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From the Editor

Tom Wolfe, the famed chronicler of popular culture and cultural fashions, recently* characterized our decade as the me-decade. From the skydiver to the hijacker to the revelations of Elizabeth Ray, the emphasis is on the individual, the worth, the experience, the valor and the celebration of the me.

Instant historicity tends to dramatize the present to inordinate proportions and helps make sense or give focus to our daily activities. It does not replace real historical perspective and patterns. It is however in the great American tradition of instant learning, instant nobility and instant definitions. It is important to understand these distinctions so as not to shortchange the breadth of the human purpose.

Architecture has also been subjected to the vagaries of these anxious historians. According to these instant oracles the modern movement in architecture has failed. It failed its believers, therefore justifying a revival of 19th century Revival architecture. The cities have failed, therefore justifying rural settlements; the highrise building has failed, therefore justifying the construction of more detached dwellings. These are popular and facile views, easily assimilated and repeated. Some of the elements of these polemics are obviously symptoms of other discontentment. They are nevertheless the betes noires of the moment. Sometimes these views are expressed by serious Cassandras anxious to be in rather than out of it.

It is appropriate, if somewhat delayed, for us on the occasion of the Bicentennial to rediscover our past achievements in building construction and design. To learn of our past enriches our lives, strengthens us, and enables us to see ourselves in a broader context. As T.S. Eliot wrote "Time present and time past/ Are both perhaps present in time future." If, in an adolescent country, we have just discovered our grandfather’s farmhouse, this is no license to build a farmhouse on 40 acres today. For an adolescent on the threshold of the 21st century to withdraw to the vision of a pastoral life is immature and ill-advised. The architecture of the 19th century — what is left of it — is wonderul and its rich embroideries delight our eyes but that architecture failed us more even than the modern movement. It never for an instant anticipated the need of an accelerated world it must have seen coming. The highrise apartment has been a failure to certain social demands but not as a home for millions of city dwellers. And the city has not failed us either. It is still the heartbeat of all civilization; its bankruptcies distress us, but its brilliance, its genius, its poetry nourish us all.

Tom Wolfe’s me-decade justifies the man who built his own house with recycled siding and retrieved windows and a home-made sun collector, or the one who spends two years with lead and colored glass recreating 19th century cornucopias for his windows. This man is doing his Thing. It is also a manifestation of our affluent society that this man can take the time to do his Thing and be somewhat oblivious of the world around him. This regression from the anxieties and the needs around us is not afforded many parts of the world. We can only hope that this is indeed a fashion and that the me-decade, which will fortunately soon be over, will give way to a maturing decade or generation which will delight in its past and expand its vision and cares to make for a future that is much greater than me.

— Bernard Jacob

*At the 1976 International Design Conference in Aspen.
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RIGHTEOUSNESS AND RESTORATION
ETHICS ON SUMMIT AVENUE

FROM THE EXECUTIVE DIRECTOR
MINNESOTA SOCIETY OF ARCHITECTS

A just-published Citizens League report states that houses in the city sell a great deal faster than those in the suburbs. This is particularly the case in neighborhoods which are quite cohesive and strong in their self-identification and image projection. In most of these instances this is due to powerful and influential neighborhood organizations which, over a period of time, have been able to catalyze and project a singular neighborhood spirit. Certain neighborhoods in the city benefit from a historical identity, as is the case with the Ramsey-Summit neighborhood in Saint Paul. The revival of neighborhood identification together with an active citizen participation is a recent phenomenon motivated by nostalgic historical, and of course also economic needs. In some instances the latter, the economic motive, has led to excesses which have caused unreasonable inflationary values.

To residents and to outside-observers alike, Saint Paul's Historic Hill District appears to be at the crest of a highly successful resident-inspired restoration. Yet, specifically right in the Ramsey-Summit neighborhood restoration effort, there is evidence of the paradox described above.

It is fitting that a journal concerned with architecture, urban development, and community revitalization reflect concerns that have been raised. This is not done to question anyone’s motives or involvements, but instead to seek answers as to how citizen participation in neighborhood revitalization can be most effective to insure the intended results.

The Ramsey-Summit Hill area is a neighborhood of more than 150 square blocks, a large part of which is going through a dramatic upturn. It is an area of beautiful homes, a diverse commercial street – Grand Avenue – and a considerable area needing adaptive reuse. Many of its homes represent some of Minnesota’s best residential architecture. It is rich in early Minnesota history.

Active in the neighborhood have been several neighborhood organizations and associations, including the Ramsey-Summit Hill Neighborhood Associations and a non-profit (largely closed) corporation of residents called Old Town Restorations. An emerging and important force now on the scene is the city’s newly created Historic Hill District Commission and the city-wide Historic Preservation Commission, not yet appointed.

In reality Old Town Restorations has been the major force in promoting, encouraging, and planning restoration. However, there exists an ever-growing likelihood of conflict of interest among members on the current board of directors of Old Town Restorations, Inc., a high percentage of whom own investment or rental properties, yet direct the organization which has received substantial grants (in excess of $200,000) for neighborhood planning. One of the reasons is that the board of directors is elected annually by members of that same board. There is only the board of directors — no larger body of membership to which interested neighbors can belong and have a say in decisions and directions. The group maintains that it was developed to encourage revitalization and to purchase and restore properties. This is true, but it has subsequently taken on other neighborhood-wide planning functions which have been and are growing in scope. The two are likely to come in conflict someday. Why not face that reality now?

This planning function should understandably be concerned with preserving and handling with sensitivity the character of the neighborhood. Yet as this issue goes to press, a member of that Old Town Restoration Board is acting in a manner that could conceivably be in conflict with this aspiration. Richard Mannillo purchased, in late 1975, the former home of D.
Beckman, whose wife was Rachel Hill, daughter of James J. Hill. The house had most recently been used as the House of the Archbishop of the Roman Catholic Archdioceses. In March 1976 Mannillo Investments closed with the Archdiocese for a purchase price of approximately $105,000 for the house.

Astonishingly, less than a few months later the house is on the market at $275,000 to $300,000. It is indeed a splendid property, one of the finest on Summit Avenue, but to achieve that value the use would have to be changed. One of the potential buyers, from whom Mannillo indicated he had received a purchase offer of approximately $300,000, was a “Guest House.” Admittedly, it appears that, due to neighborhood pressure, this use will not be realized.

The point of the above is that the escalation in value is excessive. Some neighbors even refer to it as “profiteering.” The price was predicated on a change in use which can or will affect neighborhood character.

Yet in a personal meeting, Mr. Mannillo indicated he must sell at this price “because I am selling wood frame restored homes in the neighborhood of the $100,000 level. I must sell that magnificent property at a much higher level to maintain the credibility of Mannillo Investments.” At that price he has eliminated from consideration residential use except for the ultra-rich and is also using “economic rezoning” in requiring its sale at a much higher price.

This is not to belabor Mr. Mannillo’s involvement, but to point out that likely conflicts of interest could arise. If not Mr. Manillo, Mr. so and so, etc.

A conflict is apparent between objectives of those seeking to see property values and investments rise at a substantial rate, and those wishing to stabilize property tax increases, which are a direct reflection of market value. If property values skyrocket, and taxes are indirectly raised, and what use are to be made of them. The James J. Hill home is recognized by most architects and architectural historians as one of the highest ranking buildings on the National Historic Trust. Yet in going into the building it is apparent that it is in extremely poor condition and ill-maintained. Partitions have been indiscriminately put up, and overall it is now in a sub-marginal state.

