

PROTOCOL FOR EYETRACKING EXPERIMENTS

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Version 2

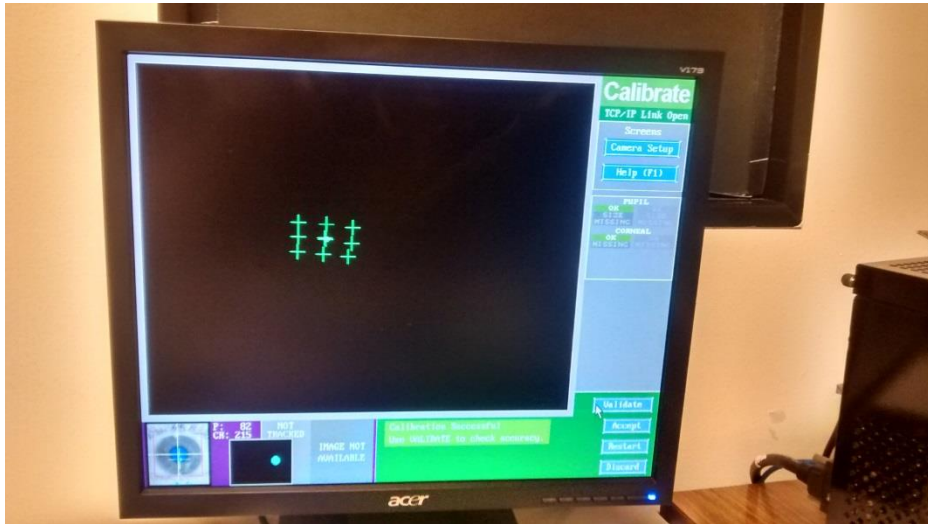
Adjusted by Anne Zonneveld

Getting Started

1. If you do not have your own employee card, get an access card for the labs at the main entrance of the Transitorium building.
2. Get in, turn on the busy-light, and the lights in the room. Optionally: put outside the advertisement.
3. Start the experimenter computer and the Eyalink computer (in this order). Check if the sounds on the computers are on and if they have an appropriate loudness.
4. Because of some recent experience of people stealing stuff from the rooms, it is important to always lock the door with your employee card / access card when you leave!

Running the participant

1. 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 it 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, but preferably keep this at the same height across participants.
3. Start up the experiment. When using opensesame, make sure that eyelink_mode function says "tracker attached" and not dummy mode. Also check that the settings on the eye-tracking computer are set to default. Enter the camera setup in opensesame by pressing ENTER or by pressing the camera setup button on the eye-tracking 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 eye-tracking computer. Check if the eye is in focus and adjust the focus of the eye-tracker lens if necessary.
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. Calibrate the eye tracker. You can do this by pressing C and V (to validate the calibration). During this process, the participant should follow the dot with their eye. The calibration should look something like this (see next page):



7. When the eye tracker is properly calibrated (max 1 dva difference between calibration and validation) 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 and make sure that everything is clear. It is important that they keep their head stable in the headrest and try to keep their blinking to a minimum. Also tell them when to rest and blink as much as they want during the experiment, if applicable.
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 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 fill in the according data in the Excel declaration forms. Send the forms to your supervisor or Suzan Besuijen (suzan.besuijen@vu.nl).

Miscellaneous

- In order to book 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 book the lab simply create an event in the calendar of the lab you would like to book.