

Concrete shell of the Nauvoo Temple, east side, April 2001. Photograph courtesy of Roger P. Jackson.



Workers preparing to pour the concrete for the front steps, February 2001. Photograph courtesy of Roger P. Jackson.

# Designing and Constructing the "New" Nauvoo Temple: A Personal Reflection

## Roger P. Jackson

Like so many people, I was caught by surprise when I heard President Gordon B. Hinckley's announcement in the April 1999 general conference "that among all of the temples we are constructing, we plan to rebuild the Nauvoo Temple.... It will be a while before it happens, but the architects have begun their work. . . . The new building will stand as a memorial to those who built the first such structure there on the banks of the Mississippi."<sup>1</sup> I must admit that the thought passed through my mind that I should be the principal architect for the job. I do not attribute this feeling especially to inspiration but rather to my own arrogance and selfishness. A few years earlier, in 1997, the architectural firm I work for, FFKR Architects of Salt Lake City, provided the architects for the Vernal Utah Temple; and before that, in 1993, we contracted to design the restoration and conversion of the Hotel Utah building into the Joseph Smith Memorial Building. We had also done other adaptive reuse projects with historic buildings. This mix of experience with temples, historic buildings, and grand, beautiful spaces would make me (that is, "us") perfect for the job. I also knew we had the resources to do what it would take to do the job the way the Church would

ROGER P. JACKSON received his Bachelors of University Studies from the University of Utah in 1981 and a Masters of Architecture from the University of Utah Graduate School of Architecture in 1984. He is a principal architect in the firm of FFKR Architects in Salt Lake City. Before his assignment as the lead architect of the Nauvoo Temple, he was the project architect for the Vernal Temple (formerly the Uintah Stake Tabernacle), the Joseph Smith Memorial Building (formerly the Hotel Utah), and the Noyes Administration Building on the Snow College campus in Ephraim, Utah. He was also involved in the design of the new East High School building in Salt Lake City and in numerous school building projects along the Wasatch front. He lives in a beautiful old house in Salt Lake City with his wife Rhonda and four children.

want it done. Furthermore, from our past projects, we already knew many of the people in the LDS Church Architectural and Engineering Services Division and the Temples and Special Projects Division (TSP).

The morning following the announcement, I called Allen Erickson, our project manager with TSP on the Vernal Temple, to see what he could tell me. Allen told me he thought the Nauvoo Temple project was already underway but suggested I speak to another project manager, Robert (Bob) Dewey, who was handling the project. I was only somewhat acquainted with Bob, but I called him anyway. We had a pleasant conversation, and he told me that the Church was probably going to do the architectural work internally but that I was welcome to send him a letter stating our qualifications and interest. I did so and assumed that would be the end of it—until he called me back.

Bob Dewey and Keith Stepan, Bob's boss and the managing director of Physical Facilities for the Church, called and stated they wanted to come to the office to visit. When they came, I showed them a small set of drawings we had prepared for the Uintah Stake Tabernacle building prior to its adaption to the Vernal Temple. We had sent Gerald (Tim) P. Maxwell from our office (at the time he was working as a contract consultant) to Vernal to measure the building and prepare the "measured drawings" showing everything about the old building. Measured drawings show overall dimensions but also detailed information about the construction of the building, the principal features, and the detailed elements, both inside and out. These drawings, beautifully drafted, became the basis for the design and planning within the existing shell and gave us the details to utilize for exterior and interior trim and moldings. Keith, Bob, and I discussed our firm's experience and capabilities as well as our desire to be involved in the project in any way we might. They left, and I assumed that would be the end of it-until he called me back.

When Bob called back a second time, he informed me that they had a plan and wanted to know if we wanted to be part of it. The plan was simply this—he wanted us to do the research on the design and layout of the original Nauvoo Temple and send the information to Lou Chiodini, an architect in St. Louis, Missouri, who had designed the St. Louis Temple. Bob knew of our capabilities and felt that we could best assemble the research work from Salt Lake City. The plan made sense. He was here, the archives and research materials were here, and we were here also. Bob also knew Tim Maxwell from our office because Tim had approached him about the Nauvoo Temple on his own, independently of FFKR. Tim is an experienced preservation architect with a personal interest in Nauvoo and a tremendous passion for history (particularly architectural history) and Mormon pioneer architecture.

We were happy with this arrangement-thrilled really-to be involved in the project this way. Another Salt City architectural firm. Lake Richardson Design Partnership, was also invited to participate in the project. Its architects were to compile the research on the interior of the historic building, and we would do the research on the exterior. We would coordinate our efforts with yet another architect, Uriel Schlair from Harry Wesse Architects in Chicago, Illinois. Uriel has been involved in many large-scale, historic restoration projects around the country and has done consulting work for the Church on several temple exterior restoration projects, including the temples in Washington, D.C., Salt Lake City, and



Roger P. Jackson, principal architect of the Nauvoo Temple, 2002. Photograph courtesy Roger P. Jackson.

Manti. Uriel's responsibility was to research the existing stone fragments and develop an index of shapes, sizes, and textures for each type of historic stone to use in piecing together the design of the exterior stonework for the reconstructed building. All of this research work was to be reviewed by a committee of people, experts in their fields, regarding the Nauvoo period. This proposal sounded dreadful and quite unwieldy, but it actually proved to be very valuable. Our meetings together were quite helpful, and members of the committee helped us tremendously throughout the rest of the project.

