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Contact vs. internal dynamics in the typological shift of English*

Il passaggio dell'inglese dal tipo flessivo a quello analitico è stato spesso attribuito al contatto con le varietà celtiche o con quelle dei popoli che successivamente invasero l'Inghilterra (Scandinavi e Normanni). Tuttavia, l'influenza di quelle lingue sembra essere stata marginale dal punto di vista delle conseguenze che esse ebbero sulle strutture (diverso, ovviamente, è il caso del lessico) e tale cambiamento tipologico fu dovuto piuttosto ad una lunga e complessa serie di processi fonologici naturali che, come spesso succede, ebbero conseguenze catastrofiche sulla morfologia. Del resto, già il proto-germanico aveva un numero di categorie morfologiche inferiore rispetto all'indoeuropeo. In questo articolo, l'autore sostiene che l'inglese antico era in uno stato di equilibrio instabile e che il contatto può, al massimo, aver accelerato il passaggio al tipo analitico. Tali cambiamenti morfologici e tipologici possono essere spiegati applicando la Morfologia naturale e la Teoria della Complessità.

1. Introduction

It is a truism that all languages are subject to contact with other linguistic systems and, therefore, that they may undergo external influence. English, in particular, has been subject to various contacts since the earliest Germanic invaders settled in Britain.

The role of contact and its extent varies from one case to another, depending especially on social conditions and on the linguistic systems involved (including their typological distance); regarding the social aspect, relevant factors are the length and the intensity of contact, the actual amount of bilingual speakers, their proficiency, their attitude to the different linguistic systems, etc. If it is possible to analyse contemporary

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contact situations (including major instances such as pidgins and creoles) from these points of view, this proves to be much more difficult or even impossible in the case of historical situations which occurred in the past. One such instance is represented by Old English varieties, which experienced, first, contact with indigenous Brythonic types of speech, then with Scandinavian ones, and, finally, with Norman French after 1066.

After Keller's study (1925), the 'Celtic hypothesis' has been revived in the last few years (see, e.g., Tristram 1997, 2000, 2002, 2003, 2004, Filppula et al. 2002, Lutz 2002). In particular, Tristram (2002 and 2004) argues that the indigenous Celtic varieties spoken in Britain influenced the imported Germanic ones so deeply as to cause the typological shift of English from synthetic to analytic; on the other hand, White (2002 and 2003) claims that contact with the Britons made inflections more and more marginal and, consequently, since they had become 'ornamental' and communicatively useless items, they were dropped; this, in turn, brought about a sequence of phonological changes which blurred phonological oppositions in unstressed syllables and eventually resulted in the merger of unstressed vowel under /ə/. These are very stimulating suggestions, and, as Tristram rightly claims, we should not underrate this type of foreign influence on Old English. In this paper, we briefly consider the sociohistorical situation and, in more detail, the linguistic evidence in an attempt to demonstrate that the typological shift that English underwent is basically the consequence of internal factors, to which foreign influence may have contributed only marginally and, above all, mainly as an 'accelerating' factor.

2. The sociohistorical situation¹

Independent of whether one supports the 'Anglo-Saxonist' account (i.e., the extirpation of the indigenous Celtic population by the Anglo-Saxon invaders) or the 'Celtic Hypothesis' (i.e., the cultural attraction of the invaders by the indigenous inhabitants, i.e. 'acculturation'), it seems undeniable that linguistic contact between the two populations was

¹ Jackson (1953) is still unsurpassed for its wealth of historical details.

inevitable, especially where immigration from the Continent was considerable, as in the central and eastern parts of England, as opposed to the South (Capelli et al. 2003); contact was limited also in the northern parts of the country, which were very scarcely inhabited and, as we know, were reached by the Germanic populations much later than the rest of Britain.

An important point is the considerable disagreement existing among researchers in connection with the ratio between the immigrants and the indigenous population, which ranges from 1:100 (Higham 1992: 225) to 1:4 (Härke 2003: 21), with Laing and Laing in between, i.e., 1:20 to 1:50 (1990: 84). These divergences cannot be overlooked, since the extent of, and the time required for, the process of acculturation and assimilation obviously depended considerably on the actual numbers and ratio, and of course the possibility of bilingualism must have depended heavily on demographic and sociohistorical circumstances. In view of this uncertainty, Filppula's assumption that "there was a period of extensive bilingualism for a considerable length of time after the *adventus*" (Filppula, forthcoming) sounds rather optimistic, especially regarding the North, where Celtic influence is usually assumed to have started to operate at a very early stage².

