

September 9, 2007

## Scent and Sensibility

By JAMES VLAHOS

On a roof top high above the Las Vegas strip, across the street from a one-third-scale reproduction of the New York skyline, a device in a small black box was emitting a fine chemical vapor. Tiny, fragrant molecules entered the building's ventilation system, tumbled through the ductwork and spilled from discreet panels in the ceiling of a large, circular room, the sales pavilion for a real estate development called CityCenter. Drifting invisibly downward, the particles perfumed the air — vanilla, paired with jasmine, lavender and rose; sweetened by coconut and peach; and enriched by sandalwood, amber and musk — an “aromatic symphony,” in the parlance of its creator, called Essence of Destiny.

A half-dozen visitors milled about the pavilion's Great Room that January day, and if any of them noticed the aroma, they didn't say so. There were other distractions. A tabletop model of the Strip measuring 15 feet across occupied the center of the space, and as the room lights dimmed, the miniature towers of CityCenter warmed with a platinum glow. A saleswoman approached the table with a male visitor. “Are you ready for a life-changing experience?” she asked. “Do you think you could be part of history?”

Amplly hyped and outsize even by Las Vegas standards, CityCenter is a \$7.4 billion venture initiated by the resort conglomerate MGM Mirage that is reputedly the most expensive privately financed development in United States history. Under construction on 76 acres between the Bellagio and Monte Carlo resorts, CityCenter will offer 4,800 hotel rooms and 2,700 condominium units, plus a mix of shops, restaurants, gambling areas, parks and theaters. When completed, supposedly in late 2009, CityCenter will total 18 million square feet — 7 million more than the entirety of what is slated for ground zero in New York.

Rather than erecting yet another Vegas-style hotel-as-stage-set (depicting Paris, Egypt or the like), MGM signed up the architectural equivalent of the Dream Team, with the firms of Norman Foster and Rafael Viñoly, among others, designing a set of sleek, glassy towers. With plans for its own fire station, a gourmet market and sidewalks to encourage walking, the developers of CityCenter are aiming not for a mere resort but a complete, high-end village. And they are charging correspondingly high prices — \$500,000 to \$12 million for a condo.

Tony Dennis, the executive vice president in charge of residential sales, says he knew that to

persuade thousands of multimillionaires to spend that kind of money, he would need an elaborate presentation at the sales pavilion. To get people to buy what is essentially a very costly lifestyle accessory — “Be serious, this is a second or a third home, so it’s not a need,” he told me — Dennis wanted to appeal not just to the minds of prospective buyers but also to “their emotions, psyche, heart and soul.” A visit to the pavilion couldn’t just be informative; it would have to be a multisensory experience. One key to creating it, he thought, would be to employ the power of scent.

Instilling fragrance in the CityCenter salesroom seems quintessentially Vegas — the latest desperate attempt to stand out in the attention-deficit capital of the world. But the developers’ scent gambit is hardly isolated. Although CityCenter is probably the most sophisticated case yet of using smell to sell real estate, hundreds of businesses around the country, desperate to compete in a marketing-cluttered environment, are turning to piped-in scents. The open question is: Do they work?

Take a whiff. Maybe you’ve noticed — and maybe you haven’t, and this isn’t entirely by accident — that the world has lately become a more fragrant place. Westin hotels waft a blend of green tea, geranium and black cedar into lobbies; Sheraton has jasmine, clove and fig. Jimmy Choo stores smell of cardamom and ivy, while Thomas Pink opts for the tang of fresh linen. Artificially introduced aromas are seemingly everywhere, and while certain applications are obvious — like pumping the smell of fresh-from-the-oven bread into a supermarket to draw shoppers to the bakery department — a growing number of companies employ the technique to sell products with no intrinsic odors. Sony Style stores, for example, are scented with a blend that includes orange, vanilla and cedar, an aroma the company hopes will put female shoppers at ease. Even “new car smell” isn’t what it used to be. Cadillac, for instance, wanting to ensure that its models smell not just like any generic new car, infuses interiors with a custom scent called Nuance.

