

The Economy Principle in Language

Notes and Observations from Early Modern English Grammars

[...] and whatever tongue hath less Grammar
than the English, is not intelligible, and whatever
Tongue hath more, is superfluous.
(John Collyer, 1735, 114)

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1. INTRODUCTION

The concept of economy in linguistics can have lots of different values and meanings and can be considered and studied from many and diverse viewpoints.

In order to determine its several readings, a lexical and etymological definition has been attached to the word ‘economy’, which reveals a positive interpretation as a whole: ‘economy’ means gain, thrift, less burden, saving; it is defined as the rule for the good administration of a house, derived as it is from the Greek *oikòs*, which means ‘house’, and from *nomòs*, from *némein*, which means ‘to deliver, to distribute’. This notion concerning the good management of the resources in a house can be metaphorically transferred from a social to a linguistic level; in this sense, language as a whole shows a proper balance resulting from the right distribution of all internal and external forces that custom, linguistic change, contacts with different realities and other various elements import constantly, causing alterations and irregularities to the detriment of communication. Therefore, economy in language has a strong controlling function over the whole system, something which is carried out with the least possible cost in terms of energy.

The concept of economy – a tenet or tendency shared by all living organisms – may be referred to as ‘the principle of least effort’, which consists in tending towards the minimum amount of effort that is necessary to achieve the maximum result, so that nothing is wasted. Besides being a biological principle, this principle operates in linguistic behaviour as well, at the very core of linguistic evolution. In modern times it was given a first consistent definition by André Martinet, who studied and analysed the principle of economy in linguistics, testing its manifold applications in both phonology and syntax.

This paper aims at selecting and analysing the concept of linguistic economy out of a corpus of no less than 450 Early Modern English works, i.e. grammars, spelling books and linguistic philosophical treatises dating from the 16th to the 18th centuries. In particular, the first work considered – *An Orthographie* by John Hart – was published in 1569, while the last one – James Adams, *The Pronunciation of the English Language* – was published in 1799.

While the term ‘economy’ is largely used in modern scientific linguistics as it is conformable to precise grammatical and linguistic theories, a first statistical analysis has revealed that it is almost never used in the grammatical and linguistic works under scrutiny here, although it entered the English language through the French *économie* in 1530 (Simpson 1989:s.v. *economy*). Other words that cover only a part of its whole meaning are employed instead.

Allusions to or just simple hints at the concept of economy in the four linguistic levels of phonetics/phonology, morphology, syntax and lexis were looked for during the survey of the texts. Only in a very low percentage (about 6%, i.e. 27 out of 450) of the analysed works, meaningful data were found which can be referred to the concept of economy directly, that is observations, comments or considerations of which the authors may be either aware or not.

Such a scarcity of data can be traced back to two main causes. Firstly, during the period considered linguistics had not yet achieved the dignity and importance of a historical science, which can on the contrary be said of 19th-century linguistics, when researchers and scholars paved the way for theoretical surveys with a synchronic attitude typical of 20th-century studies. One explanation might be that in the period considered, proper scientific-linguistic means for a systematic analysis of the present matter had not been developed yet. Secondly, the topic of linguistic economy is never directly hinted at, it never has a central position in Early Modern English dissertations.

Therefore, in my opinion, it is very difficult to understand whether the authors were already aware of the economy principle of the language and of

how it worked. In this respect I have tried to interpret and decode statements and comments by looking at them through the magnifying glass of modern linguistic categories but without forgetting the main linguistic assumptions of those times.

Before concentrating on the historiographical analysis of the Early Modern English texts, I will devote the following paragraphs to the study of the concept of linguistic economy in modern times, in order to provide some theoretical criteria and parameters to be applied in the analysis of the early works.

2. LINGUISTIC ECONOMY IN THE 19TH CENTURY

2.1. *André Martinet and George Kingsley Zipf: economy within functionalism and the principle of least effort*

In 1955 there appeared a publication that was to have a great bearing on the history of theoretical linguistics all over Europe. *Economie des changements phonétiques* (Martinet 1955), compiled by André Martinet, provided a coherent definition of linguistic economy – the so-called ‘classical definition’ – as the unstable balance between the needs of communication – which are always changing – and natural human inertia, two essential forces contributing to the optimization of the linguistic system.

He stated that any change occurring within the system – which is never static – is explained by means of the following dichotomy: a single act of communication requires, on the one hand, clearness and precision, which multiply conspicuous units, and, on the other hand, a remarkable organic inertia, which produces effort relaxation, less numerous, less specific and more frequently occurring units, whose result is a hasty and careless expression. While inertia is a permanent, immutable component, man’s communicative needs change constantly, so that the nature of this balance will be modified over time. However, linguistic behaviour seems to be regulated by what Zipf – who inspired much of Martinet’s works – called «the principle of least effort» (Zipf 1949). In such a theory, the principle of economy plays an important balancing role: any non-economical change, which would bring about an excessive cost in terms of efforts and constitute an obstacle to comprehension, will be automatically removed or avoided.