Unfortunately, in these situations we can only rely on limited and accidental samples of texts, and our evidence consists only of written rather than spoken language; moreover, the whole historical background becomes more and more opaque and our evidence more and more decontextualised the further back we go in history. Inevitably, all this makes it impossible to recover reliable evidence regarding fundamental factors, such as, for instance,

- i) the actual amount of the population (especially in the North), and the ratio between British and English inhabitants;
- (ii) the relationship between them (peaceful coexistence, rivalry, fights, etc.), and whether this was fairly constant or intermittent;
- (iii) the extent of linguistic intercourse and, therefore, of bilingualism;

² For a useful summary of the historical debate, see Härke (2003). Whether 'extirpation' or (much more reasonably) 'acculturation' actually occurred is not very relevant from the linguistic point of view, since linguists are definitely far more interested in analysing the consequences of contact on the linguistic systems involved than in being involved in an outdated political (and even racial) debate.

(iv) the relevant sociolinguistic parameters, such as age, sex, class, religion, occupation, socio-economic status, ethnicity, etc., all of which have a fundamental role in modern sociolinguistic research.

3. The Celtic hypothesis

In a number of recent studies (e.g., Hickey 1995; Tristram 2002; White 2002 and 2003; Filppula (2003); but cf., e.g., Isaac 2003), it is suggested that the shift from synthetic to analytic of the non-indigenous Germanic varieties spoken in Britain was induced by contact with the indigenous Brittonic population.

3.1. Attrition in nouns

In particular, Tristram (2002 and 2004) argues that the Brittonic population would have been attracted towards the language of the new elite and would have contaminated it "on the phonological and grammatical levels" (2002: 118). This process was especially typical of the northern areas of Britain, where "the overall proportion of native Britons relative to incomers was at its highest" (2002: 118). In this typical instance of contact-induced language change 'from below', the inflections of the imported Anglo-Saxon speech became subject to attrition, especially in the noun phrase, where Old Welsh had already dropped its inflectional markers. On the other hand, the verb phrase was already less inflected in Old English than it was in Old Welsh.

Tristram adds that, according to common knowledge, the attrition of inflectional markers became evident during the early Middle English period, when all types of constraints of the West Saxon standard "foundered under Norman rule" after inflections had been kept relatively stable for about five hundred years (2002: 124). Therefore, the obvious question is why the decay of inflections first appeared in the northern areas.

According to Tristram, two external factors and an internal one were responsible for this: i) the early contact between indigenous Celtic speakers and immigrant Germanic ones, with the attendant language shift mentioned above; ii) then, the later contact of the speakers of that

post-shift non-standard variety with Old Norse invaders, both of which combined with iii) the strong stress on initial syllables³.

The consequence was the blurring and eventual erosion of final unstressed syllables in the North earlier than in other areas of the country. Since transmission occurred (almost exclusively) in unmonitored oral communication, the features transferred from the spoken Brittonic variety became grammaticalised in the target language and were then passed on to consecutive generations of Old English speakers, who eventually underwent Norse influence in the Danelaw areas. The early Middle English that resulted, then, was a norsified Brittonic English variety in the Danelaw and 'ordinary' Brittonic English in the South and West. In particular, at the beginning of the Middle English period, in the North both Brittonic and Norse were spoken, in the East only Norse was spoken, in the South-East neither Brittonic nor Norse was spoken, and, finally, in the largest part of the South-West only Brittonic was spoken⁴.

3.1.2. Tristram's analysis

In order to substantiate her claim, Tristram (2002) examines six texts.

- i) In *Mortain Casket* (end of the seventh century) there are no instances of inflectional attrition, and also the vowels of unstressed syllables are fully retained.
- ii) In *Ruthwell Cross* (late seventh century or early eighth century) there are four instances of final <-n> deletion in verbs: two infinitives and two past tense forms of the 3rd person plural; these are matched by two past tense plural forms where <-n> is retained, plus one doubtful instance. On the other hand, there are no signs of

³ A fourth possible scenario, Dixon's "punctuated equilibrium model", is added later (2004: 90ff.), and Tristram rejects it as an explanation of the changes under consideration.

