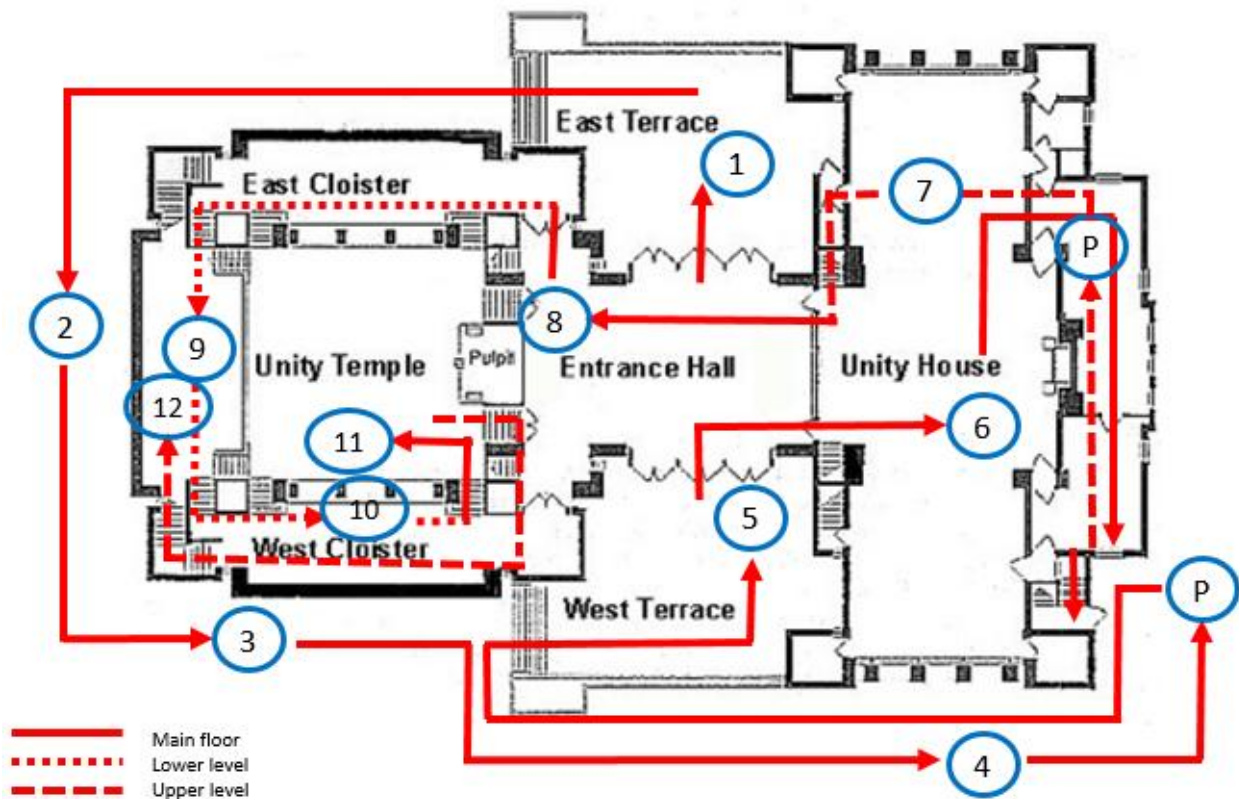


Unity Temple: In-Depth Tour



Stop 1: East Terrace

Introduction and background information about the building and congregation.

- Welcome to Unity Temple.
- My name is _____ – I'm a volunteer with the FLW Trust, one of three groups associated with the building.
- Unity Temple is the spiritual home for the Unity Temple Unitarian Universalist Congregation.
 - Place of worship for over a century; be respectful.
- The Unity Temple Restoration Foundation works to maintain and restore the building.

Restoration Notes: summary:

Two year restoration completed in 2017 by Harboe Architects.

Unity Temple was restored back to its 1908 appearance, with a few exceptions needed to adapt the building to meet current functionality requirements.

- Exterior surface repairs, sky lights refurbished and protected.
- Roof and drainage systems replaced.
- Art glass windows restored
- Interior walls restored to original appearance
- All wood cleaned and restored to its original appearance
- Geothermal heating and air conditioning installed
- Cost was over \$20M.

Unity Temple is frequently considered one of the most influential buildings of the 20th century.

