Beholding Beauty

Research shows beauty response is hard-wired in the brain

By Jeffrey Spiegel, MD, FACS

We've all heard the expression, beauty is in the eye of the beholder and we interpret it to mean that beauty is completely subjective-that is, one person's idea of beauty may not be shared by another. Newer findings, however, suggest that there is much that is universal about beauty that we recognize and respond to subconsciously.

While it's true we may regard a friend with an overly large nose as beautiful because of her personality, kindness, and optimism, the rigors of science might be a little less generous when considering only her appearance. If she were evaluated in photographs by people who didn't know her, the inner beauty might not shine through and her face would likely be rated as less attractive than some others.

The beauty response is deeply ingrained. Amazingly, research has shown human babies, and even chickens, will stare longer at pictures of attractive faces than unattractive faces.

As an esthetician you can be of tremendous help to your clients so they can make that all-important first impression in business, love, and friendship be their best impression. Being armed with scientific knowledge of beauty can help you bring your clients into their own best light.

Appearance of Age

Why did human beings develop a sense of beauty anyway? Why does it matter if our nose is crooked or our skin is wrinkled? The answer lies in our gradual adaptations to our environment over time as the species worked to ensure its own survival.

When you look at someone's face, you learn a lot very quickly. For example, you immediately know if this person is familiar (or a stranger), their gender, approximate age, mood, and general health. A person with a fever or chronic illness may look sick while a healthy person has a rosy glow.

Let's talk about age. Why would it be important in human relationships to determine someone's age by their facial features? It has to do with attraction and reproduction. As women lose fertility with age, there's an anthropological adaptation such that men are attracted to younger looking women. Our male ancestors who were attracted to younger looking women had an easier time passing on their genes.

Now, think about what is commonly defined as beautiful: healthy skin without thinning, wrinkling, or age spots; a cute nose that isn't too large or drooping towards the lips; full (not thin) lips; properly arched eyebrows (not too low over the bone of the eye socket and not too straight); and overall facial balance. All of these, except facial balance, are characteristics of youth. After all, with time the skin changes, noses lengthen and become less pert, eyebrows descend, and lips lengthen and lose fullness.





Sometimes it's Who You Know

While most of the factors that make our brains read beauty are universal, there is a twist on this notion.

Research has shown we have certain preferences about attractiveness based upon the people with whom we grew up. A person from a small tribe in South America, for example, will probably prefer a mate from that tribe and consider them more attractive than, let's say, a very different-looking person from a village in Norway.

Imagine though, that the men in the South American village were given a slate of five Norweigan women from whom to choose a beauty queen. These men would be likely to choose the same woman as beauty queen as would men from Norway, despite the differences in the men's geographic and cultural backgrounds.

The reason is that when the South American men are reviewing only those women from Norway, they aren't making a comparison between Norwegian and South American women. So, they revert to choosing features that are universally considered more feminine, symmetrical and healthy-looking.

—Jeffrey Spiegel

The selection process may be why women down through millennia have grown to look increasingly and markedly different from men-the genes that created more feminine faces have been chosen in the mating process more often and thus have been passed down, further emphasizing the visual differences between the sexes.

Balanced Features

Now, how about facial balance-why does that matter? Again, it's because of our genes and the strong biology behind survival. A person with great asymmetry in the face is more likely to have a genetic problem. While few people have a dramatic asymmetry in facial features, the brain read a more symmetrical face as a healthier one. Certain inherited disorders result in one side of the face, or perhaps just one ear, being smaller than the other. The brain recognizes this as unattractive-likely because it is a harbinger of a genetic disorder. Symmetry is so important that some studies have shown that facial and body symmetry increase in direct correlation to how fertile a woman is and at what point she is in her monthly menstruation cycle! Some asymmetric marks (such as a beauty spot as seen on Marilyn Monroe) are attractive, but these usually are considered attractive because they accentuate the fairness and overall consistency of the facial skin (another marker of beauty and health!).

