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# Facial Image Comparison Feature List for Morphological Analysis

### 1. Scope

- 1.1 This guide defines a set of facial components, characteristics, and descriptors to be considered during a morphological facial comparison.
- 1.2 This set of facial components, characteristics, and descriptors describes the facial features that may be visible and comparable between images.
- 1.3 This guide defines a standard set of facial components, characteristics, and descriptors that should be used for facial comparison.
- 1.4 This guide does not define the comparison process itself, just the feature set to be used during such comparisons.
- 1.5 This guide does not define a classification system to constrain how those descriptors shall be articulated as applied to samples.

### 2. Terminology

### 2.1 Definitions:

- 2.1.1 Characteristic descriptors, n minutiae of the component characteristics.
- 2.1.2 Component characteristics, n detailed features of the facial components.
- 2.1.3 Facial components, n gross features considered in virtually all comparisons.

### 3. Significance and Use

3.1 Morphological analysis used for facial comparison should utilize consistent terminology and methodology. This guide provides a standard set of facial

- components, characteristics, and descriptors to be used as a framework in conjunction with a systematic method of analysis for facial image comparison.
- 3.2 The order of the facial components in this set is presented from the top of the face to the bottom, not in order of importance or priority.
- 3.3 Within this guide, the term "face" generally refers to the face, head, and neck inclusively unless specified otherwise.
- 3.4 There are several instances in this guide in which the term "distance" or "approximate distance" is used. When this term is used in this guide, it does not mean to imply that the precise value of this dimension shall be determined, but rather the relative size of this dimension compared to the overall width or height of the face, if not otherwise specified. In this guide, it is recommended that photoanthropometry not be used at all because of its limitations.

### 4. Facial Feature List

- 4.1 The following feature list contains nineteen (19) facial components, each of which is further divided into two levels of detail.
- 4.2 The facial components are gross features to be considered in virtually all comparisons. Tables 1 through 19 (in section 4.3) further expands each facial component into a set of component characteristics and their associated characteristic descriptors.
- **NOTE 1** In the figures, dotted lines indicate the position, orientation, and/or location of the feature.
- 4.3 Facial Components—The human facial components are multifaceted and when imaging conditions allow, it may be possible to subdivide these components further. Any standard procedure using facial comparison analysis should consider all of the following facial components: Skin, Face/Head Outline, Face/Head Composition, Hair, Forehead, Eyebrows, Eyes, Cheeks, Nose, Ears, Mouth, Chin/Jawline, Neck, Facial Hair, Facial Lines, Scars, Facial Marks, and Alterations. If features are present and observable on a face that cannot fit into the categories below, those features should be considered and included as part of 4.3.19.
  - 4.3.1 Skin—"Skin" refers to the overall appearance of the skin. See Table 1.

### **TABLE 1 Skin**

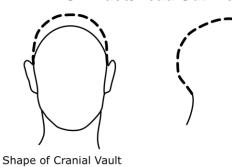
Component Characteristics	Characteristic Descriptors
Overall skin appearance	<ul><li>Overall texture</li><li>Overall tone (for example, luminance and color)</li></ul>

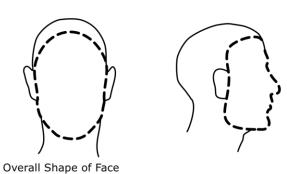
4.3.2 Face/Head Outline - "Face/head outline" refers to the overall shape of the head (cranial vault) and face. See Table 2 and FIG 1.

### **TABLE 2 Face/Head Outline**

<b>Component Characteristics</b>	Characteristic Descriptors
Shape of cranial vault	<ul><li>Portrait contour</li><li>Profile contour</li></ul>
Overall shape of face	<ul><li>Portrait contour</li><li>Profile contour</li></ul>

### FIG 1 Face/Head Outline





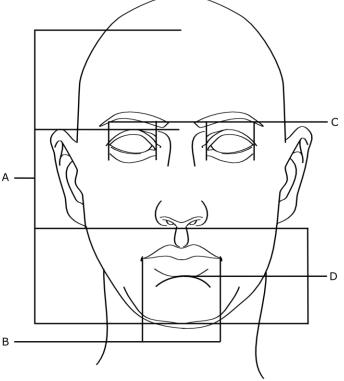
4.3.3 Face/Head Composition—"Face/head composition" refers to the overall configuration of the facial components, to include their alignment and relative sized, internal to a single face. See Table 3 and FIGS 2 and 3.

