th-century canonization of SVO as the standard word order of a declarative sentence, impersonal verbs, which were used without a personal nominative subject, as in *me thynketh* '(lit.) to me seems', began to decline, and then the use of *it* as a purely syntactic placeholder caught on in popular usage (see *OED*, s.v. 'it'; Jespersen, 1924 [1992], p. 241). This very realization deters us from citing the dummy *it* as an exaptation because nothing had been further from inert uselessness than *hit* (later, *it*) as a pronominal reference to the nominal previously mentioned or identified (e.g. 'Where's your office?' 'It's on the fifth floor.'). The reuse of *it* as a semantically empty subject then can hardly be dealt with under the heading of exaptation

Looking back at Table 2, the four additions given a minus value under exaptation, that is, 1 (the progressive), 2-1 (the indefinite article), 2-2 (the definite article) and 4 (the dummy *it*) are so judged because none of the four, of which the original material recycled for a new purpose is not junk, fully meets the definitional criteria of exaptation.<sup>3</sup> Under such a general context, 3 (biological gender) comes to us as a luminous exception in that this alone upsets the distributional balance in the otherwise asymmetrical spread of a minus value for exaptation and a plus value for spiral development.

Plausibly, Brinton and Arnovick (2006, p. 75) are right in positing that the acquisition of biological gender by the English language is a fair example of innovative addition. But then, where does it come from and how does it arise? Reflecting that grammatical gender was inherently at odds with biological (or natural) gender, Brinton and Arnovick (2006, p. 277) remark: "As early as the Old English period, these clashes were being resolved in favor of natural gender", while Burrow and Turville-Petre (1992, p. 38) concur by noting that during the transitional period "the notion of grammatical gender...was replaced by the present distinction between human male, human female, and non-human: *natural gender*". 'Replaced', incidentally, happens to be exactly the same wording

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<sup>3</sup> This judgment, needless to say, does not detract from the value of such additions. For the significance that should be attached to these kinds of additions, see Lass (1997, pp. 318-324). Under 6.4.4, Lass develops his argument for "non-junk exaptation".

adopted by Horobin and Smith (2002, p. 94) when they state: “The system [grammatical gender] was replaced by the ModE usage, whereby pronoun-assignation was based on real-world knowledge of sexual characteristics”. Conditioned as we moderns are to refer any linguistic wonderment of the world not to the Deity but to language as its own innovator and renovator for explanation, in concert with Burrow and Turville-Petre (1992), Horobin and Smith (2002) and other historical linguists we have to conclude that biological gender entered English as a replacement of grammatical gender, thus replying to the first part of our self-posed pair of questions (i.e. where does it come from?). While to answer the *how* part of the pair (i.e. how does it arise?) reiterating the replacement that ultimately ousted grammatical gender in and around the 13th century and reviewing the intensive leveling of inflection having taken place during the course of the 11th century would be good enough. At any rate, we now know the reason for the plus value given 3 (biological gender) under exaptation: it is that of the five additions biological gender alone is a replacement of “functionless material left over from the decay of earlier systems” and “the use by a language for new purposes of junk”. (Trask, 2000, *s.v.* ‘exaptation’)

#### 4. From Pre-Modern Thoughts to Modern Linguistic Views

“In Europe until the eighteenth century”, write Brinton and Arnovick (2006, p. 18), “the dominant belief was in the divine origin of language”. In so far as the context in which the authors note this is concerned (see Brinton and Arnovick, 2006, pp. 18-19), their words should be taken as a mere reaffirmation of the widely held erstwhile belief that language was brought into existence as a divine gift, and thus do not appear directly related to our current concern with linguistic change. But abstracted from its context, the same sentence can be interpreted as a resounding proclamation of far-reaching importance remarkably relevant to us.