Unity Temple is included in group of 10 FLW buildings proposed as UNESCO World Heritage site.

Some history about Unity Temple:

- Building designed by 38 year old Frank Lloyd Wright in 1905 / constructed 1906-8 / dedicated in 1909.
- Original congregation was named Oak Park Unity Church
 - Minister was Augusta Chapin, second ordained woman in U.S. and the first to be awarded a doctorate in divinity. She started with the congregation in 1886
 - Anna Wright was member
 - Anna's brother, Jenkin Lloyd Jones, suggested that Anna board with Augusta Chapin when she first moved to Oak Park.
 - FLW and his youngest sister Maginel (Margaret Ellen) also boarded with Chapin at this time
 - Located 2 blocks south, on Pleasant (now the Dreschler/Brown funeral home parking lot)
- Rodney Johonnot became minister in 1893 after Chapin left the congregation to represent the Unitarian Universalists at the World Ecumenical conference
 - Johonnot was very progressive.
 - Congregation increased, was outgrowing original building / Johonnot thought building was outmoded even though the building was only 30 years old.
- In December 1904, the building fund was \$814.
- June 4, 1905: lightning strikes steeple; church burns to ground.
 - Piano, kitchen silverware, some classroom furnishings were salvaged.
- Decision made to move to Lake Street: several churches already on street; wanted to be visible, included with other faith groups
- Edwin Gale sold parcel of land at discount (\$10,000 for \$15,000 parcel).

Originally named Unity Church; became Unity Temple reflecting ancient / biblical architectural influences

- Nine architects were interviewed by the congregation, FLW selected
 - FLW designed homes for several congregation members – Gale's
 - Compatible thinking / vision – FLW grew up with Unitarian views
 - Willing to break traditional concepts – created Prairie style in studio three blocks from here; influenced design here
 - FLW went through 34 studies for Unity Temple before final drawings were complete (he made additional changes as the building was under construction)
- Johonnot, Wright, and Woodard (a church member) wrote pamphlet, *A New Edifice for Unity Church*, outlining the new Wright-designed structure and specifying that the building would:
 - Modern building
 - "embody principles of unity, truth, beauty, simplicity, freedom, and reason" ← remember this concept throughout tour!!!
- Influences
 - Japan – Shinto shrines
 - Jenkins Lloyd Jones / All Saints Church; Abraham Lincoln Center (FLW designed), both on south side

- Limited budget - \$45,000, including \$10,000 for the lot; other churches recently built were \$65-80,000
 - Use of concrete so didn't compete with other structures; was cheap
 - Actual cost was over \$70,000 (Scott, page 18 / Siry, page 193)
 - FLW viewed construction as an evolutionary process, resulting in many changes from the original drawings.
 - The general contractor, Paul Mueller, worked with FLW on EZ Polish Factory building in Chicago and the Larking Building in Buffalo, NY. Both used poured concrete but the exterior walls were brick unlike the concrete used for Unity Temple. Mueller's quote to construct Unity Temple, excluding heating, plumbing, electrical, and furniture, was \$32,221 (Sokol, page 75). He overspent by \$12,000 and declared bankruptcy as he could not absorb the overages (Sokol, page 156).

Walk to front of building on Lake Street

Stop 2: Front of building, on Lake Street

How built; how building fits on Lake Street

- Looking at the front of the building:
 - Cantilevered roof edge – explain cantilever/shoulder & arm example (*hold arm out at right angle, point out that hand, elbow etc. are unsupported*)
 - note upper clerestory windows, monolithic sides
 - Upper columns cast in mold; are original, did not require restoration
 - Nod to classicism
 - FLW believed ornamentation should be an integral part of the building, so cast rather than applied.
- compare with church across street:
 - visual clues so know it's a church: sculpture, religious ornamentation
 - materials
 - location and scale of entrance / noise impact from Lake Street
 - No steeple – don't reach up toward God; also decrease risk of fire
- Poured concrete – first application for walls
 - Plastic material, very fluid
 - Poured into wood forms, allowed re-use of forms – sandwich analogy (*wooden forms are the bread; the concrete and steel reinforcing rods are the filling*)
 - Steel rods used for strength/support → rusting problems
 - Saw pour lines; created texture that FLW thought was organic, natural
 - Note: you won't see these pour lines, will explain why not in the next stop.
- Restoration note:
 - Nine geothermal wells were drilled in the front yard, providing heat and, for the first time, air conditioning for the building.
 - Keeping the building at a uniform temperature year-round will help prevent future structural and surface deterioration while also protecting the exterior concrete structure and interior finishes.