**TABLE 3 Face/Head Composition** 

Component Characteristics	Characteristic Descriptors
Proportions/position of features on face	<ul> <li>Approximate width of nose relative to eye distances (for example, interpupillary distance, individual eye width, or overall distance between outer corners)</li> <li>Approximate width of mouth relative to eye distances</li> <li>Approximate width of nose relative to mouth</li> <li>Approximate distance from nose to upper lip relative to face length</li> <li>Approximate distance from chin to lower lip relative to face length</li> <li>Ear position relative to eyes, nose, and mouth</li> <li>Eye position relative to face length</li> </ul>



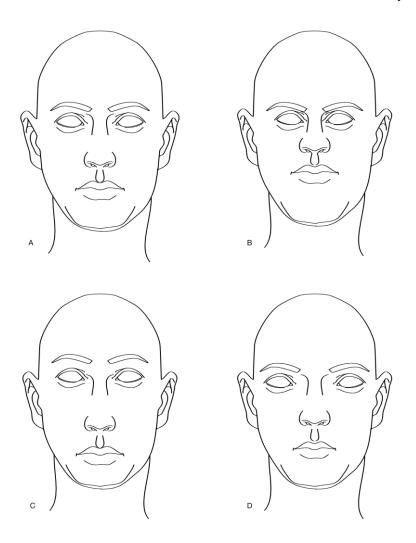
FIG 2 Some of the Traditional Canons for Ideal Facial Proportions<sup>1</sup>



- NOTE Not all faces will conform to the proportions presented in this figure.
  - A The face can be divided into three equal parts: hairline to nasal root (bridge), nasal root to nasal base, and nasal base to chin.
  - **B** The width of the chin is the same as the width of the mouth.
  - **C** The distance between the inner corners of the eyes is equal to the width of one eye.
  - D The mentolabial sulcus is half the distance from the nasal base to the chin.

<sup>&</sup>lt;sup>1</sup> Vegter, F. and Hage, J., "Clinical Anthropometry and Canons of the Face in Historical Perspective," *Plastic and Reconstructive Surgery,* Vol 106, No. 5, 2000, pp. 1090-1096.

FIG 3 Examples of Alterations to the Positions among Facial Components and the Effect those Positions Have on the Overall Face/Head Composition



### NOTE

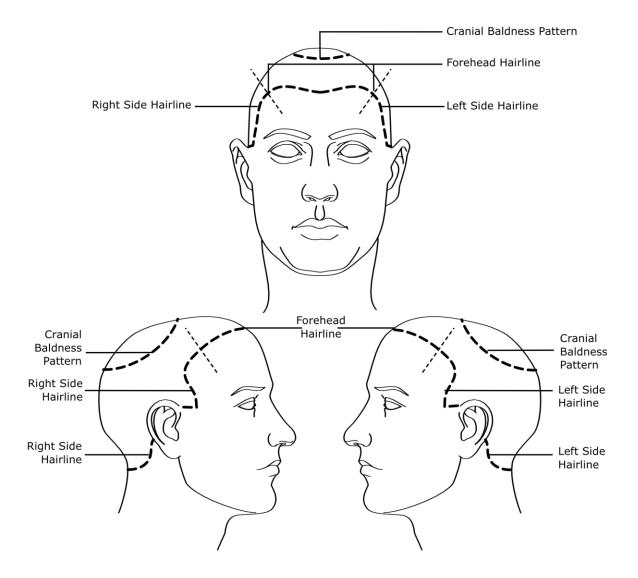
- A This face shows the proportions as they are presented in the previous illustration.
- B The eyes and eyebrows have been moved toward the midline (medially) and the tip of the nose, the lips, and philtrum have been raised toward the nose.
- C The eyes and eyebrows have been raised, and the tip of the nose, the lips, and philtrum have been moved down.
- D The eyes and eyebrows have been moved away from the midline and the lips have been made smaller. The overall face shape has not been modified in any of the figures.

4.3.4 *Hair* - Hair" refers to the shape and distribution of head hair and does not include other facial hair (eyebrows, lashes, facial hair). *Hair* includes the appearance of the hair itself and the sections of hairline and baldness patterns. Hairline refers to the contour of the edge of the hair along the top and sides of the forehead to the top of the ears. Cranial baldness pattern refers to apparent baldness affecting the hairline as well as gaps on the crown and sides of the head. See Table 4 and FIG 4.

### **TABLE 4 Hair**

Component Characteristics	Characteristic Descriptors
Hair	<ul> <li>Shape/spatial distribution (including overall hair length)</li> <li>Texture</li> <li>Symmetry</li> <li>Density and distribution of density (including gaps)</li> <li>Tonality and variation in color/tonality</li> </ul>
Forehead hairline	<ul> <li>Detailed shape (for example, symmetry, "widow's peak," "part line," "cowlick")</li> </ul>
Hairline right side Hairline left side	Detailed shape
Cranial baldness pattern	Detailed shape and distribution

FIG 4 Hairline/Baldness Pattern

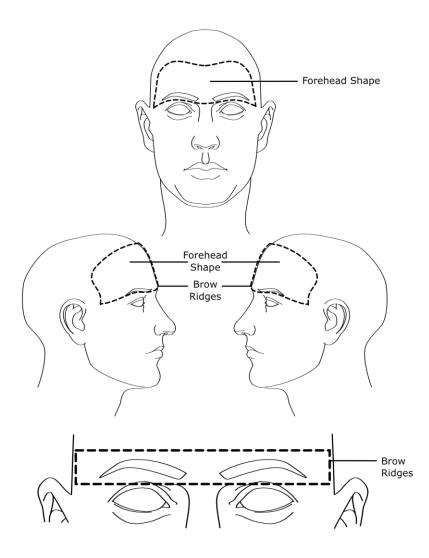


4.3.5 *Forehead* - "Forehead" refers to the part of the face above the eyes, including the brow ridges. See Table 5 and FIG 5.

