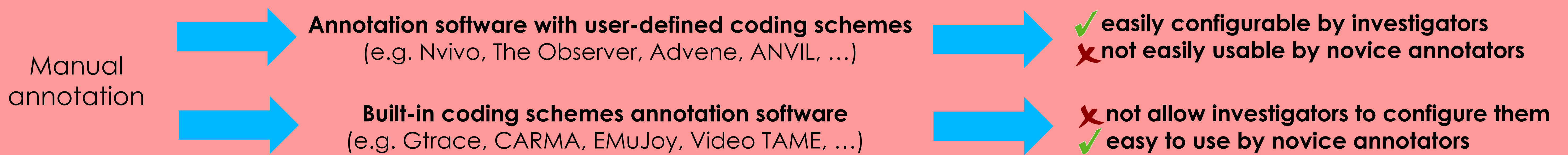


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## A new tool for the manual annotation of FEE: the Oudjat software

The annotation procedure is often used to study the recognition of facial expression of emotion (FEE). Today, many tools exist for annotation purposes. However, these tools seem to be torn between configurability and usability.



Considering advantages and weaknesses of existing software programs, Oudjat tool has been designed to be both configurable and usable.

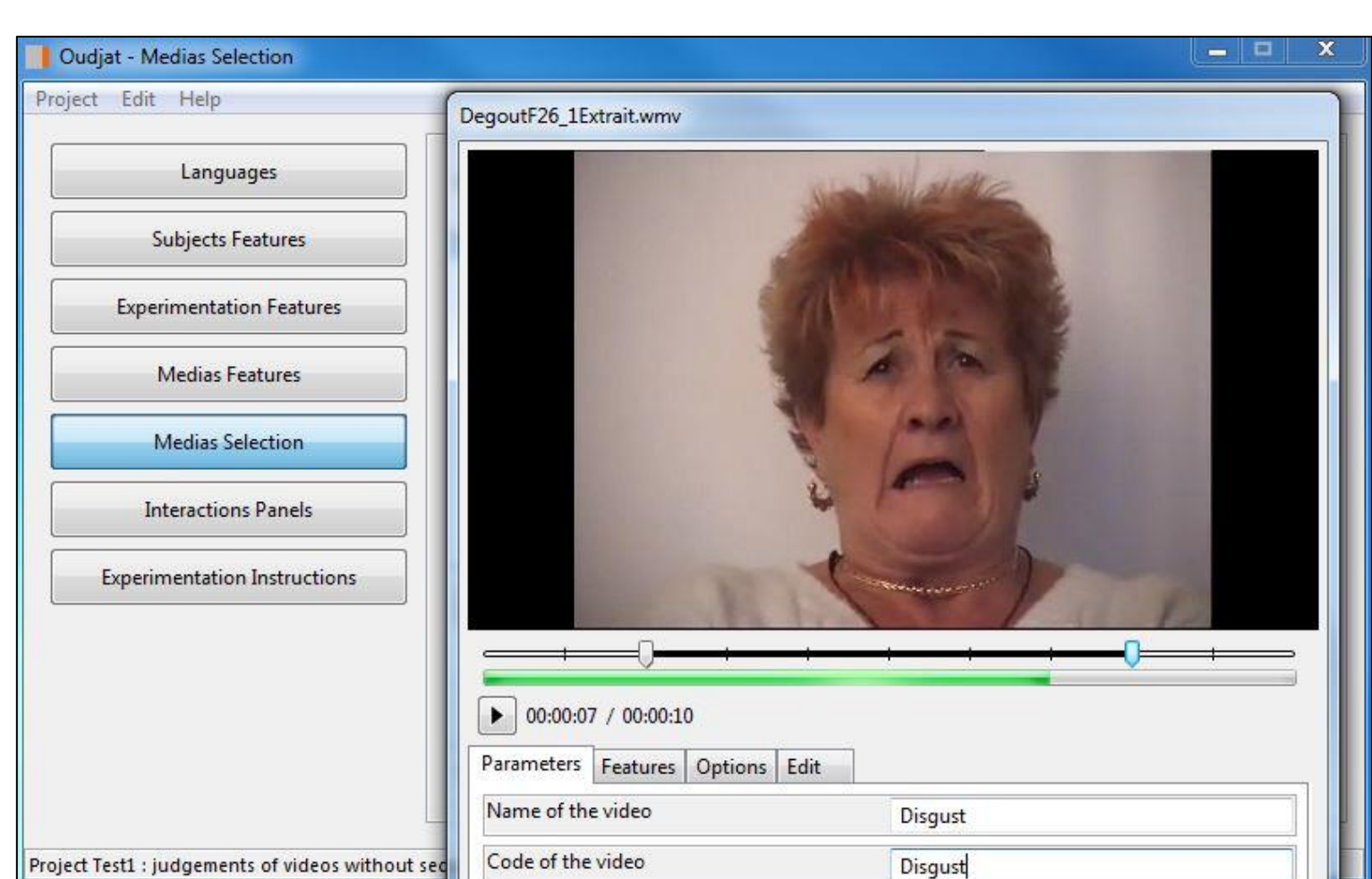
Oudjat is an open-source annotation software that dissociates the involvement of these end-users. Because investigators and annotators have different needs, Oudjat considers them as distinct end-users. They do not have the same expectations or skills. This explains why the system is separated into two modules: configuration module & annotation module.

