During the summer of 1855, future General Philip Sherid-
dan commented, "If I owned Texas and Hell, I would
rent out Texas and live in Hell." A hundred and forty-
years later newcomers undoubtedly appreciate Sheri-
dan’s sentiments as the Texan climate remains oppress-
ively hot. In our time, Houston’s citizens invoke
mechanical remedy at a grand pace. In the fifty years
since air conditioning arrived they have sealed and
chilled virtually every inhabited space: home, vehicles,
offices, gyms, convenience stores.

Houston’s extensive cooling is costly, however, and not
just in terms of energy and capital. Air conditioned
spaces are, by practice and design, divorced from
nature: dark glass extinguishes daylight, a flush facade
the sounds of nature. This is Le Corbusier’s manifesto
realized—the house is a sealed box. And deep within ver-
tical memories of time, season, and weather finds in
the monotony of a steady state.

When Dan Solomon described to me the Beth Israel
chapel project and Rabbi Kaff’s desire to avoid
mechanical conditioning, I warmed toward the apprecia-
tion and fact, it was easy to embrace their desire for an
architecture of physical qualities. Here was the rare
assertion that a building, if clever, could adapt to Hous-
ton’s natural setting and, in doing so, be closer to God.
Willie Carrier be gone. We can exist for a moment with-
out artifice, exposed and connected like the genera-
tions before us. My fears arose from years spent in the
derelict downtown and freeways, a place filled with indeli-
bible impressions of a vacuous, clinging light and
spontaneous perversion. Engaging the physical world
without a mechanical safety net can get out of hand in
these conditions. The design should provide a path to
God, not cause a heat stroke.

Dan and I maintained a running discussion during the
softer pencil stage of the chapel’s design. Each sketch
presented possibilities and caution. Hot humid climates
such as Houston offer the opportunity to reject
unwanted heat. The traditional heat sinks for passive
cooling—earth, air, and sky—are already warm. With-
out the burden of mechanical interventions, the chapel
design must painstakingly avoid heat gain. In our
design meetings I found myself sounding like Barry
Goldwater. “Extremism in roof insulation is no vice.

And... moderation in shading is no virtue.” At least
some aspects of the program worked in our favor: the
chapel had a trellis and infrequent occupancy; there
were few internal sources of heat, and the site was
favored by shade trees.

The building that emerged from the sketches is
completely open toward the cemetery. The south wall
is porous thanks to an ingenious baffling scheme tuned
by acoustical consultant Charles Satter. The baffles
provide a sculptural entry while shading and reducing
sound from an adjoining roadway. The chapel’s porous
nature and tall ceiling allow free air movement and
thus convective cooling of occupants.

Much attention was paid to the building’s parasol roof,
a large surface shielding the brunt of the summer sun.
Here we used a ventilated ice house roof section with
carefully chosen finish properties and insulated connec-
tors to avoid thermal bridging. Chadron studies at the
Pacific Energy Center helped size and place a cloth in
the roof. With its deep twill weave, the opening provides
the desired day lighting effect without allowing excess
heat gain. The building’s opaque walls have effec-
tive finishes and are shaded. A large concrete thermal
mass on the shaded north side dampens peak after
noon temperatures.

The chapel faces a brief but distinct heating season. Our
scheme does not attempt to heat the building during
cold snaps but instead warms occupants directly with
a heated bench. Though designed, this feature will not
be installed unless the congregation deems it necessary.

In the end it seems to have worked. The chapel has
weathered its first cycle of seasons without calamity. It
stands in Houston as an oasis of serenity, buffering the
natural world without avoiding it and without mechanical
distraction. Doing so seems particularly poignant in
our day.

Enthalpy hour diagram. This plot, a plan view of the U.S. looking from the
northwest, shows cooling
load by location in the
country. The load is
proportional to the
height of the surface.
Southeastern Texas is
second only to Southern
Florida in severity of heat gain, and Florida’s
climate is redeemed by a
sea breeze.

[Graph: Charles C. Benton]