STRESS IN POLISH — WITH SOME COMPARISONS TO ENGLISH STRESS*

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In discussions of languages with fixed stress, one will find Polish given prominent position. It is taken as exemplary of languages with penultimate stress. Indeed, there are numerous alternations in stress, such as język, języka, języków, which seem to show that regardless of how many syllables are added to the stem, it is always the penult which gets the stress. I will try to demonstrate that stress in Polish is more complicated than may at first sight appear, and has some interesting parallels with English stress rules.

The most obvious rule which one might suggest for assigning stress in Polish is rule (1):

1) $V \rightarrow [\text{stress}] | - C_o V C_o ^\#$.  
   It is immediately apparent that rule (1) must be modified to account for normal monosyllabic words in Polish, such as pięć, być, etc., which are not stressless, but rather receive stress on their only vowel. Thus, we must allow rule (1) to stress word-final syllables as well:

1') $V \rightarrow [\text{stress}] | - C_o (V C_o) ^\#$.  

There are a small number of foreign words in Polish which are stressed on the antepenultimate syllable, such as matematyka, prezydent, statura, język, kaliko, repuls, and operet. In every such case of a foreign word stressed on the

* Over a vowel will indicate primary stress; will indicate secondary stress. Vowels irrelevant to the exposition will often not be marked. A primary stressed o will be written o. Orthographic <œ> will be written [œ] when stressed and [œ] when unstressed. A tilde (~) over a vowel indicates nasalization. Thus ~ — nasalized (a), but — orthographic symbol, not necessarily nasalized. The author's knowledge of Polish is limited, and handbooks have been extensively relied on. All the more welcome, then, have been the extremely helpful and insightful comments of Dr B. Marok, M. Pakosz, B. Nykiel, H. Kurdeja, and others; trenchant discussion at the conference by Dr L. Biedrzycki, Dr J. Rubach, Dr W. Święcicki, Doc. dr J. Cygan, and Prof. dr hab. J. Fisak has greatly improved the paper. The author hereby exonerates all of them from the errors still remaining, however. It is hoped that the paper will nevertheless be suggestive.

1 Cf. e.g., Rompert 1971: passim.
antepenult, it is also possible for the word to be stressed on the penult (at least in some circles or circumstances), indicating the strong attraction of stress to the penult in Polish, and of course the tendency for languages to regularize exceptions. There are an even smaller number of native words antepenultimately stressed: eyes, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָם, אָדָמ

With respect to the innermost parentheses in rule (1'), we should observe that in nearly all foreign words which permit stress to skip over the penult, the penult is weak; that is, it is a vowel followed by a single consonant (vowel) sequences are normally not permitted phonetically in Polish.

Such rare examples as Wąszyngton (often Wąszyngton) are in many varieties of Polish felt to be virtually pronounced in English, and reinforce this pointed: they are like English words such as partie pronounced with a uvular (French-like) r which are considered to be pronounced as in French, even if the other segments in the word are English-like and un-French; likewise English Bach pronounced with [x]. In those varieties of Polish where Wąszyngton is the normal pronunciation, we must account for the stress on these words: perhaps the restriction of rule (2a) below to a single consonant after the penultimate vowel is too strong; nevertheless, words like Wąszyngton are clearly exceptional. More examples must be examined, however, before a principled decision can be made on this issue.

Thus, we can modify rule (1) once more, as follows:

2) MSR: \[V \rightarrow [\text{stress}] - C_0(V C_0) V C_0^{\#}\.

Rule (2) (what we will call the Main Stress Rule) is an abbreviation for the following three ordered rules (which are, of course, mutually exclusive — cf., the discussion of disjunctive ordering in Chomsky and Halle 1968):

2' a) \[V \rightarrow [\text{stress}] - C_0 V C_0 V C_0^{\#}\.

b) \[V \rightarrow [\text{stress}] - C_0 V C_0^{\#}\.

c) \[V \rightarrow [\text{stress}] - C_0^{\#}\.

