



Culturally-Determined Architecture for Children's Health

Course# Met117

Expires September 2010

This course is worth 1LU/HSW.

Meyer Pediatric in Florence, Italy is a unique example of what happens when multiple firms come together under challenging circumstances to create a successful replacement of a beloved building. The article "Hiding in the Hill" from the September 2008 issue of *Metropolis* looks at this Tuscan hospital's successful use of forward-looking ideas for hospital design and green building.

INSTRUCTIONS

Read the article with the following learning objectives in mind. Then complete the participant exercise online at www.metropolismag.com/ce.

LEARNING OBJECTIVES

- Identify international cultural markers of healthcare architecture
- Discuss siting options that resolve issues of historic preservation and expansion
- Understand methods for a strong base of collaboration in challenging circumstances

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HIDING IN THE HILL

NEW BUILDING

To blend in with the surrounding park, the first two floors are partially underground. Only the third floor, which features a green roof that uses an array of daylighting strategies, is completely aboveground. The levels are tapered and staggered to create overhangs with large terraces.

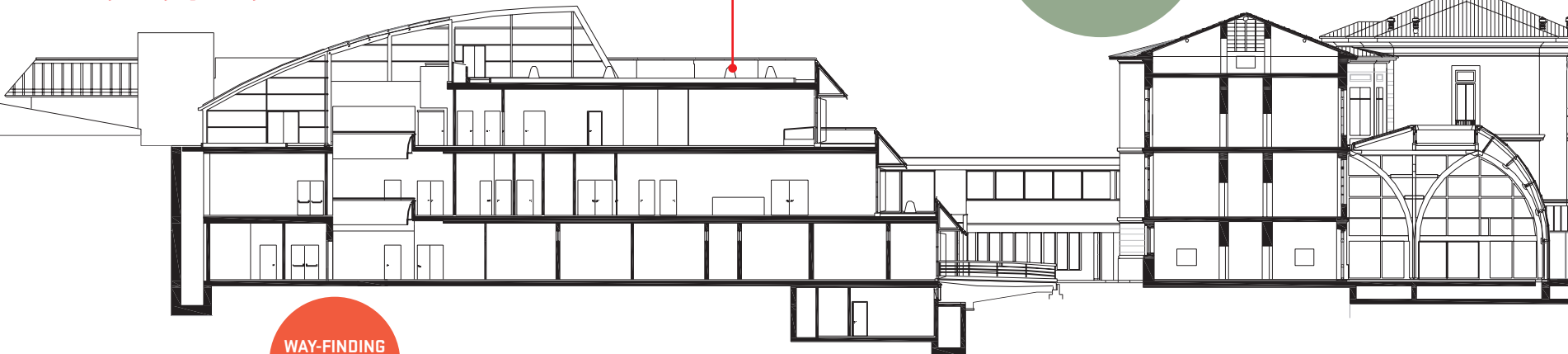


PUBLIC ART

Sculptors, illustrators, painters, video artists, photographers, and graphic designers—all working pro bono under the coordination of Andrea Rauch and the MeyerArt Foundation—created a rich and often site-specific program of public art.

by
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and
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WAY-FINDING



For way-finding purposes, each floor is color-coded: the outpatient level is blue, the ward (or inpatient) level is orange, and the intensive-care and surgical block is apple green.



Two architectural firms bring their unique cultural perspectives to bear on a state-of-the-art children's hospital quietly tucked into the Tuscan landscape.



PATIENT ROOM

The patient rooms use a modular universal-design concept that allows the hospital to make changes in easy, cost-effective ways. They all include a sofa bed, so a parent can be with the child at all times. The beds expand and contract to accommodate different age groups.