#### The Historic Building

We started with a big kickoff meeting with everyone in attendance. We mapped out a schedule for our work that outlined when we would have information to Chiodini. We committed to these dates and the information we could have for them. I tried to imagine, as if I were he, what he would need for preliminary planning, design development, and detailed construction drawings. We began the research work with the little bit of information we had, and then we became surprised with the amount of information that actually was available. The principal sources of information for our research work are given below. The drawings from the original architect, William Weeks. Bob Dewey gave us photocopies of the few available drawings, which gave us a big head start. One of the most valuable drawings was one showing the west elevation, a drawing we had seen many times in the past. There were building sections, large-scale sections through the roof truss, and details of windows and moldings. We also located good drawings for the baptismal font. Interestingly, there were quite a few drawings representing the tower, including the structural framing and the moldings on the tower. There was only one drawing—a fragment really—showing an actual floor plan. It is a small corner of a floor framing plan for the second floor (first mezzanine) showing the round opening in the masonry for the southwest spiral stair and the framing of the mezzanine floor neatly fitting into pockets in the masonry wall.

Because the quality of the photocopies was limited, we needed to see and study the original drawings. We arranged this inspection with Scott Christensen at the LDS Church Archives. He was very accommodating. This experience was a real thrill for me to see and feel these drawings, if only through a white cotton glove. I kept thinking, "Who else has seen and held these same drawings?" The drawing we needed to see was the west elevation drawing. It was drawn with ink and shaded with pencil. The scale markings and notes on the drawing were so fine that we used a jeweler's loupe to help us read the writing. The drawing is superb and beautifully crafted. It shows, without all the noting and information we would add today, a wealth of information regarding the textures on the stones, the depth of materials (with shade and shadow), and the sizes of things. Along the left side and across the bottom of the drawing are several scale bars showing the dimensions of various elements, as if along an imaginary line drawn across each part of the building (for instance, vertically through the windows), and showing in detail things like the sill stone, the arch stones from the spring line, and the keystone over the window. These drawings started it all and formed the basis of what we knew, what we thought we knew, and what we did not know.

The Harrington archaeology report. A small volume entitled *Rediscovery of the Nauvoo Temple: Report on Archaeological Excavations*, by Virginia S. and J. C. Harrington, was published under the direction of Nauvoo Restoration, Incorporated (NRI) in 1971. This report shows photos and scaled drawings of various stone fragments and the plan view of the temple excavation. It also shows detailed information about the font stones and the oxen fragments.

Historic photographic (daguerreotype) images of the building. Realistically, the daguerreotype images of the building were mostly too fuzzy for us to learn much specific detail from, but we were able to see and "feel" the building and understand its proportions better than we could from the few drawings we had. Tim Maxwell, however, studied the photos in great detail and learned more than I thought possible. Formerly, architects knew how to use the plan drawing of a building and an elevation drawing of a building and construct a three-dimensional representation—or a perspective drawing. Tim used the photos and our entire conference room table and constructed, in reverse perspective, the plan view of the building. The accuracy was limited, but it helped us confirm, generally, the dimensions of things we knew and helped us learn the dimensions of things we did not know. Tim studied what could be seen through the windows on the photos and helped confirm what looks like an inconsistency in the interior column spacing. He also studied the shadows cast and the light shining through the window openings to help us understand the relative depth of things. The best information we learned from any of the old images was from a tintype image of the historic ruin, taken by T. W. Cox around 1850.<sup>2</sup> A tintype is a small, flimsv piece of tin with a photosensitive coating on which the image of the building is etched, or placed, by the process. The image is reversed on the tin, so the image is usually printed reversed. This photo, when enlarged, clearly showed what no other image had shown-the coursing of the stone masonry on the west face of the building. The most interesting thing we learned from the photo was the increased size of the stones at the upper-level windows. Most of the wall stones between the pilasters were eight inches tall. The size changes slightly when the arch stones ("voussoirs") step around the windows, but generally, they were eight inches tall. For some reason, at the upper-level windows, the height of the stones changed to sixteen inches to match the sixteen-inch-high pilaster stones, which was very curious. People have their own ideas as to why this happened, but we simply do not know for sure. My idea is that this was about the time the Prophet Joseph was killed, and Brigham Young told the builders to "hurry it up."

**Existing stone fragments.** After the 1848 fire burned out the wood floors, roof structure, and tower of the original building, the south, east, and north walls stood unsupported until a tornado blew them down in 1850. This cut stone was scavenged for other building projects in town. The west end of the building stood as a ruin until about 1864, at which time the remaining stone was taken down to build other structures. The Icarians, a French communal utopian society, acquired the property and built several structures out of the temple stone, including a schoolhouse on the southwest corner of the original temple block. The schoolhouse was dismantled by NRI in 1972, and much of the stone was sent to the landfill. Some stone was, however, saved by NRI and was added to the other fragments of stone from the building the NRI people had found and collected over the years. Uriel



Circular staircase under construction in the southwest corner of the building, July 2001. Photograph courtesy of Roger P. Jackson.

Schlair and Jim McElvain from the office of Harry Wesse Architect in Chicago, Illinois, went through the pile and scrounged around town to catalog and document all the existing stone they could. They carefully measured each stone they could find, noting the shape, surface textures, and dimensions of each. This work was compared with the preliminary drawings we were preparing and was integrated with what we knew so that the stone drawings could be as accurate as possible. We found representative samples of the more typical stones, but there were not enough of the unique stones (outside corners, base and water table stones, and arch stones) to feel confident about having everything exactly right.

There are many more stone fragments "out there" than we were ever able to locate or see. Here is an example. My wife Rhonda ran into her former doctor, now retired, in the grocery store one day. After some chitchat, he asked about me and my work. When he learned about my involvement on the Nauvoo Temple, he told her he had a very interesting original fragment that had been given him years ago by Dr. T. Edgar Lyon, a historian who worked closely with NRI in the 1960s and early 1970s. I arranged to go see it; and while I was there, I measured it, sketched it, and even traced the outline of it onto my notepaper. I took it back to Tim Maxwell in the office and asked him if he could tell where it was from in the temple. It had quite a unique shape and a very simple texture. Tim figured out that it was from the capstone, the top stone of the masonry walls.