The use of piped-in aromas to set a mood, promote products or position a brand is known as scent marketing. Its efficacy is uncertain, but the practice is on the rise. Advertising Age named it one of the top 10 trends to watch in 2007; Dave Van Epps, president of ScentAir, a producer of aroma-marketing systems, told me that his business had quadrupled between 2005 and 2006. Harald Vogt, founder of the Scent Marketing Institute, a consulting firm based in Scarsdale, N.Y., estimates that over all, \$50 million to \$80 million was spent on scent marketing in 2006 and that the figure will surpass \$500 million in the next decade. Scent marketing, whether for condos or cars, is part of a broader movement known as “full-sensory branding,” the key tenet of which is that to be successful in an advertisement-crammed world, companies must reach consumers not only through the overtaxed avenues of sight and sound but also through touch, taste and smell. Advertising shows up on eggs, on airplane tray tables and on horse tack. Smell, meanwhile, is viewed as wide-open bandwidth. “Fragrance is the only thing left,” Vogt says. “You cannot turn off your nose. You

have to breathe.”

In real estate, a basic form of scent marketing has been around for decades; consider the seller’s trick of placing a freshly baked apple pie or cookies in the kitchen, which makes a house feel more like a home. The problem is one of scale, Van Epps says. “If I’m a homebuilder, and I’ve got six models to sell, I’m not baking cookies in all of those models every day, all day long,” he notes. ScentAir’s technology, originally developed for military simulators and theme park rides, is now used by Toll Brothers, D. R. Horton and other major builders to sell thousands of new homes nationwide. Some systems emit the classic pie or cookie smells, while

others release a “brandscent”—a custom creation matched to the style and location of the real estate and designed to be as memorable as the Nike swoosh or the Golden Arches. “If you are effective with it, you can own an aroma,” Van Epps says, just as you can own “a color or a logo or anything else about your brand.”

CityCenter’s Dennis was inspired by the success of businesses like Pottery Barn and Starbucks at creating distinctive environments through meticulously chosen lighting, background music, furniture textures and other design elements. Taking this model to its logical extreme at CityCenter’s sales pavilion, he left no aspect of the customer’s sensory experience to chance. The design team started with the traditional vocabulary of interior design and expanded it to aromas and auditory elements to help tell the story of how, say, ViG±oly’s condos differed from Lord Foster’s — what was the design gestalt, what were the target demographics. Dennis was especially intrigued by a scientific premise that seduces just about everybody who comes across scent marketing: that smell has an unrivaled power to awaken emotions and that this power can be harnessed to lift sales.

When you sniff something, signals from the odor receptors in your nose reach your amygdala first, producing an immediate, visceral reaction. No other sense is directly wired to this emotion-processing part of the brain; scent is unique in the way that any response in the higher cortical areas responsible for conscious thought comes second if it comes at all. “All of the other senses, you think before you respond, but with scent, your brain responds before you think,” says Pam Scholder Ellen, a Georgia State University marketing professor. Smell is our chemical alert system, responsible for detecting whether the molecules around our bodies are beneficial or toxic, a determination of fundamental importance to all forms of life. Richard Axel, a Nobel Prize-winning neuroscientist, notes that worms have about as many genes as we do devoted to smell; the anatomical organization of a fruit fly’s smell system is “remarkably similar to that of the olfactory system of mammals, suggesting that the mechanism of odor discrimination has been shared despite the 600 million years of evolution separating insects from mammals.” Smell is the primary way that most creatures identify mates, food and predators; it is our most primal and deeply rooted sense. No

wonder marketers hope to tap into its power.

Companies are also intrigued by the potential of using smell to unleash memories — positive, deeply held ones that could then be associated with the products offered — and also to strengthen brand memory. In a rare instance of business practice being influenced by French modernist literature, scent marketers frequently reference Marcel Proust’s “Remembrance of Things Past,” in which the taste and aroma of a tea-soaked madeleine unleash a torrent of childhood memories. Almost everybody has experienced something similar. The smell-linked amygdala, it turns out, also plays a key role in associating memories with emotions, which helps explain the nostalgic feeling researchers call the Proustian effect. “The emotional power of smell-triggered memory has an intensity unequaled by sight- and sound-triggered ones,” wrote Rachel Herz, a [Brown University](#) neuroscientist, in a paper summing up more than a decade of her research.