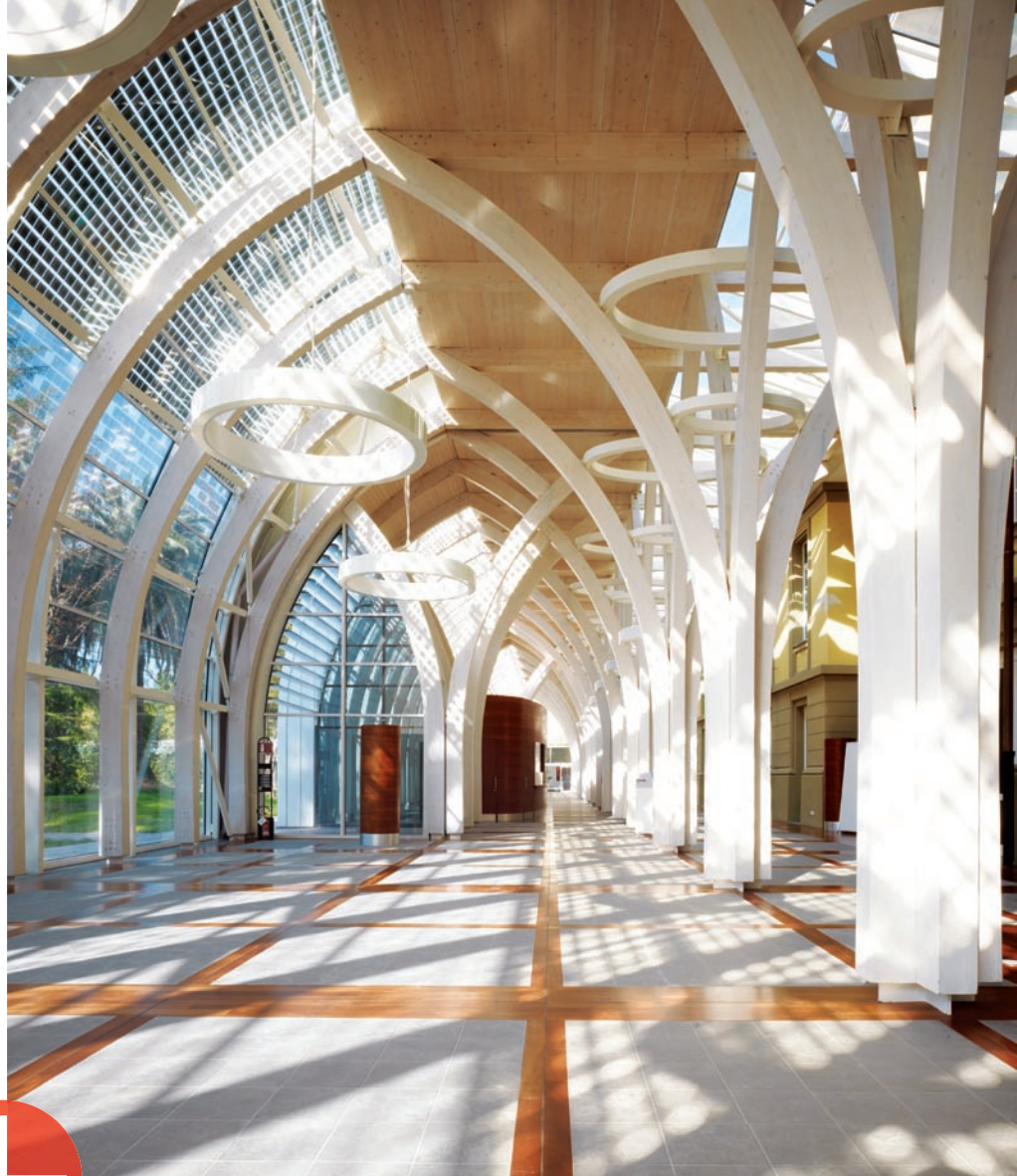
Top left and bottom left photos: Alessandro Ciampi/courtesy CSPE; art photo, courtesy Beth Dickstein; patients room photo, courtesy CSPE; section drawing, courtesy CSPE in association with Anshen + Allen