**TABLE 5 Forehead** 

<b>Component Characteristics</b>	Characteristic Descriptors
Forehead shape	<ul><li>Relative height</li><li>Relative width</li><li>Slope/contour (visible in profile)</li></ul>
Brow ridges	<ul><li>Prominence</li><li>Continuity</li></ul>

FIG 5 Forehead

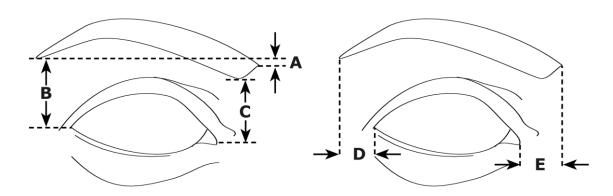


4.3.6 Eyebrows—"Eyebrows" refers to the strips of hair above the eyes. See Table 6 and FIG 6.

# TABLE 6 Eyebrows

Component Characteristics	Characteristic Descriptors
Right eyebrow Left eyebrow	<ul> <li>Shape (may include detailed observations)</li> <li>Size (width and length of eyebrow relative to eye size)</li> <li>Lateral eyebrow vertical end position relative to medial eyebrow vertical position (tilt of eyebrow) ("A" in FIG 6)</li> <li>Vertical end position of lateral eyebrow relative to the lateral canthus ("B" in FIG 6)</li> <li>Vertical end position of medial eyebrow relative to the medial canthus ("C" in FIG 6)</li> <li>Horizontal end position of lateral eyebrow relative to lateral canthus ("D" in FIG 6)</li> <li>Horizontal end position of medial eyebrow relative to medial canthus ("E" in FIG 6)</li> <li>Conjoined left-right eyebrows ("unibrow")</li> <li>Density of hair within eyebrow and distribution of density</li> <li>Hair details (for example, texture, length, thickness, shape, and color)</li> <li>Noticeably longer hairs</li> </ul>
Asymmetry between right and left eyebrows	Overall shape, size, position, hair details, and so forth (see individual eyebrow descriptors)

# FIG 6 Position of the Eyebrow Relative to the Position of the Eye Opening



### **NOTE** -

- A—Lateral eyebrow vertical end position relative to medial eyebrow vertical position.
- B—Vertical end position of lateral eyebrow relative to the lateral canthus.
- C—Vertical end position of medial eyebrow relative to the medial canthus.
- D—Horizontal end position of lateral eyebrow relative to the lateral canthus.
- E—Horizontal end position of medial eyebrow relative to the medial canthus.

4.3.7 *Eyes*—"Eyes" refers to the orbital region below the eyebrows and above the cheeks. See Table 7 and FIGS 7-9.

