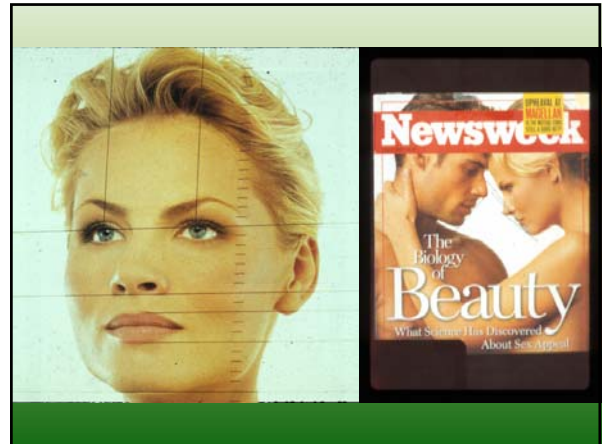


THE BEATIFUL FACE

Orthodontics 2005

Malcolm E. Meistrell, Jr., D.D.S.
Clinical Professor of Dentistry

Division of Orthodontics
School of Dental and Oral Surgery
Columbia University



Beauty

✘ Every culture is a BEAUTY culture

Beauty

✘ A Pleasure to the senses

Esthetics

✘ A branch of philosophy that gives way to science

ESTHETICS

✘ A Study of Beauty
✘ Application of Beauty and its Psychological Response

Notion of beauty

✘ Transcends Culture

LOCAL FASHIONS

✘ Rest on bedrock of shared preferences

Looking good

✘ A universal human obsession



Physical beauty

PHYSICAL BEAUTY

- ✘ Why do we put so much stock in it?
- ✘ How do we perceive it?

Outward beauty

ATTRACTIVENESS

- ✘ May be a reliable indicator of underlying quality
- ✘ Certifies biological quality



Judgement Of Beauty

JUDGEMENT OF BEAUTY

- ✘ Observation of another
- ✘ Do you want your children to carry his/her genes?
- ✘ Visceral attention to small variations
- ✘ Size
- ✘ Symmetry of facial bones
- ✘ Body weight

Mr. Right

- ✘ Ideal face for a woman varies according to menstrual cycle stages
- ✘ Likely to conceive receptive to rugged masculine features
- ✘ Unlikely to conceive smoother more feminine features

Stages of Cycle

- ✘ When likely to conceive prefer men with rugged masculine features
- ✘ When unlikely to conceive prefer men with smoother more feminine features

Control Group

- ✘ Women on birth control pills
 - No change in hormonal cycle
 - No variation over course of month
 - Preferred more feminine men

Reasons

- ✘ From biologic point of view, masculinity is great for lower species females.
- ✘ Bright feathers - big horns etc. in males = Good genes
- ✘ Opposite in humans, children take longer to raise stability and supportiveness.

Fling Vs. Long Haul

- ✘ Fling varied according to cycle stage
large gap between high and low fertility times
masculine versus feminine
- ✘ Long haul consistent throughout cycle
tended to be moderately feminine



Average faces

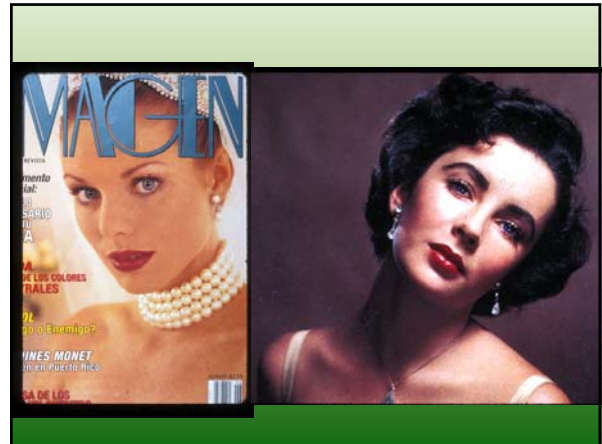
- ✘ More pleasing than faces with features that deviate from the norm



