Building Community Through Participation

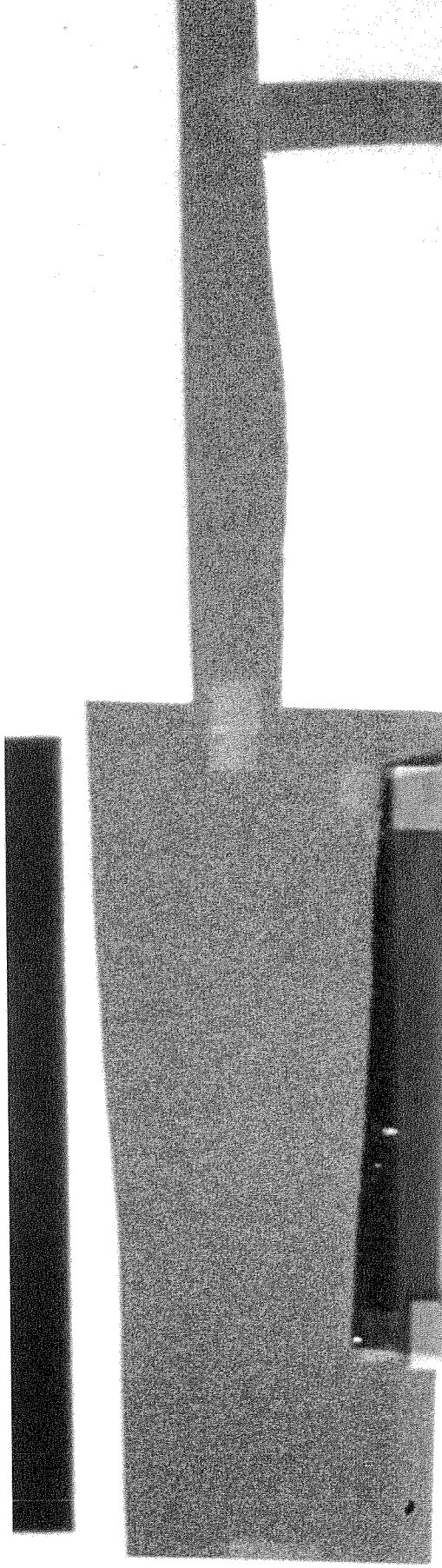
Buzz Yudell

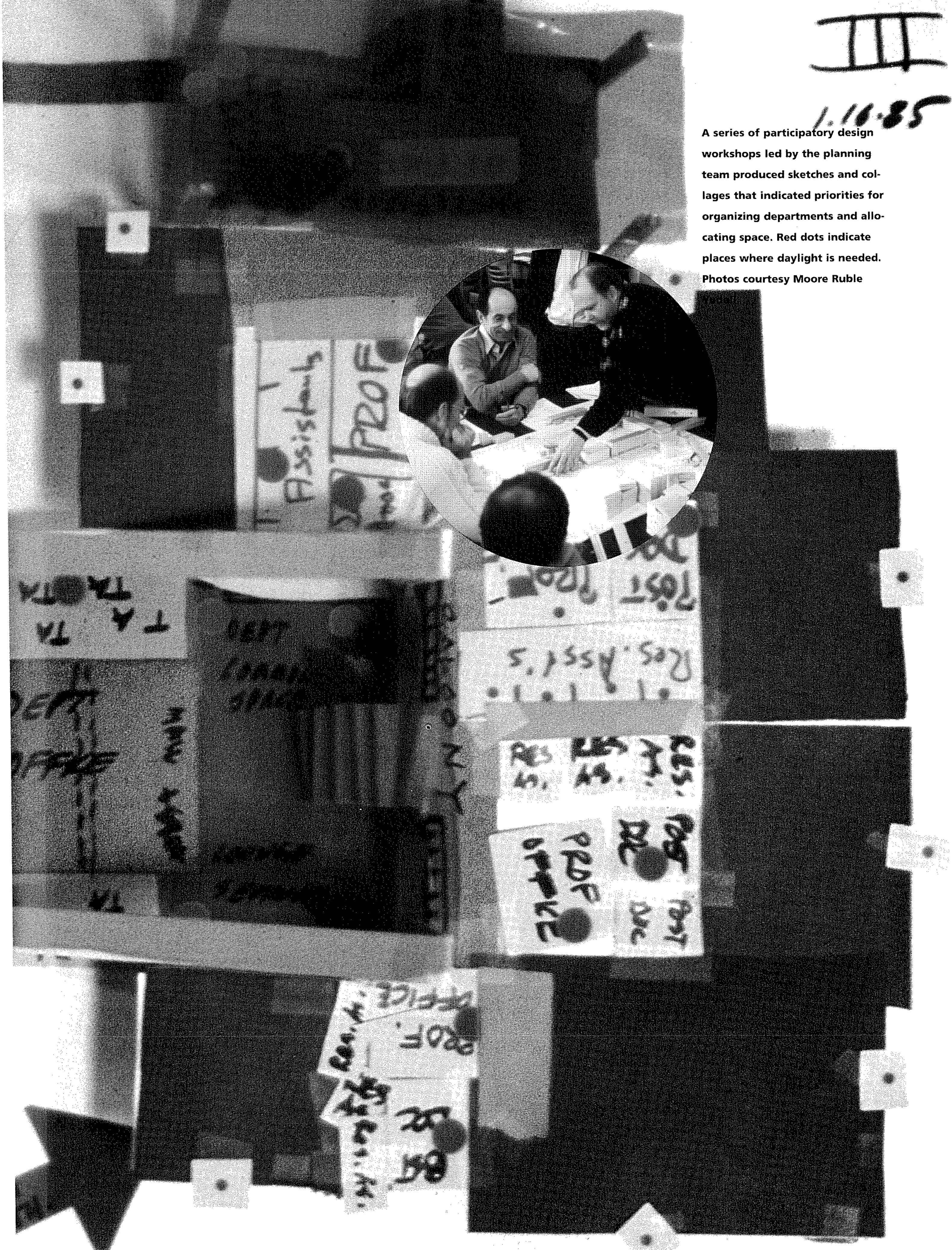
Planning a major new complex in a sensitive environment is a daunting prospect. The planning team consists, inevitably, of outsiders able to bring new insights but equally capable of disrupting the fabric of the place. How can one give shape to the needs and spirit of the place?

In his book *Genius Loci*, Christian Norberg-Schulz writes, "Architecture means to visualize the *genius loci* (spirit of place), and the task of the architect is to create meaningful places, whereby he helps man to dwell."[1]

We approached this project with the sense that the best way to help our clients to dwell was to engage them deeply in the process of planning. We came with a commitment to listen, to collaborate and to help synthesize many perceptions and needs into the physical places that could nurture their work, community and campus.

When the planning team — consisting of the firms of The Ratcliff Architects, Moore Ruble Yudell, and McLellan & Copenhagen — began work at the University in 1985, we found a sophisticated community proud of its history, aware of the recent damage to the fabric of the campus and committed to an open and democratic process of decision-making. While the campus seemed unusually free from partisan maneuvering there were, as always, divergent goals and perceptions.





A series of participatory design workshops led by the planning team produced sketches and collages that indicated priorities for organizing departments and allocating space. Red dots indicate places where daylight is needed. Photos courtesy Moore Ruble

The science departments themselves were highly organized, having worked for years on alternate scenarios for expansion of their facilities and funding. The scientists were concerned with the functional needs of their laboratories and the amount of space that would be available to them. The campus planning staff was dearly concerned with the scale and pattern of buildings and open spaces. Students were looking for the quality of the teaching facilities. Many of the architecture faculty were concerned that Christopher Alexander's "pattern language" as expressed in *The Oregon Experiment* be rigorously applied. All of these groups participated throughout the design process, from workshops through the traditional design phases.

The planning team brought its own history, diversity of perceptions and predilections. We saw our challenge as creating a process that could welcome a multiplicity of perceptions and opinions, foster communication and exchange, and ultimately, synthesize and manifest a diversity of thought and need into a coherent plan and design for the science complex.

