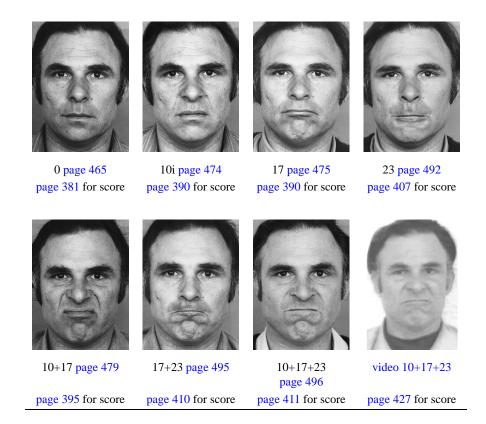
Action Unit Combination – 10+17+23

A. Appearance Changes due to AU Combination 10+17+23

Almost all of the elements described separately for AUs 10, 17 and 23 are preserved in this combination. The exceptions are in the shape of the lips, appearance changes 1 and 2, and in the wrinkles in the skin above the lips, appearance change 10, where AU 10 diminishes the effect of AU 23.

- **1.** Raises the upper lip. Center of upper lip is drawn straight up. The outer portions of upper lip are not drawn up as much as they would be in 10 alone due to the action of 23.
- 2. Causes a bend in the shape of the upper lip, which may appear similar to as in 10 alone, or due to the additional action of 23.
- **3.** Pushes the infraorbital triangle up, and may cause the infraorbital furrow to appear, or deepen if already evident in neutral.
- **4.** Deepens the nasolabial furrow and raises the upper part of this furrow producing a shape as
- **5.** Widens and raises the nostril wings.
- **6.** Pushes the chin boss upwards.
- **7.** Pushes the lower lip upwards.
- **8.** Causes wrinkles to appear on the chin boss as skin is stretched, and may produce a depression medially under the lower lip.
- **9.** Tightens the lips, making the lips appear more narrow.
- **10.** Produces small wrinkles in the skin above and below the lips, and muscle bulges below the lower lip, but due to 10 the wrinkles above the upper lip may be less visible than if 23 acted alone.
- 11. May cause the red parts of the lips to roll inwards and almost disappear from view, although lips may protrude outward.

Compare images 10+17, 17+23, 10i, 17, and 23 with 10+17+23. Inspect the video of 10+17+23.



B. How to do AU Combination 10+17+23

Follow the instructions, repeated below, for making AU 10, AU 17, and AU 23. Raise your upper lip (AU 10). Then push up with your lower lip (AU 17). While holding this, tighten your lips (AU 23). Reverse the procedure: do 17, add 23, and then 10.

AU 10 (repeated from page 95): This movement is easy to make. Be careful not to involve AU 9 – no nose wrinkling. Just lift your upper lip straight up to show your upper front teeth. Practice weak and strong actions.

AU 17 (repeated from page 98): This movement is easy to do. Push your lower lip upwards. Note the wrinkles in your chin, and the change in the shape of the lower lip. If you are unable to make this movement, place your fingers on your chin about in the middle and push the skin upwards, noting the changes that occur. Now try to hold this appearance when you take your fingers away.

AU 23 (repeated from page 237): This movement is not easy to make. Tighten your lips. Make them thin and tense. Be careful not to press them together (AU 24). Concentrate just on your lips. If you have difficulty, try tightening your lips and pressing them, then release the press holding the tightening action. You may have done or seen this movement when using the phrase "Zip your lip."

C. Intensity Scoring for AU Combination 10+17+23

The intensity criteria for AU 10, AU 17, and AU 23 are unchanged in the combination 10+17+23, and are repeated below.

AU 10A

The appearance changes for AU 10 are sufficiently present to indicate AU 10, but are insufficient to score 10B (e.g., a *trace* of pouching or bulging of inner corner of the infraorbital triangle or *trace* of increase).

AU 10B

1. *Slight* pouching or bulging of inner corner of the infraorbital triangle. See Figure 4-2. If the pouch is permanent, it must increase *slightly*. If the pouch is ambiguous, but you can see the center of the upper lip raised and it is not due to 6, 9, 11, or 12, you can score 10.

If you did not see the movement, it must also meet an additional criterion:

- **2.** *Slight* deepening of the upper portion of nasolabial furrow which takes on characteristic shape. If this shape is permanent, it must increase *slightly*.
- 3. Center of upper lip raised *slightly*, causing an angular bend in the shape of the upper lip.

AU 10C

At least *marked* evidence of pouching or bulging of inner corner of the infraorbital triangle, with lip raising evident and at least some of other appearance changes in 10secA (1) through (5) are present, but the evidence is less than the criteria for 10D.

AU 10D

At least *severe* evidence of pouching or bulging of inner corner of the infraorbital triangle with all appearance changes in 10secA (1) through (5) present, but the evidence is less than the criteria for 10E.

AU 10E

Appearance changes in 10secA (1) through (5) are all present and extreme to maximum.

AU 17A

The appearance changes for AU 17 are sufficiently present to indicate AU 17, but are insufficient to score 17B (e.g., a *trace* of lower lip pushed up and/or *trace* of chin boss wrinkling).

AU 17B

- 1. *Slight* evidence of lower lip push up beyond the movement necessary to close the lips; may include lip protrusion, or depression in medial area under the red part of the lip. The lower lip may slide in front of the upper lip and expose more of the red part of the lip than usual.
- **2.** *Slight* chin boss wrinkling or puckering, <u>and</u> upward movement of chin boss. If the chin boss is permanently wrinkled, it must increase *slightly*. AU 15 may cause similar chin wrinkling, but they differ in appearance. See 15 vs. 17 in subtle differences.

AU 17C

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both evident and at least one is *marked*, but the evidence is less than the criteria for 17D.

AU 17D

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both evident and at least one is *severe*, but the evidence is less than the criteria for 17E.

AU 17E

The pushing up of the lower lip and the wrinkling/puckering of the chin boss are both in the maximum range.

AU 23A

The appearance changes for AU 23 are sufficiently present to indicate AU 23, but are insufficient to score 23B (e.g., *slight* tightening of the lips alone).

AU 23B

- **1.** The lips appear *slightly* tightened, and,
- 2. The red parts are narrowed slightly and the narrowing is not due just to 12, 17, 20, 24, or 28.

If you did not see the <u>movement</u>, then the additional criteria must be present:

- **3.** *Slight* wrinkles or bulges in skin above or below at least one lip, or.
- **4.** Marked change on either criteria 1 or 2 for 23B and slight change on the other.

AU 23C

The lip tightening and narrowing described for 23B are both *marked*, but the evidence is less than the criteria for 23D.

AU 23D

The lip tightening and narrowing described for 23B are both severe, but the evidence is less than the criteria for 23E.

AU 23E

The lip tightening and narrowing described for 23B are both in the *maximum* range.

If the criteria for 23 are present on one lip, but <u>totally</u> absent on the other lip, score as T23 or B23. You can score 23 as occurring on only one side of the face, but you cannot score unilateral 23 on a single lip.