As for the neighborhood itself, a thought is that additional neighborhood discussions take place with a view to separating the considerable planning responsibilities associated with Old Town Restoration grants and the Old Town Restoration Board.

A much more broadly-based representation of the whole community should be overseeing planning functions. It is even questionable whether the Historic Hill District Commission is sufficiently broad for this task. Old Town Restorations should also perhaps concentrate on its original functions and not be as intimately involved with the planning functions. If it chooses to continue to assume this responsibility, detailed minutes of all its meetings should be taken and disseminated to anyone in the neighborhood who wishes to be on the mailing list. In addition, membership should be open and voluntary and this membership should annually elect its board of directors.

The relationship of the Historic Hill District Commission and the city-wide Heritage Preservation Commission should also be carefully examined. The city-wide Heritage Preservation’s responsibilities have been severely restricted by excluding the Historic Hill District from its jurisdiction. The latter is in the hands, some may argue quite correctly, of neighborhood leaders. However, great care should be taken in appointing these individuals.

The Saint Paul Chapter AIA and the Minnesota Society of Architects had worked to insure two architects on the city-wide Heritage Preservation Commission. Unfortunately, in violation of the legislation, no architect-planner member has been appointed to the Historic Hill District Commission. Instead, there are a number of individuals who have potential conflicts of interest. Some may say they should merely abstain on such matters. However the truth is, in serving on many public bodies, when an individual is on a board and does abstain or leave the room, there still exists within the group a “group or aldermanic courtesy” in which his or her views most generally prevail.

Again, the minutes of this group, as well as future agendas, should be sent to anyone who desires them. The responsibilities of the commission should be clearly spelled out. Yes, I have read the ordinance and it does not specifically do that. There always is a tendency to appoint to such bodies individuals who are politically active. Care must be taken in these appointments.

It is ironic, thus, that the return to the city movement which was to provide reasonably priced housing within the city has, in some instances, expanded to threaten the opposite results.

— Daniel J. Sheridan
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Having just received notification of the Golf Outing sponsored by the “Women In Construction” chapter leads me to comment on the increasing importance women are playing in our industry. I think it’s great and those of us who overlook the hiring of qualified women are penalizing ourselves and our companies. A look at the WIC chapter roster will show that many are employed as salespersons, draftspersons (it’s a sign of my age, but I still find that terminology awkward) estimators, officers and directors of construction related companies, manufacturers’ representatives and several other categories besides the traditional secretarial and clerical positions. Of course, on the other hand, I am happy to find that the Men’s Lib Movement is becoming more of a reality, too. The time has come for us to be recognized as something more important than just a woman’s plaything or sex object. As someone said to me recently, “I don’t mind being rated by my wife below the children and grandchildren, but I do think it’s time I moved ahead of the family dog.”

In order that we may all, men and women, increase our productivity and worth to our industry or profession, I again remind you of the many courses and seminars available to us. For example, Bob Anthony of the Dale Tile Company, has notified me that the local chapter of the Acoustical Society of America will hold a seminar on room acoustics and architectural noise control during the week of September 20th. Details will be available at a later date. Also, the University of Wisconsin Extension continues to conduct many short courses and seminars that are both pertinent and timely. Why not write to: Department of Engineering (MAILINGS), University of Wisconsin-Extension, 432 North Lake Street, Madison, WI. 53706, and get on their mailing list to find out when they are holding courses on subjects such as Construction Financing, Specification Writing, Value Engineering, Fire Protection in Buildings, Legal Aspects of Construction and many, many more?

Two members of the Minneapolis-Saint Paul Chapter, CSI, were given national awards at the Annual Convention held this year in Philadelphia, June 21-24. Francis E. Zach of Rieke, Carroll, Muller Associates, Hopkins, received an Honor Award for specifications prepared for a municipal parking ramp in Mankato and James A. Blackwell, 3M Company, Saint Paul, received CSI’s Technical Commendation Award for his efforts in promoting the technical programs of the institute.

A program to implement accreditation of specifiers is being considered by CSI. It is not a licensing or registration program but should give recognition to those who make special effort to become proficient in the preparation of construction documents. More about this at a later date.

The new executive director of the Minnesota Masonry Institute is Howard Noziska. Under his direction MMI’s primary goal will continue to be dissemination of information which assures all the advantages of masonry construction are utilized to their fullest on Minnesota construction projects. Formed in 1973, MMI is subsidized by masonry union members and their contractors.

New officers for 1976-1977 of the Minnesota-Dakota Chapter, Producers’ Council are: President, Don O’Reilly, Johns-Manville Sales Company; First-Vice President, Ken Kline, Snow-Larson, Inc.; Second-Vice President, Don Ponto, Robertson Co.; Secretary, Ken Hoevet, Andersen Corporation; Treasurer, Kurt Rose, W.R. Grace & Co.; Immediate Past President, Dave Ziegler, Pella Products, Inc.

If any of you have to deal with the new energy code but can’t always recall or sort out the difference between “R”, “C”, “U”, etc. or how to calculate heat losses, call me at 612/374-1216 or write to 1221 Second Avenue North, Minneapolis, Minn. 55405, and I’ll send you a copy of “Useful Facts and Definitions about Thermal Insulation” which we compiled. It is nonproprietary and should prove to be helpful in your own work or as a handout to your clients or customers.

To go back to the subject of Women’s or Men’s Rights recalls the remark made by a wife to her husband as they were out for a drive, “Remember years ago how close we used to sit together in the car?” His answer was, “I haven’t moved.” So, if you want to get ahead in the construction industry, I guess it’s appropriate to say, “It’s your move, ladies!”

Robert Snow heads Snow-Larson, Inc. of Minneapolis and is North Central Section Director of the Construction Specifications Institute.
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CSI Elects Officers, Re-Names Fladland President

CSI members have elected for a second term as chapter president Clinton C. Fladland, executive director of the Minnesota Lathing and Plastering Bureau. The Minneapolis-Saint Paul chapter of CSI — Construction Specifications Institute — elected 1976-77 officers at its May meeting. They take office July 1.

A national organization of architects, engineers, building products marketers and others concerned with improving specifications for building construction, CSI has about 250 members locally.

Elected to a newly-created office of president-elect was Alex Gintner, Hammel, Green and Abrahamson, architects. He will become president next year.

The chapter elected to vice president in the professional category George Mastny, Mastny, Paulsen, architects, and Mark F. Winsor, Bissell, Belair and Green, architects. Elected vice president in the industry category was Audrey M. Brucker, Midwest Architectural Products.

Others elected were: Oscar A. Hallgren, MacArthur Co., secretary; Gerald J. Kastner, Specialty Sales Service, Inc., treasurer; James W. Bragonier, Northfield architect, director for two-year term; and Walter Kowalski, Conpro, Inc., director for two-year term.
Future visitors to northern Minnesota may be able to spend a day at an indoor/outdoor museum depicting a chronological history of the state's forests. Located on a 50-acre Mississippi River site near Grand Rapids, the Forest History Interpretive Center will be funded through an initial $200,000 construction aid grant from the Minnesota Resources Commission with additional grants from private industry. Architectural Resources, Duluth, and the Minnesota Historical Society are currently working on a program study for the proposed center. Rather than the more traditional static museum display, the center will incorporate a series of indoor/outdoor multi-media display areas depicting a chronological history of the northern forest as the Indian, logger and settler knew it, concluding with the forest of today. Other components include a modern display center, a reconstruction of a circa 1900-1910 logging camp, a Finnish settler's cabin, a ranger station and forest tower and a series of nature trails.

