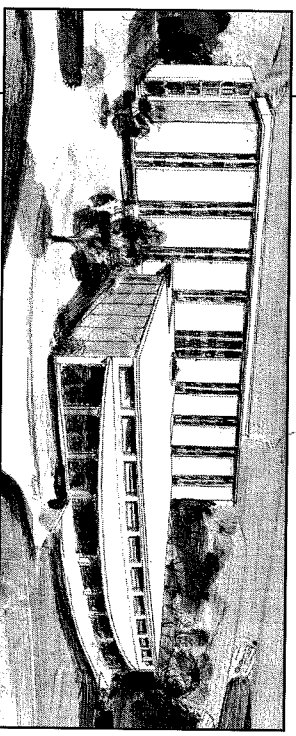
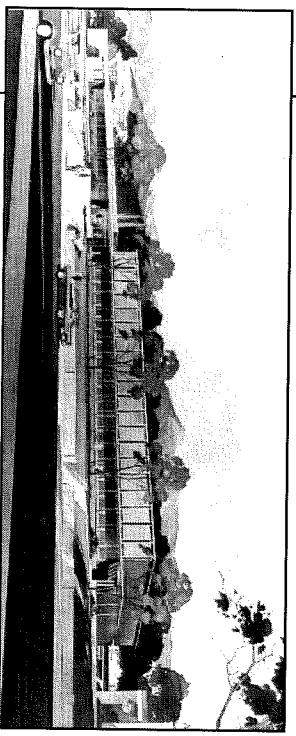


Modernism on Campus



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University of Utah Architecture

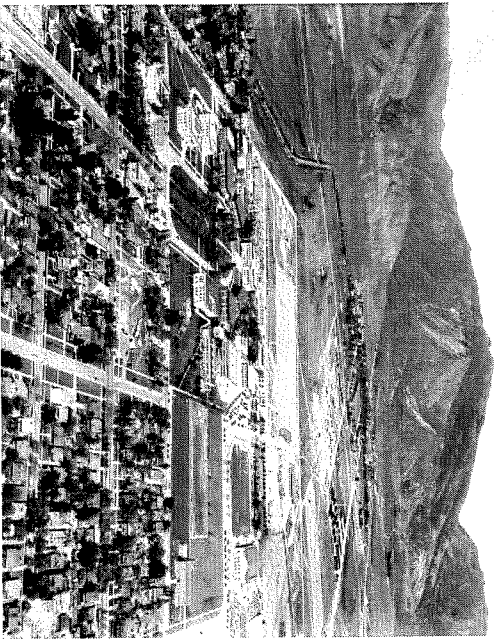
1945–1975

A Walking Tour

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March 2015

A New Era for University Architecture



University of Utah circa 1940

The end of World War II brought with it exponential growth in the student body of the University of Utah. In 1945, enrollment stood at just under 3,700 students. By 1950, it had more than doubled. And by 1970, it more than would double again.

All these new students, as well as dramatic changes in technology driven by the war effort, created an urgent demand for new classrooms, new labs, and new offices. Compounding the simple demand for more space was the fact that the university was operating on essentially two different campuses. The first centered on Presidents Circle, the historic core of the school. The second, a grouping of surplus military buildings, was located east of what is now the Huntsman Center, nearly a mile away.

What was called for was an integrated new campus that provided modern facilities for the school's rapidly expanding population. In response, President Ray Olpin pushed an aggressive initiative through which nearly 90 buildings would be planned, designed, and constructed between 1945 and 1975.

The task was daunting. Perhaps the greatest challenge was obtaining financing. Utah's legislature, reluctant to incur debt, refused to bond, practicing instead a "pay-as-you-go" policy. This approach, while fiscally sound, also imposed significant constraints. The university struggled to balance limited funding with the urgent demands of various departments,

each of which had its own compelling justification for a new building. (In 1964, the College of Engineering published its own brochure calling for completion of the new Engineering Center.)

In order to meet these pressures, the university adopted the practice of constructing buildings in phases. While this approach allowed various projects to proceed simultaneously, it also meant that completing a given building could be a drawn-out process. Orson Spencer Hall, for example, took fifteen years to complete. In spite of the brochure, Phase IV of the Engineering Center, a six-story classroom building, was never even started; the planned-for funds didn't materialize.

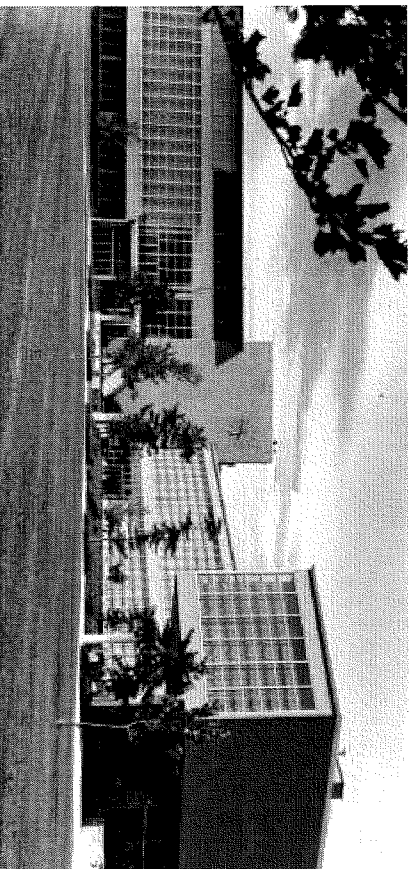
All these new buildings had to go somewhere. Through a series of land acquisitions following World War II, primarily in what was then Fort Douglas, the main campus expanded by leaps and bounds. The challenge for university planners and architects lay in ensuring that the sum of the various parts – old and new – was a coherent whole.

