

New Theory on Facial Beauty:
Ideal Dimensions in the Face
And its application to your practice

By

Dr. Philip Young

Aesthetic Facial Plastic Surgery 2015

Bellevue, Washington

American Brazilian Aesthetic Meeting

Beauty

Circles of Prominence

A New Theory on Facial Aesthetics

Philip A. Young, MD; Uttam Sinha, MD; Dale H. Rice, MD; Fred Stucker, MD

Objective: To elucidate key elements of facial aesthetics through a new hypothesis called the *circles of prominence*.

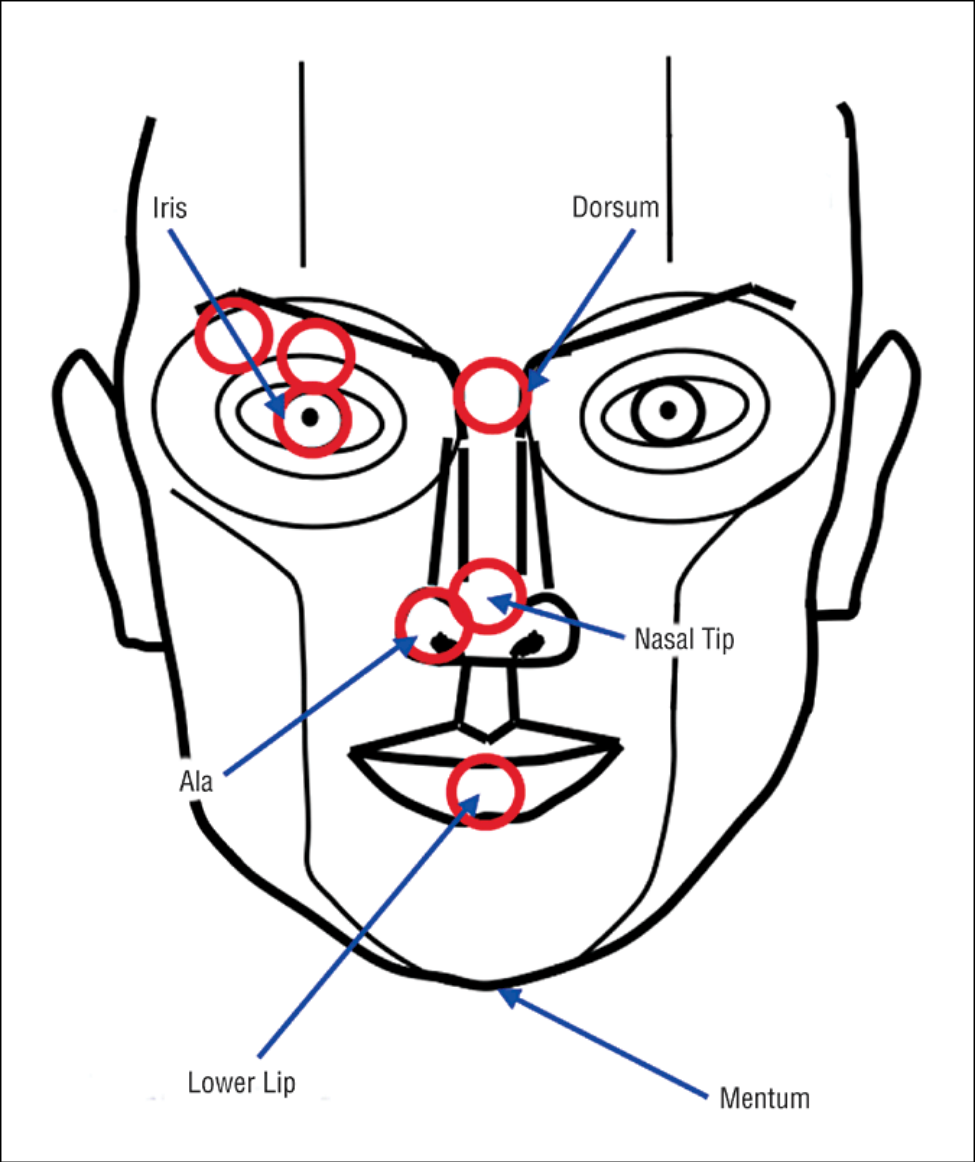
Design: In this subjective survey, 32 persons in the medical field rated frontal-view photographs of 20 subjects in 5 categories on a 0-to-100 scale, 0 representing the most unaesthetic rating, 100, the most aesthetically pleasing. The study was conducted in an academic setting, and the subject photographs were of 9 women (aged 27-65 years) from a clinical setting and 11 women whose pictures appeared in entertainment magazines. Each subject's eyes, nose, mouth, and chin were subjectively rated for their aesthetic quality. A general rating was also given for the subject's face as a whole. The subject's faces were then analyzed and measured based on the circles of prominence theory. A total of 52 measurements were chosen for the analysis. All raters' numbers for each anatomic unit and the face in general for each subject were averaged. The theoretical measurements were also averaged for each unit. The percentage of the ideal for the face in general was calculated based on weighted averages of the measurements from the individual units of each subject. The Wilcoxon signed-rank test was used to determine whether a significant difference existed between the raters' averages and the averages measured based on the facial analysis. Spearman rank coefficient correlation was used to determine if a significant correlation existed be-