Industrial contributors to the project include Hoerner Waldorf Corp., Saint Paul; Boise Cascade, International Falls; Potlatch Corp., Cloquet; and Blandin Paper Co., Grand Rapids, who donated the land for the center as well as sponsored the initial study grant in 1973. Construction on the outdoor exhibits and erection of the forest tower is scheduled to begin this summer and federal funding for the project will also be sought upon completion and approval of environmental and economic impact statements.

Following a visit to the forest center, travelers may want to drive thirty-five miles to Hibbing, for a look at the proposed Greyhound and the Origins of Bus Transportation Interpretive Center, designed by Architectural Resources' Hibbing office. Located in a park setting, the center will profile the development of bus trans-
The building industry faces serious new problems and responsibilities as energy policies and legislative controls zero in on building design.

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portation, which, by the way, originated in Hibbing. Visitors to the center will be introduced to the evolution of the industry which interlocks in part with the history of the town. Designed with a chronological theme, visitors enter the exhibit area through a dark, carpeted entrance tunnel arriving at a display area depicting the era of pre-bus transportation by illustrating the amount of walking people had to do as part of their daily lives. Subsequent exhibits profile the growth of Hibbing's first bus company and its affect on the community and, eventually, the nation. Each display area contains a bus from the respective era, and one exhibit will give the visitor the option of seeing how a bus works by climbing down into an open pit over which the vehicle is parked. In addition to a glass-enclosed overlook of the museum area, the center will contain an educational alcove which enables a teacher to review the interpretive experience with the class.

A joint Senate-House committee voted recently to authorize a design competition for a building to be located on the mall in front of the State Capitol. With a cost estimate of $20 million, the facility would be largely underground to preserve the view of the Capitol. The structure would contain 16 legislative hearing rooms, an auditorium, cafeteria and parking for 450 cars. Saint Paul architect Clark Wold, one of three architect-advisors to the Capitol Area Architectural and Planning Board, will serve as advisor to the project.

The Minnesota Society of Architects in cooperation with the Saint Paul Ramsey County Bicentennial Commission and TailorMaid Tours, Inc., will sponsor a series of charter excursions, Sunday Summer Tours of the City, designed to acquaint the public with the diversity and historical importance of Saint Paul architecture. Anticipated highlights of the tour series include a look at selected edifices and homes of two of the area's most distinguished architects, the late Cass Gilbert and Edwin Lundie, restored residences in the Summit-Ramsey Hill neighborhood and two industrial sites, Northern States Power's Highbridge plant and the 3M complex. Participants will have the opportunity to depart from the buses and each tour will be fully narrated. Registration and additional tour information is available from TailorMaid Tours, 699-7317.
An old Super Valu building in Cannon Falls, will be transformed into a Library-City Hall-Senior Citizens complex with design by Architects Plus, Inc., Faribault.

Plans and specifications for enlarging and remodeling Apple Valley's city hall and police facilities are being drawn by the firm of Peterson, Clark and Associates, Inc., Minneapolis.

A year-long evaluation of the Honeywell-installed solar energy system at Northview Junior High School, Brooklyn Park, indicates a savings of about six percent of total energy costs, the equivalent of 4,000 gallons of oil or about $12,500. While results to date indicate that the project is the most successful of several solar systems installed in schools throughout the country, the fuel savings would not justify the cost outlay, according to Gay Halter, the school's principal. The Northview system has a daily capacity to produce more than four million British Thermal Units (BTU's) of heat — even on the coldest of winter days — and utilizes a 3,000 gallon storage tank for reserve use at night or on cloudy days. School officials plan to continue using the National Science Foundation supported system indefinitely. Architects for the project were Matson, Wegleitner, Abendroth, Minneapolis.

Voters of School District 191 - Burnsville-Savage-Eagan — recently approved the expenditure of $8.6 million to expand the existing senior high school and the design will be furnished by Stegner, Hendrickson, McNutt & Sullivan, Brainerd.

Groundbreaking ceremonies this month will mark construction of a seven-story, 121-unit apartment complex at Western and Goodhue Ave., Saint Paul. Designed by Hammel Green & Abrahamson, Inc., Saint Paul, the building will be the first leased housing project in Saint Paul under Section Eight of the Housing and Community Development Act of 1974 which provides for government subsidization grants to tenants. The $2.5 million complex, owned and operated by Dominium Group, Inc., will feature a heat recovery unit, an arts and crafts center, a major recreational facility with a dance floor and kitchen and a community room on each floor. Each apartment will have a private balcony and a screened porch will overlook a planned orchard adjacent to the site.

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also provide design services for a proposed new surgical building and facilities addition for Saint Mary's Hospital, Rochester, in joint venture with Naramore Bain Brady & Johanson, Seattle, Washington.

Official opening and dedication ceremonies were held recently at the new international headquarters of Gelco Corporation, Eden Prairie. Fifteen acres of the $5-million complex's 40-acre site, overlook Anderson Lake and were left in their natural state and endowed to the Eden Prairie Park Preserve. Designed by Parker-Klein Associates, Minneapolis, the building utilizes insulating reflective glass to conserve cooling energy and planted terraces adorn the building's stepped roof. Parking lots are screened from view by nearby woods. Although the building has been occupied since last fall, the ceremonies marked Gelco's 20th anniversary.

Spared from demolition, a circa 1898 four-bedroom house at 720 8th Ave. SE, Minneapolis, has undergone complete renovation and is now for sale, thanks to the efforts of the 1st Southeast Corporation, a neighborhood-based company whose reason behind purchasing and renovating old homes in the community is to maintain it as a residential area. The 10-year old company recently held an open house at the two-story frame dwelling to mark the completion of the renovation and hopefully attract a buyer.

For further information, contact the Minnesota Society of Architects at 227-0761.
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Minnesota Masonry Institute

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Minnesota's urban places house three-quarters of its population, and their importance in state and local affairs is enhanced by their concentrations of retail, service, financial, administrative, professional, industrial, wholesale, and communications activities. Minnesota is less urban than many other states, but the agricultural, extractive, and recreational activities which take place in its rural areas would be severely inhibited were it not for the functions provided by the state's cities and towns.

Much attention has been given to the fur-trading, farming, lumbering, and mining which led to settlement in different parts of Minnesota, but the establishment of urban centers was contemporary with the origin of these activities. The French and British fur trading networks were based at permanent settlements such as Grand Portage, and the first permanent American installation was Fort Snelling, at the confluence of the Mississippi and Minnesota Rivers. It was a military post, but a number of civilian concentrations evolved nearby. The most important of these settlements was Saint Paul, situated near the point where Trout Creek gently graded through the Mississippi bluffs and provided the first point of easy access out of or into the valley below the head of navigation at Saint Anthony Falls. Saint Paul became the territorial capital in 1849 and then the state capital in 1858, but its early preeminence resulted from its location as the trade center where river traffic and overland wagon trails met.

