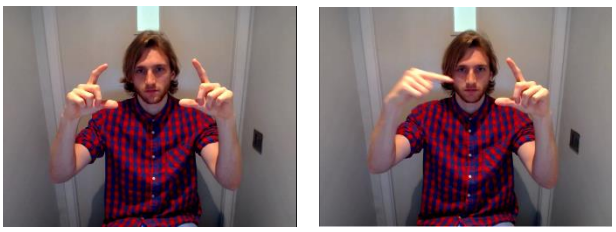
Finding the right gesture videos

You will be coding participants from 6 conditions across 3 different experiments. Please start by coding seed gestures, and then move through each experiment (1-3) in turn. You can find the video data at http://dx.doi.org/10.7488/ds/2447 . Data is organised by experiment and condition. For interaction only and transmission + interaction conditions, you can find the correct videos by looking in corresponding folders for each chain, generation and participant. For transmission only data, you can find the correct videos by looking in corresponding folders for each chain and generation (participant number is not used here). For the seed gestures, you can find the correct video by finding the video with the number that corresponds to the **director** column in the seed spreadsheet (e.g. arrest1.mp4).

You will be coding two aspects of the gesture. Firstly, you will give the gesture sequence a gloss, made up of a **handedness parameter** and a **characterising shape**. Then, you will code the gesture for whether the gesture is marked for its functional category.

Glossing gestures

A gesture video usually shows a sequence of gestures for a particular meaning, i.e. a sequence made up of shorter individual gestures.



Example gesture for camera

For example, the gesture above represents the meaning **camera**. Here, the participants hands first represent the camera, and then show the gesturer pointing at the camera he just set up. Therefore, we could code this as follows:

2hCamera,1hPointAtObj

Here, each part of the gesture sequence is separated by a comma (there should be no space after the comma). Each gesture gloss is comprised of 2 elements: a handedness parameter and a description.

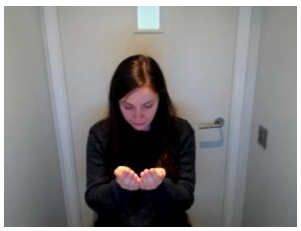
The handedness parameter is always written as either **1h** or **2h,** depending on whether it is one- or two-handed. It is important that you do not type this in any other way. For example, where both palms represent an open book, we would classify that gesture as **2h**. There should be no space between the handedness parameter and the shape descriptor.

To give the gesture a characterising shape, you can choose a word or multiple words to represent the shape. For example, we can denote the camera-shape as 2hCamera, because this shape (including the action of pressing the camera button) is likely to be used in this way across several gestures. For the pointing action, it is a bit more tricky. It is important to think about the general ways in which a gesture may be re-used. For example, the same participant

could point at an object he has already gestured in a different location to the camera; however, the general meaning of the point would be the same. As such, here I have given the point a general code of **PointAtObj**. Importantly, I would re-use this code, every time a participant points to the location where they have just produced an object gesture. However, this might be different from other points, such as when the gesturer points at themselves.

You can use whatever words characterise the shape best for you. Some gestures, like camera, will be easy to assign a label to. Other gestures might not have a clear meaning, so you can code them based on handshape or location. For example, if a participant outlines a box with their hands, you can code it as **2hBox**, whether the box is supposed to represent a cardboard box or something else, like a window.

The most important thing is to re-use gesture shape tags when they come up, regardless of the meaning of the gesture. For example, in the images below, both participants use a similar shape, that appears to be a representation of an open book, though one shows a gesture for **restaurant** (representing a menu) and one shows a gesture for **bible** (representing the bible).



Example gestures showing book shape.

Repetitions of the same gesture in a sequence should be repeated. For example, a gloss such as:

2hCamera,1hPointAtObj,2hCamera

means that the participant has repeated the camera gesture after the point. Actions that are repeated within the same gesture, such as pressing a camera button several times, do not need to be coded. Some gesture sequences will have many repeated gestures, so don't worry if your code seems very long.

The content of the labels are not necessarily important. For example, it does not matter if you tag a book gesture as **book**, **openBook**, or **handsOpen**. What matters is that you use that tag consistently across gestures that use that same shape. You can go back to edit codes if you think the gestures are actually the same shape or meaningfully different. Remember, there is not necessarily a right answer, but you should try to keep your decisions consistent across participants.

Functional markers

The second aspect of the gesture you code is the presence of functional marking. For this, you look at a whole gesture video and decide if there is a functional marker (yes) or if there isn't (no).

What is a functional marker?

Gestures are associated with one of the following categories: person, location, object and action. For example, a gesture for **bible** is associated with the **object** function. **A functional marker is any gesture that is meaningful to the *whole* category associated with that gesture and not just the individual gesture itself**. This means that markers should be found in more than one gesture for a functional category. For example, if a gesture creates a gesture for an object and then points at it, we might consider the point at the object a functional marker if and only if that point occurs in at least one other gesture associated with the object category. Remember that the decision about whether part of a gesture is a marker should refer to the target meaning of the whole gesture sequence (e.g. bible, hairdresser) and not to individual gestures.

The figure below shows an example data sheet that you will fill in. You are given the participant number (as well as other information to help you find the right video), the target meaning for the video, and the functional type (person, loc, obj or act). You will fill in the two final columns. For marker presence, you can fill in a **y** for yes and an **n** for no. For the gloss, you fill in a sequence of handedness + shape codes, separated by a comma (as shown in the figure).

	B	D	E	F	G
1	participan	target	ent_type	markerPres	code_string
2	s3	frying pan	obj	y	2hBook,1hPointAtObj
3	s8	to preach	act		
4	s35	camera	obj		
5	s38	concert hall	loc		
6	s17	hairdresser	person		
7	s21	police officer	person		
8					
9					

Example data sheet

Key points

- Glosses are formed of sequences of gesture labels, separated by a comma. There should be no space after the comma
- Gesture labels should have a handedness parameter and a characterising shape. There should be no space between the handedness parameter
- Repetitions of whole gestures should be coded
- You should aim for consistency in the use of gesture shapes, and aim to re-use gesture labels where possible
- The presence of markers should be coded as yes (y) or no (n).