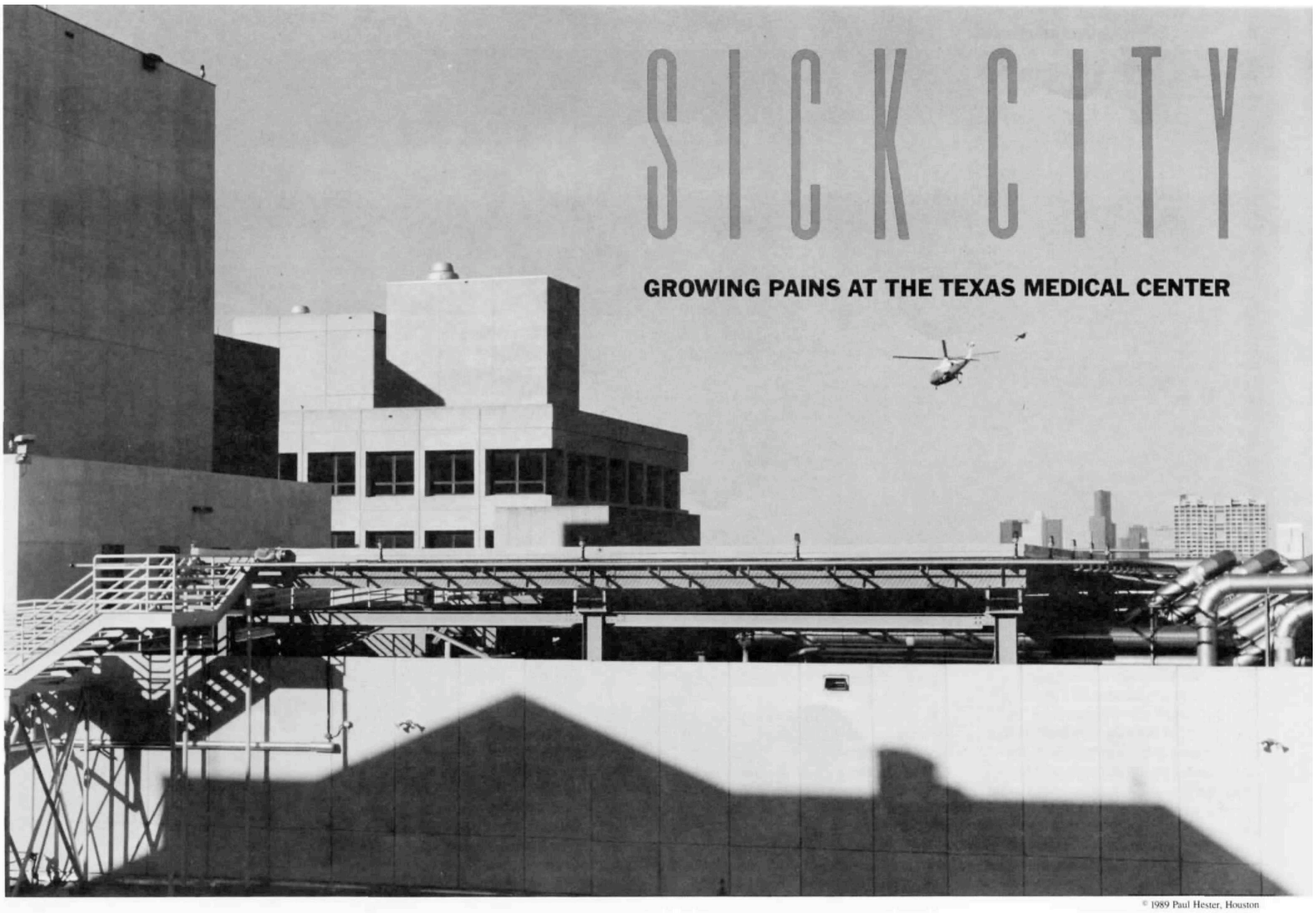
SICK CITY

GROWING PAINS AT THE TEXAS MEDICAL CENTER



© 1989 Paul Hester, Houston

Richard Ingersoll

During the past five years Houston's building cranes have migrated en masse from the once-booming downtown business district three miles south to the Texas Medical Center. With the bust in the oil-and-finance economy, developers and builders turned their attention to the relative stability of the health-care industries, and the majority of the 42 institutions located at the Texas Medical Center have initiated major physical expansions costing more than $1.5 billion. This will double the building area within the world's largest medical center. The name Texas Medical Center refers to both a district of Houston, known as the Medical Center, and an umbrella organization, which for the sake of clarity will be called the TMC. The hospitals, research laboratories, schools, and health organizations located at the Medical Center are federated but autonomous members of the TMC. The conflict between individual institutions and collective needs is clearly legible in the uncoordinated urban pattern of an area that contains Houston's third most significant concentration of buildings. The TMC's power is negligible compared to that of its members, and therein lies the chief deterrent to concerted planning – no plan will work beyond the degree to which the members themselves are willing to cooperate.

Some of the finest works of public architecture in the Western world are medical buildings. The long porticos of Brunelleschi's Ospedale degli Innocenti in Florence and Baccio Pontelli's Ospedale di Santo Spirito in Rome are stunning examples of how hospital design in 15th-century Italy contributed to the orderly organization of urban space. In the 17th century both Jules Hardouin-Mansart's Hôtel des Invalides and Sir Christopher Wren's Royal Naval Hospital in Greenwich presented architecture of magnificent symmetry, geometrical regularity, and hierarchical clarity that served as a critique of the density, filth, and chaos of their respective metropolises. At the end of the century, however, hospitals were among the first buildings to be consciously identified as functionalist; perhaps the original use of the machine analogy in reference to architecture can be traced to Jean-Baptiste Le Roy, a scientist involved in the rebuilding of the Hôtel-Dieu in Paris, who proposed in 1773 that "a hospital ward is really a machine for the treatment of the sick."