Walk to slot windows on west side of building, auditorium end.

Stop 3: Slot Windows

- Lancet (slot) windows in corners provide break; add light to corners which are stairwells.
 - FLW thought would act as expansion joints – didn't
- Walls experienced severe cracking, rusting over time:
 - Shotcrete (Gunitite) applied in 1970's to stabilize, acts as veneer. Solution proposed by Lloyd Wright (FLW's oldest son, also an architect)
 - Gunny Harboe believes the shotcrete application proposed by Lloyd Wright saved the building and is the only reason it is still standing.
 - Shotcrete: sprayed onto building; 3 nozzles: water, aggregate, cement
 - Restoration notes:
 - Building was cleaned using a soda blasting process: sodium bicarbonate applied to surface using compressed air. Process is mild abrasive blasting, much milder than sand blasting (also used on the Statue of Liberty in the 1980s).
 - Tapped entire surface to determine where the shotcrete was delaminating. Failing areas were cut out to a depth of about 1.5 inches and reinforced with steel mesh and/or pins to minimize future shrinking and cracking.
 - Matched existing surface: challenge because the original shotcrete was applied over a period of time and reflected changes in the quarry providing the raw materials.
 - Took about two weeks for the new material to dry and cure. If the shotcrete mix didn't match the color of the surrounding walls, the repair was removed and redone.
 - Cracks were repaired using a sealant containing sand and aggregate matching the surrounding area.
 - The repairs were done by the sons of the 1970s shotcrete contractor.
- Restoration note: The lights in the sidewalk show the building to great effect at night while also making the entrance easier and safer to see when it is dark.

Walk along sidewalk to west end of Unity House, stop in front of columns.

Stop 4: Unity House Exterior

- Ornamented columns motif possibly from nature (hollyhocks) or from Mayan Temples
 - Architecture critic visited after Unity Temple was completed, wrote that FLW build a giant Mayan handball court
- Sculptor was Richard Bock, worked frequently with FLW.
- Columns are identical throughout building, only one mold was used.
- Columns 12 feet tall, too big to make as single unit.
 - Bottom 7 feet was poured.
 - Decorated upper section was cast, four identical pieces per column. (Siry, page 152)

Walk to south end of Unity House.

- "Back" of the building, no ornamentation or decoration – all functional design for the kitchen on the first floor and classrooms on the second floor.
- Test geothermal well drilled in back yard, provided heat and air conditioning to the minister's office.

- Gale House immediately south of Unity Temple built by George Gale, one of Edwin Gale's sons, and was donated to the congregation as the parsonage.

Walk to west terrace.

Stop 5: West Terrace

- Entry somewhat hidden – “Path of Discovery”
- Scaled to human size
- Influence of Japanese architecture
 - Columbian Exposition
 - 1905 trip to Japan / shrines
 - Low entry
 - Muted colors
- Binuclear design – auditorium, Unity House connected by low entry
- Motto (on both terraces) – very liberal congregation
 - Worship of God – sacred
 - Service of Man – secular, community involvement
- Entry unites sacred, secular into one universal truth; merges indoor/outdoor light and space
- Planters – same geometric influences as building
- Landscape has been recreated to replicate the plantings used in 1908
- Side lights – reminiscent of Japanese lanterns
- Enter through glass doors with leaded glass “screens”

Walk into building, turn right into main room of Unity House.

Stop 6: Unity House, Main Floor

Main function of space is to support secular activities.

Wanted to feel like a home:

- Main room is square, like FLW's living room – anchored by 4 piers: same concept in entry vestibule, auditorium
- Alcoves are like a dining room and study; “break box”
- Fireplace is the focal point of the room, consistent with FLW's concept of “the hearth is the heart of the home.” Fireplaces are a central feature in FLW's homes.
- Minister's study overlooks room – visible on north side
- Skylight pattern in glass represents leaves against sky; is not religious
- Colored glass pieces are all squares
- Skylights recessed between 15 foot beams – do not support roof
 - Restoration notes:
 - Skylight had been replaced at least twice and was visible from the street.
 - The new skylight is constructed with insulated frosted glazing and a thermally broken aluminum frame.
 - The new skylight was lowered to the original location, concealing it from view on the outside.
- Cantilevered lights provide additional light.
- Lights are spheres – shape will be continued in auditorium
- Lights do not move up and down.
- Earth tone colors vs. monochromatic exterior, colors are relatively bright.

