Subtle Differences Among Single Oblique Action Units in the Lower Face

Table 6-1 highlights the subtle difference between the action units discussed in this chapter above. Study these comparisons before proceeding to the AU combinations for this chapter.

Table 6-1: Subtle Differences Among Single Oblique Action Units in the Lower Face

AUs	Subtle Differences	Subtle Differences		
	They share some appearance changes (effects on the skin above the upper lip and deepening of the nasolabial furrow) but differ in that 6 but not 11:			
6 vs.	causes crow's feet wrinkles	• causes crow's feet wrinkles		
11	narrows the eye aperture			
	• bags and wrinkles skin below the eyelids (note that AU 11 can do this, but only at the extreme medial area and cannot create severe bagging or wrinkling even with maximum contraction).			
10 vs. 11	row in the top portion, while 11 deepens the nasolabia	Only a problem with 10B vs. 11. Look for characteristic 10 pouch, and for deepening of the nasolabial furrow in the top portion, while 11 deepens the nasolabial furrow more in the middle portion. If you cannot decide between 10B or 11, choose 10B if the evidence to score 10B is present.		
	Usually only problematic if there is a very small acti	on.		
	10	12		
10 vs.	upper portion of nasolabial furrow deepens in very weak action	lower portion of nasolabial furrow deepens in very weak action		
12	pouching of inner, top corner of infraorbital triangle	slight puffing of outer top cheek area of infraorbital triangle		
	characteristic shape of nasolabial furrow	nasolabial furrow stretches laterally		
	medial portion of upper lip raised	lips elongated and angled obliquely at corner		
11 vs. 12	Only a problem with 12A vs. 11. The shape of the lips differs since 12, even when weak, pulls lip corners or adjacent skin upwards, changing the angle of the lips and creating a shallow curve in the lips. AU 11 pulls on the lips between the philtrum and the corner and does not create such a shape.			
11 vs. 13	Only a problem with a weak 13. The shape of the lips differs, since even a weak 13 pulls the lips up sharply, and 11 has no such effect on the lip shape or angle of the lip corners.			
12 vs. 13	12	13		
	angle of lips up but not as sharply as in 13	angle of lips up but more sharply angled than in 12		
	entire red part of lips may appear elongated	lip corners elongated up but red parts do not elongate as they do in 12		
	oblique lift to lower portion of infraorbital triangle	more vertical lift to lower portion of infraorbital triangle		

	It can be difficult to discriminate between the lip corners being pulled obliquely by 12 and the lips being pulled inwards and tightened by 14, or their combination, especially when the actions are weak.		
	12	14	
	infraorbital triangle raise	absent	
12 vs.	lip corners angled up	lip corners may appear angled up, but more importantly the lip corners appear tightened	
14	in an extreme 12 the lip corners may also disappear from view covered by skin adjacent to lip corners	lip corners may also disappear inwards	
	in a moderate to strong action the nasolabial fur- row is very apparently deepened	in a moderate to strong action the nasolabial fur- row is not as deepened, and it is primarily the lower portion which deepens	
	Typically 20 pulls horizontally while 12 pulls upward obliquely. However, there may be an upward pull that produces a shallow U shape in the 20 action, and then the shape of the lips can make it more difficult to distinguish 12 from 20, especially when these actions are small, but instead:		
	• infraorbital triangle raise may appear with 12, but not 20,		
12 vs. 20	• flattening of skin beyond lips evident in 20 not 12. Also consider the possibility that it may be 11+20.		
	When the action of 12 and 20 are strong, they are much easier to distinguish. Some signs relevant to AU 6 might appear in either, although a strong 20 does not produce <i>marked</i> crow's feet wrinkles nor does it narrow the eyes, while a strong 12 can produce both of these changes. When 6 is added to the action of 12 and 20, the basis for distinguishing 12 and 20 becomes somewhat more difficult. In strong actions of 12 and 20, the center of the lower lip becomes more flattened and stretched in 6+20 than in 6+12.		
	13	14	
	lip corners angled up steeply	lip corners may angle up but not as steeply	
13 vs.	puffed out outer top corner of the triangle	absent	
14	lip corners tightened pulled sharply up	lip corners tightened inwards	