At the southwest corner of the building is the official capstone, whose setting called for a special ceremony. From the building committee records of that day, 24 May 1845, the logbook has the following record:

Capstone of the Temple laid this day at 6AM by Pres Brigham Young assisted by foreman Wm Player. [It is a time of trouble for the Saints.] The twelve apostles being sought by their enemies. They were hid up; Nevertheless they suddenly appeared on this occasion to the great joy of many hundreds of the Saints. The Hosanna Shout was given, saying Hosanna, Hosanna Hosanna, Amen, Amen, Amen (three times repeated.) The day was proclaimed by president Young to be the true Sabbath of rest for the Saints, as it was anciently for the Jews—he exhorted the Saints to diligence and faithfulness—After which the twelve apostles as suddenly disappeared out of their sight. The band played some lively airs—the Capstone hymn was sung by J Kay.<sup>3</sup>

Descriptive articles. During the time the temple was being built and after its completion, several articles were written for local and east-coast newspapers giving detailed descriptions of the building and specific features that caught my interest. These are the only sources for information about some elements of the building. An article by Lyman O. Littlefield gave us a good confirmation for the number of windows. He states, "In all, there [are] forty-seven main windows, the tops of which is in a half circle, or oval form. Between the two rows of main windows, is a row of circular or round windows, twenty-two in number. Above the pilaster capitals is a row of smaller circular or round windows. The basement story is lighted by twenty-two windows in the form of a half circle."<sup>4</sup> Littlefield was also the source of information regarding the upper gable window on the east side of the building, of which we could find no photograph. "At the east end of this room, is already constructed the frame of a window twenty and a half feet in the span, which forms four gothic windows, and three irregular triangles which partake of the elliptic and gothic."5 The newspaper articles gave us information on the "Venetian," or "Palladian," windows on the east wall, the attic skylights, the roofing material, and a host of other details. Our source for almost all this information was Don F. Colvin, who was on the historic review committee. We could call Don and ask him any question; in a few minutes, he would fax or e-mail us three or four quotes giving us the information we needed. This assistance was a tremendous help in the process of putting everything together.

**Personal journals.** A number of Mormon journals were very helpful and very descriptive—but others were not. My own great-great-great-grandfather, John Mills Woolley, kept a journal that was not much help. He wrote these three entries regarding the Nauvoo temple:

We got there [Nauvoo] the 20th of November 1841. I worked on the Temple (or rather for it) part of the winter. The rest of the winter I went to school to Orson Pratt. $^6$ 

In the spring [1843] I worked some on the temple and some of the time I quarried stone.  $^7\,$ 

The spring following [1845], I went into the mercantile business with my brother Edwin. I also worked some on the temple.<sup>8</sup>

Other journals, however, were very helpful. We had the journal of William Clayton, who was the recorder of the temple construction committee. His writings outlined significant dates (and names) for significant mileposts of the construction. As he would describe specific items or events, he also referenced other things happening around or adjacent to what he was writing about. Careful reading gave us insights into much that went on.

We were given a copy of the journal of Norton Jacob. It came from Carol B. Thomas, my sister's friend, who was serving at the time in the General Young Women's Presidency. The Sunday after Carol sent it to me, the high priests group leader in my ward, Verl Jacob, asked if we had this same journal and offered to get it for me. Norton Jacob was the foreman for the framing of the roof and tower. His journal provided some information about the work he did, but it also gave us information about the other things that were happening. He speaks of the work on the building and the spiritual life of the Saints, their meetings, their struggles with the mobs, their receiving temple blessings, and their efforts to complete the building, even knowing that they were planning to leave the building behind as they left.

Artwork and sketches. Several drawings and paintings of the building have been done; but, for the most part, they were completed well after the fact—and probably from memory or in so little detail that they were difficult to take seriously. Because the few details they did show were often contradicted by other information we knew to be reliable, we slowly grew to have little confidence in them. There was one drawing, however, that was very helpful—one done by Frederick Piercy, a British convert to the Church who left England in 1853 for Salt Lake City. As a trained artist, he prepared a series of sketches and commentary to guide travelers en route to Utah. His sketch of the Nauvoo Temple ruin was beautifully done and in such fine detail that we were able to learn quite a bit from it. Interestingly, it showed in detail the framing of the mezzanine floors and the access to the circular stairs—the very same information we learned from the little scrap of a floor framing plan drawn by William Weeks. It shows the arch supporting the tower, coursing of the stone, and the damage to the building. Piercy wrote of the temple, "On the banks of the river lie broken blocks of stone and shattered bricks, the visitor's first steps are over evidences of ruin and desolation."<sup>9</sup>

The architectural team. Our primary source of expertise was Tim Maxwell in our own office. It is easy to see how Tim had been prepared to do this very work. He spent a few early years as a stone mason. His early architectural work was in Nauvoo as a restoration architect under the direction of Steve Baird and NRI. While in Nauvoo, he researched and worked on the restoration of several of the pioneer structures, including the beautiful Seventies Hall. He watched (in horror) as the Icarian buildings were demolished and hauled away to the dump. He also observed firsthand the Harringtons do the archaeological work on the temple site. His career since his early Nauvoo days has been full of historic projects of all types with an emphasis on pioneer-era buildings, having also been involved with the territorial statehouse in Fillmore, Utah, and with the early development of what became "This Is The Place" Heritage Park. While working at FFKR, he was involved as the on-site architect for the remodeling of the Hotel Utah (now the Joseph Smith Memorial Building). Tim's passion for the temple along with his desire for historical accuracy and all things old made a huge contribution to the success of the project. He did amazing work in pulling together the research and making something out of it. He looked at all the information and synthesized it, with a particular emphasis on the stone and the exterior features. I know he was frustrated in not having sufficient time to do all the research work that could be done because of the compressed research and construction schedule.