George Kingsley Zipf tried to investigate speech as a natural phenomenon and discovered that an inclination to economy is a criterion regulating any aspect of human behaviour, which is governed by this *Principle of Least Effort*,¹ operating within linguistic evolution as well.² In such a dynamic process as linguistic change, words are constantly being shortened, permuted, eliminated, borrowed and altered in meaning, but, thanks to the *Principle of Least Effort*, an equilibrium with a maximum of economy is always preserved.

Martinet certainly got inspiration from Zipf's works, since there is evidence that the complete formulation of the term 'economy' appears in Martinet's writings only after 1949: he speaks of a tendency towards economy as a composition of two contrary forces – effort limitation on the one hand and needs satisfaction (a new element which seems clearly inferred from Zipf) on the other – whereas, in his previous works, he had only spoken of a tendency towards economy of means or good economy of system.

2.2. *Some interpretations of the principle of economy before Martinet*

Many scholars before Martinet and Zipf had already focused on partial aspects of the very notion of linguistic economy, underlying details that Martinet himself would eventually face. Some short exemplifications will be provided as follows.

2.2.1. When in 1939 Joseph Vendryes speaks of economy in a «causerie rayonnant d'élégance» (Vendryes 1939:49; see Hjelmslev 1941:111-116), he is

¹«In simple terms, the Principle of Least Effort means, for example, that a person in solving his immediate problems will view these against the background of his probable future problems, as estimated by himself. Moreover he will strive to solve his problems in such a way as to minimize the total work that he must expend in solving both his immediate problems and his probable future problems. That in turn means that the person will strive to minimize the probable average rate of his work-expenditure (over time). And in so doing he will be minimizing his effort, by our definition of effort. Least effort, therefore, is a variant of least work», Zipf 1949:1.

²In particular, Zipf hints at different economical principles operating together and forming a natural balance in any biological system: «...we must remember that they are all constantly operating simultaneously for the preservation of a dynamic equilibrium with a maximum of economy. [...] the four principles of the phonetic system are operating upon the number, forms, frequency, and spacings of the basic phonetic entities. As a result of all these factors we may anticipate that in any sample stream of speech in any language at any time in any place there will be marked indications of the various kinds of distributions which we have been describing under the general heading of Formal-Semantic Balance», Zipf 1949:121.

first of all interested in phonetic changes:

On a parfois invoqué, pour expliquer les changements phonétiques, l'hypothèse du moindre effort. Les altérations que subissent les sons seraient dues à la paresse naturelle de l'homme, enclin même quand il parle à ménager ses forces et exposé par suite à rester en deçà du but à atteindre. [...] L'économie consisterait en un relâchement momentané ou accidentel de l'effort à accomplir, et ainsi quels qu'en soient les effets ultérieurs, elle serait à l'origine de nombreux changements phonétiques. (Vendryes 1939:49)

Economy was traditionally considered a factor functioning at sound level; according to Vendryes, it also works in the lexicon and in grammar and it is in contrast with clarity; besides, it is conceived as «le véritable principe qui commande l'usage de la parole jusque dans le moindre détail» (Vendryes 1939:57). The basic aspect of the *parole* (in the Saussurian sense) consists in sentences requiring some effort, which seems to be regulated by economy:

Pour la majorité des êtres pensants, chaque phrase doit être combinée par un effort personnel sans cesse renouvelé. Et certains s'y adonnent avec une virtuosité qui confère au résultat tous les prestiges de l'œuvre d'art. Quelle qu'en soit la valeur artistique, cet effort est essentiellement un effort d'économie. (Vendryes 1939:57)

Economy appears as the strategy to choose precise linguistic-grammatical forms in order to amend defects and imperfections of the language; in this sense the positive aspect of the principle is underlined. According to Bert Peeters (1992:Chap.8), Martinet cannot have derived inspiration from Vendryes because his idea of economy was approached only from a diachronic point of view, while Vendryes's economy gets full value in synchrony. Furthermore, whereas in Vendryes the act of speech involves an effort, in Martinet's view it implies a reduction of efforts – the double articulation being the most important synchronic manifestation of the human tendency towards reduction of physical and mental efforts. Vendryes and Martinet's viewpoints seem to get reciprocal completion.

