DISGUST AND FEAR INTERACTIONS IN RITUALS

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Background

This project is related to religious practices and rituals, which involve objects and situations, which are in certain occasions considered as disgusting (dead bodies, blood, body products, body envelope violations etc.). The normal response typical for disgust is aversion and avoidance, but opposite to these responses some rituals involve touching, kissing, eating or other forms of contact with these stimuli. It seems that these ritualized behaviors go against human intuitions about possible contagion. This specific type of behavior contradicts the evolutionary adaptive – disease/contagion avoiding – function of disgust.

Psychologists suggest that there is a strong and not well understood overlap or interaction between disgust and fear. Disgust elicitors can and often are perceived as threats, and so are highly relevant to fear-triggering. The purpose of this project is based upon this relationship between fear and disgust, to illuminate specific affective state in above mentioned type of rituals. The goal is to explain mechanisms of disgust and fear co-triggering. Such a clarification would enable better interpretations of ritualized behaviors which involve contact with disgusting objects.

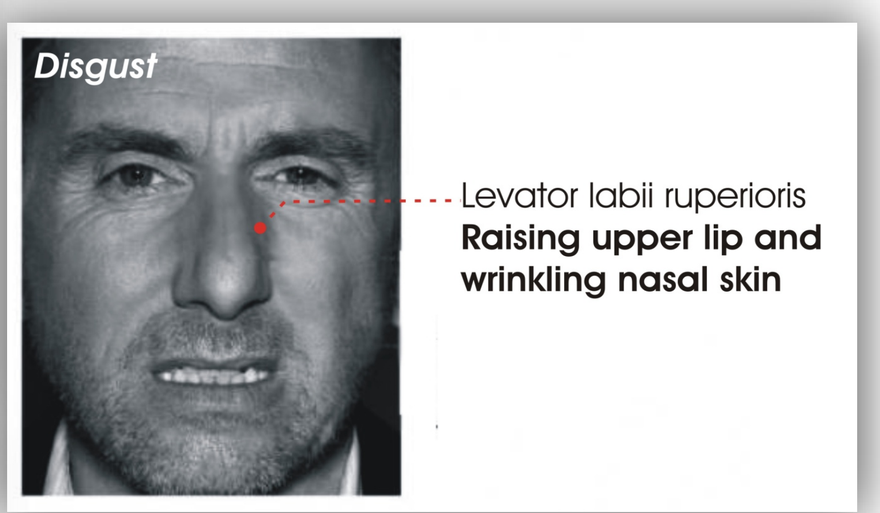
Hypothesis

We assume that fear is triggered together with disgust in situations when people cannot avoid the contact, or cannot guarantee the non-contact with disgusting objects. This can be the case at least in two situations: (1) the disgusting object can act towards the subject; (2) or the subject is forced to act towards the disgusting object. At this stage, the project deals with the fist option and the hypothesis is as follows:

H: When a disgusting object activates agency detection, also fear will be triggered.

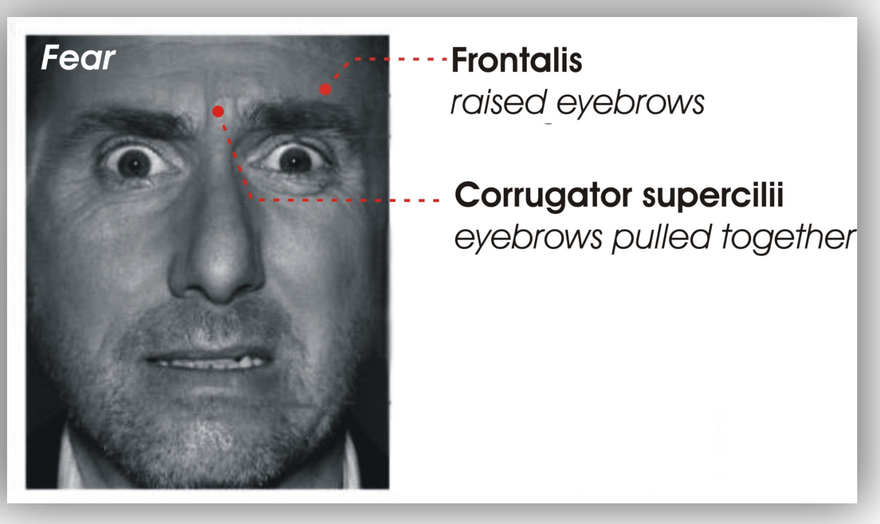
Procedure

A sequence of pictures will be presented to participants. The sequence will include four picture categories: (1) Ten images of disgusting objects, (2) ten images of the same disgusting object with human morphological cues (hands and faces), (3) ten neutral images, and (4) ten images evoking fear. An increase of fear related physiological changes is expected in (2) comparing to (1). Specific physiological changes typical for disgust and fear represent the dependent variable. The absence/presence of agency in (1) and (2), by means of human morphological cues (e.g. fecal matter – fecal matter held by a human) represent the independent variable.



Measurements

1. The activity of specific face muscles linked distinctively to specific fear and disgust face expression will be measured by using electromyography: *frontalis* & *corrugator supercilii* for fear, and *levator labii superioris* for disgust.
2. Electrocardiograph measurement of heart rate will be collected. Heat rate increase is typical for fear, and decrease for disgust.
3. Skin conductance response which positively correlates with fear will be measured.



Online survey

The experiment is accompanied by an online survey where a sequence of vignettes, which describe different situations, is presented to participants. There are three variants of each situation, where (1) a disgusting object, (2) an agent, or (3) both are present (e.g. a lift with vomit, a lift with another person, or a lift with a person with vomited clothes). Participants should imagine themselves in described situations and mark how they would feel, by using Likert scales; one for each basic emotion. Following the hypothesis an increase of fear in the disgust & agent comparing to the disgust vignettes is expected.

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