

## Research background

**Purpose:** This project aims to investigate English comprehension and production by Arabic and Chinese learners and how their first language affects their learning.

**Methods:** It adopts an experimental design, and combines psycholinguistics methods (i.e., eye-tracking) with traditional second language acquisition data collection methods (i.e., grammaticality judgements task) to study learners' implicit and explicit knowledge.

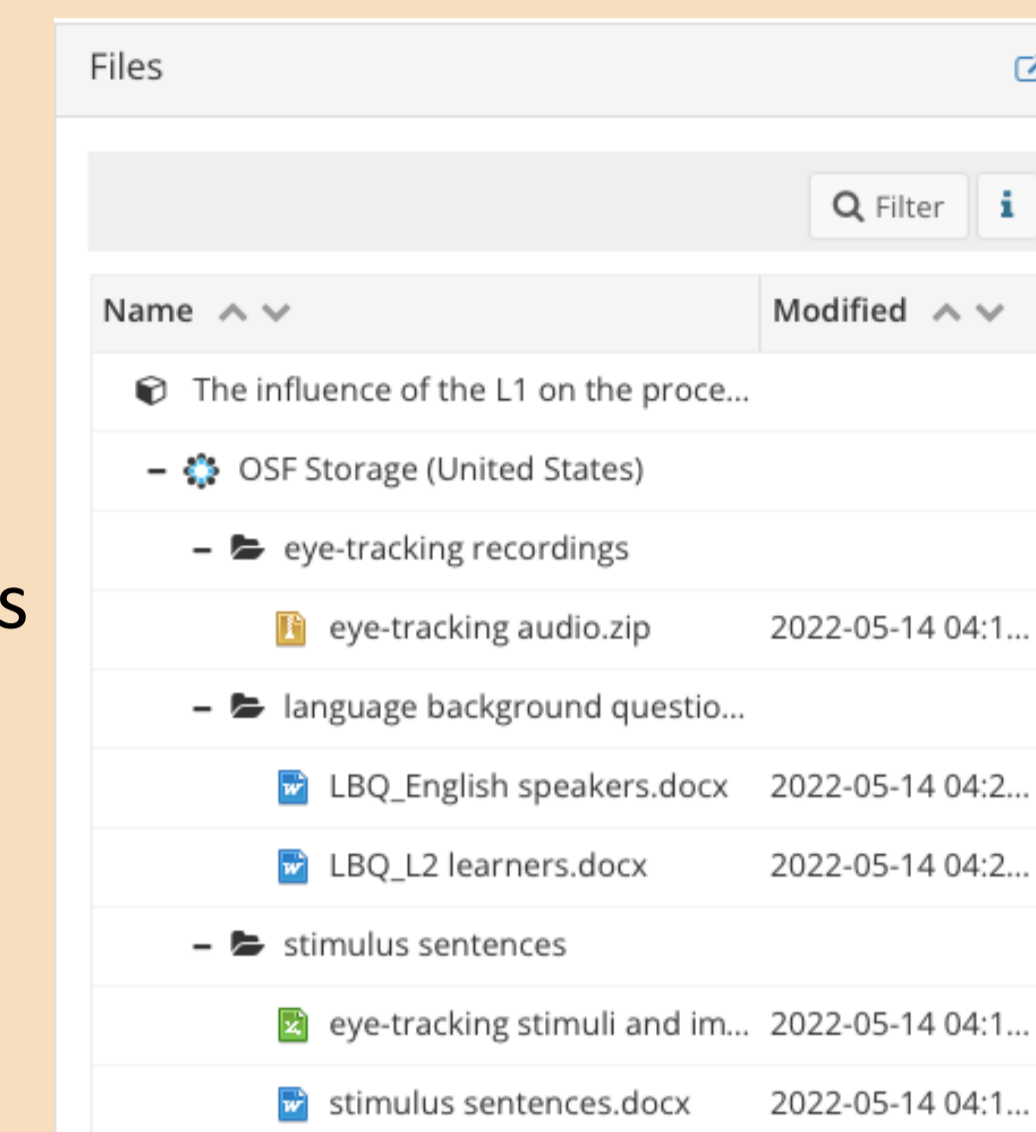
## Lack of methodological transparency



Although there are many open research practices in language research such as open access corpora data and open repository for materials (e.g., IRIS database), there is still an urgent need for more clarity about the methodology tool, stimuli design, and particularly, coding and analysis. Poor methodological transparency has made it difficult to evaluate the quality of the research. More importantly, it has impeded the development of replication studies in the area (Marsden, Thompson, & Plonsky, 2017).

## Open data

Data and codes will be uploaded for reuse once the data analysis is finished, as there has been very little raw data that is accessible in the area.



## Preprint sharing

A pre-print will also be made available to the public before the manuscript is submitted for publication.

## Rationale for open research

### Lack of open access materials

In my field, data collection tools and materials are normally created by individual researcher for individual project, and this process requires a lot of time and resources.

However, the access to them largely depends on how easy it is to get in touch with the researchers and whether they are willing to share their materials. The lack of available materials has led to unnecessary duplication of effort putting into the development of stimuli design.

## Open practices in the project

### Pre-registration

#### The place to share your research

OSF is a free, open platform to support your research and enable collaboration.

To make the study design and data collection procedures more transparent, the project was pre-registered on OSF platform.

All the stimulus materials were uploaded including the images and recordings created for the eye-tracking task, stimulus sentences created for the other tasks, and the language background questionnaire used in the study so that other researchers can download and adapt them to their projects in different contexts.

## Take-away messages

By presenting the poster, hopefully more of the colleagues will join the practise and understand that it requires ZERO effort but can bring many benefits to our field.

We can get valuable feedback from other researchers when we make our methodological tools transparent, and by sharing our design and materials, we can avoid unnecessary duplication of effort putting into the development of research instruments and encourage people to do more replication studies.