Extremely beautiful people

FEATURES OF ATTRACTIVENESS

- ✘ Share exceptional qualities
 - ✘ Body symmetry
 - ✘ Facial symmetry
 - ✘ Average-ness
- ✘ Large Eyes
- ✘ High Cheekbones
- ✘ Narrow Jaw




Ideal male faces

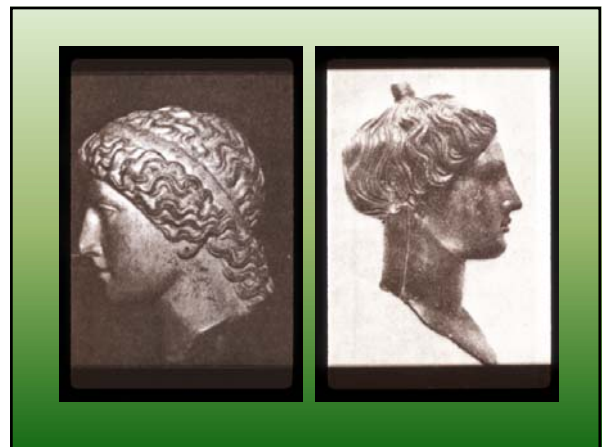
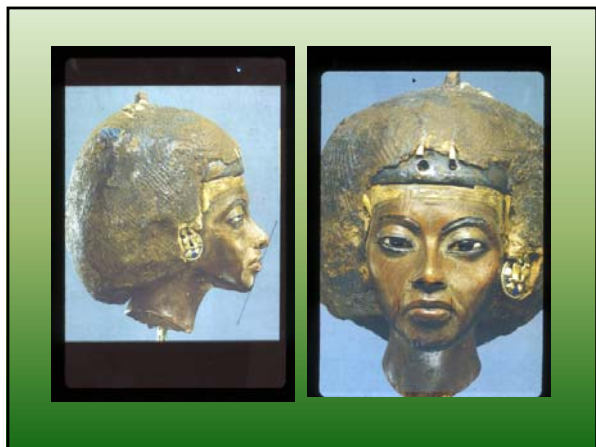
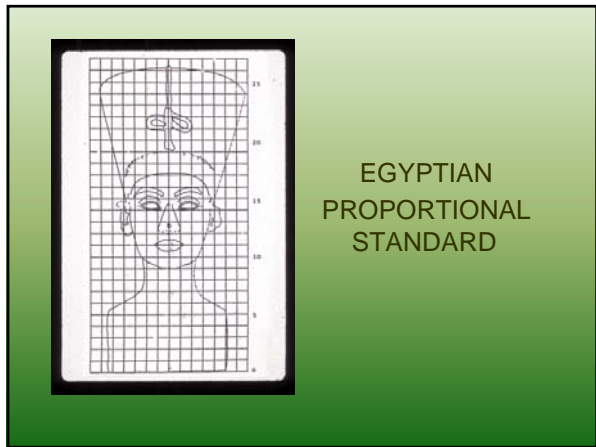
- ✘ Broad forehead
- ✘ Prominent brow and cheekbones
- ✘ Large jaw and strong chin

