

PHONOLOGICAL EVIDENCE IN MORPHOLOGICAL COMPLEXITY
OF LATINATE
FORMATIONS IN ENGLISH AND POLISH

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0.1. For the purpose of morphology, and to some extent phonology, the vocabulary of English is conveniently divided into two distinct parts: native and latinate. The overwhelming majority of the latter class includes the major lexical categories of V, N, Adj, formed by means of prefixing or suffixing latinate formatives on the morphological pattern of Neo-Latin¹ but analyzable on the native basis of word formation (henceforth WF) as well. In the pre-generative treatment of the structure of latinate words in English (Bloomfield 1933:252—6, Francis 1958) no distinct or sharp boundaries were made between these two classes of words. The only apparent differences between native and latinate words were usually assigned to their meaning and the frequency of usage rather than to their morphological or phonological characteristics. However, the class marked [+latinate], also referred to as 'learned' words, is said to comprise polysyllabic words composed of complex syllables and these, unlike native Germanic words, refer in general to a more abstract level of intellectual activities rather than objects and notions from everyday life (cf. Bloomfield 1933:252).

0.2. Similarly, the bulk of the 'learned' vocabulary of Polish are words borrowed from either Classical or Neo-Latin (cf. Doroszewski 1962:262), though, on the whole, the proportion of Latin loan-words, or latinate elements in general, is not the same in the languages under consideration. English has an exceptionally large proportion of such elements and has acquired a consider-

¹ Neo-Latin (henceforth NL) comprises also Old Greek patterns which, however, are frequently extended or modified so that they are more Latin than Old Greek.

ably greater facility for using them in new coinages (cf. Marchand 1960). That is to say, the class of latinate stems which either function as words of English or Polish, or are subject to rules of affixation on the Neo-Latin pattern is by and large more numerous in English than it is in Polish. Not all NL affixes that English has adopted have a corresponding formative in Polish. Despite those quantitative differences, the ways in which latinate elements combine to form words are perfectly regular in both languages; hence, even the choice of rather limited data for the purpose of comparison seems to be justified on methodological grounds. Needless to say, the semantics of latinate Ns and Adjs is not always a direct consequence of their morphological regularities and no semantic considerations are going to be involved in the present discussion.

1.1. It is appropriate to ask at this point on what formal grounds this twofold division in the vocabulary of English can be drawn. If there exists a class of words marked [-native] or [+Romance], [+latinate], etc., one must try to establish a set of features, other than an abstract marker [+foreign], that are characteristic of this class. Such features ought to be real linguistic entities that can be looked for at either the phonological or morphological level. If one sets out to investigate phonology, clues of foreignness expected in either underlying or phonetic representations will consist in the violation of certain native MSCs or SPCs, respectively (cf. Hyman 1970:191, Shibatani 1973:97). A formal property of synchronically foreign words can be established if the items in question do not undergo the main body of native phonological rules or are subject to certain minor rules confined to a particular set of words that come from a single source (cf. Kiparsky 1968:12, 13, Lightner 1972).

1.1.2. In the SPE phonology of latinate Vs, Ns, and Adjs all such words are derived from the 'naturalized' underlying representations via native rules. The naturalized character of the lexical entries of Latin or Romance words in SPE derives from the assumption that the rules responsible for the phonetic shapes of these words, though some of them may be foreign in their origin, are in most cases ordered among the major rules of the phonology of English. Some of these rules are used in a productive manner.² Unfortunately, the largest part of Chomsky and Halle's discussion and argumentation is based on Latin and Romance elements in English. This brings about many complications which are forced onto the native Germanic words in that they must be specially marked as exceptions to some major rules for nonphonological reasons. In

² The productive phonological rules of SPE are: stress rules, rules accounting for tense-lax vowel alternations, Velar Softening, Spirantization, Palatalization, though only the latter rule can be regarded to be fully productive.

short, there is no way in SPE to identify formally native and *linate* words as items belonging to different phonological strata. Synchronically, the feature [+*linate*] seems to be an arbitrary marker assigned to certain stems (or words).