2.2.2. Besides a principle of economy, which gets the language to dismiss what is superfluous, Paul Passy (1890) distinguishes a «principe d'emphase», which constantly gives prominence to every necessary element within the system. According to him, the two forces steadily struggle against each other, and phonetic evolution results from their synthesis:

Il n'y a, rigoureusement parlant, rien d'absolument superflu, et tous les éléments du langage doivent être exposés à l'action de l'économie d'une part, de l'emphase de l'autre. Selon que l'une ou l'autre action prédomine, nous voyons les sons s'affaiblir et disparaître, ou bien se renforcer et donner naissance à d'autres sons. On peut dire, en langage mathématique, que chaque transformation d'un son est la résultante de la force d'économie et de la force de l'emphase, appliquées à ce son. (Passy 1890:570)

2.2.3. Sweet (1888) distinguishes two principles of economy, which are the main causes for merely organic changes, that is changes due to tendencies to inertia and indolence of the speech organs:

If we survey the purely organic changes as a whole, we perceive two principles of economy: (a) dropping of superfluous sounds; (b) ease of transition from one sound to another, which leads to convergence and assimilation, as when (dn) becomes (nn). (Sweet 1888).

2.2.4. Frei (1929) – unlike Passy and Sweet – deals with synchrony. His needs of «différenciation ou de clarté» aim at distinguishing linguistic elements in order to avoid any confusion that can occur in the functioning of the *parole*. As for expressive needs, he does not accept the «loi de l'usure», a diachronic principle implying that «plus le signe est employé fréquemment, plus les impressions qui se rattachent à sa forme et à sa signification s'émoussent» (Frei 1929:233). He then continues by stating that «du point de vue statique et fonctionnel, cette évolution est contre-balancée par un passage en sens inverse: plus le signe s'use, plus le besoin d'expressivité cherche à le renouveler, sémantiquement et formellement».

2.2.5. In America, Werner Leopold (1930) deals with linguistic evolution in the same years as Frei. He discovers that there are two contradictory tendencies in any linguistic systems:

Linguistic development follows not one tendency, but two opposing ones: towards distinctness and towards economy. Either of these poles prevails, but both are present and alternately preponderant. (Leopold 1930:102)

The tendency to distinctness originates from the fact that any speaker has, at any time, «the predominant intention of being understood»; tendency to economy is but «the innate tendency of man, wisely given him by nature, not to spend more energy on any effort than necessary» (Leopold 1930:102). In some languages, one of the two factors usually prevails on the other, generating different balances depending on the social or professional level.

2.2.6. Valter Tauli (1958), who would later influence Martinet's views about paradigmatic and syntagmatic economy, deems that linguistic evolution is determined by passive pressures and by five active driving forces:

(1) tendency towards clarity, (2) tendency towards ease or economy of effort, (3) emotional impulses, (4) aesthetic tendencies, (5) social impulses. (Tauli 1958:50)

2.2.7. Albert de Groot wonders how «die Verhältnisse der Phoneme zu-einander [...] zu erklären sind» (1931:20). The answer is double: both a tendency to the greatest possible efficacy (*Wirksamkeit*) and a tendency to economy are present:

Die am meistens auf der Hand liegende Hypothese ist wohl diese, daß eine Tendenz zugrunde liegt, die Unterschiede zwischen Phonemen möglichst groß zu machen (daher werden die äußersten Ecken des verfügbaren Gebietes benützt, und zwar durch die Vokale u, i, a) und die Unterschiede zwischen je zwei nächstliegenden Phonemen (z.B. u und o, u und y, o und a, o und ø, usw.) subjektiv gleich zu machen, 'für das Gefühl' gleich. Man konnte hier von einer Tendenz zur größten Wirksamkeit reden. (de Groot 1931:120)

Eine zweite Hypothese ist diese, daß versucht wird, gewisse mitcharakterisierenden Phonemeigenschaften mehr als einmal zu verwenden: man könnte hier von einer Tendenz zur Ökonomie reden. (de Groot 1931:121)

De Groot greatly influenced Martinet, despite the fact that the latter applied the principles to diachrony, while de Groot's studies are thoroughly devoted to synchronic analysis. The noun 'tendency' has also been used by Leopold and Tauli and the verb 'to tend' by Passy; Martinet tried to limit its use in his last writings.

2.2.8. Koenraads (1953) is another author who deals with «sprachökonomische Tendenzen» in the same period; he proposes a peculiar definition of the two notions of tendency and economy:

Unter einer Tendenz verstehe ich eine Neigung, die sich in bestimmter Richtung auswirkt, sei es ganz oder zum Teile. Eine solche Neigung wird jede ihr gebotene Gelegenheit, sich durchzusetzen, benutzen, und zwar ohne Rücksicht auf die Folgen. Solche Tendenzen sind es auch, die ihren Einfluss auf die Entwicklung der Sprache ausüben und deren jeweilige Gestalt und Struktur endgültig bestimmen [...]. (Koenraads 1953:53)

Unter Sprachökonomie fasse ich die Wirkungen solcher Tendenzen zusammen, die eine Vereinfachung der Sprache anstreben, und zwar konnte man sagen, bei

jeder Gelegenheit und zu jedem Preis, also gegebenenfalls auch auf Kosten der Ausdrucksfähigkeit. (Koenraads 1953:52)

Economy seems here to mean tendency to limit any linguistic effort.

