

Caring for Places
Danlyn Lyndon

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Campuses in Place
Frances Halsband

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Cognitive Standards and the Sense of Campus
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New Campuses for New Communities
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Frances Halsband*

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Caring for Places: Caring for Thought

Among the most exciting times in life are those when ideas rearrange in the mind; when what seemed settled and fixed suddenly becomes transformed by fresh and absorbing new insight. Remembering when that happened and in relation to what circumstances becomes part of the lore of life.

People like to talk about “thinking out of the box,” “the creative leap,” and the “ah-ha effect” — all means of rearranging, or differently categorizing ideas, or of suddenly finding new relationships where none had previously seemed to exist. It happens for individuals making daily sense of their worlds, and it happens in communities of people when we talk about “paradigm shifts.”

Universities are about making this happen. Watching it happen is what teachers love most... the glint in the eye of a student when new vantage points open; the startling reflection that challenges conventional understanding. Capturing and channeling those moments of rearrangement (revising, reforming, “re-engineering”) are part of the university’s purpose.

Another part of the university’s purpose, of course, is conserving, refining and transmitting cultural norms and practices — nurturing both their understanding and the critical thought that subjects them to continuing scrutiny. That universities need to have both is evident; it’s bred into the structure and ethos of the contemporary institution.

Attending to these purposes in the settings of the university as well as in its curricula receives less attention, yet the university campus is one of the places where deliberate, purposeful construction of a common realm can be imagined and constructed; where purpose and vision can trump expediency... or so one would suppose. But in an era of declining public investment in education, a surge in emphasis on market advantage, and the complexity with which university facilities and populations are now enmeshed within the fabric of cities, the project of the university has become itself more entangled with the fate of its adjoining community. Is learning any longer (or was it ever) confined to campus? How does the ever-increasing competition for students play into the construction of facilities and the demands made on the structure and character of the city (or suburb) that surrounds it?

Can the university avoid judgment about its role as an agent of change in the community? Do the patterns of open space and building that are conventionally associated with “campus” have a place within neighborhoods that the institutions infiltrate? Conversely, should the apparatus of the city have something to say about how campus spaces are formed? Should/can the engines of technological change and the buildings they foster be absorbed within conventional fabrics laden with tradition, or should/can they be used to create new understandings among students and faculty? Should not places of learning be designed so that they lead their inhabitants to encounter a larger community, new perceptions of capability, and expanded understanding of their position in the natural and built places they inhabit?

This issue of *Places*, guest-edited by Frances Halsband — who, as an architect, is herself engaged in searching through the intricacies of these issues — may not answer these questions, but it poses them. Its articles challenge us to think about what a campus might be; how a city might be; how we ourselves might be.

— Donlyn Lyndon

Shaping Campus Edges at UC Berkeley

Emily Marthinsen

The University of California at Berkeley is a rich and dynamic place. It has a vigorously marked focus, with its Campanile, visible from across the bay in San Francisco, and a Beaux-Arts central campus plan explicitly, perhaps presciently, oriented by its architects toward the Golden Gate, the Pacific, and Asia beyond. UC Berkeley's boundaries, however, are complex and indeterminate, stretched and fractured by the demands of growth.

Berkeley's faculty members are world leaders in research, and the university draws top students from California, the U.S., and the world. New academic programs are constantly being developed and existing programs expanded. Now, in addition, as part of the California Master Plan for Higher Education, UC Berkeley must grow by an additional 4,000 students (with associated faculty and support staff) by the year 2010. The 2020 Long Range Development Plan, certified by the Regents in January, 2005, proposes adding 2.2 million gross square feet of academic and support space to accommodate the population and program growth. UCB and the city it inhabits together face formidable challenge and opportunity.

Initially set out on open ground a century ago, the campus now finds itself tightly constrained: its boundaries on three sides are well-established city neighborhoods that have grown up around the original small campus, each with a clear, noncampus identity. The fourth side is mostly steep university-owned open space reserve, with the Lawrence Berkeley Laboratory set farther up in the hills.

The campus has already moved into those neighborhoods in various ways. The university has bought or rented buildings. It has bought land, demolished existing buildings, and built new ones. Early on, the campus actually also subsumed a number of streets entirely. As with most universities, the neighborhoods surrounding UC Berkeley have not welcomed the growing campus presence.

University Influence at its Edges

Decisions made by UC Berkeley about its edges and expansion beyond its boundaries have shaped the form and activities — the character — of streets and neighborhoods bordering the campus. Sometimes those changes were made with intent, sometimes through disregard. Most appear to have been the result of demand for space and services.

In terms of character, Southside is the primary student neighborhood, and the lively commercial life here is

directly related to the large number of students who live nearby in the university's highrise dormitories (the "units") and in private apartment complexes. Small academic and service groups also create a mixed-use office environment in former residential buildings. To the west, large numbers of people coming to the campus arrive in downtown Berkeley, making it a major East Bay transit center, with bus and BART connections to the Bay Area and beyond. On the north, large academic buildings across Hearst Avenue from the campus, along with those of (delete those of) the Graduate Theological Union and other small schools and research centers, have given the Northside neighborhood an increasingly institutional character.

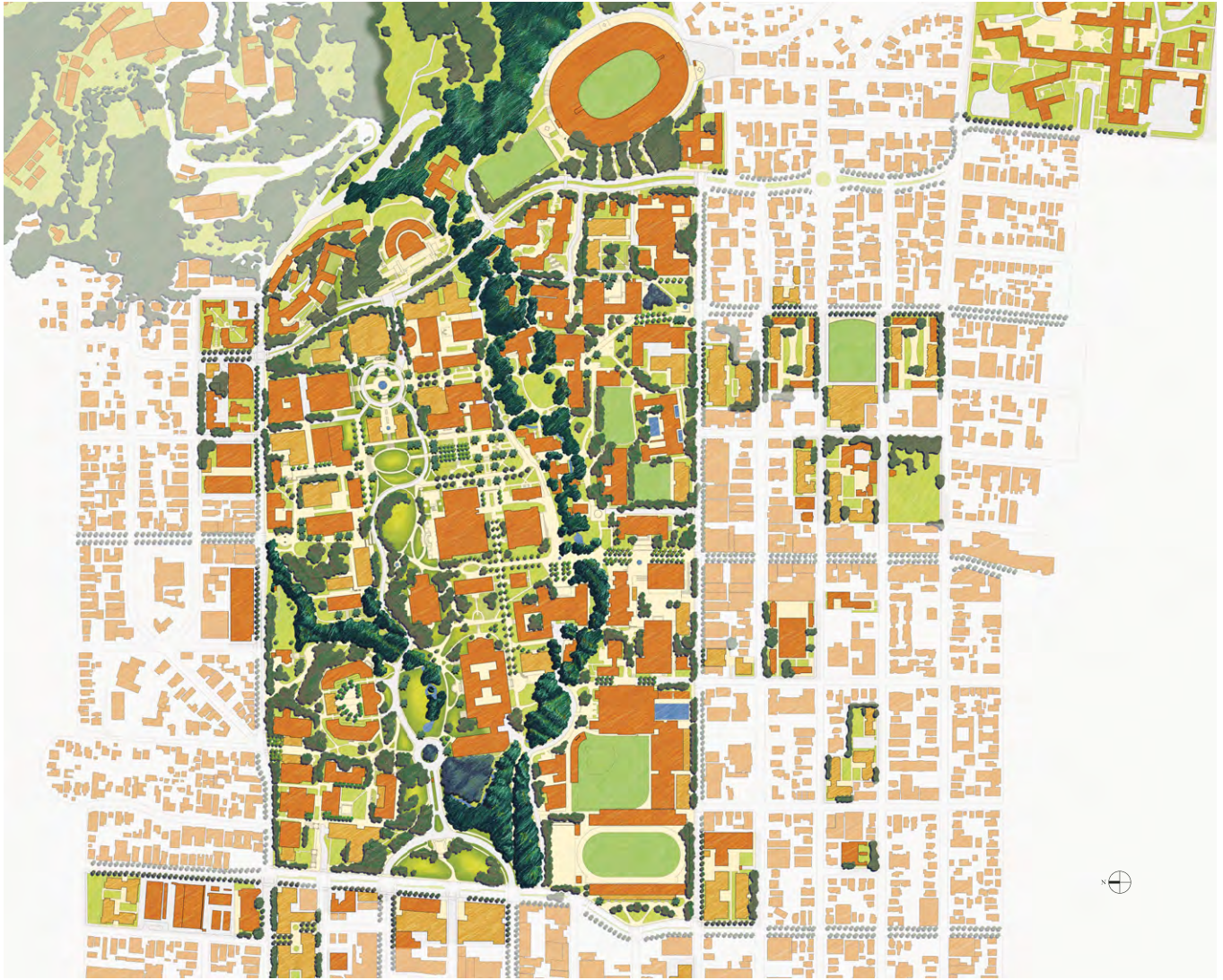
Density of development is another way the university has influenced its surroundings. The effect of density has been felt especially to the south and north. In the 1950s three groups of highrise dormitories replaced single-family houses on the south side; and since the 1970s two large academic buildings have been built on the north side, replacing small apartment buildings. Current plans for the west, downtown, edge of the campus, propose intense commercial development — a hotel, conference center, and retail uses — between the campus and the transit center, supporting the City of Berkeley's efforts to reinvigorate its downtown.

The presence of university buildings has also changed neighborhood scale and rhythm, affecting how public roads and sidewalks connect open space, how buildings frame views, and how people experience the sequence of Berkeley's urban space. Large, poorly sited buildings on the central campus block orienting view corridors, and campus buildings on residential streets — even the best — provide a less rich visual vocabulary for passersby than do Berkeley's traditional houses and gardens.

Finally, as campus programs and population have grown, and as private automobile use has replaced public transit, streets and sidewalks approaching the campus and its open spaces have become increasingly congested. One of the most hotly contested elements in the current Long Range Development Plan is the projected increase in parking planned by the university to meet faculty, staff and student demand. The City of Berkeley claims this will increase an already burdensome traffic load.

Each side of the Berkeley campus has been affected differently by the university's presence, and each offers different opportunities for positive results. But, in response, the university's approach to development along its edges is now more intentional, more studied, and more publicly articulated than in the past.

Opposite: UC Berkeley imagines a number of new and replacement building sites on its main campus and in adjoining areas of the city as part of its 2004 Long Range Development Plan.



North Side of Campus

Hearst Avenue is the traditional north boundary of the central campus. Some years ago the university crossed this street and built a number of large buildings: two parking structures, two academic buildings, and a residence hall. These campus buildings generate constant pedestrian traffic in both directions across the street. Core academic activities — research, instruction — now occur on both sides of this boundary, and the edge itself, for about three blocks, has been functionally almost erased as a result. A residential neighborhood with many large single-family houses and old apartment buildings remains intact close to these campus buildings.

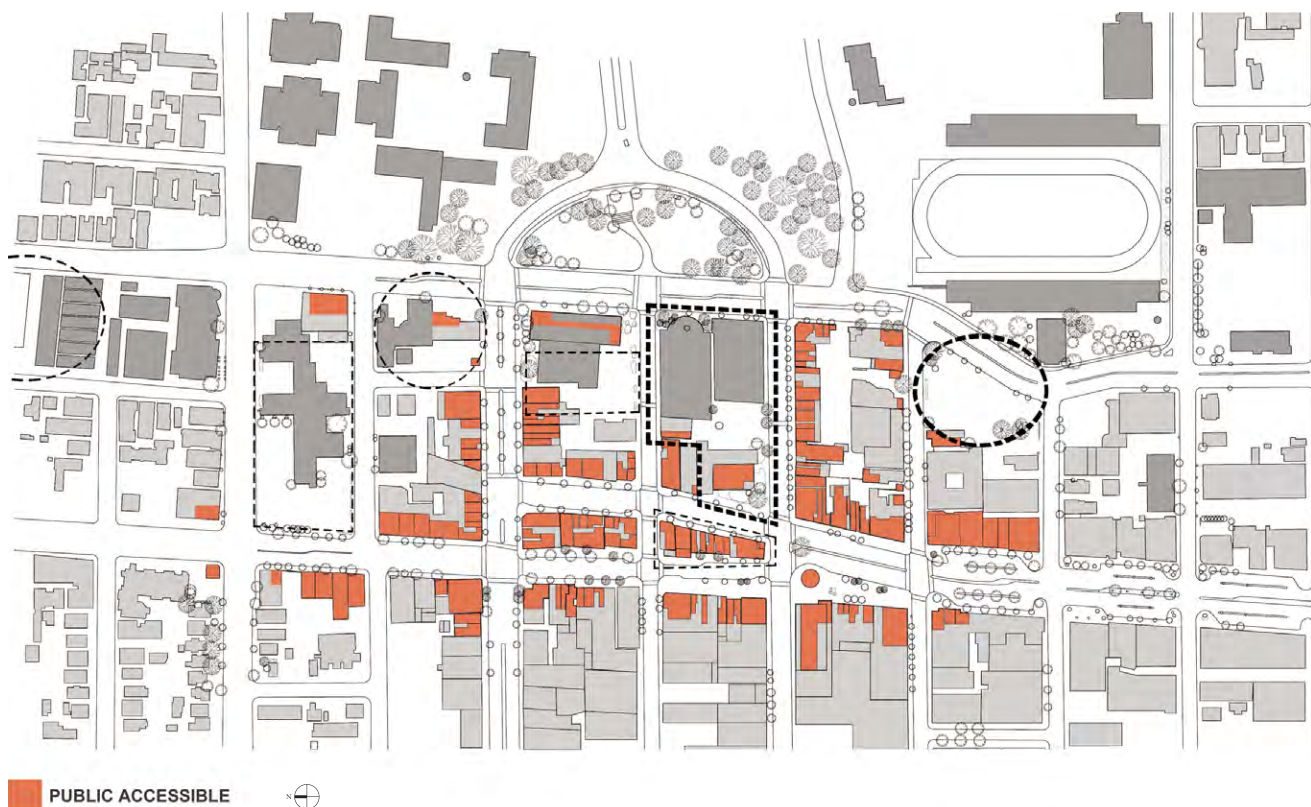
Recently, the university took a different development approach to a project on its north side. The Goldman School of Public Policy is housed in a large old fraternity house. Its recent addition is about the same size as the original, and was designed as its complement — with similar form, massing and detail. Although the new building continues the campus activities in this neighborhood, it does not increase density, and the character of the street — large elegant houses and apartment buildings, some with ground-floor retail — remains intact.

West Side of Campus

The west side is the campus downtown edge. Here a wide street, Oxford Avenue, separates the campus from the city. Although four university-owned buildings and one state-owned complex across Oxford Street have severely inhibited commercial development along the west side of the street, the campus edge here appears distinct. The most significant face of the campus is primarily open space: the West Crescent lawn, Grinnel Natural Area, and Strawberry Creek.

The university and the city are engaged in an effort to develop a hotel/conference center along Center Street. Center Street would thus become the connection between Berkeley's main commercial street (and the location of bus and rapid transit lines) and the campus. The university's art museum and film archive plan a new building at the end of Center Street, across Oxford Street, facing the campus, but also linked, by Center Street, to other areas of Berkeley's downtown, especially Addison Street around the corner, the city's designated "arts district," already home to several theaters.

The initial campus proposal for the hotel/conference center/museum saw in this project an opportunity to



develop a better connection between downtown and the campus. Visitors coming to the hotel for a conference or to the museum would discover the buildings and beautiful open spaces of the adjacent campus. The university's art museum would provide a program resource, enlivening Berkeley's downtown. This would mean that diners visiting the already lively restaurant row of Center Street, recently facilitated by the city, would be joined by a lively mix of art-museum and film patrons, conference attendees, shoppers, and pedestrians on their way to transit stops in the area.

Progress on this ambitious and innovative project has been slow, as university, city, and citizen advocates have claimed conflicting positions regarding form, development and financing both for the project and for transforming Center Street itself.

South Side of Campus

The south side of the campus has been most affected by university planning and design decisions. The university built highrise residence halls, a dramatic art museum a comprehensive student health center, parking garages,

and recently new lowrise residences. All this development occurred in a neighborhood that once consisted of large homes, apartment buildings, and religious institutions. The university bought and rented properties, and over time activities in the Southside neighborhood have become more and more dependent on the university's presence.

The first campus buildings, the highrise residence halls, were designed around courtyards. The courtyards contained landscaped walks and large pavilions used for dining. There are three such groups of three slab towers, nearly identical. Although the units themselves are blocks away from the campus, the groupings turned away from the streets and the neighborhood and created self-con-

Downtown Berkeley campus edge. The darker gray buildings are university buildings. The orange areas show portions of downtown buildings generally available to the public. Dotted lines indicate areas where there could soon be major change, four of which involve university property. The two most strongly indicated are the potential museum/hotel site (rectangular) and a private development that includes housing and an ecology center (oval). Drawing by Marianne Stuck and Benjamin Bross.



tained gathering spaces for resident students only. Students streamed back and forth between the units and the campus.

The units also did not look like the neighborhood. They are typical 1950s towers set in a neighborhood of brown-shingle and stucco houses. Their form emphasized their structural logic, with expressly delineated columns filled in between with panoramic glass and panels. The courtyard pavilions, seismically deficient and now demolished, were glassy structures with romantically curved roofs.

Recent Southside projects address the relationship between university buildings and the neighborhood in very different ways. The university recently opened a new dining facility that functions like a restaurant, open to the community as well as to students, and which opens onto the street with a gathering place at its entry.

Two three- to four-story buildings with craftsman details responding to scale and rhythm of the surrounding neighborhood have also been built. More dramatically, a set of “unit infill” projects are being completed, which add towers of a very different sort to the high-rise complexes already there. Whereas the form of the earlier buildings

were statements of repetitive structural logic, coated in pastel tan, which could as easily have been offices, the new structures are vibrantly colored vertical masses of various heights with syncopated fenestration that unmistakably house living spaces of various sorts. They formally animate both the streets and the courtyard spaces within, all the while significantly increasing the density of already dense housing along the College Avenue bus route.

Responding to Place

What we see then at Berkeley is the evolution of campus planning strategies linked to their place in the surroundings, vigorous in some instances, recessive in others, tentative (maddening, some might say) when interacting with the commercial forces of a city which both gives it nourishment and depends on its presence for its own stimulation and well-being.

Four views of new infill student housing at UC Berkeley. The design successfully engages a complex urban environment from a variety of approaches. Design by EHDD Architecture. Photos by Donlyn Lyndon.

Retrofitting Planners

Kaizer Rangwala

As cities across America are coming to recognize the undesirable qualities of the last several generations of development, they are beginning to reexamine their land-development codes and consider other options. As reported in the *Places* article on New Urbanism's Smart-Code (Vol. 16, No. 3, pp. 74-77), one such alternative is form-based coding. This approach shifts the focus of local-government oversight from the conventional hyper-control of uses to a more limited (and rational) emphasis on the form of the built environment: the streets, the public spaces formed by the disposition of buildings, and the form of the buildings themselves.

Lost in the recent discussion of this issue, however, is the challenge that such a shift poses for the planning profession. In particular, it exposes how little skill and knowledge planners today have with crucial tools of graphic representation.

The Promise of Form-Based Coding

There are important differences between conventional zoning practice and form-based practice. In effect, conventional zoning assigns regulations to individual parcels as placeholders. But these are seldom tied to a specific vision of how a community wants to look. Conversely, the regulations in form-based codes are keyed to various street and building types. In this format, the focus shifts from the regulation of activities on private property by location, to encouraging property owners to build in ways that further a community's sense of itself, particularly in terms of the design of the public realm.

To communicate such a framework, form-based codes typically utilize drawings, diagrams and photographs. Their advocates claim that the public, public officials, and designers find it easier to understand these than the lists, charts and formulas that dominate standard zoning practice. They further argue that people will more likely support what they can more easily understand.

In practice, the basis of form-based zoning is the same as that for more conventional types; a comprehensive master plan, spelling out how a city wants to develop, underlines both. But the form-based alternative seeks to develop a more meaningful implementation of the three-dimensional vision implied in the master plan. In particular, a form-based code is generally built on a regulating plan, which in turn relates to more specific building envelope standards, street sections, architectural standards, and definitions.

Of these components, the regulating plan is a drawing that specifies, in detail, what is only loosely defined in the city's master plan. The function and location of streets

and their relationship with buildings and open spaces are clearly defined on the regulating plan. Building heights, the siting of buildings on a lot, and uses are then further defined by means of building envelope standards. Typical street sections specify the cartway widths, curb radii, sidewalk and tree planting area dimensions, on-street parking configurations, and other amenities. Architectural standards regulate the important public elements of the facade. Finally, certain terms not readily understood by the public, or meant to be used in a specific way, are clarified in a definition section.

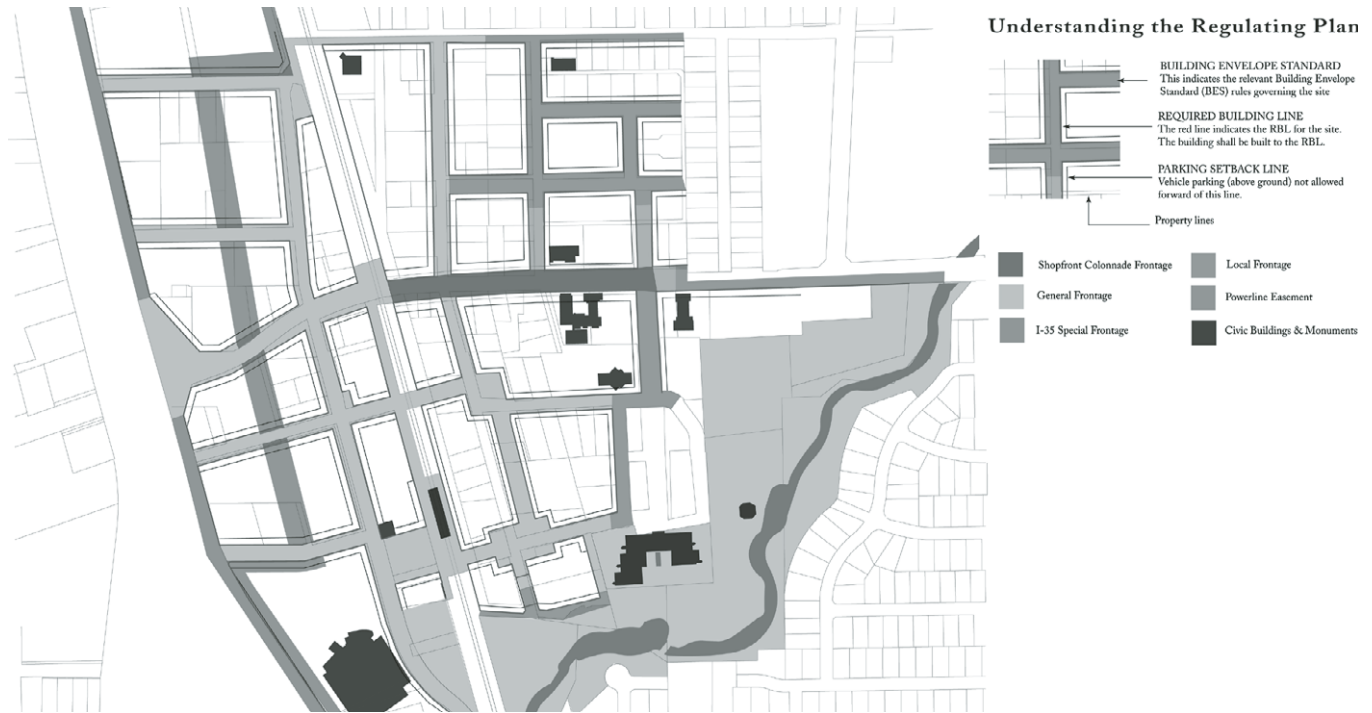
In addition to revamping assumptions about what a zoning code is intended to regulate, the production and administration of such an alternative regulatory structure requires an interdisciplinary sensitivity to urban design, architecture, landscape design, traffic engineering, and even market demand. Crafting the regulating plan and associated building envelope standards also requires knowledge and experience in drawing—typically using computer-aided design software. Finally, specifying building envelope and architectural standards require an understanding of architecture, landscape architecture, and building construction. Generally, planners do not have these skill sets, and are required to rely on design consultants when it comes to preparing form-based codes.

Designers Are Eating Planners' Lunch

Engineers have often been known to chide planners for being overly democratic—constantly searching for the politically elusive win-win solution. They argue that such a democratic process runs the risk of less than desirable outcomes that in the long term affect the planner's credibility. Now, with the advent of form-based coding, the technical grasp that architectural designers have over the visualization process presents a new challenge to the credibility of planners.

With engineers maintaining a stronghold on technical details and architectural designers offering superior visualization skills, planners risk being relegated to simply managing or facilitating the community-development process. Under such a scenario, not only will planners not get to eat, but they may not even get a seat at the table. Indeed, they may face a future as bus boys, trying to get all the plates, cups, and silverware arranged in the proper places, one piece at a time.

It is important that planners understand how serious this problem is. Crafting and implementing architectural standards and definitions requires an appreciation and a knowledge of the ways that different individual physical



components contribute to the whole urban built form, and for planners with no formal design and construction training the learning curve is steep. By contrast, architects receive formal training in design and construction, and for them the transition from the design of individual buildings to the design of the larger built environment is much smoother.

Particular difficulties often surface for planners when a developer proposes minor changes to the regulating plan of a form-based scheme. No matter how perfect the code is the day it is adopted, amendments are bound to be necessary. However, the regulating plan and building envelope standards are usually generated using computer-aided design software—a tool commonly used in the architectural and engineering profession, but not so readily found on the planner's tool belt.

Although the original plan may be developed by a consultant familiar with such graphic tools, lean city budgets are not likely to support repeated use of consultants for minor changes, such as moving a street five feet on the regulating plan or modifying the building envelope standards. If they plan to remain integral to the process, planners will have to learn to use the tools necessary to carry out such minor amendments in-house.

Retooling

The planning profession has its roots in physical planning, with an emphasis on designing desirable and livable places. However, over the last century planners have neglected the physical aspects of their profession. While the evolution of the planning profession has witnessed a pluralistic incline, planners should not lose sight of their rich heritage in architecture and landscape architecture. Where great leaders such as Ebenezer Howard, John

Nolen, Frederick Law Olmsted, and Daniel Burnham once produced grand development plans, many planners today seem resigned to the largely bureaucratic function of reviewing and processing development applications.

If planners are to continue to make a significant contribution to the communities they serve and take a more active role in the design and construction of urban built form, their education and training will have to provide them with new skills. Professional organizations will have an important role to play in this process. Today the Congress for the New Urbanism and the New Urbanism Division of the American Planning Association would seem to be particularly good sources for the interdisciplinary exchange of knowledge and tools.

Ultimately, however, the nation's schools of architecture and planning must work together to ensure that urban design skills are better developed in the planning curriculum. It seems particularly odd today that a student graduating with a Masters in Planning may be expected to review site plans, but may not be able to illustrate preferable development outcomes.

The good news is that such a retooling of the planning profession should not prove insurmountable. If planners have proven anything, it is that they can be resilient generalists, adding whatever skills may be necessary to get the job done.

Draft regulating plan prepared for Station Area, Farmers Branch, Texas. Image courtesy of Ferrell Madden Associates.

Connecting Public Health and Planning Professionals: Health Impact Assessment

Candace D. Rutt, Michael Pratt, Andrew L. Dannenberg, and Brian L. Cole

Over the last few years there has been a resurgence of interest in how the built environment affects people's health. One potential tool for moving beyond theory in this area is health impact assessment (HIA). HIA can be used to evaluate the public-health impacts of a policy or project before it is implemented or built.

One interesting aspect of the 2004 EDRA/*Places* award-winning project "Incremental Urbanism: The Auto and Pedestrian Reconsidered in Greyfield Reclamation" (Michael Gamble and W. Jude LeBlanc, *Places*, Vol. 16, No. 3, pp. 18-21) was its advocacy of public health as a salient reason to initiate redevelopment planning for a bypassed area of suburban Atlanta, Georgia—the Buford Highway Corridor. Taking this work a step further, the Centers for Disease Control and Prevention (CDC), along with the University of California at Los Angeles, the Robert Wood Johnson Foundation, and the Center for Quality Growth and Regional Development at the Georgia Institute of Technology, have begun a health impact assessment of the plan's proposals.

Among other things, the Buford Highway HIA aims to produce quantitative estimates of expected increases in physical activity and decreases in injury as a result of redevelopment, as well as qualitative estimates of its effects on air and noise pollution, traffic, social capital, crime, safety, economic development, and gentrification. A cost-effectiveness analysis of redeveloping Buford Highway from a societal perspective is also being conducted by CDC and an actuarial firm.¹

Developments in the Field

Recently, there has been a growing interest in the use of HIA in the U.S. The Robert Wood Johnson Foundation along with the CDC held an international conference in October 2004 to advance development of HIA methods.² In 2003, special issues of the *American Journal of Public Health* and the *American Journal of Health Promotion* were dedicated to exploring the interaction between the built environment and health. The American Planning Association and the National Association of County and City Health Officials have also held a number of symposia and conferences on improving collaboration between their respective disciplines. Finally, the National Institutes of Health and the CDC have launched a major research funding initiative on obesity and the built environment.³

One potential benefit of HIA is to bring public-health issues to the attention of decision-makers in areas where they may not have been considered before. For instance, HIA could be incorporated during plan review for new

developments; public-health officials evaluating traditional water and sewer concerns might make recommendations, such as for increased walkability, that could lead to increased physical activity and reductions in chronic diseases.⁴

HIA also has the potential to involve community members in decisions concerning proposed projects and policies, and thus gain their support and help reduce the NIMBY (not-in-my-backyard) phenomenon.

Similar to an EIA

HIA is commonly defined as "a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population."⁵

In some ways, HIA may be thought of as similar to environmental impact assessment (EIA). However, EIA reports are mandated, and focus on defined outcomes such as air and water quality. By contrast, HIAs can be voluntary and focus on more wide-ranging concerns such as obesity, physical inactivity, asthma, injuries, and social equity.⁶

Numerous HIAs have been performed in Europe, Canada and elsewhere. Several countries' experiences with HIA have been documented in a new book, *Health Impact Assessment*.⁷ Additional resources are available at the Health Impact Assessment Gateway.⁸

So far, research indicates that HIAs can succeed in promoting health-related change to the built environment. Successful efforts include HIAs for the Fintona Airport, and for Edinburgh's urban transportation strategy (reducing air and noise pollution; reducing health disparities).⁹ However, other HIAs, such as the "Health of Londoners Transportation Strategy," have had little or no impact.¹⁰ Several factors may influence the success of an HIA. Among these are involvement and interest of responsible decision-makers; involvement and political will of affected communities; timeliness; congruence between the health impacts examined and prevailing social and political concerns; and credibility and scientific objectivity of those completing the HIA.

Applicability in the U.S.

If HIAs are to become useful in the U.S., various challenges will need to be addressed. Among the technical difficulties that may arise is a lack of data to make quantitative estimates and barriers to communicating across disciplines.¹¹ HIAs may also encounter political resistance if they are presented late in the planning process, or if important decision-makers are unaware of them. There can also

be significant logistical challenges, such as identifying all stakeholders, finding the best way to engage them, and handling differing opinions among them. Few Americans have experience with HIAs, and training programs will also be needed.

Some countries such as Australia, Canada and Germany have mandated HIAs as part of regulatory processes; others such as Scotland, Sweden and Wales have used them on a voluntary basis.¹² Both mandated and voluntary HIAs have their advantages. However, until we can determine whether HIAs can contribute significantly to improving health in the U.S., we feel they should be voluntary.

