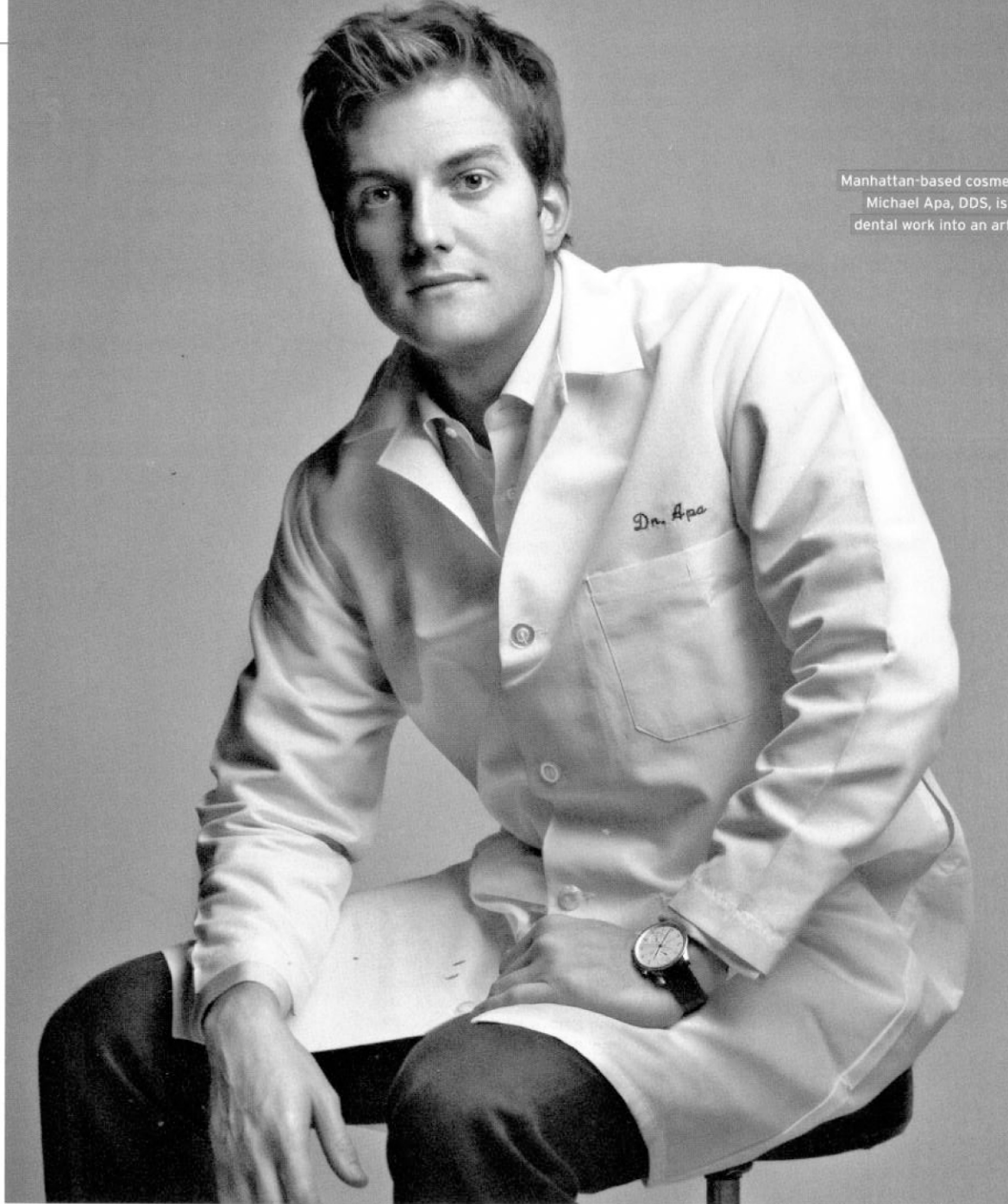


Manhattan-based cosmetic dentist Michael Apa, DDS, is transforming dental work into an art form.



Perfecting the *Not So* Perfect Smile

How new age dentists are getting it bright white *and* right. Reporter **AIMEE LEE BALL** pays an office visit.

So you're going to shave my teeth now?" "Shave is such an unpleasant word," says Michael Apa, DDS, drill bits in hand, cordially reassuring the anxious woman in his chair. "I'm going to reshape your teeth."

