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#### On The Cover:

Des Moines Civic Center Charles Herbert and Associates, Architects Farshid Assassi, Photographer Cover separations courtesy of Swanson Gentleman



Works In Progress



#### Patterns For Urban Vitality

Generating downtown diversity may rely on more thoughtful observation of the successes and failures of existing places.

Preservation and Restoration

Public and private funds serve

as catalyst to broad city

Between The Architect and

Part One of a look at architec-

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### WORKS IN PROGRESS

#### Iowa State Historical Museum, Des Moines, Iowa

The encompassing design premise for the new Iowa State Historical Museum was to provide a safe and secure location for the State's vast historical collection. The site selected is south of the existing State Capitol in an under-used, park-like area that was poorly maintained and insufficiently used. The development of an underground structure by Brown Healy Bock Architects and Engineers was done so as not to create a mass that would distract from the Capitol and would also allow for the creation of significant outdoor display spaces for those larger museum pieces such as trains, farm equipment, etc. which are to be exhibited. The design enables the natural qualities of the site to be retained and enhanced. In addition, pedestrian and vehicular circulation was developed at different levels without conflict.



The solution allows for a blend of energy efficient design, good security, the natural acoustical quality of the surrounding earth mass and the utilization of a natural renewable resource: controlled daylight. The solution has further made it practical to design a certain percentage of the building's heating and cooling needs utilizing solar energy. The collectors will be placed on a series of earth berms south of the main building down the slope.

The site design is projected as a series of ground level terraces with one major architectural feature: a large, jewel-like skylight, which allows controlled natural light to filter through into the lower levels of the building to negate the effects of a below-ground structure.



#### Northeast Park Community Center

Bussard/Dikis Associates of Des Moines is currently in the design development stage of a Community Center for a new recreation area in the rural countryside north of Ankeny. The Center will serve as a year-round seminar facility for Ankeny businesses and as a recreation center for an 18-hole golf course, tennis courts, platform tennis, jogging, cross-country skiing, and ice skating. The 11,000 square foot facility will include two seminar rooms, a large meeting area, deck, kitchen, locker rooms, sauna, golf cart storage, and pro shop/snack area.

The Center's form is strongly rural in nature, with an existing barn at the entrance to the recreation area serving as the "metaphor" for the new facility. (The existing barn is to be reused as an arts barn.) The interior finish materials will feature heavy timber beams, columns, and trusses with wood deck. The outside finish will include 1 x 12 vertical siding, wood shingles, and "barn red" panels. Operable clerestory windows are utilized to induce a flue action to improve natural ventilation.

The project is scheduled for construction in early summer, 1981.

#### Urban Center For Palmer Communications

Under construction adjacent to the west edge of the Des Moines downtown are offices for Palmer Communications and WHO Broadcasting. The 66,000 square foot building is based on a two-story skylighted circulation spine with offices and studios to the south and service functions (circulation, restrooms, mechanical) to the north. Site layout was influenced by a 400 foot tower in the center of the block, on-site-parking, and consideration of visual support for a major approach to downtown Des Moines. The office and studio portion of the building is covered with precast concrete panels; service functions are expressed by an exterior sheathing composed of natural aluminum panels. Connecting these two constructions is the skylight of translucent fiberglas. Interior walls and doors have been designed to acoustically isolate studio spaces. Completion of the \$5 million project, designed by Charles Herbert and Associates, is estimated for fall of 1982.

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### Patterns for Urban Vitality

by Kirk V. Blunck



To have a fine city today, people must first want one. Fortuitously, the American culture has fouled the once lucrative suburban dream, and we now have the opportunity to recapture the city. The major restraint against good city building lies in myths and cliches about what the city is and the consequent dearth of images for a well organized, satisfying environment. Too few believe that dense focal aggregations are essential socially and politically. Too few advocate human interaction supported by many types of communication (face to face as well as electronic) and many types of transportation (pedestrian, bus, bicycle, automobile), each readily accessible.

A return to our downtowns begins by seeking the environmental opportunities that affect the experience of living there. It may, for some, necessitate a conscious unshackling from the culturally biased expectations of what a downtown is. Perhaps this is only possible through careful attention to the special and supportive characteristics of any place. We might ask, "What is better about being here than someplace else?" then collect and record each of the discoveries and progressive understandings of those opportunities.

There must also be a redirection from singular design vocabularies that are misappropriated from one context to another. A misunderstanding of the downtown vocabulary has led to an architecture of compromise deriving from a list of problems and environmental conflicts so securely registered in the mind of the designer that they have obscured a list of downtown potentials. We are designing to avert disaster and forestall failure rather than to satisfy expanding expectations.

#### Adolescent Cities

Unfortunately, "the art of city design has not yet broken with the specious comfort of wishes, familiar superstitions, and symbols and begun to observe the real world."

Nowhere is this more true than the adolescent cities of America. The image of a young boy may be useful as an analogy to explain 'adolescent' cities. For the boy it is a potentially tumultuous period of growing, an approach to maturity. It is both a time when he is trying to decide what to be and simultaneously being impressed by many exciting yet conflicting examples of what is possible.

Typically, the adolescent is anxious and impatient to be in the next stage of development or at least have the reputation for being in it. So in his rush to 'feel' an adult the easiest thing is to grab for vestiges (usually visible, physical ones) of the adult life. It does not seem really important that he understand those things he copies. He can imitate an aloof posture, buy a first sportcoat, or cast away all 'traditional values.' But there is little sense of what responsibilities or implications accompany each one of these actions, and clearly, the implications can reach far into adulthood. It is a period of potential, excitement, and indecision.

It can also be a time when each decision seems an irreversible one. There may be some reluctance to commitment or unsure feelings about how easy it is to



In contrast to the Minneapolis Skywalk, Des Moines buildings have yet falled to embrace the skywalk system instead creating lifeless corridors and unexciting blank walls along its length.

change one's mind. This is quite different from the earlier years of reckless childhood abandon when decisions could be made on the spot and the consequences paid for later (as they often were). The leisurely, dawdling perception of childhood is too soon replaced with the hurried perceptions that must be made in order to cope with the adult world.<sup>2</sup> A lot of mistakes get made, sometimes the same ones several times before the point is driven home. (Of course, repetition of mistakes is typical in cities too; the cost is just much greater and debilitating.)

Adolescence represents an important life crisis, the conscious attempt of a growing person to for the first time formulate rules or patterns relating his self image to what he sees occuring in the world about him.

Cities too undergo transition. The inner turmoil and excitement is hardly less evident, particularly in the early years (decades) of city adolescence. While looking to the numerous models of other cities, if indeed those shaping the city do look at all, there is a tendency to seek *emulation of things*, particularly new and sleek ones, without knowing what was good, bad, successful, unsuccessful, supportive or unsupportive about these 'things.' Lessons, quite simply, are not being learned.

Part of the difficulty, admittedly, is that the city is such a complex interrelationship of parts that cause and effect relationships are almost impossible to isolate or even define when it comes to design. City adolescence is a period of utmost importance, since the patterns and developmental criteria that are set forth when the city is at this stage usually dictate the future growth potential and direction when the city becomes larger and less controllable.

Analogies are, of course, never wholly complete or specifically accurate. But the intent of any reflection on this important growth period in a human lifetime and in a city's lifetime, while recognizing these limitations, is in clarifying the attitude that distinguishes it. It is the 'attitude' of many cities, and those directing its development that continually affects the whole range of economic, political, social, cultural and environmental decisions that at some time or another get translated as fragments into built physical form.

Despite the apparent dilemma, some inspection of development values needs to be attempted by cities. It necessitates asking very fundamental questions of attitude and intent that then can establish a context for a more particular set of city goals and policies. Design is a physical manifestation of value systems and it is critical to be clear about them.

Very broadly a pattern of downtown development concerns can be identified:

• There remains a romantic notion about the rural, agrarian style of life that most people have never experienced.

· A proliferating set of large and small economic and

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political policies have left the heart of the city in the position of 'subsidizing the suburbs.'

• A body of urban cliches has become entrenched and embellished based on inaccurate sociological study, exaggerated accounts of 'big city' life, and imaginative conjecture fed by the latest television dramatization. For more than two decades the city has treated itself to a feast of condemnation.

 In defending against negativism to the city, the special qualities and potentials of the downtown structure have been neglected or denegated, resulting in unsupportive downtown isolates within the urban framework.

•Attitudes and economic obstacles have tended to limit a close investigation of how the quality of the downtown living experience can be influenced by design decisions.

