



Rodeo carnival, Astrodome, 1990.

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# DIAMOND IN THE ROUND

## The Astrodome Turns 25

When its turnstiles opened for business in the spring of 1965, the Astrodome seemed like a shrine to all those Texas jokes founded on outrageous hyperbole and insufferable boasting. Hearing its promoters tell it, the Dome was like nothing else on earth; to find suitable comparisons you had to travel to the ancient world, recalling the great (or most colossal) monuments from antiquity.

"Not since the seven wonders of the world has man allowed his imagination to soar, to conceive and to construct such wonder," trumpeted the official press pamphlet, which then went on to equate the Astrodome with the Tomb of Mausolus, the Hanging Gardens of Babylon, and the Colossus of Rhodes. A commemorative booklet sold to the public on opening day put it in the form of a more complicated metaphor, calling the Dome "the Taj Mahal of all stadia." Anxious letter writers to the local papers, inquiring how the Dome fared when compared with, say, the Colosseum or Piazza San Pietro in Rome (or some other large structure, past or present, in another city), were reassured, usually by the use of the reader's example as a kind of measuring stick to explain just how much space would be left over if it were placed inside the Dome.

Almost overnight, a barely imaginable part of the country took on recognizable form as the Dome quickly became the nation's number three man-made tourist attraction behind the Golden Gate Bridge and Mount Rushmore National Memorial, according to a U.S. Department of Commerce poll of travel agents. And unlike some of its rivals — Walt Disney World (number six) and the Gateway Arch in St. Louis (number seven) — the Dome was a practical idea. Forty-eight thousand people could sit inside on comfortable, theater-style seats to watch a baseball game. In a little less than three hours, a simple realignment of the lower stands (which rotate 35 degrees on motorized steel rails) could reset the stadium for 53,000 football fans. There would also be rodeos, concerts, religious rallies (Billy Graham's ten-day crusade in 1965 attracted a flock of 380,194), demolition derbies, motocross events, tractor pulls, soccer games, circuses, tennis matches (Billy Jean King defeated Bobby Riggs in "The Battle of the Sexes" in 1973), daredevil exhibitions, prizefights, politi-

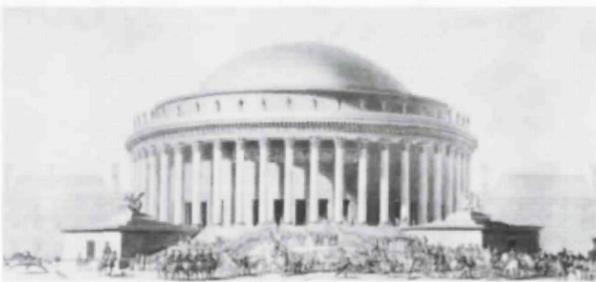
cal rallies, bullfights, basketball games (though not bridge or chess matches), and two feature-length movies — Robert Altman's *Brewster McCloud* (an Icarus-under-glass fable) and *The Bad News Bears in Breaking Training* (the world Little League championship, with fences pulled way in). And all of them taking place in a nearly perfect thermal environment. In the spirit of the air-conditioning mania of the sixties, when places were being defined in terms of the amount of chilled air pumped into them on a hot day, the Astrodome was the biggest place in town. It also was a curiously appropriate symbol of the city of Houston and its location in the steamy, semitropical Gulf Coast. In the words of Jim Murray, a sports writer for the *Los Angeles Times*, the Dome was a "monument to the unliveability of East Texas." But maybe Texas's climate wasn't an error in the Grand Scheme of Creation; it was just a bigger challenge to human ingenuity.

The Dome was like some chimerical island plopped down in a vast field on the far south edge of the city, offering a tantalizing glimpse of the brave new world Houstonians were creating for themselves. Although a downtown site had been investigated, it was bypassed in favor of the open prairie (leaving to New Orleans the distinction of being the first American city to install such an extraterrestrial presence alongside downtown). In that first year, the most spirited contest enacted there was a war of lexical attrition between visiting sports scribes from around the country trying to outdo one another in lavishing figures of speech. There was also some journalistic debunking by out-of-town writers who'd had their fill of hearing about the Dome. Jim Murray continued to be unimpressed, even by the sheer engineering of the Dome: "Hoisting a roof is a theoretical problem well within the reach of the average Purdue sophomore. But Texans

being Texans, the problem was keeping it all from blowing away until they had it all tacked down. They told everyone in town to shut up for a day or two until this was accomplished."