As a pilot effort in the U.S., various local and national groups have shown an interest in the Buford Highway HIA. These include the Federal Highway Administration, the DeKalb County Board of Health, the Atlanta Regional Commission, and the Atlanta Regional Health Forum.

Need for Coordination

In the wake of the Buford Corridor redevelopment plan, the Federal Highway Administration-Georgia Division now plans to add sidewalks and other pedestrian amenities (refuge islands and in-pavement flashing lights) to a section of the highway just north of the area selected for the pilot HIA study. This decision came before the administration was made aware of the Buford Highway HIA, however — demonstrating the importance of timing and involving all potential stakeholders.

Nonetheless, it is likely the southern portion of Buford Highway, which includes the HIA study area, will eventually also be redeveloped. At that point it is unclear what the impact of the Buford Highway HIA will be. But even if it has little effect, it will increase awareness of how health is affected by the design of the places in which we live, work, travel and recreate. It will also contribute to the development and refinement of HIA methodology in the U.S.

While more data are needed on how the built environment influences health, the Task Force for Community Preventive Services has concluded that sufficient evidence exists for targeted modifications of the built environment to increase physical activity.¹³

Ideally, future health impact estimations will be made from longitudinal databases that include both health outcomes and built environment characteristics. But these types of databases do not exist, and it does not seem feasible to wait a decade or more for them. In their absence, HIA offers a promising new approach to appropriately factor health impacts into complex policy decisions.

Notes

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2. National Institute of Environmental Health Sciences (2004), "Obesity and the Built Environment: Improving Public Health through Community Design. Retrieved Jan. 15, 2004 from <http://www.niehs.nih.gov/drcpt/beoconf/oberfa.htm>.
3. A. Dannenberg et al., "Growing the Field of Health Impact Assessment in the United States: An Agenda for Research and Practice" (in preparation).
4. Increased connectivity, increased land-use. See B.E. Saelens, J.F. Sallis, J.B. Balck, and D. Chen, "Neighborhood-Based Differences in Physical Activity: An Environmental Scale Evaluation," *American Journal of Public Health* 93 (2003), pp. 1552-58.
5. Gothenburg consensus paper. "Health Impact Assessment: Main Concepts and Suggested Approach" (Brussels: European Centre for Health Policy, WHO Regional Office for Europe, 1999).
6. HIA encompasses a heterogeneous array of qualitative and quantitative methods and tools, from rapid HIAs that can be completed in a few days or weeks to full HIAs that may require months to complete. The decision to complete rapid or full HIAs is often determined by the available time and resources.
7. J. Kemm, J. Parry, and S. Palmer, eds., *Health Impact Assessment: Concepts, Theory, Techniques, and Applications* (New York: Oxford University Press, 2003).
8. Health Development Agency, "Health Impact Assessment Gateway" (2004). Retrieved Dec. 1, 2004, from www.hiagateway.org.uk.
9. D. Gorman, M.J. Douglas, L. Conway, P. Noble, and P. Hanlon, "Transport Policy and Health Inequalities: A Health Impact Assessment of Edinburgh's Transport Policy," *Public Health* 117 (2003), pp. 15-24.
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Campuses in Place

Frances Halsband

Websites, View Books, and finally, campus visits.

Lost downtown.

No place to park.

"Mom, Dad, this is The Place. This is where I want to be."

The best university campuses are places that have been carefully designed over decades, even centuries. They are places that speak to us of continuing care, thoughtful decision-making, reverence for tradition and ritual, and a harmony of nature, landscape, and architectural design. They are places that invite us to participate in the thoughtful creation of our communal environment. They are familiar, inviting, alluring, mysterious. Richard Brodhead has defined the university as home: "a defensive structure," and a "world of belongingness thrown up against a larger world of exposure and strangeness" — but also, essentially and fundamentally, a "terra incognita," a place of "disorientation, defamiliarization."¹ Walking through the gates, we walk into the world of our future.

These qualities raise important questions for designers of new campus buildings and open spaces. Many American university campuses began on open land outside developed areas, but our cities have now grown to envelop them, complicating the distinction between "town" and "gown." Today, many American universities are called upon to be simultaneously inward-focused learning communities and outward-oriented providers of service and amenity. Embedded in urban settings, their greens may be, in some sense, public parks; their libraries, theaters and athletic facilities invite outsiders; and students and nonstudents mingle in adjacent residential neighborhoods and commercial streets — spaces whose rhythms are defined by the campus calendar, but which are fully open to the outside world.

Many of the most difficult issues faced by universities are apparent at their perceived edges. It is here that the characteristic tension between the university's desire to be both included and separated from the larger *polis* becomes most apparent. On campus, pressure to increase the density and scale of buildings often threatens the very qualities of space and social interaction which make campuses memorable. But when universities try to push outward, surrounding neighborhoods are likely to push back — and often with good reason, since these neighborhoods themselves have evolved into historic districts, with their own memorable and distinctive qualities of space and architecture. As a result, campus edges are frequently flashpoints of bitter controversy.

Faced with such strong opposition to external growth,

university planners have recently begun to look for new ways to coexist. One consequence is that the original design paradigm of academic life around a campus green, so carefully considered and nurtured through the last century, is everywhere giving way to new informal places which hide their academic roots. Starbucks is now at the center — and at the edge. Off-campus housing is the new solution to on-campus life. Remotely located biotechnology laboratories are the new norm.

Are these new university spaces "campuses"? Or are they something else entirely? Have we lost the clarity of the original idea of "collegial" life to a blurring of domains; or are dynamic new typologies of mixed-use places for research and learning emerging? Will the next generation of children get out of the car in the middle of this new mélange of university and city and announce "*Mom, Dad, this is The Place. This is where I want to be!*"

An American Ideal

In the United States, the early twentieth century was a period of intense focus on campus design. The Olmsted Brothers, Warren Powers Laird, Paul Cret, Ralph Adams Cram, Frank Day, Charles Klauder, and others provided campus plans for numerous universities. These places continue to serve as cultural paradigms. Early Olmsted plans showed individual buildings gathered around green lawns with curving boundaries and paths. Typical were the oval lawns of Smith College, shaded with (now) enormous trees, ringed with energetically Victorian buildings, and affording tantalizing glimpses of Paradise Pond. Later designs by Laird, Cret and Klauder kept the sanctity of campus greens, but interpreted them as formal rectangles, bounded by connected ranges of buildings, "where one building serve[d] to enhance, because of proximity, the value of another."²

The shape and style of these places was not merely scenographic. Woodrow Wilson, president of Princeton from 1902 to 1910, envisioned a collegiate system of educating the whole man, in and out of the classroom. To him, the college experience required "a certain seclusion of mind preceding the struggle of life, a certain period of withdrawal and abstraction." He described Princeton as "this little world, this little state, this little commonwealth of our own."³

Wilson himself sketched a physical reconstruction of the Princeton campus which joined the buildings into quadrangles, or separate colleges, such as he had seen at Oxford and Cambridge. Wilson's Quad Plan was realized in Klauder's romantic design for dormitories that recalled



Gothic precedents. The success of such plans at Princeton later influenced Cret, Day, and James Gamble Rogers to make drawings of the Gothic quads which would become the signature elements of Yale in the 1920s.

But the idea of designing a series of quads to define an inner campus space was also not limited to Oxbridge styles. Klauder designed infill buildings at Brown University based on its colonial precedents. He also invented a Tuscan Country style to frame the quads of the rapidly growing Boulder campus of the University of Colorado. These campuses have since been admired, copied, and identified as special places.

Above: Brown University campus, c. 1891. Image courtesy of Brown University Archives.

Qualities of Space and Building

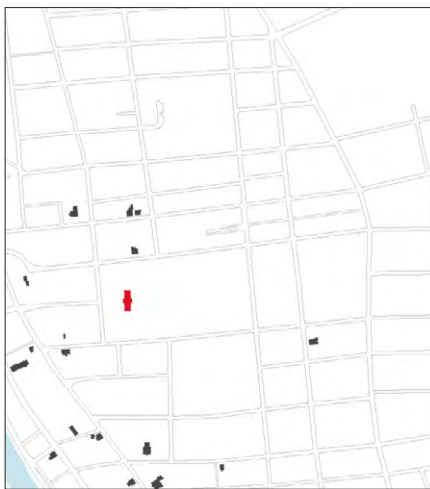
As Barbara Stanton explains in this issue, the essential ingredients of campus are greensward and trees, in a ratio favoring green over buildings. But a campus is also a place that expresses a complex mix of privacy and public purpose. The territories of many older campuses are today defined by iron fences and gates — though the gates are always open and the spaces inside welcome outside participation and use.

Campus landscapes are also furnished with signs, maps and information kiosks; artwork and commemorative plaques (free of commercial advertising) reward visitors' attention; and amenities such as benches, night lighting, and bicycle racks make them safe, convenient, and pleasant to use. Some of the great university campuses also include broad flights of steps which still invite us to sit and watch the passing scene.

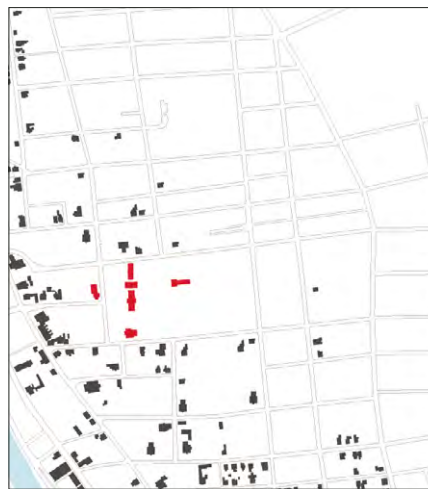
In addition, the elimination of much vehicle traffic on campuses creates an oasis of safety and quiet. With fewer cars, there is no need for wide road beds, harsh street lights, or clearly defined sidewalks. A simple lane, wide enough for a fire truck, edged with granite, speaks of a great freedom of pedestrian activities — walking, meandering, contemplating, even sitting down. It is no wonder that rituals such as “chalking the walk” have become much loved traditions in such settings.

guished by a finely woven tapestry of tiny inhabited spaces; and, as Dan Friedman explains in this issue, the bold new master plan for the University of Cincinnati creates a unified setting for a variety of contemporary buildings.

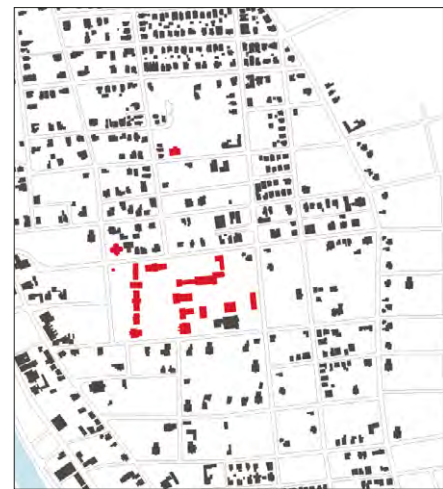
Still other campuses, such as that of Brown University, find their identity as places with deliberately contrasting styles. Brown’s buildings are diverse, quirky, often brilliant, always individualistic — all qualities that embody the character of the place. At Brown one has to ask which came



1770



1870



1904

Memorable university campuses may also be distinguished by a prevailing architectural style. However, uniformity is less an end in itself than a means to provide the sense of continuity, background and identity against which distinctive individual buildings may stand out. In design terms it is a question of establishing a “ground” against which a “figure” may become visible. An identifiable building style may also inspire a sense of belonging. Thus one may think of Princeton and Duke as Gothic, Harvard as Georgian, and University of Virginia as Classical — even when closer inspection reveals far more diversity among individual buildings.

The sense of a planned building ensemble is clearly important to the sense of a campus. Even on campuses where relatively little effort is made to arrive at a uniformity of style, a sense of appropriate scale still emerges. Often in such cases the landscape is made to do the principal work of tying the whole together. Thus, the intense green leafy canopy of Amherst College unites two hundred years of building design; the University of Oregon is distin-

first, the diversity of thought characteristic of its intellectual atmosphere, or the diversity of its buildings?

While campuses are distinctive as ensembles, their best individual buildings also proclaim a certain public orientation. Signs tell you their names and what you may expect to find inside. Grand front doors welcome entry. Public buildings are located in many other places in our cities, but rarely do we find the same quality of invitation.

Qualities of Campus Life

In this issue, Peter Salovey describes universities as places of creative encounter. He writes that they must include places of informality and interaction. Carol Christ also writes of the importance of public space in a university setting. In today’s fragmented world, people may long for the sense of community fostered by such a pattern of sociability.

In the city, informal interaction is rare, sometimes dangerous, and requires extraordinary circumstances. But on a campus a sense of containment and common purpose,

the coordination of schedules, and the existence of shared spaces for dining and living increase everyone's chances of encountering others with common interests, goals and desires. Add to this the social vitality of young adults, and one can see how a high level of informal interaction is typical of campus environments. On campuses there are people moving about at all times of the day and night; outdoor furnishings will be used.

Creativity blossoms in such free-flowing nonhierarchi-

Campuses Today

Many of the qualities described above have characterized American campuses for more than two hundred years. But the campus of the twenty-first century is also a very different place than it was fifty, or even fifteen, years ago.

As noted earlier, the most obvious change has to do with physical growth. Maps of Brown clearly illustrate this exponential increase of size. Such growth reflects the reality of increasing numbers of students, faculty and staff.



1938



1975



2003

cal environments, and college leaders have long defined their mission as going beyond mere classroom learning. The founders of Pembroke College sought to create "a new academic atmosphere with that inner quietness which only spacious and dignified surroundings permit."⁴ Likewise, the trustees of Brown in 1925 recognized that even dormitory rooms were integral to the college experience: "A student's room is not only an effect, but a cause of his character, and a worthy and dignified environment is felt at once in the student's intellectual and moral life."⁵

Well-designed outdoor spaces, and plenty of them; in-door spaces like libraries and student centers; numerous and diverse places where people feel welcome: these are all ultimately essential settings for the nurture of informed citizens.

Students need classrooms and places to live; professors need offices and laboratories; and library collections will continue to expand and require more space.

Along with growth in the number of buildings has come an increasing differentiation and specialization of building types. Yesterday's multipurpose gym has given way to today's indoor track, basketball and hockey arena, fitness center, swim center, and squash courts. Laboratory space has become similarly specialized. And to support the growing number of employees and students living off campus, parking garages are now needed, despite the best efforts at demand management.

The size and scale of individual buildings also continues to increase. The footprint of a research laboratory is now about 60,000 sq.ft., and a width of 130 ft. is deemed desirable. Such a behemoth will not fit easily on a carefully crafted historic campus. If located in an existing neighborhood, its associated impacts, including increased traffic congestion, will often be fiercely resisted by nearby residents.

As the old campus becomes a revered historic artifact—

Campus growth. Images from "Strategic Framework for Physical Planning, Brown University, October 2003," R.M. Klimont & Frances Halsband Architects.

a “garden of delights” in which to enact historic rituals—it also becomes, ironically, less amenable to changes that might keep it vital in everyday use. Campus design guidelines, historic designations, tradition, nostalgia, and the force of alumni sentiment all combine to limit needed flexibility and change. Yet simultaneously, the desire to constantly reinvent and regenerate the institution requires expression in new forms, new styles, creating a parallel demand for associated places where new things are welcome.

Of course, there are very few, if any, old campuses which are so perfect that they cannot tolerate positive change. Architecture magazines and Websites show infill projects of subtlety and charm: new buildings, additions, and renovations which transform worthy old containers into exciting spaces for new programs. Indeed, the opportunity to work in a context rich with association, with a client group willing to take intellectual risks, makes campus commissions among the most highly desired by architects. Similarly, the best current campus plans manage to identify new building sites and craft design guidelines for them that reflect awareness of both contemporary and historical values.

A Question of Boundaries

Even so, the reality is that as universities face pressures for growth they have been trying to expand beyond their traditional edges. Examined collectively, such efforts seem to indicate that different types of campuses exhibit different potentials for development. In particular, some edges seem to invite incremental expansion, while others seem to demand a more radical leapfrogging to distant sites.

As the case studies in this issue indicate, campuses with

clearly defined edges are more likely to expand by taking the form of the adjacent city. These extensions are likely to be commercial in character and made up of large-scale buildings which hug the street line. In such buildings, public uses are allowed to occupy the ground floor, and little attempt is made to continue patterns of associated open space or landscaping that might tie them to older campus traditions. Their style may express an overt rejection of historical campus precedents (even if the real choice was dictated by the necessity of making peace with the neighbors).

Designing new campus buildings to look like a part of the adjacent city, and including services, commercial and office space in them, are clearly strategies of camouflage and disguise. To appeal further to residents of surrounding communities, such “stealth” expansion may even involve inviting private developers to construct the buildings. Thus commercial housing developers are increasingly being called on to build and operate university housing, and Barnes & Noble may now be the university bookstore of choice.

Following this paradigm, Columbia’s new student dormitory on Broadway includes a public library and a video store on the ground floor. Access to these spaces is from Broadway, while the students must enter their residence from a side street. In this case, the local community board indicated that its approval of the project was contingent on it being clad in Upper West Side yellow brick, not Columbia red brick.

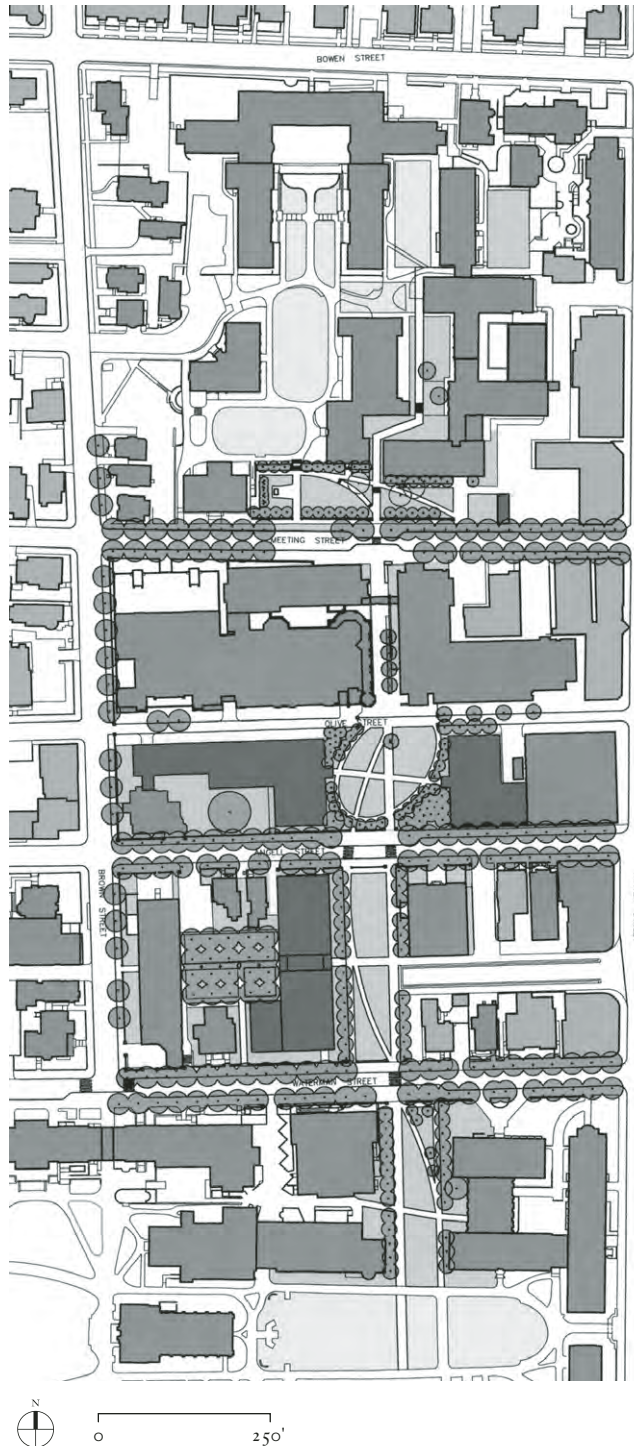
The story of Ohio State’s High Street development, described in this issue by David Dixon, shows the lengths to which campus planners have gone to address community concerns.

Here is the key to the whole matter: The object of the college, as we have known and used and loved it in America, is not scholarship (except for the few, and for them only by way of introduction and first orientation), but the intellectual and spiritual life. What we should seek to impart in our college, therefore, is not so much learning itself as the spirit of learning. This spirit, however, they cannot get from the classroom unless the spirit of the

class-room is the spirit of the place as well, and of its life, and that will never be until the teacher comes out of the class-room and makes himself a part of that life. Contact, companionship, familiar intercourse, is the law of life for the mind. The comradeships of undergraduates will never breed the spirit of learning. The circle must be widened. It must include the older men, the teachers, the men for whom life has grown more serious and to whom it

has revealed more its meanings. So long as what the undergraduates do and what they are taught occupy two separate, air tight compartments in their consciousness, so long will the college be ineffectual.

— Woodrow Wilson
1905 Phi Beta Kappa oration at
Harvard University⁹



The Walk, a proposed design for the extension of the Brown University campus joining Lincoln Field and Pembroke Green, May 2004, R.M. Klimont & Frances Halsband Architects/Todd Rader & Amy Crews Landscape Architects LLC.

Fuzzy vs. Hard Boundaries

Criteria for expansion are not as clear-cut at campuses whose edges are less well defined. Here opportunities may exist for expansion following a more gentle continuum, easing the tensions of the visible and fixed boundary, and paving the way for closer interconnection and interaction between town and gown.

Brown is one such place with fuzzier boundaries. Shared streets have provided an opportunity for limited expansion of its campus within the surrounding College Hill neighborhood. Such conditions have recently made it possible to plan for an extension of the campus walkway system to link the cores of the old Pembroke and Brown campuses across two city streets. The centerpiece of this plan is a new Walk, whose furnished green spaces are bounded by new academic buildings that open both internally to the greens and externally to neighboring streets. Among other things, the plan envisions retaining and reconfiguring significant historic buildings for new uses, while it also proposes moving one old house whose location conflicts with the new open areas to fill a gap elsewhere in the historic district.⁶

Another less obvious example of a university with fuzzy boundaries is New York University. Indeed, its edges are nearly impossible to identify. Over the years NYU has managed to expand largely by buying and renovating commercial loft buildings, transforming them into offices, classrooms, laboratories and housing, while maintaining commercial tenancies on the ground floor. While it has faced major battles in constructing new space, such gradual inhabitation of existing buildings continues without comment. In technical terms, New York zoning limits classroom uses to the area west of Broadway, but this boundary is visible only to university planners. On the street, the principal visual clue to the presence of NYU are the purple flags flown on all its buildings.

Moving Off Campus

In some cases, the edges of a university may ultimately prove immovable, and it may be essential to start anew in a distant place.

As Richard Bender and John Parman point out in their article, this has long been the policy of the University of California, which has developed new campuses around the state rather than centralize its operations in a few locations. Today this process continues with the design and construction of a tenth UC campus in the town of Merced in the fast-urbanizing Central Valley. However, even in such situations, they point out, important questions surround the location and design of campus spaces, especially as

they may be used to create new poles of growth or stabilize older patterns of development.

Smaller institutions can also employ a leapfrog strategy, especially when it comes to siting large new buildings. Brown is choosing to locate several large departments in buildings away from its existing campus on historic College Hill in areas of Providence dominated by abandoned manufacturing buildings and underutilized commercial properties. Eventually, it hopes to join the city in a broader redevelopment of one of these areas

To maintain an identification with Brown, a new campus will need to have a physical connection through a clearly defined circulation infrastructure involving such elements as bicycle lanes, shuttle routes, and signage. The new satellite campus will also need many essential elements of the old campus: inviting furnished open spaces separated from traffic and surrounding commercial life, recognizable and permeable boundaries relevant to campus functions and the life of nearby communities, and buildings of public character and related scale.

As described by Marilyn Taylor, Columbia University, long confined to an extremely hard-edged campus, is also planning a major expansion. Its new ensemble of buildings at Manhattanville will leapfrog geographic barriers and nearby neighborhoods and provide a link to their medical school campus further north. The redevelopment of Manhattanville is planned as a simultaneously urban and academic environment.

Literally and figuratively, this mixed-use precinct is being conceived as a “sandwich.” It will be built on a “factory” of below-grade infrastructure and services provided by Columbia. But the three floors closest to street level will be devoted to public use. Above that, spaces will be occupied by university laboratories and other academic spaces. Renzo Piano has described this new effort as follows:

The idea is not to make a citadel. One century ago, the only way to design a campus was monumental architecture, giving a sense of security. Today the university is in communication with life, so the story to tell today is completely different. It's more about permeability, more about participation. The model of the university today is more related to reality.⁷

Such a stratification of public urban space with academic space may well provide a new prototype for accommodating the variety of desires at the edges of the most urban university campuses. It allows local communities to maintain their identity, local governments to maintain the social fabric of the city, and deeply embedded urban universities to expand their facilities to compete with their peers.



Halsband / Campuses in Place



The Walk, Building Site 1. Drawing by Frances Halsband.

The Future

There are some who would question the need for a “bricks and mortar” campus in our time. Stuart Strother recently described his experience teaching in a strip mall. Such “satellite campuses” offer the possibility for classes taught almost anywhere, books delivered by mail, and unlimited free parking. But he points out that students miss campus life, “the sidewalk culture of protest, music, art, free-love groups, and even hate groups that encourages students to think about life in new ways... the expansive common areas and green space of traditional universities [that] nurture expansive thinking and lively debate.”⁸

The models for the future, then, include campuses disguised as extensions of the adjacent city, pieces of campuses constructed by commercial builders, satellite campuses of rented space, and Starbucks everywhere. Amidst such a collision of new ideas, however, it is important to continue to ask about the obligation, and the opportunity, that only an academic institution can bring to the city.

Is this not to continue to construct and maintain those very qualities of open space, architecture, and social structure that invite free participation and dialogue, the informal mixing places that nurture creativity, and the public spaces that offer a forum for learning in a free society?

Notes

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2. Charles Z. Klauder and Herbert C. Wise, *College Architecture in America* (New York: Charles Scribner's Sons, 1929), p.40.
3. August Heckscher, *Woodrow Wilson: A Biography* (New York: Charles Scribner's Sons, 1991), pp. 145-53.
4. From *Bulletin of Brown University, Report of the President to the Corporation*, Vol. IV, No. 4 (October 1907), p. 31.
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6. R.M. Kliment & Frances Halsband Architects / Todd Rader + Amy Crews Landscape Architecture LLC, “The Walk: A Proposed Design for the Extension of the Brown University Campus Joining Lincoln Field and Pembroke Green,” May 27, 2004.
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Living in Public

Carol T. Christ

It's not a glamorous metaphor, but I'm often tempted to liken my role as a college president to that of a landlord or small-town mayor. The constituents may be different, but the contexts are much the same: thousands of diverse individuals, living and working in proximity, leading essentially private lives in a communal setting. That point was driven home to me when a noise dispute between students in adjoining rooms — neighboring tenants, so to speak — helped ignite campus-wide demonstrations about racism. What seemed a personal conflict between a black and a white student quickly became symbolic of the college's attitude toward race. When people live together in a community, interactions that are fundamentally private and personal, the stuff of daily life, are transfigured quickly into public issues.

Since becoming the top administrator several years ago at Smith College, a small, independent, liberal-arts institution, I have given a great deal of thought to private and public space. The history of political protest at my former institution — the University of California at Berkeley, where I served as Provost — has made that institution almost synonymous with the public staging of issues. Its campus has a flamboyant, often theatrical, tradition of public debate. Sproul Plaza, the great open space on which the Free Speech Movement took shape in 1964, symbolizes Berkeley. That era in the campus's history defines an important element of its culture. Issues get debated, vigorously, in public space; the private lives of students are almost invisible. Although Berkeley may occupy an extreme on the political spectrum, its tradition of public debate is very much part of the culture of virtually all of our public institutions.

The situation at most private colleges is quite different. In those residential enclaves, the private, indeed, predominates. At Smith, for example, the spaces that most resonantly define the college for its alumnae — and often for prospective students — are the houses, designed to look like family homes, in which 95 percent of students live. Smith's founders intended this system of residential housing — called the “cottage system,” in contrast to a “congregate system” that housed all college activities, including residential quarters in a single building — to integrate students in the residential and familial life of the town. This house system shapes campus culture; at commencement students receive their diplomas not in alphabetical order, or by order of their major, but by house. Smith students' experience of living in a relatively small, home-like setting

creates deep institutional loyalty and provides an important entry point for new students into the campus at large. However, the intense private communities of the houses and their centrality to institutional identity can sometimes make it difficult to create public spaces for robust debate.

Building Public Space

I have come to believe that public space is vital to building a healthy and rich sense of diversity — diversity not only in racial and economic terms, but of political opinion, religious belief, sexual orientation, and cultural background. Such space provides an opportunity for people to disagree about matters of political conviction without personalizing the debate. That is particularly true at this moment in academic life, when students come to college steeped in the politics of identity and affiliation, and suspicious that disagreement could be expressed or received in anything but personal terms.

In part, public space is just that: a physical space. In designing Sproul Plaza, for example, its architects made a deliberate attempt to create the kind of public square characteristic of European cities, and to bring the pattern of surrounding city streets into the campus itself. The Free Speech Movement demonstrated that they were, perhaps, more successful than they imagined.

Other college spaces, like the campus center that recently opened at Smith, are intentional attempts to create public space where little existed before. The building is not a student center, but a campus center; with the exception of the student government, no group owns any space within it. In designing the building, the architectural firm of Weiss/Manfredi envisioned a roofed-over marketplace, a village square full of open walkways and gathering spaces, in which the community could see itself as a community, engaged in a wide variety of activities.

Activities housed in the building bring people inside — the post office, the campus store, a cafe, open Internet terminals. It also has many small seating areas — areas in which to read, to talk, to share a cup of coffee. In shaping such spaces, the building makes extensive use of glass; indeed, many of its meeting rooms are transparent to those passing by. Moreover, a curved walkway extends from the sidewalk in front of the building, through its middle level, out to a large lawn defining one of the campus's principal quadrangles. From the walkway it is possible to see much of what is going on in the building. As such, the architects successfully managed to create an urban street in a small town.

Students congregate at the entrance to the new student center at Smith College.
Photo courtesy of Weiss/Manfredi Architects. Photographer Jeff Goldberg/ESTO.



Supporting Public Life

But public space on a campus is also, and more pervasively, a function of climate and mindset. Classrooms and lecture halls are, and should emphatically be, public spaces in which debate is modeled, provoked and complicated —

without threat to one's feelings or identity. The reality is often very different. As one of my Smith colleagues has observed, "One can attend a public lecture almost anywhere... many dealing with provocative topics, and rarely witness an equally provocative intellectual challenge from



the audience to the ideas that have been presented. Critical views... never seem particularly welcome and always appear a bit out of place.”

It's often beyond the classroom—in the dormitory, in the locker room, in the dining hall—that the personal collides with the public. Lacking both expressive space and rhetorical confidence, many of today's students freeze when faced with disagreement. They take it personally—“You're silencing me!”—or conclude the exchange by apologizing to their adversary—“I didn't mean to hurt your feelings.”

Such reactions echo closely the findings of a 1998 study at Grinnell College, in which students were asked whether it would be possible to discuss a range of diversity issues like racial difference or multiculturalism with civility and balance. “The majority of students,” the survey found, “not only thought that balanced discussion of these issues was impossible but feared that a single viewpoint would dominate—and feared reprisal if one spoke against that perspective.”

At many institutions, students' difficulties with public debate became clear during the Iraq war. Panel discussions and other campus-wide events sometimes became strongly polarized. Supporters of the war claimed that their voices were marginalized on predominately liberal campuses. At Smith, students sponsored forums on the war in their houses, an important step in opening essentially private space to public debate. However, they instituted elaborately structured debate rules—including balanced representation of all views and equal clapping for all speakers—that seemed to signal their generation's discomfort with principled public argument.