- Paint research done to replicate original finishes throughout in restoration.
 - Restoration notes – three options evaluated for paint:
 - Option 1: Strip the plaster walls and repaint with authentic paint treatments. Stripping was not 100% successful, resulting in a “muddy” paint appearance.
 - Option 2: Apply skim coat of authentic plaster with authentic paint treatments. The original plaster had been patched in many areas and had to be removed in other places to allow concrete repair. The skim coat provided a uniform surface for the paint.
 - Option 3: Replicate the original finish by overpainting with modern paints. The original finishes were an integral part of the spatial experience throughout the building: overpainting would not replicate the original feel of the building.
 - Option 2 was selected.
 - Original specifications for the plaster interior: “composed of a lime cement plaster with crushed flint or torpedo sand aggregate, and hair fibers ‘goat or long cattle hair of Vanilla fibre to be well beaten, soaked and thoroughly mixed into lime paste.’”
 - Plaster was to receive a “rough finish floated evenly with a soft felt or cork faced trowel.”
 - Oil paint was applied using a rag finish to create the textured surfaces consistent with the original walls.
- The kitchen is behind the fireplace. The congregation has always needed a place to prepare meals for the community.
 - The kitchen was remodeled as part of the restoration to meet current requirements and building/food preparation codes.

Walk into kitchen door, east end. Go through kitchen, up the stairs to the second floor and into the south classroom.

Pause in south classroom:

In the original plans, Wright provided classroom space and a sewing room (Siry, page 9). At some point, the congregation removed the sewing room and enlarged the classroom space.

Walk into east classroom.

Stop 7: East Classroom, second floor, Unity House

- Closer look at art glass used on clerestory windows, column decoration.
 - Window pattern reflects the design in the concrete columns (Siry, page 188).
 - FLW specified thin zinc strips of came in the windows, which were then galvanized, resulting in clean metal frames in the windows (Siry, page 166-167).
- Restoration note – art glass windows:
 - All original windows were in excellent condition.
 - Glass was replaced only if it was not possible to salvage the original came, and only when original broken pieces were missing or damaged beyond repair.
 - Reglazed panels were created to match precisely the original panels, including the color, design of the matrix, and method of soldering.
 - FLW specified fusing chromatic material into molten glass, creating a richer, saturated coloration than could be obtained by enameling or painting the glass.

- Technique advocated by William Morris and was originally used by medieval glassmakers. Morris influenced Wright.
 - The steel frames holding the art glass windows in place were replaced.
- In 1961, solid walls were added to both classrooms to provide closed classroom space.
 - Restoration note: The 1961 walls were removed, opening the space so could see across entire space as FLW originally planned. The glass walls support the original open design while also providing contained classroom space.

Walk down stairs, turn right into entry hall, stop in north east corner.

Stop/Pause 8: Entry Hall, north east corner

- Distinction between inside, outside minimized by use of art glass screens on doors.
- Color is muted
- Four columns mark square form of space, “breaks box” to north
- One can proceed directly into Unity House but need to follow FLW’s path of discovery to get into auditorium
- The ceiling continues to drop, creating compression ➔ transition space

Our path will be even less direct as we walk through the original coat room following the path taken by congregants arriving late for services.

Walk down stairs following “latecomer” path, go into nursery at north end.

Stop 9: Nursery

In Wright’s design and as originally constructed, the basement consisted of a large coat room, a storage area, and two individual bathrooms located in the north corners under the stairs (Siry, page 5, 124).

In 1966, the congregation remodeled the basement:

- Coat room converted to three offices on east side, restrooms on west side.
- Storage room converted to the nursery.
- Bathrooms converted to storage areas.

As we leave the nursery, take a peek into the closet under the stairs. Originally one of the two bathrooms, the closet now contains the geothermal pipes from the wells in Unity Temple’s “front yard.”

Our route replicates the path late arrivals would take into the auditorium. The stairs continue to the lower and upper balcony sections, which will make sense to you in just a few minutes.

Walk out north door, open closet door on north side of stairs (look at geothermal piping), walk up the stairs to cloister level, stop in center of cloister.