Subtle Differences Involving Oblique Actions in the Lower Face

Table 6-1 lists the characteristics that can help you distinguish between sets of AUs which differ only subtly. This table repeats the information given earlier about subtle differences between single oblique AUs, so you can review all subtle differences. Study Table 6-1 carefully and examine the relevant images. Refer to the index of the video material in Appendix I to locate the video comparisons that can be made.

Table 6-3: Subtle Differences Among AUs and Combinations Involving Oblique Actions

	They share some appearance changes (effects on the skin above the upper lip and deepening of the nasolabial furrow) but differ in that 6 but not 11:		
6	• causes crow's feet wrinkles		
6 vs. 11 vs.	narrows the eye aperture		
6+11	 bags and wrinkles skin below the eyelids (note that AU 11 can do this but only at the extreme medial area and cannot create severe bagging or wrinkling even with maximum contraction). The effects of AU 6 on the lower face make it difficult to score 6+11. Look for lifting of the cheeks that is independent of the action of 6 to score 6+11. 		
6 vs. 7+11	It is important to distinguish the actions of AUs 6 and 11. AU 6 lowers the outer corners of the eyebrows and neither 7 or 11 affect the brows. Furthermore, the cheek raise due to 6 affects a larger area than AU 11, and 6 produces crow's feet wrinkles.		
6+12 vs. 6+20	See 12 vs. 20 and 6+12+25 vs. 6+20+25 in this table below.		
	separately and in combination. When the action of 12 is weak, the addition of 6 raises the infraorbital triagle while 7 does not do so, and the crow's feet produced by 6 with a weak 12 distinguishes it from a weat 12 either alone or with 7. When 12 is moderate, the combination of 12 with 7 is similar in appearance to with 6 because most of the signs of 6 can be caused by a moderate level of 12. Earlier subtle difference comparisons between 6 and 7 cannot be used in this case, and the distinction between 6 and 7 becomes more difficult, especially when the actions cannot be seen to act sequentially. Narrowing of the eye aper ture cannot be used, as it results from either 6 or 7. The comparisons below for low to moderate 12 with or 7 highlight useful differences.		
	6+12B or 6+12C/D	7+12B or 7+12C/D	
6+12 vs.	eye aperture narrowed	eye aperture narrowed	
7+12 vs.	infraorbital triangle raise	infraorbital triangle raised in 7+12Y not 7+12X	
6+7+12	crow's feet wrinkles	absent	
	lower lid raised	lower lid raised	
	absent	skin below the eye is drawn up and medially toward the inner corner of the eye	
	absent	raising of the lower eyelid skin over the bottom of the eyeball causes a bulge in the lower lid to appear	
	table below), let alone whether 6 or 7 has co and pushes it up to narrow the eye aperture rows the opening even more. AU 7, unlike (tion of 6 is difficult (see the entry for 6+12 vs. 12D/E in this ombined with 12. Although 6 bags the skin of the lower eyelid, 7 pulls the skin of the lid even higher onto the eyeball and nar-6, pulls the upper eyelid down and pulls the skin of the lower. When all these changes appear, score 6+7+12.	