We had a fantastic team of architects and drafters in our office: Elledge Bowers, Kevin Harrison, Garth Wilson, Margarita Herrera, Richard Baxter, Kathryn Anderson, Oktai Parvaz, Ben Lowery, Christi Miles, Scott Thomas, Barry Becker, and Jason Boehner. Pulling it all together was our project architect, Steve Goodwin. Steve is a young architect who did not even have his license when we started, but he is careful, thorough, and deeply spiritual. Steve was the point man for doing the research work and for bringing it all together and getting it all done.

We had regular meetings with Bob Dewey and periodic meetings with the committee. Bob had some early experience with Nauvoo when the Church was thinking of rebuilding a portion of the temple ruin to stand as a monument on the temple site. He had studied the temple and the William Weeks drawings carefully and had been working to develop the preliminary plans President Hinckley spoke about when the announcement was made in general conference. Bob was helpful and supportive of us and of our work. He was a good sounding board for ideas, and he was able to run interference for us with various Church departments and personnel when we needed it.

Even with all the work we did and all the resources we had, there were still things we did not and could not know. Mostly, all the fine points were too small to be seen in the photographs. What was the shape of the moldings at the doors? What were the details of the stone around the doors? Were there pilasters inside the portico? What was the arrangement of the inscription inside the portico? We know it was there, but how was it arranged? What were the details on the chimneys and balusters? Did they build the tower moldings as they were drawn? The windows? How did they use the few interior details depicted in the drawings? Did they use the detailed window trim with the carved sunstones on all the windows or on just some? How did the cornerstones actually key together as the building turns the corner? What was the water table course, and how did it key around the corner? Was there a large W-shaped stone interlocking the corner and the two end pilasters together? Did they actually carve the "all-seeing eye" on the hub of the windows as drawn by William Weeks? All the little things we could not confirm by the resources and understanding we had we needed to come up with ourselves.

The largest single item we did not have any good information on was the east wall of the building. It is not shown on any of the photos, we have no drawings of it, and only a few parts of it are described in any of the written accounts. There are a few pieces of artwork that show the east wall, but they are all different; and none of them seemed to quite fit what we think it would have been. This was an area where we used the resources of the committee. William Weeks drew a "Venetian" window (or a Palladian window) with a large center window and two full-height sidelights with a semicircular window over all three windows. There was no commentary as to where this window went on the building. However, we learned from the William Clayton journal that there was one because he mentions installing it. When we placed the window, as drawn, on the east wall in the center bay, for both the lower (main) floor and the upper hall, it just did not seem to fit. There was an awkwardness to it, and it did not make sense because we knew that just inside these windows, there were the multi-leveled, raised pulpits (as in the Kirtland and St. George temples). Tim Maxwell was working on this problem, and it was he who came up with the idea to make the tops of these windows elliptical. All of a sudden, everything looked better and seemed to fit. We reviewed the results with the historic review committee; and, lacking better evidence otherwise, we all agreed that the elliptical window is



Groundbreaking ceremonies of the Nauvoo Temple, 24 October 1999. Roger P. Jackson is shaking hands with LDS Church President Gordon B. Hinckley. Photograph courtesy of Greg Hill, Church News.

what we would go with. My greatest hope (and my greatest fear) is that someday someone will find a photograph or drawing of the east wall. My hope is that it will confirm that we were right and that we are inspired geniuses. My fear is that it will show we were way off the mark and working in the dark. This was one instance where we did not know the answer, and we had to come up with the best solution possible.

People ask me all the time to share the many spiritual experiences they naturally expect I had in being a part of this work. There were many such experiences; but, for the most part, the project was just hard work. When we met as a team and in the committee, we began with prayer and asked for help and inspiration. What we do as architects is generate multiple solutions to the given problem, critically analyze them, choose the best solution, and further refine it. That is what we do, so the line gets blurred, in my mind, between where inspiration begins and where our own efforts end. That said, I know the hand of the Lord was with us in guiding our work. All those who worked on the project had experiences where they felt they were led by the Spirit to do things a certain way. We took the attitude that we would work things out the best we could and then take them to the Lord for confirmation. This is exactly the lesson taught in D&C 9:8–9 and Moroni 10:4—the person decides for himself or herself (that is, regarding the work we did, the

truthfulness of the Book of Mormon, or any other issue where guidance is needed). The person then takes it to the Lord and asks, "This is right, isn't it?" One does not say, "Tell me what to do." Instead, one asks, "If these things are not true" (Moroni 14:4), and the Lord will confirm what one has done. I tried to teach the attitude that if what we did might have been historically incorrect or wrong, *and if it mattered*, the Spirit would guide us to the right answer. If what we did was wrong, *and if it did not matter*, then it did not matter; and as long as we thought it looked good, it was okay.

#### Architect of Record

We were working along and generally meeting our schedule when Bob Dewey called and made an interesting proposal. He said he was not happy with the information he was getting from the architect in St. Louis and wondered if we would be interested in being the architect for the reconstruction. I was so happy I could not believe it. I wanted to cartwheel all the way to the Church Office Building. Another factor in this decision was that the general contractor for the construction of the building had just been selected and was located in Salt Lake City. Legacy Constructors, a joint venture of Okland, Jacobsen, and Layton construction companies, was selected from a short list of several contractors. Legacy had recently completed the construction of the LDS Conference Center. Because Legacy, the Church, and FFKR were in Salt Lake City, there was no longer any advantage to having an architect closer to Nauvoo and the project. Also, Bob told us he was very pleased with the work we were doing and the relationship we had developed with him and his team. This was late September 1999, five months after President Hinckley's announcement.