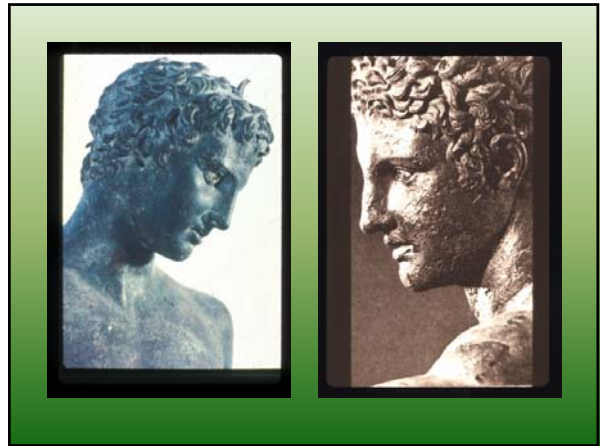
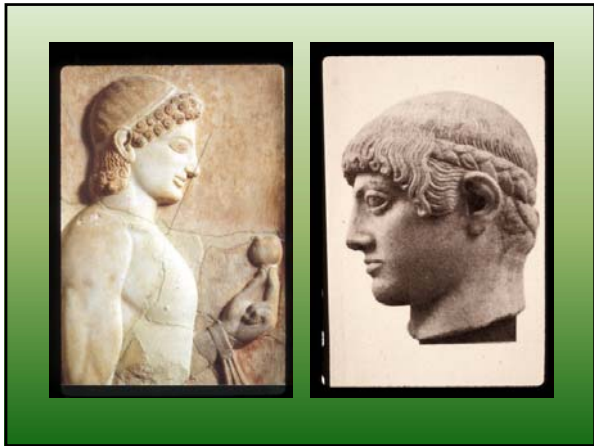


Ideal female face

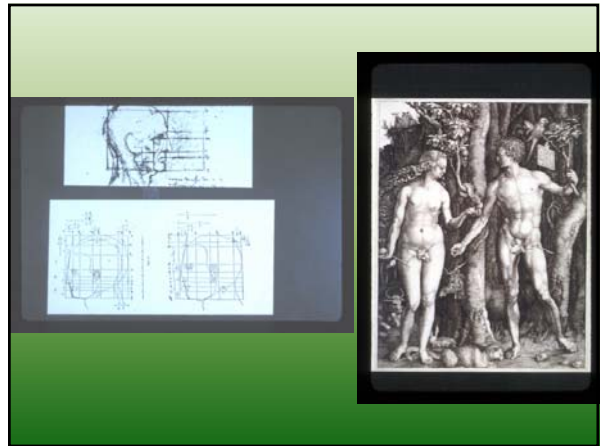
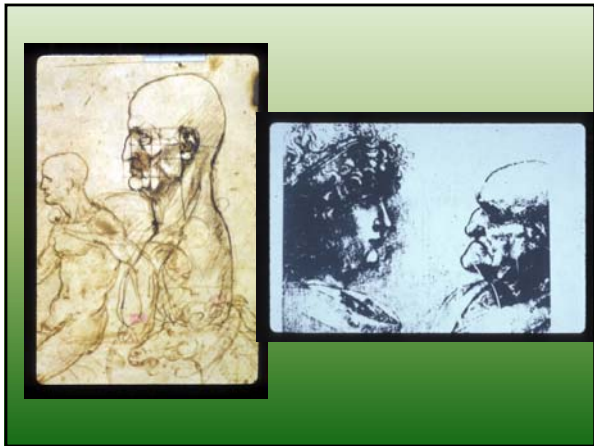
- ✘ Forehead higher than average
- ✘ Fuller lips
- ✘ Shorter jaw
- ✘ Smaller chin and nose

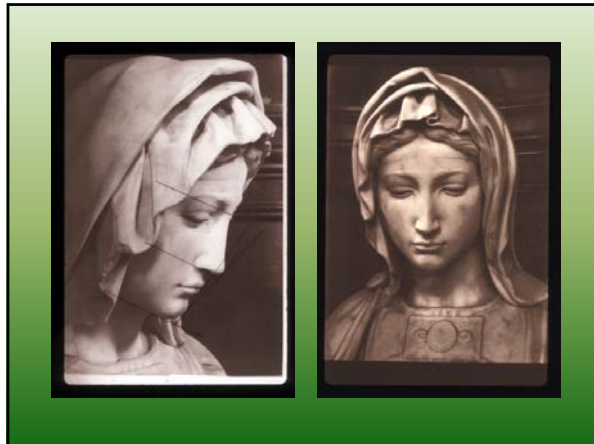





Facial Analyses
of Leonardo
and Durer

This block features the text "Facial Analyses of Leonardo and Durer" on the left side. On the right side is a reproduction of Leonardo da Vinci's "Vitruvian Man" drawing, showing a male figure inscribed within a circle and a square.