	The following signs may be evident in the weak to mo moderate 12 alone:	derate 12 plus 6, which are not evident in the weak to	
	a. crow's feet wrinkle lines (if permanent, become deeper), and		
6+12 vs. 12A/B/C	b. narrowing of the eye aperture, and		
	c. infraorbital triangle raise including cheeks up, infra eyes (probably evident in a moderate 12, not a weak 1		
	Note that to score 6 in addition to 12, both a. and b. must be at least <i>slight</i> , although this cue would probable	bly be evident in a moderate 12 alone.	
6+12 vs. 12D/E	High intensity contractions of AU 12 hide many of the effects of AU 6. However, the distinction between 12 with or without 6 is very important. A clue of the presence of 6 with any intensity of 12 is that the outer corners of the eyebrows are lowered <i>slightly</i> . Only AU 6 can lower the outer corners of the eyebrows. In many cases, the crow's feet wrinkles caused by 6 differ from those caused by 12 in that they extend farther up on the temple and outer eyebrow in 6 or 6+12 than in 12 alone. Another clue is that AU 6 raises both the lateral and the medial portion of the cheek, but AU 12 raises only the lateral portion of the cheek. AU 6 can also lower the eye cover fold and change its shape, but 12 alone does not.		
	The difference is in the following evidence of 17:		
< 10.15	• chin boss moves up,		
6+12+15 vs. 6+12+15+17	• lower lip pushed up,		
0112113111	• chin boss may be wrinkled,		
	lower lip may protrude.		
6+12+15 vs. 6+15	This distinction is so difficult that a multi-step procedure is provided to make the discrimination in 12+15secC on page 211.		
6+12+15+17 vs. 6+12+17	This is so difficult that a multi-step procedure is provided in 12+15+17secC on page 211.		
6+12+25 vs. 6+20+25	These combinations are extremely difficult to distinguish, as the addition of 6 to 20+25 produces some of the same signs as are seen in 6+12+25: deepened nasolabial furrow, crow's feet wrinkles, raised infraorbital triangle, and deepened infraorbital furrow. The lip corners in 6+12+25 are pulled up obliquely, while in 6+20+25 they are pulled horizontally, and may only go up to a limited extent. Also, the infraorbital triangle raise is more severe in 6+12+25 than in 6+20+25. And, the skin adjacent to the lower, middle portion of the nasolabial furrow is raised up and to a limited extent laterally. Most important, the center of the lower lip is more stretched and flattened in 6+20+15 than in 6+12+25.		
	(.12.25	20.25	
	6+12+25 lip corners pulled up	20+25 lip corners pulled horizontally; may angle up or down to a limited extent	
	infraorbital triangle raise	absent	
6+12+25 vs. 20+25	skin in area of lower-middle portion of the nasolabial furrow has been raised up and laterally	absent or just lateral	
	crow's feet wrinkles and bags below lower eyelid	absent	
	absent	lips flattened by horizontal stretch	
	chin boss skin flattened and stretched obliquely	chin boss skin flattened and stretched horizon- tally	
	If neither alternative seems correct, consider 11+20+	-25.	

