# Design Trends: Humanizing the Office Environment

by Helmut Jahn and Dianne M. Ludman

Secretaries, corporate executives, marketing managers have replaced laborers and factory workers in number; software has replaced hardware. By the mid-80's, the office will be the primary place of employment in the nation. With this social shift has come the need for architecture to respond to the changes in the work force, the need for more "humanized" office spaces.

The office building is no longer the place of routine procedures and sterile coldness, a place effacing the identity of the individual worker, a place of status and glorification of commercialism. The emphasis is rather on human factors—the variety of tasks to be performed, the work flow, improved environmental control and efficiency, the needs and goals of its workers. The office has evolved into an information and communication services center, rearranging the distribution of work and responsibility.

Frank Lloyd Wright's Johnson Wax Building, Racine, Wisconsin, 1936-9, is one of the rare exceptions in the past of an office environment that considered the life and needs of the daily employees. The quality of life is becoming a deciding factor in the choice of where to work or live as workers are becoming better educated, more sophisticated. People go to their "place of work" rather than "job," and consider a comfortable atmosphere a basic right. Employers are being compelled to provide more amenable workplaces. The designs of office buildings propose attractive, stimulating workspaces, integrating the various aspects of human behavioral needs: physiological, safety and

Copyright is held by authors.

Helmut Jahn is executive vice president and principal-in-charge of design, C.F. Murphy Associates, Chicago.

Dianne M. Ludman is a communications/development associate, C.F. Murphy Associates, Chicago.

security, social, ego and self-fulfillment needs. The office building becomes an amenable, liveable environment, a setting responsive to human activity.

A new image of the corporation itself is emerging that corresponds to the changes in the emphasis of the nature of business. Companies are concerned less with conveying hard-line tactics and more with appealing to human qualities and emotions. They enhance their image as people-oriented corporations by attempting to convey a corporate sensitivity and consciousness of quality. Programs of corporate enlightenment, sponsorship of the performing arts, philanthropic civic activities, art patronage has as much to do with corporate image-making and public relations as with tax incentives and investment portfolios. For their physical structures, they seek those that will embody and express their new image as well as provide an arena for the activities for those to whom they appeal.

# BACK TO THE GARDEN

Deere & Co. is one such corporation concerned with maintaining a tradition of quality while also operating on a human level. It has committed a large investment in the arts, tastefully acquiring a large corporate art collection, intelligently seeking the services of architects recognized in their profession. Architect Eero Saarinen and landscape architect Hideo Sasaki created a headquarters for Deere & Co. in Moline, Illinois that is a strong, elegant statement, not only as a beautiful piece of architecture but in its creation of a better working environment. Sensitive to the needs of its future users, the headquarters building provides a tentative open plan dividing floors with moveable partitions, creating small communal groups of workers. In a more democratic layout, window views are given to assistants and secretaries, and in the exchange, executives and administrators occupy the central areas. Intermingling exterior views into the interior spaces, Saarinen provided views and visual enjoyment for all workers.

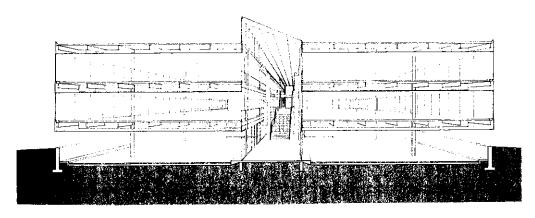
The recent addition of Deere West by Kevin Roche/John Dinkeloo continued that tradition, and created a building sympathetic with Saarinen's, yet establishing its own identity. The dramatic focus of the building is the 11,000 square foot interior garden. Surrounded by the office spaces, the garden is also integrated into the life of the office. Two floors enter out into the landscape; a third floor balcony overlooks it. Besides its visual expression, the garden functions as a circulation element; employees walk through the garden to the cafeteria. The concept of direct participation and human entry into the interior garden developed at Deere West marks a change from carefully deposited office plants for decorative effects, or, for example, the remote sunken sculpture garden created by Isamu Noguchi for Skidmore Owings & Merrill's Chase Manhattan Bank of the 60's where humans, sealed off by windows or balcony, were allowed to

"look but not touch." A subtle aspect of human factors design, then, is the need for providing a sense of participation and personal choice of the user. In the layout of office space, in the landscaped garden, Deere & Co. headquarters provides its occupants the involvement necessary for a sense of well-being.