We had a kickoff meeting with Legacy and started right off with a grand misunderstanding. Legacy knew we had been working for some time on the project and assumed we had been preparing bidding and construction documents, not just doing the historic research work. In our first meeting, the Legacy people asked us for the drawings so they could start building, and we told them we did not have anything because we had just started ourselves. It came out in the meeting minutes that we were not prepared and that we did not share the same level of commitment to the project as Legacy did. This bothered me, and I responded with a lengthy description of the huge amount of work we needed to do to have anything ready to even look at. After a retraction in the minutes and apologies and handshakes all around, all was well, I got over the misunderstanding, and we were all on the same page. In my mind, it was a rough start, but it all smoothed out; and the relationship that started there became a rich and wonderful experience.

With this change of focus, our efforts were directed elsewhere. We dropped the research work and started in earnest on the design and documentation for the reconstruction. We agreed with the contractor to prepare multiple bid packages for a "fast-track" construction project, which means that we prepare drawings and specifications for only a portion of the work and then, while the contractor bids and starts that work, we prepare additional information and have it ready in time for the contractor to bid and build that work, uninterrupted and in a natural, logical sequence. The process requires early decisions and "first things first." We initially mapped out seven of these phases and, in the end, to hurry things along, split some of them out with subsets and finished with ten. We started with excavation and early footing and foundation work, then concrete and waterproofing, then the exterior stone-font structure, tower, mechanical and electrical systems, and then everything else. It was amazing that it all worked. It was a tribute to the commitment and professionalism of the entire team (architects, engineers, Church management team, service missionaries, and the contractor and subcontractors) for how smoothly it all went.

When President Hinckley announced the temple, he mentioned that the architects had already begun their work. What he meant by this statement was a reference to the site plan and preliminary floor plans for inside the temple. The original concept was to fit the latest-generation small temple into the shell of the historic Nauvoo Temple. We started with these plans and continued to develop, revise, and refine the original scheme. During the entire time we were working with Bob Dewey on the floor-plan issues, we met with Bruce Finlinson and Lawrence Wyse, the Church's interior designers, on interior issues. There was much to talk about, such as materials and their appropriate uses, the use of moldings and trim, stain on the woodwork, placement of furniture and electrical outlets, the placement of art work, the design of the lighting and the "historic" light fixtures, the stained glass, the flooring, and carpets. We worked to be involved in as many interior decisions as we could, especially the finishes that would be built into the building, such as tile, stone counter tops, thresholds, flooring, door hardware, and millwork. Bruce and Lawrence were good about letting us take the lead in some of these issues, and they were kind enough to share with us their work on the interior design issues of furniture, fabrics, carpets, and artwork. It was a huge task that required a series of weekly meetings to get everything worked out right and to have as much as possible decided when it was time for the bidding and construction documents. This was a real collaborative effort among the designers and our team and was a great experience because these great men were so knowledgeable and, at times, zany (said with respect, of course).

One of the things we hoped for and worked for was the idea of having the architecture of the building reinforce and support the concepts taught by the temple. The temple teaches of eternal progression and the changing state of people and of the earth itself. Through the story of Adam and Eve, patrons learn about the dealings of God with His children-that we change from state to state as we progress along our journey back to His presence. I believe that the architecture of the modern temples can help teach that lesson just like the builders of the gothic cathedrals during the middle ages tried to teach about God by building soaring cathedrals. The temple architecture can teach this by having the patron move from room to room, with the rooms representing the different states of human progression. The murals on the walls represent these states beautifully, and we built into the architecture the notion of progression. Several features within the spaces change and become more developed and more decorative as a person advances from room to room. The detail of the panels on the doors and of the trim around the doors changes and is more developed. The decoration of the light fixtures advances from room to room; the moldings, trim, and paneling change; and the ceiling height increases. This sequence of things starts in the support spaces and progresses through the baptistry, the four ordinance rooms, the room with the veil, and the celestial room and ends in the sealing rooms.

A specific challenge we had was finishing out the interior spaces appropriately. The drawings by William Weeks had some information about interior detailing—but certainly not enough to show the many details necessary to finish the entire building. Included were some molding profiles, a window profile, window and door casing (trim) details, and a drawing of what we believe to be the interior entablature (above the columns) for the meeting room. Another interesting drawing was of a sunstone capital for the door and window trim that shows the sun with its eyes peeking just above some stylized leaves. (Remember, the exterior sunstones have the nose and mouth all above the clouds.) We called this sunstone the "peek-a-boo sunstone." Adding to the challenge was the fact that the interior spaces of the new temple are completely different from the historic temple.

Steve Goodwin and I went to Kirtland, Ohio, to see the Mormon temple there. We met with Elwin Robinson, who published a book about the Kirtland Temple,<sup>10</sup> and a very kind missionary from the Community of Christ (formerly RLDS) Church. Unfortunately, Lachlan Mackay, the temple curator, was out of town the day we were there, but Elwin gave us a very thorough tour. We had read his book and knew, or presumed we knew, that many of the same craftsmen would have worked on both the Kirtland and Nauvoo temples. We presumed the same with the St. George Temple. While in Kirtland, we spent time measuring and sketching several details of moldings, trim, and pulpits to get to know and understand the Greek revival detailing. We also studied the restored homes, the Seventies Hall in Nauvoo, and every other source we could find for period wood detailing. Steve Goodwin went to St. George and spent quite some time studying the details there.

A guiding principle for our work was simply, "What would they have done?" That is, if the Saints who built the original building had built the building we were building, with all the interior rooms in this configuration, what would they have done? How would they have trimmed the doors, windows. wall base, and paneling? With all this background information, we set out a sequence of moldings that graduated from room to room. We studied the door and window trim to make sure they were deep enough to receive the ever-increasing



Photograph showing the limestone "veneer" panels being attached to the steel frame, August 2001. The finished stone sections were first attached to steel frames, then the frames were attached in sections to the concrete shell. Photograph courtesy of Roger P. Jackson.

depth of the wall base and wainscot paneling. The intent was to make it appear seamless as it graduates toward the extreme expression in the sealing rooms. This work was worked over and adjusted by Tim Maxwell with refinements learned from his years in Nauvoo and from his subsequent work on pioneer-era buildings.