The concern for these underlying attitudes is so consuming because much of the literature about the 'new' trend and need for downtown housing and redevelopment, to which we still refer, appeared as a body of work in the early years of the 1960's. Optimistic projections, encouraging proposals, and what seemed like clear objectives still remain to be implemented in American adolescent cities. Despite the incorporation into policies and goals of numerous city planning documents, the arguments for living in and developing the downtown of these cities have never scratched the underlying values that have made those policies unattainable. The strength of negative city cliches has also engendered the 'reluctant' city in some cases.

#### Downtown Potentials: An Attitude

The concern for returning to the center of the city is not a romantic notion. The implications of such development respond to the broadest range of societal concerns, though clearly there is some reluctance to recognize that the downtown could provide a field for resolving those concerns. The need to reconstruct city life, the search to avoid the routine, has forced a more honest analysis of the possibilities of urban living. We might question how dense, typically disorderly places can become the instrument for accommodating an escalating desire for human choice. The uncompromising view of a vast and lonely city jungle must be transcended by a realization that a city has a positive human value. It is the framework for supporting our *own* freedom of choice.

Obviously these attitudes are not novel. Yet knowing that many current users of downtowns are 'city' born and oriented and share these positive attitudes does not resolve the dilemma of an equally large suburban-bred generation that has a sketchy pattern of central city use and no experience with downtown living alternatives.<sup>3</sup>

"As urban areas have increased in population and expanded in area and as our economies during the last one hundred years have shifted from rural to urban, the philosophy and mental attitude of all too many people remain rural. One of the major roadblocks to development and renewal of urban areas is the lingering and nostalgic mental confusion of farm-and-small-town-oriented individuals. Urban development can take place only when those responsible for that development are urban-oriented in their philosophy and have a deep and positive attitude toward urban environment to satisfy the needs and desires of an urban society."<sup>4</sup>

In a quite strange way we find ourselves pining for a rural life that the majority of people have not known anyway. We are forced, meanwhile, to defend against apprehension and dissatisfaction with an urban lifestyle that is equally unknown to most.

A major obstacle to returning to downtown areas is the level of crime and insecurity *perceived* to exist (See Eugene, Oregon Housing Survey, 1975), almost irrespective of whether it in fact does. It is an issue on which public opinion is immediately biased toward the negative and only slowly reversed or retracted. When people don't think a street or district is safe they avoid it, and by avoiding it increase the opportunity for unobserved trespass or assault.

The importance of this idea is illustrated in the Eugene, Oregon community and cited by Lipton, 1977.

"Crime was perceived as a problem by those who have strong objection to living close to downtown



As skywalks are developed to assist pedestrian movement and traffic flow, a proliferation of drive-up banks in the heart of the downtown accomplish precisely the opposite.



Arguments for siting the Marriott touted the importance of a busy downtown intersection, yet the hotel has turned concrete walls, drawn curtains, and what appears to be a back entrance to the street.



Restoration of Younkers will preserve a downtown landmark that is important both visually and economically.



even though serious crime is not significantly different in central neighborhoods than the rest of the city. While the crime figures do indicate crime in the central area, discussions with the police indicate that the crimes are generally against commercial establishments not residential properties. In fact, there is a lower rate of residential theft in the central neighborhoods...than in the wealthy suburbs.''<sup>s</sup>

Of course, another part of the reason why people fail to venture to downtowns at night is that there may be nothing to be downtown for at those times. Knowing this compounds the problem as suspicions are unnecessarily aroused about those who *do* wander through or stop and linger on the street at night without some clear point or 'business' in doing so.

On a broader scale we have confronted in 'perceived insecurity' a cliche of the urban condition that is associated with density patterns. A compendium of urban ills are quite routinely suggested to accompany city development. Our 'great American' cities, New York, Chicago, Los Angeles, etc., apparently bear this out in part. Further reference has often been made to the widely known, if unnecessarily dramatic, studies with rat populations by social psychologists in the 1960's.<sup>e</sup> But these references are incomplete and largely inaccurate. The most notable, yet consistently overlooked result, is that density measures alone cannot be effective in describing the complex of factors inherent in downtown life, or more generally, human contact.

Men, obvious to us all, are not rats and the density of cities is not like the density of rat pens. Yet this may be the most overused and least understood data social psychology has yet passed to architecture and city design. At the least it is likely to taint our image of what a city is, or can be.

"Those who draw firm conclusions about density and behavior are either speculating or making astounding inferences from flimsy evidence. The state of research knowledge as it is indicates that there are few, if any, consequences of density even among animals. Claims about pathological effects have obtained little empirical evidence support, for human reactions to crowding are **much more a function of the social and architectural situation** and of culture than simply of density."<sup>7</sup>

The conditions that generate downtown diversity may, as Jane Jacobs writes, be more fully understood by thoughtful observation of places that exibit these qualities than by any preoccupation with conventional planning policies or economic assessments alone. It is remarkable that these latter ideas have been justified (or justified themselves) and been able to reduce complex environmental interaction through a vocabulary composed largely of numbers. How many, how much, how soon, and how expensive are held up as primary indices of whether environments for people will be successful. Quantifiable elements reign over even the most clear qualitative indicators. The interrelationships that revolve about people, are not so often given decision-making importance. Shadrach Woods writes of this misplaced emphasis on mathematical decision-making:

"We have fallen victim to the myth of mathematical infallibility. When one examines the process, and sees with what imprecision the original data (on which the rest was built) are gathered and evaluated, one can see that only rarely are the impressive resulting figures to be given any credence. Their value lies not in their accuracy but in their value to persuade administrators into taking actions which will prove their accuracy, or worse, to justify previously determined actions. This method of decision making is really a new mysticism, one which is felt to be more suitable to contemporary attitudes than the old way of intuitive, quasi-logical guesswork."<sup>\*\*</sup>

Jacobs gave the following description of four conditions vital to the generation of diversity within a city's streets and districts: more than one primary function, short blocks, buildings of varying age, and dense concentrations of people.<sup>9</sup> These conditions can be quite powerful in suggesting directions for a downtown district. They provide a large, encompassing framework for decision making.



Urban plazas of any scale rely on the Intensity and movement of people for their success. United Federal Savings and Loan, Mies Van der Rohe, Architect.



As the city core is itself strengthened by new construction, major vehicular entrances are dramatized by carefully articulated building edges. Northwestern Bell Telephone Co. Charles Herbert and Associates, Architects.



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Yet it has to be emphasized that these conditions address large scale issues, often planning issues, and never attempt to take the next step to test how individual buildings or groups of buildings might also be 'planned' or designed to more fully support both their internal functions and the city street and district that is their context. This is not suggesting particular ways that these buildings must be built nor even obligatory pieces or uses that each project will include. It is not a programmatical handbook or urban cookbook to successful, vital places that requires only a careful measuring out of each ingredient.

It is suggesting that there are **observable interrelationships between a building and a street, between a building and its district, and within the building itself that can generate and support diverse and vital places for living. In this sense, Jacobs and those with a similar body of ideas concerning city structure have stopped short.<sup>10</sup> Just as city planners may become enamored of numbers rather than fundamental relationships, so can architects feel justified in satisfying more general building conditions and underestimate the importance of the more particualar relationships of entrances, public space, stairways, or building edges to the existing city conditions.** 

It is a false, misleading assurance that establishing the proper structure of a city and, more particularly, the downtown, is the primary design concern, and once having been done, well designed buildings will come in to place to support that structure. It implies that buildings that support the image of larger framework will 'take care of themselves' or follow naturally. But very little ever takes care of itself. Arguments must be forwarded for the next degree of design specificity and sensitivity within the whole of the urban environment.

An observation of what is now built can clarify why this is important. Urban high density multiple family housing is one example of the failing to recognize fundamental relationships and to latch on to instead easily provided 'things': a patch of green grass, several concrete benches, or a barren plaza. They are 'amenities' that fail, not necessarily because of lack of need or lack of people or because they were not the most expensive installation available, but because the connections to and from these were never studied and, therefore, never resolved.

The dissatisfaction of an old lady in Portland, Oregon with the connections to her environment illustrates how important this understanding must be.

"There was no place to come together with other people outside of the apartments themselves; no place to casually meet for coffee, to chat, to reminisce, to watch or listen to others. Outside the elevator door at each floor was a corridor about eight feet wide and eight feet high that looped around serving each apartment. The light was entirely artificial. There was hardly a place to pause, much less spend some time and become acquainted.