Rule (2a) is of course a minor rule — that is, only those exceptional words in Polish which are marked to undergo rule (2a) do in fact undergo it. Rule (2c), with the exception of a very few interjections (e.g., akurat, galóp — see below) applies only to monosyllables. Note that even these finally-stressed words can only be so stressed when used as interjections — cf., below, and patafaj, 'the noise produced by a galloping horse', etc.

In order for rules (2) to apply properly, we need various formal mechanisms. Chomsky and Halle (1968: 173) give conventions for marking words to undergo or not undergo rules. As noted in Levy and Fidelholtz (1971: 68ff) and elsewhere, these conventions must be modified for minor rules, such as (2a). That is, SPE convention 1 marking all words as [+rule n] must be modified to do so for all major rules n, but for a minor rule m, all words must be marked

[---rule m]. Then, by their convention 2 (appropriately modified), all markings on words are correctly changed to reflect the lexical (i.e., idiosyncratic) phonological properties of words. Thus, effectively, all vowels in each word undergo rule (3) (i.e., SPE Convention 1):

3) \[V \rightarrow [\text{rule (2a)}]\.

and those few words which do undergo (2a) then copy their lexical mark [+rule (2a)] onto the word by SPE Convention 2, thus superseding rule (3). (In some cases, as below, the lexical marking [+rule (2a)] is supplied by a lexical redundancy rule). Irregular words of the type akurat must simply be marked [-Rule (2b)], and they will then automatically undergo rule (2c).

Nearly all foreign words ending in -yka or -ika are (or may be) antepenultimately stressed: afryka, aktywka, klima, grafika, etc. But compare motyka 'hoe' [**motyka], spotyka 'he meets', mątyska 'bone' [mątyska]. Therefore, we have the redundancy rule (4). The morpheme boundary is to keep the rule from applying to Kostarik 'Costa Rica'.

4) \[V \rightarrow [\text{rule (3)[+Foreign]} C_0^{\#}, y, y^{\#}\].

Normally in Polish, such vowel sequences as aw, ex are pronounced with a glided final element [aw], [ex]. The rule turning underlying [i] into [aw] — i.e., [y] — must come before the stress rule (2), for we find such foreign words as terapeutyska, propedeutyska [tɛrɛpɛutyska], Note that the glide formation is optional in some cases, and especially so where it would tend to make the stress more regular. E.g., fauna [fasnɔ] or fauna [fasnɔ]. While we do occasionally find the pronunciation (i) propedeutyska, it is definitely rarer than fauna, since the former is more regular than propedeutyska (i.e., stress is still antepenultimate). Note the 'peeking' quality of the glide formation rule in this case, indicating that such phenomena should be looked into more carefully. As mentioned above, all such antepenultimately-stressed words may colloquially or nonstandard (at least) have a variant stressed on the penult. But the instability of the antepenultimate stress is also clearly seen in the phenomenon that frequently-need (i.e., more common and less foreign) words tend towards the variant with pre-final stress (cf., Fidelholtz 1975) for a discussion of word frequency effects in English). A clear example of this is the word polityka. In the meaning ‘politics’ it is usually stressed polityka. But in the more ‘common’ or ‘folk’ meaning ‘practical policy’ there is a strong tendency for it to be stressed pol prestigious. Indeed, even the newspaper Polska, presumably the former meaning is quite often referred to as Polskie, doubtless under the influence of its commonness or frequency. The same holds for such pronunciations as matematyka, etc.

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*Note that our account of words like matematyka also suggests a partial explanation for the regular behaviour of forms like matematyki. The stem ɛ is in the correct environment and gets marked ultimately [+rule (2a)]. Nevertheless, since it is in the
It has not always been noted in discussions of Polish stress that Standard Polish words of four or more syllables always have a secondary stress on the initial syllable (but cf. Dluzska 1976: 266) and Wierczowska (1971: 217f). Thus we have autóbus, but autóbusowy, never *autóbusowy. Therefore, it appears that we need an initial stress rule.

5) INITIAL STRESS V → [stres] / # C₀.