Martin Lindstrom, author of “Brand Sense,” the bible of full-sensory marketing, makes predictions for the CityCenter effort that go well beyond those uttered by anyone connected with the project — and for that matter, well beyond those made by most people who have researched scent marketing. He’s an unabashed zealot. “People will make quicker decisions, be willing to pay more for the property and most likely be so emotionally engaged that they are removed from the rational part of their behavior,” Lindstrom says. “I don’t need to tell you that this is on the ethical line in my opinion, but from a pure behavioral point of view, that is most likely going to happen.”

The hurdles that scent marketing would have to overcome to achieve anything like that effect, however, are significant. Scent doesn’t work like a broadly efficacious drug, but rather by playing on learned associations particular to individuals. One man’s cinnamon is another’s skunk. Preferences are cultural (vanilla tops the charts for Americans, while sandalwood is a hit in India) and generational (people born before 1930 love natural smells like grass and horses, while people born later are fond of synthetic smells like Play-Doh and SweeTarts). There is no such thing as a universally admired odor, and people form associations with negative smells more easily than with positive ones. “There’s something very seductive about the idea of using scent to affect consumers, but it can be a highly uncontrollable cue when you actually implement it,” Ellen says. “We’re not going to be able to put out a scent and transport you back to your aunt and the madeleines.”

“I’m aromatically curious,” says Mark Peltier, the founder of AromaSys, the company handling the scenting of the CityCenter sales pavilion. “I’ve been a sniffer since I was a little kid, smelling the grass, flowers, spices, dirt, sticks — just smelling.” The young Peltier loved cotton balls. To everyone else, naturally, they all smelled alike, but to him each was wondrously different. “They might as well have been candy: grape, watermelon, strawberry, banana.”

Peltier's early 20s found him working as a technician for the Air Force in Sunnyvale, Calif., where he spent days cooped up in an office that reeked of cigarette smoke. He escaped into nature whenever he could, and what happened on a particular fall outing ("around 10 a.m. on a Tuesday morning early in October of 1976," he says) has become the company creation myth. Peltier was sitting on a bench amid the redwoods of Muir Woods. It had rained the night before; glistening ferns and rhododendrons dripped onto a damp carpet of moss and soil. "The fog is starting to burn off, the sun is coming through, and I am starting to feel, like, extra-exceptional — alert, refreshed, relaxed, peaceful, calm, just every kind of positive attribute you'd ever want to have," he recalls. "It was all coming together and building up, and I'm, like, What in the hell is going on with me? And, bam, my mind flashes: It's the smell."

Peltier was inspired. What if you could capture this natural perfume and put it in a building? What if you could invent a device that played scents like music from a stereo? In 1990, after years of experimentation, he discovered that by using high-voltage, low-current electricity, he could convert liquid scent into vapor without destroying its delicate balance of top, middle and base notes. High-quality fragrance could thus be precisely and cost-effectively distributed through the ventilation systems of buildings. AromaSys was born.

By the time CityCenter came along, AromaSys was in hundreds of properties around the country, from the DeBeers store on Rodeo Drive to the Hyatt Regency on Capitol Hill. Las Vegas was the company's stronghold, and nearly half of the casino-hotels on the Strip used Peltier's systems; the MGM Grand alone employed nine different aromas. (Peltier says that when walking on Las Vegas Boulevard, he can sometimes tell where a tourist has been by the way he smells; someone who emanates coconut, for instance, is probably coming from Treasure Island.) The company's fragrances are developed by Peltier's wife, Eileen Kenney. For CityCenter, she began last December, working from written and verbal descriptions of the various interior designs as well as from collages of materials, textures and colors. From a distance, however, she could do only so much. In early January this year, just after the pavilion opened, she went to Las Vegas. Trial versions of two of her scents were being pumped into the building, and it was time to see how they smelled.