"On the ground floor there was an entrance lobby, but it was immediately inside the entrance and had seating for only six. Again, there was no gathering place at all, although there was an empty (and locked) recreation room which could be reached by going outside. There was also a roof garden, but it was seldom used because it was 'just a roof.'

"Outside the building there was a garden arranged in a formal pattern of concrete walks and raised areas of ground cover, each with a tree. It seemed to be for walking through rather than being in, with few places to relax, to linger, to contemplate something, or to get to know someone.

"My friend described her habit of leaving her apartment and her building as early as possible each day and staying away as long as she could manage. Why should she stay?"<sup>11</sup>

What is needed is a more careful understanding of what makes a downtown diverse and vital. That understanding considers the part to whole relationship. Each element of a building can be supportive of, or



The 17 story Baptist Housing Project will respond to long neglected urban residential needs. Brooks Borg and Skiles, Architects.

destructive to, the vitality and diversity of the larger framework. The connections between these parts and their fit into the whole of the downtown becomes crucial to the experience of being there.

Recent psychological research has aimed at understanding the signficance of daily environmental experiences. It has asked the 'so what' of architect's concerns for experientially rich places to live and work. Complexity and ambiguity has been discussed in particular by Rapoport and Kantor who, having recognized that a significant part of the environment is and will be 'designed,' postulated that important perceptual needs are not being satisfied. Complexity is described in a physical sense, relating to intricacy in design. Initial reports from their studies conducted at McGill University indicated the ''importance of a sensorially rich environment'' and subsequently led to an extensive investigation of the visual setting.<sup>12</sup> Deprivation experiments revealed ''significant performance decline in their sub-



The Locust Street Mall will inject four levels of high quality retail shops, open to one another by a central atrium and clearly visible to pedestrians at the street. Copeland, Novak, Israel and Simmons, Architects.

jects over a variety of thinking tasks immediately after their release from a sensorily restricted environment."<sup>13</sup>

The testing advanced within the last two decades as cited by Rapoport and Kantor have consistently supported our understanding that from infancy to adulthood humans prefer variability and complexity in visual and auditory stimulation. The lust for the rural landscape may, in fact, have more to do with the progressive schizophrenic withdrawal of the American culture than with harsh urban architectural images. Even so, much of the barren, repetitious, and vacuous downtown design has offered little to entice us back from the natural surrounding.

#### Renee Dubos writes:

"Human potentialities, whether physical or mental, are expressed only to the extent that circumstances are favorable to their manifestation. The total environment thus plays a large role in the unfolding of man's nature and in the development of the individual's personality.

"In practice, the latent potentialities of human beings have a better chance to come to life when the environment provides a variety of stimulating experiences, especially for the young. If the surroundings and ways of life are highly stereotyped, the only components of man's nature that flourish are those adapted to the narrow range of prevalent conditions."<sup>14</sup>

#### Contextural Fit and Accommodation

The surrounding context must be considered as a particular concern of urban design. Assuming local climatic, seasonal, historical, and other conditions may all be importantly considered during the design of any structure or landscape, but they are not necessarily illustrative of special urban potentials. More interesting to urban work are those physical and cultural associations available for our perception.

Dutch architect Aldo Van Eyke long ago alluded to a type of contextural fit and accommodation. **"For thirty** years architects have been providing outside for man even on the inside. But that is not their job at all. Architecture means providing inside for man even on the outside."<sup>16</sup> His is a recognition that buildings make both positive and negative space; that a wall encloses space simultaneously on both of its faces. Indeed, environments are not passive wrappings but very active, if invisible, processes that need also to be accounted for. Each building can be an additive and supportive place which may alter immediately its surroundings by its form and usage. The interplay between old and new environments can serve as a significant design base. Obviously, any place is situated in a larger context.

That this is important is demonstrated in districts where either buildings are placed as isolates neglecting the overall framework and establishing only an interior place or where an undifferentiated surface of buildings is presented to the walkway. In either case one is either 'in'



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Assessments of economic feasibility still rely on subjective judgements of value, not financial analysis. Demolition of Paramount Building.

or 'out,' 'at the place' or 'moving to the place.' There is no in-between to engage the interest of people.

A beginning vocabulary of urban design can be suggested.

Non-Duplication Within downtowns there is a potential for uses to share places and services, particularly public and transitory spaces so that resources are freed to support other building or reduce costs or provide additional shared services not now present in a district. Instead of building urban isolates or oases, each new part of a downtown should complement and enrich the whole.

Building Subparts Each building in a downtown will have several orientations with particular qualities determined by sun direction, street layout, pedestrian paths, and surrounding building uses. It is unlikely that the special qualities will be the same for each orientation. Therefore, to provide sympathetic consideration of existing paths, special connections, and responsive exterior spaces, each orientation should be treated for its specialness in relation to its larger environment.

Path Assimilation The paths we take to a particular place do much to affect our orientation and understanding of it. In this way, means of access is important to our interaction with our environment and our orientation to our environment. Thus it is important to recognize the existing overlapping paths at the city, district, and site scale and begin to make some determination of any paths will be supported by any new development. Incorporate these paths continually in the design of a building, understanding the fit of both exterior and interior routes of access into the larger district framework.

Connections With Character If the role of the city is to provide ways, places, and opportunity to support interaction with people and activities, the connections to people and activity must be carefully considered. The number of places where this is possible at a variety of scales should be maximized and the character of these connections adapted to the flow and type of interaction likely to occur in a particular place. These should include physical, and visual connections.

Local Qualities Within any district there will be a set of recognizable characteristics and local conditions at various stages of completeness and of differing significance. Where they begin to identify an area of the city with special qualities or connote a particular set of activities to engage in, they can offer strong suggestions to which the project design can respond, assist, or repair.

The primary significance of inspecting attitudes and potentials is that it can assist in outlining the structure of current subjective thought and approach to design. The vagueness and contradiction in a collective value is manifested in vague and contradictory city development. There remains an incredible waste of potentials, opportunities, or whatever other label we could attach to the environmental-perceptual resources which can be manipulated, but are not.

Potential seeking and opportunity solving are techniques to inspect the exceptional features of the urban environment, in part by defining what the downtown is. There is much concern for understanding it as a place for human interaction, a place where choice is supported by the accessiblity and connectedness of its parts, a place where diversity has both personal and collective meaning. The special and supportive qualities of this place are the process of the downtown. It is a process expressed through a singular fabric of entrances, retail windows, public spaces, pavement, building edges, and people. In a sense, the process is the special opportunity of the downtown. Solving it relies on careful attention to the relationships between a building and the street, between a building and its surrounding environment, and between the people that activate the entire process. A physical commitment to the process is a

commitment to the downtown itself. This is now overlooked.

Our understanding of urban design is sharpened by positive opportunities relevant to the quality of daily experience. Notes William Lockard:

"We seem to be making some slight progress as a species in lessening the situations where dire consequences hinge on our perception, and increasing those cases where positive opportunities can follow our perception."16

This positive kind of perceptual consequence is one key to downtown architecture. When either architecture or society fail to offer understandable, clearly stated opportunities, they fail together. The heightening of understanding based on opportunity accelerates automatically in a reiterative, generative way. If, as contemporary cynicism remarks, "one problem leads to another" can one opportunity identified reveal other opportunities?

The analogy of adolescent cities offered at the outset can be carried full circle for "a child who fails to perceive an opportunity for gratifying his special traits in his school or in society will have his perception dulled, and thus will foreclose other opportunities and his perception of them. Threatening him with negative consequences, 'pay attention or I will flunk you,' is based on fear, and unlike the process of perceived opportunity, is a static, rock-bottom threat.""

Cities too may guide development according to the

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New interest and concern is directed toward the southern edge of the urban center. Renovation of warehouses and industrial buildings can assure a needed mix of old and new structures. Kaplan Hat Factory.

negative consequences that result from any commitment. Decisions may be couched relative to politic-wise criteria for minimal intrusion, least objection, or least cost.

A growing city's attempt to formulate a self image according to its fragmentary perceptions of what occurs in other cities may preclude realization of its own inherent potentials.

The basic goal of urban architecture and of society should be to make its singular environmental opportunities abundant, obvious and accessible to everyone.



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Ham House Museum

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### Preservation and Restoration In An Old River City

by Wayne A. Norman

Dubuque, Iowa's oldest settlement, is a Mississippi River city serving as a retail trade center for all or part of 15 counties having a combined population of over 250,000 in the tri-state area of Iowa, Wisconsin and IIlinois. The Mississippi River valley to the north is one of the most beautiful in the world with towering bluffs and old river towns.