Cf. Halle (1973b), where it is argued that stress subordination — i.e., lowering of stress on other stressed syllables in a word — occurs only for rules reassigning [stres] to a vowel which already has [stres]. Note that rule (5) could be combined with rule (2) (MSR) only in an iterative format. That is, rule (2) applied iteratively (from the end of the word or from any stressed syllable) would always eventually stress the first vowel in the word. This implies that long words in Polish have several stresses. While there is some evidence that this is so (cf. Dluzska 1976: 27) and the words Konstantynopolitanscykiewicz[stres] / konstytucyjnymo-politycznymo-wielkim, it seems by no means clear (note that the stress pattern of the examples suggests that they fourth syllable from the end, the structural description of (2a) is not met and it does not apply. Something similar may go on in some oblique cases of such words as rząd lepszych/przywolnionych, univerzytelny/universytet, etc. Still, the problem is an important one to look at, and we have only a partial solution of such cases at best. Note also that words derivationally related to irregularly-stressed words are always regularly stressed: 

Another possible way to handle such cases would be to postulate a word boundary (#) after the k of the -yk/ -ka. Of course, then the stress would automatically fall on the ending (second syllable before the #). A redundancy rule for certain deletion cases would then eliminate the #. With our present understanding of Polish stress, this is merely an ad hoc solution, but note that the -a ending does seem to be discrete from the stem in general in Polish: dziecęta, but dziecęta, where independent evidence (cf. Gussman 1973) suggests a -a boundary before the diminutive ending. Note that the -a follows the diminutive *dziecęta. Of course, there seem to be no plausible boundaries in such words as univerzytelny, and native words like kotówka show that the feminine -a cannot normally be preceded by a word boundary.

The words ending in -yjek-ięta have yet another peculiarity which bears commenting upon, and is doubtless related to the foreign flavor they have. This is namely the distribution of the endings -skiejka, which is quite regular: -ska occurs after velars (lęskie, osłonka, etc.), but without any examples with -żyko), labels (posłanka, posłonka, etc.) of the sort, while the etymon and the forms from it are: the nominative I (lęskiego, osłonki), while -ska occurs after other obstruents (aktywista, osiłona, etc. from -ska), fizyka, kierunkowa, etc. While this distribution is perfectly regular, it is quite peculiar. The principle seems to be a) make the word as much as possible like the pronunciation of the word in the donor language, but b) without violating the sound pattern of Polish. The Polish down to say adding 'ska', unless the i-final palatalization (cf. Gussman 1973) would affect one of its more spectacular changes (e.g. c - s, s - z, s - z, s - z, s - z). This 'output condition' is not characteristic of foreign words in general, but of this ending in particular. Thus, we find such words as sikasty, zambési, bórko, bobik, działaj 'bloody revenge', etc. This curious output condition is likely to prove fruitful for further study.

are stressed like several shorter words, rather than iteratively), so we have preferred the separate formulation of rules (2) and (6). Note that the relative order of the two rules as formulated is indeterminate. Such compounds as dlaoko-biżyny 'long-distance' (cf. Orsza 1974: 133) should be analyzed as dlaoko-# biżyny, in contradistinction to the single # separating syllables from stems (see below).

After MSR and INITIAL STRESS have applied, rule (6) (what we will call the Nuclear Stress Rule) lowers all the stresses in the word except the last one:

6) NSR [stres] → [stres] / [-stres]₀.

Note that rule (6) can be extended to sentential contexts, much like the English Nuclear Stress Rule (cf. Orsza 1976b). Wierczowska (1971: 217f), cited in Orsza (1974: 133) suggests that current Polish tends to reverse the positions of the stronger and weaker stresses, e.g. jeździeckie małpa. In such a case, we would have to modify the NSR, either to stress the first syllable,

6') [stres] → [stres] / [-stres]₀,

or to stress the penultimate stressed syllable:


(6') is obviously a more likely rule than (6''), but one would have to examine how words with two secondary stresses are pronounced in these varieties of Polish before deciding. Note that the environment of (6') is, in effect, the mirror image of the environment of (6).