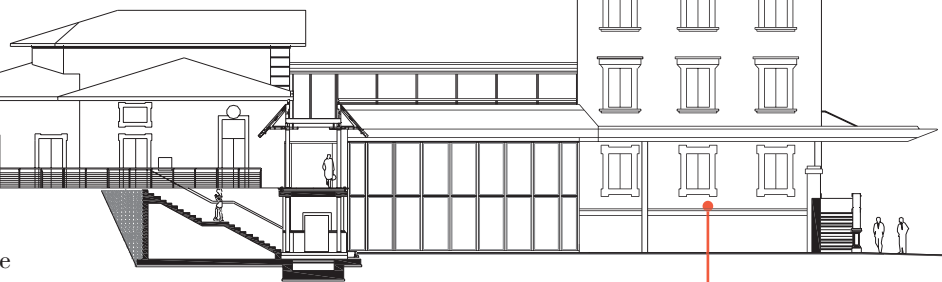
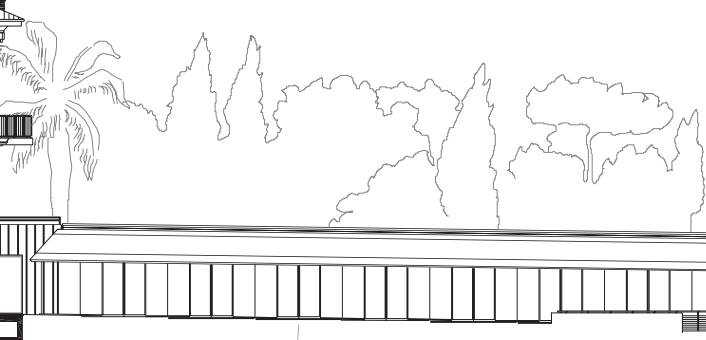
+ STAIRWELL

The glass-enclosed staircase links the old building with the new. Circulation is separated according to users: staff, patients, and goods.

The Serra, or greenhouse, contains the atrium and the main reception desk. Photovoltaic panels hang on a laminated-wood structure (right) that echoes the trees.



|
+ ATRIUM



A section drawing shows how historic buildings (right side) were incorporated into the new building's plan.

+ HISTORIC BUILDING



The restoration of this structure and its use as an entrance for the new hospital are meant to recall the previous, much beloved facility, which was located in the center of Florence.

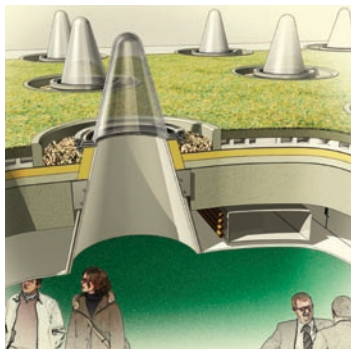
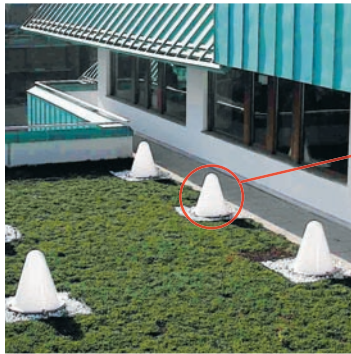
Top left: Alessandro Ciampi/courtesy CSPE; top right and bottom: Pietro Savarelli/courtesy CSPE

Locals called it *l'Ospedalino* (“the Little Hospital”). Located in the heart of Florence, Meyer Pediatric had played a central role in the city for more than a century, but its aging facilities were almost quaint in scale—not at all equal to the institution’s stature as the leading children’s hospital in central Italy. So, in spite of the fierce attachment Florentines felt toward the old building, a new Meyer was constructed, and preparations were made for the big move.

On the evening of December 14, 2007, police cordoned off the streets, and vehicles of all kinds converged on the old hospital. Nearly 1,000 people helped with the move, most of them volunteers. It was an all-night affair featuring lab-coated clowns, off-duty cabbies, three city buses, and a fleet of ambulances. By dawn the Little Hospital had relocated to its new home in the hills of Careggi, the Florence medical center some four miles away.

