

How colleges came to think that their campus layout, landscape, and buildings can enhance educational purposes.

Frederick Law Olmsted and the Origins of Modern Campus Design

David Schuyler

During the second half of the 19th century the design of America's college and university campuses became an issue commensurate in importance with the curriculum and pedagogy. One of the persons who was most active in promoting this new interest in campus layout and landscape was Frederick Law Olmsted (1822-1903), a one-time Connecticut farmer, a well-known author, co-designer of New York City's Central Park, Secretary of the U.S. Sanitary Commission during the first two years of the Civil War, and self-taught landscape architect. He introduced ideas about campus planning and landscaping that still animate much of contemporary university planning.

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The second half of the 19th century was a remarkable time, the years when some of the nation's oldest colleges evolved into modern universities, when passage of the Morrill Act (1862) ushered in a massive building program for new, publicly supported institutions of higher education in each state, and when new colleges were established to meet the higher educational yearnings of young women (Eddy 1956; Horowitz 1984; Nevins 1962; Veysey 1965). These new directions in higher education stimulated a vigorous if fragmented debate about the role of colleges in American society. But they also raised questions about the optimal locations of a campus, about student housing and discipline, about architecture and landscape design, and about the relation between physical space and sense of place.

The fate of these new or expanded colleges and universities, especially the land-grant institutions created by the Morrill Act, became a matter of intense personal and professional concern for Olmsted. That he would devote so many creative hours to the design of institutions of higher learning might at first appear surprising. A serious eye infection had cut back his own school-

ing, and in the 1840s he had derided college as “a most grievous nuisance.” Yet as early as his 1850 walking tour of England and the European continent, Olmsted recognized that education could be an important means of furthering his goal of refining and civilizing American society. He believed deeply that the American nation of immigrants needed arrangements and institutions which

Olmsted's belief: the physical environment was an essential component of the education.

would refine tastes, raise the level of thinking, and civilize people to behave in a harmonious, tolerant manner. Olmsted was also a devoted republican, and his many public parks were an attempt to bring together persons of all social classes and ethnic backgrounds in an attractive urban setting.

The issue underlying the new land-grant colleges and the old private colleges and state universities that were adding new schools of engineering, agriculture, and science, Olmsted explained to his friend Charles Norton in April 1866, was whether the new and expanding colleges could be “democratized,” whether they could combine the education of “head-workers and hand-workers.” He found some preliminary results disheartening. Two recent graduates of Yale’s Sheffield Scientific School informed him that students who followed Yale’s classical curriculum treated Sheffield’s professors and students as social inferiors. Olmsted sought a way to prevent such “artificial distinctions” and found it in a common curriculum that all students would pursue for at least a year. During that time, he believed, students would form friendships without regard for their fellows’ choice of career. “Alma Mater,” Olmsted asserted, “should be the mother common to all classes.”

Olmsted prepared designs for at least nine colleges and universities in the decade after the Civil War, perhaps as many as eleven.

His approach to campus planning emphasized the importance of outdoor spaces for healthful recreation as well as the creation of an optimal setting in which education, broadly conceived, would take place. Olmsted’s designs for collegiate institutions incorporated the naturalistic landscape aesthetic he employed in park and residential design during these years, which built upon the legacy of Andrew Jackson Downing, the nurseryman-author whose immensely popular writings promoted the civilizing influence of picturesque, naturalistic gardens and domestic architecture in the pre-Civil War era (Schuyler 1996). The campus plan would respect topography, with drives and walks following the contour of the land, rather than impose a formulaic grid or quadrangle upon it.

The campus landscape should not only be a handsome setting for appropriately designed and scaled buildings, with aesthetically arranged trees, shrubs, and lawn. Olmsted’s commitment to campus planning reflected his belief that the physical environment in which instruction took place was an essential component of the education students would receive. He hoped that a properly designed campus would influence the tastes and inclinations of students, who upon their return home would extend the civilizing mission he attributed to higher education.

Olmsted was so concerned with the proper design of the campus that he published, apparently at his own expense, a slightly expanded version of his report to the trustees of the Massachusetts Agriculture College as a pamphlet entitled *A Few Things to be Thought of before Proceeding to Plan Buildings for the National Agricultural Colleges* (1866), which circulated widely and resulted in invitations to visit other campuses as well as an exploratory invitation that he consider assuming the presidency of a land-grant university.