How we talk about public and private space is as important as how we create it. When private colleges produce admission literature replete with metaphors of family and community, of connection and belonging, it's not surprising to find students—of all backgrounds—expecting intimate connection and social ease. When we market student residences as near-private homes, imitating the structures and functions of the family, we posit a harmony and bond that probably doesn't, and probably shouldn't, exist. As the Grinnell researchers aptly observed, “Promising our students that we will make them comfortable”—in this sense, emotionally and psychologically—“may simply confirm them in their view that they have the right not to be challenged.”

From Private House to Public Space

While public universities can learn a good deal from private colleges, the reverse seems true with respect to recruiting a socially and ethnically diverse student body and developing a sense of public space. The dialogue about public responsibility that informs our public colleges and universities locates these institutions firmly within public space. Private colleges need to build a more robust sense of public culture by identifying their public commitments and exploring their public responsibilities.

In our public institutions, students feel that they have a right to belong by virtue of being citizens of their state. Public charters promise inclusivity. Private colleges define their student bodies differently. Their desire to build institutional loyalty leads them to emphasize a more exclusive sense of belonging. This sense is not always the best starting point for understanding and embracing diversity as part of the college's mission.

The metaphors of family and community that private colleges so readily use can become obstacles. A model of diversity that says that our goal is to create a harmonious and loving unity is not going to succeed. After all, public arguments with strangers are easier than family fights. Private colleges need a set of metaphors that use their own more “familiar” environments to encourage debate within the context of longer-term relationships. A model of diversity that acknowledges the possibility of respect without love, opposition without apology, will take us far further. We need to imagine a more urban sense of diversity, one that understands the variety of difference as the very texture of our lives. To achieve an urban sense of diversity, we must become more adept at moving from the private house to public space, where we welcome debate, with the expectation that strong argument not only affirms belief, but changes it.

Opposite: The central skylit passage through the new student center at Smith emphasizes the public quality of activities that occur there. Photo courtesy of Weiss/Manfredi Architects. Photographer Jeff Goldberg/ESTO.

Campus Design as Critical Practice: Notes on University of Cincinnati's New Master Plan

D.S. Friedman

The vista, not the endpoint, matters.

—Richard Rorty

Six of the top ten reasons to visit Cincinnati are new buildings. Five of these belong to the University of Cincinnati; reason number one is the university itself. Over the last fifteen years, UC has spent a billion dollars on new architecture, new infrastructure, and new landscape, most of it high fashion. The result is a crisp, contemporary, urban identity. Today, scarcely a single square foot of the university's 200-acre campus remains unchanged, with more work planned or underway. In one audacious stroke, propelled by a single master plan, UC has transformed a nondescript, slipshod building complex into an international cultural destination.

The transformation started in the late 1980s, not long after Cincinnati transitioned from a municipal to a state university. This new status triggered a comprehensive reassessment of campus facilities, and in 1985 UC hired the San Francisco-based office of George Hargreaves to evaluate its long-range needs. In 1991 the board of trustees approved the Hargreaves master plan, and the year that followed UC wasted no time breaking ground. Today, all five university locations enjoy new facilities and improvements, but the most dramatic change has taken place on its Uptown campus, 86 buildings on two superblocks that touch diagonally at their corners.

While the energy and scope of UC's makeover is astounding strictly on its numbers, what most distinguishes the university's efforts to date is its selection of architects. The majority of firms responsible for UC's transformation meet Alejandro Zaera-Polo's criteria for critical practice, that is, practices whose product is fundamentally and primarily knowledge, rather than construction.¹ Give a cook and a chef a carrot and ask them to prepare it as though for a feast, one gives you back sliced carrots, the other an orange carnation. Cincinnati's achievement derives largely from its willingness to embrace the inherent risks of this distinction.²

Comprehensive Vision

The Hargreaves plan is part of an overall effort to use the power of the university as a fulcrum for urban reconstruction. Outside its gates, UC is determined to improve the quality of the surrounding urban fabric. Under the auspices of nonprofit development corporations, often created by the university for specific initiatives, it has launched several bold redevelopment schemes that aim to fortify

independent districts in ways that complement university objectives.

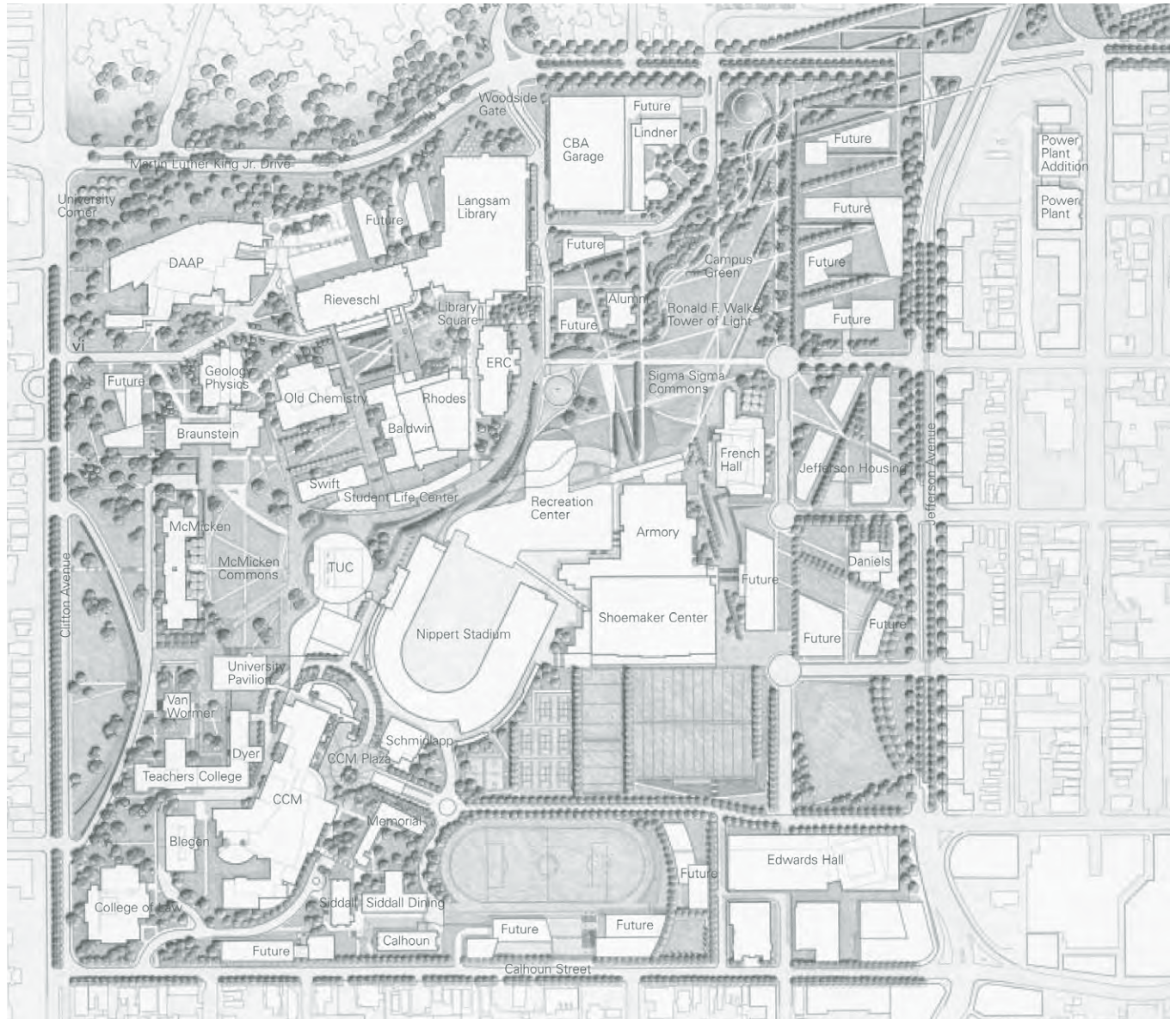
Northward, for example, the Uptown Crossings Development Plan adds a new park, new lofts and townhouses, a daycare center, and a pedestrian pathway to northern neighborhoods lying between the Cincinnati Zoo and west campus. Eastward, the University Village Urban Renewal Plan combines extensive residential and commercial investment to leverage the transformation of the seedy Short Vine shopping strip into an "Off Broadway" arts and entertainment district.

Southward, the Clifton Heights Calhoun Street Marketplace Project will soon complete construction of a formidable, half-block-long mixed-use anchor in the south-central shopping district, overlooking UC's new Varsity Village. The developers plan to infuse this complex with de-rigueur lifestyle retailing — cafes, bistros, fashion, books, sporting goods, home furnishings — all fed by 241 "upscale" residential units and a 600-car garage.

Westward, the UC-inspired Stratford Heights Project will introduce ten acres of student housing and recreational spaces to Greek Row along Clifton Avenue, specifically designed to service the University Honors scholars and graduate students from the Colleges of Law, Business, and Arts and Sciences. The French and Spanish departments plan to turn one property into a full-immersion domestic language lab.³

These interventions radiate from UC's Uptown campus, which vividly demonstrates the scope and depth of the university's ambition. Here Cincinnati has torn down a half dozen unsightly buildings, replaced acres of asphalt surface parking with new and expanded garages, constructed a million square feet of instructional and research space, and introduced a completely reformulated mix of student services — all developed around an integrated program of quads, courts, commons, and mews. Highly livable outdoor spaces showcase the university's notable collection of public art.⁴ Down to the smallest detail, new construction sustains the plan's exemplary modulation of scale.

The success of the master plan suggests the consistent application of two well-known orthodoxies. First, in varying degrees, the composition of the campus maintains faith in the unity of relation between part and whole — small things count; small things accrete to big things in significant ways. And yet the Hargreaves plan's interest in "forces" and "vectors" introduces a modern landscape that fully escapes the orbit of classical habits. Second, the master plan subscribes to a principle once enunciated by Allison Smithson: that the whole is something all new construc-



tion should aim to renovate. Accordingly, administrative practices and policies leave nothing to chance. A selection committee seeks out premier architects; a review committee oversees all new schematic design; and the university architect, bolstered by direct support from the office of the university vice president for finance, keeps close watch on the budget and calendar.

“Main Street” and Other Metaphors

In the Uptown plan, landscape and building design are equally indispensable. Radical landforms interpret both the topographical and cultural origins of the campus, in particular its dramatic ridges and swales. The Hargreaves plan populates open space with cones, valleys, spiral paths, chiseled planes, and serpentine berms, which rhyme Ohio’s prehistoric Indian mounds. These forms sport varied surface effects, including graphic floral patterns, groundcover, and ample quantities of natural stone. Reciprocating the intensity of new open space are buildings and urban arti-

facts by designers with internationally recognizable names: David Childs, Henry Cobb, Peter Eisenman, Charles Gwathmey, Frank Gehry, Michael Graves, Wes Jones, Jorge Silvetti, Andrea Leers, Thom Mayne, Eva Maddox, Bernard Tschumi, and Buzz Yudell.⁵

The adjective “signature” presupposes a unique, internationally recognized, award-winning style (often synonymizing a “brand”), usually associated with a distinct theoretical or artistic orientation. The best of these enjoy critical and historical significance. However, the greatest significance may well accrue to UC’s master plan, which expertly disciplines a dozen such powerful compositions, most located on difficult sites.

University of Cincinnati Master Plan — West section. Hargreaves Associates.

The East section of the campus, containing the Medical School and other facilities, is connected at the top right corner.

Several ruling metaphors help orchestrate the relationships among all these signature products. For example, “green windows” (or “gates”) code every major campus entrance with a unique arrangement of freestanding Ohio sandstone markers, sometimes in the form of columns, sometimes curving walls. Both blocks of the Uptown campus boast new “commons.” On the west block, the “Braid” of walkways twines diagonally across the length of the Campus Green, tracing the site’s long-buried creek bed. The Braid in turn leads to “Main Street,” which concentrates student life, athletics, retail activity, and recreation along a curving swath of circulation space midway between the low-lying Campus Green and higher elevations.

“Main Street” is an odd choice of metaphor. It evokes Pleasantville more than Over the Rhine, the venerable downtown neighborhood surrounding the city’s real Main



Street, site of Cincinnati’s infamous April 2001 race riot. Long before this urban disturbance, however — mindful that it competes with four other state universities for Ohio’s best students — UC wisely cultivated a plan that would communicate a strong sense of safety and insulate student life within a secure perimeter, tactfully defined by the aforementioned system of “gates.”

In practice, UC’s Main Street tailors classic mixed-use development formulas to suit the appetites of eighteen-to-twenty-three year olds, although a much more varied constituency enjoys its amenities, not least the two-story Starbucks.⁶ When the new recreation center opens for business in 2005, UC planners confidently predict students will complete 90 percent of their daily transactions on campus.

Main Street’s center of gravity is a large, stepped terrace called Bearcat Plaza, which overlooks Nippert Stadium at the intersection of the university’s primary pedestrian thoroughways. Three vivid arcs delimit this gathering place: the new Tangeman University Center, designed by Gwathmey Siegel & Associates (with GBBN Architects); the new Steger Student Life Center, designed by Moore Ruble Yudell (with Glaserworks); and the new student recreation center, just north of the plaza, designed by Morphosis (with KZF Design). Pedestrians enter Bearcat Plaza along several axes: downhill from the west, along the north edge of McMicken Commons, between the prow of Steger Center and Tangeman; and uphill from the north by two alternate routes — through Steger’s portal, which connects the plaza to a narrow, cascading walkway between the Steger Center and a row of older university buildings (called the “Mews”), and between the Steger Center the student recreation center, along a route that leads up to the College Conservatory of Music.

The most breathtaking moment in the whole campus plan may be the northern entrance to Main Street, a powerful canyon that channels space along the sleek and varied facets of the recreation center, upstream to Bearcat Plaza, and downstream past Sigma Sigma Commons into the meandering rivulets of Campus Green. Shifting width-to-height ratios frame and serialize views along this corridor: some deep (over into the bowl of the stadium, for instance); some narrow (up into the Mews); some distant (down across Campus Green). The planners and designers who formulated this moment seem equally predisposed to a postmodern picturesque, insofar as each element individually and in concert exhibits what historian Sidney Robinson has called “[inhospitality to] a tradition of systematic centeredness.”⁷

A Wealth of Architecture

There is easily enough exceptional architecture at Cincinnati to fill a book (indeed, Princeton Architectural Press issued a Campus Guide in 2001).

Cobb has designed a beautifully understated background building that coaxes the highest possible value out of its unruly context. It reorders its site just below the southwest crest of UC’s ridge with deft massing and physiognomy, setting off the chain of chords that carom

Above: The “Braid.” Hargreaves Associates.

Opposite: College Conservatory of Music, designed by Pei Cobb Freed & Partners Architects, looking north. Photographer: Timothy Hursley.

down the west campus's central swale. One of these chords is the faux vault atop the engineering building, which offers Cincinnati a collector's specimen of Graves's trademark Prismacolor scenography. Meanwhile, on the east campus, Gehry's Vontz Center offers homage to Oldenburg — certainly not his best work, but no less a landmark.

The latest campus headline is the new recreation center by Morphosis, which incorporates two swimming pools, a basketball gym, multipurpose courts, a fitness center and climbing wall, a food court, and a dormitory. For the dormitory wing, Mayne hoists a broad, north-facing bar of student apartments onto piloti overlooking a roofscape of folded plate. The rest of the building sweeps around Nippert Stadium with the horizontal velocity of an action sport. Its walls are porous and excitable; its scale oscillates; its composition defines an essential edge, like CCM, while activating everything that surrounds it.

Given all this star-power, what if any are the theoretical dividends of UC's aesthetic audacity? Mayne's recreation center, Eisenman's Aronoff Center for Art and Design, and Hargreaves's Campus Green offer useful opportunities for comparisons and evaluation, first in respect to questions about how high-design affects campus life, but also in respect to questions about the general relationship between architecture and landscape.

Campus Green and Art Center

Critical practices are risky because they appear to put "architecture" first, sometimes at the expense of the user. Campus Green, however, surrounds users with a demonstrably improved and enriched environment. On what used to be a six-acre, 700-car, asphalt parking lot, Hargreaves and his partner Mary Margaret Jones designed a broad arboreal park, site of the Braid. They placed a tall, cone-



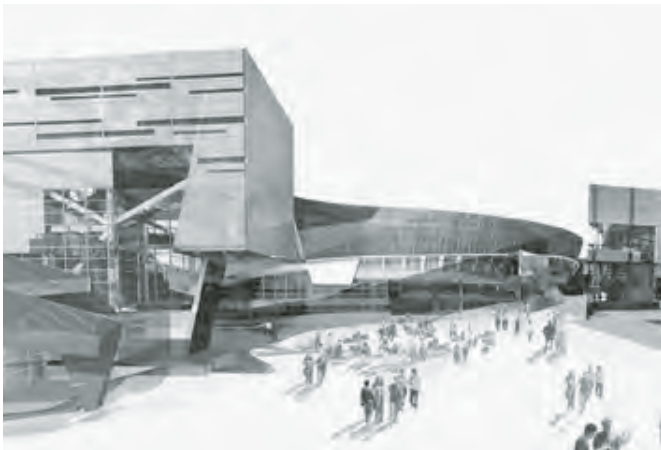
shaped mound at the north edge to shield the park from the noise and sight of traffic, also to connect it to the adjacent woods across a congested boulevard. Specimen trees line walkways that crisscross a sprawling lawn, defined on the east edge by three sloped, triangular planes. These small terraces offer visitors a place to sit, talk, read, watch, or otherwise enjoy their subtle prospect; in spring, miniature daffodils dot the winter creeper that carpets their embankments. Just south of the mound, two limestone stair-step waterfalls recycle storm water runoff.

With abundant squares of grass and stone benches, this is one of the university's primary social amenities. There is no better place in Cincinnati to teach a child how to ride a bike, since the infinite combination of straightaways and slow curves reward success with amplified sensations of freedom in variety.⁸

But what sets Campus Green apart from ordinary

ard Serra's site-specific sculptures. It maintains a connection that allows it to both criticize and communicate with surrounding architecture.¹⁰

Hargreaves's Campus Green — indeed, every tactical intervention he and Jones employ in the reconstruction of UC's landscape — constitutes what landscape theorist Bernard Cache calls a "mnemotechnical object."¹¹ Hargreaves's landforms work "beneath the surface of identity," in Cache's words. "What counts is the reading of a territory in terms of a conjunction between two sorts of images: concrete gravitational vectors and abstract vectorial space."¹² UC's new landscape introduces an alternate, poetic formation within the everyday experience and rhythms of campus life. In contrast to the conventional sculpture garden, Hargreaves fuses landform with vegetation in highly affected but unobtrusively constructed topographies, less something to look at than be in. These



parks or campus commons is the way it operates as fecund ground between vertical and horizontal orientations. Form takes its place not strictly as "landscape," but rather as an aggregation of terms "on the periphery of a field in which there are other, differently structured possibilities."⁹ It is strong enough to regulate the disarray of existing buildings, which is an important part of its job, and yet not so strong that it dominates its context. Rather, Campus Green engages its context — critically — not unlike Rich-

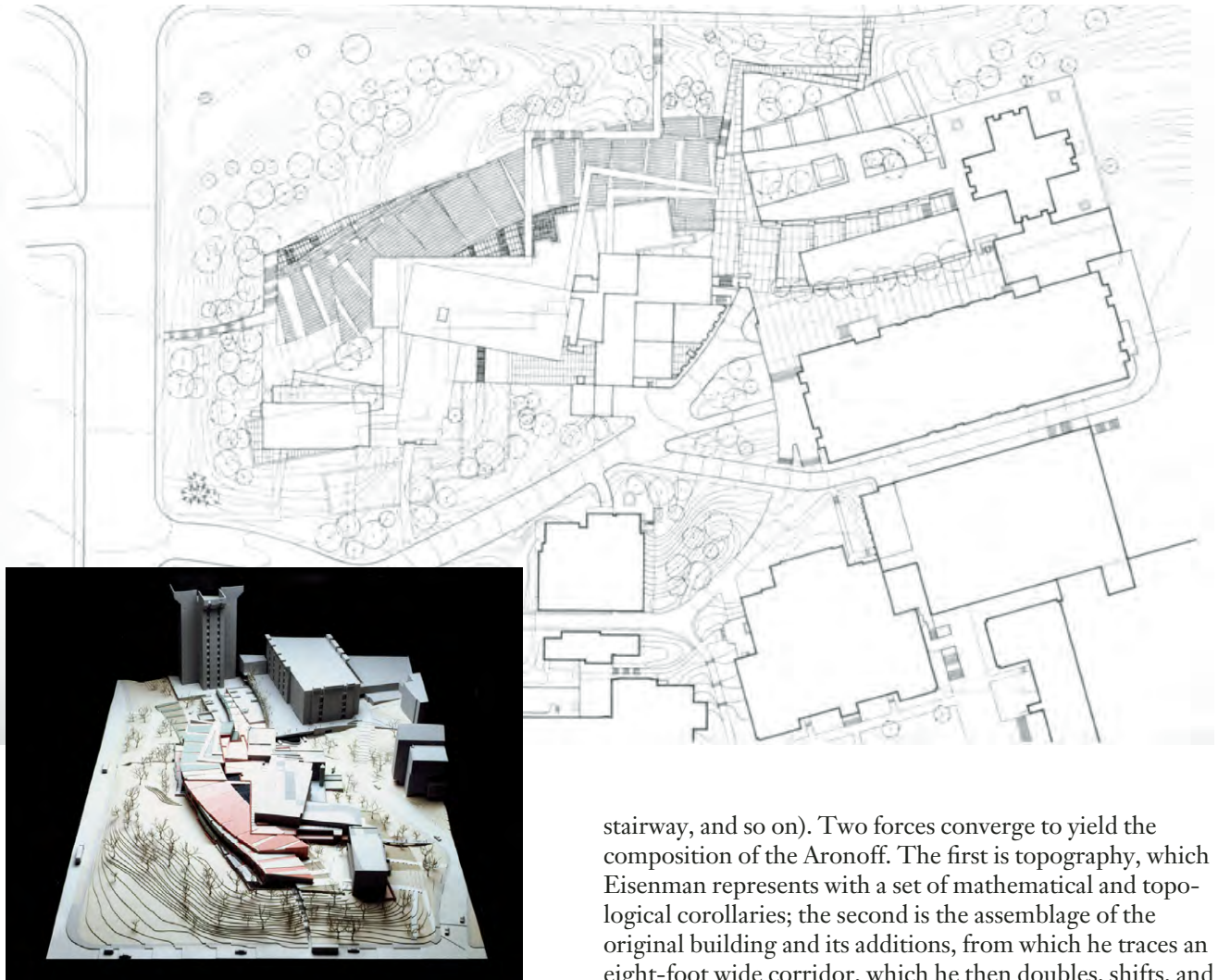


forms ornament time as much as space. Gates, quads, commons, and greens all produce dynamically "inflected" environments that represent "a totality of possibilities" (here again citing Cache) — "openness," "receptiveness," "anticipation."¹³

In Hargreaves's composition, "landscape" mutates in the direction of the static object, insofar as his landforms adopt qualities typical of tectonic geometry — sharp edges, oblique planes, raked steps, Euclidean solids. Contrariwise, in Eisenman's composition, "building" mutates in the direction of fluid event, insofar as he sets every plane of the composition into falling or slipping motion, right angles tilting awry, planes sliding away like plate tectonics. Underlying each project is a heterodox conception

Left: Student Recreation Center, designed by Morphosis. Simulated view from northeast, looking west along Main Street.

Right: View down Main Street from the east. Model image courtesy of Moore Ruble Yudell Architects.



of space, Piranesian in flavor, “a complex spatial wandering, in which the objectives of the journey [are] not revealed” — in which axes and centers are always dislocated, always multiple.¹⁴

In a work by Eisenman no assumption about architecture is ever completely safe. Just as Hargreaves discards the basic tropes of landscape composition (background quads and quiet courtyards), Eisenman discards the basic tropes of building composition (exterior, interior, entrance,

stairway, and so on). Two forces converge to yield the composition of the Aronoff. The first is topography, which Eisenman represents with a set of mathematical and topological corollaries; the second is the assemblage of the original building and its additions, from which he traces an eight-foot wide corridor, which he then doubles, shifts, and rotates.¹⁵ Eisenman’s diagram effaces conventional typological antecedents, like “grand stair” or “central space,” at the same time it renders these antecedents legible.¹⁶

An Alternate Template

Different as they are, Eisenman’s and Hargreaves’s compositions are not just about difference. Sanford Kwinter has rightly noted that “the very phrase ‘avant-garde’... represents not only the idea of directed novelty, that is, not the idea of any-novelty-whatever, but specifically novelty in the service of hope.”¹⁷ The connection between avant-garde composition and this idea of hopeful novelty has little appeal to warriors of opinion who diminish or deride anything beyond their immediate understanding. And yet there is no better way to honor avant-garde discourse than to have strong doubts about it.

Above: Site plan showing relationship of original building and new Eisenman addition. Image courtesy of Eisenman Architects.

Inset: Aerial view of final model. Photographed by Dick Frank; image courtesy of Eisenman Architects.

Hargreaves was the first signature on UC's master plan, Eisenman the second. Their early influence on Cincinnati's transformation (now waning, I'm afraid) suggests a bracing reorientation to modern university experience best expressed perhaps by Bill Readings, in his seminal critique of contemporary higher education, *The University in Ruins*.

[The] claim for an ideal community in the University still exerts its power despite its glaring inaccuracy—evident to anyone who has ever sat on a faculty committee.... [W]e should recognize that the loss of the University's cultural function opens up a space in which it is possible to think the notion of community otherwise, without recourse to notions of unity, consensus, and communication. At this point, the University becomes no longer a model of the ideal society but rather a place where the impossibility of such models can be thought—practically thought, rather than thought under ideal conditions. Here the University loses its privileged status as the model of society and does not regain it by becoming the model of the absence of models. Rather, the University becomes one site among others where the question of being-together is raised, raised with an urgency that proceeds from the absence of the institutional forms... , which have historically served to mask that question....¹⁸

Cincinnati has emerged as a standard-setting case study in contemporary academic planning, which increasingly integrates intellectual resources with other strategic priorities, especially marketing, customer service, security, convenience, recreation, athletics, and brand management, usually under the banner of “excellence.” As the new American university continues to adapt to market pressure, this level of commercial development seems increasingly unavoidable. Especially among cash-strapped, “state-assisted” public universities, branding campaigns and “quality-service” initiatives now compete with the great conversations of liberal education. Still, the risk of commercial contamination may be less threatening to public education than declining enrollments and attrition. In today's economy, brand marketing and capital development are the price we pay to ensure our continuing social relevance.

Many critics who reward Main Street with approbation for its sensitivity to student users also can't resist ridiculing Eisenman for his “aloofness” and “star-quality.”¹⁹ Yet Eisenman's composition is singularly courageous and vital in the following respect: it provides an unflinching critique



of the homogenization of knowledge and experience that Bill Readings calls “the university of excellence.”²⁰ Education isn't comfort food. Richard Rorty admonishes us to remember that “the real social function of the humanistic intellectuals is to instill doubts in the students about the students' own self-images, and about the society to which they belong.”²¹ More so than any other building on UC's campus, the space of Eisenman's composition instills doubt: it eschews the possibility of models and raises the question of being together through a vision of the campus not as “a place set apart,” but rather as a place engaged, a place set into motion by the proliferation of analogies and signs.²²

“Literature,” declared Ezra Pound, “is news that stays news.”²³ What happens when we apply Pound's dictum to architecture? We put up two hundred thousand new build-

¹⁸ “Mews” behind the new Steger Student Center and paralleling Main Street. Photo courtesy of Moore Ruble Yudell Architects.

ings every year, but only a handful are likely to change our view of the world. Buildings that stay news earn our attention by demonstrating their relation to ideas that fuel the public imagination. These ideas engird our basic responsibility to accommodate use, to ennoble, and to incite questioning through “directed novelty” — to produce what Henry Cobb has called “instruments of speculation.”²⁴ Great buildings and great spaces put us in touch with our deeper poetic intuition and with alternate temporalities. In the presence of newsworthy architecture, we live more fully, more self-aware, and more open to the irony of our own finitude.

Most campus plans fall short of these admittedly rare and lofty but nonetheless essential criteria. And yet there is one newsworthy plan that multiplies our horizons and increases our chances for an encounter with this plenitude — and that plan is taking shape in Cincinnati, of all places.

Notes

1. Alejandro Zaera-Polo, “The Making of the Machine: Powerless Control as a Critical Strategy,” in Cynthia C. Davidson, ed., *Eleven Authors in Search of a Building* (New York: The Monacelli Press, 1996), p. 27.
2. Prof. Jay Chatterjee, who served as Dean of the College of Design, Architecture, Art, and Planning from 1986 until 2001, originally formulated this approach for his own unit’s expansion. In the formative years that followed, under the leadership of University President Joseph Steger, he and three other primary actors helped to shape the vision of the campus: Hargreaves (in collaboration with Mary Margaret Jones); Dale McGirr, Senior Vice President for Planning, Finance, and Community Development; and Ron Kull, University Architect. Hargreaves and Jones remain Cincinnati’s master planners for the current phase of the university makeover. Peter Eisenman was one of the first “signature” architects commissioned to design a major university building. Jay Chatterjee, telephone interview, Nov. 22, 2004.
3. These and other descriptions throughout this essay benefit from meticulous and detailed documentation of campus capital development by the University of Cincinnati public relations office. For more information, see <http://www.uc.edu/ucinfo/sigarch.htm> (accessed regularly between Nov. 22, 2004, and Feb. 8, 2005).
4. New public sculpture includes works by Nam June Paik, Joel Shapiro, Kenneth Snelson, James Carpenter, Sam Gilliam, George Rickey, Tim Prentice, and Terry Allen.
5. Other significant buildings and renovations strengthen this aggregate: Nippert Stadium, Swift Hall, the French Building, and the new baseball stadium. In almost all cases, “signature” firms teamed collaboratively with highly respected and accomplished local, regional and national offices, including BHDP, KZF Design, Glaser-works, GBBN, SFA, Wilson & Associates, and Lorenz+Williams — all from the Cincinnati area; and VOA in Chicago.
6. The total 2004–05 full- and part-time enrollment of the Uptown campus is 27,178; the university employs about 13,800 people, of whom 1,148 are full-time Uptown campus faculty; the 2003 freshman retention rate was 70.8 percent. For more information, see the homepage of the University’s Office of Institutional Research, <http://www.uc.edu/institutionalresearch/report.htm>.
7. Sidney K. Robinson, *Inquiry Into the Picturesque* (Chicago: The University of Chicago Press, 1991), p. 166.
8. Interview with Leigh Taylor Friedman, Dec. 10, 2004 (in reminiscence of her first bike-riding lessons on Campus Green, spring 2000, age five years).
9. Rosiland E. Krauss, “Sculpture in the Expanded Field,” in *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: The MIT Press, 1986), p. 284.
10. Yve-Alain Bois, “A Picturesque Stroll around *Clara-Clara*,” in Annette Michelson et al., ed., *October: The First Decade, 1976–1986*, (Cambridge, MA: The MIT Press, 1987), p. 350.
11. Bernard Cache, “Territorial Image,” in *Earth Moves: The Furnishing of Territories*, trans. Anne Boyman (Cambridge, MA: The MIT Press, 1995), p. 12.
12. Ibid., pp. 14, 11.
13. Ibid., p. 17.
14. Vincent Scully Jr., *Modern Architecture* (New York: Braziller, 1965), p. 10, as quoted in Bois, “A Picturesque Stroll,” p. 354; and Richard Serra, *Richard Serra: Interviews, Etc. 1970–1980* (Yonkers, NY: The Hudson Museum, 1980), p. 33, as quoted in Bois, “A Picturesque Stroll,” p. 355.
15. For the source and further explanation of these and other terms in Eisenman’s Aronoff center, see Donna Barry, “Connecting the Dots: The Dimensions of a Wireframe,” in Davidson, ed., *Eleven Authors in Search of a Building*, pp. 48–59 (Barry was a project architect for the Aronoff Center). See also Sanford Kwinter, “The Genius of Matter: Eisenman’s Cincinnati Project,” in *Peter Eisenman & Frank Gehry*, catalogue of the Fifth International Exhibition of Architecture of the Biennale, Venice, 1991; and the Contemporary Arts Center, Cincinnati, 1992, n.p.; also Peter Eisenman, *Diagram Diaries* (New York: Universe, 1999).
16. Gayatri Chakravorty Spivak, “Translator’s Introduction,” in Jacques Derrida, *Of Grammatology*, trans. G.C. Spivak (Baltimore: The Johns Hopkins University Press, 1976), p. xviii.
17. Sanford Kwinter, “The Fallacy of Misplaced Concreteness and the ‘Avant-Garde’ in America,” in R.E. Somol, ed., *Autonomy and Ideology: Positioning as Avant-Garde in America* (New York: The Monacelli Press, 1997), p. 264.
18. See Bill Readings, *The University in Ruins* (Cambridge, MA: Harvard University Press, 1996), p. 20.
19. See Susan S. Szenasy, “R-E-S-P-E-C-T,” in *Metropolis* (February 2005), p. 21.
20. Readings, *The University in Ruins*, pp. 21–43.
21. Richard Rorty, “The Humanistic Intellectual: Eleven Theses,” in *Philosophy and Social Hope* (New York: Penguin Books, 1999), p. 127.
22. See Robert A.M. Stern, “The Campus: A Place Apart” [video recording], in *Pride of Place: Building the American Dream* [video series] (Princeton, NJ: Films for the Humanities, c1986). My thanks to Sharon Haar for recommending this reference.
23. Ezra Pound, *ABC of Reading* (New York: New Directions, 1960), p. 29.
24. Henry N. Cobb, “Ethics and Architecture,” *Harvard Architecture Review* 8, p. 45.