Minnesota's cities and towns grew coincidental with growth in the state's rural areas. The urban system developed in response to changes in the form and location of economic activities, changes in the transportation system, and changes in the preferences of its population. This development is traced in a series of maps at twenty year intervals indicating urban places with at least as many residents as a town which grew at the same rate as the state as a whole and had a 1970 population of 10,000. Saint Paul was the only city recorded in the 1850 Census.

River towns dominated the Minnesota urban system in 1870. The largest cities were Saint Paul and its rival twelve miles up the Mississippi at Saint Anthony Falls, Minneapolis. Saint Paul was larger in 1870, but two years later Minneapolis would equal the capital city in size by annexing the city of Saint Anthony on the east side of the river. Within a decade, the plentiful water power of the falls coupled with the convenient river crossing at Nicollet Island and closer proximity to a developing western hinterland made Minneapolis the state's foremost city, a position it never relinquished.

Other important towns downstream on the Mississippi included Hastings, Red Wing, and Winona, which grew around their sawmills during the period when logging reached its peak in the Saint Croix and upper Mississippi drainage basins. The most important lumber town was Stillwater on the Saint Croix. The Mississippi River towns also grew as landings for settlers moving into the state's interior. Granite quarries and heavy German settlement made Saint Cloud the foremost center of the upper Mississippi, while water power sites on smaller streams witnessed the growth of trade and processing centers in southeastern Minnesota such as Rochester, Faribault, Owatonna, Austin, and Mankato, where early agricultural settlement in the state was concentrated. Finally, imminent completion of a state-funded railroad from Saint Paul to the Minnesota side of the westernmost bay of Lake Superior spurred the development of the port of Duluth.

By 1890, movement of the lumber industry into northern Minnesota allowed Duluth to firmly establish itself as the state's third largest city. The Twin Cities grew at the heart of Minnesota's expanding railroad network, with Minneapolis rapidly emerging as the nation's premier flour milling center. The addition of specialized processing industries furthered the growth of the cities in the southeast, while the advance of settlement to the remainder of the state was reflected in the growth of towns such as Brainerd, Crookston, and Fergus Falls, which were located at important railroad junctions or water power sites.

Locational tendencies in the Minnesota
urban system of 1890 continued into the twentieth century, but three major changes were evident by 1910. First, there was a "filling-in" of outstate areas. Albert Lea became an important rail center in the productive southern agricultural areas, and Little Falls developed as a minor center on the margin between logging and agricultural activity. Secondly, the emergence of Cloquet as the state's foremost lumber processing center signaled the relative decline of Stillwater and other southern river towns. Finally, after the establishment of the iron ore industry beginning in 1884, Hibbing, Virginia, and Eveleth developed as the largest cities on the Mesabi Range, primarily because they were adjacent to the largest of the iron mines.

As Minnesota entered the Depression in 1930, Minneapolis had clearly asserted itself as the upper Middle West's industrial, wholesale, and financial center. The Twin Cities' first major suburb, South Saint Paul, appeared in the state's urban system as a relatively independent municipality oriented toward the stockyards and other activities downstream from Saint Paul. The pattern of outstate centers was largely unchanged in the first third of the twentieth century, although the population loss suffered by Cloquet, coupled with the growth of Bemidji, indicated continued shifts in the lumber industry in northern Minnesota.

The growth of the Twin Cities area during and after World War II was reflected on the 1950 map by the continued population increase of the central cities, which still had some available land to accommodate expansion, and by the appearance of adjacent residential suburbs such as Robbinsdale, Saint Louis Park, and Richfield. The pattern elsewhere in the state was generally unaltered, although the concentration of retail and service activities in larger centers of agricultural southwestern Minnesota permitted Willmar, Fairmont, and Worthington to become more important members of the urban system.

Between 1950 and 1970, the present pattern of Minnesota cities and towns evolved. Population losses were experienced by a number of centers, including the state's three largest municipalities. The decentralization and growth of the Twin Cities led to the creation of a maze of rapidly growing suburbs, nine of which had over 30,000 residents, but both central cities, especially Minneapolis, lost population. To the north, the depletion of the raw ores forced a greater reliance on taconite processing and led to declines in the older range cities and Duluth, where increased business resulting from opening the Saint Lawrence Seaway did not offset the diminished ore trade.

Elsewhere in the state, Fergus Falls, Brainerd, and Red Wing lost population between 1950 and 1970 as their major industrial or transportation-oriented activities declined in importance. In other outstate centers, however, a variety of activities permitted established centers in the southeast to diversify their economic bases and add to their populations. With few exceptions, most of these activities were not restricted to specific sites; they were located in one of the outstate centers because that was where their founder resided. The abilities of Minnesota entrepreneurs resulted in some activities achieving national or international importance, however, such as Rochester's Mayo Clinic, Owatonna's school jewelry production, and Austin's meat-packing industry. Another factor contributing to the growth of some outstate municipalities was the presence of rapidly-expanding colleges and universities; expanded student and faculty populations contributed substantially to increases in places like Saint Cloud, Mankato, and Northfield.

The differential development of Minnesota cities and towns appears not only in the evolution of the state's urban system but also in the structural patterns of individual urban areas. Cities with similar histories and similar functions produced comparable locational arrangements. Although differences between municipalities related to size, site characteristics, and peculiar facets of development distinguish individual centers, six types of urban places in Minnesota may be identified which have the same general land use patterns and functional arrangements.

The first group of urban centers consists of the metropolitan areas of Minneapolis-Saint Paul and Duluth-Superior. Both are characterized by a pair of central cities which developed to take advantage of distinctive sites. Business districts emerged near the port facilities or mills in all four
municipalities, and although the subsequent growth of the cities led to their coalescence into a pair of metropolitan masses, investment in the original centers permitted them to remain important employment nodes.

The Twin Cities area occupied a position at the focus of the upper Middle West’s transportation, communications, financial, and corporate networks, and as a result, its population growth was unabated. Because there were few topographic barriers, residential construction advanced in all directions from the two original centers as changes in personal transportation made peripheral areas more accessible. This outward shift in residential locations was accelerated by a comparable movement of employment; by 1970, only one of eight Twin Cities employees worked in either of the central business districts. The location of political boundaries explained the population growth and decline of the central cities, the explosion of suburban municipalities, and the integration of previously-independent towns into the metropolitan area, but the general process in the Twin Cities was not substantially different from what was going on around most other large American cities.

Terrain and political boundaries produced a linear pattern in Duluth, which was somewhat less integrated with Superior than were Minneapolis and Saint Paul. A smaller growth rate meant that outward expansion was less pronounced in the Twin Ports area than in the Twin Cities, but Duluth also exhibited a pattern of linear extensions and nodal concentrations of non-residential land use, and boasted a major “suburban” retail and service cluster northwest of its struggling downtown. To a lesser degree, Fargo-Moorhead entered into this group of larger metropolitan clusters as the transportation, wholesale, financial, and administrative center of North Dakota and northwestern Minnesota.

A second group of Minnesota urban centers are the cities and towns adjacent to the major rivers. Red Wing exemplifies this group, with its gridiron street pattern modified to keep it generally aligned with the main channel of the Mississippi. The city is strung out along the floor of the floodplain, with its length approximately four times its width. Rail lines extend adjacent to the river and the major highway parallels them approximately one block inland. Most industrial uses are concentrated near these transportation routes.