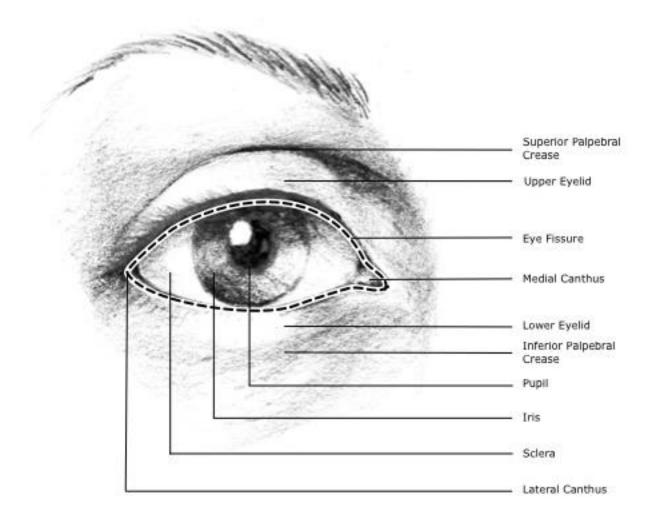
**TABLE 7 Eyes** 

Component Characteristics	Characteristic Descriptors
Intercanthal distance	Distance between inner corners of the right and
	left eyes
Interpupillary distance	<ul> <li>Distance between the center of the right and left pupils</li> </ul>
Right eye fissure opening	Shape
Left eye fissure opening	Angle [angle from inner corner and outer corner
(outline)	(when eyes are horizontal)]
Right upper eyelid	Prominence (for example, visibility, folds,
Left upper eyelid	including epicanthic fold)
(including lashes)	Protrusion
	<ul> <li>Visibility of the crease above the upper eyelid</li> </ul>
	(superior palpebral furrow)
	Position in relation to iris and/or pupil
	<ul> <li>Lash characteristics (for example, length,</li> </ul>
	density, flow, irregular)
Right lower eyelid	<ul> <li>Prominence (for example, visibility, folds)</li> </ul>
Left lower eyelid	Protrusion
(including lashes)	<ul> <li>Visibility of the crease below the lower eyelid</li> </ul>
(	(inferior palpebral furrow)
	Visibility of infraorbital furrow (a place where a
	line or wrinkle may appear parallel to and below
	the lower eyelid running from near the inner
	canthus and following cheek bone laterally)
	Position in relation to iris and/or pupil
	Lash characteristics (for example, length,  density (flow irregular)
Pight evehall prominence	density, flow, irregular)
Right eyeball prominence Left eyeball prominence	Degree of protrusion
Right eye sclera	Visibility of blood vessels and defects
Left eye sclera	Color
-	Color
Right iris Left iris	Visibility
Leit IIIS	Diameter relative to eye opening
	<ul> <li>Position relative to eye opening (in front view)</li> </ul>
	Irregularity in pupil

Component Characteristics	Characteristic Descriptors
Right eye medial canthus Left eye medial canthus	<ul> <li>Caruncle (fleshy prominence at inner eye corner)</li> <li>Shape and angle of inner corner of the eye</li> </ul>
Right eye lateral canthus Left eye lateral canthus	Shape and angle of outer corner of the eye
Asymmetry between right and left eyes	<ul> <li>Shape, angle</li> <li>Off-set (for example, one eye higher than the other)</li> <li>Eyelids (for example, one drooping, one retracted) and eyelashes</li> <li>Color</li> <li>Iris and pupil position (for example, crosseyed)</li> <li>Overall shape, size, position, and so forth (see individual eye descriptors)</li> </ul>

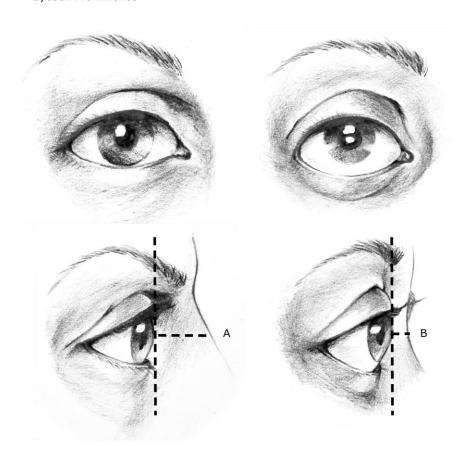
FIG 7 Eyes





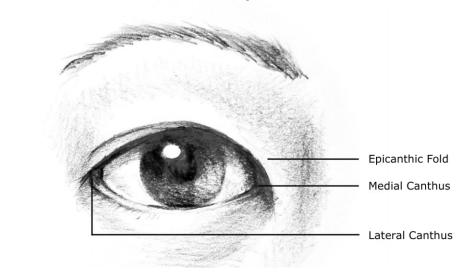
# FIG 8 Anterior (Forward) Projection of the Eyes

**Eyeball Prominence** 



**NOTE** - **A** shows an eye with minimal prominence (projection forward from the socket), whereas **B** shows an eye with significant prominence.

FIG 9 Epicanthic Fold



4.3.8 *Cheeks*—"Cheeks" refers to the regions surrounded by the eyes, ears, nose, mouth, chin, and jawline. See Table 8.

**TABLE 8 Cheeks** 

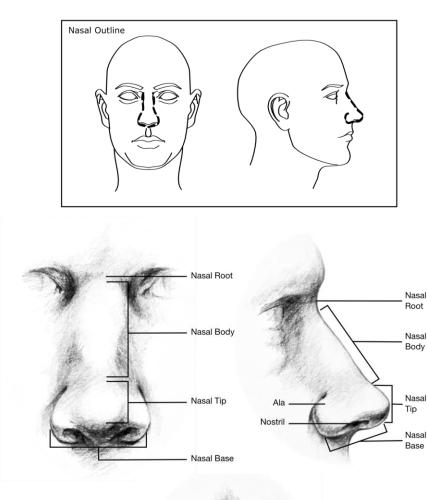
Component Characteristics	Characteristic Descriptors
Right cheekbone Left cheekbone	Prominence
Right cheek shape Left cheek shape (soft tissue)	Presence of dimple

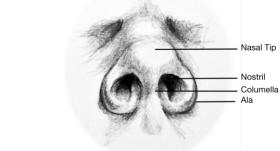
4.3.9 Nose—"Nose" refers to the entire nasal region. See Table 9 and FIG 10.