Stop 10: Cloisters, west side

- Pathways called cloisters – covered walks open on one side to garden/nature.
- Originally, the pews in the cloisters were on the main floor of the sanctuary. They were moved for two reasons:

- Provide additional floor space in the auditorium to support the piano and theater/dance performances.
- Provide accessible seating.
- Note the contrasts as we transition from the cloisters to the main auditorium:
 - Dark to light
 - Lower to higher

Walk toward entry hall, turn left and go up the stairs into the main floor of the auditorium/sanctuary. Invite guests to sit in the pews.

Stop 11: Auditorium

Universalist – emphasis on loving God (FLW's father was Universalist minister)

- Anti-slavery / abolitionists
- First to ordain women

Unitarian – independent thought; rational humanism (FLW's Uncle Jenkin Lloyd Jones was minister)

Look at how Johonnot's requirements are met with FLW-designed building:

- Johonnot: "modern building that would embody principles of unity, truth, beauty, simplicity, freedom, and reason"
- Ralph Waldo Emerson (was Unitarian minister): led transcendentalism movement.
 - Belief that God is manifest in beauty of nature and all living things
 - Universal presence around and within us
 - "profound harmony between physical world and the human soul"
- FLW: worshiped God with a capital "N" for Nature

Building:

- Spaces flow into each other; outside and nature with clerestory windows
- Natural colors
- Unity ↔ togetherness and democracy with close proximity of all seats
- Orderly arrangement of functions, simplicity and reason in geometry
- FLW called it the "Noble Room"
- Also called it "good time place"
- 25 square art glass windows in coffered ceiling → "happy cloudless day" effect
 - Same pattern used in each light, turned to create weaving effect → continuity (Siry, page 176)
 - Wide end of pattern continued with wood band
 - Protected by the original skylight (or a very early replacement).
 - Restoration note:
 - The skylight framing was corroded, the glazing was cracked, and it leaked.
 - The existing framing was kept in place but the glazing was removed.
 - A new skylight with a thermally-broken aluminum frame and insulated frosted glass was installed over the original frame.
 - The new skylight is about a foot higher than the original but causes minimal external visual changes to the building given the height of the auditorium.
- Clerestory windows add light and sense of openness
- Columns in four corners reflect square shape of room; then "break box" on all sides with balconies and pulpit (forms Greek cross, may be coincidental)

- Only religious symbol visible is Roman cross in wood, on either side of the pulpit. Since Unitarian Universalists do not use traditional religious symbols, FLW may not have been intentionally incorporating a cross (Siry, page 186).
- Chalice – used as identifying symbol for underground during Nazi occupation in WW II.
- Candles – members light to signify change in life, choose whether or not to share details with congregation
- Wood trim defines planes, wraps around to minimize edges like a folded piece of paper, creating a floating plane and a sense of plasticity (Siry, pages 179-180).
 - Restoration note:
 - Original finish was pine resin and linseed oil finish. These materials tend to yellow and darken over time.
 - In the auditorium, the wood was cleaned and rubbed with Tung oil.
 - In Unity House, the wood was refinished previously and was lighter than its original color. It was refinished to match the finish in the auditorium.
 - Each piece of wood trim was documented, removed, restored, and reinstalled. Removal was required to support plaster and paint restoration work.
- Wood screen behind pulpit adds vertical feel; hid original organ pipes
 - Music was an essential component of the service. The congregation did not want to conduct services in the auditorium until the organ was installed.
 - FLW did not plan enough space for the organ pipes, so several organ companies refused to submit bids for the project.
 - Organ cost \$3500. Member Emily Currier left her estate, valued at \$4996, to Unity Temple. The organ was dedicated in her memory. (Sokol, page 150).
- Colors are lighter than Unity House, restored to original shades and finishes
- Balconies create different feel from the monolithic exterior walls
- All seats are within 45 feet of pulpit and are visible from the pulpit (no sleeping through sermons!).

When the plans for Unity Temple were being reviewed, congregation president Thomas Skillin objected to the design, believing the building would be dark and people would not be able to hear. In his autobiography, FLW recorded this exchange with Skillin following the dedication service:

Skillin: Take back all I said... light everywhere – all pleased.

Wright: Hear well?

Skillin: Yes, see and hear fine – see it all now.

Wright: I'm glad.

Skillin: Goodbye.