The Process

Any process with these ambitions must balance openness with structure, free expression with information. Our means of accomplishing this was a series of participatory design workshops conducted on campus over a four-month period. These workshops brought together interested members of the University community, people representing a broad range of constituencies and points of view, and encouraged their creative participation in an array of campus planning issues.

The Campus

This workshop began with a presentation about the historical plans for the campus, looking at places where those had been successfully realized and places where, more recently, the patterns had been ignored or damaged. This was followed by a range of activities, from those that encouraged people to think freely and creatively to those that asked them to be focused and analytical.

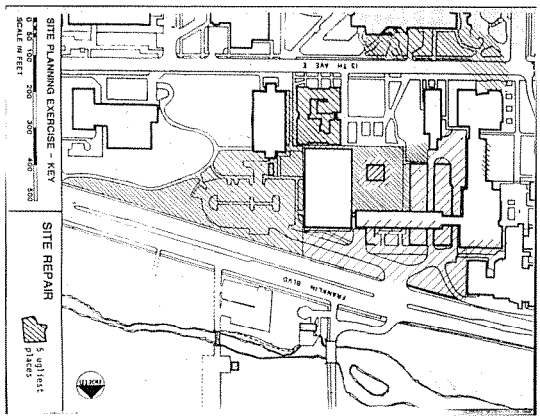
During most of the workshop, small groups explored the implications of alternate schemes for the location and massing of the buildings. The groups were intentionally organized to be heterogeneous, each with representatives of science departments, the campus planning office, students, staff and administration. Early on, it became apparent that the maximum efficiency of the science buildings might be at odds with the campus needs for sensitively scaled buildings and courtyards.

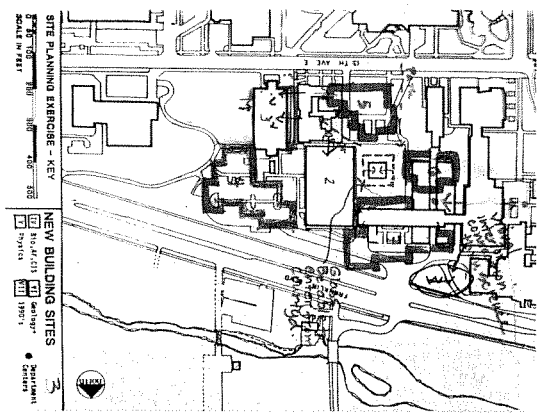
The scientists, who were already well versed in the programmatic needs of the buildings, became sensitized to the needs of the campus. The campus planners, students and staff began to understand more clearly how the scientists worked and their physical, spatial and social needs. The overlapping agendas had been exposed, the dialogue had been expanded.

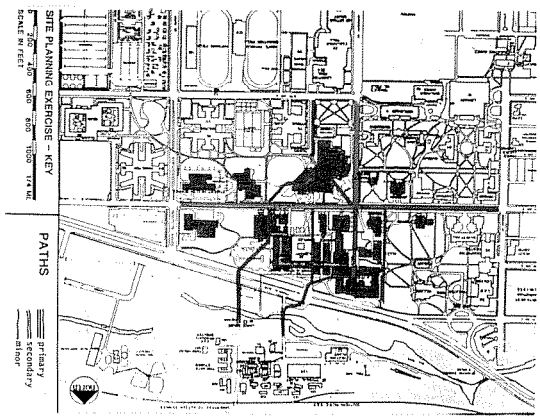
Intermittently groups went out to the potential sites and responded on maps to questions about such issues as preferred locations for individual buildings, important paths and views, site repair and key linkages between departments. These issues all had analogues in patterns described in *The Oregon Experiment*. The maps were collated by the planning team and discussed with the whole workshop.

This workshop also led to a number of critical discoveries about the physical planning of the campus. First, it became clear that the horizontal and vertical linkages that the scientists sought among departments and institutes (some in existing buildings and others in new ones) could be achieved without sacrificing important campus patterns. The new buildings could be linked in such a way that a new series of south-facing courtyards (a pattern from *The Pattern Language* that Alexander and his colleagues said would be particularly applicable to the Oregon campus) could be established. Further, these new buildings could be positioned to preserve and enhance important axial views and to "repair" damaged site areas by shielding unattractive views and providing "addresses" and identity on 13th Avenue, the main campus street, where previously there had been none.