Practical Application

How can we use this fascinating research to help our clients? In my work as a plastic surgeon, I've been applying these theories to facial analysis for years. There is much more to the theory than what is presented here, but essentially we analyze faces to identify which characteristics need enhancement to maximize characteristics perceived as feminine. Since femininity is read by the brain as beauty, my plastic surgery procedures are designed to create more delicate features, including adjustments to the forehead shape, brow position, chin shape, cheek, jaw width and height, and the prominence of the Adam's apple. Women's foreheads are different from men's, as men have a forehead that typically slopes backwards and has a prominent ridge between the eyebrows and over the eyes. The jaw and chin are usually smaller and less pronounced in women than men. And women's Adam's apples are less protuberant as the voice box is a different shape (and as a result, the voice is higher pitched).

Sometimes what needs to be done is not obvious. For example, eyebrows are critical in defining gender and age. Keeping the eyebrows peaked above the orbital rims rather than too flat or too low is important; plastic surgery or eyebrow shaping procedures that don't create that look may inadvertently create a more masculine appearance.

Also very important to facial femininity are the cheekbones. Most fashion models have high cheekbones and most women who wear makeup use blush at the underside of the cheekbone to make it appear more prominent. The underlying purpose for this is to make the eyes seem larger, but also to de-accentuate and draw attention away from the jaw. A woman with a wider jaw tends to look more masculine; makeup or reshaping through surgery can help a jaw look less prominent and more feminine. Re-shaping the jaw (which is easier than you might think and is often done without a hospital stay) can readily present a more feminine and beautiful appearance. Feminine chins are also important. They tend be narrower (cleft chins are typically wider and thus less feminine) and shouldn't extend too far forward. There is an ideal relationship between the lip position and the chin projection.

Research also supports some less obvious characteristics that define a feminine face. For example, luminence around the eyes and mouth are read by the brain as more feminine. This might be an argument in favor of eyeshadow with shimmery substances and lighter highlights across the upper cheekbone. Lips may benefit from a fuller, glossy look. One reason fuller lips are considered attractive is because they swell during kissing-it shows a state of sexual excitement. Teeth whitening can also contribute to the luminence effect, as well as conveying an impression of health and attractiveness.

There's still much to be done in understanding how the brain identifies characteristics we call beauty. Both estheticians and plastic surgeons can work to find solutions for clients who want to look and feel their best. SD

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Three Case Studies in Facial Beauty

Skin Deep asked two experts how they would further beautify the faces of five women using the tools of their trades. Jeffrey Spiegel, MD, FACS is chief of facial plastic and reconstructive surgery and associate professor at Boston University School of Medicine. Pamela Taylor is an authority on print and fashion makeup and owns a makeup studio and school in New York City. For additional profiles, see www.ascpskindeep.com, Members section, Publications.

He says ...

In general, the more feminine, healthy looking, and symmetrical the face, the more an observer's brain will read it as attractive. In actual practice, a plastic surgeon would study several views of the face with the patient's hair pulled back to make the best analysis. As always, the best results are the ones a woman chooses for herself.

She says ...

The power of makeup is often underestimated. The wrong makeup can age the face appearance drastically. Using the correct textures and trade secrets, women can take years off their faces.

But they would be wise to get professional help. Not everyone who claims to be a makeup artist does the right thing--I've seen many mother-of-the-bride photos where the makeup artificially aged the woman. Less is often more.

There are looks that come and go in terms of style. The heavy shaded contoured cheeks, lip liner, and noticeably competing features is out. Frosted color, too much powder, and too much shine from powdered foundations can age skin appearance drastically.

The key is to attract attention to the tightest and youngest part of the face, areas supported by bone structure like the brow bone and cheekbone. Too much shine on the lower jaw or jowls will drag features down, as will shine at the nasolabial folds, and the inner, lower orbital cavity.