If the event was like a scene out of a Roberto Benigni comedy, the hospital itself tells a different kind of story. It’s a tale of collaboration starring two firms—Centro Studi Progettazione Edilizia Architects (CSPE), a local practice, and Anshen + Allen, international health-care specialists—that together created a state-of-the-art hospital that would have been difficult for either to accomplish alone. A long, low copper-clad building with a huge green roof, Meyer is both thoroughly of its place (a humble object discreetly tucked into

DAYLIGHTING



Top left: A detail of the Pinocchio-hat skylights on the roof. Left: A rendering of the skylights. Below: Color-coded ceramic cones act as hallway landmarks and way-finding devices. Bottom left: One of two large light wells that pour daylight deep into the building. Bottom right: The atrium of the hospital is located in a restored 1930s building.



GREEN ROOF

Meyer's green roof enables it to blend into its natural surroundings. It also helps insulate the hospital, lowering indoor temperatures by several degrees.

You'd think that burying a children's hospital would be counterintuitive. Bunkers are generally not regarded as healing environments.



the Tuscan hills) and utterly alien to it (a 280,000-square-foot 21st-century health-care machine). The contradictions are part of the package, and part of the reason that it is considered so important for Italian health care.

You'd think that partially burying a children's hospital would be counterintuitive. (Bunkers are generally not regarded as healing environments.) But embedding the structure in a knoll within a lush park allowed the architects to preserve and restore the site's handsome set of classical buildings, which were once home to the Villa Ognissanti, a former tuberculosis clinic with expansive (and presumably recuperative) views of the landscape. One of the smaller buildings, a modest, three-story palazzo, now serves as the hospital's entrance. The new structure is hidden behind three of the historic pavilions, invisible from the street. "Everybody loved the old hospital," says Romano Del Nord, the CSPE partner who invited Anshen + Allen to join the project. "It had a small dimension, a human dimension. We wanted to create a memory of the past while reducing the impact of the big structure."

During the competition that launched the design, several teams proposed tearing down one or more historic buildings to accommodate a parking garage. "We decided to keep the cars out of the park," says Giulio Felli, the CSPE director who oversaw the project. "When families arrive they have to walk. It's long, but it's the kind of walk that gives tranquility to the kids." It is indeed a long walk (much longer than most Americans would tolerate, according to Anshen + Allen), past the palazzo, down a long, glassed-in passageway that threads through a healing garden, and finally into a large, sun-drenched atrium called the Serra ("greenhouse"). This curved, triple-height space attached to one of the Villa Ognissanti pavilions (two others house outpatient services and a medical school) acts as the circulatory heart of the hospital, stitching old and new together.

The Serra is the hospital's public face—a space

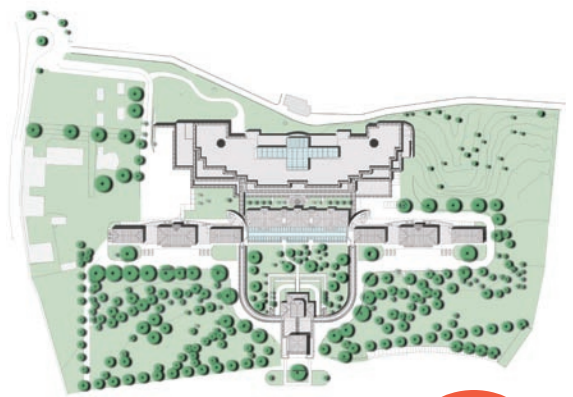
trying awfully hard to give off a hospitality vibe rather than a health-care vibe. Here, arriving families are directed to their destinations as others say their goodbyes and make payments on elegant electronic kiosks. The vast glass room is dominated by a white, cathedral-like ceiling. Made of laminated wood and looking a bit like the ribs of a whale, it is the first of many whimsical references to Pinocchio. The beloved wooden boy's story inspires artwork and architectural details throughout the hospital. A series of paintings in one hall depicts his plight, and colorful ceramic way-finding devices evoke the shape of his conical cap, which even turns up as skylights (they're called Pinocchio hats) piercing the hospital's green roof. All of this is connected to MeyerArt, a public program that asked artists to donate both work and services for site-specific installations. "The program has many, many facets, including incorporating art by children," says Felicia Cleper-Borkovi, the president of Anshen + Allen's London office. "It doesn't talk down to the children. It's quite sophisticated. Sick children tend to be sophisticated."

