



The Circles of Prominence: Ideal Ratios That Determine the Basis of Facial Beauty

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Statistics: Hil Lyons, Nate Mercado

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Circles of Prominence:

-New Theory:

Circles of Prominence: A New Theory on Facial Aesthetics. Philip A. Young, MD; Uttam Sinha, MD; Dale H. Rice, MD; Fred Stucker, MD. Arch Facial Plast Surg. 2006;8:263-267.

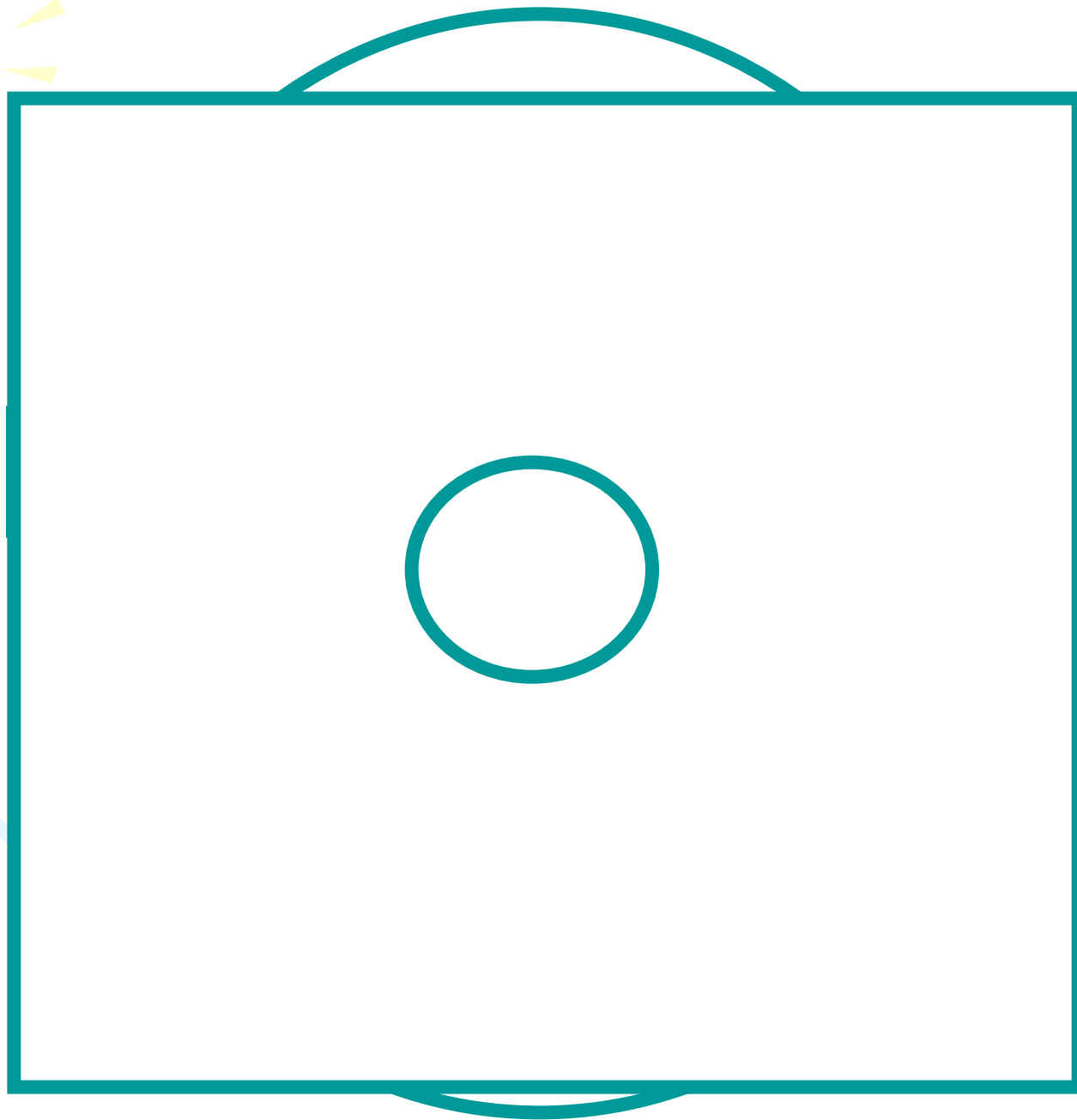
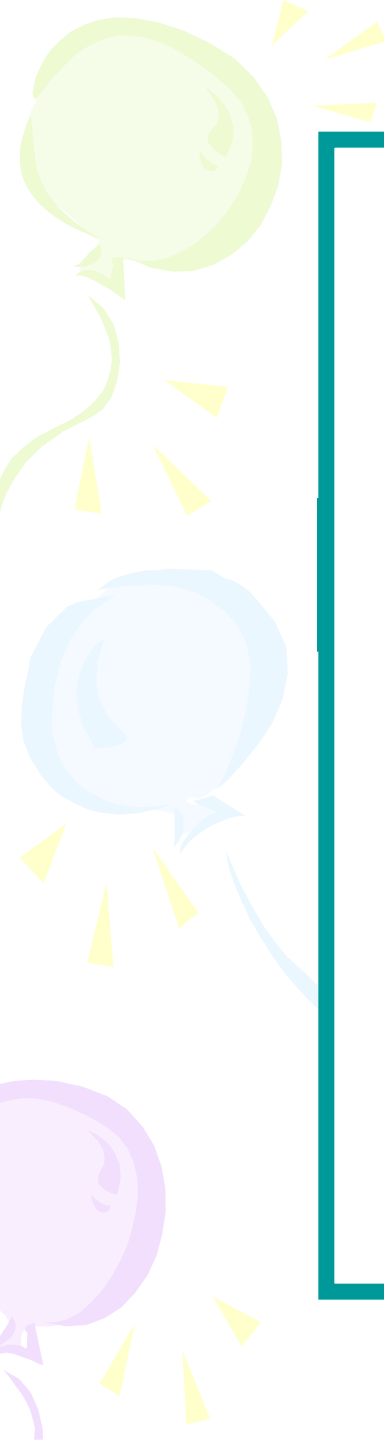
-Previous Theories: Leonardo Da Vinci and the Neoclassical Canons: External Landmarks, recent studies

