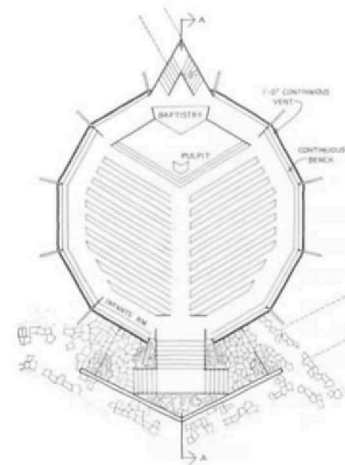
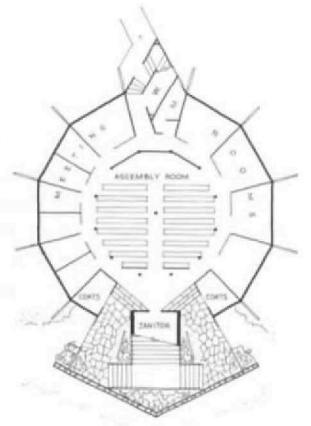


Architectural Forum 101 (December 1954)

Hopewell Baptist Church: section, first floor plan, and basement plan.



First floor plan.



Basement plan.

Pipe Dream

Bruce Goff's
Ad Hoc
Oil-Patch
Tepee Church

In Edmond, Oklahoma, the Hopewell Baptist Church (1948-50), one of Bruce Goff's few church designs to be built, has fallen on hard times and faces an uncertain future. The church, which dispensed with its Baptist affiliation several years ago, is nondenominational now and goes by the generic name of the Church at Edmond, cross referenced as the West Edmond Fellowship. But it continues to be known locally as the Tepee, an appellation deriving from its distinctive conical profile, which resembles an Indian wigwam.

Goff intended the church's form to recall Oklahoma's Native American culture, an evocation of history deftly married to the imagery of the West Edmond oilfields by his characteristically inventive use of found materials. He was teaching at the University of Oklahoma in Norman when he was approached in 1947 by a group of Edmond oilfield workers for advice in building a church. They had little money but plenty of donated oil pipe, and some were skilled at welding. So Goff produced a design simple enough for the members, who scoured the region for additional materials, to build themselves. As his longtime associate Bart Prince observes: "Goff was interested in giving them something that had a sense of aspiration to it."

The church rises from a dodecagonal (12-sided) base to a height of 80 feet at the tip of its bell tower. Its primary connection to the surrounding oilfield is found in its 12 ribs — exposed exterior trusses constructed of welded sections of thick, round drill stem infilled with a lighter network of thin line pipe — named for the 12 apostles. Goff also used the corrugated metal siding common on oilfield shacks both inside and out. The improvisation carried over into light fixtures fashioned from fluted aluminum cake pans.¹

Merrill Blair helped build the church and still lives nearby. He worked then as a farmer, and recalls that the congregation was made up of oilfield workers and farmers who spent long hours at the end of their regular workdays to build the new church. Their wives brought meals in the evenings. He labored as a welder's helper: "I'd carry pipe up to them and hold it. You can't see but ten percent of the welding that's in it. That thing is built like a bird cage in between the finish walls and the roof deck." The local stone used for the foundation and entrance was quarried near Calumet by the congregation, as Blair relates: "We went out there with bars and pigs and what have you, and we broke those rocks out by hand and we hauled them ourselves, brought them into the church and laid them."

The church received widespread notice upon completion in 1950, not only for its novel appearance, but also for its extraordinarily low cost of about \$20,000. It was published in *Architectural Forum*, *Popular Mechanics*, *Aluminum Bulletin*, the *Daily Oklahoman*, and as far away as the *Chicago Sun-Times*;² Charles Jencks and Nathan Silver later illustrated it as part of an appreciation of Goff's method in their book, *Adhocism*.³ Yet its gestation was not without controversy. Reverend John Ward, who has served as pastor for the last 11 years and whose father and grandfather were both deacons of the church, attests: "I understand from my grandpa that [the design] nearly split the church. That shape of building — you didn't see that kind of church in those days, especially in rural Oklahoma. But it's very definitely a landmark. I think that if [after] people go to work, we took that thing down, they wouldn't know how to find their way home."