The finishing touches were being applied to the 30,000-square-foot pavilion, built at a cost of \$24 million, as Kenney walked through the Great Room with Mary Guiliano, the CityCenter executive who was overseeing her work. Above the tabletop model, on a screen that ringed the room, a video depicted an artsy montage of CityCenter promise and delight. (Loose interpretation: Your tee shot will reach the green. You will embark upon a vision quest in the desert. You will swim in a bottomless flute of Champagne and soar hand-in-hand, Peter Pan with an all-grown-up Wendy, over the glittering nightscape of Las Vegas.) As Kenney and Guiliano paused to watch, a saleswoman approached a pair of visitors and handed them bottles of water. "We'll be right back with those mochas," she said. "Nonfat

milk this time.”

In addition to the Great Room, the sales pavilion has separate showrooms for each of CityCenter’s four glassy condominium and hotel towers, which have been named Mandarin, Veer, Vdara and Harmon. Guiliano led Kenney through a doorway into the Mandarin model unit, where a mock entryway was decorated with a small rock garden, two polished wood-stump sculptures and a tidy arrangement of young green bamboo. Essence of Destiny, the fragrance piped into the Great Room, yielded to a new aroma, one of orange and spice, like a rich herbal tea, which Kenney had named Escape to Hong Kong.

“You like it in the space?” Guiliano asked.

“I do,” Kenney said.

Kenney’s father was a chemist and her mother a professed clairvoyant; her own personality and approach to work encompass both scientific rationalism and free-spirited intuition. While living in Berkeley in the mid-1970s, Kenney says, she was “a failed hippie” but was also fascinated by chemistry; after graduation she applied to medical school but changed her mind and moved to Montana, where she holed up in a teepee, taught wilderness survival and studied natural healing and aromatherapy. She met Peltier and, sold on his idea “to bring the best of the outdoors indoors,” relocated to Minnesota with him as his wife and business partner. Though she had little formal training, she soon took the lead in scent development.

In concocting Escape to Hong Kong, Kenney had first considered the rarefied demographics of the Mandarin buyer. Units in the building, which was designed by Kohn Pedersen Fox, started at \$1.5 million, so the scent needed to suggest a level of luxury and refinement. Aromas aren’t so specific that they can be aimed at an individual buyer profile — a 56-year-old businesswoman from Vancouver, for instance — so Kenney instead focused on expressing the mood of the space, a sort of stylized Zen minimalism.

The décor provided many of her cues. The core aromatic note of spicy orange was inspired by a burnt orange hue that recurred in accents such as the kitchen-chair covers and the place mats. The refrigerator and cabinets were dark umber and the floor lighter oak, so Kenney included the earthy smells of cedar, sandalwood and amber. Freshly cut flowers, carefully arranged in vases on a marble-topped kitchen island, were reflected in the aromas of lily, jasmine and rose. Other connections were less obvious. The Mandarin design is one of light and transparency — floor-to-ceiling windows, opaque shoji screens, mirrors that rise into cove lights — and for that reason, the scent contains violet, a cool and ethereal floral. The bathroom featured European fixtures, spare and chrome; metal has no smell, but Kenney incorporated an ozonic note that she said was “clean and crisp and has a kind of

grayness to it.”

The two women went into Guiliano’s office to discuss possibilities for the Veer and Vdara showrooms, which weren’t fragranced yet. The two towers of Veer were designed by Helmut Jahn and lean strikingly 5 degrees off the vertical axis; the units were styled as hip urban lofts, the sort you might find in TriBeCa. Kenney’s challenge was to try to imagine what sort of scent the Veer customer would like, a selection process guided by intuition rather than by hard science. She put six vials of scent on the table, and Guiliano rejected several immediately. Too light. Too spicy. Too soft and powdery for the urbane Veer client. She wanted an aroma that was bright and unfussy. The winner, they decided, was in a bottle marked V3. “It almost smells like something a man might wear,” Guiliano said.