A similar use of an interior garden incorporating a sense of direct contact was achieved at the Bradford Exchange, Niles, Illinois, where architects Weese Seegers Hickey Weese Architects Ltd. transformed a discarded strip store into an office and display space. A 3,000 square foot skylit, sunken landscaped garden with a fountain and running brook serves as the central organizing spine, dividing the areas of office landscape. The garden also acts as a conference and dining area, and a museum display area and small theater for visitors contribute to the people-oriented office. While imparting a soothing atmosphere, and creating aesthetic effects, the trend towards office gardens contributes both to the corporate image and to more humanized workspaces that reflect the growing concern with health, nature, clean air and water, and other issues affecting the quality of life.

## ATRIUMS, NATURAL LIGHTING

In the design of the new corporate headquarters for Rust-Oleum Corporation by C.F. Murphy Associates, the underlying idea was to create a pleasant and humane space flooded with daylight—a building that is open, light and inviting. The satisfaction of the employees, the warm, cheerful atmosphere encountered in the offices of the recently completed building are strong indications of the successful fulfillment of those ideas. In creating the office space, the office can be a "special place" in which its workers can have a stake, and encourages a sense of pride and respect.



Rust-Oleum Corporate Headquarters

Situated on a 5.96 acre site in the suburb of Vernon Hills, Illinois, the design for the Rust-Oleum headquarters sought to preserve the site for landscaping and its visual benefits rather than parking. The structure seemingly floats above the below-grade parking, where workers enter from the depressed area up into a pleasant and open environment. The 30' x 40' bays cantilever 20 feet in one direction and 15 in the other to optimize the parking area and create large column-free office space. Stairs and ramps tie the floating structure to the outside grounds, not as heavy anchors but rather invitations to above. Once invited into the central skylit spine, employees find all functions organized around the spine with the utmost efficiency, openness and comprehensibility. The atrium—the central unifying space—divides the office into four modular areas, two on each side of the spine. The sense of openness is accentuated by modular desk arrangements and glass-walled offices. With its stairs ascending up through the spine, and the series of bridges interconnecting office areas, this central space helps people circulate, entices them to move around. The interplay of verticals, horizontals, diagonals and the colorfully painted mechanical systems, treated as sculptural forms, and reflecting the owner's products. contribute to the visual and spatial excitement for the user. The atrium, then, becomes the "people place." In one section of the atrium is the employee cafeteria; the visitor waiting and reception room in another. Other amenities afforded the daily worker include an audiovisual room, a chapel. Flooded with comfortable natural daylight (an energy savings as well), the inside also provides just as pleasant a view to the exterior landscape beyond. At night, the visual effects provide a heightened sensory experience.

There has been an increasing use of atriums and skylights and natural lighting in developing architectural concepts to humanize interior spaces and provide comfortable and functional work environments, while at the same time exploring the applications of natural light to energy savings and the efficiency of the building. C.F. Murphy Associates' design for the Program Support Facility for the Department of Energy at Argonne National Laboratories in Illinois is a building with insulating glass and skylights designed to act as a solar collector, and at the same time deals with the effects of daylight and the creation of a human environment as an alternative to conventional office space. The concept of the interior spaces is based upon open office planning and the maximum use of daylight to increase user comfort and conserve energy. The three-story atrium facilitates orientation, movement and spatial comprehension for the user, in addition to providing natural illumination within and a view to the natural wooded environment outside. The Argonne Program Support Facility represents a serious and sophisticated approach to the considerations of the use of natural light, and a thorough analysis of its contribution to the performance of the building in terms of human satisfaction and comfort as well as energy efficiency.