The key word in the title Olmsted chose for his pamphlet on the proper design of educational institutions was “before.” These were considerations that needed to be resolved prior to even the schematics of building or landscape design. Olmsted’s work as a campus planner in these years, while not

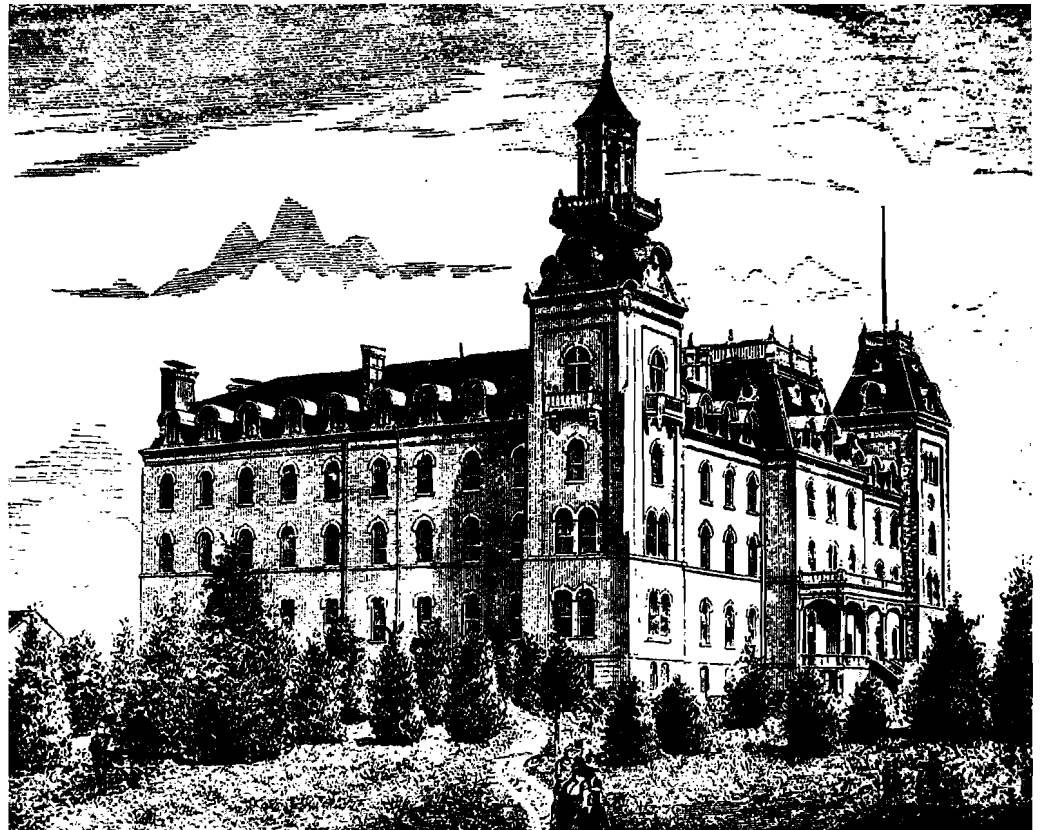
as widely known or recognized as his contributions to park and community design, articulated a coherent vision of the physical setting as a critically important element of the educational mission of the college. As historian Charles Beveridge has pointed out, central to Olmsted's work as a designer was his "desire to use landscape art to meet deep human needs" (1977). Olmsted expected that graduates of the nation's colleges would lead the "advancing line of civilization" in the United States; and so, he argued in 1866, an education to taste and communal responsibility was an essential part of their education.

Olmsted's principles for good design

Olmsted never established a set of rules or guidelines for campus planning, but in his various reports five general themes emerge as principles of design.

1. The campus is not a cloistered retreat from the community but an extension of it.

In 1749 Benjamin Franklin proposed that the Academy he was attempting to establish be located "if not in Town, not many Miles from it," and preferably on a site "not far from a River, having a Garden, Orchard, Meadow, and a Field or two." Franklin envisioned a school that combined the best of both worlds: it was proximate to the city yet also had space for rural pursuits. The two most important plans for institutions of higher education undertaken in the early 19th century, however, turned away from urban areas. Eliphalet Nott, president of Union College, believed that the college had to be "separated from the great world." When the student body outgrew its first building in Schenectady, New York, he moved the college to a large new campus outside the vil-



The main building of Iowa Agricultural College (now Iowa State University), built in 1866. Olmsted argued against the construction of single, massive structures to house all the functions of a college and pressed for separate smaller buildings which would allow for growth.