Results: We set statistical significance at $P \leq .05$ and found that the mean ratings of 11 of the 20 raters for the face in general were not significantly different from the measured means based on the circles of prominence theory. There was a significant correlation between the raters' means and the measured percentages of the ideal for all units and the face in general based on the Spearman rank test.

Conclusions: Although the statistical analysis showed that many of the raters' subjective averages were significantly different from the averages calculated on the circles of prominence theory, the trends for those averages showed that the theory has meaningful validity in assessing facial aesthetics. The measured average ratings based on the theoretical calculations were higher than the subjectively rated averages. This was especially true for the photographs of clinical subjects and might be the cumulative result of multiple measured deviations from what is most aesthetically pleasing, thus creating an impact greater than the sum of its parts on the observer's subjective interpretation. The possible synergistic effects of multiple deviations for each anatomic unit or the face in general might have resulted in the much poorer subjective ratings than what the equally weighted, linearly determined measurements could analyze.

The Circles of Prominence

- Original published Archives FPS 2006
- Based on the idea that there is an ideal
- Everything on the face has an ideal as well
- Because we spend so much time looking at the iris
- All dimensions of the face are related to the width of the iris
- Obviously with a better definition of beauty our results in plastic surgery can be improved



13 Sections studying different elements in the face were studied including the eyebrows, nose, lips, ears, and the relation between the eyes, nose, lips and face as a whole

Question 1:

Data Based on 190 Surveys
Eyebrow Study Line Drawings:

Distance from bottom of eyebrow to eyelid margin is 1 iris width.

Distance in each picture is varied between $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW

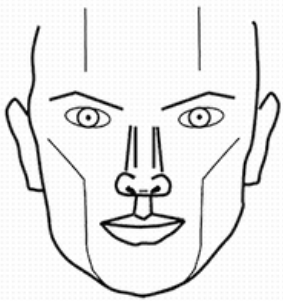
$\frac{1}{2}$ IW

1 IW

$1\frac{1}{2}$ IW

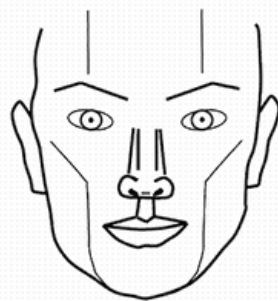
2 IW

1. Eyebrow Study Section #1



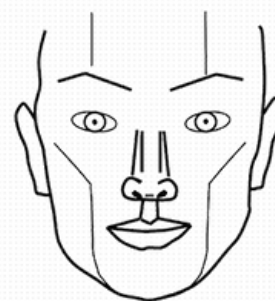
● 1 ● 2 ● 3 ● 4

• 2.65



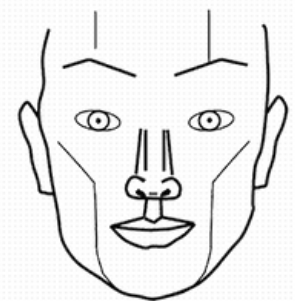
● 1 ● 2 ● 3 ● 4

• 1.73



● 1 ● 2 ● 3 ● 4

• 2.01



● 1 ● 2 ● 3 ● 4

• 3.52

Question 1:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
1	< .001 (84.95)	.0011 (10.61)	2

Eyebrow Study Morphed Pictures:

Question 2:

Distance from bottom of eyebrow to eyelid margin is 1 iris width. Distance in each picture is varied between $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW

1 IW

$\frac{1}{2}$ IW

$1\frac{1}{2}$ IW

2 IW

2. Eyebrow Study Section #2



1 2 3 4



1 2 3 4



1 2 3 4



1 2 3 4

1.54

2.91

2.10

3.43

Question 2:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
2	< .001 (172.24)	< .001 (26.95)	1

Nose Study Line Drawings:

Question 3:

Width of Nasal Bridge is 1 iris width. Distance in each picture is varied between $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW

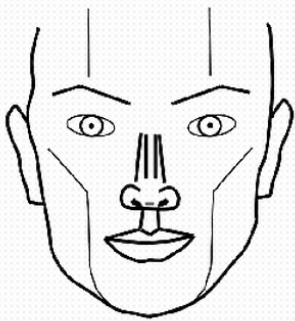
$\frac{1}{2}$ IW

1 IW

$1\frac{1}{2}$ IW

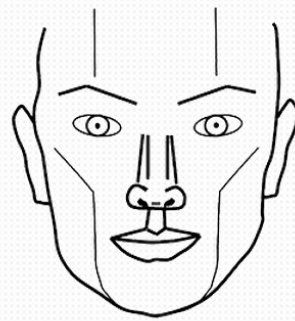
2 IW

3. Nose Study Section #1



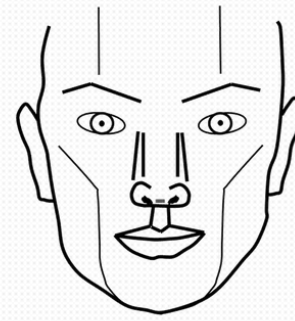
1 2 3 4

1.77



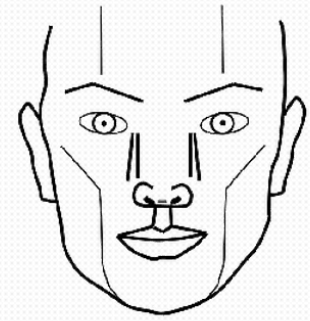
1 2 3 4

1.65



1 2 3 4

2.72



1 2 3 4

3.83

Question 3:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
3	< .001 (106.52)	.932 (.01)	1 and 2

Nose Study Morphed Pictures:

Question 4:

Width of Nasal Bridge is 1 iris width. Distance in each picture is varied between $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW

1 IW

$1\frac{1}{2}$ IW

$\frac{1}{2}$ IW

2 IW

4. Nose Study Section #2



1 2 3 4



1 2 3 4



1 2 3 4



1 2 3 4

1.42

2.72

1.92

3.85

Question 4:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
4	< .001 (160.52)	< .001 (13.74)	1

Next we studied the Lips

Question 5:

Height of the Upper Lip is $\frac{1}{2}$ iris width
Height of the Lower Lip is 1 iris width

Height of Lower Lip is 1 iris width. Distance in each picture is varied between $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW

Lower Lip Study Line Drawings:

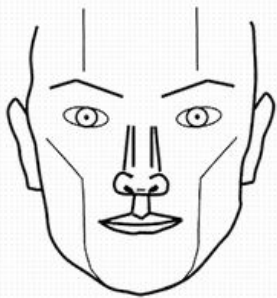
$\frac{1}{2}$ IW

1 IW

$1\frac{1}{2}$ IW

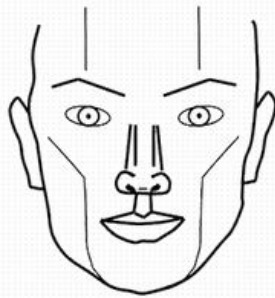
2 IW

5. Lip Study Section #1



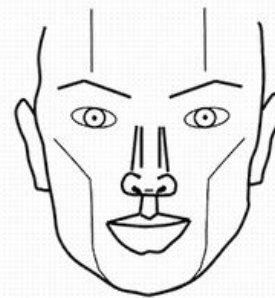
● 1 ● 2 ● 3 ● 4

1.96



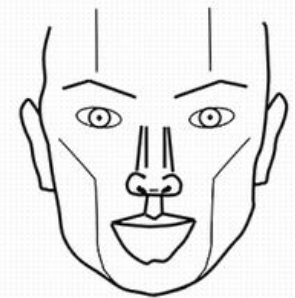
● 1 ● 2 ● 3 ● 4

1.34



● 1 ● 2 ● 3 ● 4

2.78



● 1 ● 2 ● 3 ● 4

3.90

Question 5:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
5	< .001 (215.92)	< .001 (44.83)	2

Upper Lip Study Line Drawings:

Question 6:

Predicted Height of Upper Lip is ideally $\frac{1}{2}$ iris width.
Distance in each picture is varied between $\frac{1}{4}$, $\frac{1}{2}$, 1, $1\frac{1}{2}$, IW

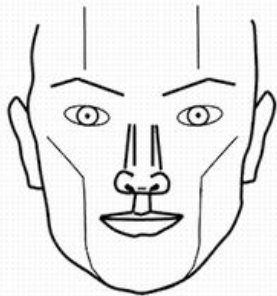
$\frac{1}{4}$ IW

$1\frac{1}{2}$ IW

$\frac{1}{2}$ IW

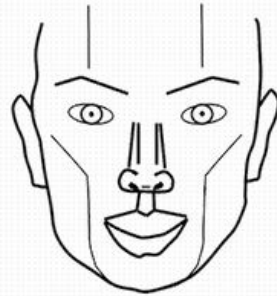
1 IW

6. Lip Study Section #2



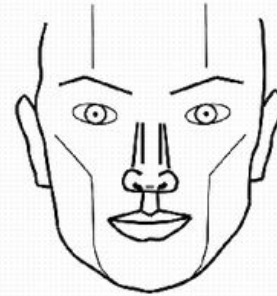
● 1 ● 2 ● 3 ● 4

2.44



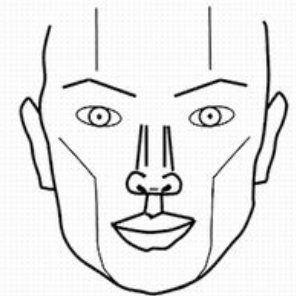
● 1 ● 2 ● 3 ● 4

3.1



● 1 ● 2 ● 3 ● 4

1.51



● 1 ● 2 ● 3 ● 4

2.94

Question 6:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
6	< .001 (131.99)	< .001 (34.27)	3

Lower Lip Study Morphed Pictures:

Question 7:

Height of Lower Lip is 1 iris width. Distance in each picture is varied between $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW

$\frac{1}{2}$ IW

$1\frac{1}{2}$ IW

1 IW

2 IW

7. Lip Study Section #3



1 2 3 4

2.01



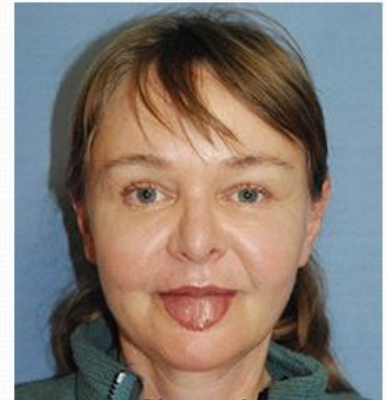
1 2 3 4

2.94



1 2 3 4

1.18



1 2 3 4

3.88

Question 7:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
7	< .001 (341.61)	< .001 (101.44)	3

Upper Lip Study Morphed Pictures:

Question 8:

Height of Upper Lip is $\frac{1}{2}$ iris width. Distance in each picture is varied between $\frac{1}{4}$, $\frac{1}{2}$, 1, $1\frac{1}{2}$, IW

$\frac{1}{4}$ IW

$\frac{1}{2}$ IW

1 IW

$1\frac{1}{2}$ IW

8. Lip Study Section #4



1 2 3 4

2.17



1 2 3 4

1.22



1 2 3 4

2.66



1 2 3 4

3.92

Question 8:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
8	< .001 (273.76)	< .001 (94.08)	2

Next we studied the Ears:

Question 9:

The Ideal Distance that the ear extends from the face is one iris width. This distance was varied for each picture by $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW.

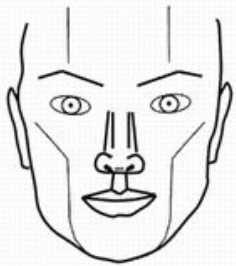
$\frac{1}{2}$ IW

1 IW

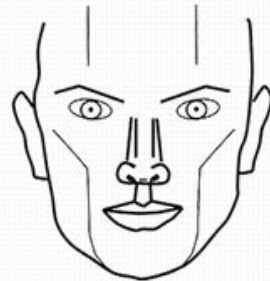
$1\frac{1}{2}$ IW

2 IW

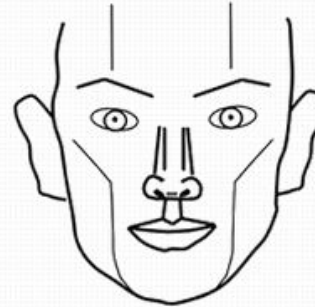
9. Ear Study Section #1



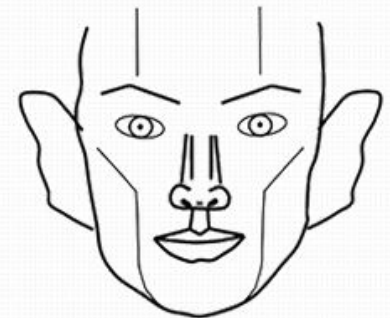
1 2 3 4



1 2 3 4



1 2 3 4



1 2 3 4

1.52

1.58

2.99

3.89

Question 9:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
9	< .001 (135.86)	.324 (0.97)	1 and 2

Ear Position Study Morphed Pictures:

Question 10:

The Ideal Distance that the ear extends from the face is one iris width. This distance was varied for each picture by $\frac{1}{2}$, 1, $1\frac{1}{2}$, 2 IW.