At the end of the day, Guiliano was escorting Kenney toward the lobby when she stopped in her tracks. “Do you smell that?” she asked. A fruity aroma, ripe and overpowering, filled the air. Frank Zoccole, an AromaSys operations manager, paced about, then stopped in the entrance to Mandarin, where the smell was strongest. “I’m going up to the roof,” he said.

Zoccole found the little black box marked AromaSys. He pulled out some tools and ran a few quick tests, but he already knew what he would discover. The building’s electrical system was going haywire, unleashing potent voltage surges and spikes. This was normal for a totally new building, but it was wreaking havoc on the scent system, which was pumping out way too much aroma. No wonder it stank downstairs.

“Scent is like fine music,” Kenney said when Zoccole returned. “If it’s on too loud, you’re still not going to like it.”

Do smells MAKE people spend? Two of the best known, if most controversial, investigations of the topic were done by Alan Hirsch, a Chicago neurologist who is the founder of the Smell and Taste Treatment and Research Foundation, a clinic and research group partly financed by the flavor and fragrance industry. Over the past three decades, Hirsch has conducted more than 180 studies, and while many of the findings have been eyebrow-raising (the odor of pumpkin pie increases male sexual arousal, Hirsch reports, while that of jasmine raises bowling scores), none have drawn more attention than his work on scent marketing. In 1993 Hirsch took two identical pairs of Nike running shoes and put them in rooms that were alike save a single detail: one was perfumed with a floral scent while the other was not. Subjects inspected the sneakers; afterward, 84 percent of them reported that they were more likely to buy the shoes in the scented room, and the value they estimated for that pair was, on average, \$10 higher than for the other. Two years later, Hirsch wafted a pleasant smell into an area of slot machines at the Las Vegas Hilton. He checked the revenues for the weekend before and the weekend after and, verifying that there hadn’t been any casino-wide increase in revenue, determined that people plunked 45 percent more change into the

slots in the scented area.

Hirsch's famous studies have been criticized for lacking proper scientific controls, but subsequent experiments by other researchers have reported similar results. Shoppers in scented environments, when compared with those in aroma-free ones, tend to linger longer or perceive that they have spent less time shopping than they actually have. They rate the selection of merchandise as better and the offerings as more modern; they express a greater desire to purchase and a willingness to pay higher prices. Pamela Dalton, a psychologist with the Monell Chemical Senses Center, recalls industry colleagues doing experiments in which subjects are presented with three supposedly different brands of dish detergent. In reality, the products are identical except for their smell. "People will say they're making their choices based on which one cleans better or leaves a better finish, but the driving force is always scent," Dalton says. The same might be true for consumers evaluating closely comparable real estate, she continues, adding, "The ambiance that scent creates is critical."

These results came mostly from lab-based experiments, with imaginary dollars being spent in fictional stores. Some of the most recent research, though, has examined real-world settings. Eric Spangenberg, a consumer psychologist and the dean of the business school at Washington State University, has studied scent marketing for more than a decade. For his latest study, published last year, he conducted an experiment at a local clothing store and found that when scents chosen to appeal to men or women were released (rose maroc for men, vanilla for women), cash register receipts for sales to the corresponding sex doubled. "Scent marketing is a viable strategy that retailers should consider," he recently told *New Scientist* magazine. "But they really need to tailor the scent to the consumer."

This is easier said than done, given the great variability in how people respond to scents — and for that matter, in their opinions about artificially introduced aromas. In December 2006, after the California Milk Processor Board introduced a set of bus-stop-shelter "Got Milk?" billboards in San Francisco that wafted the smell of chocolate-chip cookies, people complained vigorously: the smell might torture people with chemical sensitivities; taunt the homeless, who lack a ready supply of cookies and milk; and tempt the obese. The ads were yanked after only a day. "For a lot of people in our culture, we don't like all of the scent," says Ellen of Georgia State. "We don't like being bombarded with smells that are unnecessary or inappropriate for an environment — it's just like loud noises."