We must also have rule (7) (DESTRESS) to eliminate stress on syllables occurring immediately before stressed syllables:

7) DESTRESS V → [-stres]₀ C₀ [+stres].

This rule accounts for the difference in stress in the first syllable of autóbus and that of autóbusowy; likewise Nalęczewy/NalezačewSY.8

Such a treatment, including a rule like (5) (INITIAL STRESS), also accounts for Polish dialects which have initial stress only (cf. Mańczak 1975: 24): Mańczak suggests this as a step both historical and geographical between the free stress dialects like Raszubian and "Standard Polish." Thus, rule (5) seems to be historically prior to the MSR. As mentioned above, rule (5) synchronically could just as well come before the MSR. It is of interest that Mańczak, after noting these dialectal facts, fails to point out that INITIAL STRESS operates even in modern Standard Polish (cf. Dluzska 1976).

All of the stress rules we have discussed must come very late in the rule ordering, after most consonantal changes, vowel deletions and epentheses, etc. Thus pieszczek but pieszczekin; bez comunità (see below), etc.

8 Words like autóbusowy are also a strong argument against a stress cycle below the word level in Polish, since we would have severe problems in eliminating the stress on the second syllable remaining from a putative earlier cycle on autóbus.
In addition to the words like Ameryka and akurat discussed above, there are a number of other real and apparent exceptions which bear comment.

One little-discussed class of exceptions includes some interjections, such as patteje, galop; akurat, korékst; jjo, jha ([jah] or [ha]), ejh 'shnek'; müh ([fmüh]) 'yes'. The last can be quite variable in both Polish and English. If N represents any nasal or nasaled segment (m, n, nasalized vowel, even at least in English-n or l), then the sequence: glottal stop — syllabic N — voiceless N — stressed syllabic N represents an instance of the positive interjection. If the voiceless N is changed to another glottal stop, and the intonation appropriately modified, the negative interjection will result. Some segments like m, n, and shwa are more natural in this context, but any nasalized segment will work. Interjections in all languages may and often do violate the phonological principles of the language. While such violations are the norm and thus be expected, as the interjections get removed further from their original emotive function and more integrated into the system of the language, their phonology tends to get regularized. Thus, while they remain interjections, we would expect no pressure from the MSR on them to regularize their stress. But if we were to coin a verb aha! 'to say aha!', surely it would be stressed āha, and not *ahaft. Observe as well that in such a verb, the irregular nasal vowel would be nasalized: āhā, not *āhād. In this connection, it is interesting to note some uncertainty among native speakers as to the correct form of the noun for aha:

8) Ona powiedziała dużo aha! 'she said a lot of aha's' (also: 'a lot of ahh's')

but

9) Jest dużo aha w tekście 'there are a lot of aha's in the text'. Another class of apparent exceptions consist of the forms like (10):

10) a) pracowalaby 'I would work'
   b) pracowalśmy 'we worked'
   c) pracowalsieć 'you worked'
   d) popracowaliby 'they'd better work'
   e) (pop)pracowaliby 'you'd better work'

Forms (10a, b, and c) are especially bad because they violate the condition in rule (2) that only a 'weak cluster' may be skipped over by the rule in the exceptional words. Indeed, in some similar forms, stress may even be on the fourth syllable from the end:

11) popracowalibyście. 'Why don't you (pl.) do some work?'

Several methods might be suggested to handle these cases: i) a redundancy rule to mark such cases as irregularly undergoing (2a); ii) a word boundary before the offending ending; or iii) that the i of the ending is phonologically [j], which is neutral to stress, and later changes to [i]. Suggestion (i) is quite weak in that it cannot account for the pre antepenultimate stress in (11).

(iii) could in any case only handle some of the exceptions, since (10a) has no [i] in the ending; it would also derive incorrect stress in such forms as pracowali. Therefore, we suggest that there is a word boundary before the ending. There is a good bit of syntactic evidence to support this analysis. E.g., corresponding to (10), we find in (12) (with the same meaning in each case):

12) a) ja bym pracować
   b) myślać pracować
   c) wycieć pracować, or (archaic) wy żeć pracować
   d) omi by popracować
   e) ty byś (pop)pracować and corresponding to (11):

13) może byście popracować.