2.2.9. Economy, causality and teleology

Critics tried to devise a teleological approach in Martinet's teachings: Dausies (1990), for example, notes that from the use of the term 'needs' there emerges a concept of teleology, one of the most contradictory aspect of causality. Martinet never acknowledged a teleological approach and always refused to take part in the 'terminological dispute' about such concepts as teleology, finality and determinism (see Martinet 1955:§1.9.), although he disclosed some important convictions about this question.

Martinet uses expressions that can only partly be traced back to a teleological approach, which does not come as a surprise given that he belonged to the School of Prague, which was clearly devoted to teleology. According to this theoretical approach, most changes occur in the linguistic system because they aim at a total optimization of communication, the primeval function of language. However, according to the last Martinet, any change will occur whenever communication needs require it, but it will not happen in order to make a linguistic system easier or more complex; on the contrary, it will occur because the system in which it takes place is too complex to satisfy the communicative needs of the speakers. A teleological reading, therefore, is based on an improper interpretation of linguistic change; by rejecting a finalistic tendency towards simplicity or harmony of the system, Martinet prefers a deterministic or causal concept, which is realized in the 'panchronic' principle of economy; the famous statement according to which «languages change because they function» makes sense now.

3. LINGUISTIC ECONOMY IN EARLY MODERN ENGLISH TEXTS (1582-1799)

By trying to detect evidence of the presence of the principle of linguistic economy in Early Modern English works, it was noted that most of the texts scrutinized and dealt with in this paper present the English language as a simple language to learn, made up of easy expressions and governed by few gram-

matical rules, which have undergone, in the course of many centuries, an even more conspicuous simplification: «the English Language is perhaps of all the present European languages by much the most simple in its form and construction» (Lowth 1762:iii).

This characteristic results from gradual linguistic changes, but it can also be traced back to the very nature of the English language and its speakers; English people are depicted as savers («we are a people very sparing of our words, and even of our syllables»: White 1761:29), who avoid excessive efforts to communicate: «we have a fondness for Abbreviations, and that fills our language with many Monosyllables» (Collyer 1735:68).

Moreover, the monosyllabic nature of the lexicon is often underlined: «monosyllables are very numerous in our English Tongue, that's why it is an easy Tongue to write and to speak» (Aickin 1693:30). A lot of remarks concern the use of several abbreviations, or the lack of morphological endings that usually indicate syntactic connections, or again the purity and elegance of its construction, all aspects that indicate economy and saving as beneficial, almost peculiar characteristics of the language.

Some of the most important aspects coming out of the analysis of the texts will be now considered and investigated, in order to emphasize the presence or the absence of the concept of economy in the observations collected; the related comments will be classified by linguistic levels.

3.1. Phonetics / Phonology

The most recurrent problem at this level is the unsatisfactory relationship between the contemporary English system of sounds and its representation in writing;³ the economy factor seems to be missing here.

The variability of English spelling was in fact an important part of the instability that people felt typical of the English language in the sixteenth and seventeenth centuries, especially if compared with a language like Latin. Although at the end of the fifteenth century a standard had already emerged, there was still a feeling of great mutability: the English language was growing and enriching itself without any constraints; only the eighteenth century would witness efforts to standardize, refine and fix it.

The trouble was not merely that English spelling was bad, but that there

³ As Ward (1765:314) writes, «it is very evident that the alphabet is redundant in several instances, and deficient in others».

was no generally accepted system that everyone could conform to; in short, it was neither phonetic nor fixed. Grammarians and lexicographers understood the functioning and the malfunctioning of their mother tongue: in particular, they saw the uneconomical nature of English spelling as its worst defect, a defect that could be corrected though, to some extent at least.

Sixteenth – and seventeenth-century grammarians (Mulcaster, Jonson, Hodges, Care, Colsoni and Aickin), in fact, often remark that there is no direct correspondence between the letters of the alphabet, drawn from both the Latin and the French languages, and the correct pronunciation:

- As Ben Jonson notes, the same phonetic realization can correspond to two different graphemes as far as the letter <q> is concerned:

It is a letter we might very well spare in our Alphabet, if we would but use the serviceable k, as he should be, and restore him to the right of reputation he had with our Fore-fathers. For the English-Saxons knew not this halting Q with her waiting woman U after her, but exprest [...] quest. kuest. [...]. Till custome under the excuse of expressing enfranchis'd words with us, intreated her into our Language, in quality, quantity [...] and hath now given her the best of k's possessions. (Jonson 1640:51)

A sense of anti-economy can be perceived in all the texts dealing with the question of graphemes vs sounds.