[1] The functionalist paradigm emphasized the importance of designing from the inside out, with the unfortunate consequence that buildings were no longer conceived as parts of an urban whole. In the 1920s, such Modernist evangelists as Sigfried Giedion and Richard Döcker[2] used medical buildings as exemplars of a new architecture. Hygienic regulation of light and air, unobstructed circulation, and stripped-down simplicity for ease of maintenance became axiomatic alternatives to traditional architectural styles.

Excepting the splendid machinery of the out-of-the-way Heating and Cooling Services building, there are few external signs of functionalism at the Medical Center. Certainly the interiors of the newer buildings are strictly governed by functional demands, but they are virtually unrelated to the exterior elevations. Although the attention recently given to façades indicates some desire to address the public realm, the effect has not been harmonious; each project competes with the others in scale, material, color, and style. The current batch of additions and new buildings ranges in style from the slick thermometer look of Smith Tower to the crusty, Postmodern mannerism of Dunn Tower across the street, heavily rusticated and trimmed with classical moldings. Both were built for Methodist Hospital during the same period, yet they look like rivals. Changes in medical technology and hospital functions have occurred so quickly that both Ben Taub and the Veterans Administration have found it more economical to build new structures than to adapt existing ones

The Medical Center is a microcosm of Houston, developed according to a defiant feudal logic . . .

© 1989 Paul Hester, Houston

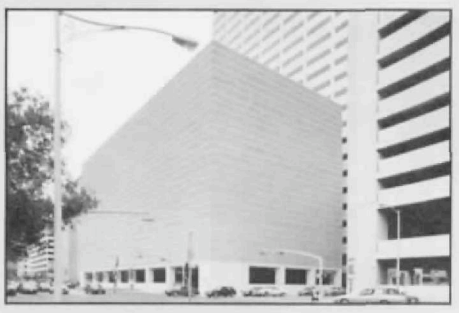
(even though they are only 25 to 40 years old). The design of the new Veterans Administration hospital is indicative of the attempt to mask functionalism: fancy striated veneers and figural Postmodern corner towers cloak the highly flexible interior arrangement, which is based on interstitial floors. Mezzanine spaces eight feet high have been sandwiched between all floors for services and equipment so that adjustments for new technology – which have to be made every ten years – can take place without interrupting day-to-day operation. The static style of the exterior, which includes classical modillions and rustication, awkwardly contradicts the dynamism of the interior, making the building seem clumsy.