The mention of “the divine origin of language” reminds us of the biblical account of God naming ‘day’, ‘night’, ‘heaven’, ‘earth’, and ‘seas’ (Genesis 2.5-2.10). Some of us may also recall Genesis 2.19-2.20 where Adam is directed by God to name all cattle, fowls and beasts. There may even be those thinkers whose intellect goes back to Greek antiquity and recalls the *Cratylus*, one of Plato’s dialogues that introduces a mythical inventor of language called ‘the name-maker’ and spells out how language originated as the invention of a preternatural being. While it is worth noting here that those earliest influential accounts of the origin of language stemming from the two main strands of Western intellectual history are both committed to the view that language did not come into being as a human invention, of no less consequence is the realization that both the Hellenic (Graeco-Roman) and Hebraic (Judaeo-Christian) traditions are built on the assumed corrupting effect of time on language (see Harris, 1995, pp. 8-9; Robins, 1990, p. 21; Eco, 1997, Chap. 1). The “dominant belief” (Brinton and Arnovick, 2006, p. 18) therefore was not just in the preternatural or divine origin of language but also that the unimpeachably flawless language as gifted by the name-maker or God had been vitiated in the course of human history due to changes wrought by time. It is at this point that questions about language origin and problems about language change come to merge as one inseparable debate.

In the ever-evolving history of the Western approaches to language and its investigation, the eve of modern times should be remembered as a turning point of importance in that under the heat of those crucially transitional moments philology (later, linguistics) as a new science broke with the basic assumptions of the long-standing pre-philological tradition of accounting for language in philosophical or biblical terms, thus parting company with the tenacious belief in the preternatural or divine origin of language. Speaking in terms of historical linguistics, this departure from the theosophical view of language took the form of a volte-face in ways of grasping language change conceptually. As suggested in the foregoing paragraph, 'degeneration' used to be a key concept in any true traditional interpretation of language change, but in the collective mind of modern linguists 'regeneration' is a defining feature of language change.<sup>4</sup> In the very process of hopping from degeneration to regeneration, the history of Western thinking about language witnessed a string of epoch-making occurrences that dismayed traditionalists. These included among others William Jones's remarkable—by the lights of his day—proposal (1786) hinting at the cognacy of Sanskrit, Greek and Latin in vigorous opposition to Hebrew monogenesis, the blossoming of comparative philological studies most notably in the German-speaking world, and the determination of the Linguistic Society of Paris to ban any debate on the origin of language (1866). All this helped to clear the way and set the stage for a breakthrough in methods of viewing language and thinking about its change.

To return to the subject of spiral development, one last example of addition to the succession of instances bearing on remaking is the pluralization of adjectival nouns. The passage quoted below from Foster (1970, pp. 206-207) commands our attention to the growing trend for the 'attributive noun' to be pluralized:

A rather widespread and far-reaching tendency in recent English is the one affecting what grammarians call 'the plural attributive noun'. Hitherto, for instance, such a type as 'wage award' has been regarded as the norm, but now we often come across *wages award*. It is true that in some kinds of phrase the attributive noun has always taken the plural, but these were so few as to be relegated by textbooks to the status of exceptions to a general rule; dice-play, goods-train and scissors-grinder, .... The situation now is that in very many cases the speaker has in effect a free choice between such forms as 'greeting card' and 'greetings card', 'no-claim bonus' and 'no-claims bonus', 'expense account' and 'expenses account'.

Foster points out to us that the history of this trend can be taken back to the times before the Present-day English (PDE) period when dice (as a plural form of noun 'die'), scissors, goods,

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<sup>4</sup> In *The Search for the Perfect Language* (1997), on which the current context of our argument chiefly relies, the author U. Eco engages in a polemical debate apropos of 'degeneration' vs. 'restoration (or regeneration)' time and again. (See esp. Eco, 1997, Chaps. 1 and 17).

savings, fireworks, sports, customs, and other nouns normally used in their pluralized forms began to serve as attributive adjectives as in 'dice-play' (c1440)<sup>5</sup>, 'scissors-grinder' (1756), 'goods-train' (1832), 'savings account' (1850), 'fireworks display' (1853), 'sports club' (1882), 'customs office' (1882), and so on. Following suit, admissions, arms, systems, communications, sales, materials, needs, contents, customer services and suchlike nominals likewise used in their pluralized forms not infrequently are contributing brand-new phrases: 'the admissions officer' (1919), 'arms reduction' (1921), 'systems engineer' (1940), 'communications technology' (1941), 'sales rep' (1959), 'materials control' (1962), 'needs analysis' (1969), 'the contents page' (*New Oxford American Dictionary*), 'customer services manager' (*Longman*). Foster concludes by gathering such is the expansion in our days of the innovative noun phrase consisting of 'pluralized attributive noun' and 'noun' that it is no longer *pluralia tantum* alone like *goods* or *needs* that is built into this structural innovation. Not that the following fragment of information matters, but it is interesting to note in this connection that the New Edition of *Longman Dictionary of Contemporary English* (published 1987) has 'no-claim bonus' as a lemma, whereas the Sixth Edition of the same dictionary (published 2014) brings us up to date with the linguistic renewing now in progress by substituting 'no-claims bonus' for the older entry form. It is said, however, that even the best dictionaries can be behind the times. In keeping with that enduringly truthful saying, 'expense account' stays put as a persistent lemma in both these editions of *Longman*.