- A single grapheme often corresponds to two or more different phonetic realizations; Care states that «it is an inconveniency that words under one and the same manner of Writing, should have a double and different sound» (Care 1687:4).
- A grapheme can also have no corresponding phonetic realization:

Gh is only a piece of ill writing with us: if we could obtaine of *Custome* to mend it, it were not the worse for our Language, or us: for the *g.* sounds just nothing in *trough, cough, might, night.* & c. Only, the writer was at leisure, to adde a superflous Letter, as there are too many in our *Pseudographie.* (Jonson 1640:51)

G is not sounded, tho written, in *Sign,* and its Compositions, *Assign, Resign, Design, Consign* [...]. (Care 1687:17)

- If allophones have become different phonemes, orthography does not report this as the entire system is hardly ever able to register phonological changes:

Th hath a double, and doubtfull sound, which must be found out by use of speaking [...]. And in this consists the greatest difficultie of our *Alphabet*, and true writing: since wee have lost the *Saxon* Characters. (Jonson 1640:51)

- A wrong pronunciation generates homophones and a consequent confusion in communication:

[...]. But it were to be wisht, that the vowels might bee so distinguisht, as that their sounds might be certainly known of themselvs, without any other help: the neglect thereof is the caus, whay many words are pronounc't two several ways [...]. (Hodges 1653:51)

Confusion in communication is also clearly feared by Henry Care, who devises a sort of table in order to avoid errors:

Similitudes are the common Field wherein Error is sown and does most thrive; So Hypocrites in a garb of Religion first cheat the World, and at last themselves; So Bristol Stones are taken for Diamonds: And thus words of *resembling Sound*, tho *different Sense*, are most apt to betray us into mistakes in writing them. To distinguish which, to common Capacities, I shall here present you with a Collection, Alphabetically as near as may be, of the most material; That so these Masqueraders being respectively brought to an Interview, the difference between them may more easily and certainly be discerned, and consequently the true manner of writing each. (Care 1687:39)

Given these premises, the correspondence between sound and graphic realization should be as strict as possible.

- Sometimes graphemes, remains of a past morphological system, have been requalified, by acquiring new functions:

You ought to know also, that whensoever *e* cometh in the end of any English word whatsoever, except the article *the*, it hath no use for sound of it self, save onely it serv's for a signe of a long vowel going before, and therefore might bee altogether left out; if wee had long vowels to express our words withal. But forasmuch as this is wanting, wee are inforced to make use of an *e* in the end of many words, to shew thereby the vowel to bee long going before [...]. (Hodges 1653:51)

In other words where *e* is put at the end and the Sound not heard, yet it is not superfluous nor to be omitted in Writing, for these following Reasons. 1. It serves to draw the Syllable long, which without it must be Sounded Short, and so several words of different Sense would be confounded, which by this means are plainly distinguished. 2. Another reason for writing *e* final when not

sounded, is to soften the sound of these two letters *c* and *g*. As in *Ace, place, lice* [...]. (Care 1687:15)

There is no letter in the English tongue, that serves to a greater variety of purposes, than *e* silent at the end of words; which, tho it be not sounded itself, yet varies the sound of many other letters [...]. (Ward 1765:9)

This seems to be one of the clearest examples in which the principle of economy has operated: the linguistic system has in fact optimised material that had previously lost its original function by providing it with a new task.

The same considerations can be made as far as the 18th-century authors are concerned – from Gildon/Brightland (1711) to James Adams (1799) – with the only difference that there seems to be a greater influence of the French language on their writings and that they are more autonomous in drawing up rules and devising new systems of graphic reform (see Elphinston 1790/1795), attempts that do not prove successful however.

To remedy such a problematic condition, most authors demand a spelling reform, a solution which is constantly asked for over the whole period considered; unfortunately, wrong habits do not allow the system to be effective as far as communication is concerned.