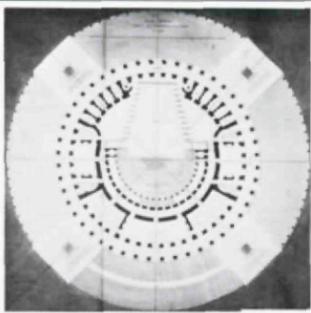
For a city seeking to plant itself in the national consciousness, nothing seems to work so well as acquiring a major-league sports team. A city's participation in professional sports portrays something about the city as a social formation in much the same way a picture postcard of the city's monuments or most splendid views represents the city as a place. Reported on national television and radio and covered on a daily basis in the newspapers, a sports team — how it departs itself, what it calls itself, where it plays its games, the peculiarities of its fans — presents a distilled picture of the city it represents to the world. In extreme situations — consider Green Bay, Wisconsin — a sports team may be the *only* thing most people associate with a city.

It is probably one of the great American myths that there is anything even approaching fealty between a sports team and its city. But at some point in their development, most cities seem to feel an acute need for professional sports and set out to do something about it. How else to explain the way Jacksonville, Florida, collectively prostrated itself at the feet of Houston Oilers owner Bud Adams in a bidding war with the Houston Sports Association, the prize being a perennially mediocre NFL franchise? But a city seeking a franchise faces a chicken-and-egg dilemma: the baseball establishment says, "Get a first-class stadium and we'll talk about a team"; the city says, "Give us a team and then we'll build a stadium." Take the case of St. Petersburg, Florida, which is putting the finishing touches on a new, tilted-dome stadium with no tenant but with which the city hopes to lure a major-league baseball team down from

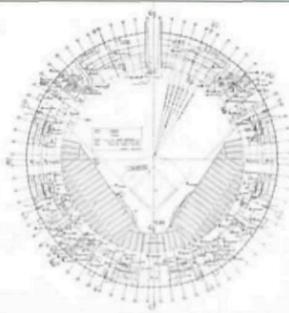


Courtesy of the Bibliotheque National, Paris

**Etienne-Louis Boullée, project for the Paris Opéra, 1781, perspective and general plan.**



**Astrodome, 1960-65, general plan, Lloyd and Morgan and Wilson, Morris, Crain, and Anderson, architects.**



**Houston Astros baseball club logo, Adie Marks, Gulf State Advertising, December 1964.**

the north; or San Antonio, which is engaged in an equally speculative maneuver involving the construction of a domed stadium on its east side.

Houston in the late 1950s was feeling similarly deprived and in need of the reassuring presence of a professional baseball team. When the city made its pitch to the National League's board of directors in 1960, a model of a proposed covered stadium was brought along to propitiate those skeptics who questioned the feasibility of playing in the mosquito-infested heat and humidity of a rainy Gulf Coast summer. When the National League awarded Houston one of two expansion franchises for the 1962 season — the other going to the New York Mets — the Houston Sports Association devised a \$22 million, tax-supported bond issue, hastily erecting a temporary 33,000-seat stadium next to a rapidly expanding hole in the ground where the Domed Stadium would be built. The name settled on for the new franchise was the Colt .45s, and the team was framed in a Texas-style mixture of Wild West mythology and gun fetishism. Parking-lot attendants at Colt Stadium, attired in orange ten-gallon hats, blue neckerchiefs, and white overalls, directed cars into one of several parking sections, each marked with a sign proclaiming it "Wyatt Earp" or "Matt Dillon" territory, or the domain of some other legendary hero of the television Wild West. Ushers in modish cowgirl outfits were called "Triggerettes," and there was a "Six Shooters Club" for kids. The "Fast Draw Club," a bar designed to look like the Long Branch Saloon of the "Gun-smoke" series, was a members-only club for adults, since Houston's laws at the time forbade serving liquor by the drink except in clubs.