The central business district (CBD) extends for six blocks on either side of the highway, although it has a minor extension up to the courthouse along the street that previously led down to the docks. Residences spread out along the valley bottom in both directions from the CBD and follow the roads leading out of the valley. A few new subdivisions are found on the bluffs overlooking the city.

Owatonna typifies the third group of Minnesota urban places, the industrial centers in the southeastern part of the state. The gridiron street pattern is oriented with the cardinal directions. The city developed adjacent to a small stream, the Straight River. One of two major rail lines parallels the river, the other crosses it just north of the CBD. Industrial establishments are clustered along the river and along both sets of tracks, especially near their intersection.

The CBD is less lineated than in Red Wing and the courthouse has a more central location. The river, railroads, and industrial activities discouraged residential development northwest of the CBD. Industrial establishments are clustered along the river and along both sets of tracks, especially near their intersection. The city’s prosperity is marked by numerous post-war subdivisions. The planned route of I-35 west of Owatonna was visible on the 1964 photo, as was platting for residential and commercial development which subsequently took place.

The service and processing centers of southern and western Minnesota are exemplified by Willmar. Established by a railroad at the time of agricultural settlement in the surrounding countryside, its origin is emphasized as the highway, industries, and commercial establishments all parallel the tracks. Willmar’s older homes surround the CBD in a broad semi-circle, and some newer subdivisions have developed, although their sporadic clustering indicates the tract character of post-war housing construction.

A fifth group of Minnesota municipalities are the recreational centers. Frequently located along the shore of a large lake, the recreational center has more highway-oriented commercial establishments than are present in other types of comparably-sized...
centers. Parts of the lakeshore have been set aside for public use, and some of the town’s more prestigious residences stand nearby. The city typically follows only a small part of the lakeshore; however, near more northern centers such as Detroit Lakes, Alexandria, and Bemidji, private homes, campgrounds, and resorts dot entire shorelines in a distinctive form of rural non-farm development.

A final group of Minnesota cities and towns are the municipalities on the iron ranges. The most distinctive feature of places like Hibbing and Virginia are the huge open pits, sometimes up to 500 feet deep, which occupy large areas on the outskirts of the municipality. The pits sometimes encroach on the built-up area and force relocation of homes, businesses, or possibly the entire town.

Considerable area is also devoted to other mine activities, including mine dumps and tailing ponds. An intricate network of conveyor belts, railroad tracks, and service roads connect the pit and dump areas with the rail yards, processing plants, storage and repair facilities, and office buildings which are integral parts of the mining complex. Mining activities are most heavily concentrated on one side of the municipality, but they may almost completely surround it.

The CBD is strung out along the main highway, which makes a right-angle turn in the district. This produces an L-shaped district, which somewhat shields the main residential area from the bulk of the mining complex. Residences grade from old to new with distance from the CBD, but the relatively high percentage of post-war units results from the relocation of families displaced by expanded mining operations rather than from population increase.

The close proximity of the municipalities and the dispersed character of the mining operations has generated a distinctive settlement pattern in the iron ranges, where a large percentage of the population lives on isolated plots or in small clusters outside any municipal limits. The hinterlands and commuters of individual cities overlap extensively, and the entire region operates to a great degree as a poly-nucleated yet highly integrated functional unit.

Not all Minnesota urban places are easily classified into one of these six groups, nor do all the cities and towns within a group exhibit the same characteristics as the municipalities examined here. Corresponding populations, functions, and histories produce cities and towns which are similar, but the distinctive terrain and resources of sites and the variable abilities and imaginations of local citizens yield urban places which are distinctive and merit attention in their own right.

Thomas J. Baerwald received a B.A. from Valparaiso University and an M.A. from the University of Minnesota. He is presently finishing work on a Ph.D. in geography at the University of Minnesota. His primary interests include North American settlement and the development of urban places. He acknowledges the comments made by James D. Fitzsimmons, Judith A. Martin, John R. Borchert, and Fred E. Lukermann during preparation of this article.
FOCAL POINTS

First single-structure complex in the nation combining public and private financing. "Fast track" system encompasses a total construction time estimated at 30 months, with a guaranteed maximum price of $24.9 million. Expected to attract people from a large surrounding area of Central Kentucky and from such nearby cities as Cincinnati, Ohio and Charleston, W.Va. Ellerbe Architects, Inc., Bloomington, Minnesota.
Ellerbe was the architect for the $3.3 million Dakota County Government Center. Located on a 50 acre site outside Hastings, the project has a bold massing giving visual identity to the legislative, administrative and judicial functions. The building features a 3-level atrium and skylit lobby. The 98,000 square foot building was completed in 1975.

The public circulation spine is climaxed at the Administrative and Judicial cores, which also act as nuclei for future growth.
Program called for Branch Y.M.C.A.,
facility to be constructed in an older
inner-city residential area. The site is
surrounded by 2 to 3 story homes
on two sides built around 1920, many
with stucco exteriors. The south side
faces a neighborhood park. Smiley-
Glotter Architects, Minneapolis, de-
signed the building to be compatible
with the existing neighborhood en-
vironment by keeping within existing
heights and using stucco and wood as
exterior materials. The building gen-
erates around an interior court yard
that is open to the pool, administra-
tive offices, and the future gym. The
meeting rooms and senior citizens' areas are oriented to the south for
vistas to the park and to capture
south sun light in the long winter
months. The building was designed to
meet the new state of Minnesota energy
codes and to be totally accessible by
the handicapped.

The 30,000 sq. ft. structure will
have a structure frame of steel and
pre-cast concrete. Exposed burnished
cement block, quarry tile, and wood
will be used for interior surfaces. The
building is scheduled for completion
late next year.
Burnsville Well No. 3,
Burnsville, Minnesota

The building houses a gas turbine driven submersible pump for a 24" deep well and chlorination equipment, all part of the village water system. Architects were Bergstedt Wahlberg Bergquist Associates, Saint Paul, Minnesota.

Washington County Courthouse Expansion,
Stillwater, Minnesota

The Washington County Courthouse and Jail was an extension of the existing Courthouse and provided needed space for the County operations housed in the original 1870 courthouse. The facility houses Sheriff's administration and security spaces, probation offices, county attorney and clerk of court, plus judges chambers and courtrooms.

Careful attention was given to the selection of compatible materials and the massing of elements so that the character of the complete design would be that of a single stage building. Architects were the Wold Association, Saint Paul; Contractor was Witcher Construction.
The recently completed Meeker County Courthouse contains several county functions including Board of Commissioners’ meeting room, district and county court rooms and public assembly rooms. The white stucco building cost $1 million to build. The architects were Genesis Architecture, Richard A. Moren, project architect; Philip B. Anderson and Richard A. Moren, partners; Willmar, Minnesota.