Shaping Place: Structure and Discovery

Buzz Yudell

Analogy is only helpful to the design process in its careful application. This is perhaps how best to understand the concept of Main Street at the University of Cincinnati. One of the buildings central to this vision is the Joseph E. Steger Student Life Center. In designing this building, we engaged in a fluid, collaborative process whose ultimate success lay in the university's willingness to clarify their vision through a process which balances structure and discovery.

At the time we received the commission for this building, the university was interested both in completing the "Braid" that would tie sections of the campus together, and in creating a focus of student life. Main Street was the governing analogy for such a complex which would create this critical link and be animated by a 24/7 mix of uses.

It was the linear form of the site and the mix of uses that would be present there that had originally suggested the idea of a Main Street. However, there was never an inclination to hew to the notion of Main Street based on some image of commercial urban life. Instead, the opportunity for discovery, based on the specificity of campus needs and life, trumped the idea of a fixed image or formulaic urban solution.

The Main Street project does share with its prototype the idea of a density of uses which can both activate and serve community. Yet, it has not been conceived primarily as a commercial machine. Instead, student needs and their variable schedules have governed the patterns of access. The programmed adjacencies of use, both horizontally and in three dimensions, have been generated by the imperatives of campus life, not retail life.

Collaborative Process

In working to refine the Main Street analogy, Moore Ruble Yudell/Glaserworks engaged in a dynamic process which involved close collaboration with the designer of the campus master plan, Hargreaves Associates, and with the architects of two adjacent buildings, Gwathmey Siegal/GBBN Architects and Morphosis/KZF Design.¹

In this effort, the university encouraged freedom of exploration in several unusual ways. Most importantly, the planning team was encouraged to discuss program type, allocation and placement, building site options, phasing, and financial implications of alternate diagrams within the evolving campus framework.

Finding the right fit between structure and discovery was critical to the process. Carefully programmed multiday workshops in Cincinnati were augmented by workshops in New York City and Santa Monica. While more traditional committee meetings supported a finer grain of decision

making, it was the workshops which generated most of the pivotal programmatic, site planning, and financial decisions.

Early on in our workshops we debated the question of street or plaza, path or place. The Hargreaves team spoke of a street with stepped outcroppings to negotiate the fifty-foot grade change while encouraging gathering. However, Mike Moose of Glaserworks was concerned that the terraced street was flowing too fast and should have more places for calm activities.

At one workshop an earnest student told all the architects to "forget everything you remember about campus life when you were in college." He and others went on to describe a life in which boundaries of time, space and academic discipline are falling, due to both electronic media and more informal social patterns.

Clearly, no analogy could be entirely correct. Indeed, what eventually evolved was a hybrid of path and place with many opportunities for social interaction at varied scales. In many ways the project may be developing more as a main *place* than a Main Street.

A Flexible Armature and a System of Elements

The Student Life Center developed as a flexible armature for the energetic, electronic, eclectic nature of student organizations and activities. The program evolved as a hugely varied mix of uses, many of which require collaborative space. Some require high visibility, while others need quiet and discretion: a panoply of uses and needs. How could we support these now and yet accommodate the inevitable flux with time?

In part we distinguished elements, needs and activities which are immutable or primal (social needs, physical comfort, climate, light, building structure, campus structure) versus those which are shifting. The building evolved as a system of elements which are permanent, complemented by a set of spaces which are flexible. In a sense the building is a highly inflected loft.

This duality of generic and specific, or loft and inflection, generates variations in scale and type of space, and accommodates program diversity with highly particularized responses to campus context and topography.

The building is configured as a thin, single-loaded loft, with south-facing social corridors containing bays inflected to frame campus views and to provide casual meeting places. At grade level this south passage becomes an open-air arcade. It gives street presence and direct access to an array of activities including a twenty-four-hour computer lab and lounge, a student gallery, a business support center, and more typically commercial uses such as Starbucks and



Subway. Student organizations have access from the arcade on Main Street. Their “over-the-shop” locations are primarily configured in open-plan suites with daylight from north and south.

Thanks to the flexible planning phase, we “discovered” that by pulling our building south from our assigned site (which had been laminated against the backs of laboratory buildings and Swift Hall), we could develop a marvelous path and set of terraced outdoor rooms which we called the mews. These have become semiprivate gardens for many of the ground-level uses, and are now highly valued complements to the activity of Main Street. Moving the eastern prow of the building south from the existing Swift Hall allowed us to develop a powerful ceremonial covered entry

to this newly shaped interstitial space and to renovate Swift Hall in a more respectful and strategic manner.

Iconic places such as the east and west prows, campus-scaled portals, and the arcade, along with social stairs and bays ample enough for casual encounter, and the terraced mews, give diversity of experience and power of place to the building. They provide people varieties of outlook and exposure, allowing them to modulate their own sense of being together or apart. This permits the simple loft spaces to be quiet, flexible vessels for the changing organizational and commercial uses that bring people here: a structure that encourages people to discover their own ways of inhabiting this place.

Notes

1. The Moore Ruble Yudell core team included Buzz Yudell, John Ruble, Mario Violich, Adam Padua, Tina Beebe, Kaoru Orime, and Yana Khudyakova. The Glaserworks core team included Mike Moose, Art Hupp, Steve Haber, and Mike Maltinsky.

Above: The Joseph A. Steger Student Life Center. Entrance to “Mews” between new and old buildings is straight ahead. Main Street is to the right.

Inset: Social corridor with south-facing bays on upper floor. Photos courtesy of Moore Ruble Yudell Architects.

Celestial Cities Meet Vanity-Fair

Cervin Robinson

They presently saw a town before them, and the name of the town is Vanity; and at the town there is a fair kept called Vanity-Fair... The way to the Celestial City is through this town... Now, I saw that there stood... a chariot and a couple of horses, waiting for Faithful, who... was taken up into it, and straightway carried up through the clouds, with sound of trumpet, the nearest way to the Celestial Gate.

—John Bunyan, *The Pilgrim's Progress*

American universities, filling the role of celestial cities, i.e., goals for the pilgrim students, often make an official presentation of themselves across a major street to the non-campus Vanity-Fair where students will be buying books, clothing, stationery, CDs, fast food, and entertainment. Across these streets, avenues, or boulevards many universities announce: this is where our campuses begin, judge our character by the way we build our walls and set our buildings behind them.

The set of twelve photographs in this issue illustrates how six universities manage doing this (or avoid doing it). The pictures are in most instances meant to provide recognizable views to either side of the streets: of Massachusetts Avenue in Cambridge where Harvard makes its presentation, of Church Street in New Haven where Yale does so, of Broadway in New York where Columbia put up its wall.

On page 2 and on the cover two images of Harvard begin the set. On its side of Mass Ave. Harvard presents packed energy in a view between Wadsworth and Wigglesworth to Boylston and Weld with a hint of University Hall beyond (1), whereas the city presents on the other side the confident conservatism of Leavitt and Pierce's ancient (1880s) promise of GIFTS! TOBACCO! (the SMOKING kind) and GAMES! next door to J. August below the Porcellian Club (2). Even the Serendipity store to the left of Leavitt & Pierce, though relatively new, hints at a literary past and ironically reminds us of an urgent current need, the latter probably unconsciously. Its name comes by way of Horace Walpole from an early name of Sri Lanka, in a word "Serendip."

Brown University and New York University play the game differently. Brown seems resolved to avoid even meeting the city at Thayer Street. A new Life Sciences Building, now under construction, will not reach it—though the nondescript Brown Office Building, where students buy books, does. Farther north, the New Pembroke dorms, which were designed to meet the street and come to terms with it, turn out to have had their passageway to Thayer Street bricked up (3).

New York University in meeting its town has entered something like a space-warp. Where is the campus? Wherever it is, its buildings, some of which reach 16th Street to the north while others reach Houston Street to the south or cross Third Avenue to the east, have mostly surrounded Washington Square as though, if Harvard can have a "Yard" with a Widener, NYU too must have one, sort of, with its Bobst Library facing it (4). Just east of this, the university and the city face each other at Broadway. There the city does its best to offer Vanity-Fair; but the university, instead of offering any Celestial Gate, presents something more like the rumps of several elephants (in this instance that of the Meyer Hall of Physics) (5).

Columbia presents a wall of buildings, in this example formed by Journalism and Furnald, its bottom actually battered (6). Though access to the campus is open, it is about to be partly restricted by bollards that are now under construction. This clear-cut campus sees itself as separate but more or less equal to the city's main boulevard, Broadway (7).

Princeton (the town) has not the pressures of a city, and there the university presents, on the other side of a fence (not a wall), dignified parkland leading to Nassau Hall looking more aloof than energetic (8). On the town's side the presentation is of an opportunity for some upscale suburban shopping (9).

Yale offers monumentality so confident, in the form of the Old Art Gallery, High Street Bridge, and Street Hall, that it does without a special wall (10). The town on the other side of the street offers the full gamut of pleasures, from a traditional greasy breakfast (the Copper Kitchen) to a popular vegetarian lunch (Claire's Corner Copia) (11).







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Crossing Beyond the Boundaries: Columbia University in West Harlem

Marilyn Taylor

Situated on New York's Upper West Side, Columbia University in the City of New York has long been one of America's most urban universities. Yet, like virtually all such major institutions, Columbia today has a tremendous need for space, particularly to serve growing needs for interdisciplinary academic and research initiatives including science, engineering and technology.

Development of such buildings is bringing nearly all urban universities into contested neighborhood settings. However, rather than approach this need incrementally, ad hoc, Columbia's leaders have chosen to propose a plan to be implemented over three or more decades, with commitment to distinctive urban form and active public engagement.

A Bypassed Neighborhood

Here is a picture of the West Harlem area into which Columbia plans to invest.

As the Upper West Side of Manhattan extends north from 59th Street, its topography rises dramatically from riverfront edge to a series of highlands whose names we know as the major neighborhoods of this part of the city: Morningside Heights, Hamilton Heights, Sugar Hill, Washington Heights. But between Morningside Heights and Hamilton Heights, the ground plane dips to the level of the river, and 125th Street cuts diagonally across the city grid to follow the valley to the river's edge. This accident of topography created one of the city's most interesting, yet



The implementation of this plan entails the rezoning of 35 acres currently zoned for manufacturing, of which some 17 acres are intended for Columbia's future use. These sites are located on contiguous blocks between Broadway and 12th Avenue, from 125th to 133rd Street, as well as on three blocks east of Broadway.

Today, the area includes industrial buildings, many of which are underutilized and obsolete, and a small residential population (there are approximately 140 apartments in the area, of which half are now vacant). Over time, Columbia envisions that it will acquire, reuse, and recombine sites and buildings in this 17-acre area. These sites offer an opportunity, rare in New York, to create footprints for the broad range of facilities Columbia already needs.

Above: Section east to west through proposed Columbia Manhattanville campus. Riverside Drive passes on a viaduct to the west, the IRT tracks to the east. Drawing courtesy of Skidmore, Owings & Merrill with Renzo Piano Building Workshop.

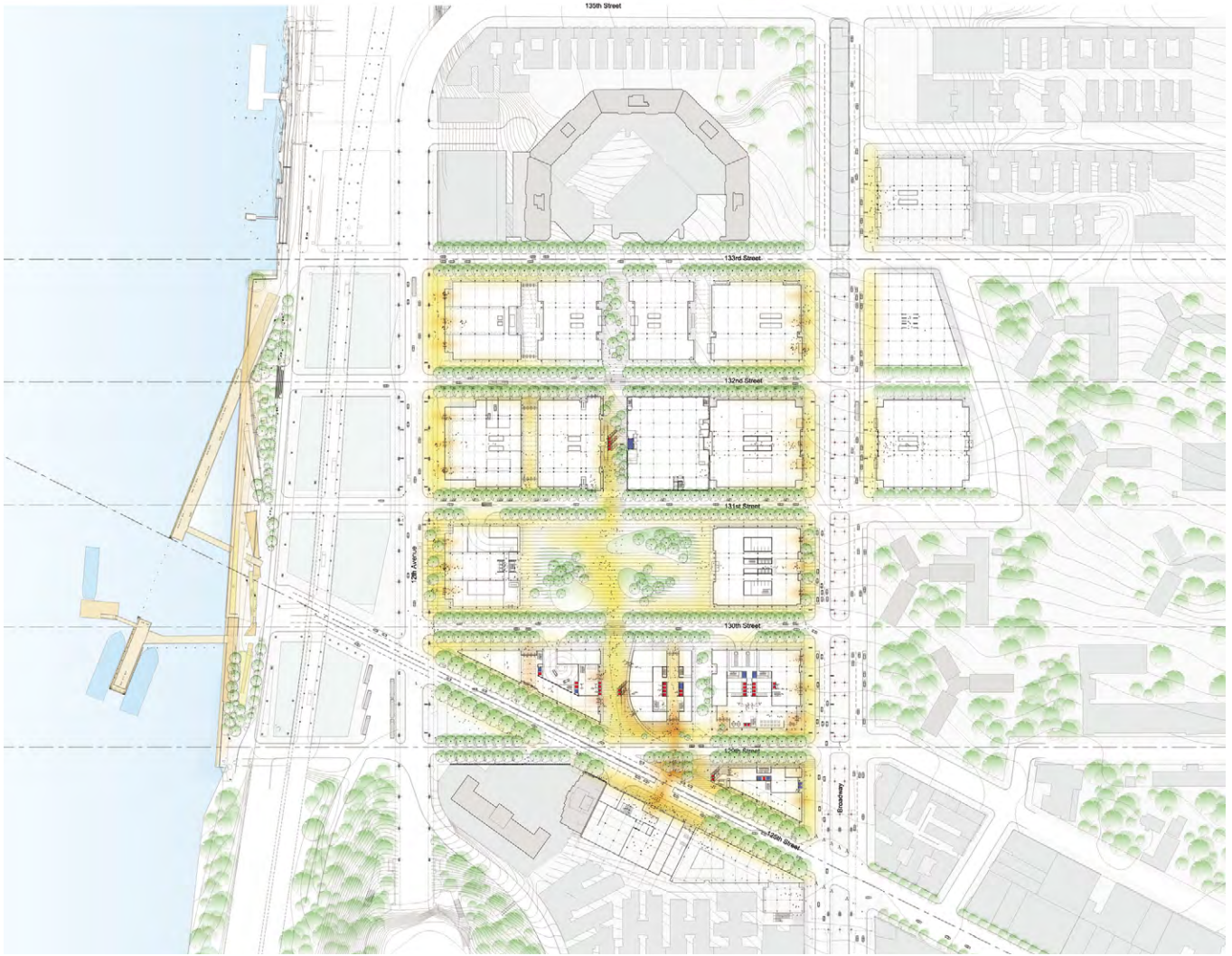
Opposite: Plan of the proposed new Manhattanville campus. 125th Street would cut diagonally across its lower edge. Broadway would separate it from existing public housing (winged buildings) to the east (right). Drawing courtesy of Skidmore, Owings & Merrill, with Renzo Piano Building Workshop.

generally unknown, neighborhoods: Manhattanville.

Manhattanville began as a precolonial village, home to both Patriot and Tory families, serving hillside farms. Over time it became a stagecoach stop, with connections to lower Manhattan, and then, given the abundant water supply and river connections, it began to attract various industries to serve the growing city.

In the first decade of the twentieth century, Manhattanville was also the site of two significant public works that were both to link it more firmly to the region, while simultaneously beginning the process of "passing it by." One was the IRT subway, which was built below-grade, along Broadway. At Manhattanville, however, the IRT was designed to emerge from its tunnels onto an elevated structure some twelve blocks long, keeping the trains at level grade while spanning the valley. To the west, Riverside Drive followed suit, riding above gracious bolted metal arches and tying together the Olmstedian landscapes of riverside parkland being created to the south and north. Manhattanville's main industries — milk processing, stables, and increasingly automobile assembly, service, and storage — were now located "between the viaducts."

In the second half of the twentieth century, Manhat-



Manhattanville became the location for a number of initiatives that served the critical need for both public and private housing. To the east in the 1950s, Manhattanville Houses, Grant Houses, and Morningside Gardens were built by a combination of public agencies. These were superblocks that in the fashion of the times created generous open space while overwriting the scale and connectivity of the grid. Construction of the massive Riverside Park Community Gardens on 133rd Street in 1976 added another superblock to the neighborhood. Meanwhile, industries languished, a bus maintenance depot and utility services replaced them, and jobs fled the leftover area between the viaducts.

As these changes were taking place, Columbia's main campus, located immediately to the south on Morningside Heights, continued to grow. As it sought additional land for student and faculty residences, it moved closer to the area in 1964, when it built an apartment complex for faculty just south of 125th Street. But it anchored this acquisition in the uplands to the south by providing it with a Riverside Drive address and only a back door on 125th Street. Today, however, Columbia proposes a major investment into this area as a means of regenerating this neighborhood for a 21st century future.

To a certain extent this view is supported by its neighbors, who have initiated plans to reclaim the waterfront as parkland and to create a mixed-use district in this area. Among the issues are economic ones: will Columbia offer—and deliver—much-needed jobs and economic activity in return for the opportunity to invest and become an important presence in Manhattanville?

Campus and Not Campus

Renzo Piano of the Renzo Piano Building Workshop and Marilyn Taylor of Skidmore, Owings & Merrill LLP are together leading the urban design and planning work for Columbia. Our collaboration, still in preliminary stages, is intended to create a place of transparency, porosity, and urbanity. Of these, the principal quality we imagine is urbanity: a place that promotes interaction, among communities of the university, neighborhood and city. In future years, the major advances and breakthroughs in higher education and research will likely occur in the intersection of disciplines, of ways of thinking. Achieving positive relationships with communities also requires understanding the intersections of their goals and the opportunities to meet them.



This twenty-first-century urbanity is in direct contrast to the twentieth-century version that created the character and “gravitas” of the Morningside campus. The introspection and formality of this classic space created a magnificent presence. But it was one conceived as fundamentally separate from the surrounding city. In Manhattanville, we envision the energy of the city and academy flowing together.

We hope this will create a place that is simultaneously “campus” and “not campus.”

We envision a connective network of accessible open spaces, including a central “square,” several smaller piazzas, and a continuous north-south passage breaking down the 800-ft. dimension of New York’s West Side blocks. Columbia will retain legal ownership of these spaces, but in keeping with the larger vision for the area, their quality and success will be measured by the sense of invitation they offer and the mix of people who will enjoy them.

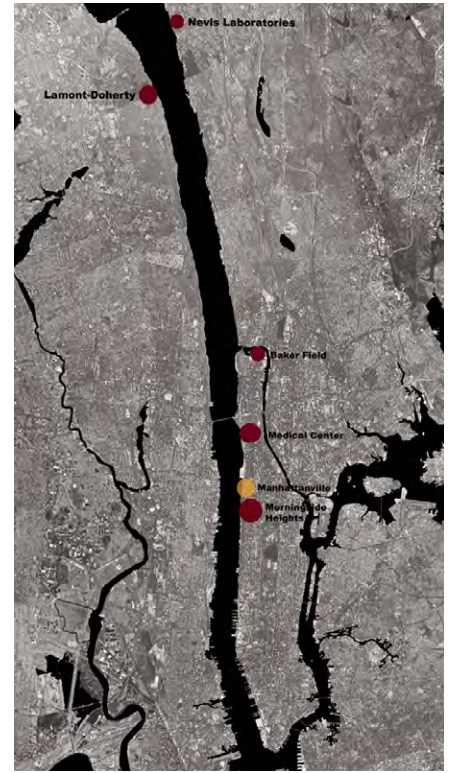
Another, more functional but essential aspect of the plan will be an extensive and contiguous basement area that Columbia will own. One might think of this multistory

below-grade space, extending beneath three cross-town streets, as a “factory” that will support the academic and research activities above. Among other things, it might accommodate an energy center, support services for the sciences, central loading and distribution, athletic facilities, and parking. Locating these uses below-grade instead of above, and combining them instead of distributing them, will enhance the quality of the public realm and the efficiency of university operations. It will also leave above-ground spaces for the development of an enlivened public realm.

While the above aspects of the plan recall a more traditional campus setting, other aspects will be deliberately “not campus.” For example, we envision a broad mix of uses in buildings of different size and articulation, each with a highly transparent and porous ground floor. The floors closest to the street would thus become an “urban layer,” where most activities would not be university related, but rather neighborhood-serving shops, cafes, restaurants, bookstores, exhibit and meeting areas, and perhaps theaters and performance spaces as well.

Another “not-campus” element will be the fully public nature of all streets crossing the site. During the decades

Rendering, looking northwest, of 125th Street as it would cut through the site. Drawing courtesy of Skidmore, Owings & Merrill with Renzo Piano Building Workshop.



of change to come in Manhattanville, we expect that many existing and new uses, other than Columbia's, will continue to be a part of neighborhood. For example, we hope the rezoning will encourage the emergence of a wonderful and distinctive 12th Avenue market and entertainment district, between this site and the river, building on the existing food market (Fairway) and serving the neighborhood at large.

A Neighborhood Image

Our thinking also envisions that this new area of Columbia will be realized through a distinctive architecture that builds on Manhattanville's industrial past. This will make reference to the neighborhood's history of bold industrial forms, viaducts, and factories by revealing primary structure and enriching the reference through metal-and-glass curtain walls, canopies, double skins, and stairs. As in the factories for car assembly and milk pasteurization that formerly occupied this area, the buildings will be designed for transparency. The metal and glass vocabulary will be complemented by the warmth and color of terra cotta panels, screens, and interior wood.

The result will be more public than civic, with a sense of place not dependent on formality. In the end we hope

it will contribute another distinctive neighborhood to the many already existing in New York. New York's look, if it has one, is built on thousands of individual, entrepreneurial actions that have come together to make an extraordinary city. We want to add to that.

A remarkable array of great urban institutions across fields of health science, research, education, and culture will be essential to the next wave of job creation and economic vitality, particularly for world cities and for America. Jobs will look different, be different, and occur in different places than we have previously experienced. The boundaries between the academy and the workplace will become less defined. So too will the distance between the city and the academy diminish. This will create a new urbanity, energized by learning, characterized by interaction. Only time will tell whether we call that a "campus."

Left: Aerial view of site looking southwest. Columbia's main Morningside Heights campus is just off the top (south) of the image. Photo courtesy of Skidmore, Owings & Merrill with Renzo Piano Building Workshop.

Right: The new campus would be one of several Columbia facilities along the Hudson River. Photo courtesy of Skidmore, Owings & Merrill with Renzo Piano Building Workshop.

New Campuses for New Communities: The University and Exurbia

Richard Bender and John Parman

Universities and colleges can be great forces for urbanity in their communities (and vice versa). Just how this potential is integrated into a community, however, has been the subject of various interpretations through history. Today, in America, there is a tendency to think that the university campus must be a place apart. Likewise, on campus, there is a tendency among university administrators to think that every new academic or institutional “need” must be translated into a new building campaign.

There are other options. While models like Jefferson’s University of Virginia and venerable Ivy League campuses still shape our sense of an appropriate setting for academic life, an even older root—going back to Bologna, Padua and Paris—situates the academy within the *polis* and makes it an integral part of everyday life. The urbanity of this model reflects the historic tendency of towns and cities to mix uses in a fine-grained way that creates and enlivens culture as well as stimulates the local economy. For many such institutions a more intensive mix of uses may also reflect financial necessity, leading them to seek partners in their communities with whom to integrate facilities.

The need for alternatives to a territorial, facilities-oriented approach to campus planning were brought home to us in the late 1990s with the financial collapse of the American Center in Paris. Following the completion of a magnificent building designed by Frank Gehry, its director publicly reflected on how he had thought he was building a \$40-million asset, when in fact he had built a \$6 million-a-year liability.

Universities have learned from their own past to the extent that they are developing more flexible buildings today, and often forming new partnerships to share the cost with others, including developers. Urban universities are also increasingly looking beyond their own campus boundaries to grow. Arizona State University, for example, is expanding across metropolitan Phoenix, while Harvard is shifting its science and technology faculties to a new campus across the Charles River. Bard College has established a study and research center in Manhattan, just as ASU, with its main campus in Tempe, is moving into downtown Phoenix. All of these developments point to a recognition that these institutions realize their futures lie at least partly in looking beyond traditional campus boundaries, integrating university programs with those of the city at large.

Such a rethinking of seemingly fundamental tenets of American campus design are particularly relevant today as “learning” becomes a lifelong, year-round pursuit. Post-secondary education is now a necessary accompaniment of adult life, enabling people to ramp up skills, get needed

credentials, and finally move from work to the rest of life. Given this, the idea of building a traditional university or college campus may be more and more of a distraction from what real investment in higher education is coming to mean.

The Rise of Exurbia

A rethinking of what a campus is may prove especially beneficial in “exurbia.” This is the name recently given to sprawling new communities like Mesa, Arizona, that are frequently home to as many people as older cities like St. Louis. Such locales evince all the forms of the twentieth-century American suburbs, but without any sense of being tied to an original center. They are a logical next step from what Joel Kotkin and others have noted about U.S. demography: that since 1960, more than 90 percent of all population growth in America’s metropolitan areas has taken place in suburbia.¹

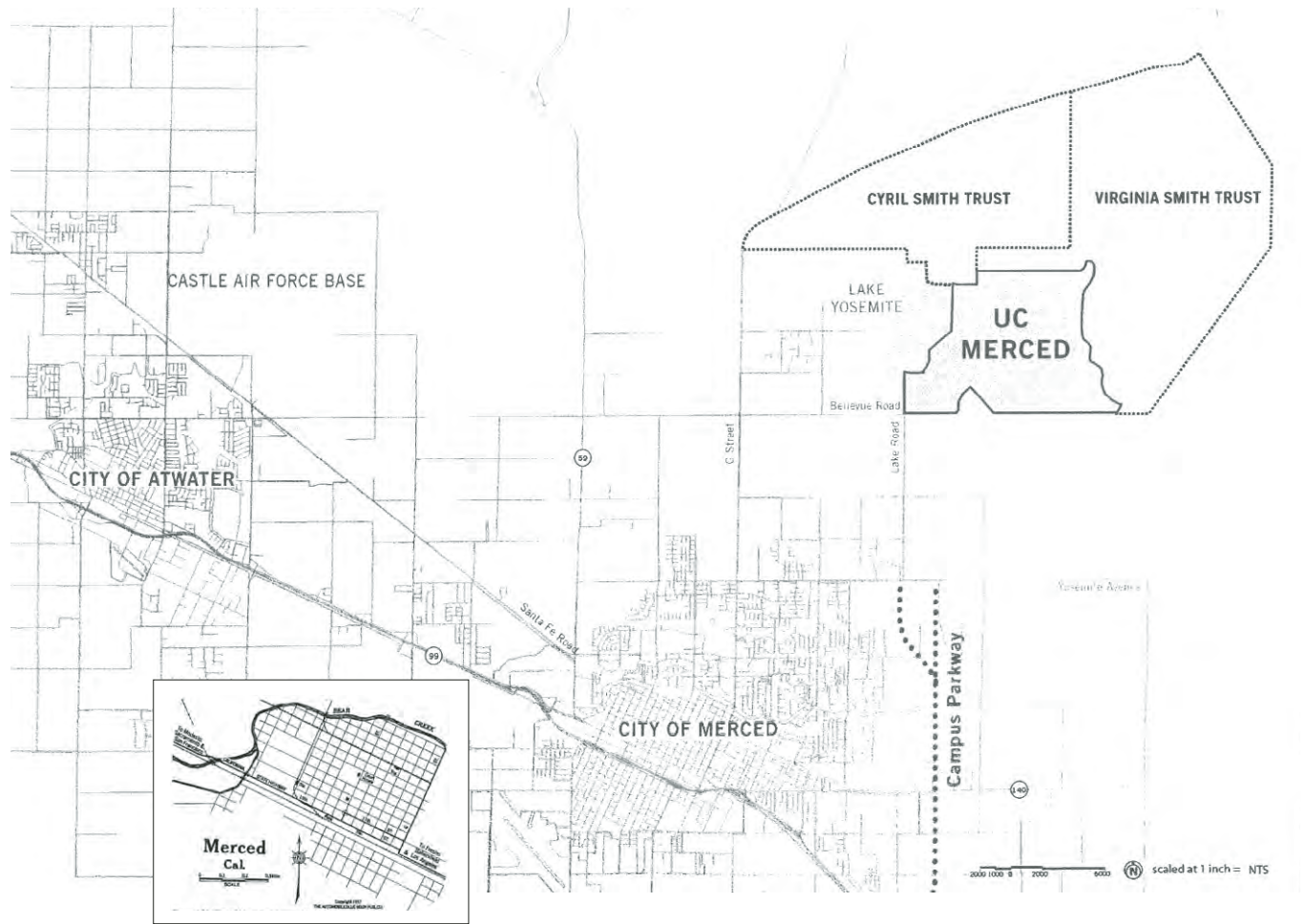
Another social critic, David Brooks, attributes the rightward shift in American politics to exurbia, which he contends is not simply an “opting out” of the city, but also a more utopian impulse to reinvent the city, in the tradition of new towns from Ebenezer Howard on forward.²

Exurbia may only be passing through a suburban stage on the way to becoming a new metropolis. But universities and colleges may contribute to this transition by helping to give it much-needed cultural and civic life.