### **TABLE 9 Nose**

Component Characteristics	Characteristic Descriptors
Nasal outline (profile and front view)	<ul><li>Overall shape</li><li>Length or width or both</li><li>Prominence</li><li>Symmetry</li></ul>
Nasal root (bridge)	<ul> <li>Front view: width, length, shape, depth</li> <li>Profile view: length, depth, angle</li> </ul>
Nasal body	<ul> <li>Front view: width, length, shape, angle</li> <li>Profile view: length, angle, contour</li> </ul>
Nasal tip	<ul> <li>Shape (in front and profile view, including whether or not the tip is bifid)</li> <li>Angle (for example, up, down)</li> <li>Symmetry</li> </ul>
Nasal base	<ul><li>Width</li><li>Height</li><li>Deviation to the right or left</li></ul>
Nasal base: alae (wings of nose)	<ul><li>Thickness</li><li>Symmetry</li><li>Shape</li></ul>
Nasal base: nostrils (nasal openings)	<ul><li>Shape and size of opening</li><li>Symmetry</li><li>Hair</li></ul>
Nasal base: columella (soft tissue between nostrils)	<ul><li>Width and length</li><li>Relative position</li><li>Symmetry</li></ul>

FIG 10 Nose



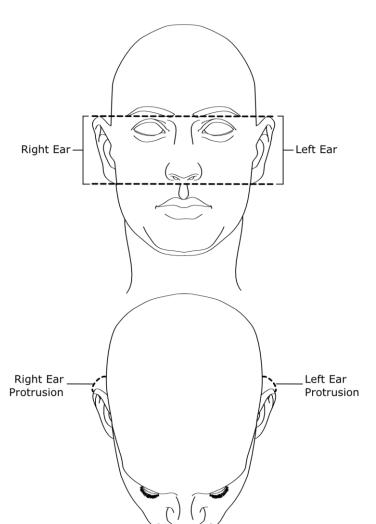


4.3.10 *Ears*—"Ears" refers to the external characteristics of the ears. See Table 10 and FIGS 11 and 12.

# **TABLE 10 Ears**

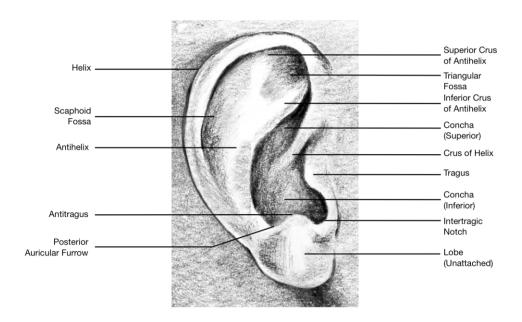
Component Characteristics	Characteristic Descriptors
Asymmetry between left and right ears	<ul> <li>Size</li> <li>Shape</li> <li>Protrusion</li> <li>Positioning (for example, one higher than the other)</li> </ul>
Right ear protrusion Left ear protrusion	Extent of protrusion
Overall right ear Overall left ear	<ul><li>Size</li><li>Shape</li><li>Angle</li></ul>
Right ear helix—superior/inferior (tail) Left ear helix—superior/inferior (tail)	<ul><li>Size</li><li>Shape</li></ul>
Right ear tubercles (auricular/Darwin's tubercle) Left ear tubercles (auricular/Darwin's tubercle)	<ul><li>Size</li><li>Shape</li><li>Quantity</li></ul>
Right ear antihelix Left ear antihelix	<ul><li>Size</li><li>Shape</li></ul>
Right ear crura of antihelix (superior crux, inferior crux) Left ear crura of antihelix (superior crux, inferior crux)	<ul><li>Size</li><li>Shape</li></ul>
Right ear triangular fossa Left ear triangular fossa	<ul><li>Size</li><li>Shape</li></ul>
Right ear crus of helix Left Ear crus of helix	<ul><li>Size</li><li>Shape</li></ul>
Right ear scaphoid fossa Left ear scaphoid fossa	<ul><li>Size</li><li>Shape</li></ul>