1.1.3. The only substantial piece of evidence for the non-arbitrariness of the feature [+*linate*] comes from morphology rather than phonology. The SPE classification of suffixes involves a distinction between those suffixes which assign primary stress by the Main Stress Rule and those which are neutral to the placement of stress. It happens that among the latter group one finds inflexional suffixes and derivational formatives of native origin, viz., *-ing*, *Past Tense*, *-hood*, *-ly*, *-wise*, *-like*, *-ness*, *-ish*, and Romance *-able*, and it has been furthermore assumed that an affix is neutral when the /#/ boundary can be introduced between the string belonging to a lexical category and the affix. Strings with an internal /#/ boundary are of course not subject to cyclic rules of stress assignment. Affixes that carry /#/ are assigned to words by grammatical transformations.³ Derivational suffixes that determine stress placement are largely internal to the lexicon (SPE:84—6). It can be seen that the SPE distinction between neutral and non-neutral suffixes is drawn on rather general grounds, though phonologically one can group together those disyllabic suffixes which determine the placement of stress and effect the trisyllabic laxing of the underlying tense vowels, viz., *-ity*, *-(at)ive*, *-(at)ion*.

1.2. The presence of boundaries in the underlying representations of derived nominals and adjectives (a consequence of the transformationalist position which has been adopted in SPE) can be explained only in the case of the internal /#/ boundary. The occurrence of the other two, i.e. the prefix and morpheme boundary (/=/ and /+/, respectively), are phonologically motivated. That is to say, the presence or absence of a prefix/morpheme boundary in an underlying phonological representation is to be decided upon on the basis of "morphophonological" alternations and the applicability of phonological rules involved in the derivation of correct phonetic representations. Some rules apply only within a domain of a given boundary but not across this boundary or any other boundary (SPE:371). Others apply only across a certain boundary. For example, the prefix *re-* in English has different distribution with regard to certain *linate* verb stems in that it is found either before /=/ or /#/ with or without the subsequent voicing of /s/ in an intervocalic postboundary position, respectively; the boundaries also differentiate the two occurrences of *re-* semantically, e.g., *re=serve* vs *re#serve* (SPE:221.2). The prefix boundary also accounts for stress placement and

³ This view is no longer tenable, see Aronoff (1976), Chomsky (1970), Jackendoff (1975).

several other facts in certain latinate verbs, e.g., assimilation in *succeed*, *suggest*, voicing of /t/ in the env. $\left\{ \begin{array}{l} \text{mi-ive} \\ \text{ver-ion} \end{array} \right\}$ (SPE:371). Chomsky and Halle suggest that /=/ is introduced by special rules which are part of the derivational morphology of English. It is worth noticing that the only morphological environment in which this boundary is necessary is a designated set of latinate verbs with bound stems, and the level at which the presence of /=/ seems to be relevant is at the input of the word level phonology, since the stress rules are cyclic rules, and the rules applying across /=/, except the s-voicing, are grouped together with other readjustment rules.

1.3.1. Rules that account for phonological alternations restricted to certain syntactic or lexical classes or those governed by certain classes of morphemes must be rejected in a more tightly constrained theory of phonology as being not optimal phonological rules. Within a theory that recognizes derivational morphology as a separate component dealt with in the expanded lexicon (cf. Aronoff 1976, Chomsky 1970, Halle 1973, Jackendoff 1975), all nonphonologically determined variation (e.g. variability of prefixed/suffixed stems in English, different realizations of the prefix /coN=/ or the suffix /+(At)ion/) can be conveniently handled by rules of allomorphy (cf. Aronoff 1976:98—112). Rules of allomorphy are external to phonology in the same way as word formation rules are. An allomorphy rule is a rule that effects a phonological change, i.e., adjusts the shape of a morpheme, or rather a specific class of morphemes, but it only applies to certain morphemes in the intermediate environment of certain other morphemes. Allomorphy rules look like phonological rules, but they do not interact with the latter, and therefore must be ordered before rules of phonology. However, they must have access to the phonological component, since they cannot introduce segments other than those belonging to the actual inventory of underlying segments motivated independently of the allomorphy. It is important to note that allomorphy rules are totally morphological by definition; they must be defined on morphemes, not segments, and of course they are not subject to naturalness constraints. Thus the assimilation rule across /=/ in prefix /=/stem latinate verbs, e.g., *acceed*, *assume*, *attest* (SPE:222), or the deletion of /æ/ in the /+æ̃t+iVn/ suffix, e.g., *reduction*, *absorption*, are defined on designated classes of morphemes (cf. Aronoff 1976:104—5) in spite of the fact that the choice between the two restricted variants of +(At)ion, viz., *-tion* and *-ion*, is determined by the feature [-coronal]/[+coronal] of the stem final consonant, respectively. On the other hand, English /k → s/ Velar Softening and Spirantization are rules of phonology, not allomorphy, since they are ordered among the major rules, and their application is governed not by a morpheme but a morphological feature, i.e. [+latinate] (cf. Aronoff 1976:113).