The patient is a 30-year-old whose birthday present from the orthopedic surgeon she just married is a smile makeover. In about a week she will be around \$30,000 poorer but have ten new porcelain veneers—gleaming little white gloves—masking the imperfections of her natural teeth.

Cosmetic dentistry is a darling of the current self-improvement zeitgeist—in this country, it's at least a \$3 billion industry—but some version of dental adornment has been practiced by various cultures for millennia: The ancient Egyptians replaced missing teeth with false ones wrapped in gold wire; the Japanese practiced the art of *ohaguro*, staining teeth black; and the Maya cut circles in their teeth, filling them with jadeite inlays. Modern options have far eclipsed

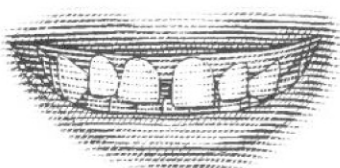
the do-it-yourself whitening kits, and a full set of veneers can cost more than \$60,000, but expense is no guarantee of outcome. The corollary to the prevalent Hollywood facelift with that regrettable caught-in-a-wind-tunnel look is the Hollywood smile: a row of square white Chiclets. It's personal enhancement, *reductio ad absurdum*.

When Apa, freshly minted as a dentist in 2003, joined the New York City practice of Larry Rosenthal, DDS, he went to a party at his new partner's home where the assembled friends looked so much alike—as if they all had the same dentist, the same plastic surgeon, the same dermatologist—that one would be hard-pressed to single any of them out of a police lineup had a crime been committed. For several decades, explains Apa, cosmetic dentistry was based on precise mathematical principles developed by the ancient Greeks and known as golden proportions—a foundation for the most pleasing artwork.

"If you drew a rectangle around the face of the *Mona Lisa*, the ratio of height to width would be completely symmetrical," says Apa. "Da Vinci basically painted the Pythagorean theorem. We applied those same principles to teeth. We were taught a certain length and width for the front teeth, the side teeth, the canines—there were formulas. It wasn't artistic so much as scientific. Beauty is symmetry. With any arrangement, whether in nature or manmade, the reason people think it's beautiful is that it's symmetrical. But we were taking something symmetrical and plunking it into people's faces. Combined with the bleaching craze—people wanting abnormally white teeth that weren't humanly possible—everybody was getting the same set of teeth."

Apa started reading orthodontic journals and resumed taking art classes. He ultimately realized that he could "build" someone's mouth to create the illusion of symmetry in other parts of the face that aren't usually the province of dentists. Most of us develop asymmetries as we get older, through chewing, smiling, squinting, talking, and falling down on the soccer field in the third grade. "Injuries often start an asymmetry," says Apa, "and then the musculature, which is stronger than anything, will overemphasize it. The muscle will actually pull bone into a certain place that it wants to be. That's why there are guys who look like Lyle Lovett. Everything's asymmetrical."

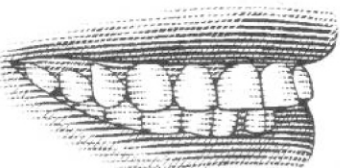
THE CHECKUP



THE GAP

DIAGNOSIS An improper bite formed with age and during the teeth's developmental stage can cause spacing and shifting. Here, the smile is also gummy.

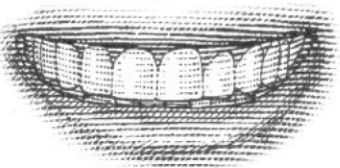
SOLUTION Apa suggests reconstructing the bite with veneers and ceramic onlays, and having a periodontist reposition the gum tissue, a six-hour process over the course of two weeks.



THE OVERBITE

DIAGNOSIS Flared (or buck) front teeth and crooked lower teeth could be the result of thumb sucking or tongue thrusting. Here, the side teeth are also gummy.

SOLUTION Apa recommends using veneers along the top arch to give a nicer profile, veneers on the lower teeth to straighten the arch, and laser-ing of the gum, a six-hour process over the course of two weeks.