6+12+27 vs. 6+20+27	See 12+27 or 6+12+27 vs. 20+27 or 6+20+27 entry in	See 12+27 or 6+12+27 vs. 20+27 or 6+20+27 entry in this table.	
6+13 vs. 7+13	This distinction presents issues similar to 6+12 vs. 7+12 vs. 6+7+12 in this table above.		
	Similar considerations apply to this distinction as to 6+12 vs. 12 in this table above. When 13 is weak or moderate, the following signs must be evident in the weak to moderate 13 plus 6, which are not evident in 13 alone:		
	• crow's feet wrinkle lines (if permanent, they become	• crow's feet wrinkle lines (if permanent, they become deeper),	
	• narrowing of eye aperture,		
6+13 vs. 13	• infraorbital triangle raise including cheek raise, infraorbital furrow deepen and bags or wrinkles under eyes (may be evident in a moderate 13, not a weak 13 alone). Note that to score 6B in addition to 13, both a. and b. must be <i>marked</i> and c. must be at least <i>slight</i> .		
	When 13 is strong, it produces many of the signs listed above, and an added 6 is harder to see, unless the actions are sequential. You should look for the outer eyebrow being lowered by 6, additional or more extensive crow's feet wrinkles above those produced by 13 alone, and more lift in the medial parts of the cheek and infraorbital triangle than 13 alone produces.		
6+15 vs. 15	The difference is the evidence of AU 6: infraorbital triangle raise, narrowing of eye aperture, crow's feet wrinkles, bags or wrinkles below the eyes, deepening of infraorbital furrow. If you are uncertain whether it is 6+15 or 12+15, see 12+15secC on page 211 for the decision procedure.		
	When 12 is weak to moderate, the following signs are evident in the weak to moderate 12 plus 7, which are not evident in 12 alone:		
	• tightened lower lid,		
	• lower lid raised,		
7+12 vs. 12	skin below the eye is drawn up and medially towards.	• skin below the eye is drawn up and medially towards the inner corners of the eye,	
12	• raising of lower eyelid skin over the bottom of the eyeball causes a bulge in the lower lid to appear. When the 12 is strong, it produces some of the same changes listed above, making any added 7 hard to detect. A strong 12, however, cannot push the lower eyelid as high up on the eyeball as 7 can pull it, cannot narrow the eye as much as 7, does not lower the upper eyelid as 7 can, and does not draw the skin of the lower eyelid towards the inner corner of the eye as 7 does. Look for these signs as clues to an added 7.		
7+13 vs. 13	Similar considerations apply to this distinction as to 7+12 vs. 12. When 13 is weak to moderate, the signs of an added 7 are easier to see than when the 13 is strong. See the comparison of 7+12 vs. 7 in this table above for the distinguishing signs of 7 in combination with either 12 or 13 versus 13 alone.		
10 vs. 11	Only a problem with 10B vs. 11. Look for the characteristic 10 pouch, and for deepening of the nasolabial furrow in the top portion, while 11 deepens the nasolabial furrow more in the middle portion. If you cannot decide between 10B or 11, choose 10B if the evidence to score 10B is present.		
	Usually only problematic if there is a very small action.		
	10	12	
10 vs. 12	upper portion of nasolabial furrow deepens in very weak action	lower portion of nasolabial furrow deepens in very weak action	
	pouching of inner, top corner of infraorbital triangle	slight puffing of outer top cheek area of infraorbital triangle	
	characteristic shape of nasolabial furrow	nasolabial furrow stretches laterally	
	medial portion of upper lip raised	lips elongated and angled obliquely at corner	