Missed Opportunity

Despite the potential benefits that a rethinking of the relation between campus and city might entail, most large university systems continue to build according to old models. A good example is the construction of a tenth campus of the University of California, now underway in Merced. Merced is one of a chain of towns and small cities extending south from Sacramento to Bakersfield in the state’s vast Central Valley. This formerly agricultural area is today developing according to the classic exurban scenario, and all indications are that it will become California’s third megalopolis by 2050. As a result of this growth, the population of formerly sleepy Merced is expected to rise to 200,000 in the next forty years.

As the setting for a new urban agglomeration, the Central Valley has several things going for it. Older patterns of infrastructure and commerce already link its towns with a major highway (California 99) and several north-south rail lines—one of which the state may rebuild to accommodate high-speed passenger service. Furthermore, its older town centers, largely developed in the early twentieth century, offer attractive grids of tree-lined residential streets and tidy, if underutilized commercial cores. However, instead



of seizing on the potential offered by this pattern of existing settlement, with its transportation and communications infrastructure already in place, UC chose to locate its new campus (for an eventual population of some 30,000 students) on open ranchland some six miles out of town.

The University of California has a history of locating its new campuses on open land. Its oldest campus, at Berkeley, was founded when the university moved out of its original headquarters in downtown Oakland. Built on grazing land in a town that was mostly a summer refuge for San Franciscans, UC Berkeley was eventually surrounded by a new city that grew up around it.

However, the real antecedents for UC Merced are the UC campuses developed in the 1950s and 1960s like Santa Cruz and San Diego. Both were organized around separate, inward-looking academic/residential colleges. Both were also deliberately held at a distance from surrounding cities, a strategy that has proved especially problematic at Santa Cruz, where it has largely eliminated any possibility to share facilities with the larger community.

The design of the Merced campus, following a skillful overall design by a team led by John Kriken of Skidmore, Owings & Merrill, San Francisco, largely adheres to this

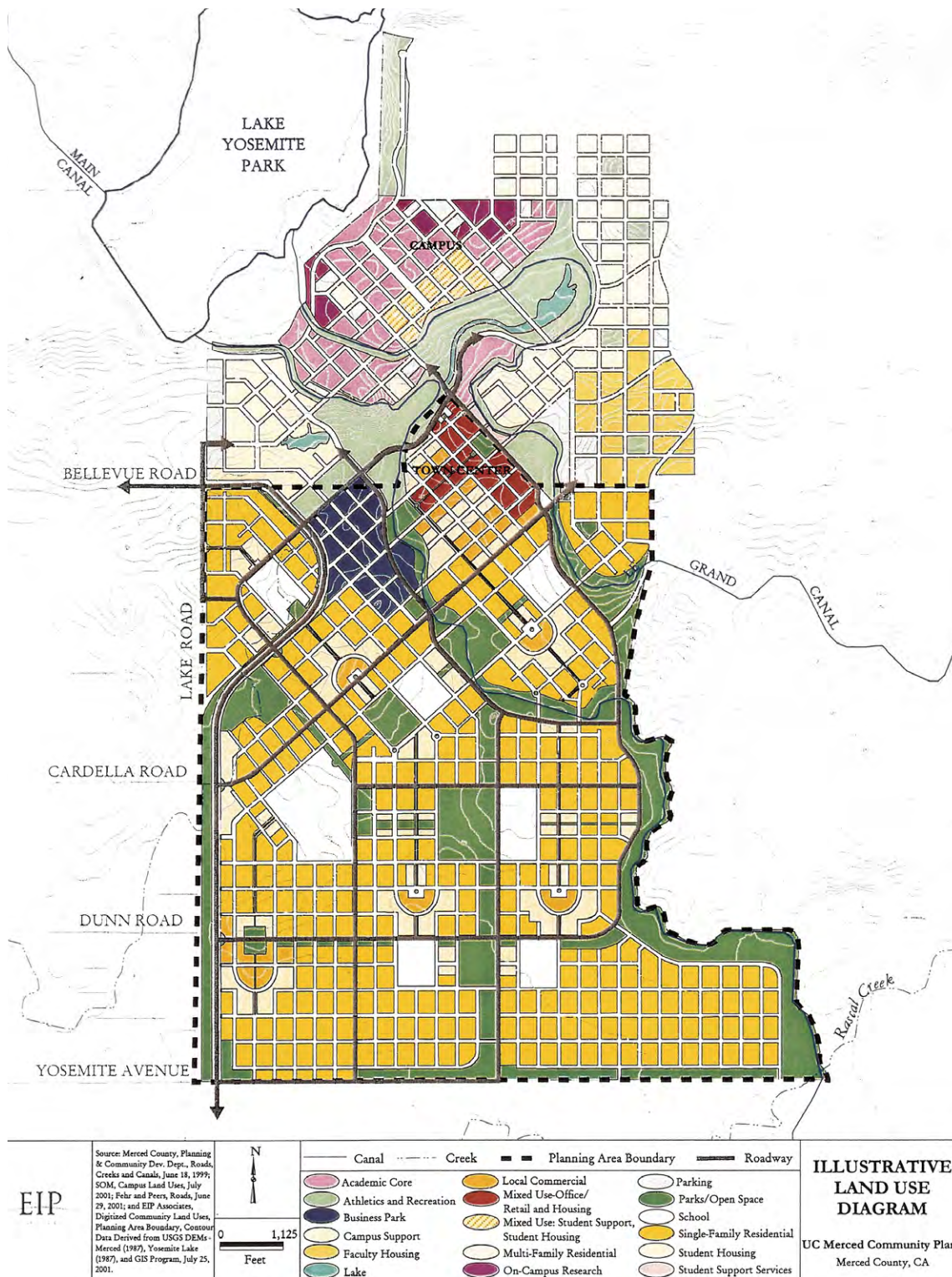
traditional territorial model.³ It proposes a tree-lined street grid, recognizing this as a pattern of Central Valley towns, as well as an effective way to make a compact and urbane campus that can mitigate the area's extremely hot summers and cold, windy winters. But at Merced the distance between the existing town and the new campus appears to impede initial opportunities for synergy between the campus and the Merced community. With its implications for extended infrastructure, travel time, energy and pollution, six miles is just too far.

If planners had looked further back, past UC's suburban precedents of the 1950s and 60s, they might have discovered models that specifically anticipated ways that a campus and a community might better evolve together. But this would undoubtedly have involved building closer to town, or even in town, and the political leaders of the multicampus UC system did not want to take on the problem of assembling land in an area where patterns of development had already been established. Instead, they opted to site the new campus on "empty," supposedly trouble-free, land that they were able to obtain relatively easily. As it has turned out, however, environmental problems related to the presence of vernal pools and other environmental constraints have now contributed to a nearly decade-long delay in construction. Today they have also led to the first phase of the campus being located on an adjoining former golf course, an area not included in its original 2001 master plan.

One other obvious problem with the chosen site was the

Above: Location of UC Merced campus (UC Merced Long Range Development Plan, August, 2001, Figure 2.2).

Inset: Plan of Merced city center, ca. 1917 (UC Merced Long Range Development Plan, August, 2001, Figure 4.20).



lack of any surrounding amenities. To make up for this, however, a new General Plan for the City of Merced, produced in parallel with that for the campus, calls for a series of planned residential developments between the existing town and the site of the campus, anchored by a “town center” — a private shopping area.

Meanwhile, although the opportunity was constantly pointed out during the planning process, the town and the university both failed to engage each other and find concrete ways they could benefit from the other’s presence. Libraries, museums, medical facilities, playfields, stadiums, and even things like utilities and police and fire services were all potential candidates for joint development. By banking land for future growth, they could both have gained from the rise in Merced land values.

From a regional standpoint, the decision was similarly flawed. If a site had been selected that was more closely related to Highway 99 and the north-south rail corridors that historically linked the Central Valley towns, it might have better fulfilled UC Merced’s potential to serve the whole region, not just one part of it. Indeed, in the run-up to the opening of the new campus, the university has opened academic subcenters in other valley towns and cities, and it has become clear that many students will commute from their homes up and down the valley. Given such an existing pattern, it is ironic that the final decision focuses all the state’s resources in one out-of-the-way location.

An American “New Town”?

Ironically, UC Davis — the one campus that most obviously reflects the University of California’s land-grant heritage (for years, one of its great strengths was agriculture and natural resources-related research) — comes closest to being the model that might have provided the most sensible basis for a design that could have served both UC Merced and the larger Central Valley community. Adjacent to a rail corridor that links the Bay Area to Sacramento, Davis also falls within a fast-developing “exurban” corridor — one that extends east along I-80 from Vallejo to Sacramento, and beyond to Roseville (along I-80) and Placerville (along US50). Like the Merced campus, the Davis campus was originally laid out on a grid pattern; but unlike Merced, the Davis campus was conceived as a loose extension of the adjacent town. Even the creek that runs through it helps connect them.

The plan envisions the eventual development of a new University Community, a “new town” to help tie the outlying campus to the rest of the city (UC Merced Long Range Development Plan, August, 2001, Figure 3.8).

The Davis example was not the only alternative that could have been seized upon as a precedent. Before the Merced site was chosen, the larger Central Valley city of Fresno had proposed that the core of the new campus occupy a section of its early-twentieth-century downtown, the Fourth Street Mall. This area had been a center of prosperity in the prefreeway era, but for many years it had been bypassed, as suburban development spread to the northeast. In addition to many underutilized properties, it offered good proximity to an existing train station and good access from Highway 99.

Those with experience of European campuses might recognize the Bologna model in such a plan to reinhabit an older urban area. In the U.S. the benefits of such a strategy have also been reaped in Manhattan, where NYU has for years renovated industrial lofts as classrooms and student residences, and in a broader sense has adapted itself to the urban fabric of that city. DePaul has also followed this strategy in Chicago’s Loop. In other historic European towns like Siena, a further benefit is that the university can play the role of custodian of important elements of its historic fabric, while locating other parts of its program, like laboratories and athletic facilities, outside the town’s historic zone.

Looking farther afield, it is possible to see an even more relevant example. In the 1960s, about the same time that UC Santa Cruz was being developed, the French new town of Cergy-Pontoise was being created outside of Paris. The town was to incorporate several existing villages, but universities were planned to be among its earliest new elements. Today these institutions include ESSEC, one of the leading business and management schools in Europe. A technical university was also created, and it now supports many of the high-tech companies that have relocated to the region. They were initially brought in as a way to provide jobs that would induce people to move there or “reverse commute” from central Paris — part of a regional strategy that also saw the development of the RER line passing through Paris to connect new towns to Central Paris, Orly, and Charles de Gaulle International Airport.

Like Merced, Cergy-Pontoise is located on the fringe of a major urban center. The great amount of farmland that surrounds it and its proximity to the large Vexin regional park are also similar to the position of Merced — also surrounded by farmland, and which often refers to itself as a gateway to nearby recreation areas in the Sierra foothills and Yosemite National Park.

The success of these planning initiatives forty years ago has now become fully evident.⁴ Cergy-Pontoise today has a population of close to 200,000 people — along with 25,000

university students. Moreover, the recent development of high-speed rail service to the U.K. has situated Cergy-Pontoise along a linear network of towns that are becoming proximate to London as well as Paris, underscoring its role in an expanded regional economy. Businesses in the town are already connected to this corridor's fiber-optic line, which runs along the National Highway right-of-way — next to the technical university at Cergy-Pontoise.



Evolving Exurbia

Unlike the development of most new U.S. communities, of course, the building of Cergy-Pontoise involved a major initial public investment in physical and social infrastructure. Indeed, part of the goal of the new-town effort around Paris was to shift the center of development pressure away from its historic center.

In comparison to the French model, in the U.S. such peripheral development usually emerges “in reverse.” The private sector usually leads the way — with low-density projects coming first, followed typically by privately developed shopping malls. If there is an existing town, as there

Aerial view of Cergy Pontoise, showing the integration of city and university. The diagonal path leads through a shared green, between the squarish city hall and the horizontal white city recreation building, to a commercial area and train station. The white tower to the right houses the liberal arts division of the Cergy branch of the National University, one of several campuses within walking distance of one another. Across the main highway lies a disused military base. At the top of the photo is the historic town of Pontoise. Photo courtesy of Richard Bender.

is in Merced, it often must compete with — and may ultimately be undermined by — this piecemeal development. However, the choice of where to locate a major public university could have been regarded as a strategic intervention to encourage a more sensible and coherent (and less costly and destructive) pattern of development. While the planning of the UC Merced campus aimed within its own boundaries for this kind of coherence, it missed it entirely in terms of what the campus could do for Merced, and vice versa. This was equally true for the Merced General Plan — which suggests that both entities failed to understand the exurban phenomenon.

Exurbia has tended to grow on an ad-hoc basis as an agglomeration of “planned communities” that are relatively low density and car dependent, with few public or community spaces. Schools and churches are often the first civic buildings, and cultural life often begins with them, along with shopping and movies. In this context, a university or college campus could help provide the missing elements — the “collegial” and cultural settings that support the civic and cultural life of the community — along with opportunities for education and training. One example of such a relationship can be found in the community of Cypress-Fairchild (actually a school district) outside Houston, where the local government partnered with a community college district to develop a campus whose civic, cultural, learning and recreational facilities serve a population that runs the gamut from toddlers (and their moms) to younger postsecondary students, adult workers, and the retirees who enroll in its Senior Academy — one of its fastest growing programs.

One characteristic of these exurban campuses is the way they seek to capitalize on the interplay between learning and a broader community of learners — and vice versa. Another is how their physical form evolves in relation to their communities. In this sense, Cy-Fair College is both a college, albeit with a broader constituency than most universities, and a town center.

Need for Stewardship

The last point reflects on what should be an important concern for campus planners generally: that in developing a university or college in an exurban context, it may be particularly important to tailor development to where a community is in its lifecycle. Following such a tenet, what would have made more sense in a place like Merced than to utilize already-existing undervalued resources as a way to build together toward a common future?

In fifty years UC Merced may come to seem a part of its community. By then, the population of the town may, in classic exurban style, “fill in” the agricultural land between



the new campus and the existing town. It may even grow right up to its gates, so to speak, and create the same problems of boundaries and edges that cause such difficulties between other UC campuses and their surrounding neighborhoods. But until then the town will not gain much from the presence of the campus, and the campus will not gain much from the town. The region, similarly, will be only poorly served.

This may be the most salient point today — that towns or cities and their colleges or universities need to see each other as partners. Both need to share a sense of stewardship. As Frederic Law Olmsted put it, a campus needs to provide settings for learning for its students that reflect “the work of disciplined mind.” In exurbia, especially early on in its development, this may be particularly valuable.

Ebenezer Howard, who we might think of as one of the fathers of exurbia, saw new towns as an opportunity to build a new civilization. In a real sense, the campuses of the new exurban universities and colleges, UC Merced among them, are opportunities to bring the benefits of the city to areas that are ready to embrace them, but in a new form.

Notes

1. Joel Kotkin's books include *The New Geography: How the Digital Revolution is Reshaping the American landscape* (New York: Random House, 2000). His *The City: A Global History* will be published in April by Modern Library Chronicles.
2. David Brooks, “Take a Ride to Exurbia,” *New York Times*, November 9, 2004.
3. John Lund Kriken, “Principles of Campus Master Planning,” *Planning for Higher Education*, July-August 2004; and University of California Office of the President: *Long Range Development Plan: The University of California, Merced, Public Draft*, August 2001.
4. Bertrand Warnier, “Cergy-Pontoise: Du Projet à la Réalité,” *Atlas Commenté* (Heyden, Belgium: Pierre Mardaga Editions, 2004).

Opened in August 2003, Cy-Fair College is the fifth college in the North Harris Montgomery Community College District. Planned and designed by Gensler and The SWA Group, the 200-acre campus is organized around a restored prairie landscape that includes lakes and retention ponds as a natural means of wastewater treatment and cooling. Cy-Fair College is a conscious effort to inject civic and cultural life into an exurban residential community that has until now been anchored by schools, churches, corporate campuses, and shopping centers. Photo by Joe Aker, courtesy of Gensler.

Creative Places: A Dean's Welcome

Peter Salovey

Mr. President, officers, colleagues, families, and most of all, members of the Class of 2008: I am thrilled to share the stage this morning to welcome you to Yale and to New Haven. It also is a marker for me: I have played many roles in this institution, but today you are the first class I welcome here as the Dean of Yale College: your dean.

This morning I would like to take a few moments to fix our gaze not on ourselves but on what surrounds us. We owe our past and future successes not merely to intellectual prowess and hard work, important as they are, but also to good fortune: the good fortune to be at a place whose existence inspires creativity and greatness. Indeed, I believe that you are here at Yale not only because of your gifts; rather (and, perhaps, paradoxically), you are gifted because you are here. By being here, in this place, greatness is thrust upon you. Perhaps this sounds heretical. Does distinction ultimately reside in places rather than people?

Now, this idea may not sound so surprising — or appalling — when you remember that I am a social psychologist. Social psychologists place great importance on context — situations and environments that shape behavior. The father of modern social psychology, Kurt Lewin, famously articulated the first principle of this emerging field of study: $B = f(P, E)$. Behavior is a function of the person, his or her environment, and the interaction between the two. Now, this may sound so obvious you cannot imagine how an entire field of study could be built upon such a simple equation. But, in fact, the emphasis on environment as a determiner of human behavior at least equal to the person was a fairly novel idea among the major psychological philosophies of the early part of the twentieth century.

Others have made similar observations. On a trip to Sweden a few years ago, my wife and I visited the wonderful Nobel Prize Museum, where an exhibit titled “Creative Milieus” celebrated the importance of environment to the creative process. It would be reasonable to expect the Nobel Museum to bask in the reflected glory of personal achievement; but, no, the Centennial Exhibition was not about persons, but about places — the importance of place in promoting, as the museum’s own literature states, the courage to think in entirely new directions, daring to question established ideas, and innovatively combining insights from different fields of study.¹

The Nobel Museum’s theme was that special environments and the unplanned conversations and interactions that arise within them spur creativity — indeed, they define creativity. Spectacular examples from all over the world were presented in amusing ways through film and text. Visitors could travel to Calcutta and find themselves in a pro-

gressive, outdoor school-without-walls inspired by Nobel Prize-winning poet-philosopher Rabindranath Tagore in 1901. Then it was on to the cafes of Paris in the 1920s to feel the atmosphere of creative revolt as experienced by Ernest Hemingway and Samuel Beckett. The exhibition asked us to appreciate next the endless conversations and “Copenhagen spirit” that characterized the theoretical physics institute of Niels Bohr in the 1920s and 1930s. Guests were transported to Cambridge University’s Cavendish Laboratories, where a young James Watson and Francis Crick worked out the double-helical structure of the DNA molecule (and, earlier, the electron and neutron were discovered). Visitors could enjoy the Basel Institute of Immunology, described as a scientist’s paradise, distinguished during the 1970s and 1980s by its lavish resources, egalitarian spirit, wild parties, and, of course, prize-winning science.

These and other work environments fostered spontaneity, collegiality, intellectual intensity, and, most importantly, the opportunity for the unfettered exchange of insights and ideas, some bizarre and others amazing. The curators of the Centennial Exposition unabashedly declared, “The creative process is extremely dependent upon the individual’s surroundings.” The point is that whatever brilliance we have been able to attain, is in part a function of the environments in which we find ourselves.

Let me make this point in another way by focusing on a very different time and place. One of your teachers here at Yale is Maria Rosa Menocal, the R. Selden Rose Professor of Spanish and Portuguese and Director of the Whitney Humanities Center. Prof. Menocal is an expert on medieval Spain, and has written an exciting book that focuses on the region of Andalusia, and especially on the city of Cordoba, during the Middle Ages.² In it, she describes a part of the world in which a culture of great literature, philosophy and science thrived. Her argument is that the intellectual riches of this period were fostered by an especially tolerant political and religious climate. Jews, Christians and Muslims lived side-by-side; and, as she says, “despite their intractable differences and enduring hostilities, nourished a complex culture of tolerance.” Prof. Menocal calls this an “authentic multiculturalism.” Jews rediscovered the Hebrew language and created what has been termed a Golden Age of Hebrew poetry; philosophers of great religious commitment, like Maimonides, guided the perplexed. This was the setting that motivated the introduction of Arabic number systems — think of Arabic-origin words like algebra and algorithm.

You now find yourself at a university that is proud of

its architectural gems, residential colleges and their courtyards, libraries, galleries, and museum collections. You have just entered a creative milieu on a grand scale, and your success—though certainly in part attributable to your hard work and intelligence—will also be a consequence of the nature of this place itself, including your classmates. In the coming years, perhaps you will discover a bustling laboratory, an alcove in the library, a little-known artistic collection that is especially meaningful, a theater, rehearsal hall, athletic field, or some other spot on campus that inspires you to wise thoughts and creative syntheses. In my graduate student days here, I liked to read (more often just daydream) sitting on the leather sofas on the second floor of the Beinecke Rare Book and Manuscript Library. The translucent marble walls glowed in the sunshine; the books themselves sparkled behind the central glass tower, and the soft whoosh of white background noise reminded me of the sound of the seashore. There was something about that place that sent me back to the laboratory clear-eyed and motivated, and my windowless basement office in Kirtland Hall just could not compete. Inspiring places bring together inspired people who, together or individually, do remarkable things.

And so this brings us to these opening days of college life. I suggest, if I may, that one of your tasks as you move into the amazing setting that is this university is to recognize the importance of place in your achievements so far and to expend some effort finding those local environments that will allow you to discover your personal strengths and talents but also stimulate you to explore new ones. Most likely, your creative milieu will include what sociologist Ray Oldenburg calls a “third place.” Neither the room where you live nor the place where you typically do your work, the third place is where you will find that combination of camaraderie and intellectual safety in which you can try out a really crazy idea.³

Jonathan Spence, Yale’s Sterling Professor of History who teaches a famous undergraduate course on China, describes a third place that some of you are likely to discover too. In *The Search for Modern China*, he noted that, “This book was written, in just about equal parts, either in Yale’s Cross Campus Library, or in Naples Pizza... I would like to thank the entire staffs of those two admirable establishments for providing two complementary worlds in which to mull over, and then to pen, this record of the past four hundred years of Chinese history.”⁴ Others of your teachers have found less public third places inspiring to them. Prof. of Music History Craig Wright, for instance, describes architectural mazes and labyrinths as solitary

places that help to structure our perceptual experience in ways that can inspire creative choices.⁵

My remarks this morning have emphasized the psychology of the social and physical environment. I have underscored the relevance of milieu in nurturing creativity, whether in the laboratory, library, studio, or community. I suspect Yale will nourish your accomplishments in your years here. Indeed, I wish you good fortune as you strike out to find your inspiring places of study and friendship. And, having found them, you will experience just a little humility and awe contemplating their role in your future successes.

My hope is that you will find great joy in the four years ahead and that you will discover, in Tagore’s words, a Yale:

*Where the mind is without fear and the head is held high;
Where knowledge is free;
Where the world has not been broken up
into fragments by narrow domestic walls;
Where words come out from the depth of truth;
Where tireless striving stretches its arms toward perfection;
Where the clear stream of reason
has not lost its way into the dreary desert sand of dead habit;
Where the mind is led forward... into ever-widening
thought and action...*⁶

I welcome you to Yale College and know that you will embrace, in my predecessor’s words, “the good of this place.”⁷ Starting right now, this place is yours.

Notes

1. A description of this exhibition and the creative environments described can be found in U. Larsson, *Cultures of Creativity: The Centennial Exhibition of the Nobel Prize* (Stockholm: Science History Publications, 2001).
2. M.R. Menocal, *The Ornament of the World: How Muslims, Jews, and Christians Created a Culture of Tolerance in Medieval Spain* (New York: Little Brown, 2002). All of the observations about Andalusia described here are from Professor Menocal. I have paraphrased her observations liberally.
3. R. Oldenburg, *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community* (New York: Marlowe, third edition 1999; originally published by Paragon House in 1989).
4. J.D. Spence, *The Search for Modern China* (New York: Norton, first edition, 1990).
5. C.M. Wright, *The Maze and the Warrior: Symbols in Architecture, Theology, and Music* (Cambridge, MA: Harvard University Press, 2001).
6. R. Tagore, poem 35 in *Gitanjali: A Collection of Prose Translations Made by the Author from the Original Bengali* (New York: Scribner Poetry, 1913/1997).
7. R.H. Brodhead, *The Good of this Place: Values and Challenges in Higher Education* (New Haven, CN: Yale University Press, 2004).

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Above: These two images, of the entrance to Harvard Yard and the face of the buildings across Massachusetts Avenue in Cambridge, are part of a portfolio of photographs exploring ways traditional campus and town edges face one another at six well-known North-

east universities. They were taken by our Consulting Editor Cervin Robinson for this issue. His article "Celestial Cities Meet Vanity-Fair" and the rest of the portfolio may be found on pages 26-35.

Cognitive Standards and the Sense of Campus

Barbara Hadley Stanton

Many colleges and universities are expanding their campuses nowadays to accommodate increased enrollments and/or specialized teaching, research, commercial and/or athletic facilities. Alternatively, like Columbia and Harvard, they may be planning entirely new campus precincts on adjacent land. Such changes often raise important issues with regard to older, core areas that symbolize the identity of the institution. Is it possible to insert new buildings in such historic areas without damaging their valued qualities? Do conflicts emerge when one links across existing boundaries to areas long thought of as “off-campus.”

Such issues highlight the sense of separateness and containment that often characterizes the American university campus. Is this sense really unquantifiable, or can measurable standards be discovered behind this perception? In planning for future growth, are there demonstrable thresholds that designers and planners should not cross?

The field of cognitive sciences may hold some answers to these questions of identity and design. By looking to the basic processes that inform our perceptions, we may gain a better understanding of what a campus actually is — what some of its physical requirements may be. More precisely, by making implied values explicit, it may be possible to make better decisions more easily with regard to campus-planning issues. Such an examination might also throw light on how people make sense of their surroundings in a more general way.

An American Construct

The idea of a university “campus” appears to be an originally American one. According to the *Oxford English Dictionary*, the first recorded use of the word to describe “the grounds of a college or university; the open space between or around the buildings” came in 1774 in reference to Princeton University.¹

In contrast, the first British use did not occur until 1958. The earlier English word for a college field was “yard.” For the most part, however, the oldest medieval universities, such as those in Bologna and Paris, had been fully integrated into the fabric of their respective cities. Among classic English universities, neither Oxford nor Cambridge had a central core; they were composed of individual colleges built around separate courts, or yards.

Today, designs for new American colleges and universities may be choosing to imitate this earlier, more urban arrangement of space. But it is still the campus as an arrangement of buildings in the open, separate from the structure of a surrounding city, that remains the ideal form. Indeed, at many older American colleges and universities

such a historic campus may provide a powerful symbol of higher academic life. It is the ivory tower translated into open space. While the institutions may ultimately extend far beyond these limits, these relatively open areas remain their symbolic hearts.

In the context of a city, a sense of openness is essential if such a core campus is to be perceived as separate from surrounding areas. A sense of openness also serves to emphasize the unity and special quality of the particular institution. These qualities may also symbolize learning as something apart in terms of time, money, and social class. It is here where the sons and daughters of privilege, and those who rise from lesser means to join them, have traditionally been allowed to spend the years between adolescence and adulthood developing their particular talents and interests supposedly free from the business of earning a living.

Whatever its historical, ideological, or cultural messages, this American core campus is ideally — and usually — a place apart, an open precinct of a certain size separate from its surroundings.

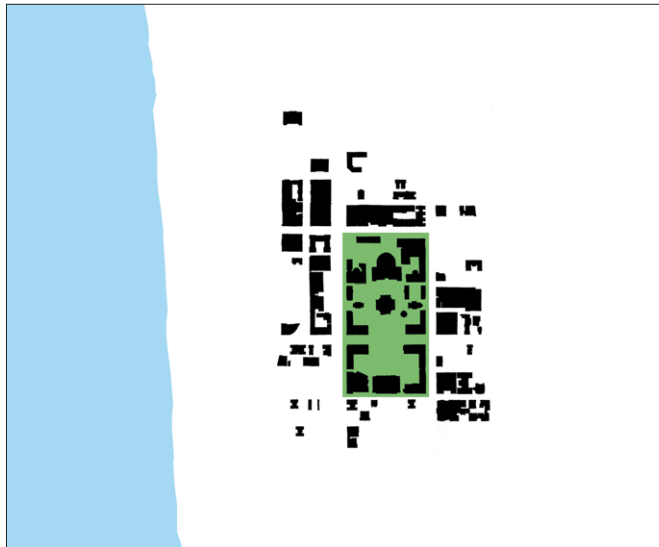
Where to Build?

Because of these qualities of openness and separation, within the science of perception, a core campus is also a cognitive entity. As such, different or additional parts of our brains are involved in its perception than are used in perceiving its surroundings.² The exact size that a core campus must be to seem sufficiently separate is a question to be explored elsewhere. The question here is whether there is any physical or cognitive standard that might help planners and designers determine when further building might endanger its important sense of openness.

Certain university building efforts in the late 1960s and early 1970s may be particularly instructive in helping examine the case for such a threshold. In those years, three of the nation’s oldest Ivy League institutions planned or actually constructed underground buildings on their core campuses: Yale completed a library under its Cross Campus; Harvard built the Pusey Library beneath the southeast corner of its Yard; and Columbia announced plans, later changed, for a gymnasium under its South Field (between the Low and Butler libraries).

These universities had previously expanded well beyond their core campuses. But the nature of the new facilities was such that it made sense to site them in central, accessible locations. In addition, each institution had recently experienced opposition to further off-campus building. In some cases this took the form of local neighborhood

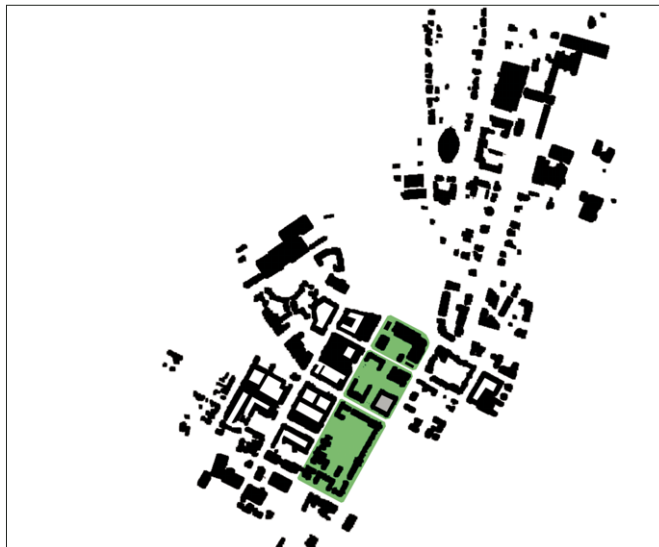
Tables of Core Campus Building Ground Coverage and Acreage



Columbia University 120th Street – Amsterdam Avenue – 114th Street – Broadway	Building Ground Coverage 33.3%	Area in Acres 29.4
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Harvard University Broadway – Quincy Street – Massa- chusetts Avenue – Peabody Street	Building Ground Coverage 25.9%	Area in Acres 25.4
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Yale University Grove Street (excluding Elm and Wall Streets) – College Street – Chapel Street – High Street	Building Ground Coverage 31.2%	Area in Acres 19.5
--	--	------------------------------



Princeton University Nassau Street – Washington Road – a line just south of Witherspoon, Clio and Whig Halls – University Place	Building Ground Coverage 30.9%	Area in Acres 26
---	--	----------------------------



opposition; in others it came from city administrators concerned about further loss of tax revenues. Whatever the case, a combination of such factors established building in the historic core campus area as the preferred option. And in those years none of these areas had a building-to-open-space ratio that was greater than 40 percent.