THE IDEAL

Porcelain veneers can be a great option to mask worn or chipped edges, discoloration, gaps, and misshapen or crooked teeth. A small amount of front enamel is reshaped, and a custom-made thin laminate of porcelain is bonded to the tooth with resin cement. They can last 10 to 20 years with preventive maintenance. Prices vary widely, from \$1,000 to nearly \$3,000 per tooth. For one errant tooth, **bonding** may be the less costly option. The tooth's surface is etched with a mild acid, then a composite resin is molded on and sculpted. Average lifespan is around seven years. Prices start at \$350 per tooth. —MELISSA DENCHAK

Despite the traditions of ancient civilizations, celebrities were the only ones indulging in cosmetic dentistry when Marc Lowenberg, a partner in Manhattan-based Lowenberg & Lituchy Cosmetic Dentistry, was growing up in the fifties. "I was about ten when a neighbor, married to a dentist, got her teeth capped," he says. "It was the talk of the town. People got nose jobs and their hair colored. But only movie stars enhanced teeth." Lowenberg did his first cosmetic procedure in the early seventies on a patient who was a talent coordinator for *The Merv Griffin Show*. "Merv had told him about a company in California with a product that was painted on your teeth to make them look whiter," Lowenberg says. "I graduated from dental school in 1972. No cosmetics were taught then. I had no idea what he was talking about. He brought the material to me, no instructions, and I had to figure out what it was. In the next couple of years, that product became known as bonding."

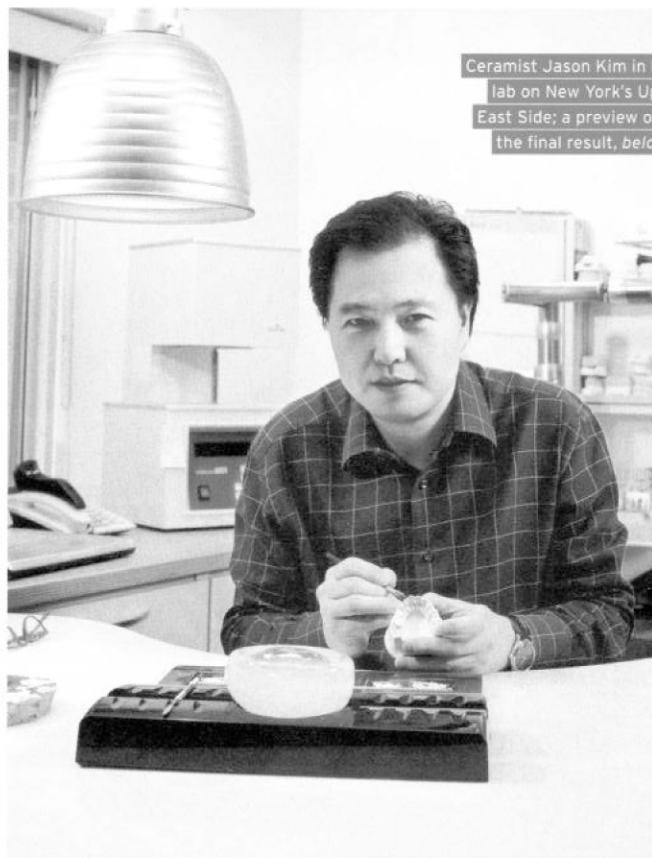
Next came the concept of preformed teeth façades, made from a plastic called Mastique. After that, the industry developed a way of attaching porcelain to the teeth (although precise credit for the technology is much disputed). "And that's when the cosmetic revolution exploded," says Lowenberg. "What you can do with porcelain that you could never do with plastic or resin is re-create all the qualities of natural teeth: They're translucent, they reflect light instead of absorbing it, they have a high glaze like glass as opposed to a matte finish, they're far more durable than bonding material, and they don't require any maintenance. They can make crooked teeth look straight, short teeth long, or long teeth short. They can change the color of your teeth and turn a narrow smile into a Julia Roberts smile."

Roberts is a big point of reference with cosmetic dentists. Also Eva Mendes (voted the American Academy of Cosmetic Dentistry's best celebrity smile of 2008), Brad Pitt (good), Joe Biden (bad), and the late great Anna Nicole Smith (really bad). Displaying the palette of colors available for porcelain veneers, Gerald Curatola, DDS, points out the most blindingly white choice. "This is the one I call toilet-bowl white, or Joe Biden white," he says. "We had to go back to the drawing board and use whiter shades of glass (porcelain is basically a silica glass) because people bleach their teeth. When you're photographed with veneers,

there's fluorescence in them, so they look dazzling even though they don't have to be as white as Joe Biden's. Poor Joe."

Poor Joe may be thrilled with his dental work. "There are people who don't want natural-looking teeth," says Lowenberg. "They say, 'If I'm spending \$40,000, I want everyone to know I had my teeth done.' It's the same as a woman saying, 'If I'm doing breast implants, I want double Ds.' When people come in and say, 'I want big white teeth,' I tell them to go to my competitor. We create natural-looking smiles that are still glamorous. But some people want the Chiclets look and find dentists who will give them that."