10+12+25 vs. 12+25	The evidence of 10 varies depending upon the strength of 12. With low intensities of 12 (A or B), 10 is evident in the characteristic pouch of the inner corner of infraorbital triangle and exposure of most of the teeth in the upper front row. With 12C or 12D, look for the pouching, but it may be harder to see, due to the stronger action of 12. With 12E you rarely can see the characteristic AU 10 pouching of the inner corner of the infraorbital triangle, so look for signs of 10 in other changes. AU 10 raises the medial part of the infraorbital triangle more than 12 can, 10 lifts and deepens the medial part of the nasolabial furrow while 12 affects the lateral part more, and 10 lifts the nostril wings up more than 12 can.		
11 vs. 12	ners or adjacent skin upwards, changing the angle of	Only a problem with 12A vs. 11. The shape of the lips differs since 12, even when weak, pulls the lip corners or adjacent skin upwards, changing the angle of the lips and creating a shallow curve in the lips. AU 11 pulls on the lips between the philtrum and the corner and does not create such a shape.	
11 vs. 13	Only a problem with a weak 13. The shape of the lips and 11 has no such effect on the lip shape or angle of		
11+20+25 vs. 12+25		Only a problem when 12 is weak. The chief difference is the primarily horizontal stretch (AU 20) plus nasolabial furrow deepening (AU 11) as compared to an oblique pull on the lip corners by 12. See the 11	
	This distinction is very difficult. The action of 20 can Also, AU 20 stretches the nasolabial furrow line and t		
11+20+25 vs. 20+25	• the nasolabial furrow deepens; if the person has a permanent crease, it may be difficult to see the additional deepening due to 11 and you have to rely more upon the change listed below,		
	 pushing up of the skin below the infraorbital triangle. Read the 11+20+26 vs. 20+26 entry below for cautions about AU 6, 10, 12, or 13 in these combinations. 		
11+20+26 vs. 20+26	The clue to the presence of 11 is a deepening of the nasolabial furrow, usually in the midsection. As long as the criteria for 11 are met and there are not crow's feet wrinkles (in which case you would score AU 6) or pulling up of the lip corners (AU 12 or 13) or pouching of the inner corners of the infraorbital triangle (AU 10), you can score 11. See 11+20+25 vs. 20+25 entry for the problem encountered if there is a permanently creased nasolabial furrow.		
11+20+27 vs. 20+27	See 11+20+26 vs. 20+26 in this table above.		
12 vs. 12+14	It is hard to see the combined action of 12+14 unless the actions have different offsets and onsets. In 12+14 the lip corners appear tightened inwards by 14 and you also see the influence of 12 in an oblique pull of the skin beyond the lip corners and an oblique raise of the skin in the area of the lower middle portion of the nasolabial furrow and/or raise of the nasolabial triangle itself. To score 14 with 12, the tightening in the corners of the lips produced by 14 must be apparent. AU 14 should not be scored merely because a bunching of skin is observed in the corners of the lips.		
12 vs. 12+17	In 12+17 the line of the lips is straighter, the lips are narrower, the chin boss is raised, the lower lip is raised, there may be chin boss wrinkling, and there may be a protrusion of the lower lip.		
	12	13	
	angle of lips up but not as sharply as in 13	angle of lips up but more sharply angled than in 12	
12 vs. 13 vs.	entire red part of lips may appear elongated	lip corners elongated up but red parts don't elongate as they do in 12	
12+13	oblique lift to lower portion of infraorbital triangle	more vertical lift to lower portion of infraorbital triangle	
	The combination 12+13 is an unlikely score because it hard to detect when 12 and 13 are simultaneous, e	e the appearances of 12 dominate those of 13, making specially if 12 is moderate to strong.	

	It can be difficult to discriminate between the lip corners being pulled obliquely by 12 and the lips being pulled inwards and tightened by 14, or their combination, especially when the actions are weak.		
	12	14	
	infraorbital triangle raise	absent	
12 vs.	lip corners angled up	lip corners may appear angled up, but more importantly the lip corners appear tightened	
14	in an extreme 12 the lip corners may also disappear from view covered by skin adjacent to lip corners	lip corners may also disappear inwards	
	in a moderate to strong action the nasolabial fur- row is very apparently deepened	in a moderate to strong action the nasolabial fur- row is not as deepened, and it is primarily the lower portion which deepens	
12+14 vs. 14	This discrimination can be difficult, especially when the which can hide the signs of 12. See 12 vs. 12+14 in the		
12+15 vs. 12+15+17	Usually these combinations are scored when 15 is weak or moderate. AU 17 is evident in the chin boss raise, wrinkled chin boss, and pushed up lower lip. You may have some doubt whether it is 12+15 or 6+15; whether it is 12+15+17 or 6+15+17 or 6+12+15+17. See the multi-step procedure in 12+15secC on page 211 for details about such discriminations.		
	12+15	12+17	
	lip corners angle down	lips tend to be straight with corners up	
	lips appear flattened	lips appear narrow or lower lip may protrude	
12+15 vs. 12+17	If the action of AU 15 is at least moderate, there is pouching, bagging or wrinkling below the lip corners. AU 17 also may create a similar but visibly different appearance below the lip corners (see images). However, the difference is subtle and hard to describe in words so other bases are relied upon to distinguish 12+15 vs. 12+17. Also, note that if the 15 is strong (15E) in the combination 12+15, it hides the 12 and scoring 12+15E is difficult, unless the actions are sequential. Look for the upward movement of the outer portion of the cheeks and upward pull on the lip corners. It is very important whether 15 is present with 12 or not. See 12+15secC.		
	chin boss skin stretched, or flattened; may also appear wrinkled, may produce depression medially under the lower lip, but that is not definitive, instead it is the stretching and flattening which is distinctive	chin boss raised, and may appear wrinkled, may produce depression medially under the lower lip	
	absent	lower lip pushed up and may protrude	
	If there is a question about the involvement of 6 in the 12+15 combination, see the multi-step procedure in 12+15secC on page 211.		
12+15 vs. 15	The weak or moderate 12 when added to 15 has little effect on the lip corners which are pulled down by 15. But 12 pulls the skin beyond the lip corners obliquely up, and raises the infraorbital triangle. If crow's feet (not a toe) appear, consider scoring 6+15 rather than 12+15. If 15 is strong (15D/E), it becomes increasingly difficult to detect a 12, unless the actions are sequential. See the procedure in 12+15secC on page 211.		
12+15+17 vs. 12+17	See 12+15secC on page 211 for step procedure to disc	See 12+15secC on page 211 for step procedure to discriminate these combinations.	
12+15+17 vs. 15+17	See entries 12+15 vs. 15 and 12+15 vs. 12+17 in this table.		

