DIY ROI Template: Experiment 1

Introduction

ROI Templates contain location and timing information related to the ROI's we would like to track throughout the experiment. There are two categories of ROIs: static, which always appear in the same place and time, and dynamic, whose location and/or timing attributes vary on a trial basis.

ROI templates must be made in excel. For a detailed explanation of the components of the template, please see the user guide's Preparing the Data: ROI Template section.

The coordinates provided for this experiment are in a raster format, meaning the top left corner of the screen has the coordinate of (0,0). The coordinates of the ROI Template do not have to be in raster format. For more information on raster coordinate systems, please see the user guide resources in the Preparing the Data: Coordinate System Conversion section. Note: In this experiment the test phase occurs immediately after the study phase for each trial.

In the study phase:

A scene appears on the screen which can either be a stereotypical masculine, feminine, or neutral environment. Although the scene pictures vary in content, they always appear in the same location and within the same time window.

After 2,000 ms, two people are presented to the participant. There's a male individual in attire that matches the masculine scene and a female in feminine attire that matches the feminine environment. There are only two spots where these individuals are presented, but the ordering is completely randomized. So, on trial 1, the feminine female could appear in the first location but switch to the second coordinates on trial two.

Regardless of the content of the study scene, it'll be named 'Study Scene'. Its top left (TL) and bottom right (BR) coordinates are (5,10) and (105,120). The feminine female will be labeled 'D' while the masculine male is 'Q'. 'D' and 'Q' are randomly placed in the TL and BR coordinates of (25,35) & (40,45) or (50,35) & (65,45). The two locations within the 2,000 ms to 3500 ms time window are labeled 'person_1' and 'persion_2' in the roi key map.

In the test phase:

For the 3501-5500 time window, novel scenes appear but they still follow the same schema as the study phase, as they can be feminine, masculine, or neutral. In the last time window, 5501-7000 ms, 2 novel individuals are presented. This time, the female is dressed in masculine clothes and the male is dressed in feminine clothes. As with the study scene, the positions of these ROIs are randomized.

For the test scene, we would like to keep tabs on the content of the scene presented. It can have the labels of 'Feminine Test Scene', 'Masculine Test Scene', or 'Neutral Test Scene'. In the ROI key map, the scene column names are 'F_test_scene_key', 'M_test_scene_key', 'N_test_scene_key'. Any one of these columns is filled with the ROI event key 'test_scene', indicating that the metadata associated with this column label was displayed. The TL and BR coordinates for 'test_scene' are (5,10) and (105,120).

We'll label the masculine female as 'L' and feminine male as 'K'. As in the study phase, they are randomly placed in the TL and BR coordinates of (25,35) & (40,45) or (50,35) & (65,45). The two test locations within the 5501 ms to 7000 ms time window are labeled 'person_3' and 'person_4' in the ROI event map.