1.3.2. A seeming discrepancy can be spotted in Aronoff's treatment of phonological rules. The rules which apply across boundaries are separated from the rules of phonology. It is understandable that rules of allomorphy, as described above, must be taken care of by the lexicon. Aronoff's WFRs are part of the lexicon too, as they can be used in the formation of new words as well as to motivate the structure of already existing words. In a word-based derivational morphology a WFR specifies a set of words which serve as its base, as well as some phonological operation, both of which result in a (or a set of) new word(s). The phonological operation consists in the addition of an affix and it specifies the phonological form of the affix and its place in relation to the base. The phonological operation is part of the WFR itself, and it cannot be ordered among the rules of phonology, since WFRs precede all phonological rules, though they operate on completely specified phonological strings. The role of boundaries is to encode the place of a particular WFR and the phonological operation in the phonological derivation of the base, i.e., /+ / is prephonological, /#/ is postcyclic (word level), /# #/ is postphonological. What is the status of /k → s, g → j/, then, since this rule is known to apply across /+ / as well as within a morpheme? According to Aronoff's theory, it comes earlier in *publicity*, *production*, *negligible* than it does in *decide*, *region*, by virtue of its being linked to a WFR in the former case. Needless to say, this rule will have to be stated twice in the grammar.

1.4. Aronoff's assumptions about the lexicon and the structure of already existing words are by no means clear. Both WFRs and completely specified lexical entries belong to the lexicon. If we narrow down our interest to *linate* Vs, Ns and Adjs derived by means of WFRs from other major lexical categories, we find that in this case WFRs serve to account for the analyzability of the forms in question rather than to form words that can be added to the speaker's lexicon. However, they do not solve problems pertaining to morphological complexity of non-word derived words, i.e., words whose etymology shows them to be derived but are not so analyzable by most speakers. A possible solution, which also rids us of the problem of a rather dubious status of Velar Softening (and Spirantization) in a word-based morphology, is to assume after Aronoff's alternative hypothesis that only words a speaker actually makes up on his own have a morphological structure; the words he knows (i.e., has learnt by hearing them) have no structure (Aronoff 1976:29). But of course this view would come into conflict with two facts: (a) the compositional character of the *linate* vocabulary, both in English and Polish, is in most cases recognizable; (b) phonology must have access to boundaries.

1.5. In the sections below we shall sketch the most significant differences between *linate* formations in English and Polish with regard to the abstract morphological feature [−native] or [+*linate*]. It can be hypothesized that,

if this class turns out to include words fully integrated in the native phonological system (they do not violate MSCs or SPCs and undergo rules that fall together with the native ones), their underlying boundaries and morpheme constituents ought to be motivated by the applicability of the native phonological rules. We shall see below to what extent the predictions made by the theory of phonological borrowing (Holden 1976:131, Hyman 1970:19) account for the assimilation of latinate words in English and Polish.

2.1.1. The distinction between native Germanic and non-native latinate words in English lies in the fact that, morphologically, the two classes enter different derivational systems. This means that the WFRs are sensitive to this distinction, i.e., those which attach latinate affixes, with very few exceptions,⁴ operate on a latinate base only; native affixes do not discriminate between latinate and native words (cf. *+ity* vs *#ness*, or *iN=* vs *un #* attachment). Phonological rules too can be sensitive to this distinction, e.g., Velar Softening affects the underlying stem final velars in latinate stems only. The non-phonological feature [+latinate] is a property of morphemes, not words. This observation runs counter to the SPE assumption that "all nonphonological features of a given lexical item are distributed to every unit of this item" (SPE:374). If [+latinate] were a property of words, the word *forgivable*, which has the morphological structure [-latinate(base)][+latinate(suffix)], would become latinate (cf. the *+ity* attachment in *readability*) for the purpose of phonology, and we would thus expect the softening of /g/ before /i/ (cf. Aronoff 1976:51, 52).