George State

With a history going back to lead mining before the Revolutionary War, the old portion of the city was built primarily from 1840 to 1900 and contains a gallery of architectural types from Greek Revival through Riverboat Gothic to the Victorian years of Italian Villa, Queen Anne, Second Empire and Richardsonian Romanesque. Dubuque has a longstanding commitment to the vitali-

24

ty of its central retail core. This commitment was confirmed through the Downtown Urban Renewal Project in 1968, which sought to create an expanded and revitalized regional retail center, organized along lowa's first open pedestrianway.

This prize-winning urban renewal project, Town Clock Plaza, was capped with an imaginative combination of the old and the new. The 100-year-old Second Empire Town Clock was salvaged and placed on a new tower in the center of the plaza. Local fund-raising efforts combined with sympathetic city and project officials gives the city's center a unique character.

The crown of the city's architectural jewels, the Five Flags Theater, originally the Majestic, was built in 1910 as an opera house in Flemish Rennaissance style. The theatre was constructed on a site that has been continuously used for theater since 1840, possibly the oldest continuous-use theater site west of the Mississippi.

The urban revitalization story started in 1969, with the urban renewal project having cleared the area to the north wall of the building, the wrecking ball ready for action. The perpendicular street had been widened to plow through the south side of the building. Within two weeks of demolition a group of interested citizens were able to put a hold on the demolition to complete feasibility studies.



Town Clock Plaza





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Beginning as a private fund-raising organization, with a \$4,000 individual commitment to finance a survey by a real estate research firm, the Five Flags Center Fund raised over one million dollars to purchase and restore the theater and purchase the adjacent full-block site from urban renewal.

City and urban renewal officials, the former owner, industry, business and labor, all joined together on this board, meeting weekly, every Friday morning over coffee and doughnuts until the theater was restored, given to the City and opened in the Bicentennial, six years later, with a smash hit musical "Get the Lead Out".

An initial study by Architectural Historian A. Craig Morrison showed that the theater, originally built as the Majestic, was the first theater designed by the famous Chicago architectural firm of *Rapp and Rapp*. who later did many of the great theaters of the early 20th century such as the Chicago; the Capital (St. Paul, MN); the Penn (Pittsburgh) now the Heinz; and the St. Louis, now the Powell. Mr. Morrison pointed out "the form of the American theatre building underwent radical changes during the latter years of the 19th century and the opening years of the 20th. As did all buildings, theatres underwent a stylistic change from the Victorian to the accurate reproduction of historic forms that marked the 20th century period of scholarly eclectic. Architectural tradition is slow to change and it is just this slowness that gave the Majestic its form and made (this theater) a building of unusual interest in that it falls precisely in the middle of the process, incorporating features of both the past and the future.

The stage apron has disappeared and the main floor is seated with fixed, forward-facing rows of seats as would be all theatres in the future. At the level of the lower box is the old-fashioned hairpin balcony, in this case treated as a "dress circle" of boxes. In these boxes originally were the individual opera chairs of the 19th century playhouse. Above this level is the balcony, forwardlooking in its design in that it is deep and the seats are relatively straight rows, looking directly into the stage rather than down upon it from the sides. This type of balcony, ever increasing in size, was to become standard in the large theatres of the 20th century. In those later theatres there was to be but one balcony, but in the Majestic there is yet another level, the old Family Circle appearing for a last time before its demise. It is complete with its separate entry and high-backed benches, a feature that would have been familiar to audiences of the Civil War era".

Studies by a national real estate research firm were completed indicating that Dubuque needed a civic center, in a location where the existing theatre was located, and that the restored theatre would be an asset to the center. With this positive study, plus the beautiful



The Five Flags Theater Undergoing Restoration



Restored Interior of the Five Flags Theater

restored theatre and the enthusiasm of 11,000 admissions to the summer musical, a public referendum authorizing a 3.6 million bond issue passed with a 70% majority. An earlier referendum for the 2.5 million, prior to the opening of the theatre, was defeated 60% to 40%. The local paper indicated "First referendum won by a musical". With this positive vote, the theatre has become the cornerstone of the Five Flags Center.

The Five Flags Center shows how private funds of one million can act as a catalyst to put together a multimillion dollar civic center incorporating a theatre, 27,000 square foot arena with ice sheet, basketball court and complete community and convention facilities.

Meanwhile, other private projects were underway to save the city's vanishing heritage of beautiful mansions. The Ham House was purchased by the Dubuque Park Commission, used for offices for many years and turned over to the Dubuque County Historical Society as the Ham House Museum.

The Ryan House was built by Thompson, mayor of Dubuque in the 1860's and bought by William Ryan, early Galena meatpacker and friend of Ulysses S. Grant. This house was occupied by the family and Ryan's daughter until her death in 1968, when it was sold to Dubuque decorator, Bob Sullivan, who retained the principal furnishings and restored the interior. In 1970, when the house was threatened with sale and destruction, three Dubuque businessmen purchased the property and turned it into a gourmet restaurant. In a quarter-page article the Chicago Tribune stated the restaurant is "worth the drive to Dubugue". An initial investment of \$90,000 has grown to over a quarter of a million and the restaurant volume has multiplied 7 times in 10 years. The key to success has been a qualified and dedicated chef/manager, now a full partner; a willingness on the part of investors to be satisfied with annual tax loss deductions for ten years while additional funds were borrowed to expand operation; an attractive, successful adaptive use and a friendly bank willing to loan substantial funds.

Elsewhere in the City, *Cable Car Square* was falling into disrepair with several 1850-vintage brick row houses vacant and posted for demolition; an invitation for clearing and a drive-in, fast-food operation. The cable car and its unique area deserved better. A group of local businessmen bought the vacant houses and are gradually turning the area into a restored, old-town type area. A professional office for a firm of attorneys, the *Gentry*, a



The Restored Five Flags Theater and New Five Flags Center



The Redstone, a Bar & Gallery in the Cable Car Square Area



The Dubuque County Courthouse

gallery and antique shop, *Coventry*, a fine specialty shop, and the *Redstone*, a bar and gallery, are all in the Cable Car Square area. This is another example of private funds invested with an annual tax loss as the primary initial return. Eight partners with an investment of \$24,000 plus a friendly bank, purchased the initial four properties. A willingness to work with others who will purchase and trade other properties in the area allows the initial purchases to be rolled over into a revolving fund to continue purchasing other area properties as they become available. Since 1973 the area has made considerable progress toward the total area concept.

The City Council has followed suit by restoring the City Hall, which is on the National Register of Historic Places. Also, the restoration of an 1891 Beaux Arts Court House, which towers over all of downtown Dubuque, is near completion. The old county jail, built in 1857, has been made available to the Dubuque Art Association as the "Old Jail Gallery". This is one of the last known examples of Egyptian Revival architectural erected in the United States.

Dubuque is the first city in Iowa to enact a historic preservation ordinance (April, 1977). In 1978 and 1979 an Architectural Historian was commissioned to prepare a study of all buildings within the city of Dubuque and evaluate each building as to its architectural significance and pinpoint clusters of architecturally significant buildings as potential preservation districts. Through the efforts of the Preservation Commission and local property owners, the Langworthy Preservation District, centering around Dubuque's famous Octagon House, was established in 1979. A minimum of four more districts are now under consideration.

A long neglected area of Dubuque, its waterfront, is finally getting some attention. The Mississippi River really was the reason for Dubuque's existence in the first place. A riverboat museum for Dubuque's harbor was conceived as a total area development "Port of Dubuque". This idea was taken under the wing of the Dubuque County Historical Society two years ago. It was sparked by the gift of the Burlington Freight house adjacent to the Dubuque harbor and subsequently the gift of the 277-foot sidewheeler *William M. Black*, given to the Society by the U.S. Government.

\$775,000 was raised to proceed with the remodeling of the freight house, now on the National Register, and with preparation of the sidewheeler for tours, which began in June, 1980. It is hoped that a portion of the

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main museum will be open this year with completion by the year 1982. Three hundred years of river history and particularly Dubuque's position as a boat building center, will come alive in the Port of Dubuque.

We have seen how private funds in the private sector have reused vintage buildings for financially viable facilities such as a restaurant, professional building, specialty shops and a fine bar. Regarding private funds in the public sector, the Five Flags Theatre demonstrates the catalystic effect of private investment to sparking a renewal project. Public funds in the public sector, as illustrated by the City Hall restoration and County Courthouse restoration, round out the effort.

