The Chinese University of Hong Kong
Department of Linguistics and Modern Languages
LING3204 Second Language Acquisition
Tutorial session for Lecture 5
First term, 2022-23

Task 1: Demonstration of the Simon task

The Simon task is a well-established experimental paradigm widely used to measure bilingual advantages in executive functions. It requires participants to press a button depending on the kind of shape—for instance, left button for circle and right button for square (https://icnp-exp3.netlify.app/). Or the response may be dependent on the color of a square (e.g., left button for a red square, right button for a blue square).

Trials are typically categorized as either 'congruent' or 'incongruent'. The trials are congruent if the stimulus appears on the side of the screen that corresponds to the response key. The trials are incongruent if the stimulus appears on the opposite side. Imagine that in a Simon task, a right button is to be pressed for square regardless of the location of the square on the screen. On congruent trials, the square appears on the right of the screen, same as the relative location of the response key. On incongruent trials, the square appears on the left, and this conflicting spatial information must be suppressed before responding, typically prolonging reaction times.

The response time difference between congruent and incongruent trials is termed the Simon cost. Smaller Simon costs indicate better ability to accommodate conflicting but irrelevant spatial information.

Task 2: Discussion

Do you agree with the information processing framework for SLA? Do you recall explicitly learning some linguistic forms, which gradually become automatized?