⁴ Tristram criticises Thomason & Kaufman (1988) for their "Anglo-Saxonism" (2002: 125, n. 24), in the sense that they insist on Norse influences on Old English but totally neglect the previous British contact situation, and even subscribe "to the common prejudice of the genocide of the ancient Britons" (*ibid.*). Thomason & Kaufman's basic argument, however, is that northern Middle English had many more Midland than Northumbrian features, to the extent that the former amounted to thirty-three compared to only eleven features of undoubted northern origin, four of which had Midland variants; therefore, they suggest, "Norsified English arose in the Midlands" (1988: Table 4, pp. 300-301), a conclusion which clearly points more closely to internal than to external factors in the development of the language.

vowel reductions in unstressed syllables and no cases of attrition of inflectional markers in the noun phrase. The parallel West Saxon poem (i.e., the *Dream of the Rood*, in the *Vercelli Book* of the tenth century) still has unreduced inflectional markers. Similarly, there are no instances of inflectional attrition in the thematically connected *Brussels Cross* (eleventh century), written in late West Saxon.

- iii) In the so-called *Franks Casket* (first half of the eighth century), vowels in unstressed syllables are retained.
- iv) Caedmon's Hymn (ca. 737) has two relevant forms: fold-u for fold-um (dat. plur. of folde 'earth', 'ground', 'soil', etc.), which lacks the final -m of the inflectional marker, and scepen for scyppend 'Creator'.
- v) Bede's Deathsong (ninth century) has no instances of attrition of inflectional markers.
- vi) The *Leiden Riddle* has some instances of attrition of inflectional final -n, but without any vocalic reductions: e.g., *cnyssa* 'knock' (cf. WS *cnyssan*), and *eorðu* 'earth (acc. sing.)', etc. Since final vowels and inflectional -s are well retained, whereas -m and -n are often affected, the inevitable conclusion is that "what there is of noticeable attrition is phonologically conditioned" (Tristram 2002: 131).

As Tristram herself has to admit, despite the fact that the Welsh texts are "well advanced in analyticity" (2002: 135), in the Old English ones that she considers there is only "little attrition of endings" (*ibid.*), the most outstanding instances being those involving final nasals and the reduction of final n-clusters.

3.1.3. A different hypothesis

In our view, these changes are more probably the result of natural phonological processes than of contact with xenolectal features. In fact, nasal consonants are normally frictionless continuants qualitatively more vowel-like than consonant-like; thus, in unstressed final syllables in Old English, they may have been easily confused with the immediately preceding vocalic segments⁵.

It is not surprising that these processes, which usually begin as optional

⁵ Although phonemes belonging to different historical periods do not necessarily have the same phonetic features, and can only be compared as segments of a particular phonological system, it seems interesting to quote Cruttenden, who, in connection with nasals, writes that their

rules in less formal and less controlled speech acts in the spoken language, may have affected especially the North, since this was less subject to standardisation pressure than the West Saxon high-register written variety. There seems to be no doubt, then, that the instances of morphological attrition discussed were mostly phonologically conditioned.

Arguably, the internal factor – which we suggest was both of phonological and of typological origins – is "likely to have been reinforced by the two external factors connected with language contact" (Tristram 2002: 135), and this leads to the inevitable conclusion that contact was basically instrumental in the diffusion of innovations, but only marginal in the creation of variants. Moreover, the fact that the drift of English from synthetic to analytic was shared by Romance and Celtic languages alike (which, according to Tristram (2002: 137), means that there was a "common drift") demonstrates that there was nothing particularly unusual in this respect in the loss of casual inflections in English, also in view of the fact that, compared to Indo-European, Proto-Germanic already showed considerable reductions in the number of morphological oppositions. On the contrary, this underpins the claim that contact simply accelerated this process but did not trigger it.

To sum up, although it is true that the early contact of Germanic and native Old British speakers has so far been underresearched, and that we must not "underestimate the contribution of the speakers of Late British [...] to present day English" (Tristram 2002: 138), on the other we should not overestimate it either, especially if this depends on the need to analyze the role of Late British speakers on present-day English, which derives from "that ease of learning conferred by analitycity" (Tristram 2002: 138)⁶. If this were true, one wonders why highly inflected languages are still spoken today.