There were, as well, some magical moments of discovery. During a site-massing study, a member of the faculty noticed that in addition to using the new buildings to strengthen the sense of identity of 13th Avenue, there was also the possibility of arranging them to create a secondary path, a pedestrian way parallel to 13th Avenue. This was to become Science Walk, a kind of insiders' path for communication among science students and faculty. It later became so important to the plan that Scott Wylie, a sculptor involved in the art program, choose this walk as the site for a series of tile and brick installations.

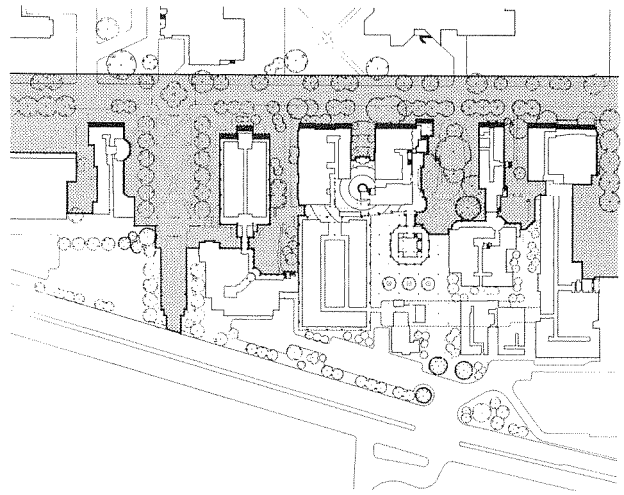


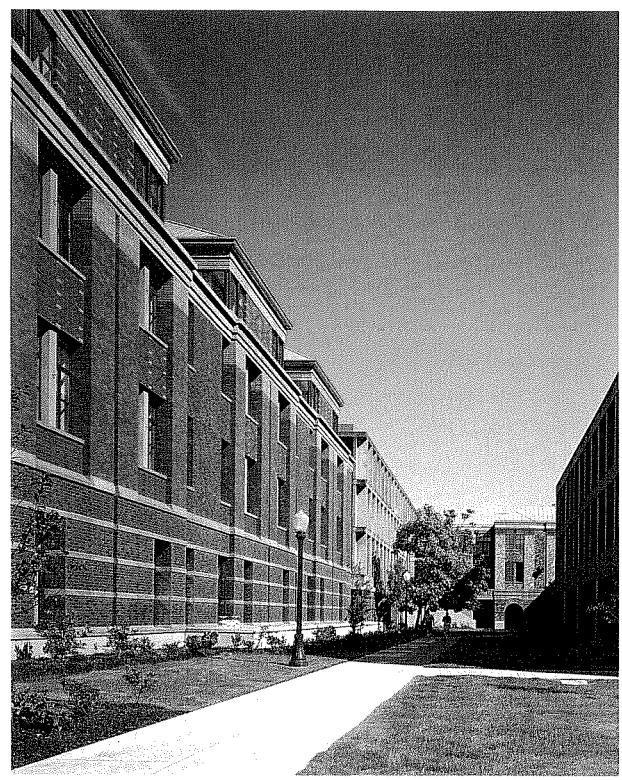




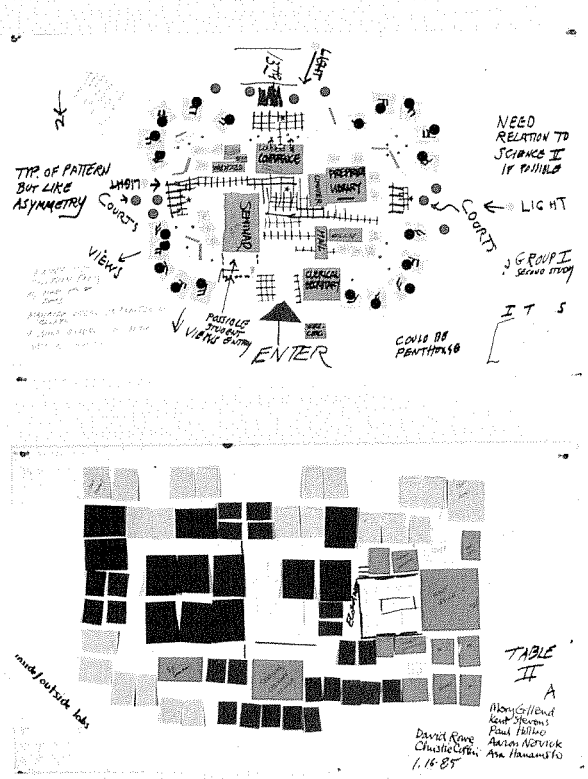
Architects and workshop participants walked the campus, making maps that indicated views, paths, potential building sites and sites in need of repair. Drawings courtesy Moore Ruble Yudell.

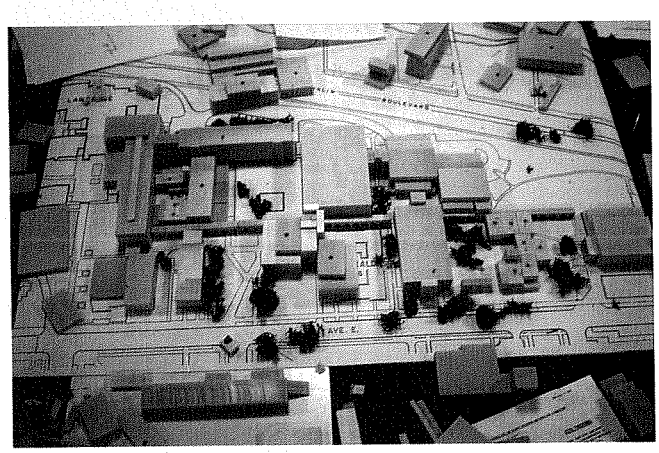
The facades of the buildings strengthen the idea of 13th Avenue as an important street, and south-facing courtyards penetrate into the complex from 13th Avenue. Graphic courtesy Moore Ruble Yudell.