1 IW

$\frac{1}{2}$ IW

$1\frac{1}{2}$ IW

2 IW

10. Ear Study Section #2



1 2 3 4

1.47



1 2 3 4

1.72



1 2 3 4

2.88



1 2 3 4

3.87

Question 10:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
10	< .001 (145.06)	.0025 (9.14)	1

Primary Circles of Prominence Morphed Pictures: Question 11:

Next we studied the relationship between the eyes and nose by varying the distance from the irises between 5 and 6 iris widths and from the iris to the nasal tip distance from 3 and 4 iris widths

The Ideal Distance would be 6 and 3 respectively. The pictures were varied in the following manner: 6/3, 5/4, 5/3, 6/4

6/3

5/4

5/3

6/4

11. Primary Circles Section #1



○ 1 ○ 2 ○ 3 ○ 4

• 2.11



○ 1 ○ 2 ○ 3 ○ 4

• 2.87



○ 1 ○ 2 ○ 3 ○ 4

• 1.22



○ 1 ○ 2 ○ 3 ○ 4

• 3.87

Question 11:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
11	< .001 (356.42)	< .001 (102.40)	3

Primary Circles of Prominence Line Drawings:

Question 12:

The Ideal Distance would be 6 and 3 respectively. The pictures were varied in the following manner: 6/3, 5/4, 5/3, 6/4

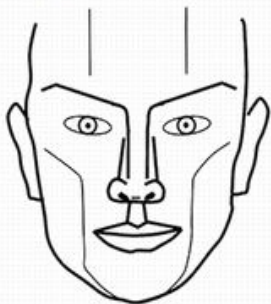
5/3

6/3

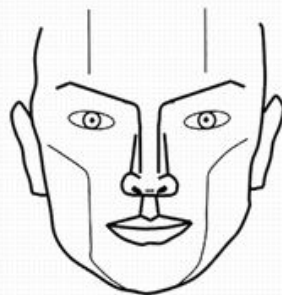
5/4

6/4

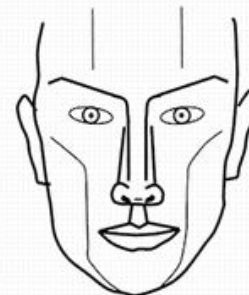
12. Primary Circles Section #2



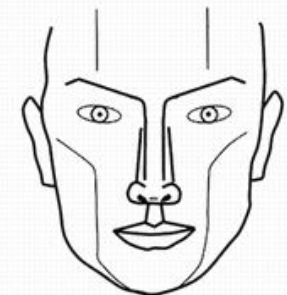
● 1 ● 2 ● 3 ● 4



● 1 ● 2 ● 3 ● 4



● 1 ● 2 ● 3 ● 4



● 1 ● 2 ● 3 ● 4

1.78

2.40

3.24

2.56

Question 12:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
12	< .001 (41.12)	.012 (6.38)	1

Primary Circles of Prominence Line Drawings:

Question 13:

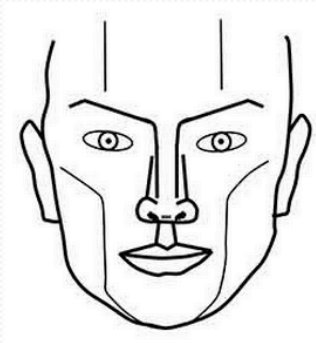
Because of the equivocal results between 5 and 6 iris widths inter iris widths that had the distance from horizontal level of the iris to nasal tip set at 3 iris widths. We wanted to study this same relationship but varying the distance between irises from 5, 5 1/2, 6 iris widths (55 surveys):