What is worth calling to mind at this juncture is a historical linguistic fact that except demonstrative adjectives (e.g. this book >these books, that tree >those trees) and 'man' and 'woman' as attributive nouns (e.g. a man-midwife >men-midwives, a woman shoemaker >women shoemakers), adjectives in and after the Middle English period are not inflected to mark their plural forms. As exemplified below (refer to the Old English examples in Table 3), an Old English adjective marked its plurality by being inflected in accordance with the plural inflection of the nominal part of the phrase. Such an adjective/noun agreement in number, which was fully incorporated in Old English noun phrases, was removed from the grammar of Middle English except where 'this', 'that', 'man' and 'woman' were involved, as noted above. Coming now to the right end of the successive periods herein tabled, we can hardly resist the temptation to view the modern restoration, if only in part, of the grammar of Old English (i.e. pluralization of adjectives) in the light of spiral development.

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<sup>5</sup> Each date that ensues from here signifies the year that an individual phrase was first produced as far as the *Oxford English Dictionary* can trace.

Table 3

*Vicissitudes of the plural inflection of adjectives in noun phrases*

PERIOD	Old English	Middle Eng. - Early Modern Eng.	Modern English
STATUS	incorporated in grammar	removed from grammar (except where <i>this</i> , <i>that</i> , <i>man</i> and <i>woman</i> are involved)	restored grammatically in part
EX	-gōde menn ( <i>lit.</i> 'goods men') -þa ealdan bēc ( <i>lit.</i> 'the olds books')	-these rooms -those rivers -men-sphinxes -women-warriors	-a greetings telegram -the humanities course -human rights abuses -communications skills

In the sense that the adjectival and nominal elements of a Modern English noun phrase no longer agree on three accounts, i.e. number, gender and case, as their Old English forebears did, the pluralization of Modern English demonstrative adjectives and 'man' and 'woman' as attributive nouns to agree with the pluralized nominal element may well be described as a reuse of the pre-existing morphosyntactic structure. But whether such a reduction in the extent of agreement can be called an exaptation is debatable, and so is whether it is a junk exaptation or a non-junk exaptation. This highlights the advantage of the newly proposed concept; but then, from the viewpoint of spiral development, whether the change involved is augmentative or diminutive matters as little as whether it concerns a junk exaptation or a non-junk exaptation. Provided the change under scrutiny is not a carbon-copy type of restoration of the past resources like the revival in Present-day English of the pronunciation [ɔ(:)ft(ə)n] for 'often' but that there is something revitalizing, regenerative or developmental about the change concerned, any remake of a pre-existing form or structure can be a candidate for spiral development.

The significance of the role played in the history of English by 'man' and 'woman' as attributive nouns, alternatively called "inflected adjectives" (see, for instance, Baugh and Cable, 2013, p. 156), and 'this' and 'that' as demonstrative adjectives has been so deep that it is not idle nor pointless to seize this opportunity to allege conjecturally that without these frozen forms left over from the Old English grammar acting as catalysts, what Foster portrays as "a rather widespread and far-reaching tendency" affecting "the plural attributive noun" would not have become as prevalent as it did in recent English.

To conclude the current section, it is pertinent to give more than bare notice to 'blaxploitation' as one last brilliant, albeit cryptic, illustration of a pluralized attributive noun. According to the *New Oxford American Dictionary* (s.v. 'blaxploitation'), 'blaxploitation' originated in the 1970s in American English as a blend of 'blacks' (i.e. plural form of noun 'black') and 'exploitation'. This relatively recent coinage, meaning "the exploitation of black people, esp. as actors in films" (*OED*, s.v. 'blaxploitation'), strikes our attention as emblematic of the Present-day English period for one thing because it is the age of luxuriant blending (e.g. coffice, flexitarian, staycation) and also because we are living in the age of the revived pluralization of inflected adjectives.