The sign on the door of Curatola's Manhattan practice reads Rejuvenation Dentistry. "Cosmetic dentistry greatly helps people improve their looks," he says, "but it hasn't done anything to support wellness. My philosophy is that your mouth is on the front line of



Ceramist Jason Kim in his lab on New York's Upper East Side; a preview of the final result, below.

It's hard to hide the disdain in his voice when Apa differentiates between the "smile design" that dentists have been doing for the last two decades and what he has dubbed "facial aesthetic design," which takes into account not only the mouth but also all the features, from the cant of the nose to the tone of the skin and hair. "It's the difference between a natural and unnatural appearance," he says.

Numbed by articaine and with a nice little Valium chill, the patient who's worried about having her teeth "shaved" reclines against a velvet neck pillow, watching a Hilary Swank DVD as Apa (listening to Coldplay) takes dozens of photographs with Polaroid and digital cameras.

"She's got a cute girlish look," he says, "and I don't want to lose all that. We're going halfway between sexy and cute."

"Jerry Seinfeld's teeth are part of his character," says ceramist Kim. "I just make them look better."

a healthier life." After graduating from dental school in 1983, Curatola took a master's course in holistic health, studying Chinese medicine, Ayurveda, homeopathy, naturopathy, nutritional therapies, acupuncture, and iridology. "What does this have to do with cosmetic dentistry?" he asks. "You can do beautiful veneers, but what I'm trying to model here is a more holistic approach that brings beauty and wellness together."

His office was designed according to feng shui principles, with full-spectrum lighting and triple-filtered air. The music system converts digital format back into analog sound ("more rejuvenating for the body"). He rails against conventional toothpaste ("it's basically flavored soap for the mouth") and keeps dishes of Himalayan salts ("detoxifying") in treatment rooms. "I'm the cosmetic dentist who's also, in a sense, promoting 'organic gardening' for your mouth," he says.

There's a logical pecking order for antiaging procedures, and cosmetic dentistry must come first, before Botox or brow lifts, says



Apa. "The trick is getting across to patients where to go first for their cosmetic journey," he explains. "I'm working on a frame, like the foundation of a house. Once I rebuild the frame and retrain the muscles, then you can stretch the skin or inject it, do what you want. We work with dermatologists, plastic surgeons—a team of people. But you have to have a quarterback."

He spends about two hours reshaping the smallest possible amount of healthy enamel and sculpting a set of temps. "I do everything by hand," he says. "It allows me to be more conservative. I know exactly what the position of the teeth is, rather than a laboratory telling me they need x amount of room for the porcelain. But I can't see exactly where the temps are because she's numb, so I bring her back the next day and go over her speech, her bite, the shape, the size, the color." He makes a mold of the temps, which is sent to a ceramist.

Here's the kicker: He has a fractured pinkie on his right hand (and he's right-handed), which was slammed in a car door. But it in no way affects his performance—a good thing since there are princesses coming in from the Middle East.

Celebrities have been a major marketing tool for cosmetic dentists. Lowenberg's first famous patients were the Rolling Stones—he was referred by their personal physician, whom he met when both men were first-aid assistants at a Vietnam War protest. Curatola

has sung onstage with his patient Billy Joel. Apa's nervous patient signed up after seeing Apa on VH1 with stars like Chloë Sevigny.

Jason Kim, the ceramist who works in tandem with Apa, Lowenberg, and Curatola, has a wall full of famous faces, too, including Jerry Seinfeld, whose teeth were once described as needing their own zip code. Kim has made them twice, the first time 20 years ago. And when he was recently called in for a remake, he followed Seinfeld's wishes to

is a little indictment of dental schools, but we have not had the courage or wisdom to change the curriculum and incorporate new things. In clinical work, students still spend a tremendous amount of time doing amalgam fillings—the silver ones made with mercury.”

Lowenberg says old-school dentists look down on veneers: “They would rather put crowns on your teeth because of the way they were trained, and they’re steadfast in their beliefs. But a crown is much more invasive.” It’s

night, you’re flexing the tooth microscopically,” he says. “It only takes one clench or grind, like if you have a nightmare. The veneer won’t come off in your sleep, but you can be biting on soft butter, and it breaks the bond.”

