

Light, Time, and Temple Emanuel

By

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HISTORY

In 1951, a group of families in Pittsburgh's southern suburbs founded Temple Emanuel of South Hills. After several years of meeting in homes, schools, and churches, the group built a facility in 1954. The original facility was then enlarged in 1960 with the guidance of renowned synagogue architect Percival Goodman. Approaching their fiftieth anniversary, Temple Emanuel's leadership formed the Joshua Mission, a long range planning committee to determine a course for Temple's future. Among many recommendations, the Joshua Mission cited the need for a building expansion, focusing on a new prayer space, along with educational and communal spaces.

The design process began by examining the worship experience in the original sanctuary. The sanctuary is typical of many suburban Temples designed in post World War II in America, with an ambience that can be described as "formal" and "classical."



Original Sanctuary

But as beautiful as the sanctuary was, it was agreed that the new prayer space would offer an alternative prayer experience in a new space that contrasted with the sanctuary. When completed, the new prayer space would be called the Beit HaT'fila, or House of Prayer.

The committee listed the attributes of the original sanctuary along with their opposing counterparts to form the basis for the design attributes for the Beit HaT'fila:

<u>ORIGINAL SANCTUARY</u>	<u>NEW BEIT HA'T'FILA</u>
formal	informal
rectilinear	curvilinear
permanent	flexible
hard pews	soft chairs
high Bimah	low Bimah
stained glass	clear glass
institutional	environmental
oration	conversation

During the design process, it became apparent that the qualities of the Beit HaT'fila would have a strong connection to the natural environment. It would be an outward-reaching prayer space with a large expanse of clear glass to offer a distinctly different worship experience than the sanctuary's inward-focusing space with narrow, opaque, stained glass windows. Through this connection to the environment, the relationship between the movement of natural light

and the passing of time became the conceptual blueprint for the Beit HaT'fila. Through ongoing meetings between the committee, Rabbi, and architect, several biblical and literary sources were studied. One of the fundamental sources for the project became The Sabbath, by Rabbi Abraham Joshua Heschel. In this great literary work, Rabbi Heschel described Shabbat as a "Sanctuary in Time," because "Judaism teaches us to be attached to holiness in time, to be attached to sacred events, to learn how to consecrate sanctuaries that emerge from the magnificent stream of the year. The Sabbaths are our great cathedrals." The design of the Beit HaT'fila explores and expresses the relationship between holiness and time as described by Rabbi Heschel, a relationship that is fundamental to Judaism.

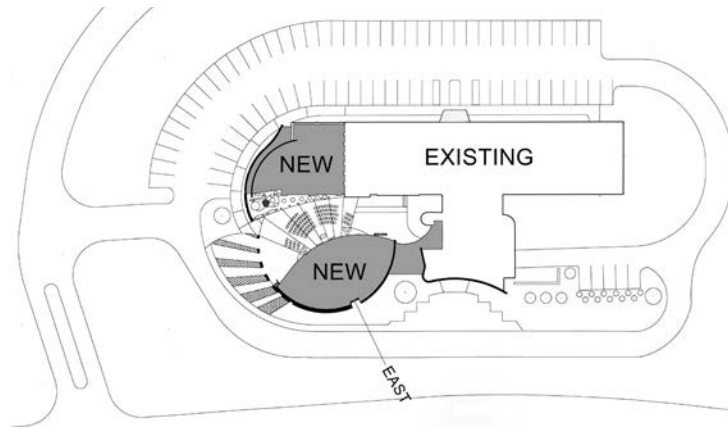
LIGHT AND TIME

The first words that God speaks in the Torah are: "Let there be light." This seemingly simple utterance that begins creation is riven with complexity. God did not create the natural presence of light that we recognize as sun, moon, and stars until the fourth day. So traditional commentators propose that the first light of creation was not natural, but supernatural. When God creates the first light, the Torah notes that "it was good," a clear reflection of the intrinsic moral component of this first light. The prophet Isaiah implied a qualitative difference to this primal light in relation to other lights when he stated, "Light is sown for the righteous." Mystics and Messianists have discussed this primal light as a metaphor for holiness or goodness.

According to Thomas Cahill in The Gift of the Jews, prior to the birth of Judaism, primitive religions described time as a cyclical endeavor, like a wheel. Man labored in a repetitive agrarian cycle: spring, summer, fall, and winter; sowing, tending, and reaping, year upon year without change. The ancients ended life where they began it, there was no progression. Cahill proposes that the birth of Judaism was a complete paradigm shift in mankind's relation to time. By improving the human condition through the observance of the *mitzvot*, the sacred commandments of the Torah, Judaism broke away from this monotonous, repetitive cycle. Judaism's covenant with the One God is built upon these sacred acts of goodness each and every day to create a progressively stronger, more meaningful relationship with God in order to make a better world. Thus, the relationship between light (holiness) and time is at the very foundation of Judaism.