In the middle of all this design work, Bob Dewey retired, and Vern Hancock joined the team as the new project manager from the Church's Temple Construction Department. I know it was a huge challenge for Vern to step in and try to direct this project that was already underway, but he did a very fine job. That is the only way I can think to describe it. Vern was always respectful of Bob's decisions and directions, but I know there were things Vern would have done differently if he had been involved from the start. These were stressful times because the contractor was well under way and because we had the ongoing construction issues to deal with, along with the pressing new design issues that needed to be resolved.

We were somewhat out of the loop on the decision of the stone. We knew of the options that had been determined, but the decision process was principally in the hands of the Church. Keith McKay had been called as one of the service missionaries to assist with the development of the stone for the building, and he and Ron Prince, project manager and lead service missionary, had been driving all over the country looking at different stone, quarries, carvers, and fabricators. I went on one of these trips to Wisconsin to visit a potential fabricator and their quarry. The stone finally selected was from Russellville, Alabama, and is called "A-Day." It is somewhat similar to the historic stone but with a few differences. It has a smaller, tighter grain. It is grey but more on the creamy side, and it has a more pronounced veining. It is not quite as strong as the historic stone (there were extensive tests done on all the different stones being considered), but it carves beautifully. Some of the harder stones considered would not have carved as gracefully as this A-Day stone.

## The Construction Process

I can describe the construction process only as a wild ride. The groundbreaking ceremonies are usually purely ceremonial. The date was 24 October 1999, and it was a beautiful day. The actual work started in December of that year and continued rapidly to the very end. The setting of the cornerstones on 5 November 2000 was another symbolic event but was a very good experience. It was great to see so many people gathered to witness this historic event. All the building stones in the extreme corners of the building were dedicated in turn by general and local Church leaders. Even with all the hoopla of the event, it was a very spiritual time for me.

We learned early on that there was a groundwater problem on the temple site. On the flight home from the groundbreaking, I did a series of sketches showing a "belt and suspenders" design for the waterproofing under the building. It was similar to the design we did for the Vernal Temple—and even a bit more complex. We had a waterproofing membrane and a secondary drain to catch whatever water might, in spite of our best efforts, make it through. I joked that water in the building is the unpardonable sin. Barry Becker in our office developed the details and was involved in the construction, making several trips to Nauvoo to watch over this important work. Interestingly, a year or so before President Hinckley's announcement, Barry had received an impression that the Nauvoo Temple would be rebuilt and that he and FFKR would be involved in the reconstruction.

While construction was going on in Nauvoo, we were still working feverishly in Salt Lake City on finishing the design. This was a very stressful time because we were needed in two places. Steve Goodwin was traveling to Nauvoo every other week for three or four days at a time, and his traveling was taking a toll on him and his family. We needed to send Steve to Nauvoo to live and be there, but he was still a big part of the work in Salt Lake City. In the meantime, I was traveling every two or three weeks to visit the various stone carvers and the quarry in Alabama. After we got the last bid package out, it took about six months to compile all the drawings from the different bid packages into a single, combination set of drawings. We could finally let Steve move to Nauvoo. I felt envious of Steve and his family moving back there, but there was no way it would have worked for me to go. I was needed in Salt Lake City to tend this end and other duties in our office, and Steve was perfect for the job. He and his wife Jenny are wonderful people and are absolute Saints. I can see that being in Nauvoo, though it was difficult at times, was a great blessing for them.

While Steve was in Nauvoo, we usually had weekly conference calls along with Tim Maxwell and Richard Baxter. Steve had set up the project information on the FFKR office network so we could all have access to the information rather than keep everything in a binder on someone's desk. We would review the project status logs, discuss pressing issues, and try to give a final direction and resolve outstanding issues. We tried to support Steve as much as we could, but I know there were times when he felt abandoned and ignored out there all by himself. This was an ongoing source of frustration with Vern Hancock from the Church, and it was resolved only when we started sending Richard Baxter out once a month to be there to help Steve.

I visited the site once a month or so. My visits were helpful to Steve, if only to show him support and my appreciation for his huge efforts, but I was not much help in terms of getting any actual work done. I would visit with him, and we would walk throughout the temple project, looking at absolutely everything we could see. I would help him resolve troubling issues and answer questions. We would then walk through the project with Ron Prince (the Church's on-site project manager) and Gale Mair (Legacy's project manager). Steve and I would go to lunch, and often I would take him and his family out to dinner. There were many times when I would be a guest in their home for a home-cooked dinner. These were great times for me that resulted in outcomes I will always remember with fondness.

I had some wonderful experiences on my visits. One day in early February 2002, while on my way back to St. Louis, I had some extra time and decided to walk all the way down Parley Street to the Mississippi River. I parked my rental car at the Seventies Hall and started walking west. I was



Worker at the Rainier Davido factory in New Castle, Pennsylvania, carving one of the thirty sunstones for the new Nauvoo Temple, August 2000. Photograph courtesy of Roger P. Jackson.

wearing some lightweight hiking boots, khaki pants, a sweater over a longsleeved shirt, a fleece-lined parka with a hood, polarized sunglasses, and heavy ski gloves. I was freezing! The radio had reported that the weather was about 10 degrees Fahrenheit, and the wind was blowing strong. It was very cold, and I was grumbling about this little trek I had talked myself into doing. As I walked along the road and read the words of the pioneers who had walked that trail long ago in the same kind of weather, I could not help but think about their sufferings. I was not pulling a handcart or carrying a baby, nor was I wrapped in a hand-knit shawl. I was not hungry or wearing handmade shoes, and I was not leaving my home and the temple that I had probably helped to build. I came to realize how truly blessed I am and how much of a whiner I can be. I learned a little bit about the early Saints' struggles that I probably had taken for granted.