Wright's concluding note following the conversation: "At last the doubting member, sincere in praise, a good sport besides." (Sokol, page 156, taken from Wright, *An Autobiography*, page 176. Sokol notes that this exchange likely occurred following the first service in the auditorium rather than the dedication, which took place about a year later).

Circles and squares had meaning for FLW:

Spherical lights matching Unity House, square lights match entry.

Wright's circle in square motif: (from Martin House)

Circle is continuity

Square is unity and integrity as a result of the 1:1 ratio for the square's sides.

When the shapes are combined, get harmony. Shapes are brought together in pendant lights.

FLW used squares throughout Unity Temple, in the footprint of the main sections of the building, the art glass windows, the cast columns, the panels in the auditorium lights (Siry, page 136).

Walk up the stairs on the right / west side of the pulpit. Walk along the back of the first level balcony. Go up the stairs in the northwest corner to the upper balcony, go down center aisle. Invite guests to sit in the pews.

Stop 12: Second Balcony, center

Interpreter note: Be careful where you stand as you face the group – the balcony edge is low. Standing on the steps will keep you from the balcony edge, but may be a problem if you are facing the group and step back (and down).

- The auditorium was the most complete part of Wright's design; it was the last part completed (services were held in Unity House for about a year while the auditorium was under construction).
- Organic architecture: all parts integrated.
- First truly modern building architecturally.
- Multiple uses for the building today:
 - Religious services: building has been in continuous use as a church since construction was completed.
 - Musical concerts.
 - Dance and theater performances.
 - Lectures.
 - Weddings.
- The pews in the balconies are tiered – designed to accommodate women's hats without blocking the view of the pulpit and congregation (Siry, page 177).
- Technical systems not visible
 - Heating and cooling in columns
 - Wiring behind wood trim
 - Organ pipes behind screen
 - Restoration note:
 - Poles on either side of the corner columns were added for theater lighting.
 - Connection ports were added for projectors (located in center of balcony near floor)
- Restoration note: All roofing and drainage systems were replaced.
- Look at doors on both sides of the pulpit:
 - Congregants arrive singly – the stairs are too narrow to arrive in groups. Congregants exit as a community.
 - On the way out, clergy / leadership can greet congregants.
 - Congregants don't turn back on the message they just received.
 - When the doors are opened, one can view through the entry vestibule and see through to Unity House – uses FLW's compress/release concept.

Thank guests for joining tour. Guests are welcome to stay, explore other levels in the auditorium, take pictures, etc.

Additional notes:

First United Church of Oak Park (church across street):

- Was originally First Congregational Church. The congregation merged with the First Presbyterian Church in 1975, becoming First United Church of Oak Park. First Presbyterian Church was previously located in a stone building a block west and now home to Calvary Church.
- Original built in 1873, Adler – steeple struck by lightning in 1916, destroying the church
- New church has tower on west side (steeple was on east end of building) but no steeple
- Menorah: corporate seal / logo from original building
 - Candles represent Jesus, light of the world
 - Seven branches: seven is number of perfection
 - Four for man / four seasons / four corners of earth
 - Three for Trinity

Ernest Hemingway's grandparents were founding members of the church; he was baptized there.

Conversation with Fred Henders, Building Manager, First Congregational Church of Oak Park.

Geothermal heating and cooling system operation:

A geothermal system consists of a heat pump, usually installed in the basement, and a circulating pipe loop containing water. Ground temperatures are relatively constant year round. In winter, water is pumped from the ground into the heat pump which extracts heat from the water and circulates it through the building. The water cools as a result of the exchange process and is returned to the ground. In summer, the process is reversed with warm water returned to the ground and cold water provided to the heat pump.

The EPA has acknowledged geothermal systems as the most energy efficient, environmentally clean, and cost-effective space conditioning system available.

Source: <http://www.geothermalgenius.org/how-it-works/>

Restoration funding:

The restoration cost has been reported to be \$20 – \$25 million. Unity Temple Restoration Foundation is working to raise funds for the balance of the project.

	\$, millions
Alphawood Foundation grant	\$10
Unity Temple Congregation	\$ 1.75
Unity Temple Restoration Foundation/bridge loan	<u>\$11.25</u>
Total	\$23

<http://www.chicagotribune.com/entertainment/ct-unity-temple-restored-kamin-ae-0521-20170521-column.html>

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