### Oudjat's Configuration Module

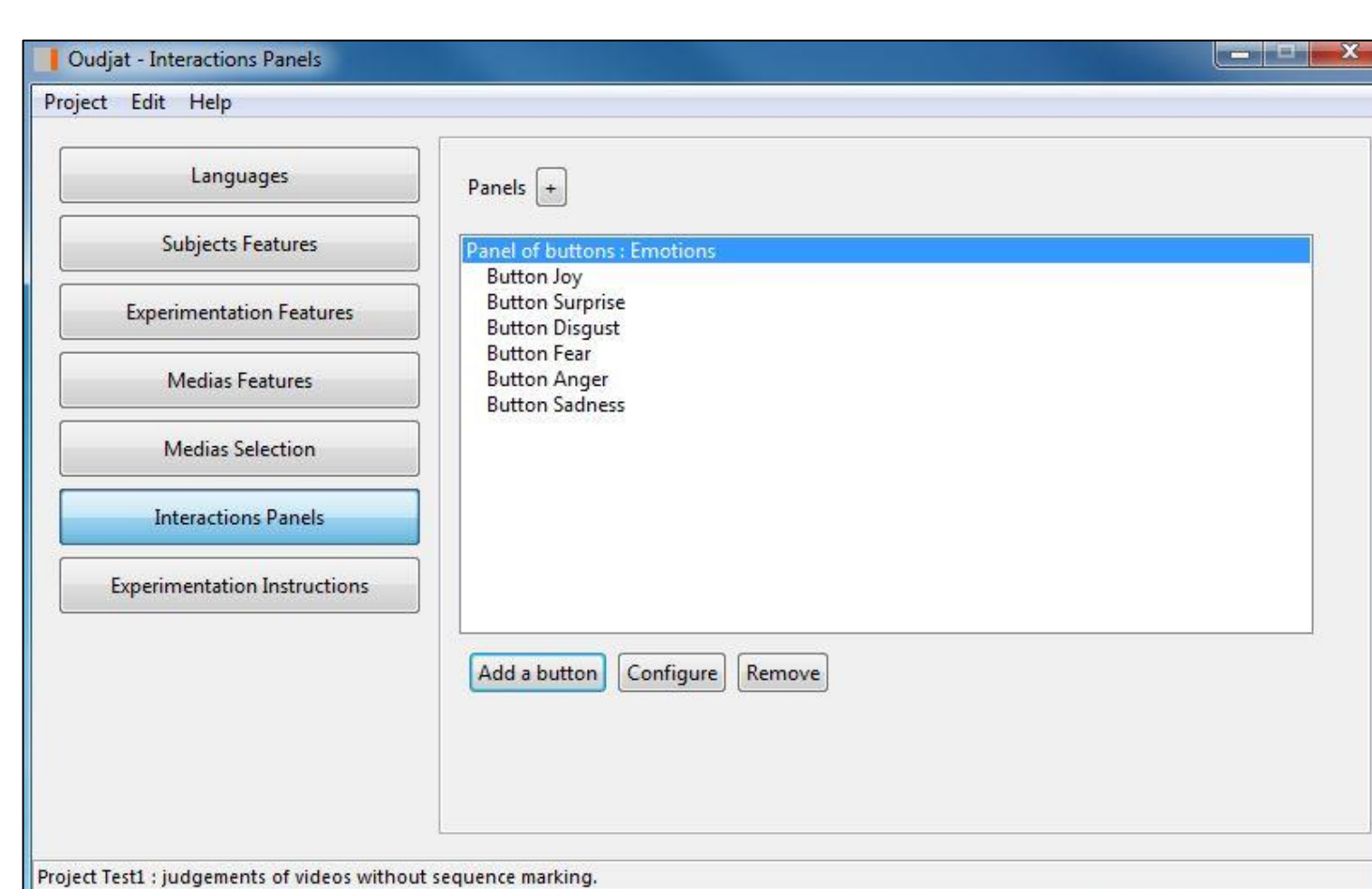
The configuration module is dedicated to investigators in order to configure their experimental parameters. Investigators can choose:

- Step 1: the annotation procedure (standard forced-choice or more complex procedure)
- Step 2: the experiment languages (all the text fields can be edited in annotator's interface)
- Step 3: the annotators features to indicate (such as age or gender)
- Step 4: the experimentation features (annotation conditions if any)
- Step 5: the medias features (such as the emotion displayed)
- Step 6: the medias selection (Oudjat integrates video processor in order to select the relevant sequences)
- Step 7: the interactions (annotators' answers with buttons, checkboxes, scales, or short free labeling)
- Step 8: the experiment instructions

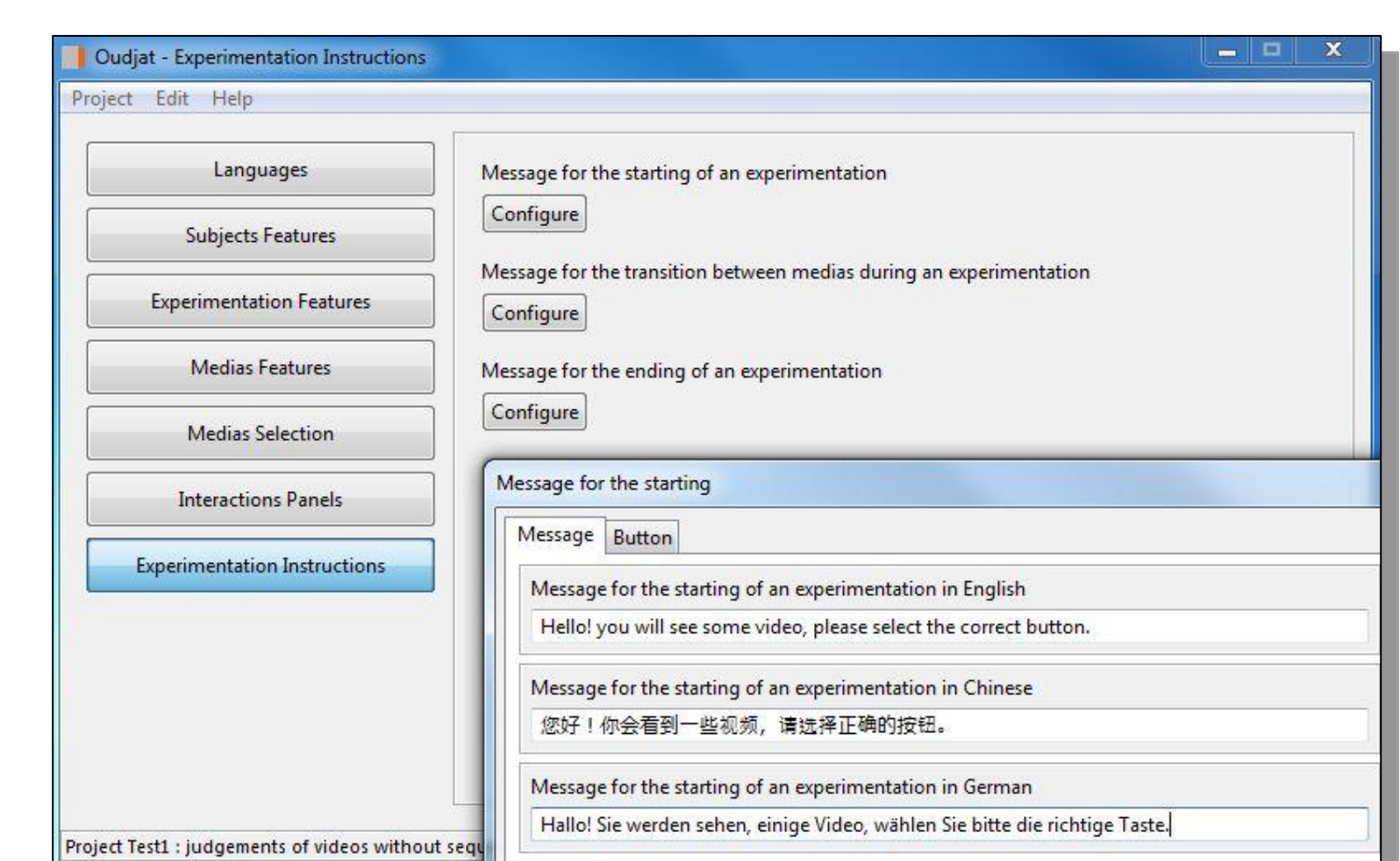
Example of steps in the configuration:



**Step 6:** A video processing can determine target sequences to show. Investigators can also choose the presentation order



**Step 7:** Buttons, checkboxes, scales, or short free labeling can be choose for annotations



**Step 8:** Instructions for a experiment can be wrote in different languages

### Oudjat's Annotation Module

The second module is dedicated to participants' annotation of the selected stimuli (pictures, videos, audio materials). It contains only relevant information to help novice and expert annotators to perform the annotation as easily as possible. The interface displays only the instructions, the annotators' tasks, and an ending message.

This simplified annotation procedure allows to quickly have a large number of annotators.

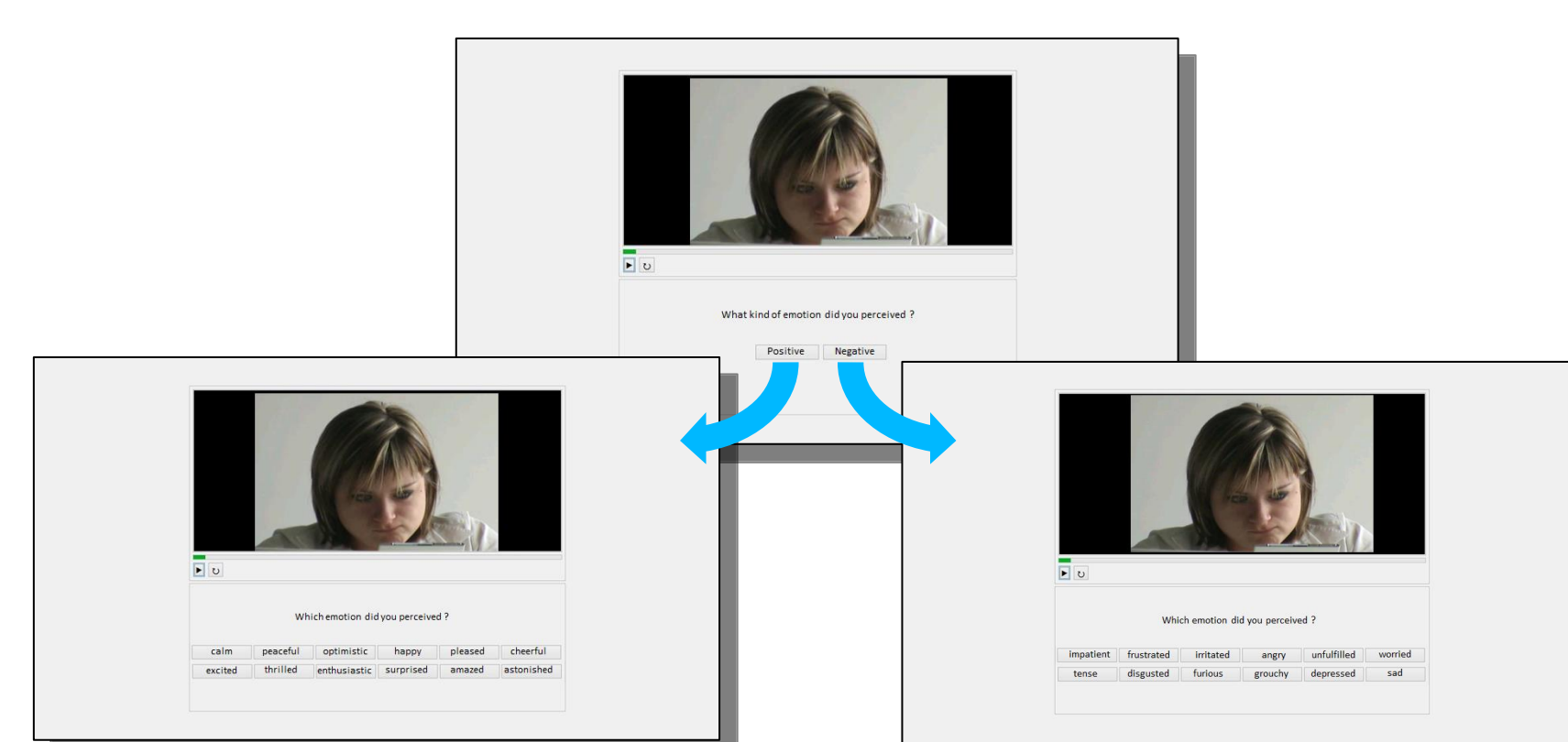
Example of annotation procedures:

#### Classic forced-choice procedure



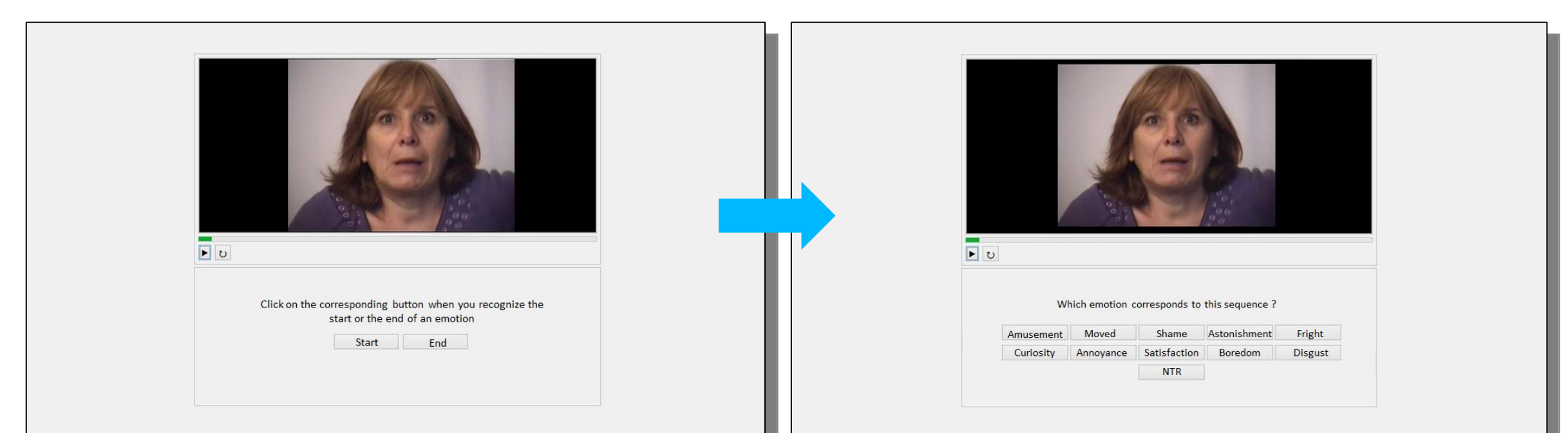
Oudjat offers various annotation possibilities such as free-choice or forced-choice annotations with labels, scales or checkboxes.

#### Chained forced-choice procedure



Annotators were asked to indicate first if they felt a positive or a negative emotion, and second, what emotion they felt depending on their first answer.

#### Two-steps annotation procedure



Sequence marking annotation experiments can also be conducted. In this case, annotators first delimitate a temporal sequence in the video and, second, attribute it a label.