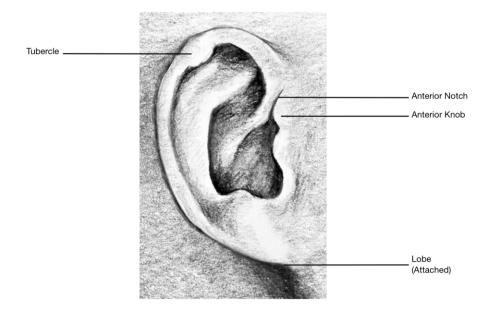
Component Characteristics	Characteristic Descriptors
Right ear concha (superior, inferior) Left ear concha (superior, inferior)	<ul><li>Size</li><li>Shape</li></ul>
Right ear tragus Left ear tragus	<ul><li>Size</li><li>Shape</li><li>Protrusion</li></ul>
Right ear antitragus Left ear antitragus	<ul><li>Size</li><li>Shape</li><li>Protrusion</li></ul>
Right ear intertragic/intertragal notch Left ear intertragic/intertragal notch	<ul><li>Size</li><li>Shape</li></ul>
Right ear anterior knob Left ear anterior knob	<ul><li>Size</li><li>Shape</li></ul>
Right ear anterior notch Left ear anterior notch	<ul><li>Size</li><li>Shape</li></ul>
Right ear posterior auricular furrow Left ear posterior auricular furrow	<ul><li>Size</li><li>Shape</li></ul>
Right ear lobule (lobe) Left ear lobule (lobe)	<ul><li>Size</li><li>Shape</li><li>Attached or detached</li></ul>
Ear abnormalities	For example, cleft lobe, "cauliflower ear"



**FIG 11 Ear Position** 

FIG 12 Ear





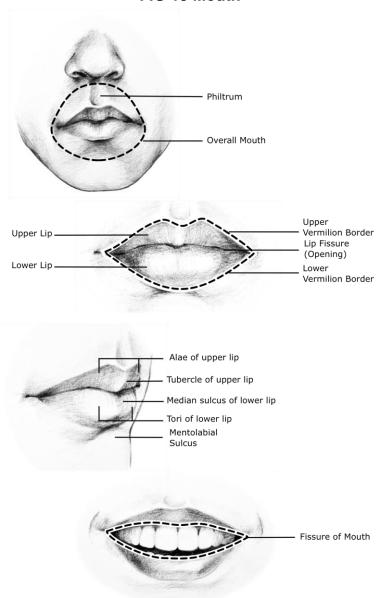
4.3.11 *Mouth*—"Mouth" refers to the entire oral region including the teeth and encompasses the philtrum. See Table 11 and FIG 13.

### **TABLE 11 Mouth**

Component Characteristics	Characteristic Descriptors
Philtrum	Prominence
	Width of ridges
	Width of furrow
	<ul> <li>Symmetry</li> </ul>
Overall mouth	Shape
	Symmetry
Upper lip	Shape
	Fullness
	<ul> <li>Protrusion</li> </ul>
	<ul> <li>Symmetry</li> </ul>
	<ul> <li>Upper vermilion border shape (for</li> </ul>
	example, "Cupid's bow") and
	definition
	<ul> <li>Detail (for example, tubercle, lip</li> </ul>
	creases, alae)
Lower lip	Shape
	<ul> <li>Fullness</li> </ul>
	Protrusion
	Symmetry
	Lower vermilion border shape and
	definition
	Detail (for example, median sulcus, tori lin granges)
Lip fissure (opening between lips)	tori, lip creases)  • Shape
Lip lissure (opening between lips)	Symmetry
	Degree of contact/occlusion along
	length of opening
	Corners/angles of mouth (labial)
	commissure)
Mouth asymmetry	Difference between left and right
	sides
Overall dental occlusion (contact between	Symmetry
upper and lower teeth)	Degree of contact/occlusion
Gnathism (apparent convexity or	Expression (for example, upper
concavity of the mouth complex, related	gums/teeth protrude, lower
to the relative projection of the upper	gums/teeth protrude)
and/or lower teeth)	Degree
	•

<b>Component Characteristics</b>	<b>Characteristic Descriptors</b>
Characteristic detail of teeth	<ul><li>Shape</li><li>Size</li></ul>
	<ul> <li>Alignment/position (for example, gaps, crooked, missing)</li> <li>Condition (for example, wear, damage, disease, color)</li> </ul>
Mouth abnormalities	For example, cleft lip (congenital deformity caused by abnormal facial development during gestation)

FIG 13 Mouth

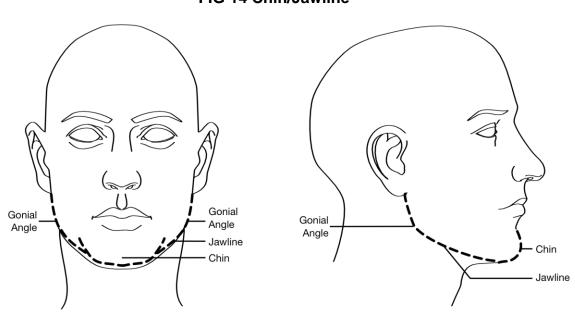


4.3.12 Chin/Jawline—"Chin/jawline" refers to the area of the face defined by the lower border of the mandible (namely, "jaw bone"). The chin is the area on the lower jaw below the mouth. Jawline specifically refers to the area of the face defined by the lower border of the mandible between the chin and the gonial angle or the point at which the lower border of the mandible abruptly changes direction from a primarily horizontal line to a primarily vertical line. See Table 12 and FIG 14.