As a matter of fact, after innumerable unsuccessful attempts at a spelling reform, the history of the English language has shown that no overall solution to the defects of its orthography could ever be found: this spelling system is evidently more economic, although it apparently seems less effective; in fact it fixes one of the elements involved – spelling – since the other one – pronunciation – is always changing; as a consequence, if a reform took place, a further confusion would arise because even the etymology of words would not be understood. This fact seems perfectly clear to James Elphinston, who, in 1790, asserts that

Orthogrophy haz proceeded by dhe stedly light ov won principel: *To' chainge notthing, dhat can consistently be kept; and to' keep notthing, demonstrably inconsistent*. Dhe first part of her plan haz been to' demonstrate dhat *By more must notthing be don, dhat can (be equally don) by les*. Dho she must dherfore wish dhe possibillity ov appropriating won symbol to' won sound, and won sound to' won symbol; yet, hwatever might be practicabel in a primittive language; ours draws from so many soarces, and haz in her own structure so littel variety, dhat nedher part ov so plauzibel a wish, can rezonably hope to' be gratified. (Elphinston 1790:52)

where a hint at the principle of the least effort can be detected.

Most analyses and considerations are based on the dichotomy between

Reason and Custom. Reason represents an imposed regulation, often based on a high standard, while Custom is the usage of the speakers, with all its inconsistencies and tendencies to change. Custom has often been considered as a negative factor, because it does not represent the so much looked for fixation, but sometimes there are also contradictory instances, as scholars would like a reform based on usage, whereas it should be imposed by Reason.

In the latter part of the eighteenth century there emerge the beginnings of the modern doctrine that the most important criterion of language is usage; sporadic recognition of this principle is encountered in the various attempts at a spelling reform of the previous centuries. In this respect, Richard Mulcaster, whose *Elementarie* (1582), «which entreateth chefelie of the right writing of our English tung», is the most extensive and the most important treatise on English spelling in the sixteenth century, played a fundamental role within the linguistic dispute. The scholar refused to go along with phonetic reformers whose systems were too cumbersome to be accepted, stating that every attempt to force people against established custom «hath alwaie mist, with losse of labor where it offered service» (Mulcaster 1582:iii). He thought reformers should use their common sense and try to remove defects in the existing system, not substitute a new one; he thought ease and convenience in writing should be considered, for popular approval is the final authority.

The imposition of a rule based on Reason is gradually rejected in the following centuries, as «it is an attempt to *fix* that which is in itself *variable*» (Webster 1789:25) and the dictum of Horace that «use is the sole arbiter and norm of speech» becomes the most important criterion of language during the 18th century and culminates then in Dr. Johnson's *Dictionary* (1755), with which the fixation of the English spelling is generally associated. One might then understand that Early Modern English linguists could perceive that the linguistic system was always undergoing changes towards a searched-for economic equilibrium, in which custom and use were felt as «the only tests of what is right or wrong» (Ward 1756:iii).

Particular attention for abbreviations in speech can be found in all the texts analysed: the grammarians state that clashes between vowels or consonants are avoided, making speech more economic thanks to a remarkable saving of effort. Abbreviations must have been an ancient habit, if Gildon and Brightland can affirm that «it ought to be no Wonder if our Forefathers wrested many others in a like Manner, especially considering how fond they were of Words of one Syllable, and allow'd themselves the Liberty of maiming, cutting off, leaving out, softening, and transposing, at Pleasure to give them the softer Sound» (Gildon/Brightland 1711:137).

Moreover, only some of the grammarians analysed seem to perceive the process of the Great Vowel Shift; this fundamental linguistic phenomenon is only hinted at, filtered by considerations of pronunciation changes compared to spelling; the authors look for graphic devices which may underline changes occurring in long vowels: «but forasmuch as our vowels are not so distinguished, as to know when they are long, and when they are short, wee are inforced to use a double consonant after a short vowel, where a single might serve» (Hodges 1653:50).⁴

In such an elaborated frame, economy is only a vaguely felt principle, which still works on rather unsteady factors; it does not have a clear definition nor a precise name yet; only Elphinston (1790) speaks of ‘economy’ in presenting his reform system:

Orthography must employ symbols (or letters) nedher too many, too few, nor inaddequate (or misreppresenting); and must, by dhis rule, first adjust dhe consonants; on hwich in evvery language, espescially in ours, dhe vocal sounds often entirely depend. From oddher languages hav many letters been impoarted and retained, dho inconsistent widh dhe economy ov dhe impoarting diccion. (Elphinston 1790:5)

Economy is only a force whose work can be perceived in the very concept of linguistic change and custom. It emerges in the authors’ affirmations about *simplicity*, *clearness*, *precision*, *regularity*, *ease*, *biunivocal correspondence* between sound and pronunciation – concepts that withstand *corruption*, *superfluity*, *redundancy* and *defectiveness*, from which the concept in direct opposition to economy, i.e. redundancy, emerges.

Economy, if thus it can be called, has an undoubtedly positive value, but it is not yet inserted in an analytical and theoretical frame; it is only partially seen, hidden under a general notion of simplicity. In this sense, one cannot yet detect the standard, complete definition and concept formulated by Martinet; however, it can easily be compared to the notion isolated by some pre-Martinetician scholars such as Sweet, Passy, and Frei. The grammarians considered here repeat several times that the general scope of language is communication, one of the main key-paradigms within functionalism. Moreover, there appears a vague hint at the concept of least effort, which anticipates Zipf’s theoretical assumptions in some ways.