"considerable damping [...] generally makes any formant structure difficult to identify" (2000: § 9.6 (2)); in other words, they are a sort of "low frequency 'murmur' below 500 Hz which precedes transitions to following sounds and follows transitions from preceding sounds" (*ibid.*). Similar developments, equally due to the vowel-like quality of the segments involved, are the eventual loss (through earlier vocalisation) of the reflex of ME /r/ in final and preconsonantal positions following a stressed short vowel (which was lengthened), its vocalisation after long vowels, and the frequent vocalisation of the reflex of ME dark /l/ in certain phonological contexts.

⁶ This claim contradicts Tristram's previous one that "no languages are ever 'simplified' by simply drifting towards analyticity" (2002: 137, n. 53), which rightly criticises Thomason and Kaufman's statement that the drift of the Germanic languages from synthetic to analytic amounts to 'simplification'.

3.2. White's creolisation hypothesis

In the same vein, White (2002 and 2003) argues that, after contact with Celtic varieties, Old English would have been subjected to creolisation due to Norse influence, when speakers were "not aiming for anything more than to 'get by'" (2003: 41). In particular, inflections would have been dropped since they were "ornamental" and, therefore, were pronounced with less effort; in turn, this brought about the loss of phonological distinctions⁷.

The argument that "German too has undergone the change of most unstressed vowels in final syllables to /ë/ [...] but (despite some loss of overt case in nouns) still retains quite literally all the categories whose loss was supposedly 'impelled' by the same development in English' (2003: 31) sounds methodologically outdated and substantially irrelevant. I consider absolutely reasonable the idea that the actuation of a language change is not necessarily homogeneous even in the same language, or, as Weinreich *et al.* aptly asked: "Why do changes in a structural feature take place in a particular language at a given time, but not in other languages with the same feature, or in the same language at other times?" (1968: 102)⁸. Therefore, changes in a language can by no means be used as parameters for analysing changes in another language, even if both have a common ancestor.

⁷ A comparison of Old English and Old Norse inflectional morphology is of course not at issue here. It will only be pointed out that White's statement that case marking was different between the two languages is ambiguous, since he does not specify which particular system-defining structural properties he has in mind, or whether he refers to the individual inflectional markers themselves, which – not surprisingly – are language-specific. For instance, whereas in Old English one of the system-defining structural properties was the homophony of the nominative and the accusative plural (e.g. stānas 'stones (nom/acc.pl.)'), in Norse this applied to feminine and neuter nouns only, masculines still preserving the etymological distinction (e.g. nom.pl. vargar, acc. pl. varga, both 'wolves'); therefore, nominal inflection was in this connection more conservative and synthetic in Old Norse than it was in Old English. On the other hand, both languages had the same number of case and number distinctions, and retained the same inflectional classes.

⁸ For interesting analyses of the contrasts between English and German, see Hawkins (1986), and Ferguson (1996). The former, in particular, apart from his support for the idea that phonological changes destroyed the case system and thus were the ultimate trigger that set in motion the syntactic changes (1986: 5), suggests that "the historical changes that gave rise to current contrasts [between English and German - AB] followed a single typological direction" (1986: 7). This seems to unobjectionally reflect historical phenomena, and, implicitly, to see the typological evolution of English more as the result of internal dynamics than as contact-induced; in the latter case, in fact, we would have had more random changes and internal inconsistencies than we actually notice.

4. Some Germanic features

4.1. Germanic phonology⁹

4.1.1. The Germanic and West Germanic periods

4.1.1.1. Short vowels

- i) The reflexes of I.-E. \breve{o} , \breve{a} , \breve{e} were dropped in final positions, as in OE -es (< PrOE -æs < Gmc. *-a-sa < IE *-o-so), gen. sing. of the a-microclass.
- ii) The reflex of IE $\check{\imath}$ was dropped when it was preceded by two or more syllables, as in the genitive and dative singular and nominative plural of *n*-microclass nouns: e.g., OE *naman* 'name' < Gmc. *-*niz*, *-*ni* and *-*niz* respectively; this change affected also the OE dat. plur. -*um* (< Gmc. *-*miz* < IE *-*mis*).
- iii) Also preconsonantal *a was dropped in Germanic in final unaccented syllables, as in the a-microclass nominative and accusative singular (e.g., hund 'dog' < Gmc. *-az, *-am respectively).

4.1.1.2. Long vowels

Long vowels were shortened in final unaccented syllables.