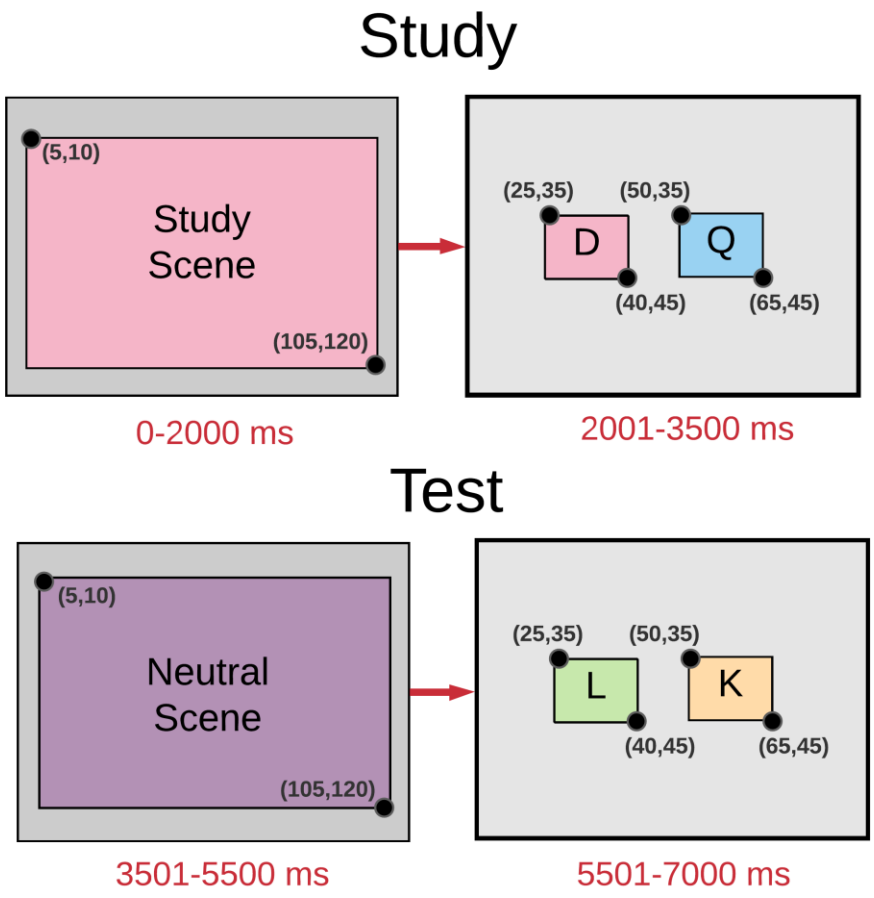
ROI Key map snapshot:

trial_id	D_key	Q_key	L_key	K_key	F_test_scene_key	M_test_scene_key	N_test_scene_key
1	person_1	person_2	person_4	person_3	test_scene		
2	person_2	person_1	person_3	person_4			test_scene

We want to track:

For the study phase, we would like to keep tabs on fixations that fall in the 'Study Scene', 'D' and 'Q' ROI. For test, we would like to appropriately label and track the test scene and the 'L' and 'K' ROI.

An example trial setup for study block and test block:



Answer Key

static						dynamic_roi_metadata			dynamic_event_options				
roi_label	roi_id	top_left_xy	bottom_right_xy	start	stop	event_key_map_co	roi_label	roi_id	key	top_left_xy	botton_right_xy	start	stop
Study Scene	1	(5,10)	(105,120)	0	2000	D_key	D	2	person_1	(25,35)	(40,45)	0	2000
						Q_key	Q	3	person_2	(50,35)	(65,45)	0	2000
						L_key	L	4	person_3	(25,35)	(40,45)	5501	7000
						K_key	K	5	person_4	(50,35)	(65,45)	5501	7000
						F_test_scene_key	Feminine Test Scene	6	test_scene	(5,10)	(105,120)	3501	5500
						M_test_scene_key	Masculine Test Scene	7					
						N_test_scene_key	Neutral Test Scene	8					

Study ROI

Although there are content of the study scene changes on a trial basis, there is only one static ROI to track this event. This is because we want to ignore these differences and label any scene that occurs in the (5,10) to (104,120) location within the 0-2000 ms time window as a 'Study Scene'.

Since the feminine female and masculine male ROI are to be identified in further analysis with the labels, 'D' and 'Q', respectively, these labels are inserted into the *dynamic_roi_metadata* section. 'D' and 'Q' are dynamic ROI because their location varies for each trial, and we want to track where they were placed so that we can properly associate fixations that fall within their ROI event.

We need to add the possible events that 'D' and 'Q' can appear in under the *dynamic_event_options*. The keys used to identify events are 'person_1' and 'person_2', and the appropriate spatial coordinates and timing information are placed alongside the keys in the *dynamic_event_options* section.

Test ROI

For the test phase, there are three possible labels for the test scene event. Since the label changes based on the trail, all three are considered dynamic ROI. The test scene labels, along with their respective column names in the event map table, are listed in the *dynamic_roi_metadata* section. The test scene event coordinates and timing information is added to the *dynamic_event_options* section of the ROI template. This event will be identified in the event map as 'test_scene', so this is also included under the *key* section of the *dynamic_event_options* section.