## Context：Phonetics and phonology

Essentially：
－Phonetics is the study of the physical aspects of speech sounds：
－How speech sounds are pronounced（produced）$\rightarrow$ our focus
－Also speech sound acoustics（sound wave patterns），and how speech sounds are perceived
－Phonology is the study of how speech sounds pattern in the mental grammar of a speaker
－Which physically different sounds actually form distinct mental categories
－How sounds change their characteristics according to their phonological environment
－How consonants and vowels join together to form larger units of sound

Phonetics and phonology can help us answer questions like these：
（1）Why do Japanese speakers add so many vowels to borrowed words，as in makuddonaru्ud $\boldsymbol{\underline { o }}$ for ＇McDonald（＇s）＇？
（2）What is the difference in pronunciation between syuziN 主人＇husband＇and syuuziN 囚人 ＇prisoner＇？How about byooin 病院 ‘hospital＇versus biyooin 美容院 ‘beauty parlor＇？Why is it hard for some English speakers to make these distinctions？
（3）Why are vowels sometimes＂silent＂or＂whispered＂？Which vowels do this，and when？
（4）How is the sound at the end of the word nomimasen 飲みません＇not drink＇pronounced？ Are the consonants at the beginning and the end of this word＂the same sound＂？
（5）Why do only some of the kana symbols take dakuten（two superscript dots，as in taた $\rightarrow$ daだ）？Does the dakuten mark have a consistent function？
（6）What happens in verbs when we form the－ta form（past tense）or the related－te form （gerund）－why are there so many modifications to the sounds in these verb forms？
（7）Students of Japanese are taught that Japanese doesn＇t have＂stress＂like English，it has ＂pitch accent．＂What does this mean，and what kinds of difficulty does this difference pose for learners of each language？
（8）Why do some English speakers have trouble pronouncing the useful word kudasai 下さい ＇please verb；please give me＇？