-NEED: Theory based on what observer finds important

-Previous Studies: eye movements, iris

-Ideal between zero and infinity

-Every Distance, Dimension, or Shape within the face is a proportion of the Iris

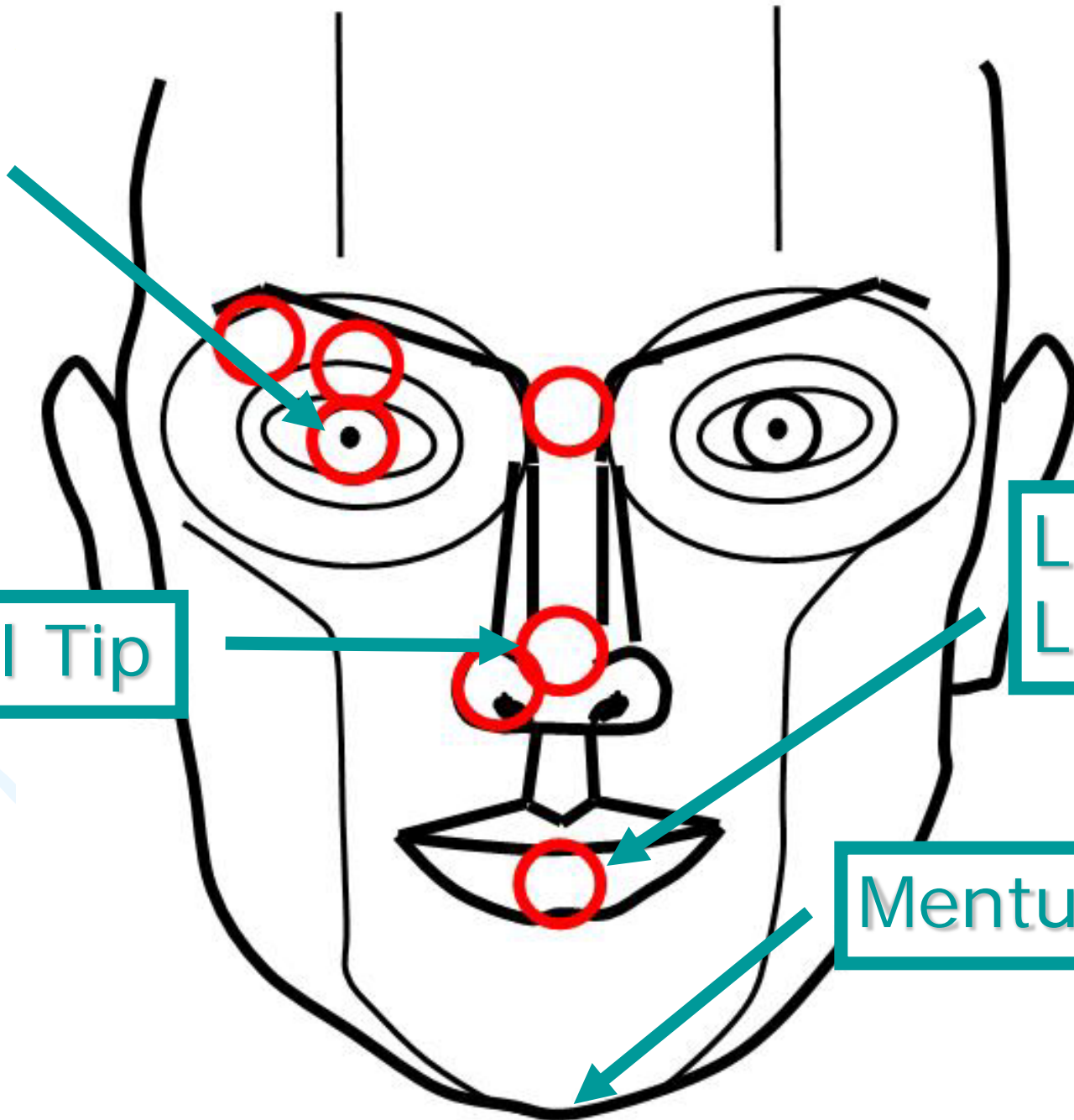


Iris

Nasal Tip

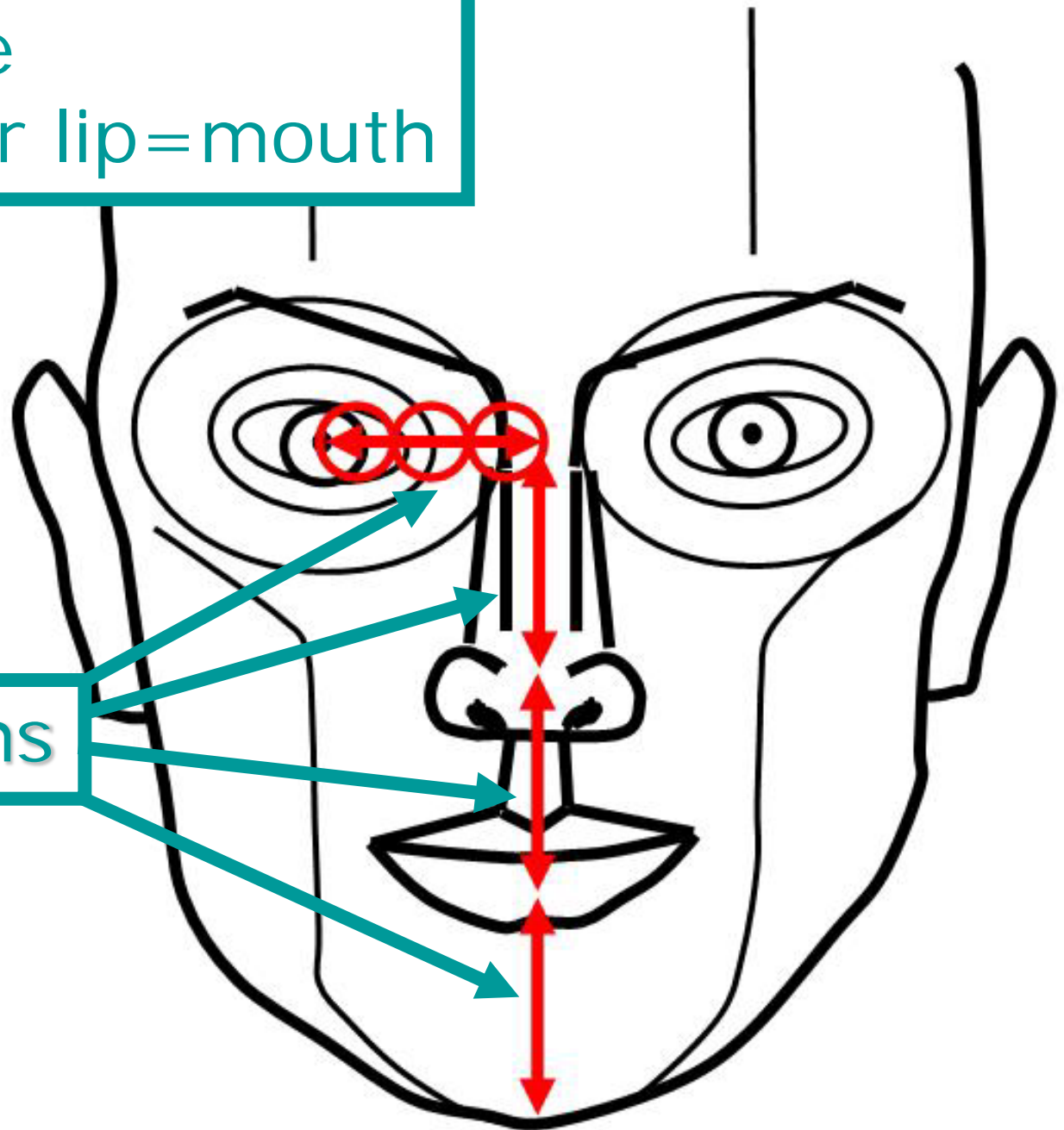
Lower Lip

Mentum



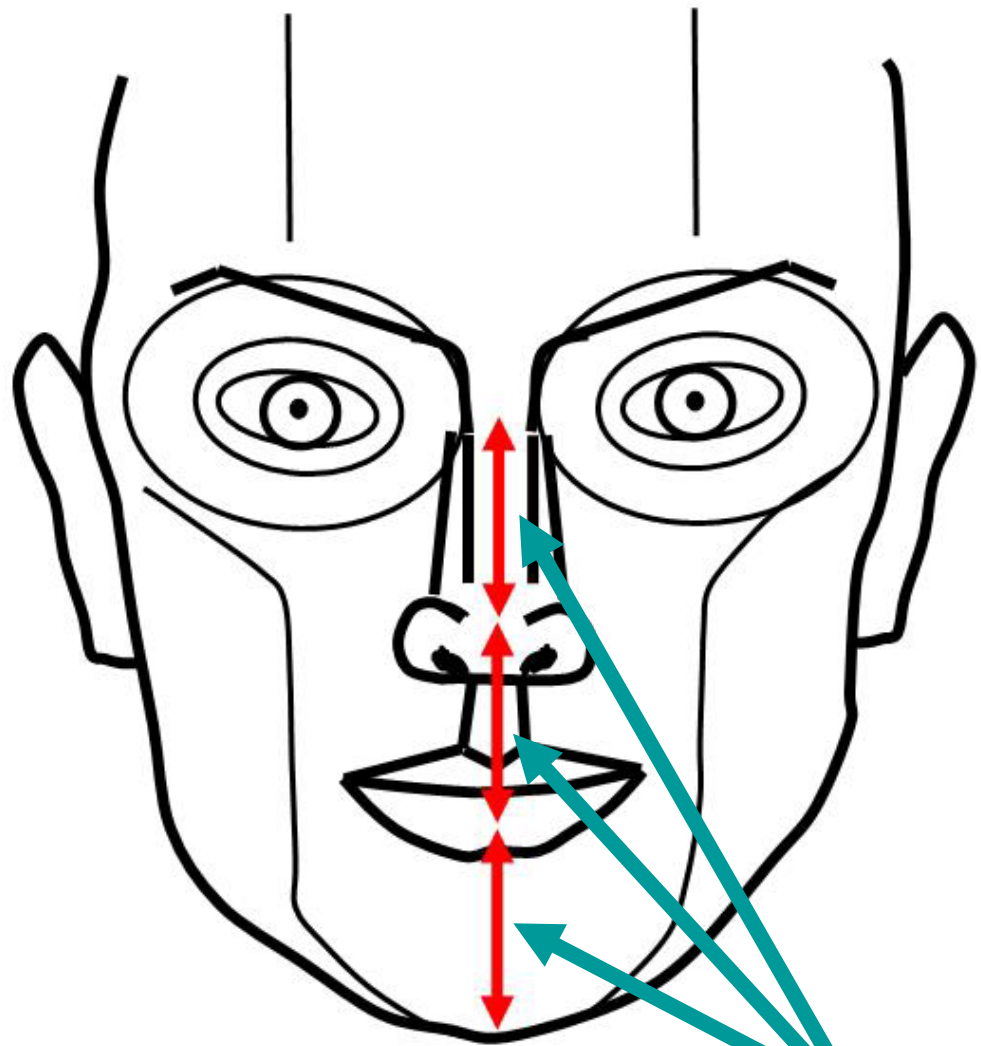
Iris = eye
Nasal tip = nose
Center of lower lip = mouth