## 5. Summing up and Thinking ahead

“Imagination is, possibly, in man, a lesser degree of the creative power of God. What the Deity imagines, *is*, but *was not* before. What man imagines *is*, but *was* also. The mind of man cannot imagine what *is not*.”

-Edgar Allan Poe, *n.d.* (cited from Parks, 1964, pp. 59-60)

As glimpsed in the subtitle of Guy Deutscher’s 2005 publication: *The Unfolding of Language: An Evolutionary Tour of Mankind’s Greatest Invention* or Edward Sapir’s famous encomium on language: “Language is the most massive and inclusive art we know, a mountainous and anonymous work of unconscious generations” (Sapir, 1921 [2004], p. 182), the general assumption of latter-day linguistic arguments is that language is a human invention, owing nothing whatsoever to superhuman or supernatural powers for further growth; and like all things human, it goes without saying, things linguistic should be accounted for without recourse to the concept of ‘creativity extraneous to language’ (e.g. “the creative power of God” as defined by Poe in the above-quoted statement). Inescapably from here, it follows that we should find ourselves face to face with a serious implication of the linguistic anthropocentricity of our time. The problem we have chosen for discussion is this: if, as Poe revealingly remarks (see the above citation), “The mind of man cannot imagine what *is not*”, that which language as a human invention does under the guise of creation can never be anything but re-creation, for it is beyond humanity’s endowment to perform a creative act in the fullest sense of the term. Then, how best to analyze and describe the process of re-creation through which language is driven to keep changing to renew itself? That is the exact question which remains for us to resolve.

The short answer to the question is a compromise, and this is indeed a telling case of compromise because void as it is of creativity in its strictest sense all along, human language has no choice but to compromise itself with “a lesser degree of the creative power of God” (Poe, *Ibid.*). Yet, for all that, we should not turn our attention away from the tangible fact that this second-class creativity, described as “the process of re-creation” in the last paragraph, is a creative power all the same in the sense that remaking coupled with spiral development is indisputably accountable for the sustenance and growth of language. Will there not be some grain of sense in thinking of ‘creativity intrinsic to language’, or Poe’s “lesser degree of the creative power of God”, as another of the design features possessed by human language and looking upon the pervasive operation of such an inherent design to drive any language forward as language’s articulation of its internal creativity? Likely, composing such a rhetorical question is the best way to conclude our attempt to penetrate this perennial linguistic question.

To make assurance doubly sure, the intellectual consensus this journey through time has reached brings fresh excitement to the crucial question under debate by boldly hypothesizing that restoration of a historical form or structure of any language as the impetus for its further growth, i.e. *spiral development*, is a design that inheres in the system of language and that this inherent design is devised to set in motion whenever the need for it is felt. The beauty of this hypothesis—if such

there be—could be sought in the easily accessible and hence commendable rationalism of our contention because its crux is simply that if there is one theoretical alternative to the creativity of the Deity *qua* the driving force behind language change, it should be the intra-linguistic programming of the need-motivated engine of spiral development of the sort dwelt upon in this paper—though we should never weary of making it clear that what language does is little more than a simulation of a creative act inasmuch as it is God alone that is truly capable of creating *ex nihilo*, and here we are brought back to our leitmotif that can be expressed appositely by restating that language is remade in its older image (*remaking*). To see that this is so, we have probed into ideas and examples of uniformitarianism, exaptation, cyclical change and spiral development with particular reference to the last mentioned as a newly proposed explanation of language change of no slight salience. To borrow the phraseology of Voltaire who once said of God: had it not existed, it would have been necessary to invent it (see Harris, 1995, p. 72), it has been necessary for linguistics as a modern science to invent “a lesser degree of the creative power of God” (Poe, *Ibid.*) by theorizing its own explanation of the perpetual resilience and vibrancy of language. It looks as if modern linguists had to excogitate the concept of self-regenerating faculties of language to pay the price for parting company once and for all with the older view of language as a divine gift. Such reasoning, it is hoped, justifies our concern with remaking and spiral development.