Given such circumstances, in which there was clearly room to build above ground, what reasoning or cognitive sense could have led these institutions to seek to build these facilities underground? The decision to build underground is an extreme one, presumably only made when other alternatives are unacceptable. Underground construction is more expensive than construction above ground because greater excavation is needed. Moreover, the resultant building is almost certain to be somewhat claustrophobic.

Today the evidence suggests that underground construction was carried out in two cases (and preferred in the third) because of certain cognitive constructs related to the sense of openness. The evaluation the universities made may be summarized as follows: additional building above ground would have intruded into the field of the core campus to such an extent that the coherent openness of the place would have been lost, and the sense of the university as a whole would have been jeopardized. In other words, those charged with protecting the symbolic value of the core campus became concerned that new buildings would damage important qualities that allowed it to be read in relation to the ideal of an American university. In particular, they might cause the perception of campus to “flip” from being an open area with buildings in it, to one where a collection of buildings was surrounded by residual open areas.

Such concern for an open core campus might be discounted as simply a matter of nostalgia or aesthetics. But it was so general in these three instances — and in many ways so obvious — that it may also indicate the presence of a cognitive standard which determined the actions of these universities.

Measurements of Openness

These three university core campuses are widely known and loved by their alumni/ae, and thus may be presumed to be large enough — yet not too large — to embody the campus ideal. But the more general question here is how open a sufficiently large core campus area (and other areas of similar size, whether a housing development, a playing field, or a major parking lot) must be in order to seem open. Conversely, at what point is such an area so occupied — whether by structures or densely planted trees or

hedges — that it can no longer be thought of as open?

The accompanying table gives the core campus areas, excluding streets, of Columbia, Yale, and Harvard as of 1974 and, in each core campus, the percentage of ground covered by buildings at that time. For comparison, these same statistics are given for the northern portion of Princeton’s campus (with Nassau Hall at its center). Maps of these core campus areas and buildings as of 1974 are shown in the accompanying figures.

The four universities discussed exhibit two basic development patterns. The Columbia and Yale core campuses comprise an almost continuous perimeter of buildings around a central open space. The building ground coverage for Columbia is 33.3 percent. The total building ground coverage for Yale, excluding streets, is 31.2 percent (made up of the following components: the Old Campus — 26.7 percent; Cross Campus — 35.4 percent; and Beinecke Plaza — 36.2 percent). Thus, if the desire to build underground indicates that these places were approaching a threshold beyond which a sense of openness would be lost, the maximum possible ground coverage in cases where buildings establish a strong perimeter is probably a little under 40 percent.

Of the two examples, Columbia eventually built its new gym, the Dodge Fitness Center, in the northwest corner of its core campus. The land drops off steeply here, and this allowed the building to be constructed into a natural slope so that its roof formed a terrace at the level of existing portions of the core campus. Further research is needed to learn whether students and faculty think this area successfully continues the core campus pattern of open area surrounded by buildings. But the siting of the building did allow the university to maintain nearly the previous percentage of open space in the core campus area.

Compared to Yale and Columbia, the buildings of Harvard and Princeton are spread more evenly over their core campuses. Many of these individual structures can be seen from all sides and do not constitute as much of a barrier between their institutions and the surrounding streets as at Columbia and, to a lesser extent, at Yale. Harvard’s core campus, the Yard, had the lowest ground coverage (25.9 percent) of the three universities wishing to build underground in the 1960s and 70s. But this area consisted of two inner spaces, each smaller than the corresponding open areas at Columbia and Yale. It is indeed difficult to think of a place where an additional building could fit comfortably.

The ground coverage of the northern portion of the Princeton campus, with Nassau Hall at its center, is somewhat higher (30.9 percent). While circumstances have not

yet forced Princeton to build underground in this core area, the extent of the university's expansion elsewhere suggests that ground coverage much in excess of 30 percent is sufficient to jeopardize its sense of openness.

A Common Standard

To summarize, it seems that where buildings are evenly dispersed, we are unable to think of an area roughly the size of these core campuses as open if ground coverage much exceeds 30 percent. If buildings are organized around a perimeter, it seems similarly difficult to maintain a sense of openness if ground coverage reaches 40 percent. The experiences of these universities suggest that these standards are probably maximum percentages beyond which it is no longer possible to perceive an area as open.

Other areas of this size, whether campuses or housing developments, may not seem open even with ground coverage lower than these maximums. But the issue clearly involves cognitive mechanisms. In what ways do ground coverage and other factors affect how our brains process information about our large-scale surroundings? What causes us to perceive paths in an open landscape? When do adjacent building facades begin to form streets, whether or not that was the intention of the architect or planner? Conversely, at what point is street continuity broken by the absence of coherent building facades or the presence of large plazas or courtyards?

The answers to these questions depend on additional factors as well as on ground coverage. Topography; building height; the arrangement of buildings, streets and parking lots; lighting; how far one can see into an area; one's sense of safety; and cultural variables all come to mind.³ However, in evaluating these factors, brain processes are crucial. The percentage of ground coverage and other physical standards are only superficial ways of getting at what these brain processes may be.

In certain ways it is so obvious as to be hardly worth stating that some areas seem open and some do not. It is surprising that it should be necessary to demonstrate that our cognitive processes are measurably governed by the pattern of development of an area and its ground coverage. We readily accept that there are definite cognitive limits to our interpersonal and social interactions, varying only slightly according to culture.⁴ Why should there not be almost equally definite cognitive standards regulating reactions to our large-scale physical surroundings such as campuses?

Acknowledgment

I am most grateful to Frances Halsband and other editors of *Places* for their helpful suggestions, and to Adam Taubman of R.M. Kliment & Frances Halsband Architects for the maps and specific ground coverage percentages in this article.

Notes

1. The full citation from the *OED* is as follows: "1774 in J.F. Hagemon Hist. Princeton (1879) I.102 Having made a fire in the Campus, we there burnt near a dozen pounds [of tea]."
2. For a general description and overview of the "what" and "where" pathways, see M. Mishkin, L.G. Ungerleider, and K.A. Macko, "Object Vision and Spatial Vision: Two Cortical Pathways," *Trends in Neurosciences* 6 (1983), pp. 414-17. For a more specific examination of the perception of enclosure, see R. Epstein and N. Kanwisher, "A Cortical Representation of the Local Visual Environment," *Nature* 392 (1998), pp. 598-601.
3. For an examination of environmental features affecting a sense of openness or enclosure, see Arthur E. Stamps III, "Enclosure and Safety in Urbanscapes," *Environment and Behavior*, Vol. 37, No. 1 (2005), pp. 102-33.
4. For examples of interpersonal limits, see Edward T. Hall, *The Hidden Dimension* (New York: Doubleday & Company, 1966); and Robert Sommer, *Personal Space: The Behavioral Basis of Design* (New Jersey: Prentice-Hall, 1969). For an example of a roughly 100-second time limit to the perception of street networks, see Barbara Hadley Stanton, "The Incidence of Home Grounds and Experiential Networks: Some Implications," *Environment and Behavior*, Vol. 18 No. 3 (1986), pp. 299-329.

The Campus Guides: More than a Local Resource

David Moffat



Later this spring Princeton Architectural Press will release the *Campus Guide to Illinois Institute of Technology (IIT)*, the latest in a series that is fast becoming an essential resource for understanding the role of campus in North America today.

At some twenty volumes and growing, the series is primarily aimed at local audiences: alumni seeking to recall the source of their affections, students exploring new environments, faculty and staff wandering on unstructured lunch hours.

In service of such readers, the books record the stories behind important buildings, open spaces, monuments and artwork. But they are further distinguished for a general readership by essays that discuss the

campuses as important ensembles of buildings. It is here that the *Campus Guides* provide the most valuable insight into the ideals of American college life as it has evolved over the last several centuries.

Continuing Themes

In the introduction to the *Campus Guide for Princeton*, Raymond Rhinehart notes how Le Corbusier once likened the American university to a “green city.” In this regard, Princeton “is... the ideal city—a marketplace for ideas set in a garden.”

While partisans of other alma maters might dispute this claim, few would disagree that American campus design sets up such expectations. More than just an infrastructure of

pipes and wires and walkways, a campus provides a physical record of how a university has seen itself through time. Further, writes Rhinehart, campus design is often not simply meant as an “expression of value,” but may be “enlisted to shape values.”

Reading across a range of the *Guides*, one soon becomes aware of other important themes, especially an ongoing tension between overall organizing ideas and the siting and design of individual buildings. While campuses are often conceived as perfect ensembles, they are never realized that way. Indeed, as different administrative and aesthetic regimes come and go, fundamental ideas may be challenged, replaced, forgotten—and reborn.

In other words, a constant cycling



of vision is a universal of campus design. This gives a campus a geological character, where different layers express shifting attitudes toward design and the landscape. In such a view, the best moments appear as those when designers were thinking most clearly and when funding, technology, and social trends come most clearly into alignment.

One can also see a continuing fascination for campus buildings by star architects. Considerable stylistic jousting took place between major U.S. architecture firms on the West Point campus during the years of its expansion in the early twentieth century. Competing aesthetic visions were a constant on the Yale campus in the second half of the twentieth

century. Today, such high-stakes showmanship seems most evident at the University of Cincinnati.

The design of spectacularly bad buildings is also a constant. Thus, the West Point Guide notes how there have been two great acts of treason in its distinguished history: when Benedict Arnold gave a plan of its fortifications to the British during the Revolutionary War; and when the massive Eisenhower auditorium rose up to mar views of the Hudson in the 1960s.

What the books make most clear, however, is that a desire for comprehensive ideals can survive the construction of even the most ill-fitting or arrogant buildings. And it is the continuing rediscovery of such principles,

and the reins they place on the egos of individual designers, that make campuses special places.

Such ideas span an incredible range of possibilities: from the sweeping orientation of UC Berkeley on axis with the Golden Gate and the University of Washington with Mt. Rainier, to

Opposite: IIT is the most recent in the Campus Guide series. New dormitories by Helmut Jahn extend out from the left in the middle distance; just in front in the image center is Mies van der Rohe's Crown Hall. From *Campus Guide: Illinois Institute of Technology* (Princeton Architectural Press, 2005).

Above: Comprehensive colored axonometric drawings are integral to all the Campus Guides. This from *Campus Guide: University of Washington* (Princeton Architectural Press, 2002).

The Echo of History

Henry Millon

more urbane notions — the Gothic quads of Princeton, the “yards” of Harvard, the “typologies” of Yale, the red-tile roofs of Stanford.

A Winning Formula

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Most of the books achieve this goal nicely. After a series of forwards and introductory essays, each proceeds to a series of walks. In most volumes, these are organized by precinct, but in others, such as that for Stanford, they trace the development of the campus through time.

At IIT (a small campus) there are three walks; at larger campuses there may be as many as ten or eleven. Each walk is generally preceded by a short thematic description, and each building along the way is credited and fully described. Graphically, each guide also contains a handsome colored axonometric of the entire campus, and important buildings and spaces are photographed, sometimes quite evocatively.

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The book also corresponds with IIT’s own renewal of interest in its campus. For years the institute was content to rest on the laurels of the Mies plan. But it recently undertook a major landscape improvement program. Two buildings for a new century are also now complete — a student center by Rem Koolhaas, and dorms by Helmut Jahn — both occupying extremely difficult sites beneath and adjacent to elevated mass-transit tracks.

According to current plans, the IIT book will be followed later this year by guides to the University of Chicago and Smith College. Other campuses documented in the series include Harvard, Stanford, Yale, Princeton, Duke, Rice, Virginia, California Berkeley, Washington, UCLA, Columbia, Cranbrook, Cincinnati, West Point, Pennsylvania, Phillips Academy Andover, Vassar, Dartmouth and Oberlin.

The mid-1960s were tumultuous years for universities and institutions in much of the world. Increasing numbers of students sought entry to universities with overburdened and inadequate facilities. Students, reinforced by members of the staff and the general public, made clamorous appeals and demands that university administrations and government ministries institute structural and curricular reforms, in addition to expanding the university system. While the urgency of their appeals may now largely have faded into history, it is important to remember how seminal this period was in terms of reformulating the relationships between the university and society at large.

In 1966, in the midst of the turmoil, the Program in Urban Territorial Planning in the School of Architecture at the University of Venice undertook a research project to address some conceptual and physical aspects of the crisis in higher education throughout the world. The project sought to examine the planning and buildings that were needed in founding new universities and institutes, as well as enlarging those already existing. This multivalent research program eventually resulted in an influential book, *Pianificazione e Disegno delle Università*, edited by the architect Giancarlo De Carlo, who was in the midst of replanning the University of Urbino, a dispersed university, with residential facilities.

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etc. — and comparative data drawn from information solicited from many diverse nations. A third part assembled a series of essays on directions and prospects for planning and architectural design found in the UK, USA, Soviet Union, Germany, Japan, Switzerland and France — countries where university design had been most forthrightly confronted. The last part gave a comprehensive indexed bibliography on urban and architectural planning and design of universities in both concept and form.

Today, it is the second half of De Carlo's pithy introduction that remains most telling and provocative as we continue to address the problems of university campus expansion. De Carlo's comments focused on the situation in Italy, utilizing when necessary the report of the commission of inquiry into the state of public instruction there. That report seemed to have overlooked important issues related to the location and construction of new university structures at various sites in Italy. De Carlo addressed these by posing a series of hypothetical questions. Following are some of the thoughtful nuanced responses formulated by De Carlo at the time.

- The structures that house Italian universities are overwhelmingly inadequate. There is no relationship between the location of universities and the distribution of population. Encased as they are mostly in ancient centers, existing universities have no possibility for development.
- Public investment in university buildings should seek to eliminate the congestion found around the urban centers in the north and center/south of Italy to produce a redistribution of activities in metropolitan areas

that gravitate around those centers. University activities should also be redistributed to reinforce the general policy of decentralization.

- A program of relocation of sites for universities should consider first the distribution of population in an area, the character of the area, the level of development, the scope of facilities, the accessibility of the site the surrounding conditions, and the qualities of the environment. The population should be large enough that the university may serve as an enhancement or reanimating force in the area.
- Which of the known models found in the organization of universities — campus, university complex, university dispersed by schools — is the most appropriate model for Italy? Not a question to ask, says De Carlo. Italy needs a new model that corresponds to the social and organizational needs of the contemporary university and to the relationship to be established within the enclosing physical environment.
- Support facilities can be divided into four fundamental categories in relation to the degree of interaction between them and the enclosing environment: shared, general, specific and specialized. A large city can offer many shared support facilities and even in some cases, general facilities.
- A program or plan for the university that is explicit about detailed and general objectives should be offered to the urban and architectural designer of a university. It should be equally detailed about the organizational structures that will govern the functioning of the university.

- Is it desirable to establish general, normalized criteria for urban and architectural design with the intention of unifying the results? No. Ensure the widest space possible for experimentation. Generalized norms are useless, and even dangerous, because they cannot have derived from study already undertaken and verified, and because they will inevitably be preconceptions.

Much has changed in the 36 years since *Pianificazione e Disegno delle Università* appeared. Nevertheless, the De Carlo volume remains a remarkably wide-ranging documentation of issues confronting the planning of buildings for higher education. A historical document prepared in the midst of a controversial period, it offered a critical yet optimistic examination of the ways to take advantage of university building to bring about complementary environmental and social change.

Giancarlo De Carlo (ed.). *Pianificazione e Disegno delle Università*. Rome: Edizioni Universitarie Italiane, 1968.

Competing to Learn: The Berkeley Prize and the Social Art of Architecture

Raymond Lifchez and Benjamin Clavan

Go about your city and investigate for yourself the situation of the displaced and those who assist them. Based on what you find, what are your recommendations for bettering the situations of those displaced persons that you believe could be helped? Write about your discoveries in the form of a persuasive article for an influential community newspaper.

The above challenge provided the basis for the 2004 International Berkeley Prize for Undergraduate Design Excellence. Since its founding in 1996, the prize has encouraged undergraduate architecture students to write about issues central to the understanding of the social art of architecture and the social role of the architect in today's world.

What is that role? What should it be? By asking students to grapple with just such problems, the Prize brings to the forefront of students' thinking the reality that architecture is a social art.

In 2004, when it chose the issue of shelter for displaced and disenfranchised persons, the prize committee knew it would be raising a host of issues, some of which are often seen as foreign to architecture. Even among academics and practicing professionals there is little consensus as to how to discuss, let alone attack, design issues related to individuals who have never constituted the traditional notion of a "client group." Nevertheless, the quality of student essays reflects a commitment to addressing and attempting to answer these questions.

Here is how one student describes his efforts to provide answers in the context of the homeless in a major American city:

The past few weeks have been unusually warm. Tonight, however, the temperature has dropped thirty degrees and a nor'easterly wind whips across the lake, cutting its way through the permeable city. Although I am new in town and only a visitor, I have found a place to escape from the confinement of my current living conditions. It is a popular spot. A well-lit corridor, formed by an arcade of massive stone columns four feet in length, provides protection from the busy street while suppressing the violent wind. Elevated above the sidewalk plane atop a six-inch stoop, a man is resting his worn body, and lays shielded by the deep jambs of an entranceway clad in marble.

Dude, you need some gear?

Huh? What? Okay I'm up!

Sorry man. Please don't get up. I didn't

mean to wake you.

Oh, I thought you was the cops. Glad to see you ain't.

No, I'm no cop.

Although he was on his feet quickly, he fumbles while folding his newspaper mattresses into a plastic Marshall Fields bag. Another bag, already containing paper, had previously served as his pillow.

Lay back down, and I'll leave you alone.

No I need to get up.

Well then, I'm John. What's your name?

I'm Steve, nice to meet you John.

Steve's grip is rough and scratchy, the agony in his life is apparent in his handshake.

Where you from? Not around here, huh?

I'm from Virginia. How about you?

Right here in Chicago, never been nowhere else.

You need some gear! Aren't you cold?

Nah, John. It's not cold yet.

Steve, wearing a white sweatshirt, brown pants and brown boots, has a new Miami Hurricanes cap lying loosely on his head. He stands there scratching his scraggly beard with one hand, and rubbing his squinted eyes with the other. Excluding the hat, I am dressed similarly, and also have a scruffy appearance. The only difference is that while the cold makes my teeth chatter, Steve is accustomed to the weather and is unscathed by the chilling conditions.

Where are you heading John?

Well I thought I'd follow you around for a while. Is that okay?

(Laughingly) Yeah I'll give you a tour. Let me put this in here.

Why are you throwing your bag in the trash? Don't you need that stuff?

Ah don't worry about it. They don't pick up 'till eight-thirty. What time is it anyway?

I don't wear a watch, but I think it's around three.

Good, I can't carry these bags all the time. I got a bad shoulder. I'll put this other one behind this dumpster and get it later...

The essay goes on to describe an eye-opening encounter. In the role of a student of hardscabble urban life, John spends the rest of the early morning with the homeless

man, who, as in an eighteenth-century utopian novel, acts as his guide. The man points out features of the city that are safe: places to stay warm (using exhaust steam from restaurant kitchens) or to sleep unnoticed by either the police or those who would prey on the homeless; places to find food and use a restroom.

The essay concludes by arguing for the kinds of public amenities that were once commonplace in the American city—the public bathhouse, the flophouse, the soup kitchen:

Although it may take several generations before mankind [sic] can trust each other without fear, the suggestions I make for alternative public amenities are credible and realistic approaches to enhancing the quality and future of urban settings.

“Let’s Have Dinner”

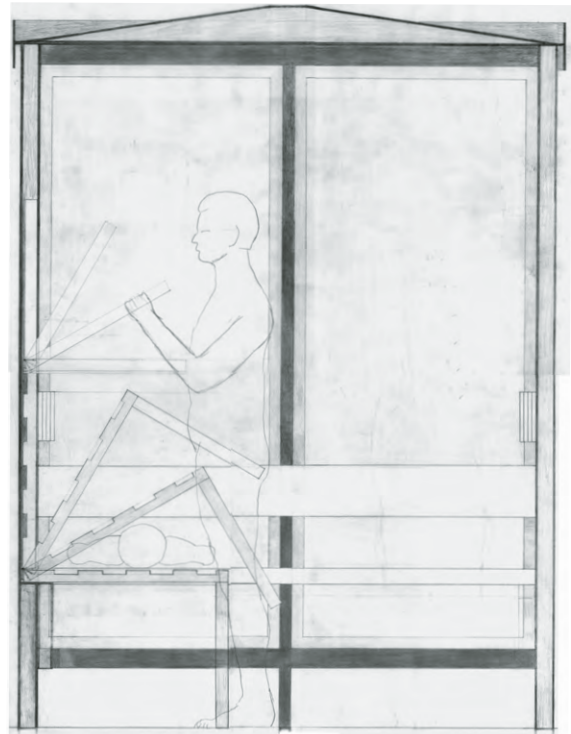
John Rea, Virginia Polytechnic Institute
USA (Third Prize)

Encouraging Idealism

The Berkeley Prize is the centerpiece of an endowment established in 1996 in the Department of Architecture at the College of Environmental Design at the University of California, Berkeley. Its activities are overseen by a group of interested academics and professionals who form a loosely knit Berkeley Prize Committee. Each year this group formulates a question, posted online, that asks students to put their thoughts and experiences with regard to an important social issue into words and selects a jury to review entries. In 2004 the prize jury included Marco Casagrande, architect and environmental artist, Finland; Beth Gali, urban planner and landscape architect, Spain; Peter Prangnell, architect, critic, and author, Canada; and Minja Yang, Culture Sector, UNESCO, France.

In past years, the prize questions have asked students to think about such issues as the equitable use of public places; the appropriateness of institutional care for the elderly; the street as mediator between public and private selves; the search for lasting values in architecture; and the exploration of meaning in social architecture. All of these topics have been presented in ways that provoke consideration of the role architects may play in identifying and redressing complex social issues.

Proposal for transforming the bus shelters of Ames, Iowa, into overnight sleeping accommodations for the homeless. Drawing by Angela Nkya, 2004 Berkeley Prize winner.



In response and encouragingly, there is throughout the submitted essays an implicit idealism about the possibilities of an architecture that addresses social ills through good design. The 2004 prize cycle was no exception: When the general public is questioned about the problem of homelessness in their community, the answers are always the same. “They chose this lifestyle” or “if they wanted to change they would.” As we wait for someone else to initiate a solution, the number of people on the street grows steadily. Sure, we feel compassion when the nostalgia of the holiday’s set in, or on those cold winter nights when the thermometer plummets below freezing and we can’t imagine how anyone will survive on the street. Where is our concern through the remainder of the year as we hurry along ignoring the voices asking for spare change or even crossing the road so we won’t have to deal with this nuisance?

We need a general reawakening of common sense and empathy towards our fellow citizen. Schools can start the process by integrating a social conscience into the education system. Young architects need to learn financial and social accountability when developing design concepts. To be told this isn’t important now

reinforces the notion we are designing only for those with power and money. Integrating all levels of income needs to play an important role in the design education of an architect.

“Productive Lives: Eradicating the Barriers”
Sandra Thomson, Dalhousie University
Canada (Honorable Mention)

Alternatives to the “Shelter”

As in previous years, in 2004 students were not only asked to think about the chosen topic but to propose solutions. This is where the responses often become most ingenious. In the 2004 competition most entrants find fault with the conventional solution of the “shelter,” as they believed it to be conceived. Essentially, they argued that, after a brief reconnaissance, many displaced people find shelters stigmatizing and/or dangerous, and prefer the street.

As an alternative, some students argue for respecting what the homeless do for themselves to solve their problems. Others argue for this respect, but also, simultaneously, for resources from the outside to augment their efforts.

In essays from Singapore and Austria two students discuss racism as a factor underlying their cities’ reluctance to effectively assist outsiders. In one case, people considered different were seen as an urban blemish; in the other, it was people of color. For example:

Graz is the cultural capital of Europe 2003 and officially the city of human rights. However, in traditionally conservative environment the “everyday racism” is supported by already described mechanisms. The politics of “city-cleaning” is manifested by removals of “unrepresentative” persons from public squares.... [But] due to the fact that marginal groups are top subject of increasingly popular cultural studies, there is a stimulus from certain academic circles that Graz should build its identity exactly on multiculturalism which would make it more interesting destination for cultural tourists.

As the starting point for integrating the “other” into the population, this author proposes turning the open spaces surrounding nineteenth-century tenements into points of interest for tourists. In any case, he argues, here was a housing stock and open space that needed to be improved.

Spaces open for staging the “authentic” handicraft services or music and cooking shows would satisfy the tourists’ need to discover and reconstruct the historic past(s) and social identities with the needed doses of amusement. The parks could be connected to each other through the passages in the building wings, forming the network of parks spreading through the structures of existing buildings.

“Changing Architecture”
Snezana Tubic, Technische
Universität, Graz, Austria

A student at the University of Lagos, Nigeria, Paul Akpokodje, suggests a solution of social policy. He writes that in his city refugees are relegated to camps outside the city and are allowed to come in only for services, such as medical care and schools. His solution is that these services be established within the camps and become the nucleus from which the refugees themselves could begin to take control of the resources necessary for social and physical health — and permanence.

Other entrants suggest solutions requiring reconsideration of how existing buildings are used, as in these three proposals:

The central business district of Tel-Aviv is a hybrid version of financial services and governmental offices along with the industrial manufacturing zones, bordering the poor neighborhoods. Almost two-thirds of this district is based on a cycle of day life/night life. During work hours, the financial working classes occupy the offices, the traffic is booming and the workshops are busy. Main traffic roads are jammed with cars and buses, next to public pedestrian sidewalks shaded by tall curtain-wall buildings.

At night, the offices are empty and the wide parking lots are vacant — the only facilities open are notorious members-only clubs and old wedding halls.... These office buildings can better the conditions of the homeless.... Most of these office buildings sit on a multilevel platform. The city can let the corporations convert or add spaces on this platform, to be utilized as public shelters for the homeless. The facade will be an advertising zone that will not only be

for commercial uses, but can also send a clear visible statement to the community....

Establishing spaces for the displaced in the interstitial areas of buildings in a legalized way can not only better the conditions for the homeless, but the corporation's public image as well. With the increase of the public's social awareness, a lot of money is invested in advertising aimed at image improvement. Recently, a rising number of Israeli conglomerates have made efforts to sponsor and donate to voluntary campaigns, leading to media coverage that promotes their community-oriented image in the eyes of the public.

"The Right Path"

Barak Levy, Technion
Haifa, Israel (Second Prize)

An American student furthers this idea by recommending that benches in conventional bus shelters be made in a way that would accommodate sleeping:

Instead of creating a new building, which raises the questions of where it is to be located and who will fund its construction, we can simply use the existing elements such as bus shelters and make them adaptable for sleeping at certain hours. The bus shelters in Ames are used during the day and remain unused after midnight. We could design them in such a way that they can be transformed to a sleeping compartment from midnight to 6 AM. Buildings such as transit bus depots, which Ames does not have at the moment, can serve dual functions by providing services such as public bathrooms, telephones and lockers to both the travelers and the homeless.

"At Home in the City"

Angela Nkya, Iowa State University
USA (First Prize)

Another American student recommends that unused warehouses be converted into hydroponic gardens where the homeless would find community through productive work and self-esteem — and reasonably, a greater wherewithal to take on the other problems of homelessness themselves. His is an architectural solution for social ame-

lioration in the spirit of social engineering, a kind of phalansterre, conceived of by a contemporary Charles Fourier:

Only when the homeless have a sense of power and control over their fate will they be accepted by society. Society must not only want to help the homeless, but must also need the homeless. So the question is, how do we give the homeless a sense of value for themselves while also feeling value from society? Integrating farms into the city may present the opportunity for homeless to provide for themselves and society.... Urban farms will be vertical. They will be a new type of multilevel building providing agriculture within the city. This form of farming can be brought to the city through technology and architecture. We possess the capacity to create urban farms... urban farms to be run by the homeless....

Once the buildings are ready for farming, a group of homeless can begin work under support and supervision of knowledgeable trainers. It is within the power of the selected soon-to-be farmers to make the urban farms successful. If individuals are not successful, the city will admit other willing homeless to the program, allowing others the opportunity. Urban farms, in a sense, would wake people up saying "hey, here is a way out, it is now up to you to succeed.

"Homeless Integration into Society
through Urban Farms"

Eric Vergne, Savannah College of
Art and Design, USA

Promoting Communication and Thought

As architects, and students of architecture, we should want to know if and how our professional skills can be of use to local governments, institutions, private groups, and individuals in meeting specific social needs — such as those posed by disenfranchised populations studied by entrants in the 2004 prize competition. To find out, we must first understand the issues directly, "on the ground." Second, we must recognize that solutions to these problems are, by definition, interdisciplinary. Both ideas are an integral part of how students are asked to research and respond to the prize questions.

By stressing essay writing, the prize deliberately forces students into unfamiliar territory where they must grapple

with a form of communication not normally stressed in architecture education. Architects generally feel most comfortable communicating by way of drawn or modeled images of one sort or another. But they must also be able to communicate their research findings and design proposals effectively in verbal and written form to the public, to clients, and to colleagues.

The Berkeley Prize asks students to create images with words, much like they might create images with drawings in the design studio. When they succeed in describing their ideas in words, they can not help but realize that, as future professionals, they have begun to train themselves in another way to advocate their thoughts to a general population (and, indeed, many clients) that do not understand abstract drawings or even ordinary plans. Similarly, as a result of this process, it is hoped that students might also begin to realize that it is actually through language that the images of intended building forms and the context in which they are embedded are conceived.

At its heart, the Berkeley Prize seeks to challenge undergraduate students to use language to engage with and communicate ideas which are typically more sophisticated than those they might project through hand drawings or conjure up on their computers. Through essay writing the Berkeley Prize attempts to educate architects-in-training that the smallest act of building has global implications: that design can and does play a major role in the social, cultural and psychological life of both the individual and society.

Some students respond instinctively to this lesson:

“You employ stone, wood and concrete, and with these materials you build house and places. That is construction. But suddenly you touch my heart, you do me good, I am happy and I say: ‘This is beautiful. That is Architecture.’”
[Le Corbusier] This is the kind of home the poor, homeless and refugees should be given. The home that says, “They too are cared.”

“A Voice of Poverty”

Kamana Dhakhwa, Institute of Engineering
Nepal

In a similar vein, but on another note altogether, the previously quoted Canadian student cited negative attitudes toward the homeless as one reason why aid to them is often slow and inadequate:

We live in a cynical world; where we should be building bridges we are instead proposing fences. Rehashing the same solutions over and over again, we have settled into the pattern of treating the symptom without diagnosing the cause. Someone needs to step in and break the cyclical cycle of non-productivity and bring this pattern of repetition to an end. By focusing on the lack of affordable housing in the downtown core, Architects and Planners have the opportunity to play a leading role in recreating the fabric of the city. Egos and attitudes need to be put aside as we work with other professional’s educating each other on the reality of the street. Only by breaking through the preconceived notions on who the displaced are and what battles they face will we create a level playing field for those fighting for survival in today’s society.

“Productive Lives: Eradicating the Barriers”
Sandra Thomson

Engagement as a Goal

The success of the Berkeley Prize as a vehicle to encourage the study of social architecture will not ultimately be judged by the level or quality of the rhetoric of the competitors—although fine writing is a prize in itself. It will be successful because it has been able to encourage writing as a means by which awareness of social issues is explored and magnified. It will be successful because it demonstrates the potential for architects to become proponents of better policies and designs through words as well as images.

The emphasis on encouraging students to view the public as their audience and to learn new ways to communicate with them has one final practical benefit. By learning to talk to the public, competitors should also discover that they can be persuasive advocates of social architecture among those for whom such advocacy is most important: those who use architecture, rather than those who make it.

Note

The full text of all quoted responses can be read at <http://www.berkeleyprize.org/2004/stage2.cfm>.