3 Iris Widths



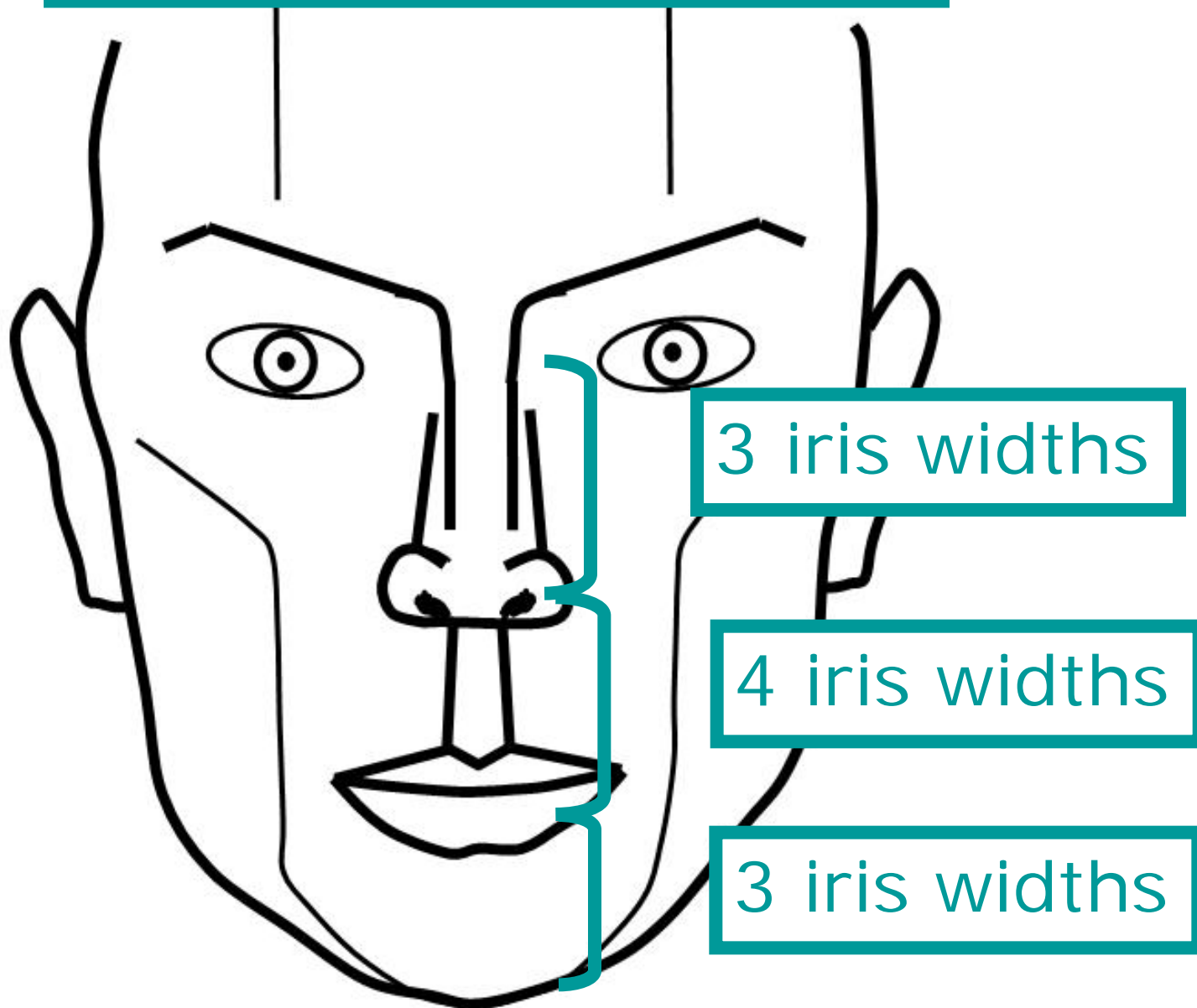
Study:

- Subjective survey
- Goal to find the most pleasing ratio and picture
- Created 27 pictures
- 100 random patients from a Head and Neck Surgery Clinic
- Each person ranked all of the pictures from 1 to 27
- Number one ranking: most attractive
- Number 27: the least attractive



Either 2,3,4
Iris Widths

Picture 11 Ratio 3,4,3



3 iris widths

4 iris widths

3 iris widths

-The lower average score the more attractive the picture was thought to be by this population

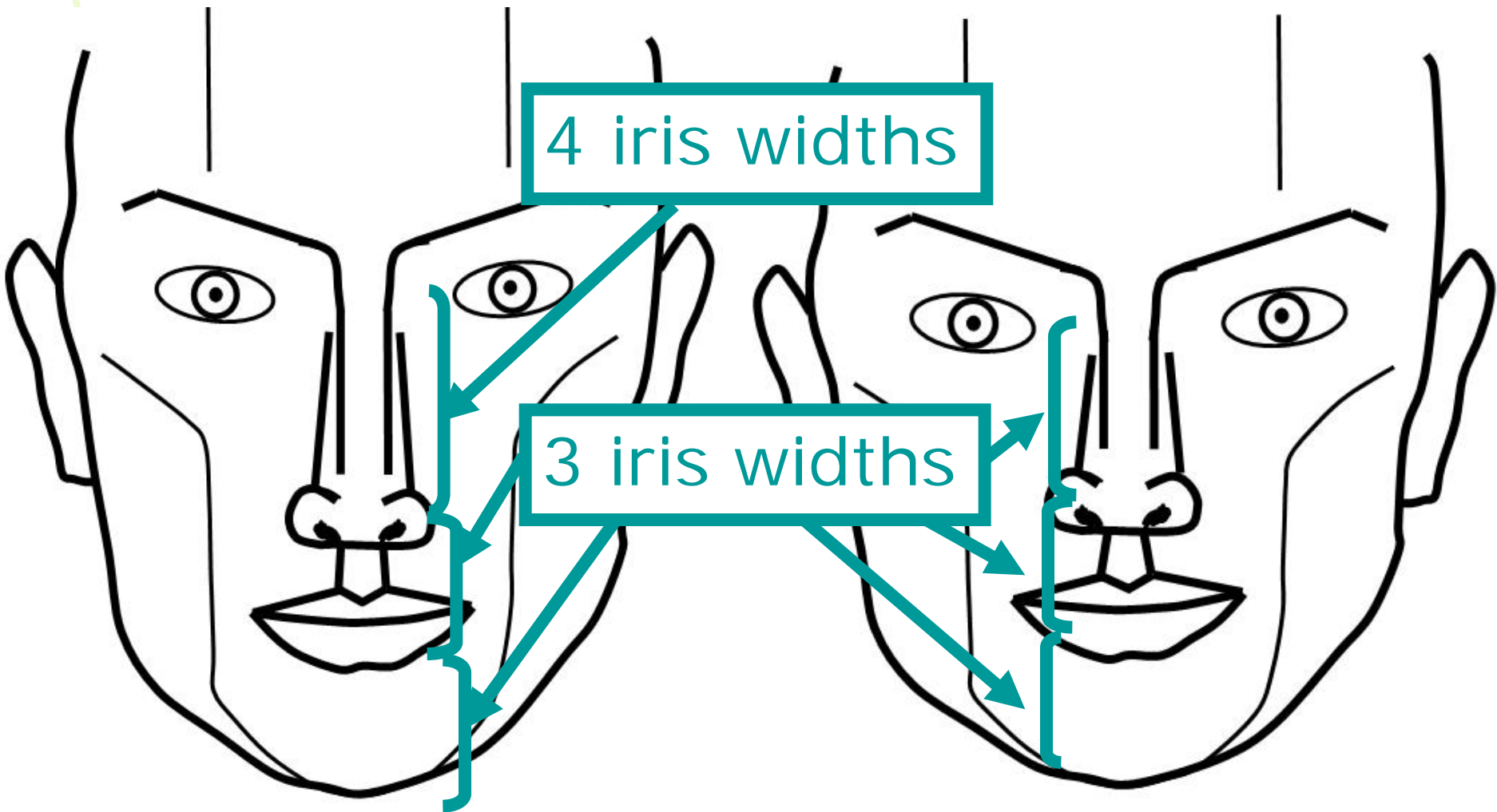
averages	pictures	ratios
12.19	1	4,4,4
10.57	2	4,4,3
13.75	3	4,4,2
7.37	4	4,3,4
4.67	5	4,3,3
9.45	6	4,3,2
17.32	7	4,2,4
17.37	8	4,2,3
19.13	9	4,2,2
12.22	10	3,4,4
9.29	11	3,4,3
12.36	12	3,4,2
7.49	13	3,3,4
4.28	14	3,3,3
9.76	15	3,3,2
19.93	16	3,2,4
19.67	17	3,2,3
21.07	18	3,2,2
13.64	19	2,4,4
10.26	20	2,4,3
24.41	21	2,2,2
14.13	22	2,3,2
24.14	23	2,2,3
14.84	24	2,4,2
13.47	25	2,3,4
10.59	26	2,3,3
24.47	27	2,2,4