Profile analysis lines

- ✘ Burstone- B line
- ✘ Holdaway- H Line
- ✘ Ricketts- E Line
- ✘ Steiner- S Line
- ✘ Sushner- S' Line
- ✘ Merrifield- Profile Line, Z angle



Burstone line

- ✘ Soft tissue subnasale- soft tissue pogonion

Holdaway H-Line

- ✘ Upper lip- Soft Tissue Pogonion

Ricketts E-Line

- ✘ Tip of nose- soft tissue pogonion

Steiner S-Line

- ✘ Soft Tissue Pogonian- Center Shape Curve Between tip of nose and Subnasale

Sushner S' Line

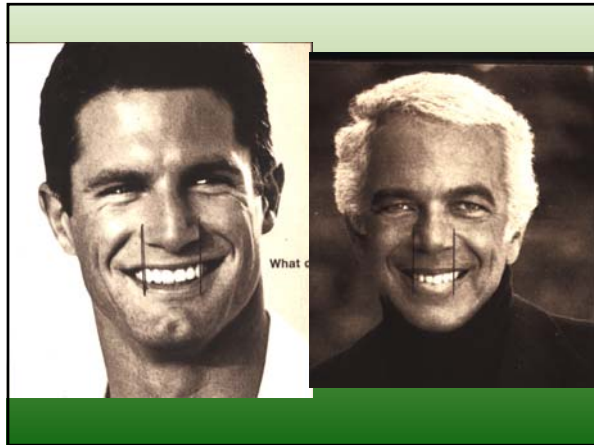
- ✘ Soft Tissue Nasion- Soft Tissue Pogonion

Merrifield - Profile Line, Z Angle

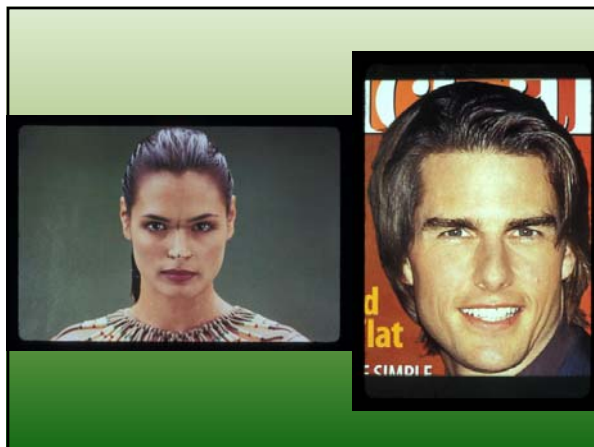
- ✘ Profile Line- Soft Tissue Pog- Most Prominent Lip
- ✘ Z Angle- Frankfort Horizontal - Profile Line

Smile Line

✧ How much Gingiva?



Frontal analysis



Nasocillary Line



Nasal Length

- ✘ Length from Nasion to Nasal Tip
- ✘ Should be Approximately 1.5 Times Width at



Midline

- ✘ A Vertical line Drawn through the Forehead, Nose, Upper Lip (columnella), Dental Midline and Chin that Divides the Face in Hair



Facial Thirds

- ✘ Face Horizontally Divided Into Thirds with Lines Drawn at Hairline, Eyebrows, Base of Nose and Chin



Lower face third

- ✘ 1/3 from base of nose to where lips meet
- ✘ 2/3 from where lips meet to bottom of chin