2.1.2. Phonologically, in spite of the constraint on the softening of velars and spirantization of dentals before certain latinate suffixes, words derived by means of latinate suffix attachment do not show any foreign features. As for the variability of vowels in suffixed latinate stems, that part of English phonology is entirely accounted for by the native rules. Among the rules that account for tense-lax or lax-tense vowel alternations,⁵ viz.:

- (1) laxing before certain consonant clusters

$$V \rightarrow [-\text{tense}] / \text{---} C_2$$

e.g., *description* /deskɹɪb/, *intervention* /ɪntr=ɪvɛn/, *retentive* /re=tɛn/

- (2) laxing before *-ic* (and native *-id*, *-ish*)

$$V \rightarrow [-\text{tense}] / \text{---} C(C) + i \begin{pmatrix} k \\ d \\ \check{s} \end{pmatrix}$$

e.g., *satiric* /sætɪr/, *metric* /mɛtr/

⁴ At least some of these suffixes seem to be productive, particularly in sociological jargons, advertizing, etc. (cf. *gumption*, *thunderation*, *sexist*, *ghettorize*, *?softize*, *?hardification*).

⁵ The rules are stated in a rather simplified form.

(3) trisyllabic laxing before *-ity*, *-(At)ive*, *-(At)ion*

$$V \rightarrow [-\text{tense}] / \text{---} \text{C}\check{\text{V}}\text{CV}$$

e.g., *profundity* /profʊnd/, *comparative* /kɒmpAr/, *decision* /dekId/

(4) tensing before *-ity*, *-ic*, *-ial*, *-ian*

$$V \rightarrow [+ \text{tense}] / \left[\begin{array}{c} \text{---} \\ -\text{high} \end{array} \right] \text{C}_1^1 + \left[\begin{array}{c} -\text{low} \\ -\text{back} \\ -\text{cons} \\ -\text{stress} \end{array} \right] (V)$$

e.g., *variety* /væri/, *algebraic* /æljɛbræ/, *managerial* /mænæʒer/, *Canadian* /kænæd/

(1), (2), (3) also apply in nonlatinate environments, e.g., *content*, *lost* (1), *rapid*, *abolish* (2), *wilderness* (3) (cf. SPE:180–5).

2.1.3. On the other hand, the variability of stem final consonants before latinate suffixes with the initial high nonback vowel is effected by the processes which are non-native, i.e., Romance. The rules of Velar Softening and Spirantization apply in a semiproductive manner, i.e., exclusively in the latinate (Romance) stems, if we take the WFRs applying in latinate environments to be productive.⁶ They apply across /+/ as well as within a morpheme, e.g., *decide*, *success*, *general*, *publicity*, *partial*, *division*, *democracy*. It is only the Palatalization Rule (dental) which can be said to be fully productive as it applies both in foreign (not necessarily Romance) words, e.g., *factual*, *gradual*, *Russian*, and across /# #/, e.g., *did you*. The surface indication of non-nativeness in latinate complex words are thus palatalized velars before certain derivational suffixes. Sequences of a velar/dental /+/ suffix are recognized as non-native at the systematic phonemic level; a velar followed by a nonlow nonback vowel without an intervening boundary, however, cannot be regarded as foreign, since such sequences are found to occur in native words too, e.g., *kill*, *kennel*, *gill*. The three rules which account for stem final consonant alternations in latinate words are ordered among the major rules of the phonology, though as far as productivity is concerned, they do not coincide with the productivity of latinate WFRs (cf. Dressler 1977:24).