These facts clearly show that syntactically the elements in question are independent, and that therefore we have every justification for positing a word boundary before them (cf. Ozga 1974: 132).

The usually archaic particle że does show up in contexts like (14):

14) co żeś mu powiedział że taki smutny? 'What have you told him to make him so sad?'

It is again interesting that despite the syntactically well-motivated word boundary present in these cases, there is still a strong tendency to regularize them phonetically with 'penultimate' stress. In the light of our comments on rule (2a) above, it is noteworthy that this attraction of stress to the phonetic penult is strongest when that penult ends in two or more consonants, as in e.g. pracowalśmy. In fact, *pracowalabym is nearly impossible, where the penult ends in but a single consonant. Likewise, the particle byd does not change the position of stress in the word to which it is attached:

15) a) popracyj 'you'd better work'
   b) popracowaliby 'you don't better work' cf: popracowal 'he worked'
   c) popracowaliby 'you'd better work' cf: popracowala 'she worked'

Marek has noted that the regularization of stress is as well dependent on rhythmic position. Thus we normally find

16) umiowniścić go 'you exonerated him'

but often

17) umiowniścić {tamtęgo} 'you exonerated {that guy}
   {du} 'both of them'}

Another instance of the dependence of stress on rhythmic position is seen in the saying

18) Uści wmarci marci, a sam głu piak świnia 'the blind leading the blind' [lit.: 'a marion taught a marion, and he himself was stupid as a pig']

Observations due to Dr. B. Marek (personal communication).
Thus, assume that that they are separated from the words they are attached to by a single #, rather than by the double # which normally separates words one from another (cf. daleko # biśnię). We may then keep such elicit from being stressed by restricting the stress rules (i.e., MSR and INITIAL STRESS) to the environment # X. This seems the most appropriate way of handling such examples. Nevertheless, we must explain why we get siadem # set, but siadem # dziśsięt. ‘Clitics’ (i.e., those words which lose a preceding word boundary) are seemingly restricted to monosyllables (cf. Osga 1976a). This would suggest that the stressless bisyllable byście in (11) is actually #by #ście, and this is indeed quite plausible, and has a good deal of syntactic justification. Osga (1976a: 139), following Topolniska (1981), points out that in certain ‘set phrases’ consisting of a preposition and a monosyllabic noun, the noun does not bear stress, e.g., dó smu ‘ready for bed’, ná d[ży] ‘down’. Since these are clearly common, frequent collocations, which types in other instances evidence weakened boundaries, the analysis with # rather than # is thereby provided further support. Note that the exceptionality of zā mnię, in this interpretation, lies in mnię and not in za. Thus we get za paś # for ‘a dog’ from zā paś quite regularly by DESTRESS (Note that rule (7) (DESTRESS) must therefore permit a word boundary to intervene between the two syllables). Monosyllabic verbs behave similarly: nē gra ‘doesn’t play’, nē ma ‘doesn’t have’, but nē mamy ‘we don’t have’.

Gaertner et al. (1968: 88) provide some examples indicating that prefix boundaries (cf. zā mnię) may only be skipped over if the prefix is nonforeign (or, possibly, only if it ends in a vowel and is monosyllabic):

22) arc# #lă #a very lazy person’, arc# #lă #arch-villain’, arc# #mistrz #a master’, els # mă #ex-husband’, wice # br[dj] # ‘viceroy’, wice # mistrz # ‘runner-up’.

So we should appropriately modify the elicit rule discussed above to account for these cases. There are many further complications in these phenomena which cannot be gone into here. (Note that Polish also has proclitics—e.g. # by #—cf. Szober (1962: 24). Note also the caution of Zwick (1977) that elicit phonology is very often irregular.