Willamette Hall's east facade forms a courtyard with Huestis Hall (right) and Klamath and Streisinger Halls (rear). Photo by Timothy Hursley.





Collages and model by workshop participants. Photos courtesy Moore Ruble Yudell.

The Department

The workshop dealing with the departmental realm began with a brief overview of the typological alternatives for organizing science research buildings. We analyzed a broad range of examples for their spatial, social and service configurations and potentials. We presented both analytic and descriptive material so the character and spirit of places could be discussed as much as their dimensions and functions.

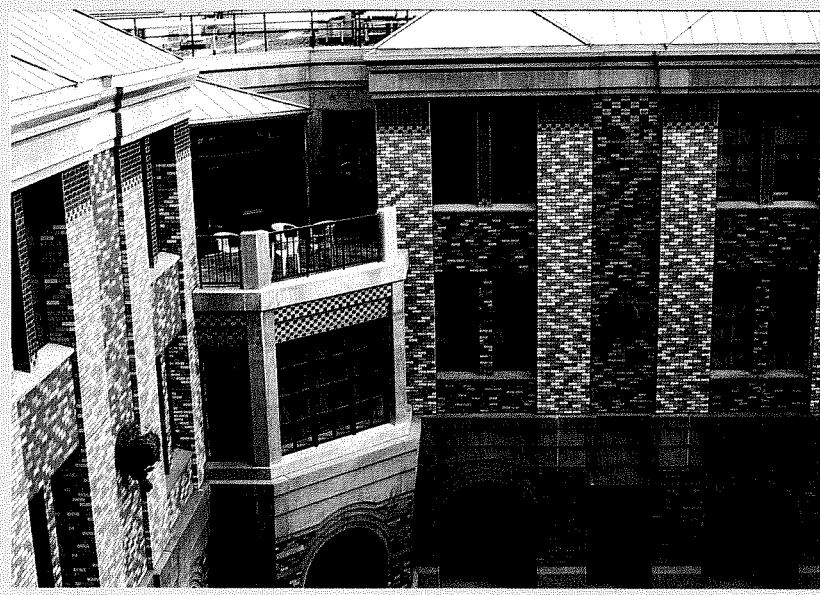
Scientists, graduate students and staff then gathered in small groups according to discipline. They discussed issues ranging from the nature of communication in the scientific community to the logistics of moving equipment through their buildings. Much discussion centered on the relationships between faculty, graduate research assistants, staff and undergraduates. It became clear that for most scientists, social relationships were central to the research process.