- ii) Gmc. *ī was shortened to *ĭ, which in Old English was either dropped or lowered to ĕ. In Primitive Old English it underwent elision after a long stressed syllable, as in the nominative singular of the -jō-microclass (e.g., OE gierd 'rod').

⁹ What follows is mainly based on Campbell (1959: chapters III-VII).

4.1.1.3. Conditioned changes

- i) Contrary to the changes in free contexts, I.E. $*\check{o} > \text{Gmc.} *\check{u}$, and Gmc. $*\bar{o} > *\bar{u}$ in North and West Germanic in medial unaccented syllables before m, or when the following syllable contained u. Examples are the dative plural of the a-microclass (e.g., hund-um < I.E. *-o-mis), of the \bar{o} -microclass (e.g., gief- $um < \text{Gmc.} -*\bar{o}$ -miz) and of the n-microclass feminine nouns (e.g., tung-um; IE *- $\bar{o}n$ -mis), and the acc. sing. and plur. tungan of the last microclass (< Gmc. *tungun-um, *-uns respectively).
- ii) In North and West Germanic, Gmc. * $ai > *\bar{\alpha}$, and * $au > *\bar{o}$ in unstressed final syllables; later, these long vowels were shortened to $\check{\alpha}$ (>e) and $\check{\alpha}$ respectively, as in the dat. sing. -e (< Gmc. *-ai) of the a-microclass (e.g., $st\bar{a}ne$), of the \bar{o} -microclass (e.g., giefe), and of feminine nouns of the i-microclass (e.g., $\bar{e}ste$ 'favour', which also covers the genitive singular, from Gmc. *-aiz); examples of the latter are the gen. and dat. sing. -a of the u-microclass (e.g., suna, handa; Gmc. *-auz, *-au respectively).

4.1.2. Ingvaeonic and Primitive Old English

4.1.2.1. Nasals

Preconsonantal nasals in unstressed syllables were dropped, with compensatory lengthening (and, initially, nasalization) of the preceding vowel; as a consequence, acc. plur. *-ans (a-microclass) > $\bar{o}s$, *-uns (u-and consonant microclasses) > $\bar{u}s$, *-ins (i-microclass) > $\bar{t}s$, which thus merged with the corresponding nominative plural forms.

4.1.2.2. Loss of final unstressed vowels in early Old English

The short phonemes $\check{\imath}$ and $\check{\imath}$ were dropped in early Old English in final unstressed syllables when they were preceded either by a long stressed syllable or by a short stressed syllable and another one. On the contrary, they were retained after a short stressed syllable or after a long stressed syllable followed by a short one. These different developments are exemplified by:

i) the nominative/accusative plural of *a*-microclass neuters, in which I.E. *- \bar{a} > Gmc. *- \bar{o} > WGmc. *-u > OE - \varnothing : e.g., word 'word' vs. fatu 'vessel';

- ii) the nominative singular of
 - (a) the ō-microclass (e.g., bisen 'example' vs. lufu 'love');
 - (b) the *u*-microclass (e.g., *ford* 'ford' vs. *wudu* 'wood');
 - (c) the *i*-microclass (e.g., $d\bar{e}l$ 'part' vs. *stede* 'place');
 - (d) the $w\bar{a}$ -/ $w\bar{o}$ -microclasses (e.g., $sn\bar{a}$ 'snow' vs. bearu 'grove', and sinu 'sinew' vs. $m\bar{e}d$ 'meadow'); and
- iii) the nominative plural of athematic nouns: e.g., *fēt* 'foot' vs. *styde* 'post'.

4.1.2.3. Loss of medial unstressed vowels in early Old English

Short vowels were dropped in open medial syllables in words with a heavy root syllable: e.g., inflected forms like gen. sing. *engles*, *hēafdes*, dat. sing. *engle*, *hēafde* (cf. nom. sing. *engel* 'angel', *hēafod* 'head'), etc., and various adjectival and verbal forms. When both the medial and the final syllables could undergo vowel syncopation, normally it was the former that was affected (e.g., OE nom. plur. *hēafdu* < *hæofudu).

