Action Unit 45 - Blink - Optional

Blinking, a quick eye closure and return to eyes open, involves a sequence of actions that happens very quickly, using muscles that are the basis for Action Units you have already learned – those relevant to AUs 5, 7, and 43. Earlier you learned that raising the upper lid (AU 5) was due to the contraction of the same muscle which, when partially relaxed, causes the upper eyelid to droop (e.g., 43B), or when completely relaxed, lets the eyes close (AU 43E). You also learned that the eyelids can be tightened (AU 7); later you will learn the eyes can be tightened-closed (7+43E). In the blink, there is a very rapid sequence of actions in which the upper eyelid raising muscle relaxes and the lid-tightening muscle contracts, closing the eye, followed in a fraction of a second by relaxation of the lid-tightening muscle and contraction of the upper lid raising muscle to open the eye again.

A. Appearance Changes due to AU 45

- **1.** Eyes close and open very quickly with no pause or hesitation in the closed position. The eyes (or one eye in a unilateral blink) must close or nearly close for a moment, and then return to an open position.
- 2. If bilateral, the eyes cannot be closed more than ½ second in the blink, or it is scored eyes closed (AU 43E). AU 45 cannot be scored in a still photograph. If bilateral and the eyes remain closed more than ½ second, then the action should be scored as eyes closed (43E). If eye closure is unilateral and does not exceed ½ second, you must consider scoring it as a wink (AU 46), i.e., if the unilateral closure is less than ½ second, it might be scored either a blink or a wink. To score a unilateral blink, the eye closure must not appear to be intentional (see AU 46).

There is no video or image of AU 45. Watch someone else blink or look for blinks that have occurred spontaneously in the video records of other AUs.

B. How to do AU 45

Blinking is very easy to do. Try blinking with one eye, so you can watch with the other eye. Or, look at someone else blink. Blinking happens quickly, and AU 45 alone does not involve tightening and wrinkling around the eye, which is due to the addition of AU 6 or AU 7.

C. Intensity Scoring for AU 45

AU 45 is not scored for intensity. Apparent squeezing or pressing in a blink, sometimes quite noticeable on faces of people affected by organic or psychological disabilities, can be captured by scoring AUs 6 and 7 for intensity.