Today the tepee church is altered. The original shingles were rust red, tying the conical form to the Oklahoma soil as if it were a great mound of earth. The supports were painted silver, which must have given the structure a much lighter appearance. Now the color scheme is reversed: the oil-pipe trusses are painted dark red and stand in stark relief against the sky, and light gray shingles cover the exterior. Much of the corrugated metal siding has

been painted, and portions of the interior have been covered by flimsy wood paneling. The original wood siding on the interior remains, its surface sandblasted to emphasize the grain. Goff referred to this as "etching wood," a technique he first employed during World War II when he remodeled an officers' club in Dutch Harbor.⁴ Now many of the panels are buckled and rotted by moisture. Evidence of termites and rodents is apparent, and several dead birds were scattered on the floor of the sanctuary when I visited. The original oil-pipe pews and the hanging light fixtures made with cake pans have disappeared. But the soaring, skylit volume of the interior still impresses.

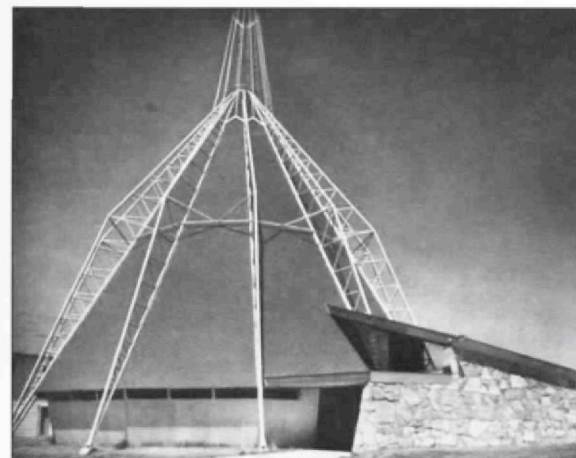
The church's survival is far from assured. A recent story in the *Sunday Oklahoman* suggested that the building was in imminent danger of demolition.⁵ Ironically, the discovery that asbestos insulation had been sprayed throughout the interior in the 1970s has forced a temporary stay of execution, since it precludes casual and inexpensive demolition. But the church's hold on the congregation is clearly waning, partly because of compromises that resulted from the limitations of its original modest budget, compounded over the past five years by a reluctance to invest in necessary maintenance.

Insulation inside the church was originally limited to Styrofoam blocks embedded in



Barbara Koerble

The tepee church today with new sanctuary at right.



Philip Welch

Entry front shortly after completion, 1950.



Philip Welch

Interior, 1950.

the walls, later augmented with asbestos. The church was equipped with a gas-fueled heating system; gas was so plentiful in the 1940s that the church got it for free. The funnellike interior, while splendidly dramatic, hardly fosters energy efficiency: any heat introduced through the forced-air system simply rises to the top of the 50-foot nave. Heating and cooling costs have consequently exhibited a skyward tendency of their own. David De Long of the University of Pennsylvania, who prepared the catalogue raisonné of Goff's work, also cites as problematic the somewhat crude construction by untrained, mostly unsupervised workers, and unresolved details induced by the complicated geometry.⁶ Nearby development and road improvements changed drainage patterns, which led to flooding from rainwater runoff once the original doors with their seals were replaced. Only recently has the site been regraded in an effort to control the problem – a particularly nettlesome one during the summer of 1989, when the church flooded four times.

