Action Unit 13 - Sharp Lip Puller

Figure 6-1 shows that the muscle underlying AU 13 originates on the front of the upper jawbone, somewhat below the origin of AU 10, runs downwards and medially, and is attached at the angle of the mouth. In AU 13, the corners of the mouth are pulled sharply up towards the upper jaw bone.

A. Appearance Changes due to AU 13

- **1.** Causes the cheeks and the infraorbital triangle to become very evident, puffing out, as the infraorbital triangle is lifted primarily up, more than obliquely.
- 2. Pulls the corners of the lips up but at a sharper angle than AU 12.
- 3. While the corners of the lips are pulled up, the red parts of the lips do not move up with the lip corners.
- 4. The lip corners appear to be tightened, narrowed, and sharply raised.
- 5. May cause the upper and/or middle portion of the nasolabial furrow to deepen.
- **6.** May cause the upper lip to appear taut or flat.
- **7.** When the action is strong, causes:
 - a. Crow's feet wrinkles.
 - b. Bagging and wrinkling below the lower eyelids.
 - c. Deepening of the infraorbital furrow.
- **8.** As does a strong AU 12, a strong AU 13 produces the appearance changes associated with AU 6. The appearance changes listed under 7 above can be caused by a strong action of 13, or by a weak action of 13 plus 6, or by a strong action of 13 plus 6. Determining which of these AUs to score is similar to the decisions made for 6, 7, and 12.

Compare image 13i with 6+13i; also compare 13ii with 6+13ii. All of these images show a weak to moderate action of 13, not sufficient to produce the changes listed under 7 above. It is the actual addition of AU 6, producing the crow's feet wrinkles and deepened infraorbital furrow, which is responsible for the score of 6+13 for images 6+13i or 6+13ii. Note that to score 6B when 13 is present there must be *marked* crow's feet wrinkles and *marked* narrowing of the eye aperture and *slight* infraorbital triangle raise (see the Reference for AU 6 on page 33). Compare 13+25 with 13ii, noting that the mouth opening has little to do with the appearance changes. Inspect the video of 13.



0 page 465 page 381 for score



13i page 486 page 400 for score



6+13i page 486 page 401 for score



13ii page 486 page 401 for score



6+13ii page 486 page 401 for score



13+25 page 487 page 401 for score



video 13 page 422 for score

B. How to do AU 13

This AU is difficult to do. Try to pull the inner corners of your lips straight up without letting yourself smile. Try to make your cheeks tighten without contracting AU 6. If you cannot do it, use your fingers to pull up on your lips so that your mouth looks like the appearance shown in image 13. Once you are showing it, take your fingers away and try to hold your face that way.

C. Intensity Scoring for AU 13

AU 13A

The appearance changes for AU 13 are sufficiently present to indicate AU 13, but are insufficient to score 13B (e.g., a *trace* of puffing out of the outer cheek and a *trace* of sharply angled upward lip corners).

AU 13B

- **1.** *Slight* puffing out of the outer top corner of the infraorbital triangle (outer cheek).
- 2. Slight upward, sharply angled shape to lips.

If either criterion 1 or 2 are permanent, then they must increase *slightly*. Note that criterion 1 can be caused by AU 6, rather than AU 13, although the puffing looks quite different if is caused only by 6 or by 6+13. If other signs of AU 6 are evident, inspect carefully for appearance change 2 in 13secA to score 13. If the criteria for 12 are met, but not for 13, score 12. When there is doubt between scoring 12 or 13, score 12.

AU 13C

The puffing of the outer cheek and the sharply angled upward lip corners are both present and at least *marked*, but the evidence is less than the criteria for 13D.

AU 13D

The puffing of the outer cheek and the sharply angled upward lip corners are both present and at least *severe*, but the evidence is less than the criteria for 13E.

AU 13E

The puffing of the outer cheek and the sharply angled upward lip corners are both present and in the maximum range.

Reference: AU 13

There are many combinations of 13 with other actions in which 13 can be difficult to distinguish from 12. These AUs include: 9, 10, 14, 15, 16, 17, 18, 20, 22, 23, 24, 28, 30, 33, 35. Although AU 13 does not occur frequently, it does have a distinct appearance that is different from AU 12.