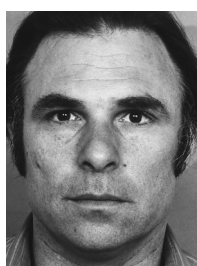

Action Unit 11 – Nasolabial Furrow Deepener

The muscular basis for the appearance changes of AU 11 is not completely certain. AU 11 corresponds to action of the muscle shown in Figure 6-1, which emerges just below the cheekbones and attaches near the outer portion of the upper lip. However, because the muscle strands running in this area are not clearly separated from each other, AU 11 may involve very small actions of some of the strands involved in AU 10 or AU 13 as well. To score AU 11, you learn how it appears and rely on these signs, and you need not be concerned with which muscle strands actually produce the appearance.

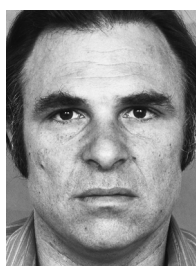
A. Appearance Changes due to 11

1. Pulls the upper lip upward and laterally to a small extent at the midpoint between the philtrum and outer lip corners.
2. Pulls the skin below the upper portion of the nasolabial furrow obliquely upwards.
3. Deepens the upper middle portion of the nasolabial furrow.
4. Raises and puffs the upper medial portion of the infraorbital triangle faintly.
5. In a strong action it may deepen the upper medial portion of the infraorbital furrow.

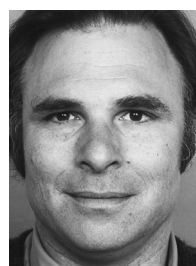
Examine image 11. Compare it to images 12, 10i and 0. Note how subtle these distinctions are. Examine j1+4; it shows a *trace* of AU 11 on one side, sufficient to score L11A. Image j1+2+4 shows a weak action of AU 11 scored as 11B. Examine the video of 11 and read the commentary in Appendix II (it also shows AU 38, nostril dilator, discussed in Chapter 8).



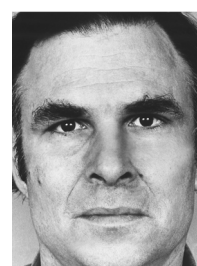
0 [page 465](#)
[page 381](#) for score



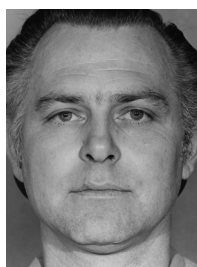
10i [page 474](#)
[page 390](#) for score



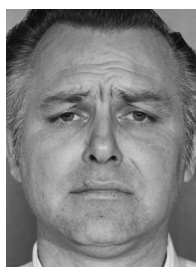
12 [page 484](#)
[page 398](#) for score



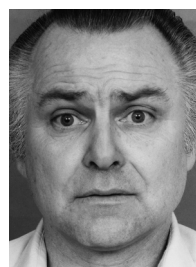
11 [page 484](#)
[page 398](#) for score



j0 [page 465](#)
[page 387](#) for score



j1+4 [page 471](#)
[page 387](#) for score



j1+2+4 [page 471](#)
[page 388](#) for score



[video 11](#)
[page 421](#) for score

B. How to do 11

This is a difficult movement to do voluntarily. Try to do it with the muscle labelled AU 11 in Figure 6-1. Avoid using AU 10 or AU 6, which also lift at approximately the same point on the upper lip. Try lifting the upper lip by a muscle that you feel contracting along the pathway in Figure 6-1 for AU 11. If you cannot do 11, try contracting AU 6 severely, which can recruit AU 11, then lift the upper lip more than is caused by AU 6 alone. When you get the feel of AU 11, lift the upper lip

without AU 6. To see the effects of AU 11 on the upper lip and nasolabial furrow, place your finger tip on the skin above the middle of the upper lip and push up and laterally very lightly.

C. Intensity Scoring for AU 11

The intensity scoring of AU 11 is difficult because other AUs in the same area of the face are likely to be acting also when higher intensities of AU 11 occur, obscuring the signs of AU 11. The intensity scoring of AU 11 is optional and not recommended as routine practice, but the guidelines for doing so are provided below.

AU 11A

The appearance changes for AU 11 are sufficiently present to indicate AU 11, but are insufficient to score 11B (e.g., a *trace* of lifting of the middle of the lip and lifting of the skin below the cheekbone, and these signs are not due to AUs 6, 9, 10, 12, or 13).

AU 11B

1. *Slight* oblique lifting of the portion of the lip midway between the philtrum and outer corners and lifting of the skin beneath the cheekbone that is not due to AUs 6, 9, 10, 12, or 13.
or
2. *Slight* deepening of only the middle portion of the nasolabial furrow. If there is a permanent deepening of the nasolabial furrow (not just a trace or line but an actual wrinkle) in the neutral face, be careful about scoring AU 11 on this basis.

AU 11C

Both of the signs listed for 11B are present and at least one is *marked*, and these signs are not due to AUs 6, 9, 10, 12, or 13, but the evidence is less than the criteria for 11D.

AU 11D

Both of the signs listed for 11B are present and at least one is *severe*, and these signs are not due to AUs 6, 9, 10, 12, or 13, but the evidence is less than the criteria for 11E.

AU 11E

Both of the signs listed for 11B are present and at least one is *maximum*, and these signs are not due to AUs 6, 9, 10, 12, or 13.

Reference: AU 11

AU 11 is extremely difficult to score in combinations with AUs 9, 10, 12, 13, and 14, and should be scored only with caution in these cases. Also possible are actions of AU 10 on one side of the face and 11 on the other (L10+R11 or R10+L11). If the effect of 11 can positively be seen in combinations of these AUs, it should be scored.

Action Units or Combinations That Change the Intensity Scoring for AU 11

Problematic Combination of AUs	Target Action of Adjusted Criteria	Use These Criteria
11+20	Criteria for scoring 11B in 11+20	<i>Slight</i> deepening of only the middle portion of the nasolabial furrow. and, <i>Slight</i> pulling up of the skin below the cheekbone.