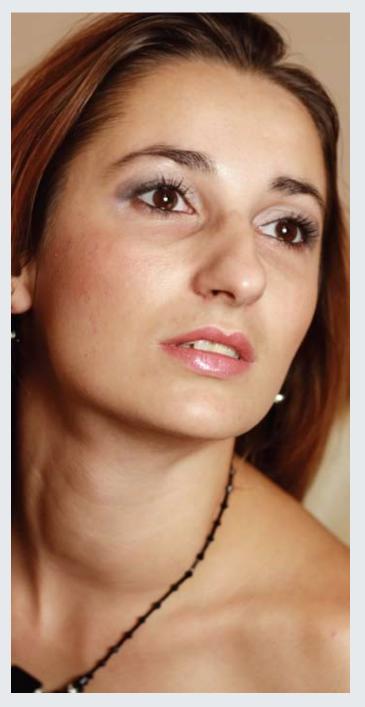
While well-performed surgical procedures can create dramatic results, but it's often surprising how much the right makeup can do.

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He says ...

Photo 1. Analysis. Her eyebrows are in a good position and her hairline placement is good. Her lip is a nice length with good tooth show (how much the teeth show at rest). Her nose has a dorsal (back) hump and a bulbous tip.

Recommendations. The dorsal hump and bulbous tip could benefit from a nose job. Other photos would reveal whether her chin might be a bit wide and whether her neck shows some excessive laryngeal prominency. Both could be surgically reduced.



She says ...

Photo 1. Analysis. This woman has cheekbones that can be favorably enhanced; my eye is immediately drawn to their height and how they enhance the width and shape of her face. Her eyes are nicely shaped and her lips are very nice.

Recommendations. A proper makeup application will highlight cheekbones and sculpt the shape of her nose. Her foundation and other makeup may be irritating her skin or clogging her pores; there may be slight irritation, milia, or rosacea. This is where the skilled esthetician can step in and provide guidance or treatment.

I recommend concealer in the lower third of the the inner eye nearest to the nose and at the lower orbital cavity where skin appears slightly blue or violet. While her foundation covers the eye area, it does not create lift in the deeper orbital cavity. I would select a shade from the color wheel that's opposite her discoloration, like a soft peach, to lift out and balance the discoloration. A foundation with less color used only over blemishes or areas that need smoothing. This usually means the sides of the nose, under the eyes to blend with concealer, and at the chin. A golden undertone would be best for her face.

Her eyebrows require brushing and shaping, with a touch of color brushed in, striving for a natural look. I recommend a soft golden brown in the inner third of the lid, then a warm chestnut matte powder shadow in the crease. Blending well will avoid the blotchiness she now has on her lid. A monochromatic slate of browns in both matte and shimmer would shape and lift the eyes. Her lashes should be separated and mascara should be applied in an outward motion. This will add width to the eye and sweep to the lashes.

The bulbous area should be skillfully shaded with a natural warm brown a few shades deeper than the skin tone. I would powder primarily the orbital cavity, taking care not to create creasing. I often hydrate by dipping and moistening a wedge with water and a pre-base cream, reducing the chance of too much product. Her lips could benefit from a stronger stain in a warm melon or berry. A touch of shine (not frost) would open the mouth and add fullness.

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He says ...

Photo 2. Analysis. This woman is older and has some signs of aging. Her upper eyelids have some hooding and her eyebrows have descended laterally. Her nose is wide and somewhat asymmetrical. She has a long upper lip and a neck that has widened from sagging facial skin.

Recommendations. Her best appearance would be achieved with a lift of the upper lip, a nose job to correct the asymmetry, an upper lid lift, a facelift, and a possible endoscopic (using a small incision) browlift for more arched brows. Her forehead is a very good length, so there is no need to reason to advance her hairline. She's a very good candidate for dramatic improvements.



She says ...