That challenge was intensified by the fact that the private-sector architects commissioned to draft plans for the university's post-war buildings were some of Utah's most creative and innovative designers. Their concepts reflected the Modernist architectural ideas emerging on America's campuses in the post-war years. Those designs were diverse, ranging from an all-concrete high rise to a sleek aluminum-and-glass cube to not one but two circular lecture halls.

The planning of this diversified new campus sought to balance the individuality and modernism of its new buildings with the sense of place and tradition that already existed. In part, this balance was achieved through the extensive use of "campus brick" to create a unifying effect through a common material. But planners and architects also focused on a given building's physical context and on how it would relate to the buildings around it and to the campus as a whole, including the various malls and plazas. The result was a diverse yet coherent collection of buildings that tell the story of an unparalleled period of growth for the university.

This tour provides a glimpse of some of those buildings located in and near what university planners came to call the "campus core." While other areas (namely, the Medical Center and University Village) would also see great growth, this area remained the center of university life and of its architectural diversity.

A. Ray Olpin Student Union



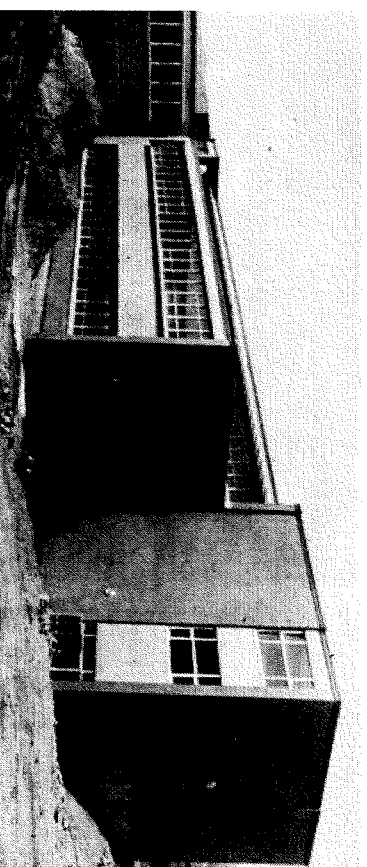
If the new library was to be the university's academic center, then the student union would be the center of campus life. This fact was recognized, not surprisingly, by the students themselves. Immediately following the close of World War II, they lobbied for a new building to replace the original union constructed in 1927, even voting to raise their own fees to help finance its design and construction.

Designed by Fred Markham and dedicated in 1957, the massive structure (its 149,000 square feet enclosed nearly 1.8 million cubic feet) was sited and configured to frame the new campus core extending to the south and west while creating a connection to the area of campus expanding to the north and east. The configuration, cubes of various sizes and shapes, was a harbinger of new Modernist architectural ideas for the university.

Working from the premise that "the greatest scholastic activity is carried on through the cooler months of the year," Markham faced the entire south and west-facing sides with glass, "providing a maximum of light from natural sources and opening vistas to the surrounding mountains." In 1967, the Union Building was expanded with an extension of the east-west wing to the west and a second addition on the northeast corner.

Markham's original concept for the Union included a plaza to the southwest out of which emerged a tall carillon. The idea, however, was not necessarily Markham's: "We are hopeful," a university planning document of the time had stated, "that someday a high-rise element visible from the entire City, such as a campanile, will be constructed near the library as a symbol of higher education."

Orson Spencer Hall



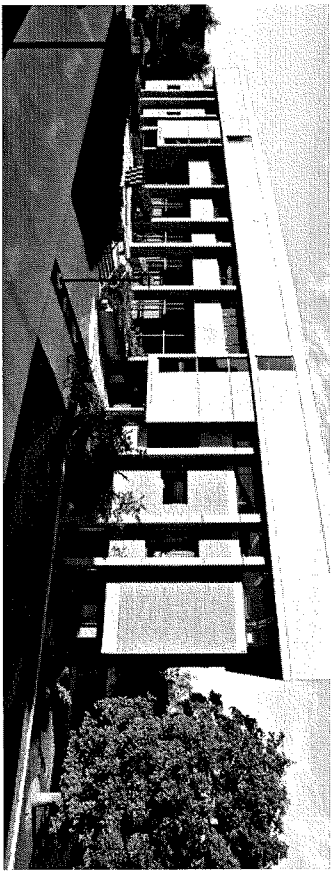
Unlike so many other post-war buildings on campus, whose design revolved around research, Orson Spencer Hall ("OSH" as it is affectionately called), was conceived, designed, and constructed exclusively as a classroom building. Actually, OSH was, in effect, three separate buildings, three east-west wings tied together by a common north-south structure.

