# Action Unit 5 - Upper Lid Raiser

This AU pulls the upper eyelid back into the eye socket. When the upper eyelid relaxes, the upper eyelid falls down over the eyeball (see AU 43 on page 36), and when completely relaxed, it closes the eyes (AU 43E). In the usual eyes open position, there is some contraction of the muscle that underlies AU 5, but AU 5 designates the appearance changes when the contraction goes beyond the usual, pulling the lid further back into the eye socket. AU 5 is not shown in Figure 2-1 because the muscle reaching back into the eye socket could not be represented in the facial view shown in that figure.

# A. Appearance Changes due to AU 5

- 1. Widens the eye aperture.
- 2. Raises the upper eyelid so that some or all of the upper eyelid disappears from view. In some people the upper eyelid is not visible when the face is neutral, and the disappearance of their upper eyelid cannot be used to determine the action of AU 5.
- **3.** As a result of the raising of the upper eyelid, more of the upper portion of the eyeball is exposed. How much is exposed depends upon how much of the upper portion of the eyeball is normally exposed in the neutral position and how strong AU 5 is. Sclera above the iris may also be exposed depending upon the position of the upper lid in the neutral face and how strong AU 5 is.
- **4.** As a result of the raising of the upper eyelid, the shape of the upper rim of the eye changes as portions medially and/ or laterally are pulled up. This changed shape of the eye usually results in exposure of more sclera adjacent to the iris medially and/or laterally. Thus, AU 5 causes sclera exposure above the iris (appearance change 3 above), and changes the sclera exposure adjacent to the iris laterally and medially.
- **5.** Due to the changes described under appearance changes 3 and 4 above, the person seems to be staring in a fixed fashion, almost as if the eyeball were protruding.
- **6.** The lower eyelid also raises, very minutely, when there is a strong AU 5. This happens because the strong AU 5 pulls the skin around the eye, including the lower lid, upwards. It is important to note that this small raise of the lower eyelid due to AU 5 does not involve any evidence of tightening of the skin below the lower lid, which is characteristic of AU 7, described later on page 28.
- 7. If the evidence of AU 5 is apparent in only one eye, score it as bilateral not unilateral.

Compare images 5i and w5i with 0 and w0. Note the 5ii and w5ii images show more action of AU 5 than the 5i and w5i images. Inspect the video of AU 5.



0 page 465 page 381 for score



5i page 467 page 383 for score



5ii page 467 page 383 for score



w0 page 465 page 382 for score



w5i page 467 page 383 for score



w5ii page 467 page 384 for score



video 5 page 414 for score

# B. How to do AU 5

This movement is easy. Raise your upper eyelid as hard as you can so you can feel it pushing upwards against your eye cover fold. Observe whether or not sclera is exposed. If you have any difficulty, just try to open your eyes as wide as you can, increasing your field of vision and bulging your eyes. Try to do a weak version.

# C. Intensity Scoring for AU 5

For scoring AU 5 alone or in any combination not listed in the Reference section for AU 5 below, use the following guidelines:

#### AU 5A

The appearance changes for AU 5 are sufficiently present to indicate AU 5, but are insufficient to score 5B (e.g., a *trace* of upper lid raising that exposes more of the iris or sclera).

# AU 5B

- 1. If the upper lid covers part of the iris in the neutral face, upper lid raise must be sufficient to expose virtually (very nearly) the entire iris, but no more than a hairline of sclera must be exposed above the iris. If more than a hairline of sclera shows, score 5C, 5D, or 5E.

  or
- 2. If the entire iris shows in the neutral face, upper lid raise must be sufficient to expose sclera above iris, more than just a hairline of sclera is required to be exposed, but not much more. If much more than a hairline of sclera, score 5C, 5D, or 5E).

#### AU<sub>5</sub>C

The sclera exposed is more than allowed by the 5B criteria, i.e., if the upper lid covers part of the iris in the neutral face, *slightly* more than a hairline of sclera is exposed; or if entire iris shows in the neutral face, *markedly* more sclera must be revealed, but the evidence is less than the criteria for 5D. When the eyes are deeply set or in some Asian faces, you may never see sclera in 5CDE, and you must make the decision based upon how much wider the eye aperture has become.

#### AU 5D

The amount of sclera exposed must be *severely* more than exposed in the neutral face, but the evidence is less than the criteria for 5E.

### AU 5E

The upper eyelid is raised as much as the person can do, and close to the *maximum* sclera that the person can show is exposed above the iris, <u>and</u> there must be a bulging or staring appearance without doubt.

Intensity may vary for the two sides of the face, but give only one score that represents the higher intensity. Examine photo w5ii. Note the E level is reached on only one side of the face. But the score of E is given to the entire AU 5.

## Reference: AU 5

# Actions of Special Relevance to AU 5

Certain head and eye movements or position changes have special significance in regard to AUs 4,5, or 7, and you should carefully inspect the face for these actions when you score 4,5, or 7, even when not otherwise scoring head/eye positions. Use the definitions of these AUs when AUs 4,5, and 7 occur, either separately or in combination with other AUs.

AU	Summary of AU	See Description for Details
M69	Head and/or Eyes Look at Other Person	"Eye Movement Codes M68, 69, and M69" on page 321
69	Eyes Positioned to Look at Other Person	"Eye Movement Codes M68, 69, and M69" on page 321

When AU 5 occurs in the combinations listed in the table for this Reference section, the criteria for scoring the intensity of AU 5 are not the same as for AU 5 alone. Instead, use the criteria following the table to score AU 5.

Action Units or Combinations That Change the Intensity Scoring for AU 5

Problematic Combination of AUs (or any combination containing these combinations)	Use this rule for scoring intensity of AU 5
1+4+5	Use intensity criteria immediately following this table.
1+4+5+7	Use intensity criteria immediately following this table.
2+4+5	Use intensity criteria immediately following this table.
2+4+5+7	Use intensity criteria immediately following this table.
4+5	Use intensity criteria immediately following this table.
4+5+7	Use intensity criteria immediately following this table.
5+9	Anytime 5 is scored with 9, regardless of the other AUs that are also scored, use the criteria listed for 4+5secC on page 45.

The intensity criteria in any of the combinations listed above or any larger combination that includes those that are listed are:

#### AU 5A in combinations listed above

The appearance changes for AU 5 are sufficiently present to indicate AU 5 in these combinations, but are insufficient to score 5B as defined below (e.g., a harsh staring or bulging quality to the eye).

#### AU 5B in combinations listed above

- Top of iris must be revealed as it usually is in neutral.
   and
- 2. There must be a harsh staring or bulging quality to the eye.

## AU 5C in combinations listed above

More reveal of the top of the iris than usual in neutral, *marked* pushing up of the upper eyelid against the skin above the eye cover fold, and a *markedly* harsh staring or bulging quality to the eye, but the evidence is less than the criteria for 5D below.

# AU 5D in combinations listed above

More reveal of the top of the iris than usual in neutral, *severe* pushing of the upper eyelid against the skin above the eye cover fold, and a *severely* harsh staring or bulging quality to the eye, but the evidence is less than the criteria for 5E below.

#### AU 5E in combinations listed above

The upper eyelid is raised to push up against the skin above the eye cover fold to a *maximum* degree, more than a hairline of sclera is exposed above the iris, and *maximum* harsh staring or bulging quality to eye without doubt. Again note that in people with deeply set eyes or some Asians, sclera will never show in a 5E, and you will have to make the judgment based on widening of the eye aperture, or the maximum amount of iris that appears capable of exposure by 5.