The Berkeley Prize Travel Fellowship



A ragged busker is taking refuge in one of many Barcelonian vestibules. He begins singing “no woman, no cry.” A comrade joins him merrily grating a tree branch (with) a ribbed plastic tube in time to the worn, but melodious guitar. Gradually, passers-by are drawn into the space by the energy of the impromptu performance. Suddenly, this ordinarily neglected space is transformed by the creative initiative of two young men trying to scrape together enough money for a meal ticket and a place to sleep. In the process, an unowned [sic] space of no distinct character becomes temporary stage, dance floor and amphitheater.

— Adriano Pupilli, University of Sydney (Travel Fellowship Proposal)

Beginning in 2004, finalists for the Berkeley Prize essay competition were also given the opportunity to complete for a two-week travel fellowship. The 2004 Berkeley Prize Travel Fellowship winner, Adriano Pupilli, proposed to “explore the issues facing Barcelona’s displaced youth and the nature of the self-help architectural solutions they

developed.” In particular, he was interested in “the adaptation of borrowed/ recycled space and materials and their role in housing the displaced, [specifically] the integration, interaction and role of these social housing alternatives within the surrounding urban fabric.”

No one on the Berkeley Prize committee was under the illusion that any one person could achieve these ends in two weeks in a foreign country. Pupilli, however, did come well-prepared: three months living and working with “informal” settlers on the fringe of Manila (by the base of a large mountain of continually combusting rubbish); the development of a self-construct kit of paper components that assemble to create a low-cost and fully recyclable paper house — built on the steps of the Sydney Opera House in the fall of 2004; and work with Australia’s Housing for Health.

What did he bring back from Barcelona? He walked the streets of Barcelona, made friends with the homeless, and catalogued how they adapted borrowed/recycled space and materials. He also met with represen-

tatives of *Architectos Sin Fronteras* (Architects Without Borders, who, among other activities, advocate for young squatters), visited several government housing projects, researched government housing in the National Library, and participated in the events of Forum Barcelona.

In some ways, it is probably not ultimately important what a young architecture student proposes to study as a traveling fellow. There is a case to be made that you can not actually study architecture until you are in your thirties or forties, since it takes that long to begin to understand all of the intricacies of the design and building process. What you can do is develop an eye for determining what is important about the way people live and the way the buildings they build support, or do not support, those ways of life. You can, in other words, study yourself.

Pupilli puts his own spin on it:

Pursuing interests in an architecture that seeks to respond to social and ethical directives has not always been an easy or clear path to follow. To students around the world, where local universities and governments may not support such an approach, [institutions] such as the Berkeley Prize provide invaluable direction and support to those interested in pursuing a field of architecture that is often overshadowed by more mainstream course objectives.... It would be difficult to deny that shelter of some form is a necessity for all on this planet. To those responsible for its development and evolution, a social understanding is fundamental.

What better way to describe the goals, and successes, of the Berkeley Prize?

Barcelona street life. Photo by Adriano Pupilli, Berkeley Prize Travel Fellowship winner.

The Berkeley Prize: Questions, 1999-2005

2005

What makes a place truly public? Go out into a community that you know well and find an exceptional, built example of one such place. In most likelihood, among other attributes, this place will embody the traditions of local culture and be a reflection of the world at large. Describe this place in a way that makes it a compelling demonstration of how other places might remain similarly vital to their own communities. Be both evocative and specific in your tribute to this place.

2004

Go about your city and investigate for yourself the situation of the displaced and those who assist them. Based on what you find, what are your recommendations for bettering the situations of those displaced persons that you believe could be helped? Write about your discoveries in the form of a persuasive article for an influential community newspaper.

2003

When architects strive to create lasting monuments, some become part of the significant cultural heritage of our age. These successes seem to embody the most socially important values of a city, region, country, or even the world. Other attempts are only the reflection of the vanity of the designer or client and pass into oblivion. Worse, they become a permanent blight on the environment. As an architect, specifically, how can your work simultaneously embody the social values of one place, a particular culture, and universal human concerns?

2002

Throughout history, the Street has served as a mediator between our



public and private lives. The photographs below are vivid examples of how this occurs. With rapid change occurring today in every culture, the traditional social value of the street is also undergoing change and in many instances is losing this human element. As an architect, how do you address this issue?

2001

Considering what has been, and contemplating what might be, what principles and objectives should guide architects committed to the concept that Architecture is a Social Art?

2000

Architecture as a social art: What role can architecture play as a socially responsive endeavor in the future? Discuss in light of your examination of architectural history, theory, and your studio design experience.

1999

The Architect Meets The Nursing Home: Architects question the

suitability of the generic American Nursing Home as a humane environment for the Frail Elderly and propose innovative design ideas. Does the "Nursing Home," as an architectural vehicle for the Long Term Care of the Elderly, work well as a humane environment? If so, what are its best and worst features? The architect's answers to this question are informed by reading critical literature and by direct experience of at least two nursing homes of the architect's choice.

Barcelona street life. Photo by Adriano Pupilli, Berkeley Prize Travel Fellowship winner.

The Berkeley Prize: How it Works

Each year, the Berkeley Prize Committee poses a question on its website, www.berkeleyprize.org. Students enrolled in any undergraduate architecture program throughout the world are invited to submit a 500-word essay proposal responding to the question. From this pool of essays, approximately 25 are selected by the prize committee as particularly promising. These semifinalists are then asked to submit a 2,500-word essay expanding on their proposals. A group of readers, composed of committee members and invited colleagues, selects five to eight of the best essays and sends these finalists on to a jury of international academics and architects to select the winners. The prize is announced, papers submitted, and reader and jury-reviewed all online. The most recent winner was awarded \$3,500 from a \$5,000 prize pool.

During the past six years, hundreds of students have submitted proposals and essays, representing dozens of schools of architecture from nearly forty countries. In recognition of these efforts, the prize was the recipient of the 2002 American Institute of Architects' Education Honor Award. The Berkeley Prize has also garnered international acclaim, not the least reason for which is its complete embracing of digital technology. In partial recognition of this outreach, the 2003 Berkeley Prize competition was named a special event of "World Heritage in the Digital Age," a virtual congress helping to commemorate the thirtieth anniversary of the UNESCO World Heritage Convention.

Organized by the UNESCO World Heritage Center, the virtual congress was one of a series of events scheduled to highlight the far-reaching goals of the World Heritage Convention to "maintain, increase, and diffuse knowledge, by assuring



the conservation and protection of the world's heritage." (For further information on the virtual congress, visit www.virtualworldheritage.org.)

The 2004 prize competition attracted 97 entries from students representing 29 countries and 43 undergraduate architecture programs on six continents. Twelve of these entries were collaborative efforts.

The 2004 competition also established the Berkeley Prize Travel Fellowship. This new prize recognizes the vital role that exposure to other cultures and environments plays in helping to demonstrate the reality and importance of the social art of architecture. All finalists for the essay competition are invited to submit proposals demonstrating how they would use a two-week, expenses-paid, trip to an architecturally-significant destination selected by the prize committee.

The 2004 Berkeley Prize honored its continuing association with UNESCO's World Heritage Center by enabling the travel fellowship winner to visit Barcelona for two

weeks and attend Forum Barcelona 2004, a six month-long, city-wide, international cultural event partially sponsored by UNESCO (<http://www.barcelona2004.org/eng/>). The travel fellowship was also seen as potentially enabling the student to take part in the international conference, "Arquitectura 3000: the Architecture of Indifference", sponsored by Escola Tècnica Superior d'Arquitectura de Barcelona at the Universitat Politècnica de Catalunya in Barcelona in the summer of 2004 (<http://www.ckk.chalmers.se/vr/arquitectura3000/>).

Barcelona street life. Photo by Adriano Pupilli, Berkeley Prize Travel Fellowship winner.

Contributors

Mara Baum is a graduate student in Architecture at the University of California, Berkeley, where she has a strong interest in green-building practices.

Richard Bender is an Emeritus Professor and former Dean of the College of Environmental Design at the University of California, Berkeley. He founded the Campus Planning Study Group there in the mid-1980s, and has consulted with U.S. and international universities and colleges on their development.

Carol T. Christ, a former Provost of the University of California, Berkeley, is now President of Smith College. This article is adapted from an essay originally published in *The Chronicle of Higher Education*.

Benjamin Clavan, AIA, is an architect who has been in private practice in the Los Angeles area for the past 23 years. His residential and commercial work consistently strives to reflect the notion, “design as if people mattered.” He received his Ph.D. in Architecture from the UC Berkeley College of Environmental Design in 1986.

David Dixon, FAIA, is a Principal at Goody, Clancy & Associates, Boston. He will chair the AIA Regional and Urban Design Committee in 2006. His work for universities, cities and developers is directed to the creation of vital and livable urban communities.

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Raymond Lifchez and his wife Judith Lee Stronach founded the Berkeley Prize in 1996. He is a Professor of Architecture at UC Berkeley, and in 2002 was named Distinguished Professor by the Association of Collegiate Schools of Architecture. He is author and editor of *The Dervish Lodge: Architecture, Art, and Sufism in Ottoman Turkey* (1992); and *Rethinking Architecture: Design Students and Physically Disabled People* (1987).

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Peter Salovey is Dean of Yale College and Chris Argyris Professor of Psychology at Yale University. His research has focused on the psychological significance and function of human moods and emotions, and the application of social psychological principles to motivate people to adopt behaviors that protect their health. These comments were excerpted from his talk to the Freshman Assembly at Yale August 28, 2004.

Barbara Hadley Stanton (M.S., Urban Planning, Columbia University) is a member of the Center for Human Environments at the Graduate School and University Center of the City University of New York. Her research concerns large-scale place cognition, the geographic components of community, and what the measurable standards derived from this research may show about the way the brain works.

Marilyn Taylor, FAIA, is an architect and urban designer whose projects focus on the public realm. She has led a number of airport and transportation projects, including Ben Gurion International Airport in Tel Aviv, JFK, and Dulles, and has also completed major planning projects in New York.

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Campus Partners and The Ohio State University: Transforming a Failing Commercial District

David Dixon

The Ohio State University (OSU) is a public university with growing national stature as a center of learning and research. Located about two miles north of downtown Columbus, OSU became increasingly convinced during the 1990s that it needed to address disinvestment in surrounding neighborhoods, both to protect its ability to attract students, faculty and staff and to fulfill its historic mission of public service as a land-grant institution.

The university's growing commitment to civic engagement is no accident. It is the largest employer in Columbus. Its campus accommodates a combined student, faculty and staff population of almost 50,000 (greater than the city's downtown workforce).

The most significant aspect of the university's commitment to date is an ongoing engagement with the City of Columbus, local business and political leaders, and neighborhood groups to revitalize nearby sections of High Street. The proudest symbol of this engagement so far is the 500,000-sq.ft. mixed-use South Campus Gateway, now under construction.

Planning Context

OSU is located at the center of a university district bisected by High Street, the city's historic "Main Street" and primary artery. High Street defines the eastern edge of the campus, and across it lies a highly diverse mix of shops, bars, entertainment venues, and food businesses. The university district itself extends along High Street roughly a mile north and south of the campus.

OSU saw the neighborhoods around its campus change dramatically in the years following World War II. Middle-class families moved to the suburbs, and the businesses and services that those families had supported largely followed. Soon after, the university consciously began to close itself off from the street and adjacent neighborhoods. Most symbolic and devastating, it closed 15th Street, traditionally the front door to the campus, and located a new performing-arts center so as to block visual connection between the campus, High Street, and the university district beyond.

Over these years a social disconnect also began to emerge between the university and nearby, formerly closely associated residential districts. By the mid-1990s more than 60 percent of undergraduate and graduate students lived outside the university district. Meanwhile, new residents of the area were increasingly low-income — predominantly people of color — who replaced what had been a far more racially and economically mixed population.

Concerned that its downtown was losing jobs and tax revenue to increasingly ambitious office parks in its



northern suburbs, the city exacerbated this gulf when it converted High Street into an arterial to enhance accessibility. Arterial status meant removing curbside parking and closing streets that connected residential neighborhoods to High Street.



Then, as disposable income in the area declined and suburban competition exploded, smaller retailers moved out and strip retail began to replace traditional pedestrian-friendly outlets north and south of the campus. Crime also became a concern, further accelerating the departure of students and long-time residents.

Rendering of the South Gateway rendering. Image courtesy of Elkus/Manfredi Architects.

Forming Campus Partners

In 1992 OSU's President, Gordon Gee, took the position that the university and the city should launch a partnership to "stem the tide of neglect" across the university district. Gee proposed that the university should take the lead in planning and funding, and he appointed neighborhood and city representatives as well as members of the university community to a task force to shape a comprehensive revitalization strategy.

The task force considered a wide range of options, from direct university participation in revitalization to creation of a for-profit entity independent of the university. But it eventually recommended formation of a group to be known as Campus Partners for Community Urban Redevelopment under an Ohio statute that confers on "community redevelopment corporations" a wide range of public powers — most notably the ability to carry out eminent-domain takings. The task force further determined that the university would provide essentially all funding and that it would appoint a majority of the board; the other members would be city and community representatives.

According to the task force, there were many arguments for establishing Campus Partners.

- Revitalization should be led by an entity with a clearly defined mission and full-time staff. Flexibility and effectiveness in undertaking planning and real estate development would also be key, and the university could not provide that expertise.
- A clear source of authority was needed separate from the university's own collegial decision-making process.
- Distance from the university structure would be important, both to shield OSU from potential controversy and to inspire community acceptance.
- Despite the need for distance, it would be equally important to take advantage of the university's relationships with alumni, who constituted much of the political, business and civic leadership in Columbus and central Ohio. A university connection would also convey instant credibility and leverage with the city and with major agencies such as the U.S. Department of Housing and Urban Development.
- Finally, the new entity would need to live up to private-sector expectations by playing the dual role of the redevelopment authority (assembling land and handling relocation, demolition and environmental cleanup) and the source of "patient capital" (taking early risks related to planning and market studies, land purchases, etc.).

Incorporated in January 1995, Campus Partners was charged with developing a comprehensive neighborhood revitalization plan and an implementation program for

the university district. To this effort, OSU committed \$3 million in initial operating funds. This was followed by a \$25 million investment from the university endowment for direct real estate investment, including site assembly.

Campus Partners' Early Steps... and Missteps

Campus Partners almost immediately selected a consultant to prepare an encyclopedic compendium of neighborhood revitalization programs and strategies. But controversy soon developed when Campus Partners and its planners were accused of trying to define the future of the university district for its residents, rather than with them.

When it became clear it was making enemies faster than friends, Campus Partners realized it had to change course, learn more about other key players, and develop working partnerships with residents, business owners, the City of Columbus, and local property owners and developers. In particular, local groups did not necessarily give high priority to the kinds of university-oriented businesses that Campus Partners' initial leadership envisioned. Instead, they were more concerned with enhancing neighborhood services and retail establishments, preserving historic structures, preventing university expansion into their neighborhoods, and addressing local political issues.

The city's planning professionals, meanwhile, recognized that they needed to inject public-sector concerns into the planning process, including economic development and job creation, district design guidelines comparable to those developed in other neighborhoods, and troubleshooting to prevent political problems. Finally, housing developers, while initially enthusiastic, grew concerned about competition from new development, possible eminent-domain takings, and access to potential development activities. The perceived lack of a community-based planning process brought the project to a halt by the end of 1996.

In early 1997 Campus Partners' first president resigned and was replaced by Terry Foegler, who had planning and

development experience in both the public and private sectors. Foegler immediately made two critical decisions: to lead with more community-based planning strategy, and to let decisions reflect that broader involvement; and to step back from a district-wide approach and proceed with a series of sequential projects that could be more readily backed by nonuniversity stakeholders.

Reaching Out Anew to the Community

Foegler decided to start by focusing on decline along High Street, and Campus Partners hired Goody, Clancy & Associates to create a vision and strategy for its revitalization.

The new outreach effort began by creating an Advisory Steering Committee chaired by the executive director of the University Community Business Association. The committee included representatives from neighborhood organizations, the city, a variety of university offices, property owners, local businesses and developers, and OSU students.

To resolve the goals of such different stakeholders into a single vision and plan, participants were urged to express their concerns early on. The consultants then organized a two-month education period to explore the range of viewpoints raised by committee members. The goal was not to create a perfect vision and strategic plan, but to arrive at positions that maximized benefits and minimized costs from a variety of perspectives.

As the process reached its midpoint, committee members began to articulate a series of shared perspectives that eventually provided a foundation upon which to build a plan.

Creating a Plan

Once the elements of such a common vision were in place, Goody Clancy began to translate them into a set of urban design principles.

The new High Street would need to be viewed as a common ground, offering a mix of uses and public spaces

Over the years the foursquare, though rarely distinguished, brick buildings that line the street have suffered more from botched attempts at modernization than outright neglect. Their slapped-on facades, out-of-date neon signs, unused upper floors all testify in

one way or another to their owners' doomed efforts to stem the drift of businesses to the suburbs in the 1950s and 1960s where life was newer and parking easier.

The character of the neighborhood is defined more particularly by a quiet and even decorous distance from mainstream culture, so that in local restaurants like Hound Dog Pizza and Whole World Natural Foods you can see old counterculture types and Gen-Xers at neighbor-

to draw on the full spectrum of the community. It would need to be enjoyable as a walkable street. It would need to provide a setting for diverse economic opportunities, including retail and entertainment uses and a wide array of housing options. It would need to be linked to adjacent neighborhoods by reopened streets. Both traditional and cutting-edge design would need to be welcome, reusing and rehabilitating High Street's notable older buildings and creating design guidelines for new development. Finally, High Street would need to be enlivened by a distinctive public realm.

Beginning south of the campus and extending to its northern edge, these design goals led to several significant development recommendations.

- Encouraging a series of new mixed-use developments in the area directly south of the university district, which could build on that area's already strong retail and housing markets.
- Redeveloping the pedestrian-hostile Kroger site with housing and a new street-fronting 60,000 sq.ft. store.
- Refashioning an overcrowded branch library into an important civic building.
- Constructing South Campus Gateway Center, a mixed-use regional destination that might support a wide range of retail and entertainment uses, as well as housing.
- Redeveloping several larger sites from single-story retail to mixed-use, with housing above and retail below.
- Re-creating the historic 15th Street gateway between the campus and the community through mixed-use development and a new University Square public space.
- Transforming several fast-food restaurants into more pedestrian-oriented businesses, and replacing several fast-food restaurants and a convenience store at the north end of the district with a mixed-use development.

Overall, the consultants identified demand for roughly one million sq.ft. of new space in existing and new buildings along a two-mile stretch of High Street.

In addressing this demand, one key strategy component was forming a parking authority through a partnership between the city, the university, and local property owners. The authority would be charged with building structured parking, faced with housing, along public streets.

The plan also called for establishing a special-improvement district to keep High Street "clean and safe." It called for the preparation of development and design guidelines that might protect the district's lively, often historic character. And it called for facade- and building-improvement incentives funded by the city, the university, and private sources, and more than \$5 million in streetscape improvements by the city to enhance the public realm.

Finally, it initiated several strategic redevelopment projects, including the regional mixed-use South Campus Gateway "destination," with a 1,100-car parking structure.

Next Steps

At this writing, working with Goody Clancy, the university and the city have approved the "Plan for High Street: Creating a 21st-Century Main Street" and "Design Guidelines for High Street"; the South Campus Gateway Center is midway through construction; and Campus Partners has initiated a series of additional redevelopment projects along High Street. In this effort Goody Clancy worked with an interdisciplinary consultant team, including the Gibbs Planning Group, which was particularly effective in developing a mixed-use strategy that ensured that new development would include a lively mix of retail, and that the South Campus Gateway Center would be oriented along High Street, avoiding internal atriums. Most recently, Campus Partners has also asked Goody Clancy to work with the city and the residents of nearby Weinland Park to develop a plan to transform that area. Without displacing current residents, its hopes is to transform it from one of the city's lowest-income neighborhoods into a mixed-income community.

ing tables. Two generations, distant enough to be parents and children, coexist with a certain tolerance and a shared fondness for fetish objects like the retro-look Volkswagen Beetle. If I were to learn, sitting among these tables, that some Weathermen or other 1960s radicals had gone under-

ground in this neighborhood with false identities, I would not be surprised.... Hound Dog gently teases the neighborhood style by proclaiming "Pizza for the People" and by delivering in a red Volkswagen with a toy rocket, surmounted by a plastic hound dog, on its roof.

From Nick Howe, "Writing Home; High Street," in *Across an Inland Sea: Writings on Place from Buffalo to Berlin* (Princeton, NJ: Princeton University Press, 2003), pp. 167-68, 179.

Is Public Space a Public Good?

Thomas Fisher

In our country, almost irrationally suspicious of the public sector and seemingly determined to incapacitate government, public space plays an increasingly important role as both a place of refuge for all who get left behind in the rush to privatization, and as a place of resistance for all who see danger in an ever more radical right wing. The University of Minnesota's College of Architecture and Landscape Architecture sponsored a symposium in October entitled "Public Space, Public Good?" that touched on such questions. Organized by faculty member Kristine Miller, the symposium brought together architects, landscape architects, and urban designers to evaluate the state of public space and the nature of the public good in an era in which both concepts have come into question.

Miller led off with a chapter from her forthcoming book on privatized public spaces in New York City. Focusing on the IBM atrium, she asked what recourse the public has when private owners alter spaces intended for public use, as happened when the IBM atrium's original bamboo garden, designed by Zion & Breen, received major modifications. She called for a public role in overseeing the changes to privately owned spaces provided in exchange for bonus space. That, however, will take a public sector in the U.S. that doesn't cower, as so often happens now, in the face of private power.

Architect Frank Mora and landscape architect Ludewijk Baljon showed public-realm projects they have designed in Puerto Rico and Holland respectively. Mora demonstrated that often simple moves, like cleaning up local streets or creating a new neighborhood entrance, can have a transformative effect, engaging the inhabitants and restoring the social infrastructure. Meanwhile, Baljon

showed how a landscape architect could hold together a newly created Dutch suburb, determining not only the major moves, but also the details that link the designs of various architects. In both cases, public space becomes the way to bind together disparate people, reminding us that our professional responsibility includes the health of communities and ecosystems, the safety of our air and water, and the welfare of future generations and even other species.

Landscape architects Dianne Harris and Walter Hood examined the ambivalence Americans have about the public realm. Harris critiqued Chicago's new Millennium Park, an expensive and exclusive public space that offers suburbanites an urban spectacle, complete with the "corporate graffiti" of private sponsors on almost everything. At a time when Chicago's schools and streets badly need money, Harris asked if this constitutes the best use of limited government funds. Hood showed two parks of his design in Oakland, where the local community demanded space for various uses, ranging from an open market to public toilets. In the end, Hood suggested, the public should make the ultimate decisions about the use of such spaces.

Architects Linda Schneekloth and Robert Shibley spoke about public space at a very different scale, the entire Niagara region. They proposed the idea of "ethical theming" to embrace those who often get overlooked in the typical branding of a region to attract tourists. At Niagara, this concept would involve seeing the Niagara River not as an edge separating two countries, but as the center of a single region. Politicians and planners have long depended upon boundaries and edges to separate people and thus reduce conflict—a substitution of distance for discourse that has reached a point where people

rarely encounter anyone or anything by chance anymore. As a result, many people fear real public space because they lack experience with it.

Yet, the resolution of such public conflicts may be the most important contribution design can make in our world, evident in the examples of traditional public spaces discussed by historian Marc Trieb and landscape architect Laurie Olin. Trieb described the design of Senate and Market Squares in Helsinki, two spaces that, while close together and roughly the same size, have very different functions and characters based on what surrounds them. Public space, in other words, depends for its vitality on the surrounding private property, just as the value of the latter depends upon the quality of the former. Olin recounted his work on the restoration and revitalization of New York's Bryant Park, where the quality of life in the space depends on improved design, management, maintenance, and programming, all working together.

The symposium ended with a spirited conversation among the participants. Do we have too much public space, asked Hood—more than we can afford? In reply, Olin asked, rhetorically, why we even have parks, or why we care about public life. Such questions reflect the embattled quality of public space in the age of terrorism and privatization. Public space has certainly become the stage on which the global struggle between the rich and poor, the disingenuous and the disenfranchised, now gets played out. Some might reasonably wonder if such problems would vanish if we were to get rid of all public space. But terrorists have shown themselves adept at creating public space faster than we could ever take it away. The World Trade Center towers, almost entirely private property, became a

GreenBuild 2004

Mara Baum

global public space as soon as the first plane hit on 9/11. We cannot escape public space, so we have no choice but to understand it.

Shibley then asked if the fear or misunderstanding of public space comes from a paucity in the language we use in talking about it. Were we to talk about social space in all of its diversity, rather than the somewhat singular idea of public space, we would have a better understanding of it. Such space would certainly not remain, as Miller said, what is left over from what the law defines as private property. Understanding the social gradients of public space, added Trieb, would help us see that it can happen anywhere, on public or private property.

Likewise, the fear of public space can be addressed, said Moya, by seeing it as a way for us to deal with our cultural differences. It is a place, said Olin, in which a variety of people can meet in safety. The symposium ended with a recognition of the paradoxical nature of public space in our time: people fear such space because they feel vulnerable in it; yet they need it more than ever, for it will enable them to interact with others and overcome that fear.

It may sometimes seem that everything worthwhile has been either privatized or mediated, but we should not be fooled. How we deal with the public good globally will determine whether or not this century will be more peaceful or more war-torn than the last. And how we deal with public space locally will determine whether or not our communities will be more united or more divided than in the past. Public space may, in the end, be the ultimate barometer of our civilization, the gauge against which we can measure whether we are a country or just a collection of individuals living in fear of one another. For all of our good, let us hope it is not the latter.

Few professional organizations grow by over 1,000 percent in just four years, but the U.S. Green Building Council has gained such momentum. More than 8,000 people attended its three-day annual conference (known as the GreenBuild Expo) in Portland, Oregon, last year. That represented a 90 percent increase from the first such event in 2002. This year, USGBC anticipates an attendance of more than 10,000 at its 2005 meeting in Atlanta.

USGBC has now become the leading national organization to promote and educate green building, and GreenBuild has become the must-go conference for industry professionals. Meanwhile, the council's growth in numbers has led to a parallel growth in vision and scope. Today the USGBC's membership and influence are spreading both beyond the United States and beyond buildings.

Major Initiatives

Founded in 1993, USGBC today represents a coalition of 5,300 member organizations, including professional firms, government agencies, product manufacturers, research institutions, universities, and nonprofits. Its mission is nothing less than to transform the construction industry to embrace high-performance green building standards.

USGBC's primary product to date has been the LEED (Leadership in Energy and Environmental Design) rating system, a means to measure and define high-performance buildings. USGBC released a pilot version LEED for new construction in 1999. It now has LEED versions for new construction, existing buildings, and commercial interiors. And today several other LEED programs, including one for neighborhood development, are under development.

The LEED system has already demonstrated how USGBC, as a

broad-based coalition, can leverage its diverse knowledge and collective power to change the industry. As of August 2004, 195 million square feet of new construction had either achieved LEED certification or was in the process of doing so.

The GreenBuild Expo is USGBC's second major initiative. This year's GreenBuild covered a variety of subject matter, including architecture, urban design, mechanical engineering, interior design, planning and public health. Attendees at the Nov. 10-12 event were able to choose between a dozen attractions, including the expo floor with 480 exhibitors, a master speaker series, and ten simultaneous learning sessions.

The educational sessions included such diverse topics as "Sustainable Housing in a Global Context"; "Green From the Developer's Standpoint"; "Are We Poisoning Our Progeny?"; "Waste is Food' — Integrating Waste Recovery into the Construction Process"; and "Visionary and Applied Approaches to Sustainable Design and New Urbanism." But more than one-fifth of the sixty learning sessions at the recent conference (an average of two per time slot) discussed planning, urban design, or global issues beyond the scope of a conventional architect or mechanical engineer. Such breadth showed how USGBC is attempting to communicate the need for sustainability at all scales — from that of the building component to that of global resources.

Welcoming the Chinese

Attendance by representatives of the Ministry of Construction of the People's Republic of China at this year's GreenBuild emphasized the conference's increasing global importance. With more than 2 billion square meters of new space built each year, China has become one of the

GreenBuild 2004

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broad-based coalition, can leverage its diverse knowledge and collective power to change the industry. As of August 2004, 195 million square feet of new construction had either achieved LEED certification or was in the process of doing so.

The GreenBuild Expo is USGBC's second major initiative. This year's GreenBuild covered a variety of subject matter, including architecture, urban design, mechanical engineering, interior design, planning and public health. Attendees at the Nov. 10-12 event were able to choose between a dozen attractions, including the expo floor with 480 exhibitors, a master speaker series, and ten simultaneous learning sessions.

The educational sessions included such diverse topics as "Sustainable Housing in a Global Context"; "Green From the Developer's Standpoint"; "Are We Poisoning Our Progeny?"; "Waste is Food' — Integrating Waste Recovery into the Construction Process"; and "Visionary and Applied Approaches to Sustainable Design and New Urbanism." But more than one-fifth of the sixty learning sessions at the recent conference (an average of two per time slot) discussed planning, urban design, or global issues beyond the scope of a conventional architect or mechanical engineer. Such breadth showed how USGBC is attempting to communicate the need for sustainability at all scales — from that of the building component to that of global resources.

Welcoming the Chinese

Attendance by representatives of the Ministry of Construction of the People's Republic of China at this year's GreenBuild emphasized the conference's increasing global importance. With more than 2 billion square meters of new space built each year, China has become one of the

world's largest construction markets.

At the conference, Vice Minister Qiu Baoxing unveiled a dramatic green building program aimed at reducing China's energy consumption by 65 percent by 2020. To meet this ambitious goal, the program would essentially rebuild or reshape a sizable portion — 25 percent in large cities — of existing Chinese buildings, completely overhaul the way new buildings are built, and power 80 million square meters of space with photovoltaics and other renewable energy sources.

Baoxing and other Chinese speakers at GreenBuild encouraged American and European green-building firms to work in China — though they suggested that Western companies should focus on understanding Chinese culture before jumping into the market. To get their initiative started, the Ministry of Construction is also planning a new National Green Building Innovation Award, and it is sponsoring a March 2005 “International Intelligent and Green Building Technologies and Products Conference & Expo” in Beijing.

China has serious environmental problems, and its government clearly realizes that it must move swiftly to curtail them. What is not clear, however, is whether China will have the political will and technical capacity to attain its goals. As professionals in the United States and elsewhere have learned, there is much difficult ground between discussing broad-based green policies and implementing green-building programs on the ground.

Only time will tell what the outcome will be in China, but a few projects do give a reason to hope. Though not energy-related, the “Canal Restorer” on the Baima Canal in Southern China was arguably one of the most successful out-of-the-box international case studies presented at GreenBuild. On an urban stretch

of canal, Ocean Arks International of Burlington, Vermont, designed and installed a floating walkway system to treat waste generated by an equivalent of 12,000 people. The walkway employs a lining of plants and micro-organisms that naturally breaks down the effluent, allowing a once-fetid waterway to be transformed into a pleasant, urban garden that showcases more than twenty species of native Chinese wetland plants. This project demonstrates how China has the potential to leapfrog over the conventional infrastructure projects of the developed world, moving straight to more ecologically intelligent systems.

Other International Initiatives

Though China dominated the international scene at GreenBuild 2004, their representatives were far from the only foreign presence. Conference participants came from 22 nations, including a handful of representatives to the World Green Building Council.