OSH grew from north to south, with the first two phases, the north and center wings, constructed in relatively short order from 1954 to 1957. Together, they contained 60 classrooms, an auditorium, and faculty offices. It would be more than ten years, however, before Phase III, the south wing, would be added.

Designed by Dean Gustavson & Associates of Salt Lake City, Orson Spencer Hall reflected the firm's Modernist bent with its geometric form, long bands of aluminum-framed, and stylized metal louvers. Yet it was strikingly different from Gustavson's other campus building, Merrill Engineering. The relatively reserved appearance of Orson Spencer Hall may have been based on its central location. Adjacent as it was to the sites of the proposed student union and library, it was a key building in the minds of campus planners and architects who were fully aware that its appearance would significantly affect the area that was to become the heart of campus. With this significance in mind, OSH was designed in understated Modernist fashion.

By the time that the last (south) wing was constructed in 1969, ideas about its design had changed. Discussions revolved around whether it should be "symmetrical" (cutting into the existing building) or "asymmetrical" (compromising its visual balance with Marriott Library). Symmetry won out. Those discussions also revolved around how open or "walled" the new wing should be. Open it was, with floor-to-ceiling windows on the ground level.

Art & Architecture Center



The Art and Architecture Center, completed in 1971 was considered an integral element in a grouping of buildings that included the Behavioral Sciences Building to the west and the Marriott Library to the north. The architects, Edwards and Daniels of Salt Lake City, reinforced the relationships within the group by aligning the complex with the central axis of the library.

Yet the architects also sought to establish a distinct identity for the complex. To this end, they adopted a low, modular configuration that created a clear visual contrast with the other two buildings. The modules within the complex – four different structures with four different functions – were connected by “bridges,” with Fine Arts in the east module, Architecture in the west, Sculpture in the south, and the Fine Arts Museum in the north. The modular concept extended to the interior of the Fine Arts and Architecture “wings,” which were described in a university brochure as “a complex of interlocking forms and spaces that create an intimate and human atmosphere which nurtures creativity.”

A courtyard between the Fine Arts and Architecture modules created a vista, a clear line of sight that extended from the central axis of the Library through the complex and out to the south. But the courtyard also served an important function: to ensure that the studios within were bathed in natural light.

Visually, the complex displays the Modernist concept of abstraction. Certain elements (for example, the concrete columns on the east and west facades) are repeated, establishing a sense of regularity. But other elements, such as windows, appear irregularly, creating a contrasting sense of abstraction.

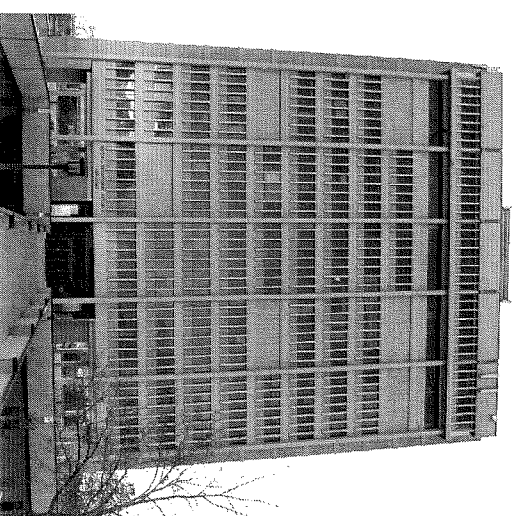
Behavioral Sciences Building

During the 1960s, high-rise buildings were becoming fashionable on college campuses across the country. Even more fashionable were ones constructed of concrete. One University of Utah planning memo noted that “concrete is a material of strong design influence in present period.” Not surprisingly, the university chose in the late 1960s to construct its own concrete high-rise, inspired by examples at Harvard, MIT, and even the Salk Institute.

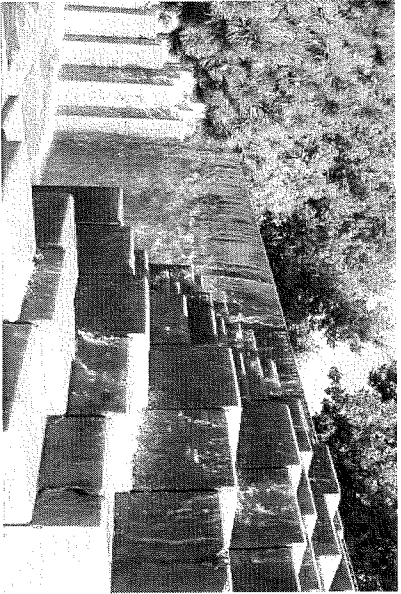
However, the building’s size was not merely a response to architectural trends. The new structure had to house three departments (Psychology, Sociology, and Speech Pathology and Audiology) that had previously functioned out of different buildings.

Faced with the limitations of the site – squeezed between Marriott Library to the north and the Art and Architecture Center to the south – going vertical was really the only option for creating the requisite space available to the architects, Panushka and Peterson of Salt Lake City. The fact that a tall, concrete building happened to be trendy was an added bonus.