ORIENTATION

The solar site plan orientation of the Beit HaT'fila strengthens the relationship between light and time. The prayer space is organized on an east-west axis with the sun setting behind the congregation in the west and rising behind the Ark in the east. Congregants are aware of the passage of time during the Sabbath, as the direction of the natural light changes from Friday evening to Saturday morning.



Site Plan

The cycle of the Jewish day begins at sunset, signalled by the diminishing of natural light. As the sun sets behind the congregation in the west, and darkness sets in, the personal responsibility of bringing moral light or goodness into the world is symbolized by the tradition of lighting Shabbat candles in front of the congregation. The next morning, as the sun rises behind the Torah and Ark in the east, it symbolizes God's role in illuminating the world through Torah. This cycle of darkness and lightness, in the evening and morning, describes the critical role of time in Judaism, underscoring the joint responsibility of God and humankind in *Tikun Olam*, repairing the world.

LIGHT

Opposing curvilinear walls forms the floor plan of the Beit HaT'fila. The walls differ in their relationship to natural light in order to contrast and complement each other.

The western wall is an expansive glass curtainwall, allowing the colorful light of the setting sun to wash over the backs of the congregants. The glass curtainwall creates a panoramic view of the valley to Temple Emanuel's west, and admits a strong blast of reddish / orange light as the sun sets.



Western Wall, evening light



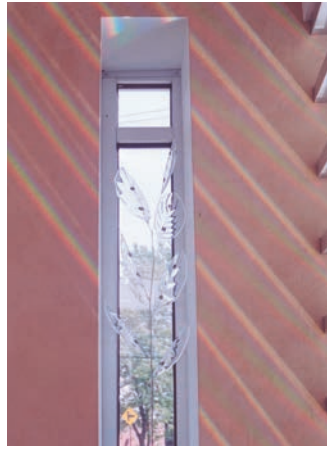
Evening light through western wall

The eastern wall is curving masonry with seven narrow slit windows filtering the bright morning light. The prayer space lies between these curving walls.

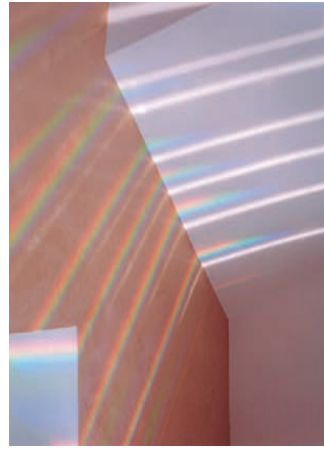


Eastern wall, morning light

The Ark stands in the center of the eastern wall. The recess behind the Ark has two windows, one on either side of the Ark. As the sun passes from east to west, left to right, angled light passes through these windows into the Beit HaT'fila. A series of reflective diffraction gratings placed on the horizontal mullions of these windows separate the natural light wavelengths into multi-colored components of a rainbow, enriching the characteristic of the light reflecting in the Beit HaT'fila. These colorful reflections of parallel light sweep across the curving wall and ceiling during services, symbolizing the *keshet*, the "bow of light" that God placed in the sky for Noah, to represent the covenant between God, man, and all living things. During various parts of the morning service, these multi-colors light effects change as the location and intensity of the sun is modified by time and weather.



Rainbow light inside the chapel



The seven slit windows in the eastern wall are replete with symbolism. A tall glass water-filled vase with a floating oil lamp stands in each window. The seven oil lamps are lit for all religious services, and form the *menorah* in the Beit HaT'fila. Above the vases in the first six windows are glass sculptures depicting the first six days of creation. Direct natural light in the morning causes an ever-changing interplay of shade and shadow in these windows, as the natural light filters through the clear glass sculptures above, and the water-filled vases below. The seventh window, symbolizing Shabbat, is different than the other six windows in that it has no sculpture above its vase and oil lamp. The absence of a sculpture symbolizes that Shabbat is a cessation from creation. By its greater width, the seventh window demonstrates Shabbat's difference from all other days. Two mirrors face each other on either side of the seventh window. When one looks in these mirrors they reflect against one another in infinity, signifying the sacred space of Shabbat in the weekly cycle.



Glass sculptures in slit windows - third day and seventh day

TIME

Time and the setting sun are symbolized in the brick site walls that surround the outside of the Beit HaT'fila and burrow into the courtyard. The brick site walls form a descending arc to trace the path of the setting sun and mark time by the ever-changing shadow patterns that sweep across the landscape. As the site walls descend, they form the courtyard that is used for outdoor worship in the summer months.