The six years from 1975 to 1981 have seen a major shift in public awareness of Dubuque's great architectural heritage. More and more vintage residences are being restored. Over 1,536 buildings in the city are of potential architectural or historical significance. It has become a challenge, for instance, to tackle a restoration project of an historically significant house.

We look ahead with hopes that the Five Flags Center will encourage completion of the city's downtown area. An enclosed mall incorporating over 500,000 feet of retail space is now being planned for the area. This would certainly be a catalyst in the public domain.

![](_page_32_Picture_4.jpeg)

The Octagon House

Wayne Norman received a degree in Architectural Engineering from lowa State University in 1942. Subsequently, he served as a Design and Development officer for five years in the Army Air Corp. For 25 years, Mr. Norman served as General Manager and Executive Vice-President for Caradco, Inc. of Dubuque, manufacturer of wood windows.

Mr. Norman is also an Architectural Historian and has been deeply involved in many of the recent or current restoration projects discussed in this article. Presently, he serves as Planning and Development Officer for the University of Dubuque.

![](_page_32_Picture_8.jpeg)

The William M. Black sidewheeler - Dubuque's future Riverboat Museum

#### Corrections to 1981-1982 Membership List

#### **Change of Address**

Anneberg, P. David -M Suite 304 8565 Harbach Boulevard Des Moines, Iowa 50311 P. David Anneberg, Architect

Browning, Christopher -M 22 River Street Quechee, Vermont 05059

Gardner, John K. -A 654 Lunar Lane Waterloo, Iowa 50701

Lukin, John D. III -A 940 14th Street West Des Moines, Iowa 50265

Miller, Jack -PA 422 Second Avenue S.E. Cedar Rapids, Iowa 52401

#### Change of Firm

Behm, Carmen R. -A 717 North 13th Street Fort Dodge, Iowa 50501

Restrepo, Francisco -M 417 Parham Muscatine, Iowa 52761

Utterback, Richard A. -M 5215 Ingersoll Avenue Des Moines, Iowa 50312

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![](_page_34_Picture_11.jpeg)

![](_page_34_Picture_12.jpeg)

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### The Legal Relationship Between The Architect and The Contractor

by John A. Ricchini, R.A., C.S.I.

John A. Ricchini, R.A., C.S.I., is President of Professional Communication Institute at Lincoln, Nebraska. The firm is dedicated to the continuing education of practicing professionals through writings, seminars and audio and visual tapes.

For many years, architects and contractors have been perplexed about their legal responsibility and authority in relation to one another. This situation is complicated further by the continual changes of law.

The United States legal system promotes such changes. Common law, or case law, is always changing in response to the mores of the times, creating precedents which establish new laws or give new interpretations to old laws, while the statutory law, emanating from legislative bodies, changes in response to various political pressures. Yet even though laws are constantly in flux, some precedents have been handed down by the courts which legally bind architects and contractors to each other. This thesis defines these bonds, discusses their evolution, and evaluates the results of the legal relationships between architect and contractor.

#### Owner, Architect, Contractor: Construction's Eternal Triangle

The first and most fundamental principle of construction contracts is that no contractual relationship exists between the architect and contractor. There is, however, a relationship stemming from contracts between architect and owners, and between owners and contractors. In both contracts, the duties of the architect, the contractor, and the owner include the responsibility and authority each has with the other.

#### **Owner-Contractor Contract**

In contracts with contractors, owners agree to pay an agreed sum of money in return for a building in full compliance with the contract documents.<sup>1</sup> The owner reserves the right to stop the work:

If the contractor fails to correct defective work or persistently fails to carry out the work in accordance with the contract documents...until the cause of such order has been eliminated....<sup>2</sup>

The owner also has the responsibility of providing the contractor with lands and easements, engineering surveys, investigation reports of subsurface conditions (used by the architect in preparation of plans), and copies of all insurance policies, including the interest of the owner, contractor, and subcontractors in the work.

A contractor, on the other hand, has the right to stop work if an owner fails to pay the progress payments established in the owner-contractor agreement. The contractor is responsible: For all construction means, methods, techniques, sequences and procedures...and the Contractor shall provide and pay for all labor, materials, equipment...water, heat, utilities...necessary for the proper execution and completion of the work.<sup>3</sup> The Contractor shall be responsible to the Owner for the acts and omissions of all his employees and all subcontractors...under a contract with the Contractor.<sup>4</sup> The Contractor shall indemnify and hold harmless the Owner and the Architect...for and against all claims, damages, losses and expenses...providing that any such claim...is caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor...or anyone for whose acts any of them may be liable...<sup>5</sup>

During the construction period, the contractor communicates with the owner through the architect. However, most contracts clearly state that, "nothing contained in the contract documents shall create any contractual relationship between the architect and the contractor."<sup>6</sup>

#### **Owner-Architect Contract**

In contracts with an architect, an owner agrees to provide the architect compensation for furnishing professional services, including preparation of the contract documents, cost estimates, advice on the selection of the contractors, and activities as the owner's agent in dealings with others associated with the project.' The owner can reserve the right to terminate the work "should the other party fail to perform the contract in accordance with its terms through no fault of the party seeking to terminate." Owners have the responsibility to provide architects with information regarding the site, budget, program criteria, and to give prompt and thorough attention to all documents submitted to him by the architect. Also, when deemed necessary by the architect, the owner furnishes the services of soils consultants, legal consultants, auditing, and insurance counseling.

The architect, by the same token, is responsible to the owner for designing the aesthetic features of the building, as well as the structural, mechanical, and electrical systems. He also assists the owner in letting building contracts, observing the work during construction, issuing certificates for payment for the work completed thus far, and issuing a final certificate declaring the building complete according to plans and specifications.<sup>9</sup> If the owner performs his own supervision during construction, the architect would not be responsible for on-site observation. The architect functions as an arbitrator or quasi-arbitrator in settling claims, disputes, or any other matters between a contractor and owner relating to the execution or progress of work or the interpretation of contract documents.<sup>10</sup>

#### **Architect-Contractor Relationship**

The contractor and architect legally bind themselves by specific clauses of the following types.

Indemnification. The contractor agrees, in his contract with the owner, to hold the architect harmless from claims by subcontractors and others under the control of the contractor.<sup>11</sup>

Administration of the Contract. The contractor agrees to the authority given the architect in the ownercontractor contract and binds himself to the architect's interpretation of the contract documents. The contractor also agrees to communicate with the owner through the architect and let the architect evaluate the work performed and determine the amount of compensation to be paid to the contractor by the owner.<sup>12</sup>

Owner's Representative. The architect agrees, in his contract with the owner, to act on the owner's behalf to the extent permitted in the general conditions. As an owner's representative, the architect can evaluate the contractor's performance, determine the amount of payment due the contractor, and assure that the quality of work is in accordance with the contract documents.

Although no contract exists between the architect and contractor, the wording contained in their separate contracts with the owner has helped establish a legal relationship between the two parties. In many cases, the courts have used these writings to determine and assess liability between the architect and contractor.

#### **Evolution of the Architect-Contractor Relationship**

The legal relationship between the architect and the contractor has evolved through several phases. Until the middle of the nineteenth century, architects were considered "immune to liability." For the next hundred years architects were liable to those parties with whom they had privity; however, they had no obligation to anyone with whom they had "no privity." By the mid-twentieth century, architects began to be assessed with "third party liability" in contractural relationships. And still later they became vulnerable to the court's application of "strict liability."

Two important facts must be understood. First, although a case may not involve the relationship between an architect and a contractor, it can establish an avenue through which the two became legally bound.

![](_page_36_Picture_10.jpeg)

Second, although a point of law may be defeated, the fact that the court allowed the point to be heard can be a significant factor for development in future cases.

#### Immune to Liability

Prior to the Industrial Revolution in both the United States and England, architects and engineers were considered "immune to liability" for their errors. Regarded as representatives of both the owner and the contractor, they occupied a quasi-arbitrator status, and were liable for damages only if they violated their fiduciary trust by commiting fraud or by colluding to the detriment of one of the parties.<sup>13</sup> It is difficult to determine exactly when this era came to an end and the next commenced. However, as late as 1974, the House of Lords, England's Highest Court, overruled a court of appeals decision allowing an architect to appeal and held that he was acting in an arbitral capacity in issuing progress payment certificates.<sup>14</sup>

#### **No Privity Rule**

The courts strongly favored the small artisan in the early years of the Industrial Revolution. Unless a party injured was a party to the contract with a new manufacturer, "there was no liability, no matter how negligently made, since the lack of privity was an absolute defense."<sup>15</sup> The courts established that parties to a contract were not responsible or liable to any parties other than those with whom they had a contractural obligation. The state of privity between two parties established a legal contractual relationship and only upon this relationship could a party be held liable.