In general the buildings of the Medical Center are being transformed by an accretive process that adds new features in response to the need for operational efficiency and new programmatic demands, resulting in labyrinthine circulation on the inside and a confused jumble of volumes on the outside. An inchoate snarl of parking structures, unclear points of egress, and difficult connections between structures make the Medical Center an aesthetically and experientially unpleasant place that seems to promote a feeling of illness rather than relieve it.

"Sick City" is, of course, an unfair moniker for the Medical Center, not because it is imprecise, but for the reason that Susan Sontag warns against using illness as a metaphor: to make such analogies is an injustice to those who are not well. Yet to call it "Health City," as does the TMC's president, Dr. Richard Wainerdi, seems equally offensive to the well. In some ways the area is a microcosm of Houston, in whose urban development parts have been favored according to a defiant feudal logic with no concern for the whole. The environmental anarchy for which the city is famous has perhaps become too strong a model, because even in the planning circumstances of the Medical Center – where the TMC owns all the land and requires nonprofit status of its tenants – uncompromising, individualistic projects are pervasive. The member institutions, among which are 13 hospitals, two medical schools, the city's department of health, and several unique institutions such as the New Age Hospice and the High School for Health Professions, are in fact as much in competition with each other as they are in cooperation. Representatives meet with Wainerdi twice monthly to discuss mutual problems, and although they are able to concur on such urgent matters as storm drainage and power supplies, very little visible evidence of coordination results. The TMC has little authority over its powerful member institutions, nor would it want to jeopardize its tenuous standing by opposing their plans. Wainerdi's claim that "each of the institutions is like a store in a shopping center" is clearly a delusion, since the management of a

New buildings in the Texas Medical Center

Methodist Hospital, Dunn Tower, *Morris*Architects, to be completed in 1989.* Methodist is the elite hospital of the Medical Center, the first to offer valet parking, the millionaires' choice. The Dunn Tower addition is the most aesthetically pleasing work to come out of Morris*Architects in a long time: its rustication and moldings are more sensitively proportioned than the Wortham Theater Center's, and the alternating rhythm of the windows is original and captivating. The new three-story atrium lobby is an attempt to equate the hospital with the grand hotel.



Smith Tower, *Lloyd Jones Fillpot & Associates, 1988.* Methodist was also the client (with Century Development Corporation as developer) for this smooth-skinned 25-story tower across Fannin, notable especially for the elegance of its parking structure, which has two ramps spiraling in opposite directions at its base and beautifully taut aluminum slats drawn in horizontal patterns across its ten-story volume. The stodgy interiors of the tower are peculiarly incongruous with the no-nonsense exterior.

Scurlock Tower, *S. I. Morris Associates, 1980.* Methodist was again the client (with Gerald D. Hines as developer) for this earlier and less well proportioned twin of Smith Tower. Black aerial tubes link Scurlock to Smith and both towers to the hospital complex. Scurlock's fourth floor houses the Sid Richardson Institute for Preventive Medicine, comprising both Chez Eddy (a restaurant named after oil-magnate donor Eddy Scurlock that serves a gourmet menu approved by the American Heart Association) and a health club with indoor track whose exuberant Postmodern interior, designed by William T. Cannady & Associates, inverts the tendency to dress up the façade.