Picture 5
4,3,3

Picture 14
3,3,3

4 iris widths

3 iris widths



A decorative graphic on the left side of the slide features three balloons: a light green one at the top, a light blue one in the middle, and a light purple one at the bottom. Yellow streamers and triangular flags are scattered around the balloons.

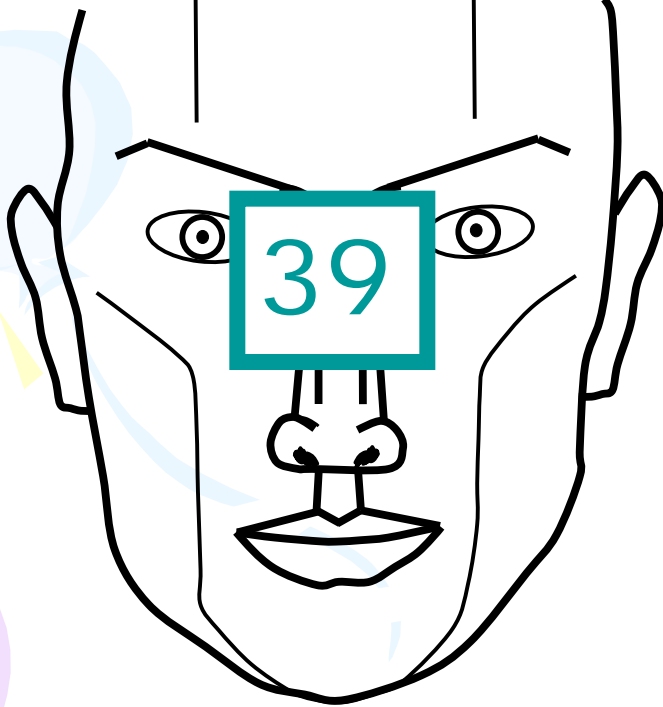
Statistical Analysis:

-Permutation Test: Picture 14 (ratio 3,3,3) was more pleasing than all other pictures ($p < < 0.001$) except Picture 5 ($p=0.223$)

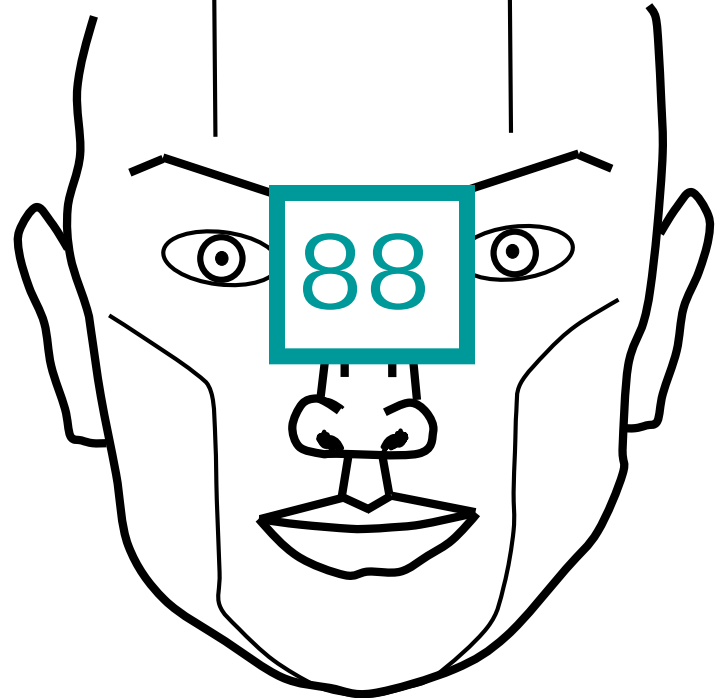
-Bonferonni Adjustment: Picture 14 was ranked #1 more than any other picture ($p < 0.002$). Picture 5 ($p=0.0011$)

Additional Study: picture 5 and 14 head to head
-127 people in a facial plastic surgery clinic

Picture 5



Picture 14



One sample binomial test of proportion $p = 0.0001$ $p < 0.01$

Conclusion:

-Data shows statistical significance:

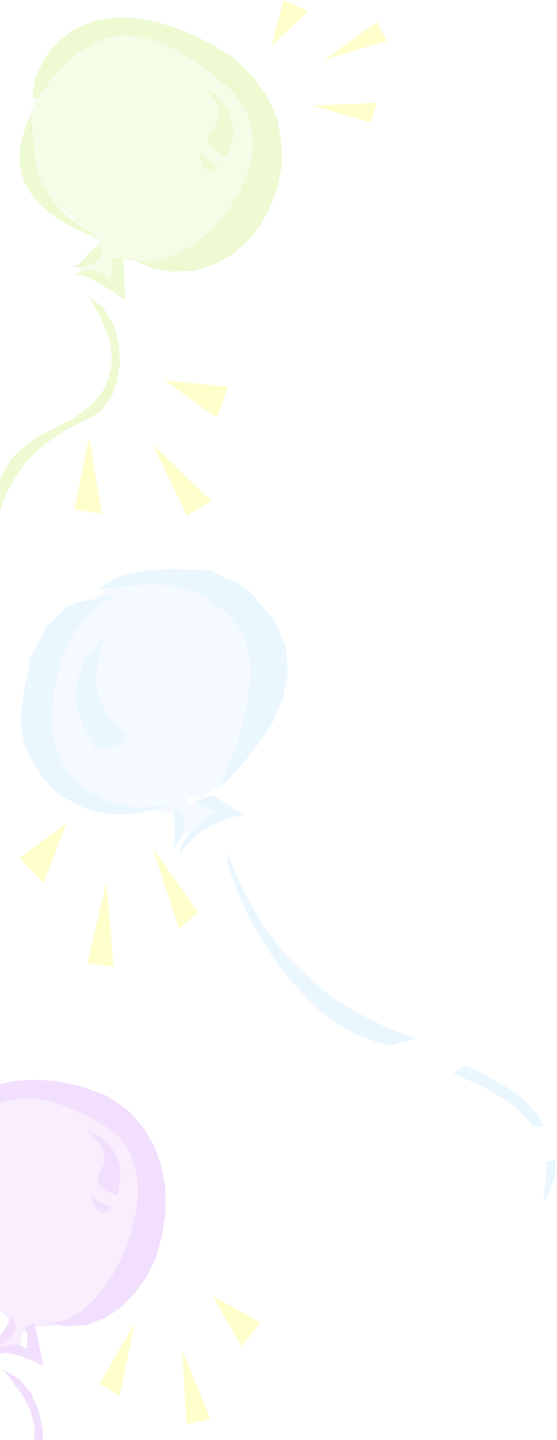
Suggests Iris, nasal tip, lower lip are the centerpieces of attention for anatomic units of the eye, nose and mouth

-When these anatomic points of attention are balanced in relation to one another

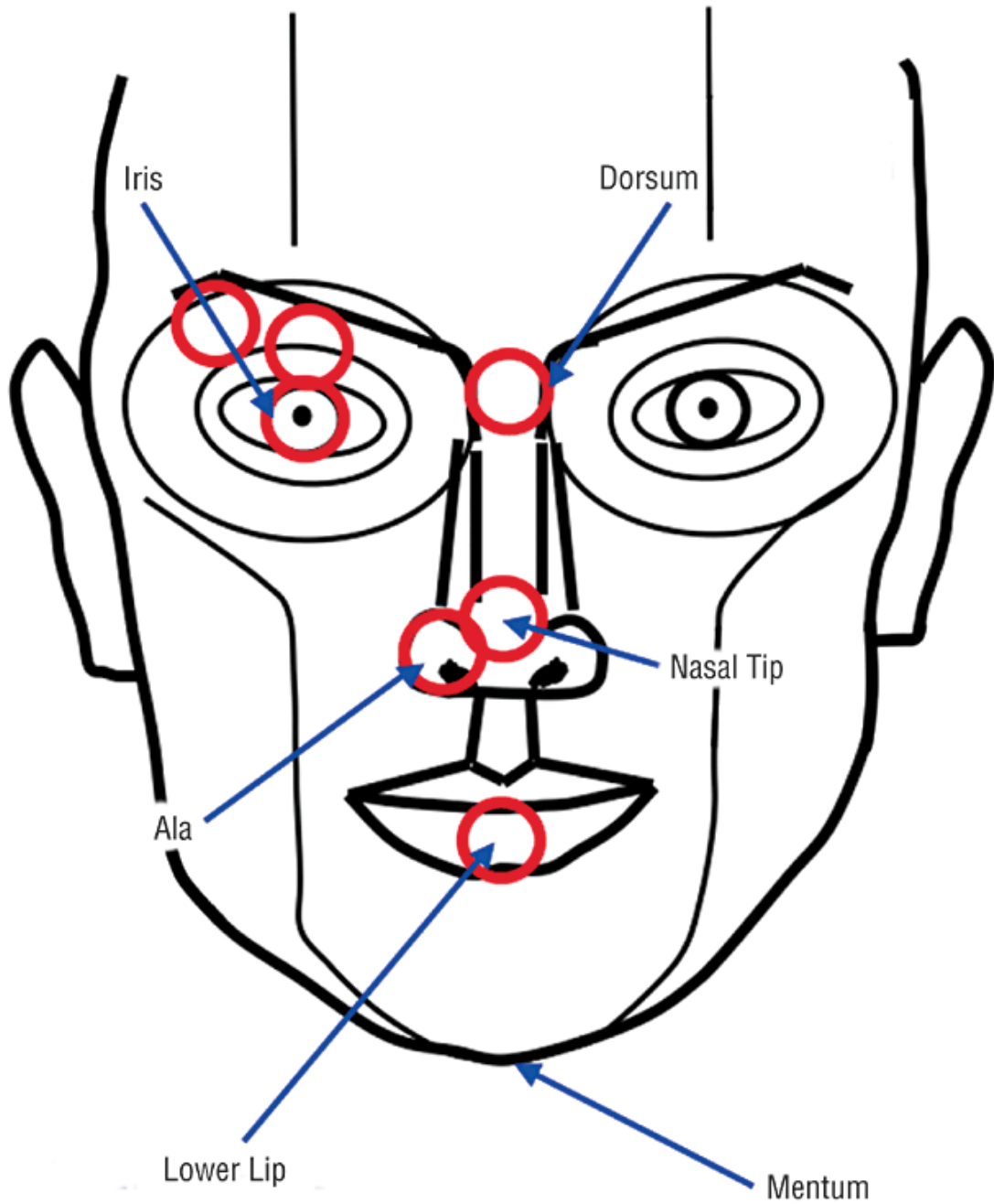
The arrangement is found to more attractive (i.e.