In later Old English, there were many analogical forms and considerable fluctuation between syncopated and non-syncopated forms (e.g., nom. plur. $h\bar{e}afodu$, modelled on the nominative singular, and $h\bar{e}afod$, on the analogy of nouns with a short root syllable). In the latter, in fact, the medial vowel was usually retained (e.g., gen. sing. werodes, dat. sing. werode, etc.; cf. nom. sing. werod 'troop'), although in originally trisyllabic nouns like firen 'crime', in which final -u in the nominative singular had been lost, the medial vowel could be dropped in inflected forms (e.g., firene \sim firne), and even monosyllabic nominative singular forms (e.g., firn) occurred.

Medial vowels were retained also in closed syllables, as, e.g., in the gen. sing. *cyninges*, or in the inflected forms of nouns and adjectives ending in *-isc*, *-iht*, *-est*, *-ing* and *-ung*, e.g. nom./acc. plur. *Englisce* 'Englishmen'.

4.1.2.4. The shortening of unaccented long vowels in early Old English

In early Old English, all the unstressed long vowels that remained were shortened, as in the following cases:

i) the vowels of final syllables which had had the 'abnormal' (also called 'circumflex') intonation in Indo-European, as in the nominative plural of the \bar{o} -microclass (e.g., OE *giefa* 'gift' < Gmc.

- *geb- $\bar{o}z$ < I.E. *- $\hat{a}s$), the genitive plural (-a) of all microclasses (e.g., OE $st\bar{a}na$ 'stone' < Gmc. *stain- $\bar{o}n$ < I.E. *- $\hat{o}m$), and, finally, the nominative singular of the masculine weak nouns (e.g., gum-a 'man' < WGmc. *- \bar{o} < I.E. *- \hat{o}).
- ii) In final syllables, $\bar{\alpha}$ (< Gmc. *ai) and \bar{o} (< Gmc. *au) were shortened respectively to $\check{\alpha}$ (later \check{e}) and \check{a} . Instances of this process are the a- and \bar{o} -microclass dat. sing. -e (e.g., OE $st\bar{a}n$ -e < Gmc. *-ai, and gief-e < Gmc. *-ai), and gen./dat. sing. -a of the u-microclass (e.g., OE sun-a < Gmc. *sun-auz, *sun-au respectively).
- iii) In final syllables, Germanic *-ja- occurred only after long syllables. When the preceding syllable was closed, a vocalic segment agreeing in height and frontness was inserted between its final consonant and the immediately following *-ja-formative (i.e., C + /ja/ > C + /ija/); this is responsible for the difference between nom. sing. * χ arjaz 'army' (with a light root syllable) and nom. sing. * χ ardijaz 'end' (with a heavy root syllable). When - α was lost, - α vir. which was shortened later in OE, as in the nom. sing. of the α -microclass (e.g., Gmc. * α -andijaz > Gmc. * α -andi > OE endi, later ende).
- iv) Long vowels in unstressed medial syllables were shortened, as in the genitive plural of feminine *n*-microclass nouns (e.g., Gmc. *-\(\bar{o}n\hat{o}m > OE -ana > -ena)\), which was later extended to masculine ones. Already in early West Saxon, the unstressed vowel of this inflectional marker was often dropped (e.g., \(\bar{e}agna\) 'eyes (gen. pl.)').

4.2. Germanic and early English inflectional morphology

4.2.1. Common Germanic

Common Germanic was characterised by a considerable reduction in the number and type of inflectional morphemes compared to the Indo-European situation.

Whereas the three genders (masculine, feminine and neuter) were retained, number was reduced to the singular and plural, the dual occurring only in relics and being totally unproductive; similarly, casual oppositions in nominal morphology were practically halved, since the

eight cases of Indo-European were reduced to four, with the merger of the vocative with the nominative, of the instrumental and locative with the dative, and of the ablative with either the dative or the genitive ¹⁰. This brought about an increased use of prepositions already in the old English period, especially in prose.

The Indo-European inflection was rather complex and was based on strong semantic oppositions (e.g., neuter stems in *-es / *-os were deverbal abstract nouns). In Germanic, this type of opposition was lost, and no inflectional class was based on semantic oppositions; this led to the disappearance of some inflectional (micro)classes and to the contemporary extension of others, especially the *n*-microclass.