Ben Taub Hospital, *CRS Sirrine and Llewelyn-Davies Sahni, to be completed in 1989.* Ben Taub, one of two large hospitals operated by the Harris County Hospital District for patients unable to afford private care, is in fact one of the most handsome of the new structures under construction. The alternating brick bands take their cue from Cesar Pelli's work at Rice University, and the glazed stair towers offer the promise of orientation from inside the building. The original 1963 building will be taken over by Baylor.

shopping mall exercises considerably more control over the design and use of its property. Closer to reality is another of Wainerdi's analogies, comparing each institution to a separate city: Methodist City, St. Luke's City, Baylor City. In the same way that Houston has been unable to implement zoning or planning, the TMC cannot deal with most of the collective and urban matters that should concern all its members. The TMC's one claim to power is its control of the majority of the parking lots and parking structures, but this has not proven to be the key to either urban clarity or backyard diplomacy.

The Medical Center owes its reputation to the competitive pursuit of advanced medical technologies, especially in cancer research, organ transplants, and treatment of heart ailments (more open-heart surgery is performed here than anywhere else in the world). Its size and complexity are seen as its major attractions to researchers and doctors. There are three cyclotrons at the Medical Center, and the ultimate in sophisticated medical equipment, such as magnetic resonance imaging machines, can be found in many of its buildings. In 1976 the first helicopter ambulance services were introduced, and the whirlybirds land daily at three of the hospitals. According to Dr. Stanley Reiser, a professor of medical ethics at the University of Texas Health Science Center and Rice University, the latest notions of modern medicine treat diseases as having specific anatomical sites that specialized technology can act upon. The classic Hippocratic concept of health, on the other hand, is concerned with maintaining an equilibrium between the body and the environment, and in this respect is more like the Chinese approach to medicine, based on the interaction of parts of the body: medicine is meant to restore the balance. Whether or not Western technology is superior to these pretechnological concepts of health, the unbalanced urban pattern of the Medical Center accurately reflects the philosophy of treating the anatomical site in isolation from the rest of the body.

The TMC was founded in 1942 by John H. Freeman, W. B. Bates, and Dr. E. William Bertner (the TMC's first president) with an initial $20 million endowment from the foundation established by cotton-exporting magnate Monroe D. Anderson. It was conceived as both a charitable endeavor and an economic backup system for a city in need of diversification. The original 134-acre site, part of Hermann Park, was purchased from the city in 1943. Among the TMC's charter members were Hermann Hospital, on the site since 1925; M. D. Anderson Hospital and Tumor Institute (part of the University of Texas); and Baylor College of Medicine, which was lured away from Dallas in 1943, when the Houston Chamber of Commerce added a $500,000 grant to the TMC's invitation to settle in Houston. From the outset, the nonprofit institutions were looked at as businesses and infused with a competitive spirit. The medical symbol of the rod of Asclepius has proven to bear an uncanny resemblance to the dollar sign. The enormous profits that accrue to TMC members, which must dedicate 4 to 5 percent of their budgets to charitable purposes in order to maintain nonprofit status, are reinvested, which partially explains their ability to expand. The profits of Methodist Hospital during the past five years have been so healthy as to bring its charitable status under legal scrutiny.[3]

When the TMC was incorporated in 1945, it had a determined architectural program meant to supply "certain rules for the general guidance of the architectural design of certain buildings." Stone and brick, with a limited amount of stucco, were recommended – "no strong yellows, reds or dark colors shall be used" – and light terra-cotta tiles were recommended for the roofs, apparently in deference to the style of the buildings on the neighboring Rice University campus.[4] The site was planned by Herbert A. Kipp, the civil engineer who laid out River Oaks. Kenneth Franzheim, who in 1946 designed both an annex to Hermann Hospital and the Hermann Professional Building, also prepared at that time a conceptual view of the Medical Center, showing a series of similarly styled buildings set in isolation in their own landscaped parks. The scheme was consistent with the 19th-century "pavilion