2.1.4. Different realizations of the underlying prefixes /æb=, æd=, coN=, iN=, sub=/ in latinate verbs with bound stems are taken care of by the rules of allomorphy and as such they belong to the lexicon, and not to the derivational morphology, of course. Further, it is noticeable that it is only this class of prefixes (i.e. latinate) which trigger the rules of allomorphy. They are not productive and are highly idiosyncratic semantically, i.e., neither the prefix

* See note 4.

nor the stem have any fixed meaning (cf. Aronoff 1976:12, 13). Their phonological behaviour is regular, but the placement of /=/ is a morphological matter. It is evident that latinate verbs with prefixed bound stems constitute a group of items, each of which must be entered separately in the lexicon. It is an empirical question to what extent the morpheme constituents of such verbs appear recognizable to a speaker. Most probably, in spite of a set of regular morphological alternations that can be associated with the verbs in question, the recognition of the underlying /=/ will vary from speaker to speaker, depending on the degree of his "linguistic sophistication" — a situation often encountered in the analysis of assimilation of loans (cf. Holden 1976:132). The reasons why latinate verbs with bound stems and prefixes are different from other verbs are both morphological and phonological. The idiosyncrasies of their morphology have been discussed above. Phonologically, they too exhibit a rather unusual feature, namely, the varying depths at which the underlying vowels and consonants are represented in the class of latinate prefixes.⁷ For instance, the consonant in /æd=/ has four different reflexes, i.e., *attest*, *assume*, *allege*, *accede*, which can be accounted for by some sort of prephonological assimilation rule in consonant clusters which involves quite a complex change (voice and point of articulation) and is moreover exclusively restricted to this and not to any other contexts. The vowel is not much "deeper" than its surface reflex. Once again, it becomes evident that vowels, unlike consonants, are entirely taken care of by the native rules. Prefix as well as stem final consonants are derived by means of rules which make reference to morphological categories, are nonproductive, and do not fall together with the native system of rules.

2.2.1. The class of latinate words in Polish is very different from the native vocabulary for both morphological and phonological reasons. Each latinate word has a separate entry in the lexicon and its compositional character is recognizable only because of the existence of a set of regular morphological alternations which phonologically are by no means native, e.g., *destrukcja* — *konstrukcja* — *struktura*, *dezorientacja* — *orientacja*, (vs *decyzja*, *desperacja*), *inteligent* — *inteligencja*, *desperat* — *desperacja*, *wariat* — *wariacja* (cf. the native suffix attachment in *wariactwo*). The WFRs which account for the morphological structure of the latinate formations in Polish are placed outside the native derivational morphology, are part of the lexicon, and are only used passively, i.e., to motivate the structure of the words contained in the lexicon. Each item belonging to this class must be learnt separately as the latinate WFRs are totally unproductive in Polish.

⁷ As pointed to me by Cygan, this is to some extent true about the underlying representations of latinate morphemes in general.

2.2.2. The phonological behaviour of Latin loan-words in Polish involves more interesting phenomena than their morphology does. Most important, it is very likely that they involve rather "shallow" underlying representations, compared with their English equivalents. This is an obvious consequence of the inapplicability of the native deep phonological rules in *latinate* environments; i.e., there is no interaction of native and non-native rules except before native derivational suffixes which attach freely to *latinate* strings. To illustrate this point we may assume that the underlying representations of *akceptacja*, *asysta*, *sukces*, *sugestia* are /ad=kept+/, /ad=sist+/, /sub=kes/, /sub=gest+/, and then try to derive their phonetic representations by means of rules similar to those in SPE.

U R	/ad=kept+/ Assimil.	/ad=sist+/ as=sist	/sub=kes/ suk=kes	/sub=gest+/ sug=gest
Velar Palat.	ak=kept	-----	suk=ces	-----
Clust. Simpl.	-----	asist	-----	sugest
i → i	-----	asist	-----	-----
D R	[akcept+]	[asist+]	[sukces]	[sugest+]

