Protocol for running eye tracking experiments

Getting Started

- 1. Get the key of your room at the helpdesk at -1.
- 2. Get in, turn on the busy-light, and the lights in the room. Put outside the advertisement.
- 3. Start the experimenter computer. Check if the sounds on the computers are on and if they have an appropriate loudness.
- 4. Check SONA-SYSTEMS (vu.sona-systems) to see when people signed themselves up for experiments.
- 5. Check EMS (ems.psy.vu.nl) for the up-to-date experiment file. Here, all the running experiments can be found, with the all the necessary information (nr of participants to run, E-prime file names, and additional study information).
- 6. Before the first participant comes in, do a round of flyering.
- 7. Because of some recent experience of people stealing stuff from the rooms, it is important to always lock the door when you leave!

Running the participant

- 1. First check that the participant is not wearing eye make-up like mascara or hard contact lenses since these will both interfere with the measurement of eye movements. If there are wearing make-up you can ask them to remove is with the make-up remover found in all the eye tracking labs.
- 2. Sit the participant down in the chair in front of the eye-tracker. Ask them to adjust the chair in such a way that they can put their head in the headrest comfortably. If necessary you can also make some finer adjust by using the knobs on the side of the headrest.
- 3. Start up the experiment. Make sure that eyelink_calibrate function in opensesame says "tracker attached" and not dummy mode. Also check that the settings on the eyetracking computer are set to default. Enter the camera setup in opensesame by pressing ENTER or by pressing the camera setup button on the eyetracking computer.
- 4. Set up the eye tracker by aiming the camera in such a way that the participants' eye is in the center of the image. Make sure that the other eye (the one that's not being tracked) is not in the image. On the participant computer you can cycle through 2 different points of view by using the arrow keys (→ ←). The first one shows you an overview of where the camera is aimed. The second one shows you the individual eye. If the computer doesn't select the eye automatically you can do this manually by click the eye on the eyetracking computer.
- 5. Once the eye is selected you can set the threshold by pressing A (auto threshold). Check if the entire pupil is selected. If this is not the case you can adjust the threshold manually by pressing the up and down arrows on the keyboard.
- 6. Now it's time to calibrate the eye tracker. You can do this by pressing C and V (to validate the calibration). The calibration should look something like this (see next page):



- 7. When the eye tracker is properly calibrated you can start the experiment by pressing OUTPUT/RECORD button on the eye tracking computer or the Q on the participant's computer.
- 8. Give the participant the instructions for the experiment he/she is going to do and make sure that everything is clear. To start each trial the participant has to focus on the fixation cross in the middle of the screen and press the space bar. The moment they do this the trial starts and it is important that they keep their head nice and stable in the headrest and try to keep their blinking to a minimum. Tell them that as soon as they see the fixation cross again no data is being recorded and they can blink as much as they want again.
- 9. If the calibration gets messed up during the experiment for any reason you can just enter the camera setup again to recalibrate. After you've done this you can continue the experiment by pressing OUTPUT/RECORD.

After the experiment has finished

- 1. Register the participation in EMS by clicking "add participant" (ems.psy.vu.nl).
- 2. Register the participation in sona-systems (vu.sona-systems.nl). If he/she participated for credits, select the amount of minutes they participated and click update. If he/she participated for money, put the minutes on zero and put "money" into the comments section.
- 3. If the participant wants money for their participation you have to fill in the "kwiteringslijst" (make sure you note the BSN/Fiscaal number!).
- 4. After your day has finished you should put you data files in the Cerberus folder by going to "//cerberus" in windows explorer. This way the experimenter can easily download the files of this network drive.

Miscellaneous

- Requesting participant money: In order to get money you have to fill in the form "declaratieformulier" and get this signed by Jan Theeuwes, Mieke Donk or Chris Ollivers. After this you can hand in the form to Mr. Blom. After you've done this you have to send him an e-mail to make an appointment to pick up the money (m.f.g.blom@vu.nl). In this e-mail you should also mention what kind of coins and bill you would like to receive. It usually take about a week to receive the money.
- In order to reserve the lab you have to go to webmail.vu.nl and log in with your VU account. Under calendar you can add a new calendar, search for FPP and you can select all the eye tracking labs (K2D-35, 37, and 38). In order to reserve the lab simply create an event in the calendar of the lab you would like to book.