

The number of people undergoing cosmetic procedures, such as those advertised in South Korea, is rising among all ethnic groups.

SURGERY

Diverse interventions

Standards for cosmetic surgery are typically based on white ideals of beauty. But the demand for facial procedures by people of all ethnicities is driving a change in practices.

BY SUJATA GUPTA

round 1,000 years ago, Leonardo da Vinci divided the face into horizontal thirds and noted that the distance from the hairline to the brow, the brow to the nostril, and the nostril to the chin should all be equal. It was one decided moment in a long, obsessive search to find objective ways to classify beauty.

As a young medical student many centuries later, Jennifer Parker Porter recalls sitting in a plastic-surgery class being asked to analyse faces and noses using such historic ideals. "I started thinking, 'Well, this isn't right. You're analysing my nose as a Caucasian nose and I'm not Caucasian," says the facial plastic surgeon from Chevy Chase, Maryland.

And so Porter began to take measurements directly from the faces of people of varying backgrounds to quantify racial differences. Her work has put her at the leading edge of a larger effort within the plastic-surgery field over the past few decades — to consider the concept of beauty in less relentlessly Western terms. "The aesthetic ideal, it comes from many moons ago when the

anatomists and artists of yesteryear were looking at proportions of the face and deciding what was normal," she says. "But they were looking only at Caucasian faces."

That is now changing. However one feels about cosmetic enhancement through surgical means, the fact is that more and more people of all ethnic groups are having cosmetic surgery. Between 2005 and 2014 in the United States, cosmetic procedures — ones done for aesthetic enhancement rather than for reconstruction, birth defects or diseases — jumped by 38% in white people and 110% in non-white people (chiefly Hispanic, African American and Asian American people), according to the American Society of Plastic Surgeons (see 'Rise of surgery').

As this cosmetic-surgery landscape shifts, the reigning aesthetic ideal that surgeons work to has come under intense scrutiny. Reshaping facial features for people of different ethnic groups means re-evaluating the prevailing aesthetic standards and establishing new, more diverse surgical guidelines.

Operating on an individual without considering their ethnic background, says Julius Few, a facial plastic surgeon and clinical professor at the University of Chicago in Illinois,

"is like trying to do heart surgery without knowing where the blood vessels go".

END OF THE MASQUERADE

Pride in ethnic identity has helped to spur this change. Until the 1990s, the small number of Asian and black people who pursued cosmetic surgery mostly did so to efface rather than celebrate their features. "There was a time when most African Americans were really trying to achieve a much narrower nose, a Caucasian-like nose," says J. Regan Thomas, a plastic surgeon in Chicago.

Many surgeons report that Asian and black people, for example, now want to preserve their ethnic features. David Weeks, a facial plastic surgeon in Atlanta, Georgia, recalls a 28-year-old Middle Eastern woman he saw a few years ago. She was considering having a rhinoplasty, and Weeks assumed that she wanted to remove the generous hump on her nose, which is a common procedure among his white patients. But she just wanted work on her nose tip. When Weeks delicately asked about addressing the hump, her mother — who had come to the consultation — cut the conversation short.

Other surgeons report similar discussions. "Some Middle Eastern patients might come in

with a huge hump. They might want to soften it, make it a little less out of control, but they feel if they go too far it makes them look Caucasian," says David Kim, a facial plastic surgeon in San Francisco, California.

Sorting out what it means to be a beautiful Middle Eastern, Asian or black person in contemporary communities means crafting templates of beauty that strip away historical white biases. To do that, Porter and other researchers are trying to quantify what makes different kinds of faces beautiful.

Chung H. Kau, an orthodontic specialist at the University of Alabama at Birmingham, has been doing so by constructing 3D faces — a procedure that entails measuring facial attributes such as the distance between the eyes or differences in the curvature of the nose¹. So far, he has collected data sets from 15 countries to create an 'average face' for each. "We do see certain characteristics in certain populations," he says. He hopes that surgeons will one day design a nose or eye using the appropriate geographical template.

Kau's work speaks to another thread of research, showing that when several faces are melded into a single composite face, people across the world find the composite more attractive than any of the original faces². Paradoxically, therefore, average equals beautiful. Averageness can be more important in certain features than in others³, however, and retaining a striking feature could actually accentuate beauty.

Few has also delved into how to quantify ethnic differences. After he started practising medicine 16 years ago, among other procedures he looked at surgery that is done to lift the corners of the eyes (which tend to droop with age) to make a person look younger. Several years ago, he reviewed the photographs in his archives and selected 296 white and African American patients, divided into over-45 and

under-45 age groups, and compared how the eye aged over time⁴.