**TABLE 12 Chin/Jawline** 

Component Characteristics	Characteristic Descriptors
Chin (profile and frontal view)	<ul> <li>Overall shape</li> <li>Length or width or both relative to rest of face</li> <li>Prominence</li> <li>Symmetry</li> <li>Details (for example, cleft, dimple, mental groove; refer to 4.18 Facial Lines)</li> </ul>
Jawline (from chin to gonial angle)	<ul><li>Shape</li><li>Definition (for example, jowls)</li></ul>
Gonial angle (angle of the jaw)	<ul><li>Shape</li><li>Definition</li></ul>

FIG 14 Chin/Jawline

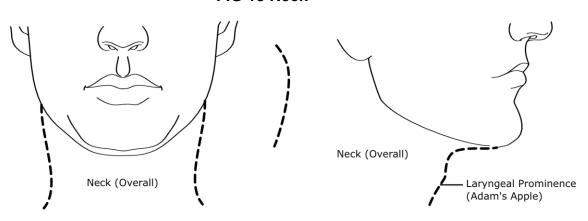


4.3.13 Neck—"Neck" refers to the transitional zone between the head and the trunk and limbs of the body. See Table 13 and FIG 15.

**TABLE 13 Neck** 

Component Characteristics	Characteristic Descriptors
Neck (overall)	<ul> <li>Width</li> <li>Height</li> <li>Details (for example, musculature, veins, wrinkles, folds, "wattle," "double chin")</li> </ul>
Laryngeal prominence (Adam's apple)	<ul><li>Shape</li><li>Size</li><li>Prominence</li><li>Location on neck</li></ul>

FIG 15 Neck



4.3.14 Facial Hair—"Facial hair" refers to the hair on the face typically covering the cheeks, chin/jaw, upper and lower lip, and neck of the face. See Table 14.

### **TABLE 14 Facial Hair**

Component Characteristics	Characteristic Descriptors
Facial hair above upper lip Facial hair below lower lip	<ul> <li>Shape/spatial distribution (including overall hair length)</li> <li>Texture</li> <li>Symmetry</li> <li>Density and distribution of density including gaps</li> <li>Variation in color/tonality</li> <li>Orientation (slanted, straight)</li> <li>Outline/edge definition (for example, sharp, irregular)</li> <li>Continuity with facial hair on side(s) or below/above mouth</li> <li>Noticeably longer hairs</li> </ul>
Facial hair on right side Facial hair on left side	<ul> <li>Shape/spatial distribution (including overall hair length)</li> <li>Texture</li> <li>Symmetry</li> <li>Density and distribution of density including gaps</li> <li>Variation in color/tonality</li> <li>Orientation (slanted, straight)</li> <li>Outline/edge definition (for example, sharp, irregular)</li> <li>Continuity with facial hair above or below mouth</li> <li>Noticeably longer hairs</li> </ul>
Facial hair on neck, below chin/jawline	<ul> <li>Shape/spatial distribution (including overall hair length)</li> <li>Texture</li> <li>Symmetry</li> <li>Density and distribution of density including gaps</li> <li>Variation in color/tonality</li> <li>Orientation (slanted, straight)</li> <li>Outline/edge definition (for example, sharp, irregular)</li> <li>Continuity with facial hair on side(s) or below mouth Noticeably longer hairs</li> </ul>

4.3.15 Facial Lines—"Facial Lines" refers to wrinkles, folds, or creases. Creases or folds are determined by craniofacial structure. Other lines, such as wrinkles, are age-related and are caused by muscle action, loss of elasticity of the skin, and/or loss of subcutaneous fat/teeth at sunken areas. The following list represents the most common facial lines and is not an exhaustive list. Special attention should be paid to any lines that do not correspond to those listed below. See Table 15 and FIG 16.