5 1/2

5

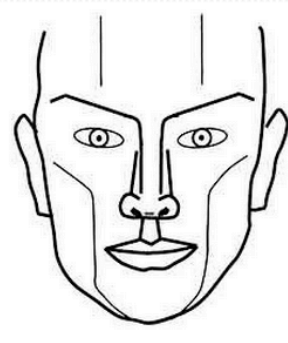
6

13. Primary Circles Section #3



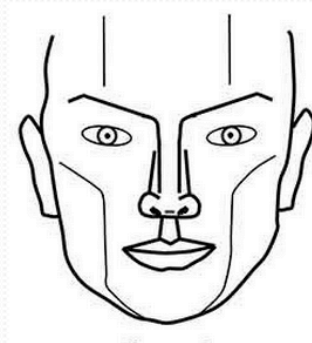
1 2 3

1.55



1 2 3

2.00



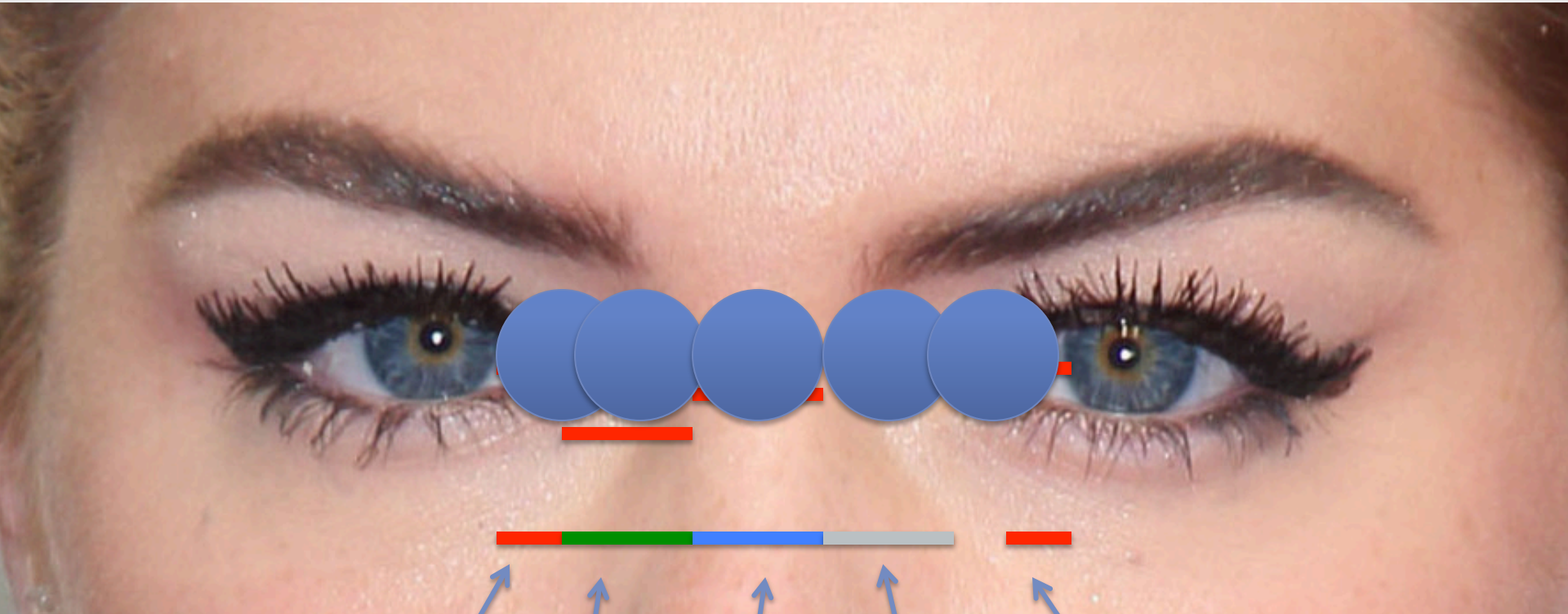
1 2 3

2.50

Question 13:

Area	P-Value		Best Picture(s)
	H0 : All Equal	H0 : Top 2 Equal	
13	< .001 (15.13)	.0934 (2.81)	1 and 2

Primary Circles of Prominence



$\frac{1}{2}$ IW

1 IW

1 IW

1 IW

$\frac{1}{2}$ IW

Conclusion:

- The Circles of Prominence states that everything in the face has an ideal between zero and infinity
- Because humans spend so much time looking at the iris, the size and shape of the iris dictates this ideal
- This study looks specifically at parts of the eye, nose, mouth and ears and has found proof that this theory has some validity
- The information in this study can markedly improve the way we help our patients with Plastic Surgery