This program is the one that is run for Simulation 5: Giroux & Rey (2009)

At the Matlab prompt (>>) type:

run\_TRACX\_giroux\_rey()

The program reads data from files in DATA1 which contains 12 different sets of sequences with single words containing between 1 and 4 syllables. There are a total of 18 different syllables, labeled ‘a’ through ‘r’. Thus, words can be ‘a’, ‘bc’, ‘opr’, etc.

The output produces an Excel file called ‘Giroux\_Rey.xls’

All parameters for the program are in set\_parameters.m

*Important note*: The output of the program records the errors for all of the words: ab, cd, efg, hij, klmn, and opqr. However, in the graph in the figure in the paper, we show only the evolution of the chunk klmn and its two “internal” subchunks, lm and mn (shown in yellow in the spreadsheet). The error for the leading chunk, kl, evolves in a way that is indistinguishable from the independent 2-syllable chunk, ab, that is never incorporated into a larger chunk. This issue is discussed in the paper.

This program (set for 5 runs, each with 12 subjects) takes approximately 17 minutes on a PC with the followings specs:

Intel® Xeon® CPU,

X5365 @ 3.00 GHz,

2.99 GHz, 3.99 GB of RAM