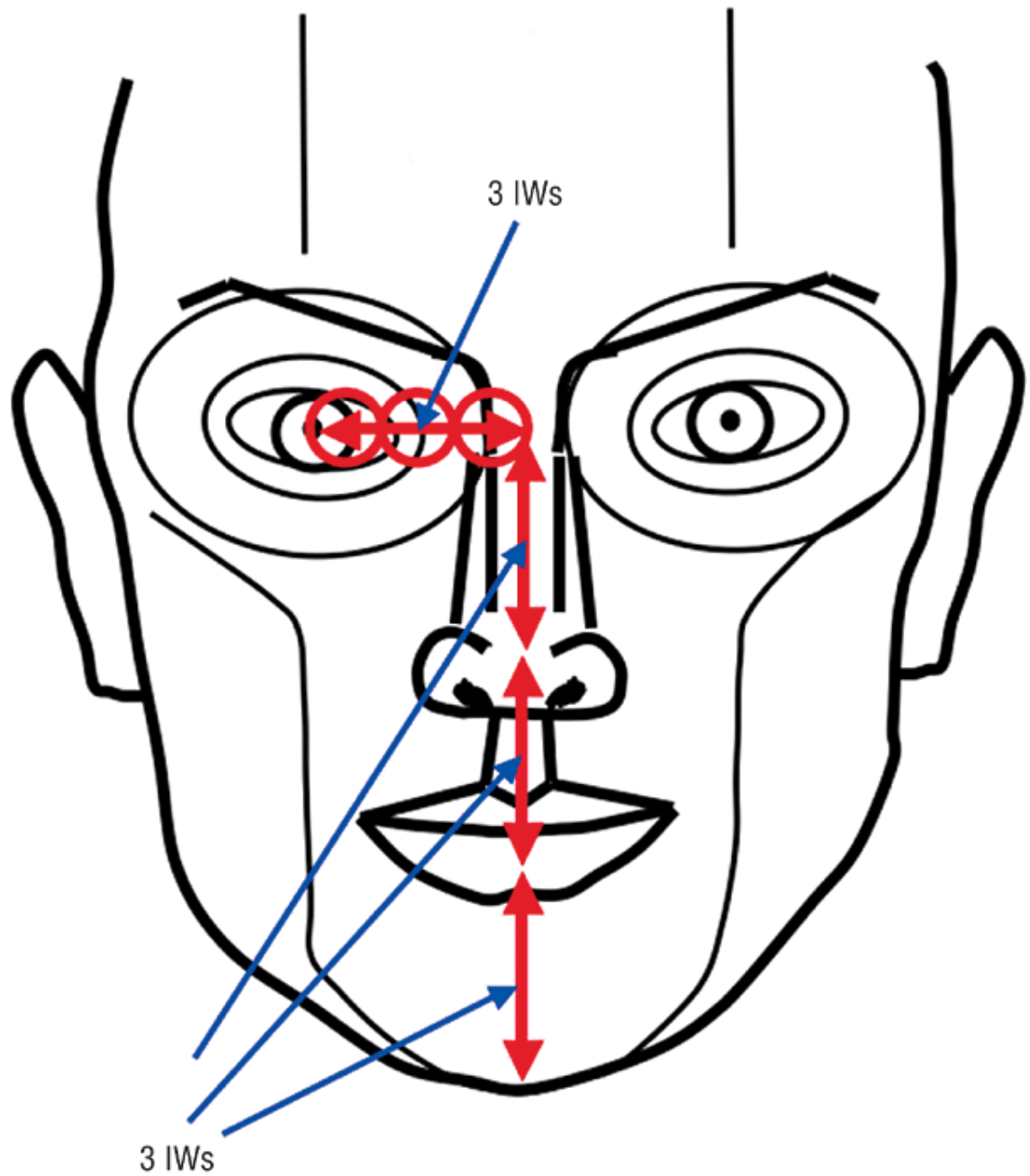
Picture 14 with ratio 3,3,3)

-Study shows more evidence that the Circles of Prominence is a viable theory that defines the elements of facial beauty in humans