⁴This phenomenon, which is typical of the English language, has been analysed by Martinet (1955) and recorded as one of the most significant examples of the principle of economy.

3.2. Morphology / Syntax

The most significant observations in this field deal with changes in noun and verb declensions, which have undergone a remarkable reduction over the centuries. Economy has contributed to the elimination of less conspicuous (distinctive) forms, favouring the most conspicuous ones; the linguistic system has consequently fixed the word order and increased the number of prepositions, in order to detect syntactical relationships within speech.

The grammarians seem to be aware of the above situation,⁵ which becomes more evident when comparing the English language with Latin;⁶ this was in fact an inflected language, which had no articles, prepositions and fixed word order, devices that usually meet the lack of inflections.

The English language – which was also an inflected language in ancient times – has undergone a general decay of nominal, pronominal, adjectival and verbal inflectional systems, so that nowadays it has come to be an analytical language. This evolution is the result of phonological, morphological, syntactic and lexical modifications and reorganizations that can be interpreted in the light of linguistic economy. The structure of the language has gone through several changes and adaptations in order to attain the best possible communication.

The collated observations go from the «puoca fatica» (Colsoni 1688:11) needed in comparison with Latin, to the «simplicity» and «easy learnability» of morphological-syntactic rules, or to the «easiness and shortness» (Jonson 1640:61; Adams 1799:42) of the noun declension system and to the «freedom from troubles» (Priestly 1762:38), which show a positive attitude towards linguistic change and evolution.

However, there are also negative considerations, such as «redundancy», «superfluity» and «defect», as the entire system still seems chaotic, hosting past grammatical elements as well as new formations that often clash with each other.

Also in this respect, the principle of economy can be detected as a general notion of *simplicity* and *facility*, although it seems a more elaborated one: there are in fact different competing grammatical – morphological and syntactic – forms coexisting within the system, so that the less suitable candidates

⁵ «now this defect of declensions and Cases, makes the English Tongue easie to be learned; and seeing that Prepositions supply the same you must learn Prepositions perfectly [...]», Aickin 1693:6.

⁶ «It is a very great advantage to the English Tongue, that it is not incumber'd with such a number of Rules that clogg the Latin and Greek [...]», Collyer 1735:17.

must be given up to make room for the aptest ones (through analogy and the weakening of the functional role of inflections, probably due to the strong action of a protosyllabic accent).

3.3. *Vocabulary*

Most English words are monosyllables; even some bisyllabic terms tend to be shortened in the pronunciation until they become monosyllables too. Such modifications are acquired by orthography till the word is completely modified, thus becoming more efficient and economic:

[...] most of our English words are monosyllables: for, howsoever wee write many words as if they were two syllables, yet wee doo commonly pronounce them as if they were but one, as for example, these three words, *leadeth*, *noteth*, *taketh*, wee doo commonly pronounce them thus, *leads*, *notes*, *takes*, and so all other words of this kinde: yea, custom hath so far given way thereunto, that the Learned not only in their Writings, but also in the Press doo practice the same, as it may most plainly appear, by many well printed books now extant [...]. This is because English seemes a simple and plaine language [...]. (Hodges 1653:64)

Vocabulary is perhaps the part of speech most involved in the reflections of 16th and 17th-century scholars and linguists. At this time England had in fact gone through a period of great economic, political and cultural development: new worlds had been discovered and a religious reform had been carried out. All this – helped by the printing press, the reading practice, the advances of learning – acts as a stimulus to the growth of the vocabulary, as «the necessity of giving names to new objects, new ideas, and new combinations of ideas» (Priestly 1762:169) becomes urgent.

The enrichment of the vocabulary occurs through three main productive methods: ‘internal’ (compound, derivation and conversion), ‘external’ (borrowings) and ‘mixed’ (semantic calque).

The borrowings acquired by the English language «must account for the English copiousness and the multitude of synonymous words with which it abounds» (Webster 1789:63); sometimes native linguistic material has been re-adapted through compounding and derivation, two procedures that have enriched and diversified the vocabulary without effort, redundancy or superfluities. Language seems to make use of internal devices to cope with new cultural, political and geographical facts.

This adaptability makes the English language «hardy and happy» (Jonson 1640:56), so that it results «così facile ad intendere che colla nozione d’una pa-

rola sene conoscono di longo quattro o cinque dipendenti di quella» (Colsoni 1688:115), and again, according to Aickin, «derivations and compositions of the parts of Speech make the language fast and good to all situations» (Aickin 1693:20).