The structure was built on the courthouse square site in downtown Litchfield directly in front of the original courthouse built in the 1880's. After completion of the new structure the old structure was razed and construction of the new Law Enforcement Center begun in the fall of 1975 on the site of the original building and is now about 60% complete. This latter structure is also the work of Genesis Architecture and will cost about $660,000 when completed.
Opened this spring the 40,000 sq. ft. building is within a 20 acre park, combined cost of over $2.5 million. The building houses multi-functional facilities for community use including gymnasium, theatre, teen center, senior citizen center, health areas, fine arts suite and various offices. The theatre stage is designed to be used by the indoor theatre and outdoor amphitheatre. Built on a flat parcel that was formerly 6 city blocks, land sculpturing was used for visual interest, separation of functions and provision of overlooks. This facility is owned and operated by Milwaukee County Parks Commission. Architects were the Adkins Association Inc., Saint Paul, Minnesota; Partner-in-Charge-of-Building Design, Robert L. Morgan; Partner-in-Charge-of-Landscape Design, Gene Stuart Peterson; Building Design, Bruce A. Tackman; Landscape Design, John Tingley.
A Street above Summit Avenue

Thomas W. Kelly and Joan Kelly

Saint Paul's Summit Avenue stands today much as it was at the turn of the century — one of the most exotic, quixotic hodge-podges of grand mansions this country has ever seen.

On it lived the rich and the near rich, the great and the near great, most of whom had taken Horace Greeley's advice, gone west and made big money fast. The proof lay in the monumental residences they built on the wide, elm-sheltered avenue.

Just as the ancient elms have resisted Dutch elm disease and the lamplighter-style street lights have escaped the advances of modern lighting experts, the avenue itself has survived depressions, decay and urban renewal.

The spectacular array of scores of homes on Summit has stayed almost intact because, as one local historian theorizes, Saint Paul has remained prosperous enough to maintain them, but not so prosperous as to tear them down for replacement.

When the street was laid out in the late 1800s on the broad stone bluff overlooking the city's commercial center, it was meant to be THE residential avenue. Later that first elegant mile was extended four miles westward to where the Mississippi River separates the Twin Cities.

Its residents were mostly land speculators, bankers, wholesale outfitters, railroaders, insurance men, attorneys, and retailers who had the required brains and daring to amass fortunes as Saint Paul emerged from the coon skin cap era into a freewheeling gateway to the opening of the Northwest.

Summit Avenue is the street where James J. Hill and Frederick Weyerhaeuser were friendly neighbors at the time they were multiplying their millions in railroads and timber. Weyerhaeuser bought his house from Frederick Driscoll, a newspaper executive, who was among the founders of the Associated Press.
Their mansions still stand, as does the modest granite row house where F. Scott Fitzgerald grew up, and the more stately house down the block where Sinclair Lewis spent a gala year.

But the real stars of Summit Avenue, the men who made it what it is today, were the ones who sat in their countinghouses with one eye on the bluff and visions of Victorian gingerbread dancing through their heads.

Although they flocked to the same avenue, these newly wealthy entrepreneurs were individualists not sheep. Each house had to be bigger or at least different from the next.

Victorian Eclecticism was rampant. Side by side rose Gothic, Romanesque, Castles-on-the-Rhine, Queen Anne, Renaissance palaces, and Italian villas.

Over the years, this colossal collection of much that was bad and some that was good about American architecture of the rea has received mixed notices.

Harper's New Monthly of October 1891 reported that "there are very few streets in the United States that give in as high a degree as Summit Avenue the sense of liberable expenditure without ostentation, directed by skill and restrained by taste."

Fitzgerald felt differently. After success came and he moved away from the avenue where he couldn't crack the social scene, he got his licks in by describing it as "a museum of American architectural failures."

Frank Lloyd Wright was more direct, simply calling it "the worst collection of architecture in the entire world."

A kinder critic termed it "gaudy, but never dull."

No one can be certain how much of the carefree melange is the work of trained architects, for they were few in those days. Some prestigious eastern firms were hired by the super rich, and locally there were architects of established reputation. But there is ample evidence that talented amateurs were mining the various fashionable design lodes or creating their own styles with extravagant abandon.

It also seems quite possible that the frenzy of spindles, piazzas, pillared porticoes, stained glass windows, conical-roof towers and turrets that abound along the avenue are the result of the client thumbing through one of the then popular architectural pattern books and telling his builder, "I'll take one of these, three of those . . . ."

The illustrations that appeared weekly in The American Architect and Building News were to the builder of the day what Women's Wear Daily is now to the garment trade.

The best way to experience Summit Avenue is to slowly drive along the four mile "upper" avenue allowing time to stop for a closer look when a stunning example of a 16th Century English Country House or a Tudor extravaganza catches your eye.

The Minnesota Governor's Mansion at 1006 is a notable example of the Elizabethan mode, with grand reception room, library, parlor, and ceremonial dining room. The splendid brick home built for lumber magnate Horace Irvine and donated to the state in 1965 belongs on a country estate, but looks quite at ease on its Summit Avenue city lot.

The "lower" avenue, built mainly between 1880 and 1910, should be walked to be appreciated. This mile-long stretch is drenched with early city history. It is where prominent families promenaded along double-width, hexagonal-block sidewalks while their servants stayed out of sight in adjacent Maiden Lane and Irvine Street.

The place to begin the walking tour is the Saint Paul Cathedral, majestically sited at the foot of the avenue. Financed in part by generous gifts from railroader Hill who lived down the street, the Cathedral is designed in the Beaux Arts style. Its impressive dome rises 280 feet above the 3,000 seats, each of which has a perfect sight line to the altar.

Hill's house at 240 is a fortress-like Romanesque mansion that he had built in 1889 for $200,000. Now a National Landmark, the huge house...
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with its uncut brownstone exterior is the focus of the avenue.

Hill told Boston architects, Peabody and Stearns, to "put the best of everything" into his new home. They gave him 38 rooms, 18 bathrooms, and 35 fireplaces to keep it all cozy during the relentless Minnesota winters.

The house has doors and paneling of carved wood, a 100 foot center hallway, 25-foot stained glass windows at the stair landing, massive crystal chandeliers and a gold ceiling in the library.

The most important room in the house when Hill lived there was the art gallery and its two-and-one-half story pipe organ. The gallery housed sculpture and fine paintings, among them his significant collection of Barbizon painters — Corot, Delacroix, Rousseau, and Courbet. The house is now occupied by offices of the Saint Paul Archdiocese, but hopefully it will someday belong to the public.

Hill's son, Louis, lived next door at 260 in a house fronted by classical soaring Grecian columns. Although Louis designed the Great Northern Railroad hotels in Glacier National Park, he chose to buy rather than build, possibly because he liked the next door neighbors.

On the other side of young Hill, at 266, lived Frederick Weyerhaeuser, who already owned the largest timber lands in the United States.

The senior Hill and Weyerhaeuser spent many evenings at home in conversations, often ending with Weyerhaeuser, an early riser, dozing while the ebullient Hill, who kept show business hours, carried on a monologue.

Today, F.K. Weyerhaeuser, lives next door to his grandfather's former home at 294 in a handsome white colonial.

Down the block at 400 was the

(Continued on page 35)
A major Bicentennial exhibition dealing with the past, present and future of the Mississippi River, with special emphasis on the Upper Midwest region will open at Walker Art Center in Minneapolis on October 3, 1976.

It will include Architectural proposals for the redevelopment of Nicollet Island, commissioned from three prominent American firms. Each proposal includes a large-scale model of an interpretation center, and plans for preservation of historic structures and conservation of the natural environment.