When I returned to the CityCenter sales pavilion in June, clusters of visitors were being led around by tall women in ice-pick heels. One guide had the loose grin of Sandra Bullock, another the glistening, pneumatic pout of Angelina Jolie. Above the low pulse of ambient music, sales pitches drifted through the air: "High-end, upscale, starting at \$1.5 million. . . . Hip and Hollywood, think Rodeo Drive on Las Vegas Boulevard. . . . We're going to have spa treatments that don't even exist yet in America." In the Veer model unit, two dozen red

apples sat in a bowl on the counter; nearby was a cookbook, “Barefoot in Paris,” opened to Page 100, Warm Mushroom Salad. A saleswoman steered a couple toward her glass-walled office. “Now,” she was saying, “if you’re ready to put down 10 percent today. . . .”

The aromas we had sampled in January were still in the air, and fragrances were now being piped into two other model areas as well. The scent for Veer was barely perceptible but gave an impression — a feeling, really — of crisp modernity suited to the space. The Vdara model next door was a conservative retreat of right angles, stiff leather, burgundy upholstery and dark wood. You could picture an older businessman staying here on work trips, and the scent in the air was his aftershave, amber-colored, with woody notes and musk.

The aromas were obvious to me, but barely anyone seemed to notice them. I approached a heavysset man contemplating a tabletop model of Vdara. “Do you smell something?” I asked him and got an odd look back. “You know, like perfume?” He sniffed a couple of times and shrugged. “I don’t,” he said. He tilted his head toward his armpit and whiffed again. “Maybe it’s me?” A middle-aged woman said she was hypersensitive to allergens and was glad that the aromas at CityCenter were below her threshold of sensitivity. “Some people love it when the air smells all fresh and flowery, but those are the places I avoid,” she said. Questioned outside the pavilion, the few guests who had perceived scents could describe only them in vague terms like “clean” or “nice.” A young woman who worked for a local architectural firm racked her brain. “I didn’t smell anything,” she said. “No wait, maybe I did. Yes, I think I did. Something citrusy, right?”

The atmosphere inside the pavilion, though, did seem to influence the mood of guests positively. The people strolling about were noticeably relaxed, exhibiting an air of pleasant distraction more common to Saturday morning at the farmers’ market than to a sales office. I was in an elevated frame of mind, too. I wasn’t Mark Peltier in the redwoods, feeling “extra-exceptional,” but was suffused with an agreeable sense that life was . . . good. It was impossible to determine how much of the mood was established by scent versus the other elaborately choreographed elements of the center’s presentation. In some hidden corner of my mind, had I been reminded of gingerbread in Nana’s kitchen, a first kiss at Farview Ranch Camp? Who knew?

I spotted Tony Dennis in the pavilion, and without prompting, he voiced a close variant of Pamela Dalton’s hypothesis. “The entire goal is to make people feel comfortable,” he said. “If they feel comfortable, they’ll stay a little longer; if they stay longer, they’ll get to know us better; if they get to know us better, they’re more likely to buy.” The Mandarin units, available since January, were 90 percent sold; total sales at CityCenter had exceeded \$1.3 billion. This was achieved against the backdrop of flagging home sales nationwide and a Las Vegas condo market that many analysts considered saturated.

Lou Buccieri, a real estate investor from Boynton Beach, Fla., entered the Great Room with his wife, Brooke, and began a tour. Angelina Jolie Lips guided them from Mandarin to Veer to Vdara, where the Buccieris dug in. Were two-bedroom corner penthouses available? What was the split with MGM if you rented your unit out? Was the deposit placed immediately into escrow? “Why don’t you come sit down in my office, and I can get you answers to all of that,” the saleswoman said.

The couple spent an hour behind the glass walls. When they emerged, Buccieri clutched a stack of sales literature. I caught them near the exit and asked if they noticed any smells. He didn’t; she did, but just barely. Is it possible that smell would make them more likely to purchase? Buccieri leaned in close and glowered. “The only thing that will make me buy,” he said, waving the documents under my nose, “is the number they write on this page.”

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