The last straw was the failure of the church's air-conditioning condenser unit, which prompted the congregation to abandon Goff's church last August for a still unfinished metal building next to it. This multipurpose prefabricated gymnasium, built at a cost of \$100,000 thus far, serves as a facility for worship, a nursery school, meals, and recreation. But the Vitruvian root of the congregation's disaffection is perhaps more a matter of delight than of firmness or commodity. Merrill Blair recalls that from time to time in the early days the church would leak, "but we always repaired it, that was something that could be handled." In his view, much of the collective memory of the tepee was lost in 1973, when the congregation splintered over "personality conflicts." Five of the six church deacons, including himself and nearly 50 other members, left the church. Those who left were those who had built it, "the ones who loved it," he says.



Barbara Koerble

Detail of outside-mounted cake-pan light.

Today, since the West Edmond oilfields have played out, the oil riggers who built the tepee church have mostly moved on. Other early members of the congregation have grown old or passed away. One of them, Lila Stennett, died just last year in her seventies. A pillow she sat on, embroidered with her name, still lies in one of the wooden pews, left behind when the congregation abandoned the church. The memories of the church builders have no place in the new meeting hall next door, filled with young, bustling couples and their children.

As John Ward acknowledges, "Probably the sentiment [to save the church] is coming more from the community than anywhere else, because it is a landmark." He estimates that 95 percent of his young congregation is new to the church and has no attachment to the teepee. Even so, he maintains that "nobody is really bent on tearing the thing down, but the frustration

of having to deal with the problems with it was what was getting to everybody. One of our interests in the thing is just to get the tepee on the outside looking well so that it doesn't just destroy the looks of everything else around here." Others are less tolerant. Beulah Strickland, a parishioner who describes how she was healed in the church in 1985 of a compressed fracture of the spine, says: "It'd take several small fortunes to fix it. I'm one of those people who see no sense in throwing good money after bad. I know it's history and all that, but if somebody would just take it off that would be wonderful. Maybe some nice tornado [will come] and just lift it off."

At least one promising development for saving the church is the involvement of Oklahoma City architect Gary McCowan, who has experience with restoration projects, including Frank Lloyd Wright's Millard House in Pasadena and Inness House in Los Angeles. McCowan was also the local associate for two of Goff's unbuilt houses in North Carolina, and he worked in Bart Prince's office on the construction drawings for Goff's Joe Price Pavilion at the Los Angeles County Museum of Art. McCowan has offered to donate his time to prepare drawings of the church in its present state so that accurate cost estimates for repairs and asbestos removal or encapsulation can be obtained, a first step in seeking matching restoration funds from the National Trust for Historic Preservation. But McCowan's offer has yet to spark the congregation's enthusiasm, and he admits, "It's very hard to pursue a project if you feel the people you are trying to pursue it for are not really interested in it anyway."⁷ As a matter of immediate priority, McCowan has recommended basic measures to stabilize the exterior and control flooding.

The church's plight also has come to the attention of the Friends of Kebyar – an international organization of Goff aficionados – who, according to Jean Eckenfels, editor of its newsletter, would be disposed to serve as an umbrella organization for fundraising purposes. Among preservationists, few would disagree that the church is worth saving and that time is running out. In the opinion of David De Long: "Hopewell Baptist is a very important record of how Goff approached the design of churches. It's also an important record of how he was able, for practically no money, to design a building that could be handmade by the local people and that would be a symbol for them. I think it is of strong sociological and historic importance." With a little help, it might yet be remade by hand. ■

Notes

- 1 "Drill Pipe, Faith and Hard Work," *Architectural Forum* 101 (December 1954), pp. 122-23.
- 2 See the bibliography in David G. De Long, *Bruce Goff: Toward Absolute Architecture* (Cambridge, Mass.: Massachusetts Institute of Technology Press, 1988). The tepee church is illustrated and discussed on pp. 98-99.
- 3 Charles Jencks and Nathan Silver, *Adhocism* (Garden City, N.Y.: Doubleday, 1972), p. 86.
- 4 *Ibid.*, p. 85.
- 5 Mary Jo Nelson, "Days Numbered for 'Wigwam,'" *Sunday Oklahoman*, 8 October 1989, pp. 1, 2.
- 6 De Long, p. 99.
- 7 McCowan and I met with John Ward at the church in Edmond on April 8, 1990.

