Action Unit 20 – Lip Stretcher

Figure 5-1 shows that the muscle underlying AU 20 emerges near the back of the jaw (ramus of the mandible) and attaches to the lip corner. The action of AU 20 pulls the lips laterally, back towards the ears. When the action of 20 is strong, the platysma (AU 21) is usually recruited, evidenced by the tightening or bulging in the neck.

A. Appearance Changes due to 20

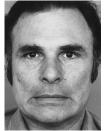
- 1. Pulls the lips back laterally; the lip corners may be raised or lowered to a limited extent but the main movement is horizontal.
- **2.** Elongates the mouth.
- 3. The lips become flattened and stretched by the lateral pull.
- **4.** Pulls the skin beyond the lip corners laterally, so that the cheek area adjacent to the lip corner becomes flattened.
- **5.** Wrinkles may appear at the lip corners or beyond the lip corners part way back towards the ears; the shape of these wrinkles is not important in distinguishing 20 from other AUs, but their presence due to the lateral pull on the skin is noteworthy.
- 6. Pulls the lower portion of the nasolabial furrow, and pulls the skin in the lower nasolabial furrow area laterally.
- 7. Stretches the skin over the chin boss laterally. May cause the chin to appear flattened and/or wrinkled.
- **8.** Can stretch nostril wings laterally to elongate the nostril's opening.

Note that 20 stretches the lower lip laterally, and that sign alone is not a sufficient basis for scoring AU 16 with 20+25. Later under Subtle Differences, Table 5-1, you will learn the effect of 16 on 20.

Compare images 20i and 20+25, which show 20 at low intensity. Whether the lips are closed or parted makes little difference in the appearance changes. There can be considerable range in extent of action. Compare 20i with 20ii. Inspect the video of AU 20.



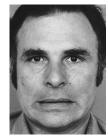
0 page 465 page 381 for score



20i page 481 page 396 for score



20ii page 481 page 396 for score



20+25 page 480 page 396 for score



video 20 page 419 for score

B. How to do AU 20

This movement is a fairly easy to do. Pull your lip corners back, stretching the lips as hard as you can. Be careful not to pull the corners down (AU 15) and not to pull the corners up (AU 12). If you have difficulty, place your fingers adjacent to the lip corners and pull horizontally towards the back of your jaw and try to hold the appearance when you remove your fingers. You can also induce AU 20 by tightening you neck muscles (AU 21 on page 300) extremely, and you should see your lip corners being pulled. Once you have the feeling of this lip corner stretch, try this stretching alone without the neck muscles. Try to make only a weak action as shown in the 20i and 20+25 images, and then a stronger version as shown in the 20ii image.

C. Intensity Scoring for AU 20

AU 20A

The appearance changes for AU 20 are sufficiently present to indicate AU 20, but are insufficient to score 20B (e.g., a *trace* of lateral pulling of the lip corners and skin with a *trace* of mouth elongation).

AU 20B

- **1.** The lip corners and skin adjacent to the lip corners are pulled laterally *slightly*. If you do not see the <u>movement</u>, then use the following criteria:
- 2. Pronounced elongation of mouth.

or

- **3.** *Slight* elongation of mouth, and one of the following:
 - a. Slight evidence of flattening of skin beyond the lip corners.

or

- b. *Slight* evidence that the lower portion of the nasolabial furrow or the skin in that area pulled laterally.
- c. *Slight* evidence of chin boss skin stretched and flattened. Unilateral 20 does not produce this appearance, and this criterion is not relevant for unilateral 20.

Note the 20 in images 20i and 20+25 show criteria 3a and 3c above.

AU 20C

At least *pronounced* pulling of the lip corners laterally or mouth elongation is *pronounced*, but the evidence is less than the criteria for 20D.

AU 20D

At least *severe* pulling of the lip corners laterally or mouth elongation is *severe* and other signs in 20secA are present, but the evidence is less than the criteria for 20E.

AU 20E

Appearance changes 1, 2, 3, and 4 of 20secA must be extreme to maximum.