#### **Third Party Liability**

Although exceptions to the ''no privity'' rule occurred as early as 1852,<sup>16</sup> it was not until a minor ruling in 1903, followed thirteen years later by a landmark case in New York, that arguments for ''third liability'' had a firm legal foundation.

In Huset v. J.I. Case Threshing Machine Co.<sup>17</sup> in 1903, the court established that the seller was liable if he knew that the chattel was dangerous for its intended use, and was of a type inherently dangerous to human safety.

In 1916, in the MacPherson v. Buick Motor Co. case,<sup>18</sup> Judge Benjamin N. Cardoza concluded that the duty did

![](_page_37_Picture_5.jpeg)

not arise out of the terms of the contract, but when the manufacturer of the article knew that the article was to to be used by persons other than the purchaser, it was reasonably certain to put human life and limb in peril if negligently made. As a result of the MacPherson Rule, the courts began considering the nature of the article rather than the party to the contract to determine their liability to remote users. If a product was inherently dangerous because it was negligently made, then the manufacturer could be found liable. However, the term "inherently dangerous" was difficult to define and many cases were decided either way based on the court's interpretation of the "inherently dangerous" finding.

Although the MacPherson Rule brought about a whole new legal relationship between a user and manufacturer, it did not affect the construction industry. In cases involving permanent real property structures where either the architect or contractor was negligent, unless the party damaged was privy to either the contractor or architect, liability charges protected the builder from the "no privity" rule.

#### Third Party Liability—The Construction Industry

The court applied the rule of "third party liability" to the construction industry for the first time in 1882 in the case of Devlin v. Smith,<sup>19</sup> to a builder who was found liable for the negligent construction of a scaffold used by an employee. However, since the scaffold was moveable, it might be considered a manufactured article and not an integral part of a building structure. Not until the middle of the twentieth centrury did courts apply the MacPherson Rule to permanent building structures.

In 1949, a Pennsylvania court applied the MacPherson Rule to those who build structures, stating:

There is no reason to believe that the law governing liability should be, or is, in any way different where real structures are involved instead of chattels. The principle inherent in the MacPherson v. Buick Motor Co. case and those that have followed it cannot be made to depend upon the merely technical distinction between a chattel and a structure built upon the land.<sup>20</sup>

A Mississippi court in 1954 heard the case of National Security Corp. v. Malvaney. <sup>21</sup> The defendant architect had approved progress payments to the contractor under the mistaken assumption that the contractor paid his subcontractors and suppliers. The surety company paid the subs under the terms of the Contractor's Payment Bond and then sued the architect for negligence. The architect argued that the surety company was not privy to the contract between the architect and the

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owner, but the court held the architect liable nevertheless.22

The landmark case of Inman v. Binghamton Housing Authority23 was decided in New York in 1957. It involved an action brought against the owner the builder, and the architect by a father whose two-year-old infant was injured after falling off a porch in a government housing project unit. The incident occurred some six years after the building had been designed. The lower court dismissed the complaint because of "lack of privity" between the plaintiff and defendants. The appellate division court reversed the determination of the lower court and held that the complaint did have a cause of action against the architect and the builder. Counsel for the plaintiff argued that the MacPherson Rule should be applied to structures on real estate as well as to manufactured articles of personal property, "knowing that third persons will use their structure...and that the structure is inherently dangerous if defectively designed." Citing the Devlin v. Smith case, the court stated:

We can see no logic in the assertion that because that one is affixed to real estate and the other is a moveable chattel that there must be a differnce in principle so far as liability to third persons is concerned. The measure of danger should not be a classification of the object from which the danger emanates...There is no visible reason for any distinction between the liability of one who supplies a chattel and one who erects a structure.

This case established that once the building or structure was accepted by the owner and was without latent defect or hidden danger, there was no liability to third persons. This portion of the decision created what is now referred to as the "patent-latent" test. Simply, this test determines whether the danger which caused the damage was latent (hidden) and therefore beyond the control of the building owner, or patent (readily seen upon a reasonable inspection) and therefore preventable by maintenance of the building. If the danger was latent, the responsibility fell upon the architect or contractor. If patent, the danger became the responsibility of the owner.

The Inman Case, with its "patent-latent" test, stirred much controversy in the judicial courts and it was not long before the Inman Rule was under attack. Two professors writing in the New York University Review called the Inman Decision:

a holding of dubious merit...enen if it be assumed that the danger was obvious, we doubt whether is is sound public to exonerate those who create the danger and thrust the full burden of the laws upon an impecunious tenet of a housing project, who, as a practical matter, probably had a little choice, but to let a child use the defective stoop.<sup>24</sup>

Other law reviews extolled the Inman Decision for extending the application of the MacPherson Rule to the building of structures on real property, but little was said in favor of the "patent-latent" test of liability to dismiss the complaint against the architect, contractor and owner.<sup>25</sup> Immediately after the Inman Case, several other cases were decided which have some impact on the construction industry.

In the case of U.S. v. Rogers and Rogers<sup>26</sup> in 1958, the contractors sued the architect for negligence in supervising and evaluating concrete tests. Damages to the concrete structure resulted and the court held the architect liable to the third-party contractor based on the contract between the architect and the owner.

...the position and authority of the supervising architect are such...that the power of the architect to stop the work alone is tantamount to a power of economic life or death over the contractor. It is only just that such authority exercised in such a relationship should carry commensurate responsibility.

The following year in Louisiana, a lower court held that the architect was liable for the death of a worker as a result of negligent inspection.<sup>27</sup> The highest court of Louisiana reversed the decision, stating the supervising architect had no duty to protect third parties injured as a result of equipment owned and controlled by the contractor.

The 1960 case of Ernhart v. Hummond,<sup>24</sup> in Arkansas, involved an architect who had knowledge of a defective wall which collapsed and killed three workmen. The architect's contract contained a provision giving him the authority to stop work whenever necessary to insure the proper execution of the contract. The court held that the issue was not whether the architect had breached a duty to the owner, but whether he had breached a duty to the workmen arising out of a safety provision in the contract.

#### Strict Liability

The basic theory of "strict liability" is that the design professional, by his undertaking, warrants by implication that the fruits of his endeavor will be reasonably suited for the intended use.<sup>29</sup>

In Broyles v. Brown Engineering Co.,<sup>30</sup> the court described the complexity of the architect's duties to illustrate why the architect should not be held to strict accountability.

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Architects must have as part of their competency a keen aesthetic sense to enable them to design structures of beauty and dignity; they must have a technical knowledge of many structural factors which lend strength and stability to their design. The materials they recommend for use are produced by agencies beyond the control and influence of the architect. His work is to a certain degree experimental or depends on the experiments and on production of materials by others. Then too, the law of physics, gravity, and the rotation of the earth, must, in many projects, be taken into account. The texture of the soil for a foundation, a factor beyond his control, must be considered. For these reasons and others which we will not undertake to enumerate, our courts have not held architects to a strict accountability of guarantee. Here again common dealing reasonably suggests the absence of any implied agreements of insurability.

In 1965, the landmark case of Schipper v. Levitt and Sons, Inc.,<sup>31</sup> was heard in New Jersey. A child had been scalded by hot water from a heating unit installed without a mixing valve recommended by the manufacturer of the unit. In its ruling, the court recognized that the principle of strict liability had already been applied in the manufacturing world and the opinion handed down by the court contained the following:

We consider that there are no meaningful distinctions between Levitt's mass production and sale of homes and the mass production and sale of automobiles and that the pertinent overriding policy considerations are the same. That being so, the warranty or strict liability principles...should be carried over into the reality field, at least in the aspect dealt with here.

Just as MacPherson's Rule originally affected only the manufacturing world and subsequently found its way into the construction industry, so also did the principle of "strict liability."

Although the Schipper v. Levitt case found the builderdeveloper liable under the principle of strict liability, "three years later the court extended the rule to architects and engineers, regardless of the number of houses which may have been built and sold."<sup>32</sup> Once again, liability was extended to include not only the design professional but the contractors as well. Although there was much criticism of the "strict liability" ruling in several California cases,<sup>33</sup> this ruling provides an introduction to our current court attitudes.