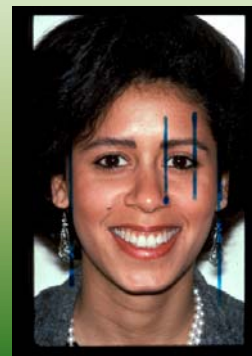
Ala base

- ✘ Width of Nose at Nostrils Equals one Eye Width



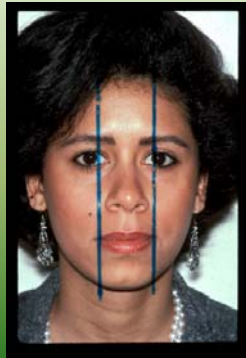
Rule of fifths

- ✘ Perfect Face Width is Five Times the Width of One Eye



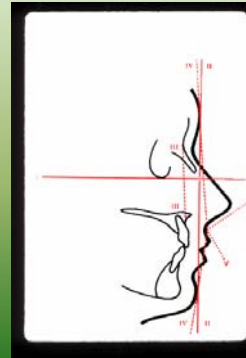
Width of the mouth

- ✘ Should Equal the distance between the Limbus of the Eyes



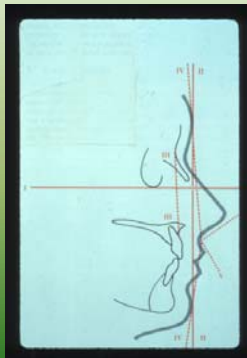
Frankfort Horizontal (1)

- ✘ A Line from the top of the External Auditory Canal to the Infraorbital Rim



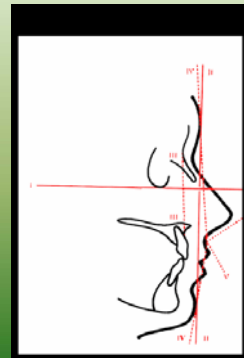
“O” Meridian (II)

- ✘ Gonzales- Iloa Line
- ✘ A Line from Soft Tissue Nasion Perpendicular to Frankfort Horizontal
- ✘ Soft Tissue Poroion- 0 ± 3 mm to line



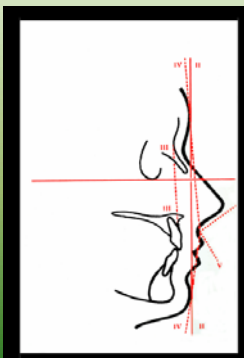
Maxillary Depth (III)

- ✘ Perpendicular to Frankfort Plane that connects N and A = O



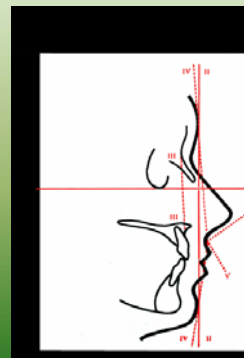
Angle of Facial Convexity (IV)

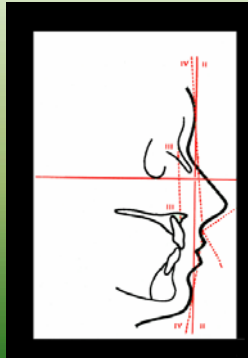
- ✘ Angle Formed by Soft Tissue Glabella, Subnasale, and Soft Tissue Pogonion
- ✘ Ideal is 11 degrees



Nasolabial Angle (V)

- ✘ Line Tangent to Inferior Aspect of Nose through Subnasale
- ✘ Line from Subnasale Tangent to Upper Lip
- ✘ Males - Angle = 90-95
- ✘ Females - Angle = 100-105





Upper Lip to Incisal Edge

- ✘ 1-4 mm at rest
- ✘ 2/3 of Entire Clinical Crown-Smiling

Interlabial gap Upper Lip

- ✘ 0-3 mm when the lips are relaxed
- ✘ Males- 22 mm
- ✘ Females- 20 mm

Harmonic Equation

Facial analysis with the golden proportion

- ✘ Beauty lies in Proportion
- ✘ Ideal or Standard is needed
- ✘ Best Order is found at the Peak of the Curve
- ✘ Biology is the Same for all Races
- ✘ Locate the Most Treatable Dysplasia



Facial features 25 YEAR OLD FEMALE

- ✘ We obsess over the ones which diverge in males and females at puberty
- ✘ Abundant lips of a 14 year old
- ✘ Delicate jaw of an 11 year old
- ✘ Relatively prominent eyes and cheekbones

