This paper compares acoustic features of (1) Polish and English glides before vowels, and (2) Polish glides in vowel-plus-glide sequences with English diphthong offglides. Contrary to traditional articulatory descriptions, the results presented, based on acoustic measurements and vector length calculations, do not reveal that Polish glides in vowel-plus-glide sequences are characterized by more extreme formant values than English diphthong offglides. The difference between English diphthongs and Polish vowel-plus-glide sequences is attributed to timing properties, which are shown to be relatively easily acquired by Polish learners of English, probably because of a universal tendency for the first element to be longer than the second one. Preliminary results, however, point to acoustic differences between Polish glides before and after vowels, the former being more consonantal than the latter.