We are faced with a complication brought about by the inconsistent application of the rule whereby velars become palatalized. The underlying voiceless velar does palatalize, while the voiced one does not. The only way to account for these facts is to assume that, unlike in English, the prefix/=stem initial consonants are nonderived in these words in Polish, and thus *sukces*, *sugestia* are entered in the lexicon with the underlying /c/ and /g/ respectively. Consequently, such shallow underlying representations do not allow /=/ boundary between the prefix and the stem, which in turn rules out the regular occurrences of the prefixes /ad=/, /sub=/ at the underlying level. Further, the complex morphological structure of the words in question becomes 'blurred' for the reasons which can be claimed to be phonological. A similar situation is encountered in the case of nonalternating initial /c/'s before a front nonlow vowel in *latinate* as well as native words, e.g., *Cicero*, *Caesar*, *cebula*, *cegła*, *cecha*. The adoption of the Latin names 'Cicero', 'Caesar' as [cicero], [cezar], though German based, conforms well to the SPCs of Polish and does not imply any phonological processes. Because it seems unlikely that Polish nonalternating initial /c/'s before a front nonlow vowel are derived from underlying velars, it would be also incorrect to derive phonetic [c]'s in Latin loan-words from the underlying /k/ via the 2nd Palatalization Rule (cf. Gussmann 1978: 82).

Another argument in favour of the absence of native phonological processes applying across morpheme boundaries in *latinate* formations in Polish can be adduced from the analysis of words ending in *-encja*. It can be demonstrated that the phonological processes across /+/ in Polish *latinate* formations are

not part of Polish phonology. To illustrate this point one might consider the derivation of the word *magnificencja* against *inteligencja*.

U R	/magnifik+ent+ja/	/intelig+ent+ja/
Velar Palat.	magnific+ent+ja	-----
Dental Palat.	magnific+enc+ja	intelig+enc+ja

As has been observed in *sukces*, *sugestia*, the voiced velar /g/ does not palatalize in these words. Again, it is an empirical question how the words with the phonetic [c] before [e] come to be lexicalized when no alternation is involved. It may turn out that most such sequences must be lexically entered with an underlying palatal rather than a velar. The word *sukces* cannot be related to any words that exhibit the *k~c* alternation. In the case of *magnificencja*, the lexicalization with either the underlying /k/ or /c/ may vary from speaker to speaker depending on how much psychological reality lies behind the affix /+ik/. A "learned" speaker should be able to relate the phonetic [ic] to the underlying /+ik/ on the basis of such forms as *magnifikacja*, *gloryfikacja*, etc., but with other speakers the lexical entry of the word in question will involve a more shallow representation.

2.2.3. So far it has been observed that the rules which apply across /+/ in latinate words are non-native, or, in other words, no native rules have been found to apply across /+/, if /+/ is not a point at which foreign and native phonological material come into contact. Therefore, it seems that there is a good deal of phonological motivation involved in the presence of /+/ before latinate affixes. In addition, nominals ending in *-cja* (underlying stem final /t+/ja/) carry two surface markers of foreignness, namely, the 'hard' affricate [c] before the palatal semivowel /j/, and the sequence of /j/ plus a vowel. The above sequences violate the SPCs of Polish, nevertheless they have been adopted as a consequence of a great impact of a large number of Latin words with 'hard' coronal obstruents before /j/, and monosyllabic suffixes of /jV/ type (e.g., *-ia*, *-ja* *-ius*, *-iusz*) upon Polish phonology (cf. Safarewicz 1969:58). Before this happened the Latin suffix *-ia* [ja] had been pronounced as disyllabic [ija], e.g., *tradycja* [tradicija]. The monosyllabic rendition of *-ia* is a 19th century innovation, but still, in a synchronic description the phonetic strings with 'hard' coronal stridents before [j] with the intervening /+/ are evidently non-native, e.g., *akcja*, *okazja*, *pretensja*, etc. The native rule of surface palatalization before /j/ does not apply across /+/ in latinate words. In conclusion, we observe that native deep phonological rules do not apply across morpheme boundaries in latinate formations in Polish. Non-native strings which are morphologically marked [+latinate] undergo a small set of phonological rules which, on the whole, are non-Slavic, and of course do not apply in other than latinate environments.