The Behavioral Sciences Building’s uniqueness lies not just in its size. To this day, over forty years after its completion in 1971, it is the one of a small number of all-concrete buildings on campus. During the design process, planners and architects considered using cast stone or campus brick as infill materials for the solid panels between the windows, but ultimately decided that concrete was best suited to “the character of the design.” Nevertheless, campus brick was used on the first story to better integrate the building with others on campus. In order to diminish the building’s monolithic presence, Panushka and Peterson adopted irregular window patterns that suggested the same concepts of abstraction present in the Art and Architecture Center’s facades.



Library Plaza & Fountain



Of all the open spaces on campus, the Library Plaza, extending east from Marriott Library, was considered perhaps the most important, because it defined the heart of the campus. At the time, the new library was considered by all parties (architects, planners, University administrators, et al) to be the most significant building on campus.

Important as it may have been, however, Library Plaza itself wanted a defining element. So in 1968 architect Boyd Blackner of Salt Lake City (whose interest had expanded from designing buildings to designing fountains) was commissioned to design a fountain to be installed on the plaza's east side. According to the university's consulting architects, the fountain could "add a large measure of strength and repose" to the area between the Library and Orson Spencer Hall, thereby unifying the two buildings "into a single strong composition."

Blackner's design evoked, as he put it, "water over boulders," the concept of streams cascading from the canyons into the valley. Initially, Blackner had proposed a composition of natural rock, but the Board of Regents and (more to the point) the fountain's funder, O.C. Tanner, expressed a desire for "something more sophisticated, urbane, and serene, something clearly man made and ordered." The result was a bolder, abstracted set of shapes.

For Blackner, the fountain's impact had to be more than simply visual. It had to engage passersby. "A spectator fountain," he told *The Salt Lake Tribune*, "didn't catch the spirit of the '60s, the new spirit of involvement." So Blackner incorporated an "island" that would draw students "into the center surrounded by the sounds and sights of great volumes of moving water."

Plazas and Malls

In the years following World War II, a rapidly growing University of Utah acquired large swaths of land, especially to the east. While these purchases may have provided the requisite space for the school's expansion, they hardly represented a campus in the true sense of the word. For the university's planners and architects the challenge was to bring some definition to this blank canvas to ensure that, as the university grew and evolved, its central campus maintained a clear identity and coherence.

An integral element of this "canvas," the open areas on campus, were viewed not simply as blank spaces – places unoccupied by buildings but otherwise without function or meaning – but as spaces that provided as much definition to the campus as did its buildings. Various campus master plans referred to them as "malls" and "plazas."

The malls facilitated movement – students and faculty walking to another building or to another part of campus. Not surprising, since in some cases they were, for many years, through streets. The malls also served an important visual function by defining long views or vistas across campus. One mall was even dubbed "Vista Avenue." But for planners their most important function was as "axes," "lines of reference for determining how the campus should grow.

By contrast, the plazas were collection areas near and around buildings that accommodated the flow of students and faculty in and out of those buildings. In most cases, the plazas were integral to the design of individual buildings. So it is that the Behavioral Sciences Building rose out of a large plaza and a breezeway opened beneath the Fletcher Physics Building. In some cases, however, the plazas were intended to serve as gathering places for impromptu social or academic interactions. Prominent among these were the plaza tucked in among the Art and Architecture Center, the Behavioral Sciences Building, and Marriott Library and the plaza east of the Marriott Library.



Biology Building



The construction of the Biology Building in 1966 was something of a godsend for members of the Biology Department. According to the university's business vice president Paul Hodson, the department had been "dismembered among twenty-one buildings, fifteen of them former barracks and five of them former latrines." "From lavatory to laboratory" was the wry slogan during those days," Hodson recalled.

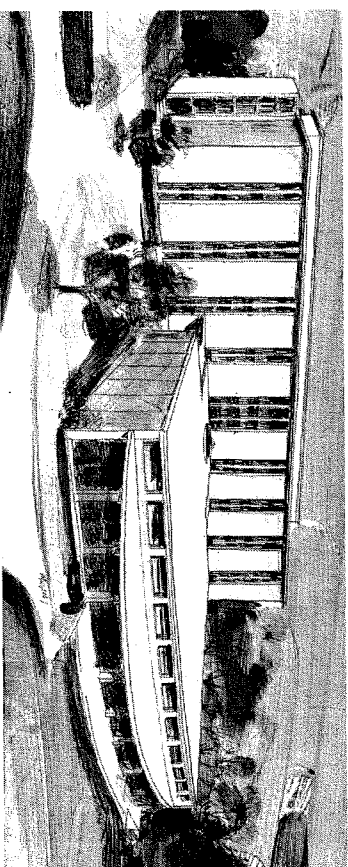
Perhaps no other academic building more clearly manifested the university's post-war commitment to research than this one. Its 119,000 square feet contained over 100 labs, 23 temperature-control rooms, and even several "animal rooms" but only four conference and seminar rooms. Almost an afterthought, classes were held in the nearby Life Sciences Building.