Animated discussion quickly evolved to equally energetic sketching and collage making. Using colored paper to code such uses as laboratories, office spaces and service areas, the teams produced two- and three-dimensional collages of great sophistication. Each collage represented the group consensus on how an entire department ideally should be organized.

The scientists from the Institute for Theoretical Physics and the computer and information science department both created geometrically elegant diagrams stressing the primacy of the individual lab, analogous to a study. These labs were oriented outward toward trees and views and configured in intimate clusters of related researchers and research assistants. The biologists sought large flexible spaces, positioned for easy connection to related research in chemistry and physics. The geologists, a particularly congenial group with an outdoors orientation, emphasized social spaces, views and contemplative study.

The physicists were perhaps the most organized and ambitious group. They were headed by John Moseley, who had been at the forefront of planning and funding for the entire science complex. They presented an extraordinary three-dimensional model that represented a highly resolved set of horizontal and vertical relationships among disciplines and equally sophisticated linkages to other departments along bridges that would house offices for the interdisciplinary institutes. The whole composition was organized around an atrium that allowed for social interaction within and among departments and could provide a focus for the whole science community.

All departments dealt with some of the key patterns stressed in *The Oregon Experiment*. "Social Stair" is a pattern that suggests the use of stairs to encourage social and academic interaction. Every department eventually integrated a carefully located social stair. "Department Hearth" is a pattern that recommends a focal space that can become the social and emotional center of the department. "South Facing Outdoor Space" is a pattern that encourages the southern orientation of gathering spaces in this often damp northern climate. These patterns were introduced to the work-



The hearth for the biology department connects to an upper-level terrace that overlooks a courtyard. Photo by Donlyn Lyndon.

shops by the planning team at various times and were skillfully incorporated in many of the scientists' sketches and models.

The scientists were able to work within these patterns while creating differentiated spaces responding to the particular needs of each department. For example, the more informal and outdoor-oriented geologists worked towards large informal south-facing meeting spaces adjacent to south-facing porches and courtyards. The theoretical physicists sought intimately scaled, quiet spaces adjacent to clusters of faculty offices or related to the small departmental library.

The sophistication of these studies, which came together in less than two hours, was astounding and demonstrated the potential of the workshop process for the exposition and synthesis of creative ideas. Most graduate students or even practicing architects would spend weeks gathering information and testing alternate configurations before arriving at the level of resolution that these studies exhibited.

The products of these workshops became touchstones for the science complex's planning and design. Specific ideas took on a life bigger than anyone in the workshops may have expected. The Willamette Hall atrium became the veritable heart of the science complex and one of the major meeting and celebration spaces on campus. Science Walk became a small-scale but very important social spine.

While it was clear that user involvement was well rooted at the University, we felt a participatory workshop process would provide additional benefits for a project as complicated as this. We had learned that workshops encourage users to participate in active, creative ways that surveys and critiques do not, increasing people's sense of empowerment and responsibility for their environment. We organized the workshops around different "realms" that people encounter on the campus, realms that are nested in a hierarchy of scales. The sequence focused on the realm of the campus, the realm of the department or building and the realm of the laboratory. Each workshop was meant to elicit and discover issues and goals of the various participants.

Within each realm diverse points of view or cultures existed. In the campus realm were campus planners, students, faculty and staff. In the department realm were at least four quite different groups of scientists with diverse ways of conducting research and communicating (there were also a number of inter-departmental institutes to encourage and share dialogue among disciplines). In the laboratory realm were individual variations in methods of research and teaching. We had to balance these against economies of scale and the need for future flexibility.