Four major new works of art, using the River as a source of imagery; by artists working with video, time-lapse photography, water, sand and maps.

Paintings by George Caleb Bingham, Albert Bierstadt, Alex Fournier and prints by Currier and Ives illustrating the River in the 19th century. Watercolors by Seth Eastman document the region around Ft. Snelling.

A film trip down today's River via a combination of film and slide images.

Maps — from 17th century Europe to NASA satellite photographs demonstrate the evolution of knowledge about River geography.

A visitor information center with rear-view projections to illustrate life above and below the River's water line: flora and fauna, ecology as well as historical facts and statistics.

A 300-foot panoramic painting describing an imaginary trip down the Ohio and Mississippi Rivers. This painting is one of the world's only surviving 19th century panoramas, on public view for the first time since 1950.

A gallery walk through the major cities along the Mississippi — from Minneapolis to New Orleans — including 19th century bird's eye view lithographs, and large photographs of the cities as they look today. Enlarged stereopticon views depict the Twin Cities as they existed 90 years ago.

Large-scale steamboat models and original boat fittings highlighting the importance of the River as a means of transportation and communication.

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(Continued from page 33)

home of the less well known founder of another Saint Paul fortune, Lucius P. Ordway, who was instrumental in establishing the 3M Company.

The only Summit Avenue mansion regularly open to the public is 432, the Burbank-Livingston-Griggs house, named for its three locally prominent owners.

The house is an American Victorian rendering of a Tuscany villa built in 1863 for $40,000 by James C. Burbank, a Vermont-born owner of stage coach and steampacket lines. Burbank had the house erected on a promontory overlooking the Mississippi so he could watch for the arrival of his river boats.

In the 1930's, the daughter of later owners, Mrs. Mary Livingstone Griggs, transformed the interior into a virtual museum of 18th Century European decor. Entire rooms from elegant French and Italian houses were dismantled, shipped, and recreated inside the walls of the Civil War-era mansion. Among the 10 period rooms are French Directoire, English Jacobean, 18th Century Venetian, Louis XV and Louis XVI. Only the main entrance, staircase, and upper halls remained unchanged.

In startling contrast is the downstairs ballroom, a superior example of expensive art-deco with silvered walls and ceilings, marble and mirror-lined guest bathrooms, and 1930's furnish-
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ings that must evoke nostalgia among only the very rich.

Across the avenue at 445 is a near perfect example of the Philadelphia Exposition style of architecture, so named for the two buildings the British built to house their delegates to the centennial celebration of American independence in 1876.

Hailed as the "national architecture of Great Britain" by building trade magazines, the "Elizabethan Cottage" caught on with a few of the wealthy who were ever searching, it seems, for a can-you-top-this home. Among them was Henry Shipman, a man of some mystery who arrived in Saint Paul in 1877 and departed six years later (it was the winters some said) leaving the house to be completed by a real estate speculator. Both men were intent upon authenticity and the gabled, half-timbered Elizabethan Cottage has been preserved down through its present owners.

Fitzgerald lived at 599, just about where "lower" Summit separated the Hills and the Weyerhaeusers from the latecomers on "upper" Summit.

It was in his hot third floor room at 599 that Fitzgerald completed "This Side of Paradise" during the summer of 1919. When Scribner's accepted his first novel that fall, Fitzgerald, acutely aware of where his address placed him in the tightly structured St. Paul social hierarchy, reported the news to a friend in a letter headed:

(599) Summit Avenue
In a house below the average
On a street above the average...

Sinclair Lewis lived at 516 from the fall of 1917 to spring 1918. He skied, skated, partied with the elite, and worked on his play "Hobohemia," which died after an 11-week run in New York.

Saint Paul is literally strewn with buildings designed by Cass Gilbert, who later moved to New York and gained a national reputation working for the famous firm of McKim, Mead and White. (He designed the Woolworth Building and the Minnesota State Capitol.)
One of his last works produced in Saint Paul is the sturdy and stylish home at 705 built in 1898 for a local department store executive. The house is constructed of yellow limestone with a green tile roof. It is marked by medieval accents—a generous porch with Gothic columns and three steeply gabled dormers on the roof.

While Summit Avenue has not been pushed as a visitors' attraction (perhaps because there is no way to turn a dollar on it), it has an affectionate hold on this city. A walk or a drive down the avenue provides an instant connection with the classy beginnings of a city that sometimes refers to itself as “the Boston of the Midwest.”

This attitude was expressed recently by a Saint Paul newspaper columnist who wrote about the avenue, “And in the hush of an early summer’s evening one can look down on the twinkling lights of the city below Summit hill or stroll with ghosts of judges, governors, railroad builders and business pioneers and know that the street looks today as it looked 75 years ago. Proud, and beautiful.”

The odds for survival of the avenue seem better today than ever. Some of the huge old homes are institutionally owned and a few have become multiple dwellings, but somehow the integrity of the avenue has been maintained.

Over the past decade the avenue and the surrounding neighborhoods have been experiencing a renaissance. Young families have moved in and the once exclusive society has been replaced by neighborhood associations whose savvy members—including descendents of original Summit Avenue residents—know how to write grant proposals, promote restoration with multi-media presentations, and pressure the city council for enforcement of ordinances which were originally enacted to preserve the ambiance of the area.

Tom and Joan Kelly are free-lance writers and photographers. Mrs. Kelly is Director of Public Relations for the Science Museum of Minnesota and Mr. Kelly is Vice Chancellor for Educational Relations for the State University System of Minnesota. They are residents of Saint Paul.
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Since the 1960's, there has been a movement in the art world to expand the traditional boundaries of art into areas normally considered architectonic in nature — to move beyond the singular art object, primarily important unto itself, and to become involved in the shaping of environmental space. The work of Robert Irwin, recently exhibited at Walker Art Center in Minneapolis, is an example of this direction. Artists, like Irwin, have been directing their efforts to the creation of works that fill, activate, or respond to the surrounding environment. A variety of media are used — light, sound, man-made and natural materials, etc. — to create an art which explores the nature of space and experience.

Irwin, a 48 year old Californian, began as an abstract expressionist, but left this subjective approach to pursue a highly theoretical and experimental course which is basically concerned with the nature of visual perception. Such Irwin comments as ... "To be an artist is not a matter of making paintings at all. What we are really dealing with is our state of consciousness and the shape of our perception" and ... "The definition of an artist must be expanded to include anyone in pure research ..." characterize his attitude. For Irwin, art is a process of research, of continual questioning. It is a reclusive approach which does not contribute to high visibility on the art scene. (During the 60's he did not allow photographs of his work, thinking these might cause misconceptions on the experience of his art.) During the past five years he has generally been out of sight — working on projects, visiting schools and even stopping work on art altogether for one year. Only recently, with exhibitions at the Chicago Museum of Contemporary Art and Walker Art Center, has his work come into full view again.

The dot paintings of the mid 60's (one was shown at the Walker), indicate the first concerns with a reductive, illusionistic approach which is anti-compositional, without focus and devoid of symbolism. A dense mass of barely perceptible dots thins out to the edge of the painting. There is a preoccupation with dissolving the painting into surrounding light and shadow — with prolonging the time needed to experience...
the work. Although there is a sense of indeterminancy, Irwin still sought a means of making a painting which did not begin or end at the edge of the canvas. The question of the confine became critical — could the edge be broken? This concern led to the disc paintings. A thin aluminum disc, painted with concentric rings of subtle color and mounted on a stem, projects 12-15 inches from the wall. Two flood lights above and two below are arranged to cross-light the disc and create overlapping soft shadows on the wall behind. An ethereal, atmospheric effect is created. The disc merges with the wall and shadows, with a resulting ambiguity as to its material substance.