Cosmetic dentistry is at times emergency dentistry. Too long ago to remember how it happened, photographer and former *Self* magazine editor Alexandra Penney chipped a front tooth and had it bonded, then rebonded several times as pieces came off.

“Some people want the Chiclets look and find dentists who will give them that.”

keep his rather prominent choppers exactly the same. “They’re part of his character,” says Kim. “I just made them look a little better.” Kim, who came to this country from South Korea at the age of 18, is the Picasso of his field—his translucent edges are a thing of beauty. But his genius is not just technical: Kim’s job, together with the dentist, is interpreting what the patient means by “I don’t want Regis Philbin teeth” or “Don’t make me look like a Cuban bandleader.” The collaboration is a delicate pas de deux. “The best clinician is tuned in to his patient’s character and social life,” says Kim. “If a petite or shy girl says, ‘I want to look like Julia Roberts,’ how do you interpret that? It’s closing the gap of communication between what the patient wants and what the dentist can provide. Then I do an interpretation of color on that shape, and usually that’s a home run.”

The era of going to the dentist just so you could chew a steak well into old age is past. But cosmetic dentistry still is not an accredited or board-certified specialty, and many dental schools offer few, if any, courses on popular cosmetic procedures. The skills are often acquired on the job and almost anecdotally, in weekend seminars financed by companies that make the materials used for the procedures. The American Dental Education Association, despite its stated mission “to address contemporary issues,” will not comment to the media about the profession. “But dentistry is a conservative field, and overhauling its education is a monumental task,” says Dan Nathanson, DMD, president of the International Federation of Esthetic Dentistry and a professor at Boston University’s school of dental medicine. “Part of what I’m saying

true that teeth must be filed down more aggressively for crowns, but our current affair with lamination is shortsighted, according to Ronald Goldstein, DDS, of Atlanta, the author of a consumer handbook called *Change Your Smile*. “I’m a great believer in repositioning teeth,” he says. “Sometimes invisible braces for about six months and some bleaching would give the person a lifelong smile and save them thousands of dollars over veneers. A crown is longer-lasting and much better for someone who grinds his teeth.”

Caveat emptor is incalculably valuable advice when choosing someone to enhance your not-so-pearly whites, since anyone can be a self-styled “cosmetic” or “aesthetic” dentist. “Credentials are masked,” says Goldstein. “With the Internet, dentists can put pretty much anything they want out there. They have self-appointed titles—president of their own society.”

It’s hard to say how much wear you’ll get out of your investment in perfection. “We have to be honest about the longevity of these restorations,” admits Goldstein. The average person can expect veneers to last ten years, he says, and that’s if you avoid spare ribs and raw carrots and wear a guard when you sleep. “If you clench at

Last year her dentist said the tooth couldn’t take any more bonding and recommended getting a crown as soon as possible. “I was enormously reluctant,” says Penney. But after conducting due diligence among dentally experienced friends, she decided on veneers. “I’ve had losing-my-teeth nightmares,” she says, “which are very Freudian. In a panic, I went to see Apa.”

Agreeing with his suggestion of four veneers to create a seamless front line, Penney declined the offer to watch the process on a monitor and instead listened to Beethoven’s Ninth during two sessions of more than two hours each. “It was the most crashing loud music I could think of,” she says, “like a tsunami wave over and over. Beethoven’s Ninth can really challenge the noise of drills.”

Penney also asked for an exact replica of her old teeth and was amazed with the results—almost paper-thin, “maybe a smooch whiter.” The new teeth even included a tiny irregular snaggletooth corner of the originals. “As a photographer,” she says, “pixel-by-pixel and millimeter-by-millimeter counts. What Apa understands is that too perfect looks fake.”

PEARLY WHITES

Here’s a little-known fact: “Bleaching does not work on everyone,” says Lowenberg. Teeth’s whiteness and brightness and how they take to a procedure can depend on one’s genes. Lowenberg supplements an hour-and-a-half, in-office power bleaching treatment with customized molds to extend the effectiveness of the process at home. “Once teeth get the whitest they can get,” he says, “there is a slight regression in color the first two weeks—just like hair color that fades.” Molds can also be used independent of an in-office treatment and are typically worn for two weeks, up to an hour per day. For over-the-counter options, Lowenberg recommends Crest Whitestrips. Beware, though: Overdoing any procedure can lead to tooth desiccation, receding gum lines, and possible nerve damage. Power bleaching, \$600–\$1,200; custom molds, \$400–\$600; Crest Whitestrips, average \$35. —M.D.