Issues exposed at each scale were juxtaposed against what we had learned about the other scales so the various ideas and discoveries could inform each other. For example, a morning workshop on the campus might expose issues that would influence an afternoon workshop on the departmental buildings.

The planning team itself brought diversity. Moore Ruble Yudell brought considerable experience in participato-

The Laboratories

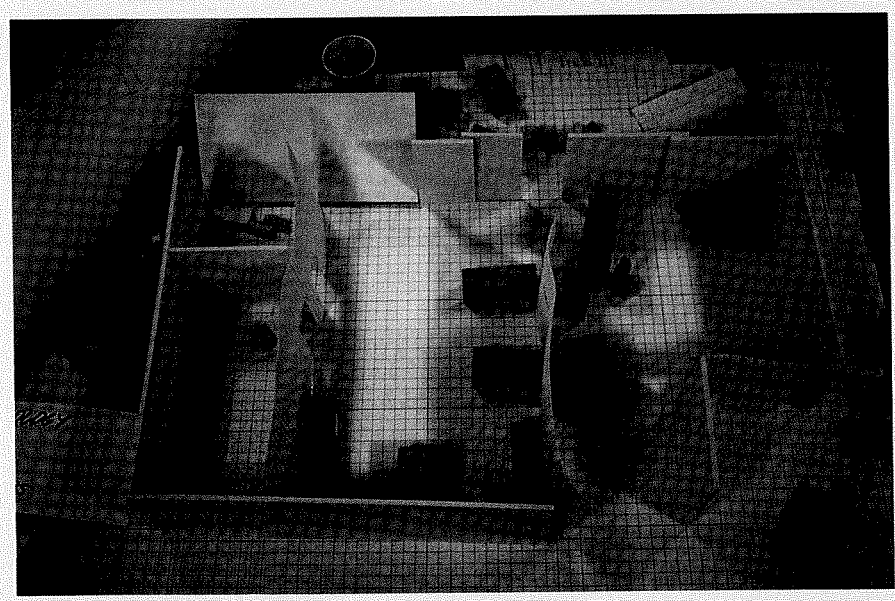
The laboratory workshop was the focus for discussions about the detailed process and dimensions of the work of research. The introductory talk focused on a range of precedents and examples with discussion of the trade-offs inherent in the size of labs and the services provided to them; we presented various paradigms for laboratory organization that would provide significant trade-offs among issues of internal functioning, cost and exterior massing.

The primary workshop activity centered on "kit of parts," models that could be manipulated to develop all the relationships within each discipline's work spaces and offices. This helped to test the many variables being considered.

During this workshop the quantitative issues of university space standards were introduced so that even at the earliest planning stages we were able to address the sometimes difficult compromises necessary between ideal solutions and the realities of budgets and funding. The workshops for all three realms or scales attempted to balance the benefits of free, creative imagining with the gradual intduction of the constraints of budget, space limitations and the overlapping needs of different constituencies within the campus.

The most critical concern for the planning team was reconciling the laboratory needs of the scientists with site concerns of the community and planning staff. The physics laboratories, which required the largest, most flexible space, produced the biggest new building. Much of the effort of the site workshop and subsequent planning team design studies focused on how to articulate the scale of this building. In the end it is experienced as a series of related pieces along 13th Avenue.

The laboratory workshop did not produce the moments of great surprise and discovery that we experienced in the other workshops. However, it established critical differences in character and dimension between the various kinds of research space. The spectrum ran from laser scientists who sought garage-like spaces with no outside light to geologists who preferred intimate studies to theoretical physicists who hoped for rooftop aeries with views to verdant mountains.



Model of laboratory spaces developed by participants in workshops. Photo courtesy Moore Ruble Yudell.

ry planning workshops. Much of this work had been inspired by earlier collaborations with Jim Burns, whose "take-part" planning techniques had been developed first with Lawrence Halprin and then extended and tested in his own community experiences.

The Ratcliff Architects brought workshop experience and a closer connection to the work of Christopher Alexander, Christie Johnson Coffin having been a graduate student his and having taught on the architecture faculty of the University of Oregon. McLellan & Copenhagen, the laboratory consultants, brought experience in client participation and in the detailed planning of laboratory space.