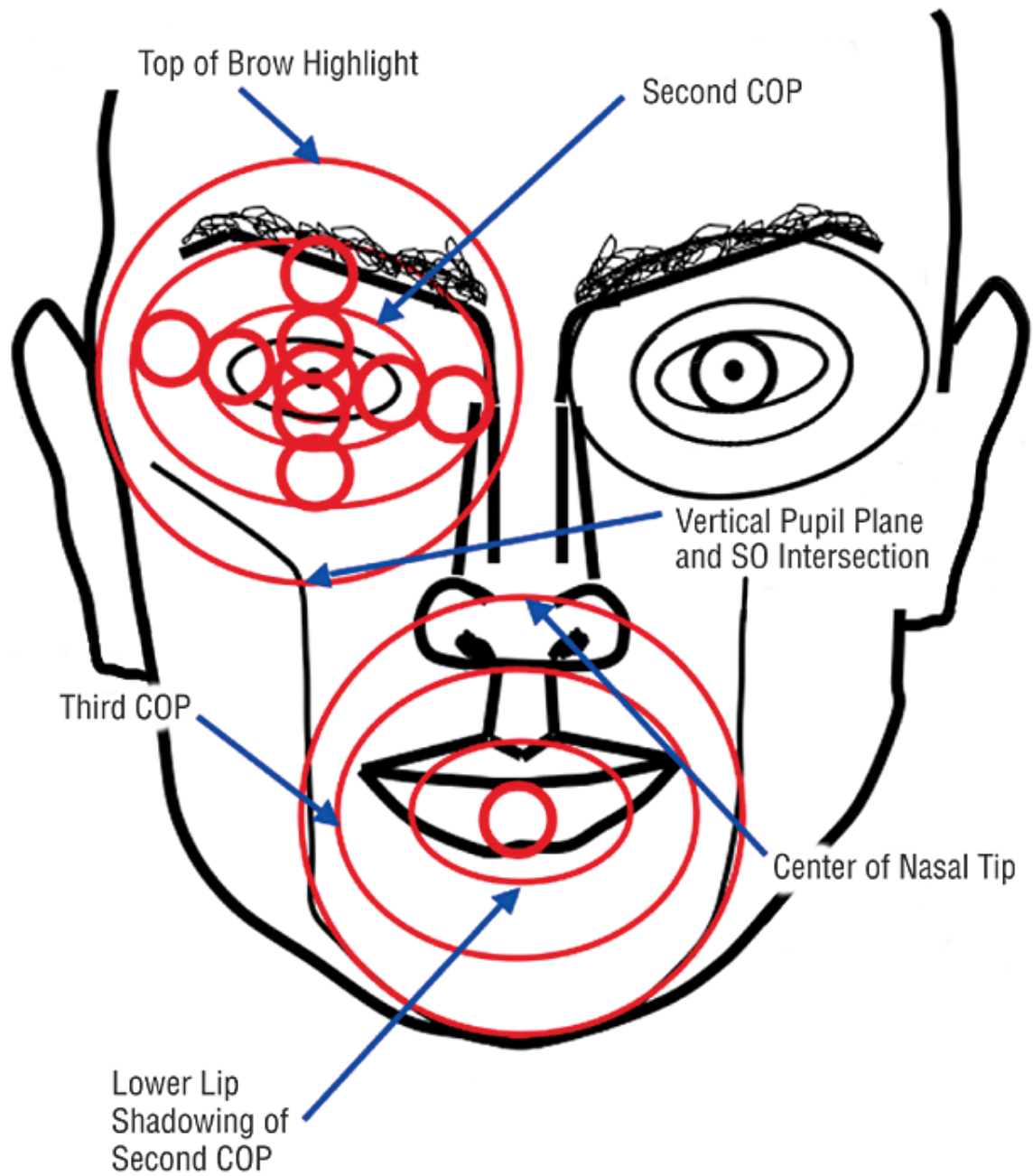
Thank You

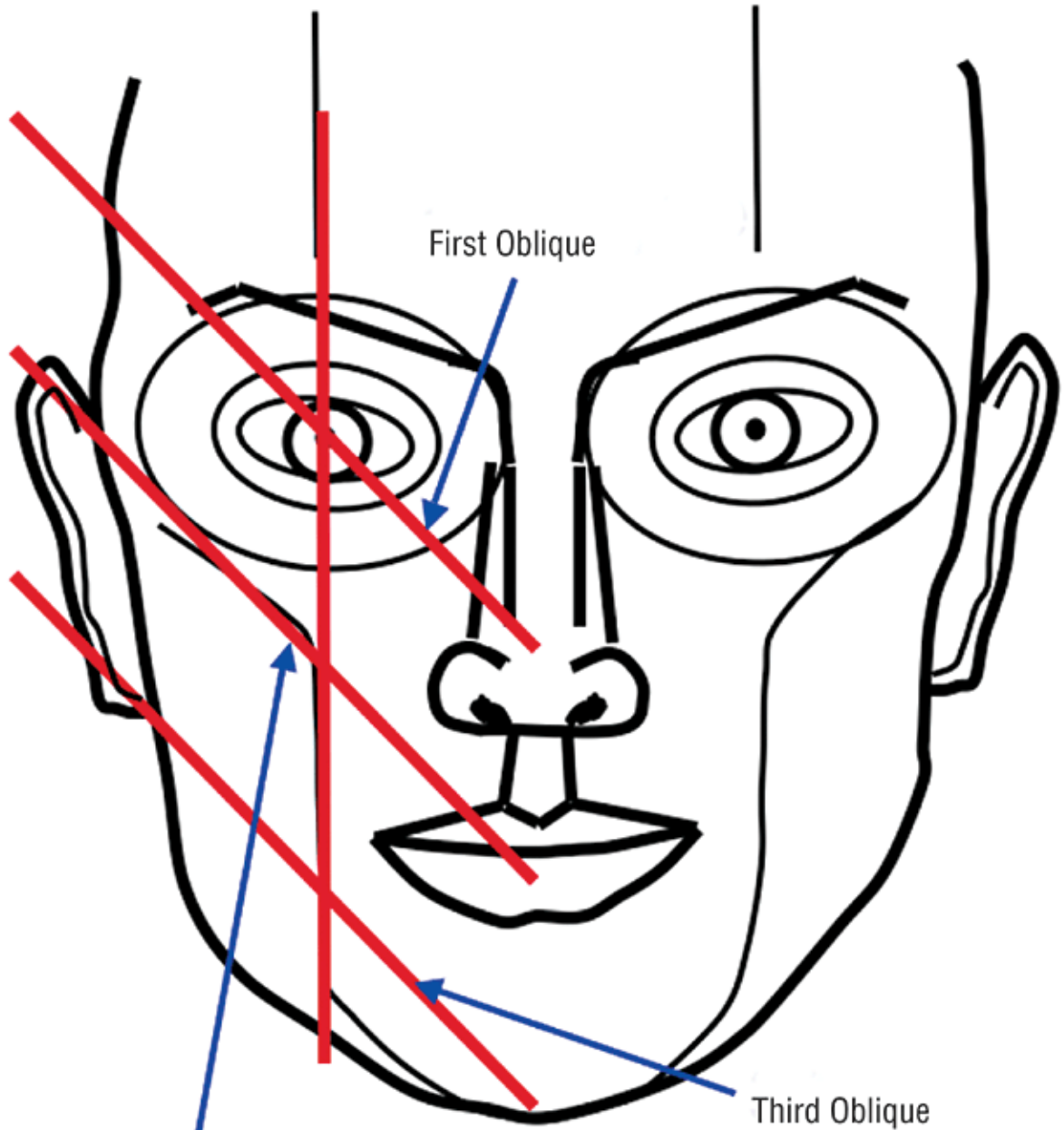




3 IWs

3 IWs





First Oblique

Second Oblique

Third Oblique