## Importance of Nauvoo

I have wondered at times about why rebuilding the Nauvoo Temple became so important to the Church and caught the imagination of the entire membership. The temple seems even to have caught President Hinckley by surprise. At the October 1999 groundbreaking, six months after the announcement, he said, "I announced that we would rebuild the Nauvoo Temple. And I have never seen anything that has elicited more excitement than this announcement."<sup>11</sup> I think there are several factors involved. The original Nauvoo Temple, even though long gone, is part of our Church history and culture, and we are continually reminded about it. On any previous comprehensive list of the temples, it was always listed with an asterisk and a note that it was gone and had been destroyed. Over the years, a fuzzy, old daguerreotype image of it has appeared in the *Ensign* magazine, usually on the inside of the back cover. How many of us, like me, have some family history traced back through the Nauvoo Temple? As we learned about our family history, we were proud of our ancestors who worked on this grand building because we knew how much it meant to the Church and what it meant that it had been lost.

I especially appreciate the following quotations because they tell the story of losing the temple and explain the sadness felt by the Church because of the loss:

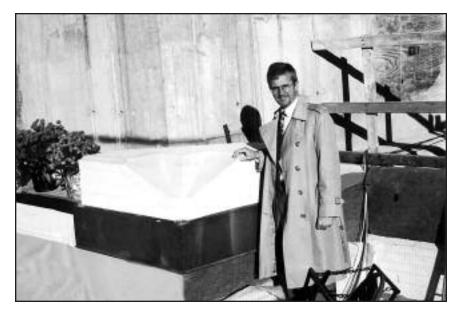
Though the walls of the Temple are still standing, yet they are much cracked, especially the east one; and not a vestige of the once beautiful font remains. There has been nothing done to rebuild it, except clearing away some rubbish, and it is highly probable that there will never be anything more done. The Temple is enclosed with a rude fence, and is used as a sheep-fold and a cow pen.<sup>12</sup>

It may be remarked that the southwestern corner of the temple stood as a magnificent ruin until 1865 or 6—a sightly landmark for many miles around. The ruin, when we saw it in February, 1864, was said to be eighty feet high. It was torn down a year or two later for the stone in it. And the ground where the temple stood was converted into a vineyard.<sup>13</sup>

We visited the site where once stood the beautiful temple. Of the stately structure not one stone was left standing upon another. The pollution of man has done its work, and melancholy and decay now abide amidst the scattered fragments.<sup>14</sup>

Another reason this building has caught the imagination of the Church is the lesson from Luke 15 about something being lost and then found. When people lose something of significance, they go looking for it; they light a candle and sweep the house and seek it diligently (see vs. 5, 8). When they find it, whether it's the lost sheep, a piece of silver, the wayward son, or, in our case, the Nauvoo Temple, they call together their friends and say, "Rejoice with me" (vs. 6, 9) because that which was lost is found.

I suppose an indication of the cultural significance of the temple can be measured by the amount of "paraphernalia" that has surfaced with a Nauvoo Temple theme—all available for purchase, I am afraid. There are books



Roger Jackson at the southeast cornerstone, 5 November 2000. On this date, a cornerstone ceremony was conducted and presided over by LDS Church President Gordon B. Hinckley at each of the four corners of the building. Photograph courtesy of Roger P. Jackson.

(some good, some not), prints, photos, videos (some, like Lee Groberg's Sacred Stone, which is very good and which was supported by the Church), all kinds of trinkets, jewelry, neckties, scarfs, tee-shirts, hats, sweatshirts, belt buckles, statues, and almost everything and anything a person can think of. I have not seen one yet, but I am sure there will soon be a snow-globe of the Nauvoo Temple. I even gave in and bought a little one-inch-tall pewter miniature of the temple, which is very nicely done. All this "stuff" (most of it junk, really) is an indication of the meaning the temple has to the culture of the Church. Some people have even been trying to sell copies of the construction documents (the drawings the building was built from) on the Internet. We contacted one seller and informed him that the Church holds the copyright, and he withdrew the offer. But other sales have gone through, I am sure. (One might guess that the Church legal folks do not think this is too clever.) On the other hand, there have been many speeches and lessons, Primary activities, firesides, and Relief Society enrichment lessons about the temple. All these activities are simply meant to demonstrate that there is a tremendous interest in the Nauvoo Temple and in the Illinois period of our early history.

#### Dedication, 27 June 2002

We were able to attend the dedication together as a family—at least those in our family who were older than eight years. The tickets available to us were for the third session at 11 A.M. on Friday, 28 June 2002. We arrived in Nauvoo the evening before as the first session was underway. We drove around the temple and were surprised to see all the people just milling about. There were individuals, families, and groups. Some people were clutching their scriptures, and some were obviously very moved by the Spirit. Some groups were singing hymns, and some were sitting quietly and praying. It was a time of rich spiritual feeling. My mind was drawn to the stories of the Kirtland Temple dedication where people saw, and reported, flames rising from the roof of the building. I was singing in my mind the words to the hymn, The Spirit of God Like a Fire Is Burning, and I admit looking occasionally at the building, fully expecting to see something. I never saw anything miraculous, but the Spirit was very strong; and I am sure there were many spiritual manifestations during the dedication. It was also a time of great emotion for me to be able to see the temple complete and to see so many people deeply moved by the building. It is very beautiful-better than I imagined; and I am happy to see people enjoying it and using it.