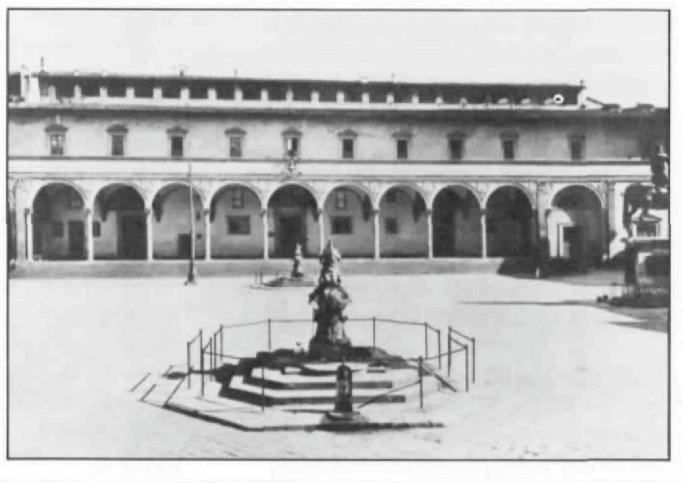
© 1989 Paul Hester, Houston

Above: Kenneth Franzheim's 1946 imagined view of the Medical Center showing similarly styled buildings, each on its own landscaped island. Left: The Medical Center, 1988, showing the impact of the automobile and the uncoordinated collection of buildings.

principle" in hospital design, which advocated detached buildings with more exposure to light and air. Although automobiles are shown skirting the area's perimeters, failure to include the automobile is clearly the tragic flaw of this conceptual order; most of the buildings of the first decade – among them Baylor College of Medicine, the Jesse H. Jones Library, and the original Methodist Hospital – conformed to Kipp and Franzheim's scheme, but parking lots necessarily displaced the gardens and blotted out the connecting lanes. The landscaped islands were transformed into an immense superblock. The 1949 extension of Fannin Street through Hermann Park was meant to divert traffic from South Main Street, and the half-mile stretch that borders the Medical Center has since developed into one of the most densely built parts of Houston, with tall towers for the doctors' offices on one side and hospitals for them to fill with patients on the other. The symbiotic bond is clearly expressed by the vascular aerial walkways that span Fannin, Houston's equivalents to the Bridge of Sighs.

The TMC now owns 525 acres in eight distinct but proximate parcels. Most of the land between these parcels is currently vacant, and one of the most important gaps, the Parkwood Apartments tract between the Veterans Administration hospital and the original Medical Center site, is said to have been acquired by Baylor in late 1988. Over the years the TMC, either independently or through its members, has absorbed numerous adjacent structures and properties, such as Franzheim's elegant Prudential Building (1952), acquired in 1974 by the University of Texas, and the Mayfair Apartments, acquired by UT in 1969. Both buildings have been successfully retrofitted for use as teaching or hospital support facilities; an awkward elevated crosswalk was built in 1988 across Holcombe to connect the Mayfair and M. D. Anderson. A sad exception to this pattern of adaptive reuse was the TMC's acquisition in 1985 of the historically significant Shamrock Hotel, which the TMC chose to demolish rather than adapt as a conference center (in characteristic Houston fashion, however, the parking garage was retained on site). The recent restoration of Hermann Hospital's original 1925 Spanish-style building in lieu of demolition is a far happier accommodation of a historic structure.

Compared with medical centers in Chicago or Detroit, Houston's Medical Center has had a less deleterious effect on its surrounding neighborhoods, because it is fairly well bounded by public and semipublic territories: Rice University, Hermann Park, the Astrodomain, and State Highway 288. Only its southeastern neighbors, especially the subdivision of Devonshire Place, have suffered ill effects. The outer patches of TMC property serve mostly for housing or parking, while major public activities are conducted on the original Medical Center site. The ever-growing work force of 52,000 and the daily visiting population, which averages 105,000, have led to egregious traffic problems and inspired several planning studies. The first, jointly authored by 3D/International and CRS Sirrine in 1986, was quickly scuttled, except for a $1 million signage program.