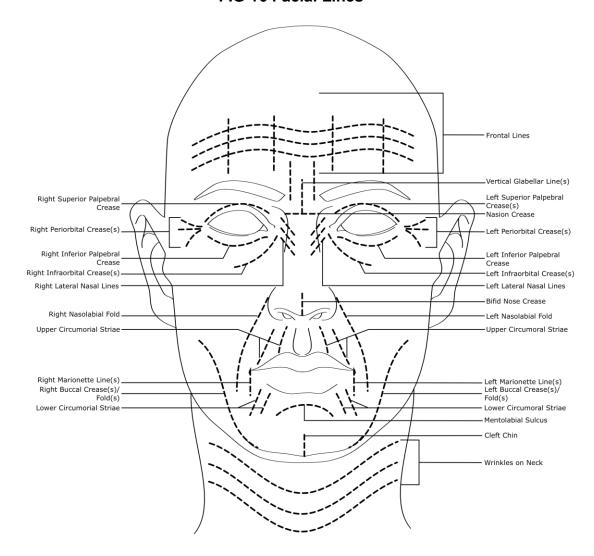
### **TABLE 15 Facial Lines**

Component Characteristics	Characteristic Descriptors
Frontal lines (forehead wrinkles)	<ul> <li>Distribution</li> <li>Orientation (vertical or horizontal)</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Vertical glabellar line(s)	<ul> <li>Length</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Nasion crease	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Right lateral nasal lines Left lateral nasal lines	<ul> <li>Distribution</li> <li>Orientation</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Bifid nose crease	<ul><li>Depth/prominence</li><li>Length</li></ul>
Periorbital lines adjacent to right eye (Crow's Feet/wrinkles) Periorbital lines adjacent to left eye (crow's feet/wrinkles)	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>

Component Characteristics	Characteristic Descriptors
Right superior palpebral crease Left superior palpebral crease (crease between the upper eyelid and the top of the bony orbit)	<ul><li>Visibility</li><li>Position</li><li>Depth/prominence</li><li>Shape</li></ul>
Right inferior palpebral crease Left inferior palpebral crease (crease between the lower eyelid and the bottom of the bony orbit)	<ul><li>Visibility</li><li>Position</li><li>Depth/prominence</li><li>Shape</li></ul>
Right infraorbital creases Left infraorbital creases (creases below the eyes)	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Upper circumoral striae (lines above upper lip) Lower circumoral striae (lines below lower lip)	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Mentolabial sulcus (horizontal crease or fold between lower lip and chin)	<ul><li>Shape</li><li>Length</li><li>Depth/prominence</li></ul>
Right nasolabial crease/folds Left nasolabial crease/folds (creases or folds extending from nose to corners of mouth)	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Right marionette lines Left marionette lines	<ul><li>Pattern</li><li>Depth/prominence</li></ul>
Cleft chin	<ul><li>Depth/prominence</li><li>Size</li></ul>
Right buccal creases/folds Left buccal creases/folds (cheek to chin)	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>

<b>Component Characteristics</b>	Characteristic Descriptors
Wrinkles on neck	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>
Other creases	<ul> <li>Distribution</li> <li>Quantity</li> <li>Pattern (including relation to one another)</li> <li>Depth/prominence</li> </ul>

**FIG 16 Facial Lines** 



4.3.16 Scars—"Scars" refers to dysmorphic or discolored areas or both of skin where permanent damage has healed (that is, not recent damage). These areas may occur at any place on the face since they are typically caused by random trauma or intentional scarification (for example, branding). See Table 16.

**TABLE 16 Scars** 

Component Characteristics	Characteristic Descriptors
Scars	<ul> <li>Location</li> <li>Shape</li> <li>Orientation</li> <li>Size</li> <li>Color/tonality</li> <li>Depth/prominence</li> </ul>

4.3.17 Facial Marks—"Facial Marks" refers to portions of the skin that contain a different level of pigment than the rest of the surrounding skin (for example, freckles, moles, acne, rosacea, birth marks, bruises, abrasions, vitiligo, and dark/light patches). These areas may occur in any location of the face since they are typically random in nature. Some facial marks are transient features that require contemporaneous images for comparison (for example, acne, bruises, and abrasions). See Table 17.

**TABLE 17 Facial Marks** 

Component Characteristics	Characteristic Descriptors
Skin marks (for example, freckles, moles, acne, rosacea, birth marks, bruises, abrasions, vitiligo, and dark/light patches)	<ul> <li>Location/distribution (including relation to one another)</li> <li>Shape</li> <li>Size</li> <li>Color</li> <li>Prominence</li> </ul>

4.3.18 *Alterations*—"Alterations" refers to any intentional modification to the face with the exception of scarring. See Table 18.

### **TABLE 18 Alterations**

Component Characteristics	Characteristic Descriptors
Piercing	<ul><li>Location</li><li>Description</li></ul>
Makeup	<ul><li>Location</li><li>Description (for example, shape, size, and color)</li></ul>
Tattoo (including cosmetic)	<ul> <li>Location</li> <li>Description (for example, content, shape, size, and color)</li> </ul>
Other	<ul><li>Location</li><li>Description</li></ul>

4.3.19 Other—The suite of components and characteristics identified in the paragraphs above should be sufficient to address the vast majority of faces encountered in facial comparison situations. However, in some instances, there may be deformities or other irregularities on a face that do not conform to this set of features. In such instances, it will be necessary to include these irregular features in the analysis. Given the unconstrained range of possibilities that this component set represents, it is simply labeled as "other." See Table 19.

### **TABLE 19 Other**

Detailed Feature Characteristic List	Feature Attribute List
Other text	<ul><li>Description</li><li>Details</li></ul>

### 5. Keywords

5.1 facial comparison; facial features; morphological analysis

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