He saw that the African American eye has a greater natural slant, even in the younger age group. Under-correcting the slant

"You can't just run in and do the same nose on everybody."

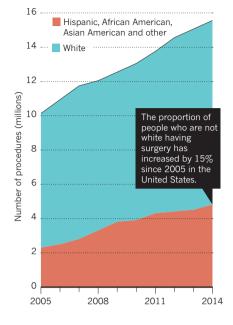
in African Americans, he realized, may make the face appear not younger — but whiter. That is important, he says: a mismatch between the surgery and face type can leave patients dissatisfied or confused by their new appearance, even if they cannot articulate what feels wrong. "Even though it's one small thing, the implications are huge," he says.

PARSING ETHNICITY

Still, attempts to characterize beauty by skin colour alone come with pitfalls, says Ronald Eccles, a rhinology researcher at Cardiff University, UK. Plastic surgeons often use skin colour as a proxy for race, he notes, but "what is African American?" Or Asian, white or Hispanic person? "You can't define such terms through

RISE OF SURGERY

Although white people make up the largest proportion of US patients undergoing cosmetic procedures, surgery is increasingly popular among Hispanic, African American and Asian American people.



looks alone." During the cosmetic surgery consultation, a surgeon must consider facial architecture, such as the height of the nose bridge, curvature of the jaw and skin type (white skin is typically thinner than black skin) to determine the types of surgical fixes that are possible. Beyond those physical limitations, cosmetic surgery is interpretive: how much should the nose be narrowed or eye lifted, for example?

The answers may rest on a person's ethnic background, which is not always clear from their skin colour. If, for example, a patient appears to be or identifies as Asian, but is three-quarters white or another permutation, a surgical assessment could become skewed: the surgeon might suggest a narrower, more 'white' nose when merely removing a hump might work best. Similarly, a surgeon working with a patient who identifies as black may suggest an 'African American eye' even though their face type would support a more characteristically white eye.

To avoid ambiguity, some surgeons routinely ask patients about their heritage. For noses, Eccles suggests sorting people not by their skin colour, but by a quantitative assessment of nose shape. This tool was first suggested more than 100 years ago by French physician and anthropologist Paul Topinard, who divided the width of the nose from its widest portion at the base by its height and called the result the nasal index. Although Topinard used the index to make judgements about race, removing this aspect could make the index an objective tool, Eccles says.

Nonetheless, many surgeons say that they do not bring up a patient's heritage and merely hope that such information will come up during the consultation. But cosmetic surgeons are also

artists whose own life histories will undoubtedly shape their conceptualization of beauty. "I'm probably influenced by my background," Weeks, who is white, acknowledges. "What I think of as normal may be different from what other surgeons think of as normal". When those subtle assumptions play out on the operating table, they can dramatically influence the look of a face. Without careful consideration of a patient's desires and background, some people will be so unhappy with the result that they will resort to further surgery.

TOWARDS BROADER STANDARDS

Beyond questions of aesthetics, cosmetic work is still difficult surgery. Tweaking a nose or chiselling down the jaw — a popular procedure in South Korea — takes considerable finesse. And because cosmetic plastic surgery was once the almost exclusive domain of white patients and surgeons, European and North American doctors have largely laid out the surgical guidelines for various procedures.

That Western orientation is problematic, says Yong Ju Jang, a rhinoplasty specialist at Asan Medical Center in Seoul. Because the writers of the guidelines tended to overlook the nuances of operating on anyone who is not white, different — and often contradictory — standards for surgeries have arisen across the world. In practice, that means a Korean American woman pursuing a nose job may well undergo a different procedure with different aesthetic outcomes in the West than she would in the East.

Consider the nose, says Jang. In general, most white patients wish to reduce its size, whereas Asian patients seek to enhance it to make it appear 'stronger'. For rhinoplasties in most of his Korean patients, Jang says he builds up the nose using cartilage from the patient's ribs or ears, as well as using implants made of Gore-Tex or silicone to improve the aesthetic end result. Although Gore-Tex implants are becoming more common for rhinoplasties across Asia, most Western surgeons avoid them for fear of complications, such as infections. Jang, who has been educating surgeons around the world on how to conduct rhinoplasties in Asian patients, says that with practice, those risks are largely eliminated.

Cosmetic surgeons hope that as long as more people of different backgrounds seek aesthetic plastic surgery, the standards will continue to evolve to reflect every type of nose, eye and chin. After all, says Parker, "you can't just run in and do the same nose on everybody."

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