Brick site walls

Embedded in these brick walls are 613 colored glass pebbles representing the 613 *mitzvot*. There are 248 stones in the education wing, relating to the 248 positive or “thou shall” commandments, and 365 in the Beit HaT’fila wing, relating to the 365 negative or “thou shall not” commandments. As the path of the sun curves around the Beit HaT’fila, and sunlight shines through the colored glass pebbles, tiny microbursts of light signify the magnitude and importance of the number 613 for Judaism.



613 colored glass pebbles illuminated by the sun

Encircling the Beit HaT’fila are twelve descending concrete pillars that also follow the path of the setting sun, similar to the brick site walls. The concrete pillars encircling the Beit HaT’fila begin at thirty feet tall behind the Ark and descended, two by two, forming a backdrop to the outdoor worship space in the courtyard. The concrete pillars related to events at Mount Sinai, where the Israelites responded to receiving the Commandments by declaring “Everything the Eternal has said we will do.” Moses then consecrated a sacred place consisting of twelve stone pillars at the foot of the mountain to represent the twelve tribes of Israel, and concretize the affirmation of the Jewish people’s

acceptance of the covenant. The concrete pillars that stand guardian around the Beit HaT'fila symbolize Moses' biblical markers around Mount Sinai.

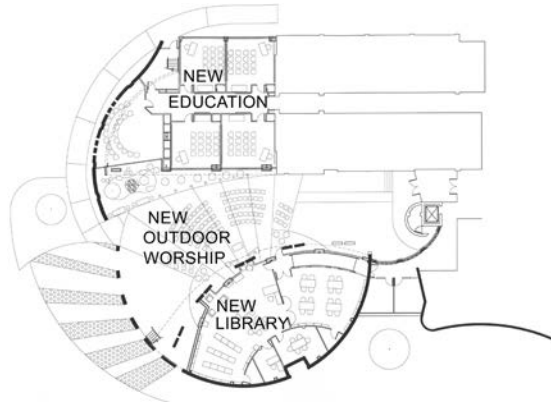


Concrete pillars

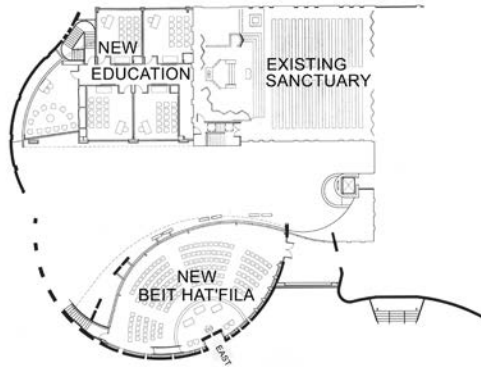
The design of the Beit HaT'fila also refers to the moon, “the lesser light,” to strengthen the relationship to time. The moon plays a prominent role in the marking of time in Judaism, as the phases of the moon mark the Jewish month from new moon to new moon. Jewish holidays typically are associated with phases of the moon: Rosh HaShana on the new moon; Yom Kippur and Shavout on the waxing moon; Sukkot, and Pesach on the full moon. The relationship between the moon and time is elevated by a continuum of lunar shapes in the design: the paved plaza in the courtyard is a quarter moon, the semicircular *bimah* in the Beit HaT'fila is a half moon, and the floor plan of the Beit HaT'fila is a three-quarter moon. The lunar patterns continue in the carpeting in the Beit HaT'fila with is of moon-like crescents, and the upholstery of the chairs with swirls and circles representing the complete cycle of the moon.

POST OCCUPANCY

The Beit HaT'fila has had a positive transformative effect on the worship experience at Temple Emanuel. Contemporary Shabbat music services have flourished in the Beit HaT'fila, and the prayer space has become a popular choice for Temple members. The effect of the curvilinear floor plan has significantly increased the intimacy of the worship experience by reducing the distance between the leaders of the services and congregants. The semi-circular seating allows congregants to see one another's faces during services, promoting eye contact and heightening personal connections. The services are warmer, and less formal. Finally, the natural light effects of the eastern and western walls during worship are a continuous reminder, according to Rabbi Heschel, that Judaism is a religion of time, and that Shabbat symbolizes our gift and our responsibility to sanctify all of time.



First Floor Plan



Second Floor Plan

Architect Daniel Rothschild is a member of Temple Emanuel and has been studying Torah weekly with Rabbi Mahler since 1998. Senior Rabbi Mark Joel Mahler has served Temple Emanuel of South Hills since 1980.