I thank Dennis Stacy of Dallas for calling my attention to the plight of the tepee church.

Recent Arrival

International Airlines Building, IAH



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Detail of side elevation, International Airlines Building, Mario Bolullo with Harry Golemon Architects, 1987-90.

The architecture of Texas airports is about as memorable as the experience of flying today's Greyhounds of the sky. Compared to the train stations of a former era, most airports are curiously anonymous points of arrival and departure, more like overgrown bus stations than civic gateways, with the exception of Eero Saarinen's terminals at John F. Kennedy and Dulles International airports. The new International Airlines Building at Houston Intercontinental Airport (IAH), which opens in May, is a modest effort at self-improvement. Viewed as an excursion in international regionalism, its vast front awning recalls the like-minded visor of the Stazione Termini in Rome (Montuori and Calini, 1947). At IAH, the wall-to-wall snap-brim awning prefaces a generic series of white-enamel-clad, appliance-like concourses and lobbies that depart from, and lighten up, the prevailing architectural scheme of the airport. Designed by Mario Bolullo with Harry Golemon Architects (in a joint venture with the office of Pierce Goodwin Alexander & Linville and in association with James L. Marshall Associates and Molina and Associates, Inc.), the new arrival is a somewhat restrained extrapolation of the similarly applanclike demeanor of Bolullo's George R. Brown Convention Center (*Cite*, Spring-Summer 1988, p. 6).

The 440,000-square-foot terminal represents both an increase in the number of international gates at IAH (from 8 to 12) and a complete consolidation and upgrading of the Federal Inspection Services facilities that monitor them. The building is located at the far eastern end of the ABC enfilade of previous terminals and is, in fact, attached directly to Terminal C, with a connector that also houses three gates. As an addition to Terminal C, the new building is sited in a way that breaks somewhat with the master plan for the airport. The previous terminals are situated between the two parallel roads running east and west. Although the terminals are bounded to the north and south by the roads, pedestrian bridges extend over the roads to the gate concourses adjoining the aircraft apron. The International Airlines Building is set immediately adjacent to the apron, above and parallel to the north service road, to better accommodate wide-body aircraft; the area between the roads will be used for the new terminal's large surface parking lot. A tunnel provides direct access into the terminal, and a subway stop below the lot links it to the other terminals.

The building responds to the program in a direct and clear-headed way. Of primary importance is the twofold organization of sequential spaces and checkpoints that receive and control both arriving and departing passengers. The design of cus-

tom facilities must meet stringent federal regulations with regard to security and control of contraband. The Federal Inspection Services therefore played a central, if anonymous, role in organizing the building and occupy a sizable portion of it.

The superscaled *brise-soleil* that marks the front of the building serves as a portecochère and shades the main ticket lobby, which lies beyond a multistory glass curtain wall. It signals the main entrance and also confers a sense of autonomy on the terminal. Beyond the main lobby, incoming and outgoing passengers are kept apart on separate floors. Those departing pass from the lobby through an inspection point and ascend to a departure level with immediately adjoining gates. The departure level is a secure (i.e., controlled-access) but open and continuous waiting room, with concessions and duty-free shops located in freestanding pavilions below an expansive ceiling. Arriving passengers are led from their airplanes onto a different floor, passing through a system of secure corridors down to the baggage claim area. Then they move through customs and exit into the main lobby on the south side of the terminal.

Future expansion of the terminal has been anticipated in both the architectural and structural design, which will accommodate the addition of another floor. Future plans also include the possible use of "mobile lounges" like those at Dulles. Bolullo's sprightly array of streamlined aluminum panels, glass, exposed structure, and brightly colored or polished materials, mounted not altogether comfortably on a precast beige aggregate base as a concession to the neighboring Terminal C, will alleviate at least some of the anxiety of its customs-bound patrons. Moreover, the rhetoric of gleaming efficiency and reliability will make a reassuring connection for those destined for the convention center downtown.

Joe McGrath