The Biology Building was designed by William F. Thomas of Salt Lake City exclusively to facilitate research. Its central utility core allowed for flexibility in reconfiguring laboratory space, while labs ringed the perimeter and the roof served as a yard for experimental greenhouses.

The latter fact explains the building's most distinctive feature: the large concrete panels that enclosed its roof. Their sole purpose was to screen the greenhouses and the building's mechanical systems. Architects consulting on the design insisted that the panels have "a definite structural character."

The Biology Building's other notable feature was a balcony that wrapped around the first floor. While it offered outside space for contemplation, its more subtle function was to reinforce the building's horizontal lines to contrast with the vertical lines of the Eyring Chemistry Building just to the south.

Henry Eyring Chemistry Building

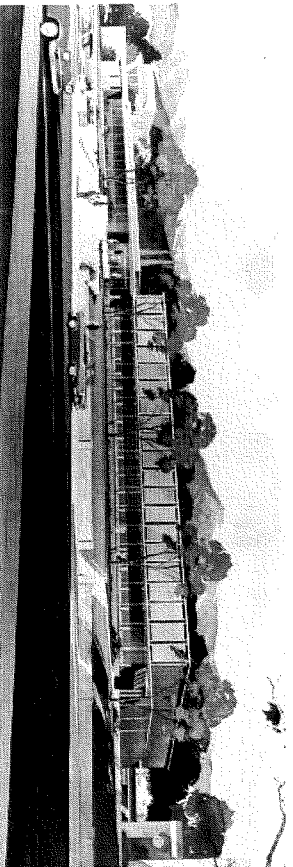


Standing in distinct contrast to the Biology Building, the Eyring Chemistry building rose at the same time. As university planners assessed how to consolidate the activities of the Chemistry Department from the nineteen buildings that it had occupied following World War II, they even briefly considered incorporating them in a fourteen-story structure that would have stood next to a "companion" high rise for the Physics Department. The idea was rejected on the basis that "shoehorning two such units into that restricted area would be most difficult, as well as visually unpleasant."

Nevertheless, the need was there for a structure that would provide equivalent space. The solution generated by Fetzler and Fetzler Architects of Provo was not one but two buildings, separated by a plaza and connected by an "open lobby." While the first building was completed in 1967, the second would not be constructed for nearly twenty years. As with the Biology Building, the Chemistry Building contained a mechanical core with labs, offices, and classrooms arranged around the perimeter of the building.

The Chemistry Building's contrast with the Biology Building was fully intentional. Designed and constructed simultaneously, the two buildings (described by one trade publication as "sister" buildings) were meant to visually differentiate from one another while at the same time integrating through shared space. While the Biology Building's design stressed horizontality, the Chemistry Building's design stressed verticality. The circular lecture hall and plaza between the two buildings represented neutral space that was visually distinct from either one, serving instead to integrate them.

College of Law



Of all the urgent arguments for constructing a new building (and each department seemed to offer its own), perhaps none was more pressing than that offered by the College of Law in 1958. The American Bar Association had threatened to terminate its accreditation, noting that "it is an understatement of fact to say that the plant facilities of the subject school are grossly inadequate – they are the most inadequate of any state related law school in America."

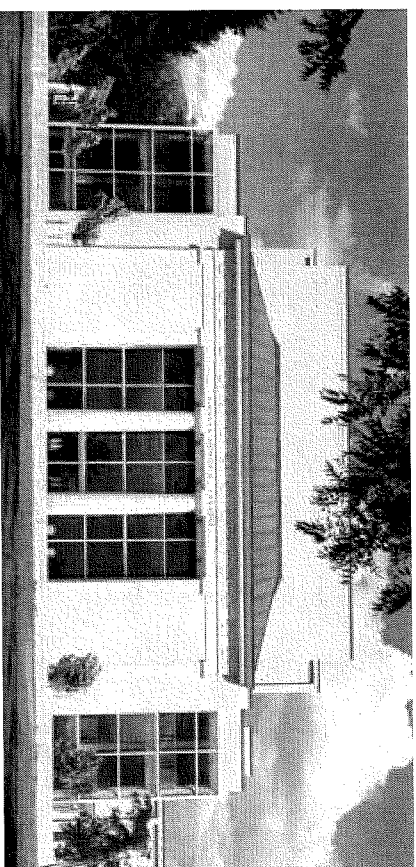
Those "plant facilities" happened at that time to be located in the venerable Park Building at the top of President's Circle, a building shared by a number of university departments. The firm of Young and Fowler of Salt Lake City was promptly commissioned to assess various options, including remodeling Carlson Hall, a former women's dormitory at very southwest corner of the campus, to accommodate the College of Law.

However, that option was not well received by alumni and legislators, so the decision was made to construct a new building between Carlson Hall and Pioneer Memorial Theater. Its location, removed from the center of campus, was based on the fact that the law school was "an independent college with [its] own library and should be near [a] peripheral road for off-campus use and parking."