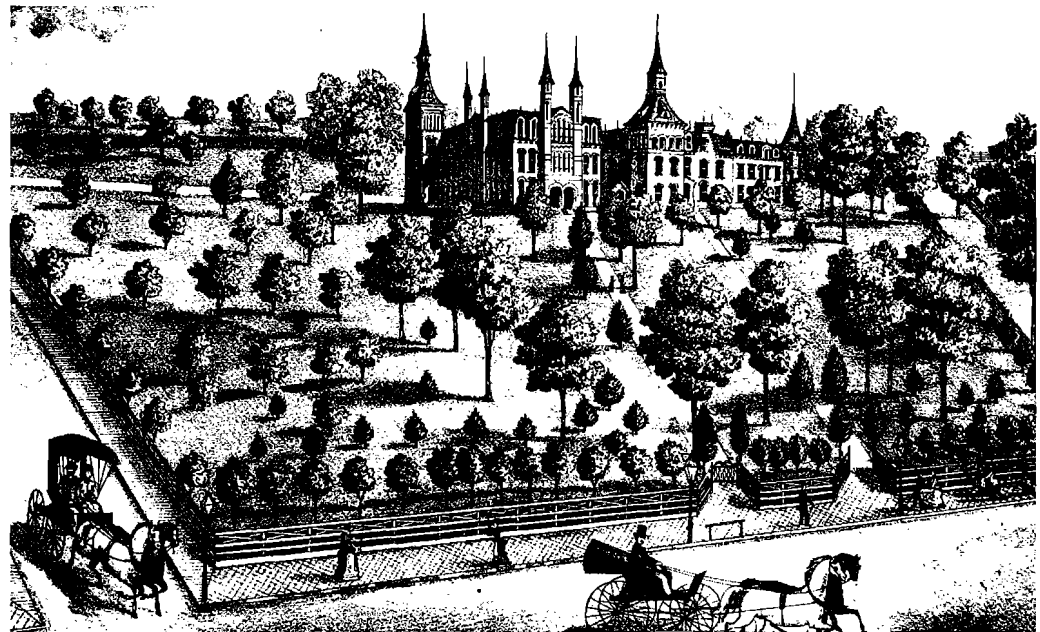
lage and in 1813 hired Joseph-Jacques Ramée, a French-trained architect, to design the principal buildings. Ramée's well-known plan was a formal ensemble of structures, connected by a curving colonnade, and enclosing on three sides a courtyard containing a circular building that served as the chapel. Thomas Jefferson's "academical village" similarly attempted to replace the single dominant structure with a group of buildings—classical pavilions that housed faculty and classrooms, student rooms located behind the connecting colonnade, and the Rotunda, a Pantheon-like structure designed to house lecture rooms, library, and other functions. But the fledgling university was located outside Charlottesville, then only a tiny remote village (Turner 1984).

In Olmsted's first effort in the design of educational institutions, a plan and report on the grounds of the College of California, a private institution in Berkeley, he rejected the idea that a college be located in a rural area, which, like Franklin, he considered too far removed from the "real life of civilization." Olmsted believed that an urban setting was equally inappropriate for an

institution of higher education because it was "not favorable to the formation of habits of methodical scholarship." A suburban setting such as the grounds the college owned at Berkeley provided the proper bal-

Buildings had to be appropriately scaled to resemble a community.

ance: a certain amount of seclusion for contemplative thought combined with regular interaction with the city and the cultural institutions it housed. Students would not be subject to the "barrenness of monastic study," but would be "surrounded by manifestations of refined domestic life," the kinds of dwellings that Olmsted considered "unquestionably the ripest and best fruits of civilization." The plan he prepared for the college's trustees incorporated sites for college buildings as well as areas for residential development, shaded, gently curving lanes, and a 27-acre public ground.