Of the examples considered in this paper, rule (7) only applies to delete stresses which have been applied by rule (5) (INITIAL STRESS). Unless other examples can be found demonstrating the necessity for rule (7) in other environments (e.g., if citation is to be handled by an extension of rule (7), it might be preferable to eliminate rule (7) and place a condition on rule (5) that it only applies before an unstressed syllable in the same word. In that case, we could have rule (5) assign [3 stress] directly, and also eliminate rule (6) (NSR). This would as well require the MSR rule (2) to be ordered before rule (5), to keep the revised rule (5) from applying in immediate prestress.
syllables. Note that a rule very like (8) is necessary in any case above the word level (see below). Eliminating DEStress would also make it much more difficult to handle the rhythmic stress phenomena discussed above within this framework, which may after all be correct. Another use we have made of rule (7) is to destress cliticized monosyllables. Zwicky (1977), however, gives evidence that in general, it seems universally correct, not that cliticized words are destressed, but rather that unstressed words are cliticized.

All things considered, then, it seems appropriate to modify rules (2) and (5) and to eliminate rules (6) and (7) (although we will need a rule similar to (6) in any case—see below). But further research is necessary to confirm or modify this decision. The rules we have discussed, then, are the following (rules (4) and (3) are lexical—or morphological—rules):

23) 4) $V \rightarrow [-\text{rule (3)}] / + \text{[Foreign]} C_0 [i, y] \text{ka}$

3) $V \rightarrow -\text{rule (2a)}$

2) **Main Stress Rule (MSR)**

$V \rightarrow [\text{stress}] / \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \# \#
światu, szczęśliwego—may have a sort of phonetic partial explanation); and (2) interjections stressed on the final syllable. With the exception of monosyllabic words, I know of no noninterjections with final stress. This seeming noncompatibility of very similar rules in different languages has been discussed before. Cf. Fidelholtz (1973: 90) for a Spanish/English example, and Guesmann (1975: 121) for a different Polish/English example.

The integration of secondary stress phenomena into the description of Polish stress allows us to account for a wide range of facts about Polish stress. The distribution of dialects with free stress and those with initial stress can be readily explained with such an integrated description. The treatment of elides and clitic-like monosyllables can be simply treated as an example of stress deletion. Likewise, we can account for many of the facts discussed in Dogil (forthcoming) by merely assuming that contrast tends to wipe out the normal main stress, or at least subordinate it to that of the contrasted syllable.

It appears to be a problem for linguistic theory that there is nothing in the formal description of Polish stress which would indicate that Polish is a "penultimate-stress" language, as compared with the similar rules in English, which is essentially a free-stress language, in the sense in which that term has been used in Slavic studies. Resolution of this problem may likewise shed light on the historical relation of Polish stress to that of the other Slavic languages generally. Cf. in this regard the analysis of Russian stress in Halle (1973a), and more generally Kiparsky (1973).

There are many further stress phenomena which we have not examined, especially in the stressing of phrases. But if I have been able to indicate that Polish stress is an interesting area of study, I will have accomplished my purpose.

APPENDIX

Example words and affixes in the article:

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<tr>
<td>akustika</td>
<td>49, 50n</td>
</tr>
<tr>
<td>Aranzka</td>
<td>50n, 52</td>
</tr>
<tr>
<td>arcyddm</td>
<td>55</td>
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<tr>
<td>arcyddm</td>
<td>55</td>
</tr>
</tbody>
</table>

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Biedrzycki (personal communication) points out that in vocatives a stress (or better intonation) peak may be found on the final syllable, with certain attitudinal meaning.
REFERENCES


Since submitting the paper I have consulted Comrie (1978) at first hand. He handles exceptional cases by making the rule (1) come second to stressing, which throws stress onto the antepenult. While his analogue to rule (2) comes somewhat close to capturing the penultimate nature of Polish stress than mine, the problem still remains.

Several more words like Washington have come to my attention: Luxembourg, Amsterdam, etc. The restriction on c in rule (3) may be too strong. We should perhaps substitute G, for the innermost c in rule (5) (cf. also 'axil').