The design was meant to achieve two visual goals: first, to ensure the building's compatibility with its neighbors, Carlson Hall and Pioneer Memorial Theater; second, that the building communicate a sense of "dignity" and "the quiet statement of 'Law.'"

Dedicated in 1964, the College of Law reflected Modernism's reserved qualities. While its geometric lines were distinctly Modernist, its most prominent feature was a colonnade of concrete columns, suggestive of Classical Greek architecture. Its modern aluminum-framed windows were discretely tucked behind the row of columns or between the panels of campus brick on the upper story.

Pioneer Memorial Theater



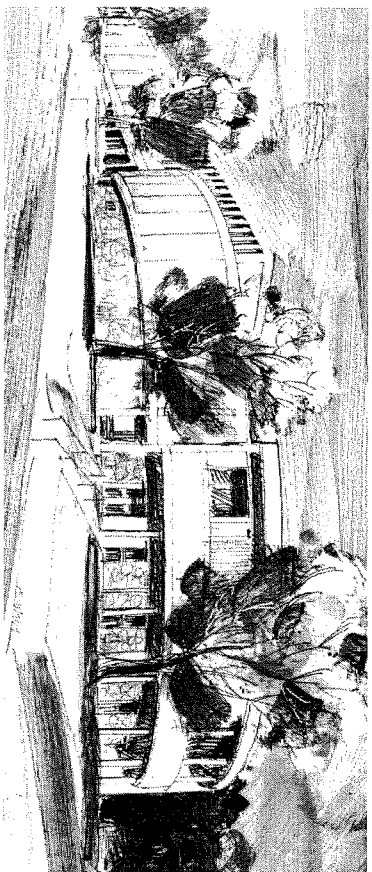
The story of the design and construction of Pioneer Memorial Theater is itself the stuff of drama. The idea for a theater on campus was conceived as early as the 1940s. Not just any theater would do, however. The new campus theater was to be a replica of the Salt Lake Theater constructed in 1861 at the northwest corner of State Street and 100 South and demolished in 1928.

The idea slowly gained momentum, materializing into a viable proposal with the active involvement of the leadership of the LDS Church in the late 1950s. The church's interest lay in the idea that a new theater "should portray and memorialize the spirit and contribution of the Pioneers in promoting the cultural and artistic life of the pioneer community." "Otherwise," stated church leaders, "there would be no justification for the Church making a substantial contribution toward the cost of the building."

This task might have seemed relatively simple on its face. But changes in theater technology and design pointed to a completely different style of building than that envisioned by church leaders. Thus the theater's architects, Harold Burton and Howard Barker of Salt Lake City, found themselves caught between the university's understandable desire for a modern theater and the LDS Church's ultimatum that the theater express a very different style. As Burton described the dilemma: "You couldn't have a replica and a modern theater."

The product of the occasionally prickly design process, dedicated in 1962, was a curious hybrid with a Neoclassical façade "tacked on" (as University architect Martin Brixen put it), flanked by Modernist wings of smooth cast-stone walls and sleek aluminum-framed windows.

James Fletcher Physics Building



Architects often speak of “context” and the challenge of fitting a building into the limitations of its site. The Physics Building, named after former University President James Fletcher, is a great case in point. It owes its configuration almost as much to the location in which it is situated as it does to the creativity of its designers, Carpenter and Stringham Architects of Salt Lake City.

The site selected for a new Physics Building in the early 1960s was hemmed in by the Naval Science Building, the existing physics building, Kingsbury Hall, and 100 South. A preliminary concept was deemed “much too crowded on the original site” and second option, an eight or nine-story building, was determined to be infeasible. The solution manifested itself in a deceptively large (72,000 square-foot) complex of two long, low structures stretching east to west.

The circular lecture hall, in particular, represented something of a sticking point in the design process. Consulting architects recommended that it be round, in order to “minimize the crowded feeling between the lecture building and Kingsbury Hall and the lecture building and the street.” Carpenter and Stringham disagreed, arguing that a round building would produce less space. Eventually, however, they relented, incorporating the circular concept into the final design.

Another unique aspect of the Physics Building is the breezeway that passes under the building. At the time of the building’s design, the area under the breezeway was actually a street (1400 East) so the building had to incorporate some sort of bridge to allow traffic to pass through the site. As the street was closed off, the resulting open area naturally transformed into a plaza.

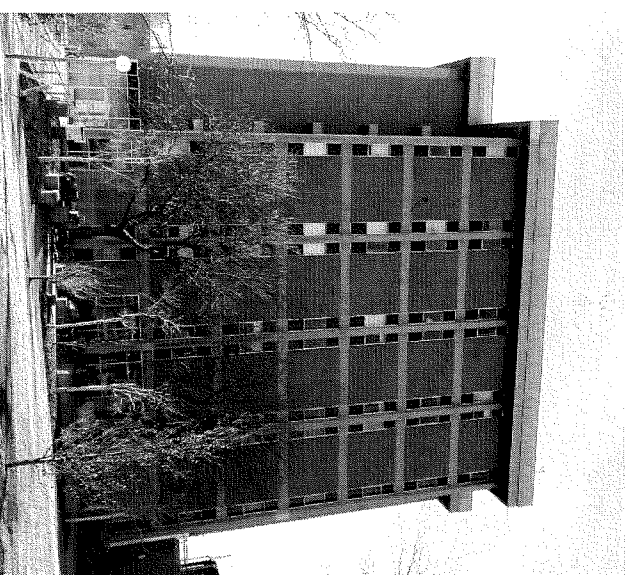
William Browning Mines & Mineral Industries Building

When the new College of Mines and Mineral Industries building opened in 1971, *The Salt Lake Tribune* hailed it as a “dream building,” a perfect facility for the teaching and research of the college. However, its design – more specifically, its profile – was less than dreamy for many on campus.