Set against the relatively serene character of baseball's traditional venues, all this manufactured hoopla captured national attention. But it wasn't ultimately the kind of image you wanted to have working for you when you were trying to build the 21st-century city ahead of schedule.

In the days before cities could set public relations firms to work on their image problems, Nathaniel Hawthorne wrote that "all towns should be made capable of purification by fire or decay within each half century." It's an idea that would appear

strange to modern Houstonians, who seek to purify their city by building instead. What the Houston Sports Association and its visionary leader, former mayor and county judge Roy Hofheinz, had in mind was to build a sports stadium so novel and so audacious it would make people forget there ever was an old Houston. (The old Houston had partaken of baseball in Buffalo Stadium, a 12,000-seat outpost of the St. Louis Cardinals on the east side of town.) Hofheinz's sources were practical ones: he formulated the idea for a covered stadium from his experience trying to get an enclosed shopping mall built in 1959 on a site at Wesleyan and Bissonnet, coupled with his recollections of a visit to the Colosseum in Rome, which he later discovered had had a *velarium*, or canopy, that could be erected over the arena to shade and protect it from the elements. A further catalytic ingredient was a series of fruitful meetings with R. Buckminster Fuller, the protean inventor of the geodesic dome. Hofheinz with his impossible dream and Fuller with his bag of impossible solutions were probably made for each other, according to Edgar Ray in his biography of Hofheinz, *The Grand Huckster*.<sup>1</sup> Fuller, who once asserted the cost effectiveness of covering a sizable portion of New York City with one of his domes, convinced Hofheinz that it was possible to cover a space of any size and control the climate inside, provided you didn't run out of money. That was the kind of challenge that appealed to Hofheinz.

During construction of the Dome, Houston was also refashioning its image from "Bayou City" to "Space City," drawing on the recent relocation of the NASA Manned Spacecraft Center to nearby Clear Lake City and the city's association with the Great Society adventure in outer space (even the police department had adopted an orbiting cosmos for its uniform patch, and the local counterculture newspaper appeared under a *Space City* masthead). Hofheinz, not to be included out, decided to capitalize on this new image by changing the name of Houston's team to the Astros. The stadium, still officially the Harris County Domed Stadium, became known as the Astrodome. (In discarding the old Colt .45 appellation, the Houston Sports Association also rid itself of a sticky problem with the Colt Firearms Company over royalties from profits made on the novelties sold at the stadium that used the name.) When fans arrived at the Domed Stadium for opening day in April

1965, they were treated to a whole new scenario: the female ushers were now "Spacettes" and outfitted in gold lamé miniskirts and blue space boots. "Blast Off Girls" worked the counter at the "Countdown Cafe," and the groundskeepers, wearing specially designed astronaut suits and bubble helmets, were called "Earthmen."

The landscape inside the Dome was a circus world, fusing elements of shopping-center kitsch with modern rationalism. Around the playing field, tiers of seats in five vivid colors terraced up from field level to upper deck under a lattice-and-Lucite sky. In the topmost reaches of the stadium Hofheinz had his designers create a girdle of private Sky Boxes for the elite expense-account crowd. The boxes were like private party rooms in a fantasy hotel, with a ball game going on outside the window some ten stories below. Each was equipped with bathroom, bar, and television, furnished and decorated in a different motif, and given a name such as "Captain's Cabin," "Imperial Orient," "Spanish Galleon," or "Egyptian Autumn." Out in center field was the famous scoreboard, a 60-by-300-foot mural of electronic pyrotechnics that celebrated the home team's occasional successes and rudely taunted the opposition. Before a computerized Diamondvision scoreboard was installed in 1983, the Astrodome scoreboard was surprisingly low tech: like the apparitions created by the Wizard of Oz, many of the displays were produced by a man sitting inside the scoreboard, back-projecting slides (or silhouettes of his own clapping hands) onto a perforated screen to create the illusion that they were produced by exotic electronic technology. But the effect was like combining real, live baseball with the responsive persona of an electronic pinball machine: an Astros homer would set off a chain reaction of lighted displays that included charging bulls, fireworks over a lighted Dome, a gun-toting cowboy, and a waving Lone Star flag.

