**Iteration 4: Gesture Content, Axes**

**Social gesture coding manual**

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The purpose of this analysis is **<blind>**

**A.** **Summary of ELAN Tiers:**

The input file for this iteration will be in the shared Gesture 1 Consolidated folder and named in the format “xyzabc\_GC1\_Consolidated.eaf” wherein “xyzabc” is a placeholder for the participant ID, “\_GC1\_Consolidated” indicates that this has completed one level of consolidated gesture coding and “.eaf” suggests it is an ELAN file.

Two gesture coders will be coding this iteration for this participant. If you have been (randomly) assigned as the lead coder for this participant, you will have already coded iterations 1, 2, and 3 for this participant. If you are not the lead coder for this participant, then you will be new to this participant.

At the time of this iteration, the verbal coding team will already have marked utterances within which you would need to code for gestures. They will have employed 2 tiers that will be visible to you: CODE HERE and CODE NOW. These tiers do not matter at this point in time for your coding.

The gesture coding team will have also coded for gestures within these marked verbal utterances. They will have employed 5 tiers that will be visible to you: BEAT, PUG, GESTURE PRESENCE 1, GESTURE PRESENCE 2, AND COMMENTS. You will use all of these tiers to make a decision about each gesture you annotate for.

**For this iteration, you will need to code for gesture content only within annotations marked as “Yes” in the GESTURE PRESENCE 1 tier.** The goal of this tier-set is to determine if the person seems to be *intentionally* gesturing along a particular axis or set of axes.

**Important:** For each gesture you annotate, always watch the video starting a few seconds prior to a gesture up until to a few seconds after. If there are two or three consecutive gestures, watch from a few seconds prior to the first gesture to a few seconds after the last. **Always step back from annotation boundaries and see what the gestures are saying**. If you disagree with any gesture boundary upon analysis, report to graduate student researcher immediately so that it can be edited across coders.

You will annotate for the following tiers in this iteration (tier names are in BLOCK LETTERS):

HANDS\_12

UPDOWN

LEFTRIGHT

INOUT

HANDS\_2C

GC2\_COMMENTS

In **section C**, you will be able to access information on how to annotate for these tiers. In **section D** you will find information that may help you solve any challenges / issues you encounter.

For the gesture content tiers, you may also find helpful definitions and information in the gesture definitions booklet and will be able to look up images in the gesture image booklet.

**C.** **Description of ELAN tiers:**

CODE HERE (Already coded at this point)

**Possible values (1):** Yes

**Description:** This tier will inform you of utterance units within which you will annotate for gestures.

CODE NOW (Already coded at this point)

**Possible values (1):** Yes

**Description:** This tier is a subset of the CODE HERE. You may receive instructions over email to only code utterance units within these instead of CODE HERE.

BEAT (Already coded at this point)

**Possible values (3):** Yes, No, Maybe

**Description:** This tier is for annotating whether a hand movement by the participant is a beat gesture.

PUG (Already coded at this point)

**Possible values (3):** Yes, No, Maybe

**Description:** This tier is for annotating whether a hand movement by the participant is a PUG.

GESTURE PRESENCE 1 (Already coded at this point)

**Possible values (1)**: Yes

**Description**: This tier will suggest whether a hand movement by the participant was deemed as a gesture of primary interest to the study.

GESTURE PRESENCE 2 (Already coded at this point)

**Possible values (1)**: Yes

**Description**: This tier will suggest whether a hand movement by the participant was deemed as a gesture of secondary interest to the study.

HANDS\_12

**Possible values (2):** 1, 2

**Description:** This tier will mark whether the gesture involves the use of one hand or both hands. Mark as 1 if the gesture involves one hand, and mark as 2 if the gesture involves both hands.

UPDOWN

**Possible values (4)**: (1)Up, (2)Down, (3)Up and down / Create vertical distance between two hands or palms, (5)Other.

**Description:** This tier will include annotations for gestures that are linear and deliberately vertical in intention. Identify the gesture in the gesture image booklet and include in comments tier. If you are unable to identify the gesture in the booklet, helpful information about these gestures can be found in the gesture definitions booklet, but make sure you are absolutely certain - else do **not** code.

**Note**: The left hand likes to stay in the left and the right hand to the right, so many vertical gestures look diagonal or even horizontal.

LEFTRIGHT

**Possible values (4)**: (6)Left, (7)Right, (8)Left and Right / Create horizontal distance between two hands or palms, (10)Other.

**Description:** This tier will include annotations for gestures that are linear and deliberately horizontal in intention. Identify the gesture in the gesture image booklet and include in comments tier. If you are unable to identify the gesture in the booklet, helpful information about these gestures can be found in the gesture definitions booklet, but make sure you are absolutely certain - else do **not** code.

**Note 1**: Left and right refer to the participant’s left and right, and not your own left and right.

**Note 2**: Up-down gestures may use areas in the left and right of the participant to situate content up versus down.

INOUT

**Possible values (4)**: (11)In, (12)Out, (13)In and Out / Create sagittal distance between two hands or palms, (15)Other.

