0) Command "<xxx>" not available for current selection
If you get an error similar to this your script wants to execute a command when no object is selected or the command is inappropriate for the selected (= highlighted) object. This happens often in loops are in connection with if-clauses, where you have forgotten to select the correct object before executing a particular command. Usually, the presently selected object is highlighted in the object list – simply add an "select <object>" command in your script prior to the erroneous command.

1) Formant measurement
It is important to set the number of formants in

To Formant (burg): time, nr_formants, max_freq, window_size, pre_emphasis

to *nr_formants* = 5 (sometimes 4 or 6 are used to analyse nasal or complex sounds), even if only 2 or 3 formants are evaluated. The reason is, that the underlying algorithm tries to model the complete spectrum with the given number of formants.

2) Using *To Spectrum…* in stead of *To Spectrogram…* (and then *To Spectrum (slice)…*)
To Spectrum… computes one spectrum the whole sound file. *To Spectrum (slice)…* computes a spectrum with a specific window size around a point in time.

3) Spectral parameters like Center of Gravity (CoG), standard deviation, skewness, kurtosis
It is important to first resample the signal into an appropriate range (for fricatives usually to a sampling rate of 16 kHz, i.e. 8 kHz bandwidth).
The reason is that the computation is done on the complete bandwidth (e.g. for a 44.1 kHz recording from 0 to 22.05 kHz). Relevant speech information will only be in the range of 0 - 8 kHz, i.e. the range from 8 to 22.05 kHz contains only 'noise' which will go into the computation, but does say nothing about the quality of the speech spectrum. Likewise, to compare a recordings with different sampling rates (e.g. 10 and 16 kHz), both must have the same sampling rate (e.g. downsampling the 16 kHz recording to 10 kHz).

4) Pitch
The standard setting in the command

To Pitch: step, low, high

is for *low* 75 Hz and it is for *high* 600 Hz to capture a wide range of voices. Often better results (i.e. less wrong values) are achieved if the pitch range is adjusted to the range of a particular speaker (but to leave some range for excursions). If, for example, the most values are in a range between 100 and 180 Hz for a speaker, then it might give less wrong values if the range is set to 75 and 250 Hz.

5) Excel sorting
If data is sorted in Excel, it is important to sort all related data (and not only one column).

6) How to find 'wrong' data?
(a) large differences between values in the same group (e.g. within F1 data in a specific vowel)
(b) no difference between clearly different sounds (e.g. F1 values for [i] and [a] do hardly differ in the measured data while the do differ in other research and must differ according to acoustic theory)

For formants values, a criterion is the bandwidth of the formants (which should be below 1000 Hz, it is actually often below 100 Hz).