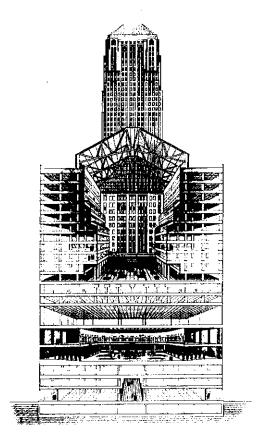
### THE URBAN CONTEXT

The urban office building presents its own special needs, for example, the desirability of its location, its relationship to business corridors, its access to transportation and commuter routes. The new urban office building is being placed within the context of its city site. Infill buildings are seeking compatability with existing neighbors. Plazas and street level spaces become integral elements in the design. The result develops the creation of urban spaces—spaces with their own unique rhythm and flow of activities. Large urban office buildings are aware that their mere presence will alter and create, populate and invigorate these new urban spaces. In addition to the life within their offices, they will be contributing to the life of the city streetscape, realizing a human concept on a more public scale. Outdoor plazas become people places, boasting large scale sculpture, offering an array of activities—places for relaxation, enjoyment, entertainment, dining. Urban plazas, whether indoor or outdoor, can relate to the pattern and pulse of the surrounding streets, to the office building itself as a unifying element, or as an inviting entry adding to the gradual crescendo of the spatial excitement. In an almost classic Italianate tradition of urban living, the populace within the privacy and restrictions of their respective offices can escape to the social ambiance of the city's new grand piazzas.

The underlying idea of C.F. Murphy Associates' Xerox Centre now under construction in the heart of Chicago's business district is the design of an infill building on a corner, placed within the context of the remaining block on the Dearborn Street corridor. The 880,000 square foot office building is set back 20 feet on Dearborn and at Marble Court, continuing the landscaped promenade established by the First National Plaza. Breaking with the concept of a "freestanding tower" on a plaza, the Xerox Centre slopes towards the neighboring structures, and its curved wall transforms the two sides of the Monroe-Dearborn corner into a single, provocative facade. In its attempt to preserve and invigorate the streetscape, the speculative office building thus becomes vitally important in creating and enriching the environment in our cities. At the ground level of the Xerox Centre, emphasis is on providing pedestrian circulation through the building. The location of commercial areas along the perimeter achieves maximum exposure both from the street and within the building. Plans for outdoor sculpture reinforce the overall commitment to continuing the creation of spaces for people begun along Dearborn.

Skidmore Owings & Merrill's design for Three First National Plaza shares the aim at contextualism and compatability with its neighboring structures. One of the nine new office buildings to rise in Chicago's Loop area, it features a 10-story ground level enclosed atrium, and a granite tower rising behind it, and continues the Chicago tradition of integrating function with distinctive design. Another design from the same firm is that of a multi-atrium office building, stacking three

atriums vertically. The mechanical core is located at the back of the building, freeing the front for either atriums or expansive office floors. Terraces overlooking the atriums offer tenants a variety of spatial configurations from floor to floor.



Chicago Board of Trade Addition

Another building that will soon participate in the life of the Chicago streetscape is the 584,000 square foot addition of trading floors, office space and support areas for the Chicago Board of Trade and the Chicago Board of Options Exchange, a joint venture of C.F. Murphy Associates and Shaw, Swanke, Hayden & Connell. The addition, designed to function with the existing building as one unit, pursues the relationship of old and new as a generator of form. The building derives its formal characteristics from an interpretation of the Art Deco style of the existing landmark structure, not duplicating its technique but rather its meaning, and thus expanding beyond the modernist interest in form as a resulting expression of function and technology to instead achieve a new synthesis.