**Description:** This tier will include annotations for gestures that are linear OR curvilinear and deliberately sagittal in intention. Identify the gesture in the gesture image booklet and include in comments tier. If you are unable to identify the gesture in the booklet, helpful information about these gestures can be found in the gesture definitions booklet, but make sure you are absolutely certain – else do **not** code.

**Note 1**: In and out mean towards and away from the participant.

**Note 2**: Paying close attention to palm orientation may be more important here than hand movement – an outward hand movement with an inward facing palm would be an inward gesture, not an outward gesture.

HANDS\_2C

**Possible values (4)**: (1)Same, (2)Opposite, (3)Alternate, (4)Other

**Description**: This tier is for annotating whether in a *two-handed* gesture of *primary* interest to this study, the two hands were doing the same thing, the opposite thing, were alternating, or something else. To make annotations in this tier, you will only scan within annotations with a “Yes” in GESTURE PRESENCE 1 **and** a “2” in HANDS\_12. If you mark the value “4” (Other) in this tier, leave a comment as to what it was.

GC2 COMMENTS

**Possible values**: Any

**Description**: This tier is for any comments you may want to make or discuss.

**D. Notes for Issues and Problem Solving**

1. **I’m not sure if this gesture is intentional:**

* At a prior iteration, the intentionality of movement was already addressed – it is how we defined a gesture for this study in the first place. At this iteration, you are looking for not just the intentionality of gestures but the intentionality of gestures along specific axes. Ask if:
  + the movement gesture is intentionally along a particular axis?
  + the placement gesture is well-formed (well-formed palm shape(s))?
  + the pointing gesture is an active one (does the hand participate)?
* However, remember that a small / quick gesture can also be a clear / strong gesture. Think less magnitude or size of gesture and more clarity / precision / intentionality of gesture (for example, a really quick finger pointing can still be a strong gesture).
* While coding, consider how the human body works. **When in doubt, try making a gesture differently and see how that feels in terms of ease and fluency**:
* **Ask yourself:** If someone else coded this gesture, would they as well see the gesture as intentionally moving / placing / pointing in the x direction? If unsure, code as other. If you mark as other, leave a comment as to why.

**II. I’m not sure if this is a one- or two-handed gesture:** Ask yourself if both hands are ***actively involved*** in the gesture. If they are, allow them to dictate your annotation as “a team of hands” trying to represent something – not two individual hands.

**III. I’m not certain if this is a gesture than spans more than one axis:** Sometimes, a gesture may seem to move inwards as well as upwards or to the left, for example. A gesture could even employ all three axes! If so, you can mark the annotation on more than one of the tiers. Having said that, again, ***be selective and consider intention.***

* If the hand is moving in direction A with intention and in direction B just randomly or to facilitate the movement in direction A in some way, annotate A and not B. If you do not look for intention, there is a risk of getting caught up in physical space, trying to tease out which directions are involved in a gesture. Only code on more than one tier if the gesture seems to ***deliberately***move along two or three axes.
* It is **very, *very*** important to ask yourself – when I code this gesture am I thinking, “this COULD BE vertical OR horizontal” or am I thinking, “this IS vertical AND horizontal”? If it is the former, do not annotate axes for that gesture. If it is the latter, you can annotate for as many axes as you see fit.

**IV. I’ve tried everything and I’m lost:** Use the following resources depending on the nature of your challenge before emailing the graduate student researcher:

1. If you are not sure if this is a gesture / what kind of gesture it is, use the gesture definitions booklet and see if you can identify any information.
2. If you are not sure about whether this gesture is valid (for example, is this upward zigzag a valid upward gesture?), use the Gesture feature-set booklet.
3. If you have asked these questions to yourself and are still unsure, before you email the graduate student researcher, check the gesture image booklet.

If these are not helpful – make certain to **seek help from the graduate student researcher**. They may not be able to see the video but will be able to speak with you about your concerns.

**D. Saving and uploading the file:**

If you are not yet fully confident of the annotations you have made, save the ELAN file named in the format “xyzabc\_GC4\_ForFlipper.eaf” wherein “xyzabc” is a placeholder for the participant ID and “\_GC4\_ForFflipper” indicates that this has completed two levels of gesture coding and is ready for clipping with Fflipper (see manual for iteration 5). This should save as a “.eaf” file because it is an ELAN file. As a next step you will execute iteration 5.

If you are **fully confident** of the annotations you have made, save the ELAN file named in the format “xyzabc\_GC4\_ForReliability.eaf” wherein “xyzabc” is a placeholder for the participant ID and “\_GC4\_ForReliability” indicates that this has completed two levels of gesture coding and is ready for reliability checks. This should save as a “.eaf” file because it is an ELAN file. Upload this file to your individual folder on Box. You do not need to execute iteration 5 if you are fully confident.