These innovations were not only morphologically driven, but were also the consequence of dramatic changes in phonology. First of all, the phonological reduction of vowels and diphthongs in unstressed syllables eliminated a large number of the original formal distinctions which had previously existed among the different inflectional microclasses; for example, the Old English form wulf 'wolf' covers both the nominative and the accusative singular (Gmc. *-az and *-an respectively). In addition to this, analogical processes operated and levelled case as well as number oppositions; for instance, nominative and accusative merged in the singular as a consequence of the regular loss of the final unstressed syllable, and this, in turn, may have favoured the merger of these two cases also in the plural¹¹. The most far-reaching result of this process is the present-day English état de langue, in which there is number opposition, and the only case opposition which has been retained is that between possessive and non-possessive; however, the former coexists with the analytic of-construction, which is optional with nouns denoting animate beings, but obligatory with those denoting inanimate objects, so that morphological encoding of this case opposition is actually available only for the former nouns.

The verb, too, was affected by equally considerable reductions of morphological oppositions; for instance, the Indo-European optative

¹⁰ Of course, syncretism is not random but occurs among semantically similar cases (for instance, there are no instances of syncretism of nominative and dative); see Kuryłowicz (1964: ch. VIII).

¹¹ In Old English this occurred through the extension of the nominative plural suffix to the accusative, while in Old High German it was the accusative ending that was extended to the nominative.

merged with the subjunctive, the imperative plural had the same encoding as the indicative (except in Gothic), the medium was lost, the basic Germanic distinction being between indicative and subjunctive on the one hand, and between present and past on the other. Also a synthetic passive was retained, but this, too, was steadily replaced by analytic constructions.

4.2.2. Old English

If we examine the early Old English inflectional paradigms suggested by Hogg (1992: 126ff.)¹², we immediately notice that the differences between them and the reconstructed Germanic ones on the one side, and between early Old English and later Old English on the other, demonstrate that the most conspicuous changes had taken place between Germanic and the early varieties spoken by Angles, Saxons and Jutes; similar considerations apply to the other historical Germanic languages (except for Gothic, for which very little is known after Wulfila's translation of the *Bible*).

In particular,

- 1) In the *a*-microclass:
 - i) loss of nom. sing. and acc. sing. endings, with their consequent merger;
 - ii) phonological erosion of the nom. plur. and acc. plur. endings, so that these, too, merged.
- 2) In the \bar{o} -microclass:
 - i) phonological erosion of nom. and dat. sing., and of nom. plur.;
 - ii) loss of inflectional material in acc. sing., and acc. and dat. plur.;
 - iii) later changes were phonologically induced, and the paradigm ca. 800 is simply the result of morphological reorganisation, which made -*e* a singular marker and -*a* a plural marker (cf. their ambiguous distribution in its immediate ancestor ca. 700).
- 3) In the *i*-microclass:
 - i) complete loss of inflectional material in the whole singular and in the nom. and acc. plur., with the consequence that *wini* encoded all these cases.

¹² Notice that Hogg's paradigms are his own reconstructions, which, incidentally, are not preceded by the asterisk, as is usual in similar cases. Where required, asterisks have been added.

ii) considerable phonological erosion affected also the gen. plur. (- $ja < *-i-\bar{o}n$) and dat. plural (-im < *-i-miz).

4) Athematic nouns:

- i) more dramatically than elsewhere, phonology played havoc with inflectional material in these paradigms, the only relics being gen. plur. -*a* and dat. plur. -*um*;
- ii) later changes showed the influence of the *a*-microclass paradigm on masculine nouns (gen. sing. $f\bar{o}t$ -es; cf. wulf-es, etc.), and of the \bar{o} -microclass on feminine ones (e.g., dat. sing. $b\bar{o}c$ -e vs. etymological $b\bar{e}\dot{c}$), and the imposition of the system-defining structural property 'nom. plur. = acc. plur.', which helped to disambiguate uninflected accusative plural * $f\bar{o}t$ (= nom./acc. sing.).

Table 1. Hogg's reconstructed early Old English paradigms (1992: 126ff.)