Before concluding our historical linguistic excursions, it may not be superfluous to use this occasion to alert ourselves to the importance of being fully alive and doing justice to the role occupied by fossilized (or frozen) forms as players in the game of language change. In linguistics, a fossil is defined as a formerly productive form which has fallen out of common use, but which is marginally maintained through to this day without being regarded as an archaism (see Trask, 2000, *s.v.* ‘frozen/fossilized form’). In an effort to be more expressly detailed within the bounds of such a definition, Kurylowicz (1964), as far as is known second hand to us, has this to note as a matter of tendency in the context where he discusses analogical extension in general: a newly created analogical form (*brothers* as an analogical plural for instance) takes over the primary function of a contrast, while the replaced form (*brethren*) remains in use for a secondary function (see Lehmann, 1992, pp. 231-232). Examples of replaced forms now fossilized and fulfilling periphrastic purposes can be assembled plentifully; *elder* (as in ‘village elders’), *shapen* (as in ‘well-shapen’), *other* (as in ‘every other day’), *hem* (as in ‘Let ‘em know who’s boss’), *VS-imperative* (as in ‘mind you’), and so on and so forth.

To be sure, fossilized forms in general are of enormous value as a window on the earlier linguistic states of affairs. But instead of being just retrospective and finding traces of degeneration in the residues of past linguistic stages, let us be prospective and spy intimations of potential regeneration in the vestiges of things past. For as suggested by our sober inference that the currently ongoing restoration of part of the Old English grammar in the form of pluralization of attributive nouns (e.g. ‘wages award’) may have been aided by the persistent survival of the inflected attributive nouns (‘man’ and ‘woman’) and the inflectional demonstrative adjectives (‘this’ and ‘that’), linguistic fossils may add signal contributions as catalysts facilitating restoration of a historical form or structure of tremendous impact.

This is no place to dwell at length on the profound impressions of fossilized forms left on later stages of a language. Suffice here to realize that recognition of the preponderant services rendered by frozen forms in language change and the punctilious treatment thereof should not fail to be the next milepost for us to attain in our pilgrimage to the promised land of truth.

## References

- Algeo, J. & Butcher, C. A. (2014). *The origins and development of the English language*. Belmont: Wadsworth.
- Barber, Ch. (2000). *The English language: A historical introduction*. Cambridge: Cambridge University Press. <https://doi.org/10.1353/lan.1994.0024>
- Baugh, A. C. & Cable, Th. (2013). *A history of the English language*. Oxford: Routledge. <https://doi.org/10.4324/9780203994634>
- Benveniste, É. (1974). *Problèmes de linguistique générale*, 2 [Problems of General Linguistics 2]. Paris: Gallimard. <https://doi.org/10.7202/500389ar>
- Blake, N. F. (1996). *A history of the English language*. London: MACMILLAN. <https://doi.org/10.1007/978-1-349-24954-1>
- Brinton, L. J. & Arnovick, L. K. (2006). *The English language: A linguistic history*. Ontario: Oxford University Press. <https://doi.org/10.1017/s136067430800292x>
- Burrow, J. A. & Turville-Petre, Th. (1992). *A book of Middle English*. Massachusetts: Blackwell. <https://doi.org/10.2307/2864795>
- Deutscher, G. (2005). *The unfolding of language: An evolutionary tour of mankind's greatest invention*. New York: Henry Holt and Company.
- Eco, U. (1997). *The search for the perfect language* (Trans. James Fentress). Oxford: Blackwell. <https://doi.org/10.2307/2171513>
- Foster, B. (1970). *The changing English language*. London: Penguin Books. <https://doi.org/10.1007/978-1-349-05942-3>
- Gelderen, E. van. (2014). *A history of the English language*. Philadelphia: John Benjamins. <https://doi.org/10.1075/z.183>
- Harris, R. (1995). *Language, Saussure and Wittgenstein*. London: Routledge.
- Horobin, S. & Smith, J. (2002). *An introduction to Middle English*. New York: Oxford University Press. <https://doi.org/10.14198/raei.2004.17.22-1>
- Jespersen, O. (1894). *Progress in language: With special reference to English*. London: Swan Sonnenschein and Co. <https://doi.org/10.1086/433745>
- Jespersen, O. (1924 [1992]). *The philosophy of grammar*. Chicago: The University of Chicago Press. <https://doi.org/10.4324/9780203716045>
- Jespersen, O. (1933 [1972]). *Essentials of English grammar*. London: George Allen & Unwin. <https://doi.org/10.2307/451989>