There was usually so much going on in the vast space that it was easy to forget about the Dome itself. Being in the Dome was a condition sensed first by the skin, the thermal delight of leaving an overheated day for the near-perfect conditions inside: 74 degrees, with a slight breeze blowing out of the air-conditioning ducts. The sensation that you were actually inside was momentary; then it slipped just

outside of consciousness, returning when, for example, the pall of cigarette smoke that built up inside before the city banned smoking would gather in the upper reaches, then slowly descend, creating atmospheric conditions like Pittsburgh in the 1940s. Or when a well-hit high fly ball would direct the spectators' view upward and set them to wondering if it would hit the lattice framework or that frightening little bridge that crawled along the inner surface of the Dome, connecting to the gondola high above the center of the field.

It was also called to mind during that agonizing first year when it became apparent that putting the Dome up was a simpler engineering feat than solving some of the problems it created. The Dome design settled on a lamella frame with diamond-shaped bracing, within which 4,596 Lucite skylights were inserted to admit the sunlight needed to nourish the grass on the field. The builders of the Dome might have done well to consult that 18th-century designer of hyperrealities, Etienne Boullée, rather than their engineering manuals. Boullée wrote: "When light enters a temple directly, art is pitted against nature. . . . the light is reflected in those places where it falls directly and hurts the eyes."<sup>2</sup> The skylights in the Dome acted like lenses, making the sunlight dazzle the ballplayers when they were tracking down fly balls. Undaunted, Hofheinz had the skylights painted out. But without sunlight, the grass on the field died, a problem solved first by painting the brown stubble green. Then they discovered AstroTurf.

God only knows what the Monsanto Chemical Company was doing when it concocted this plastic grass — the tactile equivalent of scratch-and-sniff food books or freeze-dried ice cream. Coming like carpet in 15-foot rolls that zipped together to cover the ground, it looked from a distance like a too-perfect, retouched fashion photograph. Up close it had all the pastoral charm of a green Brillo pad — or "concrete with fringe," as it became known to the National Football League players who pitted flesh and bone against its unyielding, prickly surfaces. Carpeting the Astrodome completed the work of creating the artificial world. Soon the stuff was as ubiquitous as kudzu, and every ballpark looked like a billiard table.

Baseball has always lacked the neoglorious festivity of football, with its

**Interior, Astrodome during construction, April 1964.**



Courtesy of the Houston Sports Association



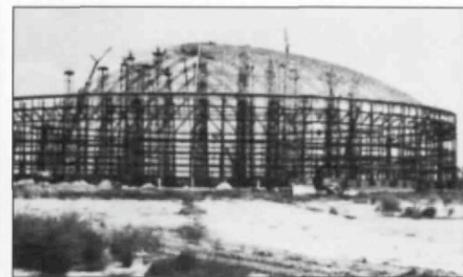
May 1963.



July 1963.



August 1963.



September 1963.



Courtesy of the Houston Sports Association

Ground blazng, 3 January 1962. Roy Hofheinz appears in second row, with hat and glasses; R. E. "Bob" Smith is at right, in light suit.



© Paul Hester, Houston

Vision-obstructed seats with compensatory monitor.

nearly nonstop action and a supporting cast of cheerleaders, marching bands, and precision clone-ette drill teams to fill in the empty spots. For all the historical appeal and strategic maneuverings of the game, baseball is a comparatively austere spectator sport, riddled with in-between time, pauses, and endless waiting for something to happen. While a football team is always playing against both the other team and the clock, baseball creates its own time existentially, precisely the kind of game to exist in the temporal limbo of the Dome. To bring it into the television-shortened attention spans of the 1960s and to attract a following for the new and painfully marginal franchise, Hofheinz reconstituted the stadium as a kind of theme park, with the ball game as simply one of its attractions.