2.2.4. On the other hand, the morpheme boundary does not prevent palatalization of *Latinate* stem final velars and dentals if the conditioning factor is a nonlow nonback vowel initial in a native morpheme. To put it differently, stem final velars and dentals undergo the native processes of palatalization before native inflexional and derivational suffixes beginning with a nonlow nonback vowel irrespective of their native or non-native status. For example, the underlying *Latinate* stem final /k/ softens to [č] before the adjectival suffix /+in+/ (e.g., *elastyczny*, *publiczny*, *poetyczny* and their cognate nominals), and to [č] → [c] before the adjectival suffix /+isk+/ (e.g., *poetycki*, *katolicki*). The underlying stem final dental /t/ palatalizes to [c] in the context of /+isk+/ (e.g., *literacki*, *patronacki*). It is important to note that the rules which apply both in native and foreign environments are usually the strongest or most productive ones in a given system and they account for the adjustments of foreign words to the constraints of the target language. Incidentally, /+/ is not the only position in *Latinate* strings where the productivity of certain native phonological processes may become manifested. As far as low level rules are concerned, it can be shown that they tend to apply across boundaries as well as within morphemes. Surface palatalization before /j/ applies to dental plosives in *Latinate* words irrespective of /+/, e.g., *partia*, *tragedia*, *tiara*, *Diana*, so it does not constitute any phonological indication of an underlying boundary. Vowel nasalization in Polish shows itself to be productive in optional nasalization of mid vowels in *Latinate* words where the sequence vowel—nasal is not divided by /+/, e.g., *cenzura*, *pretensja*, *precedens*; but where the /=/ boundary is 'felt' to occur after certain *Latinate* prefixes ending in a nasal, this tendency is rather suppressed, e.g., *kon=flikt*, *kon=spekt*, *kon=glomeracja* (cf. Rubach 1976: 3). The pronunciation [kōw̃flikt], [kōw̃spekt], [kōŋglomeracja] is regarded to be substandard; however, the form [kōw̃serva] is frequently heard vs [kon=servatista] as a result of different rates of assimilation of these words in Polish. It can be also observed that segments of one word can show different rates of assimilation. In *tragedia* the sequences [ge][+ja] violate the native SPCs of Polish, but the segment /d/ undergoes some adjustment in that it softens to [d'] before /j/. Once again, Chomsky and Halle's assumption that nonphonological features of an item are evenly distributed over the segments of this item, appears to be incorrect.

3. Conclusions

3.1. It has been shown above that both derivational morphology and phonology ought to be taken into account in the analysis of the compositional nature of *Latinate* formations in English and Polish. Word-based WFRs have appeared to be only partly relevant to this study, since the major part of phonological variation in the forms under consideration is brought about

by a specific non-native set of allomorphy rules. On the other hand, the existence of latinate WFRs in the system of morphology helps the linguist recognize the status of morpheme as a real linguistic entity relevant to a generative description. It has been noted in 2.1.1. and 2.2.4. that the nonphonological feature [—native] is not a property of a lexical string, since the segments of the string can show different rates of assimilation; it is, beyond any doubts, a feature pertaining to morphemes, not words or segments (cf. foreign features in each morpheme of *tragedia*). Phonological alternations can be governed by an abstract morphological feature like [+latinate] in the way that all morphemes marked for that feature trigger the application of certain phonological rules. It also follows from the analysis of some pieces of English and Polish data that phonology does not always provide sufficient clues as to the underlying boundaries in latinate words. In most cases boundaries are the matter of allomorphy, but with more assimilated foreign strings the occurrence of a morpheme boundary is motivated by the applicability of native phonological processes that normally occur across this boundary in native words.

3.2. As for the actual features that make the latinate class of words different from the native vocabulary in English and Polish, they can be summarized as follows.

English. Morphologically, this class implies a foreign subsystem of WFRs coexistent side by side with the native system. The WFRs, either productive or nonproductive, accounting for the members of this class are sensitive to the morphological feature [+latinate]. There also exist a specific set of allomorphy rules that can be associated with this class. Very few of the major phonological rules are sensitive to the morphological feature [+latinate]. Apart from this, the latinate items in English are phonologically no different from native words.

Polish. The words included in the latinate class are non-native morphologically as well as phonologically. The WFRs accounting for latinate formations in Polish are totally unproductive. Phonologically, the latinate words in Polish enter a system of alternations which being evidently non-native are accounted for by minor, possibly allomorphy, rules, which do not fall together with the native major rules. There is a partial overlap between the phonology of latinate words and the native phonology, i.e., latinate words are likely to undergo the most productive low level native phonological processes.

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