One significant fact about Polish phonotactics is that no vocalic clusters are permitted within a single native morpheme -- either at the underlying or phonetic levels of representation. Borrowed morphemes, on the other hand, are permitted within a single native morpheme (e.g. *kwestią* 'question'). Both phonological and phonetic vowel sequences occur at prefixal boundaries in words of all categories (e.g. *kwestią* 'question', *plećą* 'blurred', *nauczyciela* 'teacher'). But at suffixal boundaries the occurrence of vocalic clusters is heavily restricted and limited almost entirely to words formed from foreign lexical material (both stems and suffixes).

In this paper, I attempt to analyze and explain the constraints on the occurrence of vocalic clusters as well as the strategies that the language employs to prohibit the violation of these constraints by loanwords.

The existing analyses of the morphophonological system of Polish convincingly argue that vowel sequences can appear in the underlying representations of words which words of all major lexical categories as a result of morpheme concatenation (3, 4). Rubach (4) claims that Polish permits, on the level of phonetic representation, the occurrence of vocalic clusters in nouns but not in verbs; in his analysis, any underlying sequence of vowels in a verb (except those in the prefixal position) reappears also in adjectives formed with the suffix *-ski* (phonologically /-isk-e/), as the examples below demonstrate:

(4) (a) kakao 'cocoa' (b) hoa 'hoa' kamea 'cameo' video 'video' idea 'idea' orchidea 'orchid' gwinea 'guinea' statua 'statue'

The nouns in column (a) are pronounced with or without the glide between the two vowels, but there seems to be no such option for the words in (b) in which the vowels are always pronounced as a sequence. The examples in column (a) are declinable, as opposed to those in (b), which do take appropriate case endings, at least in informal speech styles. These differences point to a greater degree of nativization of the words in the (a) group. The words in (b) behave as genuinely foreign words, both from the phonological and morphological points of view. They still have the status of monomorphemic words and therefore their vocalic clusters remain intact. Words such as *kakao* (personal name), *tgast* 'toast'.

Yet another piece of evidence comes from the case forms of some of the words under discussion. The locative case of the words *kakao* *status* is [kakale]. [statule], which is a nativized form of *kakao - kakanos* (dim.) *statua - statulwka* (dim.gen.pl.).

The glide following vowel-final stems appears also in adjectives formed with the suffix *-ski* (phonologically /-isk-e/), as the examples above demonstrate:


as well as the word *kafelka* - *kafel* 'coffee shop', which is a nativized form of *French* 'café'. The suffix employed in these derivations is the diminutive morpheme -*ko*, represented as /-k/ on the underlying level. Note that the glide occurs not only in intervocalic position but also pre-consonantically. If the glide were inserted by a phonological rule to break up a vocalic cluster, then it would have no reason to before consonants as well. Obviously, sequences such as *ak-*, *uk-*, *gl-*, *tal-* are permissible in Polish, as is demonstrated by such words as *brakot* 'to lack', *stukat* 'to knock' and those data in (5) as well.

The glide following vowel-final stems appears also in adjectives formed with the suffix *-ski* (phonologically /-sk-e/), as the examples above demonstrate:

(6) Dante dantejaki Galileo galilejaki Prometeus prometejaki

and the name of the famous street in Paris, the Champs Elysées, is transliterated into Polish as *Chopin*, *Eyls*.

The above analysis is motivated phonologically by the phonotactic constraints of the language. The nature of the glide appears to be determined by the quality of the stem-final vowel: the labiovelar glide [w] occurs after back vowels ([kakao], [statuwa]) and the palatal glide [j] after front vowels ([kameja], [ideja]).

The above reasoning inevitably leads to the conclusion that the glide is not inserted by a phonological rule, but is present in the representations of these words in their underlying representations, i.e., stems are consonant-final on both the underlying and phonetic levels. Consider further the data below, which offer support for this claim:

(5) kakao - kakakwko (dim.) 'cocoa' kaka[w]ek (dim. gen.pl.) kamea - kameajka (dim.) 'cameo' kameajek (dim. gen.pl.) statua - statuwka (dim.) 'statue' statuwek (dim. gen.pl.) orchidea - orchidejka (dim.) 'orchid' orchidejek (dim. gen.pl.)
It has been demonstrated that the stem which came into Polish as vowel-final have adjusted to the native phonotactic constraints by adding a non-vocalic segment at the end, which segment appears on the surface in some derivatives and some cases of borrowings to the native phonomorphological system; for these speakers, kakao has the same status as 3019 'wheel', which is a native word. In the intermediate group are the majority of Polish speakers. At the other end, there are those who maintain the glide (or, necessarily, [1] in some inflectional forms) through the entire pattern of the stem. For these speakers, kakaw has a relatively high frequency of usage, the diminutive form kakawa is gaining popularity among those speakers who do not necessarily consult a dictionary before uttering a word. The word kakaw is probably the most interesting of the loanwords discussed here because it displays the greatest amount of variation in its forms and pronunciations. This variation correlates with the extent to which the word is perceived as 'foreign' or 'native' by speakers. On the one end of the spectrum, there is the prescriptive pronunciation which peremptorily declares and prohibits the glide in any form; speakers with this attitude do not exhibit it. However, since kakog has a relatively high frequency of usage, the diminutive form kakawa is gaining popularity among those speakers who do not necessarily consult a dictionary before uttering a word.

The comparison of the data in (5) and (6) with (7) points to a morphological factor. The distribution of the intervocalic glide in some suffixes (the diminutive -ski, the adjectivalizing -ski-tek-/-), and the inflectional endings) does not attach to vowel-final stems that end in a vowel, and etymologically foreign stems ending in a vowel must adjust phonologically to comply with the constraint. What these suffixes have in common, and what distinguishes them from the suffixes used in the formation of the items in (7) is that they are all etymologically native. It comes as no surprise then that etymologically native suffixes which do not glide does not violate the phonotactic constraints of the language. The suffixes represented in (7) are all etymologically foreign except for -gwy, which nevertheless functions with the others and attaches freely to foreign bases (cf. zakadowy, 'cocoa' [adj.]; ideowy, 'ideological' [ideology]; kaskowy, 'of a case'; prometejski, 'prometic'; prometejska, 'Prometic').

The comparison of the data in (5) and (6) with (7) points to a morphological factor. The comparison of the data in (5) and (6) as opposed to (7), one is forced to consider an allomorphy rule that adds a consonantal extension to etymologically foreign stems when these stems are followed by etymologically native suffixes. Such a rule, even though phonological in form, is actually morphological in nature and applies prior to phonological rules. The exact status, form, and function of the allomorphy rules are extensively discussed in [1].

As expected, the process of adaptation of borrowings to the native phonomorphological system is not uniform for all items, the time of borrowing and the frequency of usage being the most crucial variables. Another important facts that appears to influence the rate of nativization of the loanwords in focus is the level of education of the speakers. The prescriptive phonological and grammatical adaptations are usually not with long and unobtrusive oppositions to neutral linguistic prescriptivists who insist on preserving the foreign status of loanwords by adhering to their original pronunciation (which is explicitly stated pronunciations) and prohibiting their declension. The more such discrepancies, example kakaw, for example, is still considered undesirable by Słownik Polsko-Polski (5) and the pronunci-

References