Filippo Brunelleschi's portico for the Ospedale degli Innocenti, 1491, Florence.

Children's Nutrition Research Center, *3D/International and Bernard Johnson, 1988.* A rare instance of direct federal funding for a TMC member, underwritten in this case by the United States Department of Agriculture. The patriotic use of Texas pink granite (too much is never enough) and the Texas star reliefs at the top were the whim of Buford Nichols, director of the center. The lobby is one of the few in the Medical Center to feature a visible stairway to the second level. The top-story greenhouses might have been a delight to observe but are hardly noticeable.

Texas A & M University Institute of Biosciences and Technology, *Bernard Johnson, to be completed in 1990.* The first of two 11-story laboratory buildings, of concrete frame with brick veneer and designed according to the regimented taste of its client to be almost without character, will be built this year on the site of the Shamrock swimming pool. A "water feature" is being planned by the TMC (with funding from the Wortham Foundation) to liven up the Main Street tip of the triangular site.

Veterans Administration Medical Center, *3D/International and Stone Marracini and Patterson, to be completed in 1989.* This will be the largest and most innovative hospital of the new crop. With utilities floors sandwiched between the working floors, it will allow alterations to be made to the mechanical system without interrupting service. The plan, which from the exterior appears complex due to the shifted orientation of the corner towers and the jogging configuration of the bays, is actually based on a simple long corridor spine, 16 feet wide, running diagonally through the center of the building.

M. D. Anderson Hospital, R. Lee Clark Clinic, *Pierce Goodwin Alexander, 1987.* M. D. Anderson was the first TMC member to break with the style guidelines in the 1950s. The firm of MacKie and Kamrath (which was responsible for several buildings at the Medical Center, including the City of Houston Department of Public Health) designed in the manner of Frank Lloyd Wright the successive stages of the hospital, first using characteristic pink marble and long sun shades, then in 1976 adding the polygonal towers and cantilevered nests of the Lutheran Pavilion. The Clark Clinic is an uninspired box.

Fannin Street looking north: professional buildings and hotels, left, Texas Medical Center garage and Methodist Hospital, right.

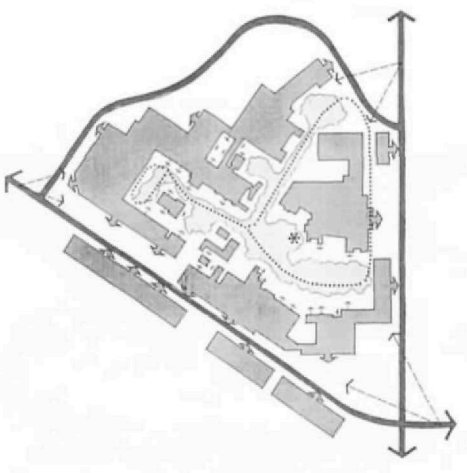
Another proposal, made in 1987 by a team led by David Scoular, is still being considered.[5] Scoular, director of planning at Baylor, wants what already works to work better. He labels Fannin the "front door" of the Medical Center and the buildings and institutions on the interior, which are less accessible to motor traffic, the "backyard." Methodist Hospital is moving its principal automobile entry and lobby from the internal street of Bertner to Fannin, an ad hoc implementation of a strategy to enforce the perimeter as the public façade, so that the distinction between vehicular and pedestrian areas becomes more clear. Other institutions might be encouraged to continue this trend; those located on the interior, such as Baylor, Texas Woman's University, and the Jones Library, would be served by M. D. Anderson Boulevard, a broad street that intersects Fannin perpendicularly. Internally one finds intense pedestrian traffic between buildings, some of which occurs below ground in 12-foot-wide tunnels – nasty but convenient, and for initiates only – that connect Baylor with Ben Taub, and Methodist with St. Luke's. Above ground a criss-cross pedestrian pattern links Methodist to Baylor and the UT Medical School to M. D. Anderson Cancer Center. Bertner is currently a four-lane core street collecting the four special Metro lines that connect the sites of TMC members (many employees are required to park at a distance and commute by bus to the central area). The major site of contention in this interior zone is the "K lot," a large surface parking lot between Baylor, M. D. Anderson, and Methodist. At the moment it is the favored site for a Metro rail station, although another faction supports locating the station on Fannin. Each of the member institutions has different interests for the site – some want to keep it for parking, others hope to see it used as a park or as a building site – and thus a compromise will be difficult to achieve. This inner core of the Medical Center desperately needs unifying elements. At present Wainerdi is implementing a landscaping program that is not conceptually coherent. Scoular's study recommends uniform paving and lighting elements and a complete signage system; the TMC's recently completed signage system only addresses automobile traffic and is less helpful for pedestrians.