If almost the entire tooth surfaces for the lower, center front teeth are exposed, and the shape of		
12+16+25 vs. 12+25	lip has been changed by the pulling down of 16 so that instead of it becomes more like	
12+23	and the skin covering the chin has been pulled down and stretched laterally, score as 12+16+25.	
	31 3 1	quely. However, there may be an upward pull that pro- the shape of the lips can make it more difficult to distin- e small, but instead:
	• infraorbital triangle raise may appear with 12, l	but not 20
12 vs.	• flattening of skin beyond lips evident in 20 not 12. Also consider the possibility that it may be 11+20.	
20 vs. 12+20	When the action of 12 and 20 are strong, they are much easier to distinguish. Some signs relevant to AU 6 are evident in both, although a strong 20 does not produce <i>marked</i> crow's feet wrinkles nor does it narrow the eyes, while a strong 12 can produce both of these changes. When 6 is added to the action of 12 and 20, the basis for distinguishing 12 and 20 becomes more difficult. In strong actions of 12 and 20, the center of the lower lip becomes more flattened and stretched in 6+20 than in 6+12.	
	When these two AUs co-occur, one can overshadow the other, depending upon which action is stronger. Although the actions of AUs 12 and 20 may appear to be somewhat similar under some circumstances, look for raising of the outer corners of the lips that cannot be due to the lateral, upward pull of AU 20.	
12+25 vs. 20+25	See 12 vs. 20, 6+12+25 vs. 6+20+25 and 6+12+25 vs. 20+25 entries in this table.	
12+26 vs. 20+26	In 12+26 the lip corners angle up. While the lips may angle up in 20+26, the major direction is horizontal. Infraorbital triangle raise is more evident in 12+26. Cheek skin is pulled obliquely in 12+26 while it is pulled more laterally in 20+26. Also, in 12+26 the lower lip appears less stretched and flattened than in 20+26. Medial portion of the lower lip in 20+26 remains straight even if the lateral part goes up to a limited extent.	
12+27 or 6+12+27 vs. 20+27 or 6+20+27	The action of 27, stretching the jaw wide open, has the effect of decreasing the apparent differences between 12 and 20. The primary clue is the direction of pull on the cheek skin, which is oblique if 12 is involved or horizontal if 20 is involved. The infraorbital triangle raise is more evident with 12 than 20. Also, the movement of the lip corners is straight back in 20+27 or 6+20+27 while it is angled up in 12+27 or 6+12+27. If the intensity of 12 is low and you do not see the movement, it is hard to detect the weak 12 with a strong 27. Also, recall that the criteria for 27 with 12 are slightly different that for 27 alone. (See 12+25+27 in the Reference for AUs 25, 26, 27 on page 112.)	
	13	14
13 vs.	lip corners angled up steeply	lip corners may angle up but not as steeply
14	puffed out outer top corner of the triangle	absent
	lip corners tightened, pulled sharply up	lip corners tightened inwards