"The Legal Relationship Between The Architect and The Contractor, Part II" will appear in the July/August issue. Current court attitudes and evolving interpretations of "strict liability" are explored. A specific list of recommendations are presented to deal with the areas which cause the greatest concern and produce the bulk of litigation: the establishment of the standard of performance, the duties of the architect during construction, the imposition of statues on the construction process, and the specific wording of the contract provisions.

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#### AIA Urges Congress To Maintain Funding For Preservation Programs

WASHINGTON, D.C., - In light of the Reagan Administration's proposal to slash federal historic preservation funding in fiscal 1982, The American Institute of Architects today strongly urged Congressional support and funding "for the essential role that the federal government must play in the preservation of our national heritage."

Testifying before the Senate Appropriations Interior Subcommittee, on March 26, 1981, AIA preservation spokesman William Dikis, AIA, Des Moines, Iowa, elaborated on the positive impact of federal preservation programs and asked Congress to strengthen the Historic American Building Survey (HABS), the Technical Perservation Services Program and the National Trust for Historic Preservation.

"The Institute supports the new administration's move toward efficient cuts in the federal budget and the federal presence in state and local government affairs," said Dikis. "Consistent with that support, we believe that the Administration's FY '82 proposal to abolish the historic preservation fund would not only be counterproductive but would decimate historic preservation efforts nationwide." Dikis cited historic preservation projects in Iowa and nationwide prove the tremendous value of the program.

Dikis is president of the Iowa Chapter/AIA and vice chairman of the AIA's Committee on Historic Resources. He testified that the Office of Management and Budget and the Reagan Administration appear to have overlooked the successful private and public partnership evidenced in the national preservation program.

The lowa architect suggested that by eliminating the preservation fund, "the administration is cutting the federal budget's leverage muscle rather than trimming the fat." He explained that the fund should not be viewed as "simply another line item to be cut now and then made up later when the budget may be balanced or when the administration's political priorities may change. Unlike the Department of Interior's FY '82 recommendation for deferring land acquisition, historic buildings and districts will not survive that type of budgetary approach."

Federal funding has provided essential seed money to leverage and attract investment capital from private sources and local governments, Dikis observed. "By stimulating private capital investment, the historic resource programs meet the primary goals and concerns of the Reagan Administration."

Dikis noted that McGraw-Hill has reported that 77 percent of all industrial construction activity surveyed in 1981 will involve preservation, adaptive use and rehabilitation. "Although market forces clearly demonstrate the need for historic preservation programs, the preservation fund program has already been reduced by 30 percent after two successive cuts by the previous administration from \$55 million originally appropriated in FY '80 to \$42 million in FY '81. The acrossthe-board budget austerity required by our new President has already been achieved in this program area," he pointed out.

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#### Durrant Group Awarded National School Honors

The American Association of School Administrators awarded national recognition to the new Northeast Iowa Technical Institute school building (South Campus) located outside of Dubuque, Iowa. Displays of the building exterior and interior were featured as part of an exhibition of school architecture at the annual school administrators national convention in Atlanta, Georgia during February.

Entries were submitted from the entire United States of instructional and adminstrative facilities for public, private and parochial schools. Special awards are made each year by the AASA for the two projects judged most outstanding for educational environment.

Durrant Architects and Engineers of Dubuque, Iowa and Watertown and Madison, Wisconsin received the Walter Taylor honor award. The jury found the School "to be a very distinguished example of architectural design which not only handles the educational requirements well but expresses the vocational/technical nature of the building in a high quality solution."

Praise was received from the jury for the energy conservative nature of the building design and for the energy conservation designed into the systems of the school. Jurors stated the siting of the building on rural farm land was well handled and the total impression is as inviting as it is interesting.

Clyde Kramer at the Administrative Center in Calmar is the Superintendent of Area One which encompasses eleven counties in the northeastern section of Iowa.

continued on page 47

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### The Future of Design

by Gerald M. McCue, FAIA Graduate School of Design, Harvard University

Much of what architects currently do can be done by others, except for one thing — architectural design, design is our unique contribution, our reason for being. Design gives our profession purpose and meaning. Indeed, if we were gone, something would be lost and missed — the capacity to conceive buildings that forge beyond the norm, that meet new challenges and present new ideas, buildings relevant to the issues of our time and most important, buildings that stir the human spirit.

Like each new decade, the 1980's will carry forward too many challenges from the past and too many more. Challenges, however, are meaningful only to the extent that they present new opportunities. We are concerned primarily about the effect of opportunities on the quality of architecture, for the key to the 80's will be improved quality. There will be great competition between regions, between sectors of the economy, and between professions. The capacity of each profession to improve its areas of unique contribution will be the key to its future. For architecture, this means improving the quality of architectural design.

The 1980's will raise issues and create conditions that will severely challenge the quality of design. Each issue, each condition, presents new opportunities. The first set of issues will challenge architects' ability to control the design process. Another set will challenge architects' control of the knowledge of the field and challenge the need for a range of architect's services. Other conditions will make the decision environment unsupportive of design so that excellence may be difficult, or impossible to achieve. In still another area, new and continuing problems will confound and conflict and the sheer number of problems may confuse design priorities. Finally, evolving theories and tenents that form the belief systems of architects will challenge the basis of relevance of the expressive interpretive art of architecture.

Control of the design process is critical to the quality of the building product. The socio-economic context in which architecture is practiced will become increasingly complex, and specialists will arise to deal with new circumstances. These conditions will pose new requirements for leadership that relate to specialized aspects of each particular project. Thus, lawyers, financiers, contractors and engineers, as well as cost and systems analysts will emerge with greater frequency to claim leadership and to give direction to development as well as to design.

Providing leadership and control over the design process in an increasingly complex social environment will present a severe challenge to architectural design in the 80's. The ability to provide direction, to draw creatively upon the talents of others and to coordinate collaborating multi-disciplinary work that maintains a creative spark and verve, will demand the best of architects' capacities. Will the public accept that architects are most qualified to provide this leadership? Others are improving their capacity to lead; will architects meet this challenge?

Emerging developments in communication technology will bring unusual challenges to design. New systems for storing, retrieving and manipulating information, and new processes for integrating, displaying and printing graphic information, may challenge architects' basic concepts of professional competence and lessen the need for certain traditional services of documentation and communication.

Technological changes in communication may produce conditions where everyone has access to information; the command of proprietary information by professionals may become less important. Clients, consumer groups and social advocates will have access to the knowledge and data of the profession, as will competing professionals and even competing architects. Small and large firms will have access to the same information. Drawings and other instruments of communication may be created without specialized experience or large staffs. What may become a communication revolution in architecture would result in less importance in esoteric knowledge and skills, and greater importance in the ability to use knowledge, the capacity to generate ideas, to make professional judgements and to provide personal service. Within the 80's the small architect, like the small doctor, may have instant access to visual data formerly unavailable to even the most sophisticated demand practices. Architects have resisted the emerging technological changes in communication, but control of this process may become essential to control of design. Will architects use these tools to support and improve the design process?

Conditions outside the control of architects will contribute to a social environment that may become increasingly inimical to the design process. Decreasing productivity of the construction industry, higher costs for financing and expanding operating expenses, will combine to increase the public's concern for the costs of construction as well as the costs of time. Changes in the industry will continue to effect the environment for design decisions. Increases in scale and complexity of projects require greater sophistication in design of components offered by consultants, tighter overlapping schedules require close-knit interface between design. bidding and construction. An environment of increased regulation requires more hearings in the public realm and an environment of increased participation requires more consultation and reviews by private, institutional, or public clients.

These conditions outlined in the design process have greater influence, as they effect the attention, time, energy and resources architects spend on design. Because of the preponderance of effort required by these activities there is great danger that architectural firms lose sight of the central importance of the quality of design. These conditions plus the number and complexity of the problem addressed and the speed in which the processes are being performed, tend to eliminate the speculative, contemplative and reflective processes essential to creativity in design. Optimizing systemsapproaches may be effective for the purely technological problems, but result in architecture which is middle-grey.

At issue, is whether architects will raise the level of creativity which they feel obligated to achieve in fulfilling their professional responsibilities for quality in design. Will architects set improved standards for design? Will architects manage or control external conditions and refuse to perform under conditions which will not permit good design? Will architects have the courage to say that excellence in design requires more time and costs more money, but the value is returned many times over?