But like a fairground after the carnival has gone, the Dome today has lost some of the color of the early years, the victim of changing attitudes and economic pressures. An expansion in 1987 increased the capacity of the stadium by 10,000 seats as a concession to the Houston Oilers football team, then threatening to move to a more capacious stadium with greater revenue-producing potential in Jacksonville. The new seats perfected the arena configuration by filling in the 300-foot gap formerly occupied by the electronic scoreboard and television screen in center field — preempting the cyclopean eye that had invested the green-carpeted Dome with the ambience of an enormous living room. Promises of a new, more spectacular, higher-tech replacement, which included hints of laser displays designed by film impresario George Lucas, have so far proved unfulfilled.

History will probably remember the Dome for another, more insidious achievement: it is a kind of idealized typological harbinger of the modern, multipurpose stadium, roofed or not. It represented a milestone not only in the denaturing of two national sports (to say nothing of the rodeo), but also in the standardization of sports stadiums and a purification of the idiosyncrasies that had distinguished one baseball park from another. Traditional baseball parks were formed by shoehorning the field and stands into a preexisting urban context, with the result that each had

its own circumstantial and nearly always asymmetrical configuration. Unlike football, which is played on a field of prescribed dimensions, baseball is played on a field with a strictly regulated infield and an outfield of no fixed dimensions. Of the baseball parks built between 1909 and 1923, only one was perfectly symmetrical, and no two were alike.<sup>3</sup> Students of the game have always been attentive to the subtleties of selecting a lineup and strategies for playing each field. Setting the Astrodome in the center of a wide-open prairie allowed the designers to realize a Platonically multipurpose stadium. But in catering to several tenants, its economies of shape yielded a universal configuration expressive of neither the *genius loci* nor the genius baseball. Today nearly every stadium subscribes to more or less the same doughnut configuration, creating a situation about which baseball player Richie Hebner confessed: "When I stand at home plate in Philadelphia, I don't honestly know if I'm in Pittsburgh, Cincinnati, St. Louis, or Philly. They all look alike." For spectators the multipurpose ring stadium involves compromises that reduce the immediacy of experience found in single-purpose stadiums, baseball as well as football.

Television has shifted the emphasis of spectator sports from stadium crowds to a vicarious, electronically fed audience. Baseball, with its natural intervals, fits neatly into the commercial scheduling pattern. But football has had to invent artificial gaps — the two-minute warning, commercial time-outs — that interrupt the natural flow of the game and can only be understood in terms of the way television measures time. Spectators often find themselves missing more by seeing the game live than by watching it on television, particularly with the advent of multiple camera angles, instant replays, and interpretive commentaries: hence the odd sight of fans lugging portable television sets into the stadium. Presently more than 500 television monitors are permanently mounted throughout the Astrodome, some of them installed to compensate for impaired sightlines. Television's domination has made the game into a media event staged for the home viewer, and Nielsen ratings count for more than the gate. Perhaps the Astrodome is

closest to the final iteration of the stadium, which may well be the non-place realm of the television studio. (Ironically, Channel 13's studios are housed in a pint-sized version of the Astrodome.)

But if the symmetrical, multipurpose, lookalike stadium-in-the-round has become the rule in the latter part of the 20th century, the Dome was still at one point a true and authentic symbol of Houston, portraying in its form and enterprise three of the things for which Houston was becoming known: audacity and entrepreneurship, a suburban concept of space, and air conditioning. The entrepreneurship was purely a matter of private and individual, rather than civic, will, reinforcing the belief that a good businessman was worth a hundred city politicians when it came to getting something done. The sense of space was not the Renaissance idea of space, considered architecturally integral with buildings. Rather it was space in the exploded, suburban sense of separating things from one another. Beginning on the outside, the Dome sits like a giant oil storage tank, estranged from whatever context it might have had by acres of concentric parking lanes, and tenuously linked with the various satellite enterprises of its domain: exhibit halls, amusement park, hotel. Unlike Boullée's schematic design of 1781 for an ideal opera house surrounded by a circle of heroically scaled columns holding up an exterior ambulatory, the Dome on the outside is pure marketplace technology, presenting the blind face of a shopping center punctuated by giant mechanical air chillers and diminutive entrance pavilions. In a reversal of Leo Marx's "machine in the garden" characterization of early-20th-century domestic architecture, the Dome reserves its paradisiacal pleasures for the inside, using its engineered container to create not architectural space but its suburban equivalent: air.