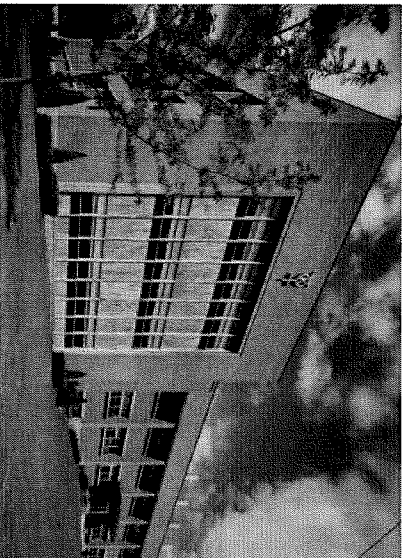
Originally envisioned as a nine-story structure, the building’s initial design provoked strong reactions that its height and bulk would be visually intrusive, obstructing views from neighboring buildings. To address these concerns, architects floated a series of balloons at the site to approximate the height of the building, a test that eventually mollified those concerns.

To be sure, the building’s architect, William F. Thomas (who had also designed the Biology Building), faced a serious challenge: how to stuff 92 labs, 47 offices, 5 seminar rooms, and even a rooftop weather observatory into a structure that would have to fit into a fairly small site. The result was an eight-story, 96,000-square-foot building that would eventually be named after William Browning, a prominent mining engineer and the recipient of the school’s first mining engineer scholarship. Certainly the structure, even as large as it was, was preferable to that originally proposed by the college’s faculty, one that would have housed 163,000 square feet of labs and offices.

As with the Biology Building, Thomas concentrated the building’s mechanical systems in a central core with offices around the perimeter and labs near the core. The facades were balanced (the north and south are identical; the east and west are identical, save for the windows) as a means of reducing the building’s perceived mass.



Kennecott Research Center



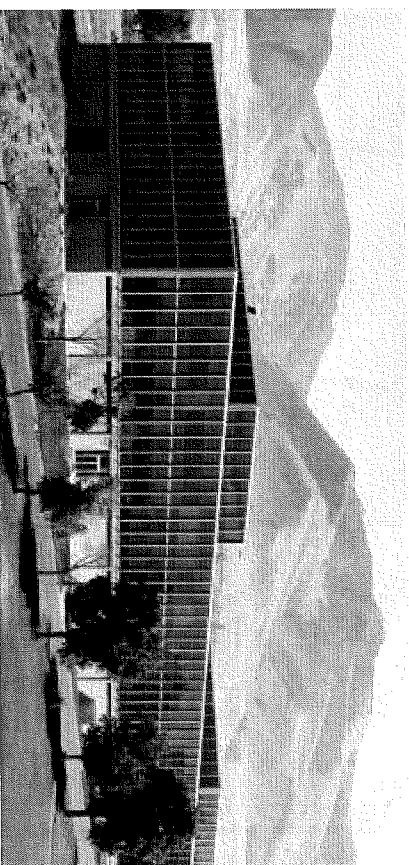
For President Ray Olpin, a post-war university had an obligation to more directly demonstrate its value to society. That goal, Olpin believed, would be accomplished by transforming the university from a purely academic institution to one actively pursuing research that could impact the state's economy. According to Chase Peterson, "He felt that the University of Utah should assist in developing industrial resources and provide information and know-how to create new industries." Or not so new. The research envisioned by Olpin centered around the mining industry, long a cornerstone of Utah's economy.

Olpin's vision materialized in the form of the Kennecott Research Center, completed in 1954. It was, as its name implies, dedicated to research. Only research. No classrooms. No faculty offices. No student lounges. Constructed solely to benefit Kennecott's mining operations, it was "the first large-scale research facility to be built by a private firm or an industry in the Mountain West."

Fittingly, the Kennecott Research Center was located in the area known as "Mineral Square," a cluster of mining-related buildings. Here, Kennecott's researchers would benefit from easy access to the university faculty's expertise. The university would, in turn, benefit from the presence of a facility dedicated to research.

Designed by the firm of Ashton, Evans and Brazier of Salt Lake City, the building's irregular profile reflected the contours of its site, a fairly steep hill. The Modernist horizontal lines of the east wing of the building contrasted with the vertical lines of the massive western block which was faced, quite appropriately, in copper.