The major improvement proposed by Scoular's team is a detached second-level walkway that shelters an exposed portico below it. This portico would follow an irregular pattern connecting the major institutions in the Medical Center's "backyard." The strategy derives from the oldest and finest aspects of hospital design, going back to Brunelleschi's portico. If the most exasperating Medical Center experience is waiting for the invariably sluggish elevators, corridors, by contrast, can be somewhat pleasurable: witness the active social life in the skyway connecting Smith Tower to Methodist Hospital. (James Stoller's recent memoir in *Architecture*, December 1988, about the "pike" at Boston's Peter Brent Brigham Hospital is further testimony to the virtues of long corridors as socializing spaces.) The proposed climate-controlled walkways would offer a more comfortable way to move between buildings during Houston's six-month hot spells. Most people working in the Medical Center would prefer to leave and enter buildings at the second level rather than renegotiate the lobbies; such a design provides the option of using either the exposed first level or the enclosed second. The design of the porticos should not be handled as a mere functional problem – they could in fact become a type of urban armature, like the ancient Roman colonnade, the Renaissance portico, or, more recently, the red boxes used by Bernard Tschumi to structure the immense area of Parc de la Villette in Paris. In Houston the spindly porticos at the University of St. Thomas are a successful example. Aerial walkways are being built at the Medical Center without the benefit of an overall plan, as witnessed on Fannin and Holcombe. If designed properly, these modern porticos could greatly enhance and visually unify what is currently a jumble of competing prospects. Scoular has himself built a timid example in the ground-floor portico connecting the rear of Baylor to its parking garage, which for all its good intentions is a reminder that the services of a Brunelleschi are needed.

The Medical Center is immense, indecipherable, and chaotic. While mandating the architecture of the area has proven impossible, there may still be time left to reorganize the parking, natural spaces, and pedestrian environments. But unless the TMC instills in its members a sense of greater public responsibility, emphasizing that the Medical Center is an urban environment that will benefit (and even profit) from architectural clarity, the confusion will continue. A healthy-looking environment ought to be on the agenda of an organization concerned with health: Sick City can be cured, if it will allow itself to be diagnosed. ■

Notes

1 Nikolaus Pevsner, *A History of Building Types* (Princeton: Princeton University Press, 1976), p. 151.
2 Richard Döcker, *Das Terrassentyp* (Stuttgart, 1929).
3 Pete Brewton, "Methodist surplus draws fire," *Houston Post*, 30 November 1988, p. A-1.
4 "Nation's health to be bettered by $100,000,000 Texas Medical Center now under construction in Houston," *Houston*, August 1946, pp. 6-11.
5 David Scoular, "Texas Medical Center Planning Study" (draft), January 1987; participants included Nathaniel Firestone, Dr. Lloyd Fie, Bridgette Schleicher, Rosemary Mackey, and Ronald Shoup.



The original site of the Medical Center as analyzed by Scoular's plan shows the tendency of the perimeter to serve as the front door and internal areas as the backyard (* marks the K lot).