It was the air conditioning that had everyone talking — 6,600 tons of it. It was a part of that magnificent Houston vision before the energy crises, when it seemed that the whole city, or at least as much of the city as anyone cared about, would be set under glass and air-conditioned. Even when the place wasn't closed in like the

Galleria, the Dome's street version, cold air could still be blown around, as it was on the lines of people waiting to get on the rides at the AstroWorld amusement park next door.

Roland Barthes in his essay on the Eiffel Tower claims the tower to be the absolute embodiment of a monument. "In order to satisfy the oneiric function by which it becomes a monument," Barthes writes, "the tower has to escape reason. . . . [It] must become totally and utterly useless."<sup>4</sup> By Barthes's definition the Dome fails entirely to become a monument: its entire *raison d'être* is to be for something. But one might claim for it a special case of momentary monumentality, fulfilling the obligations of irrationality and uselessness for a short time before the original, practical claims of its makers appear fulfilled and the sense of the monumental passes over to a sense of normality. One no longer sees it as extraordinary. One of the more distressing features of life in the latter part of the 20th century is a penchant for disguising extraordinary realities by investing them with fictional contents, leading to the conclusion that most of life is a sham. In the case of the Dome, the inelegance of its "architecture" leads one to conclude that its designers must have considered it to be nearly invisible, or at best merely a circumstance judged solely on the basis of what it did rather than what it looked like. But for a short time there is an overwhelming feeling of the sheer extravagance of effort it takes to make a place that somehow dwarfs the sense of its contents. It appears as a pure phenomenon. As David Brinkley ventured on the evening news when the Dome first opened, "Baseball here is almost incidental." You can still recover the feeling from time to time, especially if you go out there when there's nothing going on and sit in one of the seats, contemplating the vast, perfect emptiness. When the architectural history class at the University of Houston created a series of full-size drawings of a number of classical buildings, the Dome was the obvious — perhaps the only — place in the city in which to hang them, thus bringing into the Dome the "architecture" it otherwise lacks.

If the monumental work is able to transcend its function, it also invites specula-

# Shaggy Rug Story

## The Greening of the Astrodome

high flies, but the reduced solar levels were not enough to keep the grass healthy. Once again the answer was paint – this time green pigment sprayed on the brown sod. When it was clear that the grass was dying, the Astros were prepared to play their second season, like the most deprived of sandlotters, on an all-dirt field.

Before this unappealing action was taken, however, Judge Hofheinz heard of an experimental synthetic “grass” that might be used as a carpet for his now-shabby palace floor. The Monsanto Chemical Company installed roughly 100,000 square feet of its evergreen flooring and named it in the Dome’s honor. Thus was Astroturf baptised under crisis conditions. Being synthetic, it could not die; being integrally colored, it stayed green. It needed no water, and since it did not engage in transpiration, it reduced the dehumidification demands on the air-conditioning system.

It would be nice to say that this miracle material ended the woes of indoor baseball in Houston, but it merely substituted new ones and eventually spread them throughout much of the sporting universe. Stadiums that did not otherwise need it installed Astroturf or 3M’s Tartan Turf to simplify maintenance or to promote the faster game that the speedy surface allowed. When used outdoors, it proved a fine solar heating device, producing field temperatures as high as 130 degrees. Because it was not as resilient as grass, it increased player fatigue and wear on leg joints. Because it did not give way like grass, it increased the frequency and severity of knee injuries associated with twisting and sudden stops. And, of course, there was a major element of aesthetic offensiveness to fans and players brought up on the real thing. Outfielder Dick Allen summed up all these objections by declaring, “If a horse won’t eat it, I don’t want to play on it.” Alas, such sentiments have carried little weight with decision makers in sports, and artificial turf has become entrenched. The new Toronto Skydome, for example, has an openable roof that would allow real grass to grow, but it uses plastic nonetheless.

