**CONFIRMED METHODS 22/1/16**

There are 3 stages to the experiment:

1. Identify a suitable starting language, in the middle of the ExL space
2. Subject such a language to 3 different types of engagement: L-only, E-only, L+E
3. Measure and plot the E and L of the languages that come out of these three different types of engagement

***Stage 1***

* Identify four candidate languages. These will all have the same scores for E and S. We have two plausible candidates from Adam’s experiment. SR to generate two further candidates.
* Run the L condition of the experiment on 4 Ps for each of the 4 languages.
* Pick whichever L is closest to the middle of the ExL space, considering proximity to mean and variance in learnability. Do this with harmonic mean (we expect at least one language to be close).

Total Ps: 16

***Stage 2***

* Ps randomly assigned to one of three conditions: L-only, E-only, L+E. Each one run 4 times i.e. 4 Ps in L-only, 8 Ps in E-only, 8 Ps in L+E.
* In L-only there are four rounds of training, followed by an Output Phase (see below).
* In E-only there are four rounds of communication, followed by an Output Phase.
* In L+E there are two rounds of training, then two rounds of communication, all followed by an Output Phase.
* The Output Phase consists of showing an image of one member of the stimuli set, with the question “What word describes this?”. For the L+E condition, the Ps will also see the dictionary they had used through the condition.
* This gives us **20** output languages. **Question**: *Do we choose one of the two output languages for each pair in the E-only and L+E conditions? Or do we test both output languages for L? The latter will cost more Ps, but seems sensible. Because more data.*

Total Ps: 20

***Stage 3***

* Run the L condition of the experiment on 4 Ps for each of the 12/20 output languages from stage 2.

Total Ps: 48/80

*Note that, depending on results, we may run an experiment 2 with L+E as 4 training then 4 communication.*