A) a-class paradigm

ca. 400 ca.

ca. 700 ca. 800

	singular	Gmc. infl.	plural	Gmc. infl.	singular	plural	singular	plural
N.	*stān	*-a-z	*stānōs	*-ōz/-ōs	*stān	*stānas	stān	stānas
A.	*stān	*-a-n	*stānōs	*-a-nz	*stān	*stānas	stān	stānas
G.	*stānas	*-a-sa	*stānōm	*-ōn	*stānæs	*stāna	stānes	stāna
D.	*stānai	*-ai/-ē (instr.)	*stānum	*-a-miz	*stānæ	*stānum	stāne	stānum

B) ō-class paradigm

ca. 400 ca. 700

	singular	Gmc. infl.	plural	Gmc. infl.	singular	plural	singular	plural
N.	*lufō	*-ō	*lufōz	*-ōz	*lufu	*lufa	lufu	lufa
A.	*lufa	*-ō-n	*lufa	*-ōz	*lufe	*lufe	lufe	lufa
G.	*lufōz	*-ōz	*lufōm	*-ōn	*lufa	*lufa	lufe	lufa
D.	*lufai	*-ōi	*lufum	*-ō-miz	*lufe	*lufum	lufe	lufum

ca. 800

C) i-class paradigm

ca. 400 ca. 700 ca. 800

	singular	Gmc. infl.	plural	Gmc. infl.	singular	plural	singular	plural
N.	*wini	*-i-Z	*wini	*-īz <-ij-īz	*wine	*wine	wine	winas
A.	*wini	*-i-n	*wini	*-i-nz	*wine	*wine	wine	winas
G.	*wini	*-1-Z	*winja	*-i-ōn	*wine	*winiġa	wines	wina
D.	*wini	*-ei (loc.)	*winim	*-i-miz	*wine	*winim	wine	winum

D) Athematic nouns

paradigm ca. 400

paradigm ca. 800

	singular	Gmc. infl.	plural	Gmc. infl.	singular	plural
N.	fōt	*-S	*fēt	*-iz	fōt	fēt
A.	fōt	*-um	*fōt	*-uns	fōt	fēt
G.	fēt	*-iz	*fōta	*-ōm	fōtes	fōta
D.	fēt	*-i (loc.)	*fōtum	*-umiz (instr.)	fēt	fōtum

5. Conclusion

The assumption of catastrophic influences of Celtic varieties on the typological development of English seems to be implicitly based on the idea that during Old English times the language underwent something resembling more or less closely a pidgin stage, with considerable loss of inflectional markers. This is the traditional conception of pidgins as morphology-poor languages, which, on closer scrutiny, has been rejected as basically counterfactual (see, e.g., Bakker 2003). Pidgins *do* have morphology; what characterises them is the fact that compared to their lexifier(s) they tend to use the most transparent morphological forms and, at the same time, to avoid suppletion and morpho(no)logical alternations (Bakker 2003: 10)¹³. Interestingly, "number marking is

¹³ The retention of ablaut alternations in a very large number of strong verbs and of a good deal of umlaut plural forms in English clearly undermines the creolisation hypothesis.

often absent, or is optionally expressed with free morphemes such as 'many'" (Bakker 2003: 15), but this is just one of the two oppositions in noun that English has retained to date. Case marking, too, which is often dropped quite rapidly or is considerably reduced, was retained for quite a few centuries and simply underwent steady phonological erosion – which had been operative since Common Germanic times – rather than overnight loss.

In short, Old English was subjected to so many phonological processes that most inflectional markers became totally ambiguous; this ambiguity made them useless and, therefore, they were inevitably dropped. As in all complex systems, also in natural languages the individual components interact with one another; in our case, one component (phonology) had altered the stability and the equilibrium of another component (inflectional morphology). At this point, the system had undergone an irreversible bifurcation, i.e., a typological shift had occurred and the inflecting type had become a historical object. This imposed the selection of new attractors for the two oppositions left in nouns – singular vs. plural, and possessive vs. non-possessive – and the two attractors selected were the reflexes of OE (a) gen. sing. -es and (b) nom./acc. plur. -as. They were preferred for a number of reasons: first of all, because they belonged to the former Old English a-microclass – which, as the most productive of all – was the 'hyper-attractor'; then because they were additive and unique (semiotically preferred to nonadditive (i.e., non-iconic) signs, and to bi-unique or, even more so, to ambiguous signs), and, finally, because they had morphosemantically and morphotactically transparent word-based inflection (based on perception preferences, since stem-based inflection is less easy to segment).

Therefore, Old English is a clear example of system which, in terms of complexity theory, was "at an unstable or marginally stable state" (Nicolis & Prigogine 1989: 175) rather than one characterized by "a very small rate of change [...] suddenly interrupted by a violent explosive behavior" (*ibid.*), as might have been the case if Celtic-induced pidginisation had occurred.

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