The English vocabulary is therefore rich and functional, suitable for any situation, economical by nature, thanks to its several monosyllables.

The notion of economy emerges, also in this respect, from such concepts as *brevity* and *simplicity*, but a general notion of *least effort* cannot be neglected, as it plays a fundamental role in the creation of new words and their adaptation to the existing linguistic system.

4. CONCLUSIONS

The analysis of the texts has provided evidence that Early Modern English grammarians and linguists dedicated some of their reflections to the subject of linguistic economy. However, the terms and expressions used by them cover only a part of the full meaning and definition later formulated by Martinet.

A general idea of simplicity must be assumed as a guideline for the authors' comments and remarks: they constantly come across it and probably look for it within the linguistic system. Apparently different connotations of the same notion – simplicity – are conveyed through rather similar words such as 'brevity', 'efficiency', 'coherence', 'sobriety' and 'non-difficulty'. Nevertheless, more specific terms relating to 20th-linguistic-economy terminology have sometimes been detected: 'least effort', expression which will indissolubly be linked to Martinet and his school; 'office', which reminds us of the word 'function'; 'economy', with a unique occurrence by Elphinston (1790) and 'redundancy', which represents one of the aspects in opposition to economy.

More explicit and conscious observations emerge at the level of Morphology / Syntax: here the authors note the coexistence of different grammatical variables and the subsequent 'victory' of the aptest ones, a process that might equate the concept of economy to a competition between diverse linguistic forms with the best one winning.

Moreover, historiographical analysis has shed light on the role of the principle of economy within functionalism and formalism in the 20th century. From the comparison with the idea of economy that seems to characterize most texts from the 16th to the 18th centuries, one might realize that a real and structured theoretical law of the principle of economy could be stated only as

a consequence of the establishment of the explicative models of the linguistic change and of the communication theory. This idea is supported by the few cases in which we can perceive something more specific than just a general tendency towards simplification:

[...] words were originally invented for the purpose of communicating our sentiments and ideas. (Dawson 1797:5)

Language is the proper medium of all our ideas and sentiments. It facilitates and determines the most important transactions of human life: it preserves and decides the rights of mankind, whether considered in a collective or private capacity: it diffuses the light of science through the present generations, and preserves the same salutary influence to posterity. By its interposition, all those arts which support or embellish human nature, obtain a more extensive province, and higher degrees of refinement. (Blacklock 1756:5)

Besides, what can have a juster claim to our attention as a matter of curiosity, than an enquiry into the foundation of that art which is the means of preserving and bringing to perfection all other arts; an enquiry into the extent and application of a faculty which is, to a great degree, the measure of our intellectual powers; which, therefore, constitutes what is the most obvious, and at the same time a real distinction between the rational and merely animal nature; which, according to the different degrees of perfection in which it is possessed, distinguishes nations that are improved from those that are barbarous; and which, in the same country, renders one man superior to another. (Priestly 1762:9)

For synonymous words are introduced into a language for this very end to answer the increase and refinement of ideas, and to obviate that ambiguity which would otherwise arise from one and the same term standing for several different or differently modified ideas. That ambiguity, or want of precision in the communication of ideas by words, is necessarily consequent on a scarcity of synonymous words in a language. (Dawson 1797:9)

This is a result that offers some suggestions that might help to understand the attention also paid to the topic of economy in the 19th century, when the reaction against Schleicher (1688) and his theory of mutation comes with an increased concern for the communicative process, both in the context of language as a social institution⁷ and in the context of the analysis of mutations in terms of «intellectual laws» (Bréal 1897).

The general simplification of the English language from inflected to iso-

⁷ See Whitney 1877:123-134 and Whitney AJP,II:345.

lating leads us to think of an economical tendency at its very core, which is responsible for its large spread all over the world; its grammatical structures «save the Learner much pains, and yet are sufficiently clear and full» (Collyer 1735:39) and its vocabulary is «copious enough of it self to express every thing and notion» (Aickin 1693:A3). The principle of economy has clearly maintained a balance between the characteristics that assure an efficient and direct communication on the one hand, and a natural need of least effort on the other.

Richness in monosyllables, easy and fluent grammatical structures, concise constructions, and a rich and varied vocabulary are tangible examples of maximum results achieved with the least efforts⁸.

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⁸The present study, which results from a degree thesis discussed in June 2001, has shown only partial aspects of the topic of linguistic economy; in the last decade, in fact, there has been much scientific-linguistic progress, thanks to two recent theoretical developments within generativism: Chomskian Minimalist Program and Optimality Theory. There has also been extensive research about the concept of economy vs redundancy in the fields of communication and information theory, which can contribute to provide new insights into the issue; see, in this respect, the very recent Chiari 2002.

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