Formed two years ago by David Gottfried, a founder of the USGBC, the World Green Building Council is “a federation... of national Green Building Councils whose common goal is the sustainable transformation of the global property industry.” It has grown to include the councils from Australia, Brazil, Japan, Spain, India, Canada, the United States, and, most recently, Mexico (whose representatives announced the formation of the Mexico Green Building Council at GreenBuild 2004).

China is also in the process of forming a national green building organization, with the eventual goal of joining the World Green Building Council. But, overall, China had to share much of the international limelight at this year's meeting with India. At the meeting, USGBC announced it had both signed a LEED licensing

agreement with India and awarded a LEED platinum rating to the ITC Group of India. Platinum is the highest achievement within the LEED system. Interestingly, of the seven platinum buildings in the world, two are in India.

Growing Pains

Expansion in membership, scope and vision will undoubtedly help the USGBC attain its goals, but it will not come without some controversy. Some industry professionals, for example, believe that the organization has become too commercial. They claim that individual product manufacturers are too visible, and that GreenBuild has become one large advertisement.

In parallel, this past year the USGBC came close to granting trade associations membership status. Though ultimately defeated, this measure would have given veto power to organizations whose primary role is to increase market share for the products they represent.

Another troubling development is that internal organizational dynamics and market changes have delayed the release of a new version of the LEED rating system for new construction for several years — at the same time that the current version is becoming outdated and inadequate. These challenges are necessary hurdles in the growth of what has become a dynamic organization, and they will continue to play out over the next few years.

Resources

US Green Building Council <http://www.usgbc.org>

World Green Building Council <http://www.worldgbc.org>

GreenBuild Expo <http://www.greenbuildexpo.org>

Gardens of an Historic Cowper Street Residence

John N. Roberts



Kathleen Norris was the most prolific and successful romance novelist in the country during the 1920s, 30s and 40s. At one point she reportedly earned more money than President Herbert Hoover and Babe Ruth combined.¹ In 1927 Kathleen and her husband Charles moved to Palo Alto, California, and built a stunning house in the Spanish Colonial Revival style. The house quickly became the center of the social world of Palo Alto, Stanford University, and the whole San Francisco Peninsula.

Local architect Birge Clark carefully sited the Norris House within an old oak woodland near downtown Palo Alto. He designed the building with a keen sensitivity to the local environment and a clear vision of the Spanish/

Mexican/Californio architectural heritage. The elegant proportions, gracious flow of space, indoor-outdoor relationships, and fine finish materials make it an architectural jewel. The building is now deservedly listed on the National Register of Historic Places, cited for its architectural design as well as the literary and social prominence of the original owners.²

Less well recognized than the landmark building is the cultural heritage of the site. The identity of this place is linked directly with its landscape setting, embodied in and symbolized by its magnificent oak trees. On the advice of Clark, the Norrises had purchased a specific lot at the corner of Cowper Street and Melville Avenue because of

its mature trees. In his memoir about the Norris House, Clark described how the preservation of these trees “... added immeasurably to the instant photogenic character of the house.”³ For Kathleen, the trees also evoked layers of memory. When she wrote about her new house in *Country Life* in 1929, she included reference to the “dozen memorial oaks” there, followed by a provocative muse on “just what makes trees memorial.”⁴

These trees and their supporting natural system provide a touchstone for this article. As part of a vast inter-

connected woodland, they began life before Europeans arrived. They matured during the Rancho era, shading *vaqueros* and grazing cattle. The woodland survived the construction of a grid of city streets in the late 1800s. And, at an age of more than 150 years, the trees inspired one of California’s great buildings. Now, in decline, the surviving oaks tower over new gardens and shelter a reemerging woodland. By looking back at the history of human relationships with the Cowper Street landscape, one can discover a multilayered identity of place.



Opposite: Norris House rear courtyard in 1929. The dramatic plantings at the base of the building complement the building style and are compatible with the local climate. The extensive irrigated croquet lawn, however, is incompatible with the native oaks, and led to their demise. Photo by Burton Crandall, courtesy Palo Alto Historical Association.

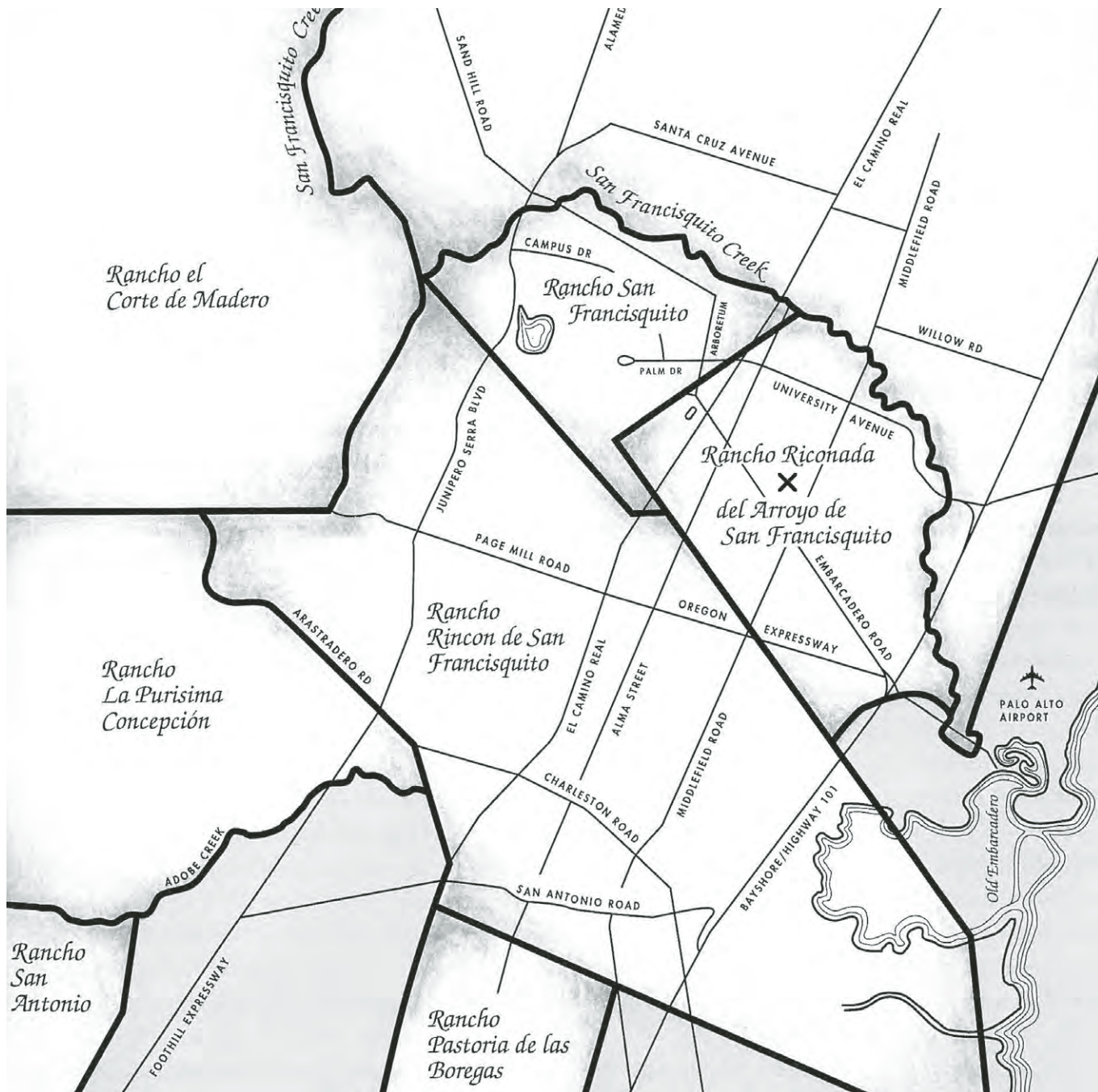
Left: Millions of acres of native oak woodlands have been lost throughout California. Many were converted to hayfields, as this image of Palo Alto at the turn of the twentieth century shows, before they finally succumbed to the pressures of urbanization. Photo courtesy of Palo Alto Historical Association.

Right: The Cowper Street site contains remnants of once vast oak woodlands that, in their natural state, looked much like this typical northern California “closed canopy” oak woodland. Photo by author.



Pre-European Landscape

Early explorers and scholarly histories describe Palo Alto’s natural environment as a mosaic of woodland, savanna, grassland and marsh, interwoven on a gently sloping plain, and cut by densely wooded streams. Within such a climax landscape, the Cowper site would have occupied the wooded edge of a grassy plain, about two miles south of San Francisquito Creek. Typical of areas with wet winters and hot, dry summers, the dense, moisture-loving riparian forest of the creek would have given way to mixed Live and Valley Oak groves along its bank-top, and then to tree-dotted savannas and open grasslands farther from the water. Such a pattern would have extended for several miles



in each direction, making the Cowper site's oaks part of an ecological continuum between the creek and the seasonally dry uplands.

Evidence of an ancient village has been found near San Francisquito Creek in the vicinity of the Cowper site. Early residents of the area lived near the trees, where fresh water was available and where they had easy access to nearby tidal marshes. The residents further manipulated the ecosystem by setting grassland fires to clear out brush and create an open landscape of grasses and forbs beneath fire-tolerant oaks. Burning also stimulated greater quantities of seed the following season, increased forage for deer, and made the harvesting of acorns easier.

Early-twentieth-century anthropologist Alfred Kroe-

ber has estimated that acorns were the primary daily food source for more than three-fourths of all native Californians.⁵ But in addition to providing for their subsistence, oaks and their acorns provided medicines, dyes, and spiritual symbols for the native peoples of California. Oaks were such an important part of the local landscape that early missionaries referred to the Santa Clara Valley, where Palo Alto is located, as "Llano de los Robles," or Plain of Oaks.

The Ranchos and Early Palo Alto

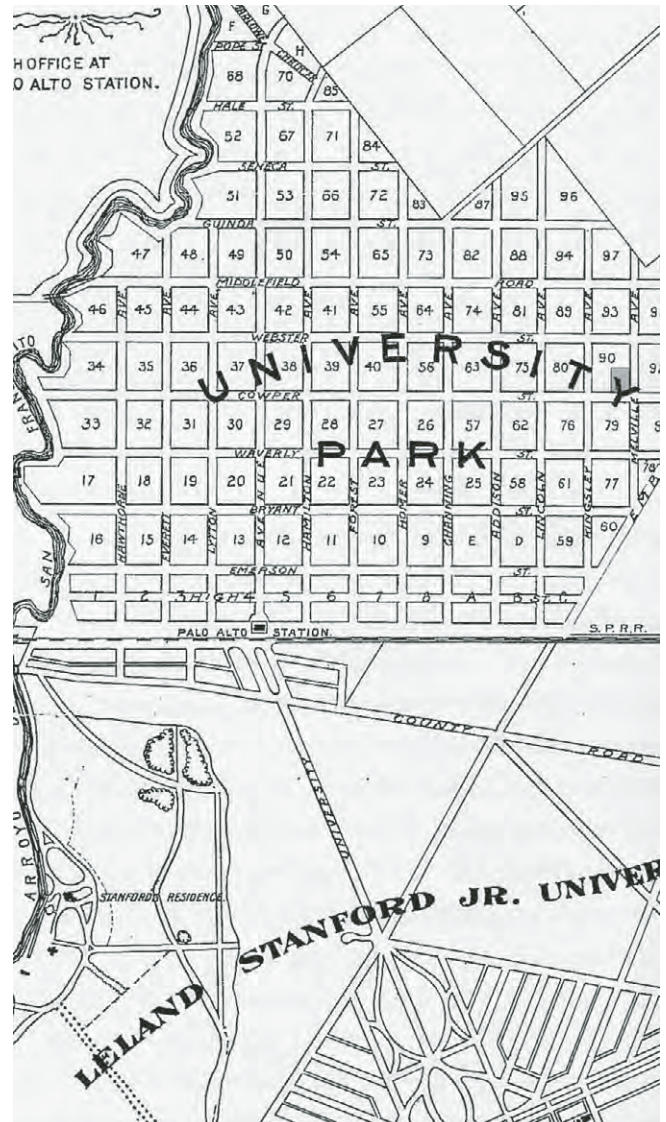
Beginning in the mid-eighteenth century, European immigrants wrested the land from the Coastanoan people and fundamentally changed the landscape around Palo Alto. Their first settlements were often missions and pueb-

los that concentrated the native population, but ranchos were also established, bringing intensive farming and millions of grazing animals. Within the Spanish/Mexican system of land grants, the Cowper site was part of the 2,200-acre Rancho Rinconada del Arroyo de San Francisquito, which ran along the lower reach of San Francisquito Creek from the upland plains to the bay. This rancho was also a center of local commercial traffic, connecting El Camino Real (the Royal Road) with an *embarcadero* (port) on San Francisco Bay.

Unlike the native population, the new culture valued the local grassland for its commercial and agricultural potential. Imported cows were sources of leather, tallow and meat that could be sold in distant markets. By contrast, the oak trees were valued for shade, lumber and fuel—but not for food. Thus, although the lands might not have changed much in appearance, the landscape beneath the trees changed profoundly. Intensive grazing killed off the native perennial grasses; exotic annual grasses took over, slopes eroded, streams were downcut, and most oak seedlings were eliminated. As elsewhere in California, where millions of acres of oak-covered land were eventually cleared, by the time the City of Palo Alto was founded, much of the area's woodland had been converted to hay fields.

As David Streatfield has pointed out, the architecture and gardens of the early ranchos reflected the familiar patterns from Spain and Mexico, but at a more humble scale, and as adapted to the local climate.⁶ The *rancheros* managed their vast cattle empires from places like General Mariano Vallejo's Casa Grande (Big House), built in the 1830s and still standing in Petaluma seventy miles north of Palo Alto. The buildings were usually adobe and wood, with central work courts surrounded by residential quarters for the *vaqueros* and *padrones*. Daily life occurred in these courtyards, where food was cooked, leather processed, and tallow made. Much of the romance about early California flowed from nostalgia for such places—favorably sited in response to the climate, overlooking a pastoral landscape, and symbolic of unbridled, easily available wealth.

The rancho life proved fleeting, however. The flood of settlers to California after the 1849 Gold Rush brought new ideas about how to live, and new forms of construction reflected their diversity of origin. New patterns of settlement also capitalized on vast new wealth, a benign climate, massive diversions of water, and the cultivation of non-native plants in commercial nurseries. In the early 1850s, General Vallejo himself, the major figure of Mexican California, embraced the latest fashion and built a clapboard house with Gothic details surrounded by a picturesque



Opposite: The system of Spanish/Mexican land grants near present-day Palo Alto, overlaid with current major roads and new shorelines. The Cowper Street site is near the intersection of University Avenue and El Camino Real, just south of San Francisquito Creek. Map by Stanford Publication Services, Courtesy of Palo Alto Historical Association.

Above: In the late nineteenth century the land south of San Francisquito Creek, now part of the City of Palo Alto, was subdivided into blocks and lots for sale to people attracted by the newly founded Stanford University. The Cowper Street site is located on the southeast quadrant of block 90, just beneath the "Y" in University Park. Map, from 1889 promotional brochure, courtesy of Palo Alto Historical Association.

English-style garden and generous lawn.

One result of these changes was that by 1889, five years before the City of Palo was incorporated, most of Rancho Rinconada del Arroyo de San Francisquito had been subdivided into city lots. The streets were cut straight through the remnant oak woodland as a simple grid between San Francisquito Creek and the rancho's old Embarcadero Road. In legal terms, the Cowper Street parcel occupied the southwest quarter of Lot #90, bounded by Cowper St.,

Melville Ave., Webster St., and Kingsley Ave. It was located in an area named "University Park," marketed as a "tract of beautiful oak-park land" to staff, students and others connected with the recently created Stanford University.⁷

Within this new system of landscape values, individual oak trees were prized as objects or trophies to be owned, coveted and displayed in exotic new gardens. Ironically, however, in the years that followed, the bounty of life in the new city destroyed many of the area's trophy trees.



For many years it was any house, and all houses. We were going to build it some day, somewhere. It was nothing: it could be anything.

Then suddenly, from a thousand dreams of ravishing Paris gambrels, prim New England windows flanked by green blinds, Georgian doorways delicate in scrolls, square brick Colonial mansions painted creamy white, Italian terraces set with delicate statues, and the half-timbered,

oak-roofed beauty of the homes of Shakespeare's day, it finally emerged into infinite cloisters and grilles and patios with red tiling. It was to be a Spanish House.

This was partly because it had to be in California, and on the lot there already stood a dozen memorial oaks. Just what makes trees memorial one is never sure, but if elms can be, oaks can be, and these great oaks look every inch memorial. There

were peppers too, and eucalyptus trees, and combined with them a semi-arid climate that encourages the idea of fountains and balconies and awnings. So that the first thing we decided about it was that it should be truly Spanish.

— Kathleen Norris, "My Spanish House," *Country Life*, March 1929, p. 40.

People became comfortable with plentiful water delivered by elaborately engineered systems of reservoirs, pumps and pipes, and as summer-irrigated gardens became the norm, they also activated a deadly fungus in the soil.

Once again, the cultural values of the residents transformed the landscape, but this time to the oaks' detriment. Long acclimated to California's dry summers, the old trees could not survive irrigation or frequent disturbance to their delicate roots, and they slowly began dying off.

The Norris House, 1927 – 1946

After Kathleen and Charles Norris bought the Cowper Street property their first action was to remove a Victorian house already built there. Like other houses built by wealthy Californians in the early twentieth century, their new home would reflect the open architecture and simple, informal lifestyle popularized in the novel *Ramona* by Helen Hunt Jackson.⁸ Jackson's novel had mythologized a nineteenth-century rancho lifestyle whose harmony with the local environment contrasted vividly with the excesses of her own era. More specifically, its literary imagery evoked a fusion of the Mexican adobe/courtyard and New England garden that had evolved primarily in the homes of Yankee settlers who had intermarried with the locals.

Like others of her generation, this image appealed greatly to Kathleen's own creative imagination. She even named her house La Casa Abierta (the Open House). It "was going to look like one of the rambling, irregular, slipshod, lop-sided, untidy old farmhouses on the road to Valladolid," she wrote. Passers-by would "behold it" and see it was "... not a cheap modern affectation, but the real thing."⁹

Birge Clark translated these desires into form by creating a series of courtyards, with an easy flow between indoor and outdoor spaces, shady overhangs, and direct connections to the gardens. Locally produced tiles and metalwork added richness to the simple building forms. Appropriate to climate and setting, the courtyards served both as gardens and outdoor rooms, and they made good use of twelve memorial trees on the property.

Yet while the Norrises' house was a fine twentieth-century version of Spanish Colonial/Californio architecture, its grounds bore little resemblance to the reality of the dry California landscape. Kathleen, the romance novelist, wrote about begonias, roses and creepers in the courtyards, and "dashing desert cactus and whale-back cactus and stiletto cactus thrusting up their bold spears against the creamy walls."¹⁰ Such dramatic plants, well suited to the building style, the climate, and Kathleen's own romantic notions, do appear in historic photos of the building. But

Charles and Kathleen were also avid croquet players, and the Cowper Street lot contained a large croquet lawn similar to that at their old house in Saratoga, California. The genteel image of croquet players on an acre of lush green lawn beneath shady oak trees was in stark contrast to that of a *vaquero* shading himself in a dusty court outside an "untidy old farmhouse."

Meanwhile, the extensive irrigated garden that the Norrises installed and maintained also accelerated the decline of the mature oaks. Other homeowners on the San Francisco Peninsula, and in California in general, were unknowingly doing the same. David Streatfield has described how many other estate gardens of the era had large mown lawns beneath groves of ancient oaks.¹¹ When the current owners bought the property in 1999, only two of the Norrises' memorial oak trees remained.

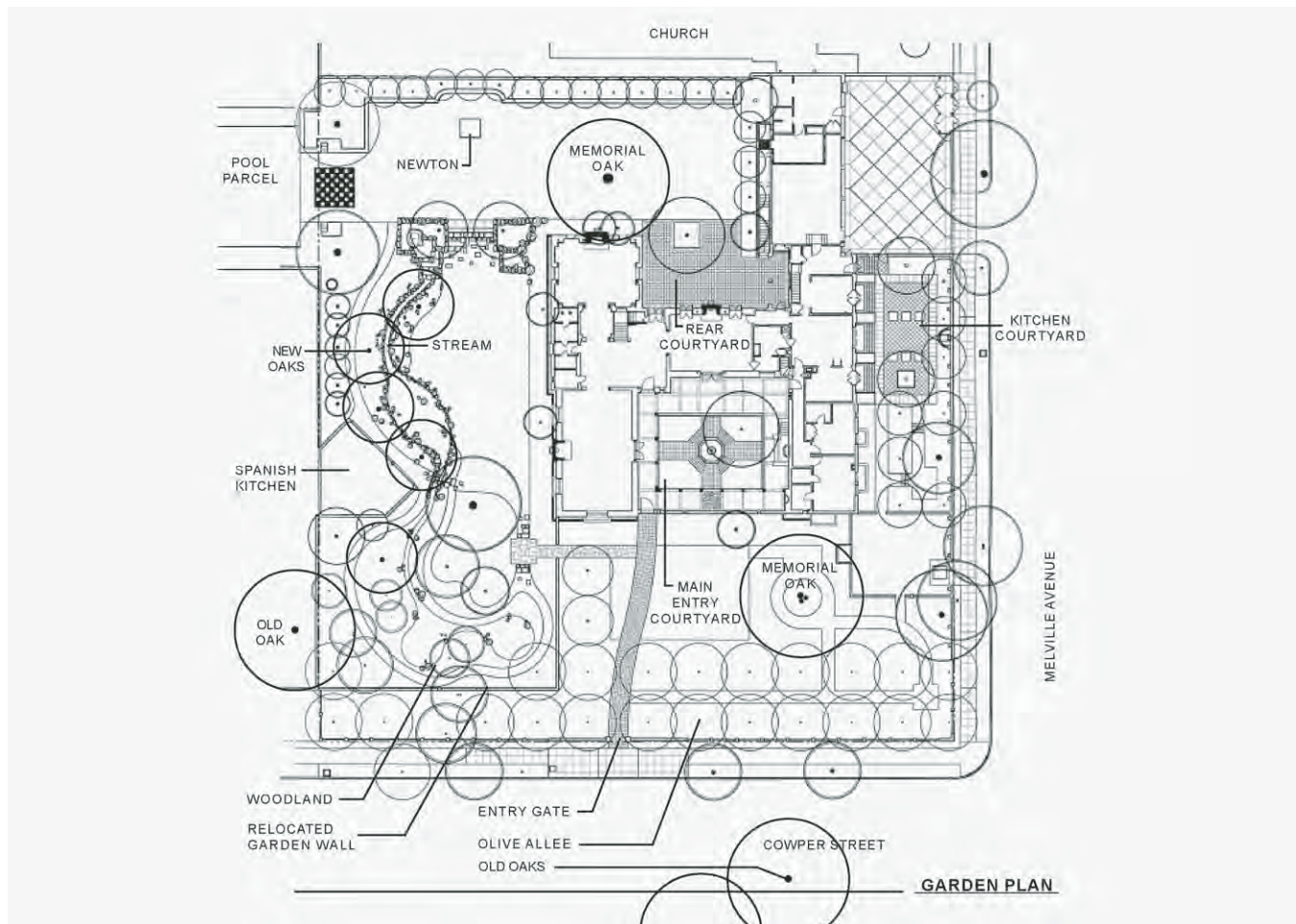
Clearly, the Norrises did not intend that their site developments would kill the very trees that had so inspired them. They were simply at the forefront of a twentieth-century culture, guided by comfort, fashion and myth, which valued the oak tree as a symbol while ignoring the ecological system that had created it.

Restoration: 1999 – Present

After Kathleen Norris sold the property in 1946 it changed hands several times before the Catholic Church finally bought it in 1949. A year later the church attached a chapel to one end of the house, and converted the house into a dormitory for priests. The church owned the property for the next fifty years, until a family with two young children and an interest in architectural heritage bought the house in 1999 with the intention of returning it to use as a single-family residence. They hired Tom Hardy, with Page & Turnbull of San Francisco, to restore and renovate the old building, and they hired John Northmore Roberts & Associates of Berkeley to design the gardens. It quickly became evident to these designers that the landscape and cultural heritage of the place was richer than that of the period associated with the National Register building.

In terms of the landscape, for more than half a century student priests had been in charge of maintaining its gardens, and the condition of these spaces had deteriorated markedly. However, the area within the garden walls had received more attention than that outside, and this pattern

By 1999, a dense cluster of mature young native oak trees, visible in the center of the photo, had formed in a neglected corner of the Cowper Street lot. It is likely the trees sprouted from acorns of the larger old tree visible on the neighboring property to the left. Photo by author.



had produced a most interesting consequence. Within the walls, the gardens had evolved into an easily maintained combination of lawn and Algerian ivy with remnant trees and a few ornamental shrubs. Meanwhile, the more remote spaces outside the wall had been increasingly neglected and become a haven for a mix of weedy plants.

More importantly, during the long period of church occupancy, a small native oak woodland with some undergrowth had reestablished itself across property lines, as it might have in pre-European times. The trees sprouted from acorns dropped from nearby ancient trees and “planted” by squirrels. By 1999 a dense cluster of new trees had formed, with the oldest about forty years of age. The woodland was scruffy, with some exotic vegetation — but it was flourishing. Its presence provided a clue to how the new gardens might be structured. This could follow what Mark Francis and Andreas Reimann have called “an eco-

logically sustainable garden.”¹² Working with, rather than against, the site’s natural ecology, historically significant features could be restored, new uses established, and the layers of human influence more fully acknowledged.

Three general principles today form the basis for the redesign of the Norris House gardens. First has been to establish the place of the garden within its authentic landscape. This has involved recognizing and expanding the existing oak ecosystem and facilitating its future extension to adjacent properties. Second has been to restore and enhance the historically significant courtyards of the National Register building. Third has been to design new outdoor spaces that will serve the needs of the young, active new owners.

The landscape plan also attempts to preserve the site’s two remaining memorial oaks to the extent possible. These trees are in decline, but the new garden plan minimizes

irrigation in their root zones and replaces lawn and weedy undergrowth with compatible native plants and permeable surfaces. At the same time, plantings of new native oaks and understory shrubs along the length of the lot have extended the woodland, created a new natural setting for the rest of the gardens, and reinforced an ecological link with neighboring lots.



The Gardens as a Whole

The history of the grounds at the Norris house reflects the complexity of interaction between human groups and their surroundings. Successive inhabitants have imprinted their cultural values on the place with particular respect to

Opposite: Plan of the new gardens on the site by John Northmore Roberts & Associates.

Left: Norris House entry courtyard in 1929. The house was conceived as a courtyard home with an easy flow between indoor and outdoor spaces, shady overhangs, rich tile work, fountains, and lush plantings. Photo by Burton Crandall, courtesy Palo Alto Historical Association.

Right: The main entry courtyard was restored in 2001 to reflect the historic character of the National Register building. A madrone tree has replaced the oak that died, tile-work and the fountain were restored, and the planting beds are filled with herbs. Photo by author.

its trees. At the same time, the oak woodland has evolved at its own pace, responding to the imperatives of underlying ecological processes as well as the varied human interventions.

In the early twentieth century the Norrises were part of a culture that idealized its landscape and modified specific features of it to match their romantic notions of life in early



California. These were different features than those that had held commercial appeal for its former rancho residents, or that had served the subsistence or spiritual needs of Native American residents before that.

Today, under its present ownership a new shift has taken place. Among other things, this new perception of landscape value reflects interest in natural systems which transcend private property lines, blurring traditional European-based distinctions between the commons and private lands. In this regard, the current redesign suggests elegant and environmentally sound ways of designing for intimate human use while linking to broader ecological patterns.

One curious result is that Kathleen's unusual "Spanish Kitchen," originally a garden structure at the edge of a lawn, is now a pavilion set into a wooded garden (which in turn is part of a larger forest). The majestic oak tree that

towers over all here sprouted before Europeans arrived, and it has survived centuries of change. Today it offers a glimpse of the original setting for the house beneath it, which was designed to remind us of an earlier era. Meanwhile, the back of the chapel in the distance reflects the fifty years of church ownership, and the lawns between are a remnant of a century and a half of urbanization.

The redesign of this garden is located squarely within the ecologically conscious culture that has been emerging in California since the 1960s. This garden is the conceptual offspring of such seminal California projects as the Sea Ranch, which aspire to blend human habitation with protection of living natural systems. But in this case it is done at the scale of a single home. As Francis and Reimann have pointed out, "... the designed landscapes around our homes and community spaces can become the crucible of an environmentally sound and culturally expressive world."¹³

The new garden design does not try to re-create a pre-European or Rancho-era landscape, or even fully restore the gardens of the Norris years. Nor does it attempt to create a radically new place for the new inhabitants. Instead, it tries to find a new and mutually supportive balance among the forces that have shaped this landscape. For the first time in centuries, the underlying ecological system has deliberately been encouraged to reassert itself and to structure the way this site is used.

Notes

1. Ann Douglas wrote as follows about Kathleen Norris in her 1995 book *Terrible Honesty: Mongrel Manhattan in the 1920's* (New York: Noonday Press/Farrar, Straus and Giroux): "Kathleen Norris was the most interesting novelist of feminine and matriarchal sentimentalist essentialism in the 1910s and 1920s; vastly popular, with a curious literary style that seems to owe a good deal to Henry James, she developed the themes that would dominate the soaps of early radio, aroused the ire (and perhaps envy) of Dorothy Parker, was adored by Alexander Wollcott (always a fan of the matriarch), and took care of Elinor Wylie's stepchildren (they were related by marriage); forgotten today, she is well worth in-depth study. Of particular interest are her novels *Joselyn's Wife* (Garden City, NY: Doubleday, 1918), in which the heroine is a potent emblem of "wizardry"; *Martie the Unconquered* (Garden City, NY: Doubleday, 1917), whose heroine is robust, wide-eyed, and extremely ambitious; *Harriet and the Piper* (Garden City, NY: Doubleday, 1920), a tale of eminent upward mobility via marriage; *Second Hand Wife* (1932), a study of heroic feminine self-sacrifice; and *Beauty's Daughter* (1935), a fictionalized manual on how-to-hold-your-man that contains Norris's richest character study in the heroine's mother, Magda, an aging, acerbic, colorful ex-actress."
2. Page & Turnbull, Inc., "1247 Cowper Street, Palo Alto, 'La Casa Abierta,'" Historic Resource Study, San Francisco, CA, 2000.
3. Birge Clark, "Comments on the Charles and Kathleen Norris Residence and How

It Was Planned," correspondence to Palo Alto Historical Society, Nov. 14, 1974.

4. Kathleen Norris, "Spanish House," *Country Life*, March 1929, pp. 40-43.

5. Alfred Kroeber, as cited in Bruce M. Pavlik, Pamela C. Muick, Sharon Johnson, and Marjorie Pepper, *Oaks of California* (Los Olivos, CA: Cachuma Press and the California Oak Foundation, 1991), p. 96.

6. David C. Streatfield, *California Gardens: Creating a New Eden* (New York: Abbeville Press, 1994), pp. 31-35.

7. Ward Winslow and the Palo Alto Historical Association, *Palo Alto: A Centennial History* (Palo Alto, CA: Palo Alto Historical Association, 1993), p. 40.

8. Helen Hunt Jackson, *Ramona* (Boston: Roberts Brothers, 1884).

9. Norris, "Spanish House," p. 40.

10. Ibid., p. 42.

11. Streatfield, *California Gardens*, pp. 44-45.

12. Mark Francis and Andreas Reimann, *The California Landscape Garden: Ecology, Culture, and Design* (Berkeley and Los Angeles: University of California Press, 1999), p. 86.

13. Ibid., p. xiii.

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