Merrill Engineering Building



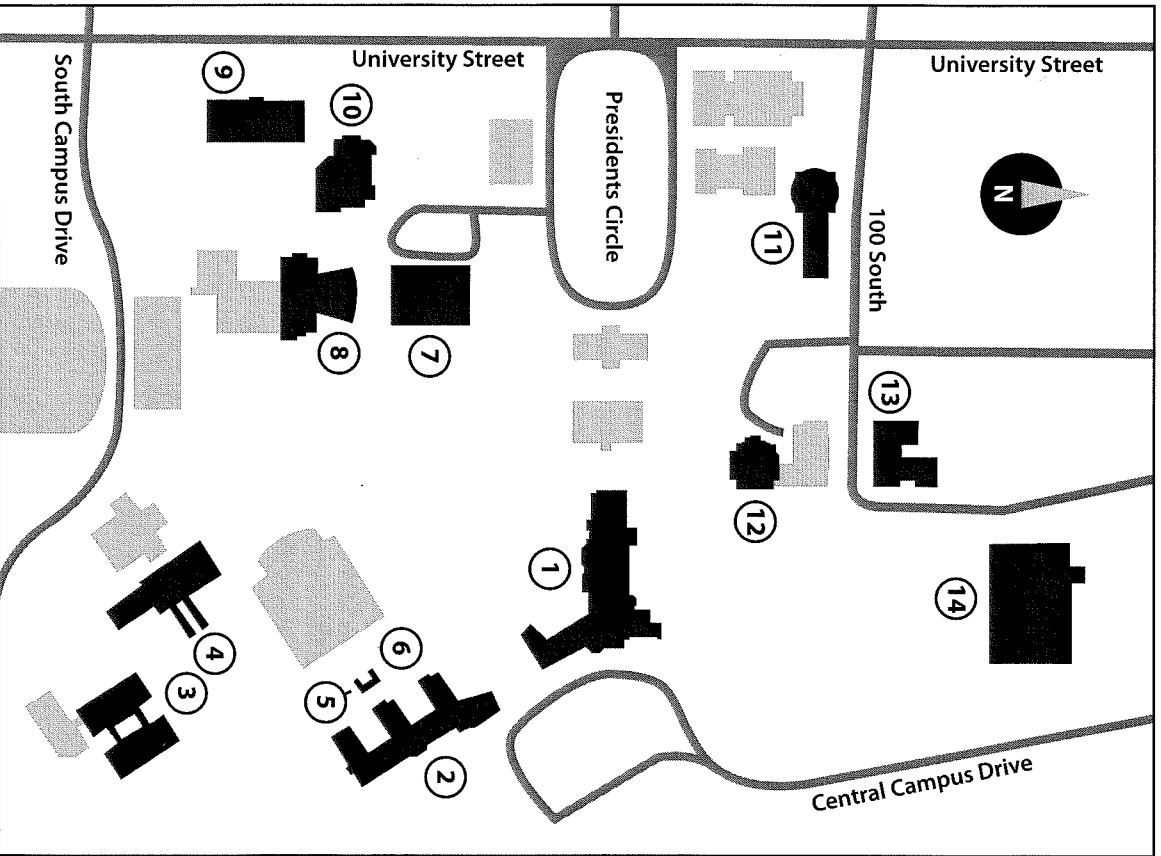
The stark appearance of the Merrill Engineering Building certainly belongs to the firm that designed it, Dean Gustavson & Associates of Salt Lake City. Yet it's attributable, as well, to members of the faculty of the College of Engineering, who "set the design esthetic as that of an industrial laboratory." In that regard, the building follows one of the precepts of Modernist architectural thinking: A building's structure should express its function.

Like other university buildings in the post-war era, Merrill Engineering was constructed in phases, initiated in 1959 and completed in 1965. The "high-tech" nature of the building was manifested not only in its appearance but in its construction. As the *Denver Daily Journal* noted in 1962, "the design of the curtain wall posed a solution that would permit entire exterior walls to be removed and relocated as the building phases continued." In the interior, steel-frame floors allowed for comparably easy reconfiguration.

When all three phases had been completed, the building occupied nearly 270,000 square feet. Yet that figure was far short of what had been envisioned for the "Engineering Center." Original concepts called for three structures – a two-story laboratory building, a six-story classroom building, and a circular building housing auditoriums of 250 and 750 seats. The latter element was eliminated early on, but the plan for the classroom building remained in play even as construction finished on the laboratory building. Ultimately, it was doomed by lack of funds.

Merrill Engineering incorporated ideas of early "high-tech" design. Its materials represented the latest in building technology: aluminum frames, coated glass, even neoprene window gaskets.

Map



Legend

- 1. A. Ray Olpin Student Union
- 2. Orson Spencer Hall
- 3. Art & Architecture Center
- 4. Behavioral Sciences Building
- 5. Library Plaza & Fountain
- 6. Plazas & Malls
- 7. Biology Building
- 8. Henry Eyring Chemistry Building
- 9. College of Law
- 10. Pioneer Memorial Theater
- 11. James Fletcher Physics Building
- 12. William Browning Mines & Minerals Industries Building
- 13. Kennecott Research Center
- 14. Merrill Engineering Building

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