From the disc paintings Irwin, in the early 70's, went on to large scale environmental installations which further test the viewer's perceptions and awareness of space. His idea is to come to a spatial situation without preconceptions and to work with the "givens" that are unique to the situation — and through his work to make the viewer more aware of what has been going on all along.

The nylon "scrim" piece was probably
the most visually dramatic of the exhibition, Irwin has taken gauze-like material and stretched it, tight as a drum, from wall to wall and diagonally from floor to ceiling at one end of the gallery. Behind this semi-transparent screen are fluorescent lights which bathe this sealed space with a soft white light. The formerly static gallery space is now transformed in a magical and, again, ambiguous way. Are we seeing a light waterfall, as one reviewer observed, or is it light pouring down from a concealed skylight? As one moves closer, there is an awareness of architectural space beyond the scrim and the sense of the taut nylon surface — but with movement in other directions the space behind the screen evaporates and there is left the impression of a luminescent volume of white light. The result is illusionistic and hypnotic in its ability to hold the viewer's prolonged attention. This, plus the urge to view the installation from various vantage points, heightens the observer's awareness of the spatial character and proportions of the gallery space itself.

Possibly Irwin’s most subtle creations in the exhibitions are the tape pieces. These are simply applications of tape to the floor in linear or mass forms. At first the viewer is puzzled but, as always with Irwin, prolonged observation reveals that the tape is placed in a way that opens up a variety of perceptions and interpretations of space. In one installation, a large mass of black tape is placed on a triangular floor area adjacent to a window extending from floor to ceiling. Strangely, the opaque blackness in this situation suggests an abyss which one dare not step into — or it might be a shadow cast on the floor. But then a shadow could not be defined in this manner by light through the window. There should really be a triangular patch of light — which is also impossible as the window faces north. Perhaps the black triangle is merely meant to give visual definition and draw attention to a generally less noticed space in the gallery.
Whatever the artist's intentions, multiple interpretations lead again to an ambiguous, illusionistic effect which brings a special life and tension to the space.

In summation, Irwin uses the simplest and most ephemeral of materials — light, nylon, tape — to create works of marvelously subtle and elusive imagery. In considering the significance of Irwin's work to architecture and urban design, it is important to remember a key factor in his approach — the desire to work with the "givens" of a situation and to make the observer aware of a space's potentials through his applications. In a time of many "givens" and constraints — high building and energy costs, ecological concerns, etc. — the use of illusionism should be considered in expanding the range of design alternatives. Working with "givens" and a minimum of resources, Irwin has demonstrated that illusory techniques can provide exciting new possibilities for spatial perception and experience.

Illusionism is, of course, not new to the design fields. Irwin's special contribution is that he makes us aware of new insights as to its potentials. This suggests an important role for art in its relationship with architecture. Art, in addition to serving its own purposes, has relative freedom to explore, in the pure sense, questions of space and sensory experience and to develop ideas which may be the basis of a
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Mr. Foster, a graduate of the University of Minnesota's School of Architecture and the Harvard Graduate School of Design, is Principal Designer at the Saint Paul Housing and Redevelopment Authority. Photos courtesy Walker Art Center.
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It is 70 years since Cass Gilbert's masterpiece was completed on the rise overlooking downtown Saint Paul. The building still serves remarkably well the Legislative, Administrative, and Judicial branches of State Government. It is equally remarkable the way it serves a symbolic role today for the citizens of Minnesota, in spite of dramatic changes in taste and technology.

Within the last four years, the House and Senate Chambers, the Governor's Office, and the Supreme Court Chamber have been restored to their original grandeur, but with notable improvements in acoustics and lighting. Now, the exterior is undergoing an extensive program of conservation — the first time since it was completed, that anything more than "touch-up" has been undertaken. The first step was recognition of the need for a thorough inspection, analysis, and recommendation of what should be done. Next, an architect was selected* to develop a program and follow it through completion. The State Legislature appropriated...
in April of 1975 and bids were received in July — the successful bidder being Macpherson-Towne Company of Minneapolis, with a low bid of $321,000.

The principal work consists of routing out all the masonry joints and repointing with a lime-cement mortar, and then cleaning all the masonry with water. In addition, it was necessary to replace brick pavers on upper piazzas, repair marble statues, reinforce members in the Quadriga, and replace some soffit lights which had disappeared long ago.

The most important lesson to be learned from this project is the value of preventive maintenance. It is quite evident now, that the extensive degradation of the marble resulted from the accumulation of air-borne pollutants. These are principally sulphur compounds, which, when combined with moisture, form acids which, in turn, attack the calcium in the marble. An enlargement of the granular surface of a badly eroded area (see photo) dramatizes this phenomenon. The Keystone figure over the main en-
trance has lost an arm and part of her head (see photo). These missing parts will be restored. A regular schedule of cleaning the exterior with water will greatly reduce the rate of erosion in the future.

The legislature has quite wisely charged the Minnesota Historical Society with the responsibility of reviewing all work done at the Capitol Building in order to assure that historical integrity is maintained. The coordination of the various projects has been most ably carried out by Gerald Robinson, an architect in the Department of Administration. His architectural knowledge and sensitive judgement have provided the essential continuity to the work of so many diverse participants.

Actually, the building is very sound,
structurally; it continues to serve well, functionally; and by public acclaim, it excels aesthetically. In short, it is quite a building!

*This commission was the first to be awarded by the State of Minnesota, under the new Designer Selection procedure. Brooks Cavin, F.A.I.A., was chosen from a field of 17 applicants to direct this important preservation work.

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Architecture Minnesota/July-August 1976
called the Ridges Phase I Complex, houses the Ridges Health Center, a community out-patient and emergency health facility, the south suburban branch of the Nicollel Clinic, and medical-dental office space.

The Ridges is expected to be the hub of health care activity for growing Dakota County, providing a high level of quality to the medical-dental services in this area. Bridges, underground tunnels and inter-connected walkways in green spaces will tie the campus together as a single unit. All-weather pedestrian linkage will be available to various buildings while at the same time providing additional freedom to walk about in a natural environment.

In the final phase of development the main building will be a hospital, expanding eventually to 450 beds. Medical-dental office buildings will provide space for as many as 100 physicians and dentists. Another facility, the Ebenezer Society Nursing Home, will be contained in separate buildings to assure added personal care and maintain more of the atmosphere of a home than an institution. It will be connected by a covered or cloistered walkway to the Prince of Peace Lutheran Church. The church has met the contemporary spiritual needs of its members by providing an outdoor pulpit for drive-in Sunday worship in spring, summer and fall and a day care center.

Building, parking facilities and streets will cover less than 38% of the campus, while common and private open space, natural and landscaped, will occupy more than 62% of this picturesque area.

The initial land plan developed by Brauer and Associates, Inc., has been a guideline for this project. Planning was conducted under the discipline of an overall development theory, not merely as another community plan to provide health care services.

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