Photo 2. Analysis. Two words: wrong base! This is deadly when trying to create younger looking skin on a mature face. The natural color of her skin is too masked and has a very blue/gray appearance. She's wearing too much powder. Her eyes and her lips are her best assets.

Recommendations. I would use less foundation and determine the correct formula for her skin tone, looking for undertones of red, yellow, and olive. The size of pore and the presence of acne also should be examined. A soft natural foundation would help clean up the discolored facial areas; keeping in mind there is no need for a mask. The right foundation would immediately take 10 years off her appearance, especially at the nasolabial folds (laugh lines). I would use a lighter foundation and shimmery highlight in the creased lines and at the outer sides of the mouth, brushing the colors directly into the lines, then blending outward toward the ears. A light powdering would reduce shine.

A deeper shade of contour to slim the sides of the nostrils and lighten the bridge of the nose near the eyes would be helpful, and lift could be added by shading the eye crease in a deeper shade to diminish the heavy appearance. Her eyes could use a touch of liner at the outer lash line, wedged against the lashes. A deep steel or midnight black/blue would give a bronzed appearance to the eye color.

Her eyebrows could use a touch of color and shape toward the area nearest the nose. I would use a wax-based pencil to sketch an eyebrow shape, and then fill it in with a brow powder in soft chestnut brown. She should avoid hard lines and blend the color with a brow brush. She should apply mascara at the outer lashes. Using a touch of deep bronzed (not frosted) peach glow at the outer cheek bones will draw attention away from the center of the face, which is too prominent. I suggest a sheer touch of natural color for her lips in the warm melon, warm red and/or berry shades. With the correct makeup, she can look 15 years younger.

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He says ...

Photo 3. Analysis. This patient has a high hairline and eyebrows that are fairly horizontal and likely sitting precisely at the orbital cavity. There is no evidence of a bump between her eyes in this view, though a side view would more clearly reveal that. Her eyes are somewhat small in relation to the rest of her face. She has deep nasolabial grooves and her face is widened because of her jowls. She is smiling slightly, which accentuates her crow's feet and undereye wrinkles. She has a wide nose with a cleft in the tip. She is closing her mouth so we cannot determine tooth show. She seems to have a somewhat thin upper lip.

Recommendations. Bring the scalp forward (scalp advancement) and lift the brow to create a more feminine forehead, perform a lower lid lift, augment the nasolabial folds with injections, consider a nose reshaping if there's a bump between the eyes; perform chin reshaping to remove extra skin and create a better profile. A facelift would create overall tightening of sagging skin.

She says ...

Photo 3. Analysis. She has great eyes, and a great face. She needs less foundation and is using an incorrect formula, which ages her face. She appears extremely ashy in color because of her silver hair but in this case, it's attractive. Her hair needs a better

shape to provide a bit of an angle at the cheekbone. She might need a smoothing serum for her hair. She has great lips.

Recommendations. I would have an esthetician exfoliate the skin, then add great cream moisture that's good for mature skin. I would lift the circle the inner corner and under the eye-pouch area with a lifting peach concealer on discolored spots. For other spot touching, I would clean up the redness and add a base with flawless and natural-appearing coverage. Because she has a round face, I would add length to it using an angular placement of color on the cheekbone. A soft, warm pink cheek color at the apple of the cheek would look great. She can soften the lower jaw (jowl area) by blending a deeper shading powder into it. To bring the eye to the tightest and youngest part of her face, she needs attention on her upper cheekbone, eyebrow, and lips.

I would remove a few outer eyebrow hairs and shape brows from beneath, adding color with either a pencil or powder brow shade, or both, then brushing them into shape. They need to be shaped and filled in naturally with no hard lines. I would add eyeliner in a smoky blue/black or cinnabar with deeporange brown to the upper outer eyelid. She needs to get rid of all makeup at the inner eye to bring attention to the lashes, brows, and lips. She should add a few coats of blackish/brown mascara, sweeping the lashes outward. A generous coat of natural lip stain or color in warm pinks and berries would look great.



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