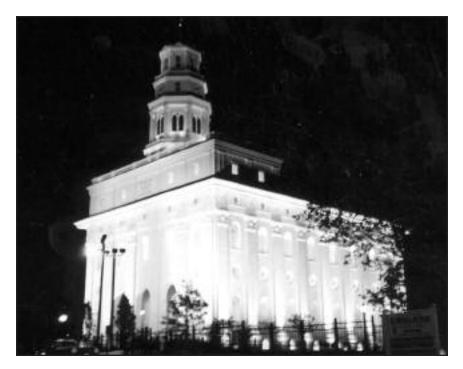
The dedication session was an absolutely fantastic experience. It was a great blessing for us to be there and to be a part of it. I was overcome with emotions for most of the time and saw that nearly everyone around me was struggling in that respect also. I know my children, Katie, who was thirteen, and Steven, who was eleven, were also touched, but I have never been able to get them to talk about it much. A month later, Katie had the opportunity to speak in sacrament meeting. She shared her feelings about the dedication and her experiences there, and I was amazed by the depth of her understanding and feelings that day. During the session, it was good for me to see the General Authorities so deeply moved as they spoke and participated in the session. When we see them in general conference, their speaking style is deliberate and rehearsed, so little emotion is ever shown. But at the dedication, to see them openly weeping and to see them searching for words and struggling to sing the hymns meant a great deal to me. One of my most enduring memories of the dedication was while singing The Spirit of God Like a Fire Is Burning. I was struggling to sing because of my emotions. I looked up at the stand and watched Elders Russell M. Nelson and Neal A. Maxwell sing, "We'll sing and we'll shout with the armies of heaven," at full voice. I was so choked with emotion I could only squeak and move my mouth with the words. It was a very wonderful experience.

The day we attended the dedication, 28 June, was also my son Blake's eighth birthday. (I was not smart enough to arrange for him to be baptized in Nauvoo that morning so he could attend the session with us, so we had to hurry home.) After the session was over, we took a few photos, changed our clothes, and left town. We flew home that evening and baptized Blake the next day. We had a very nice service with him as the only candidate. Following his baptism, we could now take him to one of the satellite dedication broadcasts the following day. He was so good. Of course we arrived early as instructed, and the session went the usual length; so it was quite a bit of sitting for an eight-year-old boy. He said he enjoyed it, but it was difficult for me to "read" him. Still high on emotions from the earlier dedication and from Blake's baptism, I had another wonderful emotional and spiritual experience.

I have thought about the dedicatory events since then, and a friend mentioned something that helped me clarify my thoughts. I was so struck with the emotions and the spiritual experiences of the leaders, and I had a rich and powerful experience myself-never to be forgotten. I have no doubt that many people enjoyed some very sacred experiences—and perhaps even heavenly manifestations. I have wondered if this kind of rich outpouring of the Spirit (as with the day of Pentecost) was not one of the reasons the temple was rebuilt in the first place. I believe that, in time, we will learn of many sacred spiritual manifestations experienced at the dedication. As I sat there with my young son, who was barely eight years old, I wondered again about the relative experiences we were having. He has always been sensitive and quite tenderhearted; and, for all I know, he was one who was having the heavens opened to him. I came to more fully understand that whether a person is an Apostle, a typical adult Latter-day Saint, or an eight-year-old member who had just received the gift of the Holy Ghost twenty-four hours earlier, the Spirit can speak to individuals and touch their hearts.

## Conclusion

Working on the Nauvoo Temple has been a singular, once-in-a-thousand-lifetimes opportunity. I am deeply grateful for the blessing it has been to be part of rebuilding *His* house that means so much to so many people. I am appreciative to Bob Dewey and Keith Stepan for trusting me and our firm with designing this building. I do not know who else might have been part of that decision or how far up the chain of command that decision went, but I am grateful to whoever it was who gave the approval. Special credit should be given to everyone who worked so hard to make it happen, especially Steve Goodwin, Tim Maxwell, and the others from FFKR. I freely acknowledge that I have been blessed beyond my worthiness and abilities.



Nauvoo Temple at night, September 2002. Photograph by Maurine C. Ward

#### Notes

1. Gordon B. Hinckley, Official Report of the One Hundred Sixty-ninth Annual General Conference of The Church of Jesus Christ of Latter-day Saints (Salt Lake City: The Church of Jesus Christ of Latter-day Saints, 1999), 117.

2. The image is reproduced in Don F. Colvin, *Nauvoo Temple:* A Story of Faith (American Fork, Utah: Covenant Communications, 2002), 265.

3. The logbook is an account or ledger book located in the LDS Church Archives, Family and Church History Department, The Church of Jesus Christ of Latter-day Saints, Salt Lake City, Utah (hereafter cited as LDS Church Archives). The book was kept by the temple building committee. It lists the names of the workers down the left side and shows the days and dates across the top. Each cell lists the hours worked on that day by each of the men. Every seventh day (Sunday) was blank. The quote appears on several of the blank "Sunday" pages. The transcription was made by Gerald (Tim) P. Maxwell.

4. New York Messenger (New York, New York), 30 August 1845.

5. New York Messenger (New York, New York), 30 August 1845.

6. John Mills Woolley, Journal, 3, transcribed by Richard Woolley Jackson, copy in author's possession.

7. Woolley, Journal, 6.

8. Woolley, Journal, 22.

9. As cited in "Chronicling the Journey to Zion," Ensign 30, no. 7 (July 2000): 36.

10. Elwin C. Robison, The First Mormon Temple: Design, Construction, and Historic Context of the Kirtland Temple (Provo, Utah: Brigham Young University Press, 1997).

11. "President Hinckley and the Nauvoo Temple," Ensign 32, no. 7 (July 2002): 24.

12. John M. Bernhisel to Brigham Young, Journal History of the Church, 10 September 1849, LDS Church Archives.

13. J. M. Davidson reminiscence in the Carthage Republican, as cited in E. Cecil McGavin, *The Nauvoo Temple* (Salt Lake City: Deseret Book, 1962), 95. McGavin gives the date the report appeared in the Carthage Republican as 25 February 1864. However, this date appears to be an error.

14. Franklin D. Richards, "A Tour of Historic Scenes," The Contributor 7, no. 8 (May 1886): 300.