New design issues will challenge the creative powers of architects to deal with intractable problems, but the more difficult challenge will be dealing with a multitude of problems simultaneously. New issues about safety, seismic and fire design, new issues about toxicity, material and air quality, new issues about physiological and psychological comfort, new and old issues about technology, operations permanence and energy, will challenge our intelligence as well as our patience in the 80's. Any one of these issues will pose worthy design problems but taken together, they will present a confounding and conflicting array, impossible to probe in any respectable level of detail for an individual design project.

The public expectation that architects can and will give serious attention to one or a group of these issues,

should be a growing concern for the architectural profession. Typically, architects have overpromised about the extent to which they give careful analysis and individual attention to the range of issues of interest to the client. As a result of promising the impossible, architects' work often seems ad hoc, unprofessional. How will the architectural profession meet the need for intensive study of the pressing and relevant design issues of the 80's? How will architects develop design techniques for considering more problems, more variables, than any intellectual process should reasonably accomodate? How will architects prevent the multitude of nagging minor issues from diverting attention from the more basic aspects of design?

Finally, we carry into the 80's new challenges about the beliefs most of us have held for decades. Most persons educated after World War II accepted as articles of faith, tenents that have recently been maligned as the misguided modern movement. For almost two generations, architects rallied to slogans like, "form follows function," "less is more," "each work should be original," "interpretative qualities of buildings should be drawn from function, and methods of materials of construction," "honesty of expression is the highest idea," "modern buildings should represent the industrial age and be devoid of historic symbolism and cultural connotations." It is true that architects have rarely given more than lip service to such dogma, but nevertheless, this set of notions have more or less guided architects' design decisions for some time. To many the challenges seem rude and capricious.

In many respects, modern architecture moved over time from a probing creative art to a set of slogans, and then to visual cliches. What were intended originally as philosophic and aesthetic principals that would prevent stylistic stagnation produced architecture so "imagable" it became a style. When modern architecture became more copied as a stylistic mannerism than understood as a philosophy that espoused a continuing evolving search for relevance, it reached a point where it must be challenged. First the public and then thoughtful architects challenged the architecture which seemed devoid of spirit, which lost a sensitivity for the social and visual qualities that impart the qualities of zest and life one associates with the great architecture of all eras. Currently the architectural press and a few protagonists are having their day beating the stuffing out of the strawmen they have created by recasting the ghosts of the modern masters.

But this challenge to design philosophy also has its opportunities. The 1980's will be a time to reconsider, and reaffirm beliefs that have proven valid over time. It will be a time to challenge old and new slogans, a time to examine our own design as well as the buildings that have given us inspiration over time. It will be a time to renew our faith in those guiding principles that impart meaning and purpose. Will architects re-establish the values and principles that form the theoretical basis for architectural design? Will architecture emerge again in the 1980's as one of the great interpretive social arts?

#### How A/E Firms Can Benefit Most From Microcomputers by C. Page Highfill, AIA

by C. Page Highfill, AIA

The most significant potential for A/E firms acquiring microcomputers will NOT be found in the normal data processing efficiencies. Although that too, is a justifyable advantage, there exists a much more important opportunity.

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The only benefits I'm interested in are some medical considerations...maybe as much as \$500-\$800 per year.

That is to cover new ribbons, an occassional cleaning, and maybe a minor part or two. I have an extremely good health record, but of course you never know what might happen.

I don't require a title, or any special hours. I'll work whenever you instruct me, including all night, if you will see to it that I have sufficient supplies, instructions, etc. If not, I will have to stop and wait for more assignments.

I suppose that's one of my short-comings...but if you leave me with enough info and supplies, I'll work whatever hours are required to get the job done. And, I don't charge extra time or over time for any hours beyond 8:00-5:00, Monday-Friday.

My typing speed is fantastic. I can type approximately 120 characters per second. This translates to about 1200-1600 words per minute.

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I can do many other things for you too.

I don't have any references to give you, since I haven't been employed yet. But I can give you a brief description of one of my cousin's work load. He is employed in a 7-person A/E firm and is quite busy. They call him Charlie, but his technical name is this: Radio Shack TRS-80 model 1, 48k, with 2-disk drives and a 80 character dot matrix printer. His total cost was approximately \$3,500.00.

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The program was then modified to process the firm's own time management system, in combination with MBT. (Management By Timesheet, a booklet by the author, available through EMA Management Associates).

Computer printouts of all of the commissions are also used with a timesheet overlay to pick up all titles and commission numbers.

Similar system used for posting Xerox copies, postage, in-house printing, etc., against appropriate commission.

The firm uses this same program to provide similar data processing services for approximately 10-clients. •Inventory Control Program......\$100.00

The firm uses this for in-house inventory processing. Presently, it provides Inventory Control data processing services for several clients.

Computerized Filing System...... \$79.50

This program was used to process and print individual FINISH SCHEDULES and DOOR AND FRAME SCHEDULES.

Computerized filing system for computer disk. Daily report data processing for 2-clients.

•Word Processing Program......\$100.00 All specs utilizing the firm's own master spec. Certain letters (matrix is not letter quality.) Notes for drawings, keynotes, etc. In-house memos, project programs, etc.

100 DISKETTES at approximately \$4.00 each -

\$400.00

Total cost, software \$ 699.00 diskettes \$ 400.00 computer \$3,500.00 TOTAL \$4,599.00

If you take this total cost and divide by 2080 (the number of hours per year for the average employee) you will see that the hourly rate, amortized over one year is only \$2.21.

Should you wish to consider my employment further, there are many agencies from which you can obtain additional information. Thank you very much for the interview.''

Could you imagine turning a possible employee away after an interview like that? Can you imagine having those benefits available to your production system? You would experience many time-saving features. But, the best feature we are experiencing is the microcomputer allowing the professional to become more involved in the projects and less involved in trivia administration.

#### How do you know which microcomputer to select?

You don't. And neither do any of the salesmen. You must work through a process. After you become just a little knowledgeable about some of the things a micro can do for you, only YOU can put a value on it. Initally, that value will probably be less than one-half of what you will actually find after you start using a micro. That's normal. Again, be conservative. But, don't allow anyone else to make those decisions for you.

If you start shopping for a micro, you will find many units on the market. Look for the following:

- 1 The total number of units sold and in service.
- 2 The availability of service.
- 3 The number of programs available and their cost.
- 4 The ease at which the standard programs can be modified to suit your particular needs. This is very important!

Finally, if you're considering a microcomputer soon, appoint one person in the firm now (not a committee) to investigate the possibilities, but make sure the inputs of others are taken into account. Outline a plan of investigation as a starting point. Include possible areas of savings, efficiencies of operation, etc., and the probability of achieving those features.

If your experience is anywhere similar to ours, I suspect you will begin thinking about a second unit, and maybe a third...even before the first year is complete.

C. Page Highfill is President of Highfill-Smith Associates, Inc., a sevenperson A/E/P firm. He will be presenting more ideas on the use of microcomputers at SYSTEMS '81, as well as regionally. He may be reached at 1145 Gaskins Road, Richmond, VA 23233, 804/740-8326.

![](_page_49_Picture_17.jpeg)

#### Des Moines Architect Receives Award

Tom Clause, architect with Charles Herbert and Associates, Des Moines, Iowa, has been presented with a \$1,000 First Award in the residential/single-family category of the tenth annual Plywood Design Awards program sponsored by the American Plywood Association and *Professional Builder* magazine.

Clause, one of 13 to receive awards and citations in this year's competition, was honored for the design of a Texas residence for his parents, Mr. & Mrs. Gerald Clause of Jefferson, Iowa. The design features an elongated south facade with large windows, utilizing passive solar energy. Curves open to decks, and vertical planning also helps expand the space.

Awards jury members commented: "The house gains a great deal of exciting space through the use of volume and a large amount of glazing. The simplicity of the fireplace and the interior spaces is very elegant."

Evaluating entries this year were jury members J. Donald Bowman, AIA, Mithun Associates, Bellevue, Washington; Edward A. Schmitt, AIA, Bob Schmitt Homes, Strongsville, Ohio; and John D. Bloodgood, AIA, President, John D. Bloodgood Architects, Des Moines, Iowa.

The Plywood Design Awards program, which recognizes aesthetic and structural applications of softwood plywood, attracted entries from across the U.S. A feature on the winning entries will appear in a spring issue of *Professional Builder* magazine.

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