Beyond Astroturf, the Dome’s design had other implications for Houston baseball and football. Its round shape was an awkward compromise between ideal seating patterns for the two very different games, and, although movable seating sections rectified the problem for patrons in the first few rows, most of the seats remained too far from the action of either sport.

For baseball, the Dome’s dimensions were generous enough to make hitting difficult. The painted roof produced dark day games. And by keeping temperatures in the low 70s, the efficient air-conditioning system cut down on the distance that fly balls carried. In combination, these three factors created the best pitching and worst hitting environment in the major leagues, suppressing scoring by 11 percent and home runs by 38 percent from expected levels over the Dome’s first 24 seasons. While one may argue that this produced a subtler brand of play, the fact remains that most fans consider low-offense ball games boring. Furthermore, the performance distortions created by the park have made it difficult to appreciate the accomplishments of Astros batters, or to compare their productivity to that of competitors playing in more conventional home parks. In recent years the outfield dimensions have been shortened a bit, but the Dome still remains a pitcher’s park.

Conceived as an engineering marvel, the Astrodome is a mechanical artifact rather than a complete work of architecture. It sits isolated in its vast parking lot like a grounded UFO, encapsulating an unquestioning faith in technology as both means and end, and in the primacy of self-sufficient objects over any relationship to context or culture.

John Pastier

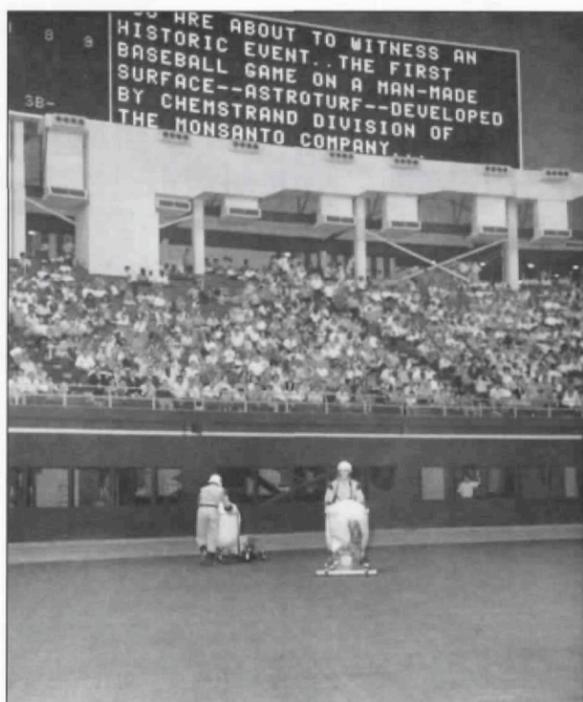
Certainly no one could accuse the Astrodome’s sponsors and designers of thinking small. They knew that building the world’s first indoor stadium large enough for baseball and football was a venture that, if successful, would make its mark on both sports. Yet I wonder if even the most self-confident of these people (the leading candidate for that honor being Judge Roy Hofheinz himself) ever dreamed that this structure would become the most influential stadium of its century, and perhaps even of all time. The simple fact is that the Astrodome altered the way America’s most popular outdoor sports would be played; it did so dramatically, perhaps irrevocably, and entirely through miscalculation.

The Astrodome’s main significance lies not in its volume, span, air-conditioning prowess, or immense skylight, but in its plastic floor covering. Astroturf is the end result of a succession of architecturally created problems, and is itself an expedient rather than a true solution. The Dome was meant to be a great conservatory, with several acres of God’s green grass growing under its clear Lucite roof. Its hothouse (or more accurately, cool-house) ecology was diligently calculated, and, since the Dome’s Tifway 419 Bermuda grass was bred at Texas A&M specifically for indoor use, there was no doubt that photosynthesis would occur to the required degree. What no one studied was the optical qualities of the roof structure and the visual needs of fielders faced with the task of accurately tracking a white ball less than three inches in diameter at distances as great as 400 feet and speeds as high as 120 miles per hour.