Given the unique nature of hospital competitions in Italy, where design teams must vie twice to win a job, the collaboration between the firms was unusually successful. "For the conceptual phase, you compete on the basis of your portfolio and your architectural design," Cleper-Borkovi says. "For the execution phase, you must show you're familiar with projects of this complexity and can deliver technically." Often one team wins the conceptual phase and another the execution. "What happens typically is the conceptual design is watered down during the second phase," adds Derek Parker, a director of Anshen + Allen. But the big idea here—placing the hospital, as Del Nord describes it, "under the hill so that it could be totally decorated with the environment and with the landscape of the Tuscan hills"—prevailed in both rounds.

Then came the hard part: crafting a functional hospital that would set a higher standard of care for children's medicine in Italy. This is where CSPE leaned on Anshen + Allen. Parker, who met

Del Nord at a health-care conference about a decade ago, is a nationally recognized leader in the evidence-based design movement, a research-driven approach that attempts to measure the impact of the built environment on medical outcomes, hospital efficiency, and staff and patient stress. But the ultimate aim is more ambitious: evidence-based designers (and their enlightened clients) seek to humanize the **continued on page 149**

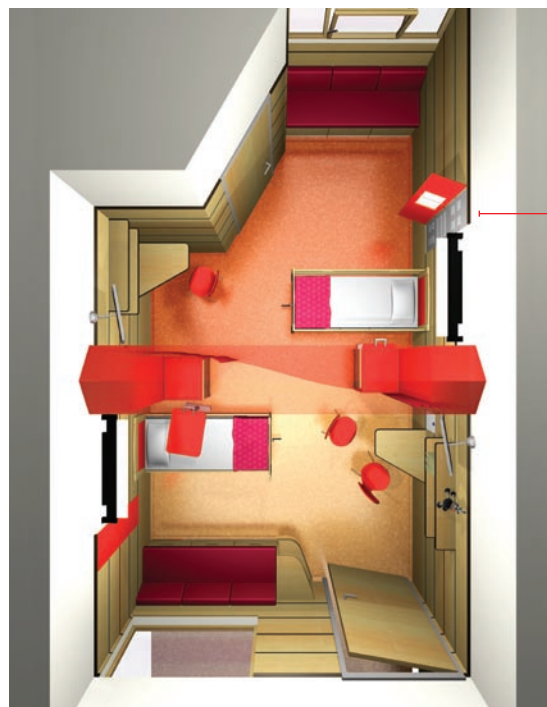
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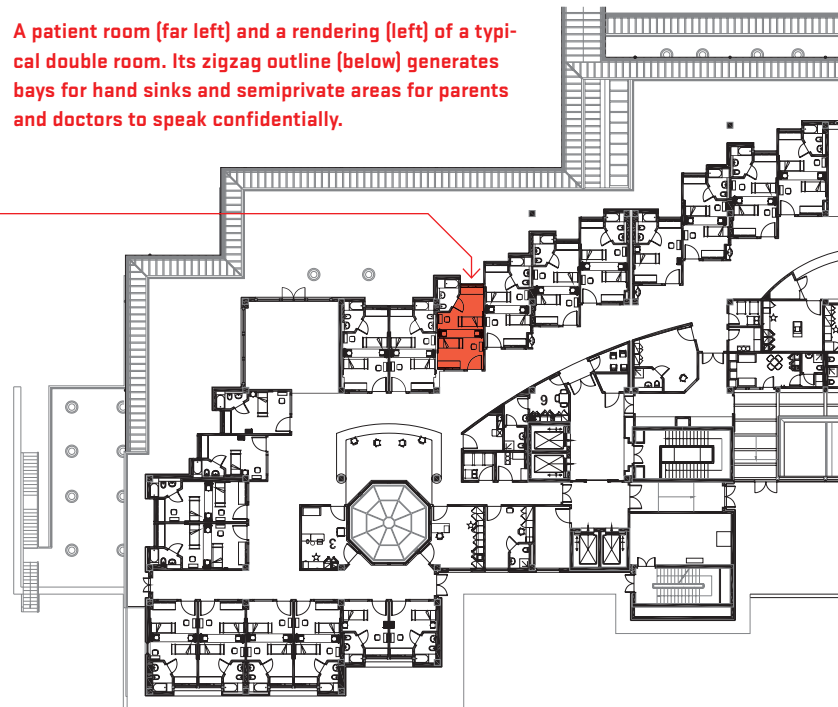
The site is a former tuberculosis clinic from the 1930s. The new hospital is inserted into a hill. Below: Generous Tuscan sunlight filters through glazed skylights.