We sought a broad cross-section of user participation in the workshops. Typically some 50 to 80 individuals representing student, faculty, planning staff and administration participated. Also, 10 to 15 members of the planning team attended each session.

Each workshop had its own rhythm, moments of discovery, controversy, magic and, sometimes, epiphany. Each began with a brief talk by members of the planning team to establish a base of information among participants from different realms. Much of the work occurred in groups of five to eight individuals at tables where ideas were exchanged and sketches and collages were developed collaboratively. One member of the planning team acted as the facilitator at each table, listening, taking notes, answering technical questions and stimulating discussion but being careful not to guide or prejudice the exploratory nature of the process. The atmosphere was meant to be informal and collegial.

Workshops were spaced approximately four to six weeks apart; between the sessions the planning team synthesized the results of the preced-

ing workshop to be presented, discussed and adjusted at subsequent sessions. Each major workshop topic was explored in half-day work sessions.

This process in no way replaced traditional programming efforts. Information on the program and needs came from the user committees and numerous interviews of scientists and staff by the planning team. The participatory process did, however, provide an invaluable mode in which communication of overlapping constituencies and free exploration of dreams and ideas could inject invaluable creativity into the overall planning process.

The Workshops in Context

For all the energy and ideas that the workshops exhibited, they represent only a short burst of energy and time within the overall planning and design phases. They in no way obviate all the traditional steps in the design process, from programming through multiple design phases. Nor do they, as some practitioners fear, diminish the role of the architect or the need for the architect to give physical form to the place. Creativity is not a limited commodity, and the more open the process the more freely it can flow.

The workshops had many lasting effects. They exposed various goals and agendas in a common forum so all players were aware of the necessity of accommodating diverse but overlapping needs from the start. They unleashed the enormous creativity of individuals who were enfranchised as creative participants in the making of their workplace and community, rather than relegated to the sidelines as observers or critics. They built a sense of participation that translated into energy and advocacy along the often difficult path to realizing a project. They fostered communication that extended the sense of community.

Opening day ceremonies were in October, 1989, about four years after the first workshops. We were sitting expectantly in the atrium enjoying the light and space and remembering the physicists' colored paper model. Awaiting the arrival of U.S. Senator Mark Hatfield, a staunch supporter of the funding of this project, we imagined with some pleasure how this space might come to be a focus for insightful discussion between scientists or symposia to solve world problems.

Suddenly the spell was broken as students festooned with headbands, placards and banners marched in, chanting in protest against Hatfield's stand on the spotted owl, the University policy on benefits for teaching assistants and other issues too obscure for an outsider to glean. They paraded around the seated guests and up the grand stairs, finally occupying the stairs and balconies of all four levels — the ones we had so carefully conceived to encourage visible social interaction.

Our University hosts were appalled that this long-awaited celebration was so rudely violated and especially that distinguished guests from all levels of government were unabashedly hooted. Both the hosts and the politicians subject to this abuse were calm and skillful in their response. The ceremonies proceeded in impressive if somewhat abbreviated form.

For some reason I was quietly pleased by this display — not necessarily from political sympathy for the protesters, but because this atrium, conceived by the scientists for their use, had already taken on a scale and life beyond those initial ideas. All of the needs of the science complex could be fulfilled here, but other agendas

Protesters in atrium of Willamette Hall during the dedication ceremony. Courtesy *Oregon Daily Emerald*.

and ideas could overlap and coexist in this place for community.

Since that eventful opening the buildings and spaces have settled down to quieter patterns of daily use. Laboratories seem well suited for research and teaching. Social stairs, department hearths, south facing courtyards and porches are used for informal meeting and relaxation. Science Walk is a place for chance encounter. The physics atrium, home to a small coffee shop, is a focus for socializing and professional gathering both at the scale of the department and the university.

For us the pleasures and rewards of the workshop process lie first in giving voice to the aspirations of a community and then in giving form to those dreams. The places that grow out of this process take on their own life, which then continues to nurture and build community.

Note

1. Christian Norberg-Schulz, *Genius Loci: Towards a Phenomenology of Architecture* (New York: Rizzoli, 1980).