- Jespersen, O. (1964). *Language: Its nature, development and origin*. New York: W. W. Norton & Company. <https://doi.org/10.2307/313841>
- Kurylowicz, J. (1964). *The inflectional categories of Indo-European*. Heidelberg: Winter.
- Labov, W. (1972). *Sociolinguistic patterns*. Philadelphia: The University of Pennsylvania Press. <https://doi.org/10.2307/412715>
- Labov, W. (1994). *Principles of linguistic change - volume 1: Internal factors*. Massachusetts: Blackwell. <https://doi.org/10.1017/s0022226700015693>
- Lass, R. (1997). *Historical linguistics and language change*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/cbo9780511620928>
- Lehmann, W. P. (1992). *Historical linguistics*. London: Routledge. <https://doi.org/10.4324/9780203416433>
- Matthews, P. H. (ed.). (2007). *Oxford concise dictionary of linguistics*. Oxford: Oxford University Press. <https://doi.org/10.1108/09504120810859837>
- McCarthy, M. (1999). *Discourse analysis for language teachers*. Cambridge: Cambridge University Press. <https://doi.org/10.1177/026565909200800108>
- McMahon, A. M. S. (1999). *Understanding language change*. Cambridge: Cambridge University Press. <https://doi.org/10.2307/416231>
- Parks, E. W. (1964). *Edgar Allan Poe as literary critic*. Athens: University of Georgia Press. <https://doi.org/10.2307/2922883>
- Plato. Cratylus. Cited from Harris, R. (1995). *Language, Saussure and Wittgenstein*. London: Routledge.
- Pyles, Th. & Algeo, J. (1982). *The origins and development of the English language*. New York: Harcourt Brace Jovanovich. <https://doi.org/10.2307/411608>
- Quirk, R, Greenbaum, S., Leech, G. & Svartvik, J. (1972). *A grammar of contemporary English*. London: Longman. <https://doi.org/10.1093/elt/29.1.83>
- Rissanen, M. (2009). Syntax. In Lass, Roger (ed.), *The Cambridge history of the English language, vol. III*, 187-331. Cambridge: Cambridge University Press. <https://doi.org/10.1017/chol9780521264761>
- Robins, R. H. (1990). *A short history of linguistics*. London: Longman. <https://doi.org/10.4324/9781315843186>
- Sapir, E. (1921 [2004]). *Language: An introduction to the study of speech*. New York: Dover Publications. <https://doi.org/10.1037/13026-007>
- Schlauch, M. (1959). *The English language in modern times (since 1400)*. Warsaw: PWN. <https://doi.org/10.2307/3721624>
- Schmitt, N. & Marsden, R. (2006). *Why is English like that?: Historical answers to hard ELT questions*. Michigan: The University of Michigan Press. <https://doi.org/10.3998/mpub.162789>
- Strang, B. (1970). *A history of English*. London: Methuen. <https://doi.org/10.4324/9781315688695>

- Trask, R. L. (1992). *A dictionary of grammatical terms in linguistics*. London: Routledge.  
<https://doi.org/10.4324/9780203393369>
- Trask, R. L. (1994). *Language change*. London: Routledge. <https://doi.org/10.4324/9780203977507>
- Trask, R. L. (2000). *The dictionary of historical and comparative linguistics*. Chicago: Fitzroy Dearborn Publishers. <https://doi.org/10.5860/choice.38-2486>
- Traugott, E. (1972). *A history of English syntax: A transformational approach to the history of English sentence structure*. New York: Holt, Rinehart and Winston.
- Traugott, E. (1992). Syntax. In Hogg, Richard M. (ed.), *The Cambridge history of the English language, Vol. 1*, 168-289. Cambridge: Cambridge University Press. <https://doi.org/10.1075/sl.19.2.10pen>
- Whitney, W. (1884). *Language and the study of language*. London: N. Trübner & Co.
- Whitney, W. (1901). *An English grammar of the higher grades in grammar schools*. Boston: Ginn and Co.
- Zandvoort, R. W. (1972). *A handbook of English grammar*. London: Longmans, Green and Co.  
<https://doi.org/10.2307/411292>