While the addition will preserve the history of the life of the building, it will at the same time create a new life of its own. An important design element is the accommodation of a covered pedestrian arcade at street level, resulting from projecting the building 20 feet on its sides beyond the existing structures to provide adequate size trading floors. The arcades along its east and west will meet and continue along its south side, where it adjoins the Loop's celebrated elevated transit line. From this arcade a two-story mid-block street ties into the existing lobby, thus encouraging retail activities and movement through the commercial spaces of the building. The concept of the office building as a place for human activity and the creation of a type of urban life-style is carried through within the design of the building as well. The first twelve floors are large bulk spaces housing the trading floors and support functions corresponding to similar spaces in the existing structure. Above this, the office floors are designed as U-shaped spaces around a central atrium which adjoins the existing structure. Glass elevators, providing orientation and revealing the original building, will offer their users a dramatic, soaring experience of space—a sense of being borne up into the past. Communication, as it relates to people's use and perception of buildings and their meanings and associations, then becomes a determinant in the approach of office buildings to the basic human needs and behavior of the people they will serve.

### INTERIOR PLANNING

The interior spaces of office buildings reflect similar humanizing concepts and trends. The type of interior layout should evolve from a thorough process of planning for the organization it serves and should have a built-in capacity for change and growth. Changes in space and facilities planning reflect changes in the operating structure of the office; the office layout mirrors the corporate matrix as it operates—the quality and quantity of personal interactions, workflow relationships and the hierarchy of authority. Within the office building, open office planning provides one solution for maximum flexibility of communication and organization planning. The richness of exterior and interior space, light and vistas, for example, can be shared by all levels of the work force. Modular seating arrangements can provide flexibility and accommodate growth. In a post-Miesian age, the trend away from huge office floors, from the efficiencies of the überlandschaft classic office landscape, marks a growing shift towards more human goal-oriented planning. In commenting upon the results of the recent national study of office environments conducted by Louis Harris & Associates for Steelcase, Ada Louise Huxtable wrote that the workers "resent the slick, inflexible impersonal arrangements. ... They agreed, almost to a man and a woman, that the relationship of surroundings to job satisfaction is extremely high. Their call is not for more stylish design but for more considerate and

comfortable design ..." (New York Times, January 31, 1979). Modified open office planning offers appropriate degrees of enclosure—areas for privacy and thought, areas for social grouping, planned for the psychological comfort of workers.

### THE HUMAN FACTOR

Design trends have begun to signal changes towards redefining the concept of the office building in more human terms. The use of atriums and skylights, exploited for energy efficiency, enhances the enjoyment and use of space, provides comfortable natural illumination and a sense of visual openness. Exterior views and landscaped vistas are available to workers through carefully planned fenestration. Indoor/outdoor landscaping and gardens bring a more direct contact with natural surroundings; improved environmental control adds to user comfort within. Color, shape, form offer aesthetic, sensory appeal, adding to the excitement of a more stimulating work environment.

Employees have begun to expect certain amenities: dining facilities, parking facilities, entertainment and a schedule of activities. Family recreational facilities, game courts, recreational balconies, locker rooms are becoming part of the architectural program, as corporate clients take advantage of the current fitness boom and the insurance benefits of corporate fitness programs. Pedestrian circulation routes become critical elements in the design process; organization and circulation of the structure are a determining factor in the efficiency and comprehensibility of the building on the part of the user.

Urban office needs—function, technology, energy, visual identity—are integrated with civilized amenities, as the new city office building becomes conscious of its contribution to the quality of the urban lifestyle. Placed within the context of its city streetscape, the more people-oriented office buildings encompass within their programs indoor/out-door plazas, arcades, malls, atriums, pedestrian circulation routes, encouraging a flow of activities, entertainment, retail and commercial operations and benefits in rhythm with the pulse of the city. Entrances suggest openness, expansiveness; enclosed or open plazas replace the traditional monumental and intimidating lobby.

In the process of redefining the office surroundings in more human terms, architecture and design concepts are clearly responding towards the creation of more humanized work environments.