Faced with such a demanding task, ball-players found that they could not consistently follow the ball’s flight against the contrasty and visually busy backdrop of the Astrodome roof. The structural system for this revolutionary building was highly conventional and perhaps even retrograde: heavy radial ribs of steel formed eight main segments that were in turn subdivided structurally by girts and purlins, then by the mullions and muntins for the 4,596 Lucite panels. The resulting pattern was not homogeneous but rather marked by light and dark areas that made fielding conditions impossible. Writing years later, journalist Lowell Reidenbaugh referred to this oversight as a “glaring fault.”

Ironically, a more suitable structural system had been demonstrated seven years earlier just 250 miles away in Baton Rouge, where Buckminster Fuller had implemented his lightweight geodesic dome system at the Union Tank Car Company repair shops. In addition to saving money and materials, its uniform pattern of thin tubing would almost surely have allowed normal fielding.

But in the non-Dymaxion world of the Astrodome, it was too late for basic structural thinking. Gray paint was applied to the Lucite to lower the light levels and thus the contrast between panels and structure. Fielders had better success with



Sweeping changes at the last moment, 18 April 1966.

Harold Israel

Building lay-up (top) and building layouts (below), Ben Nicholson and Mark Schneider with students of the University of Houston College of Architecture, 1986.

tion about what else it might have been. While the Dome was still being designed, Hofheinz hit on the idea of making the place double as the world’s largest fallout shelter – perhaps fulfilling one of Barthes’s criteria through a uselessness of intentions. Hofheinz’s motives were more a matter of opportunism than anything else, an attempt to gather eight million federal dollars into his project through the even-then-vestigial Civil Defense program. The idea prompted the digging of an oversized basement level before it was quashed, apparently by functionaries in the Kennedy administration seeking to put LBJ in his place.<sup>5</sup> Judge Hofheinz, who built a luxury apartment for himself that included a barber and beauty shop, a medieval chapel, and a circus room behind the right-field wall, prompted University of Houston student David Bucek to create a design that relined the Dome as a mixed-use development for allergy sufferers, answering the question of what to do with the Dome when the fans stop coming to watch another season of the local also-rans.

The Dome presented itself on opening day in 1965 as an object of self-induced adoration, manifolded through expansive figures of speech. Twenty-five years have made it a more comfortable object. Perhaps still a renegade building, it nonetheless fits comfortably into the Houston scheme. Coming as close to being a symbolic, public place as Houston can manage, it draws the transportable center of the city southward.

Whether it’s the Oilers or the Astros, the rodeo or the Rolling Stones, they’re playing in the big urban room. Or the Guru Maharaj Ji, who once played the Dome and tried to raise its roof with collective meditation, without result. He put it in a more spiritual metaphor: “The Astrodome is like God. You have to experience them both first hand.” ■

Notes

- 1 Edgar W. Ray, *The Grand Huckster* (Memphis: Memphis State University Press, 1980). Ray’s book is the most extensive study of the building of the Dome and was an invaluable source for this article.
- 2 Etienne-Louis Boullée, “Architecture, Essay on Art,” in Helen Rousenau, *Boullée and Visionary Architecture* (London: Academy Press, 1967), p. 94.
- 3 Philip Bess, *City Baseball Magic: Plain Talk and Uncommon Sense About Cities and Baseball Parks* (Minneapolis Review of Baseball, 1989), p. 5. This little publication offers an incisive critique of the modern baseball stadium and a glowing eulogy for the traditional urban ball park. In the final chapter the author proposes a new design for Armour Field, a new ball park for the Chicago White Sox that seeks to re-create the intimacy and ambience of the early generation of urban ball parks.
- 4 Roland Barthes, *The Eiffel Tower and Other Mythologies* (New York: Hill and Wang, 1979), p. 5.
- 5 Ray, *The Grand Huckster*, p. 273.



Photographs courtesy of University of Houston Architecture Slide Collection