Above: A family room overlooking a play area. Adults can relax and watch their children below. The furniture is soft and kid-friendly.



A patient room (far left) and a rendering (left) of a typical double room. Its zigzag outline (below) generates bays for hand sinks and semiprivate areas for parents and doctors to speak confidentially.



Site plan and floorplan, courtesy CSPE in association with Anshen + Allen; bottom left and bottom center photo and rendering, courtesy CSPE; other images, Alessandro Ciampi/courtesy CSPE

continued from page 133 hospital, moving it away from the factory model that is now more than a century old (and dying a slow death) and toward a patient-centered approach.

“It was pretty much a research-driven design,” says CSPE’s Cristina Donati. “The main aim was to introduce to Italy all the latest ideas on how to modernize hospitalization. In this respect, Anshen + Allen contributed a great deal.” CSPE and Meyer piggybacked on about 20 years of hard-fought, painfully incremental progress in the field. The patient rooms look like small apartments, with adjustable beds (designed by CSPE) that fit most children and views to the outdoors. Parents are encouraged to stay with their children, and sofa beds are provided for overnight vigils. That universal cue for illness and institutionalization—the wide, endless double-loaded corridor—is gone from the wards. On the second floor, an internal balcony becomes a living room where parents can sit and watch their kids playing below.

A single move—giving Meyer a 54,000-square-foot green roof—created a kind of serendipitous domino effect.

Though Meyer is a sort of Anshen + Allen best-practice primer, it is also something genuinely new: a green patient-centered hospital. In 2000 the hospital received a community grant from the European Union to incorporate sustainable initiatives into the project. But the central idea behind the design—the desire to slip the hospital into its natural surroundings—made those ideas seem almost preordained. There was, for example, no way to bring natural light deep into the building without freeing up the roof to install a series of light wells, skylights, and solar tubes to channel the sun. Similarly, making the building unobtrusive meant taking the mechanical systems off the roof and placing them at a central location inside, closer to high-energy, high-tech units like surgery and intensive care, where they’re actually more efficient. So a single move—giving Meyer a 54,000-square-foot vegetative roof that lowers the temperature inside the hospital by several degrees during the hot summer months—created a kind of serendipitous domino effect.

One of the reasons for the glacial pace of health-care design is the time it takes to complete hospitals: Meyer, for instance, was a nine-year process. In that period, however, the Anshen + Allen team came to cherish its moments in Florence—the one o’clock lunches, when a partner’s wife would arrive and put a red tablecloth over the drafting table; *dolce far niente* (“it is sweet to do nothing”), the leisurely approach to time, especially on the job site; even the maddening Italian bureaucracy. “I had to provide my mother’s birth certificate to prove that I was not a member of the mafia!” says Parker, an Englishman who has spent the last 50 years designing hospitals in America. With hopes of building on the success of Meyer, the firms are now collaborating on three more projects.

Meanwhile, Del Nord is conducting a postoccupancy analysis of Meyer, a process that began with a three-month study of the old hospital. “We are systematically monitoring what is happening, comparing the old with the new,” he says. One early report (proof that culture trumps design every time) indicates that doctors have colonized an area intended for a playroom and turned it into private offices, blocking the natural light. More encouragingly, the new building, it seems, has a nickname worthy of its role as the successor to the Little Hospital. “The children think the wooden structure looks like a forest,” Del Nord says, referring to the laminated ribs in the ceiling of the Serra. “It’s not a Disneyland effect; it’s an architectural solution that has meaning to them. They call it the Enchanted Forest. I think that is a great result.” www.metropolismag.com