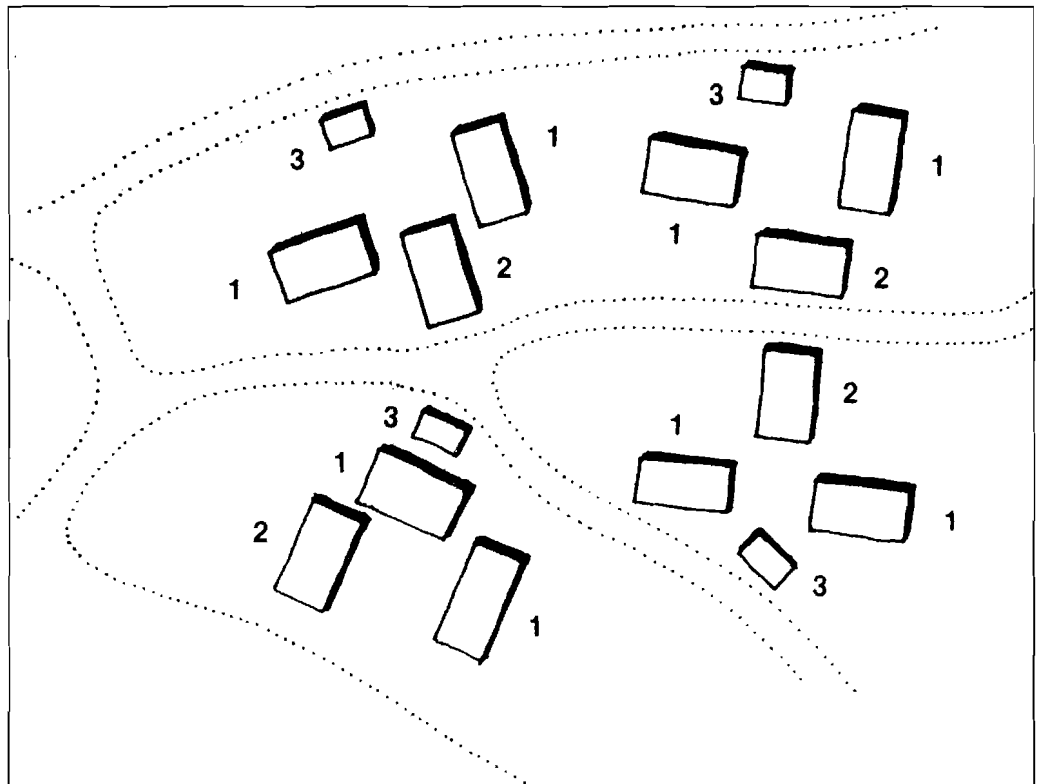


Stephens Female College (now Stephens College) in Columbia, Missouri, around 1875. Olmsted tried to convince colleges to replace their formally dotted landscaping with the naturalistic, lush, picturesque landscaping advocated by his friend and American landscaping pioneer, Andrew Jackson Downing.

Olmsted reiterated the importance of campus as part of a larger community in reports he prepared for land-grant colleges in Massachusetts and Maine. He advised the trustees of the Massachusetts Agricultural College against placing the college's principal building some distance from the main road. Such a location would resemble a southern plantation, he argued, withdrawn from the surrounding community, rather than the typical New England farmstead, located adjacent to the highway that linked it to neighbors, the meeting house, and the nearby village. An isolated campus would also interfere with what Olmsted considered the school's primary mission, enhancing the quality of rural life.

For the college successfully to train "men of civilization," he pointed out, the campus should resemble a "model rural neighbor-

hood." Olmsted offered similar guidance to the trustees of the Maine College of Agriculture & the Mechanic Arts. He urged them to think of their campus in terms of a traditional New England village. The road passing through the college's property would function as the principal street of the village, he advised, with the president's house located at the southern end of the campus, the farm superintendent's dwelling at the north. Farm buildings and model fields located in the northwestern part of the site and the arboretum and botanical garden near the president's house would be visible from the road and provide instruction in taste to community residents and travelers as well as students. At the center of the campus Olmsted placed the museum, library, and chapel to define the college in much the way that civil and ecclesiastical structures adjacent to the village green often characterized the New England community.



Detail of the proposed student residence clusters from Olmsted's 1867 plan for Maine's new State College. (1) "Cottage's with sleeping rooms and parlors." (2) "Dining halls, with kitchens and study halls." (3) "Wood sheds and water closets." Olmsted criticized the "large barracks" of older Eastern colleges and urged that institutions build smaller residences for 20-40 students each.

In these and other reports Olmsted argued that higher education was essential to the well-being of the broader community and that it should inculcate in students acceptance of social responsibility. Together, the location of the campus and the design of buildings and grounds were integral components of the educational mission.

2. *Collegiate buildings should be domestic rather than institutional in scale.*

If the college or university were to promote the importance of communal responsibility among students successfully, Olmsted believed that buildings had to be appropriately scaled to resemble a community. As the first of the post-Civil War colleges and universities were taking shape, trustees began planning and erecting large, multi-purpose buildings, often a single massive structure that incorporated all functions of the school. This type of collegiate building had, in the decades prior to the Civil War, supplanted the grouping of smaller structures Ramée had employed at Union College and Jefferson had placed flanking the lawn at the University of Virginia.

Olmsted found little that was praiseworthy in these recently planned or constructed collegiate buildings, which he considered too large and cumbersome, especially for the land-grant institutions that were avowedly experimental in purpose. Instead of erecting a single dominant structure, he advised the trustees of the College of California to construct two smaller buildings, one (as fireproof as possible) to house a library and scientific collections, the other to house an assembly hall, classes, and faculty offices. As the college increased in size, the library might occupy all of the building it formerly shared, while another new building could accommodate the sciences. Over time the college would add still other buildings to meet the demands for space and changing use; but instead of a single building or several large structures the campus would resemble a community with buildings serving a variety of purposes and yet retain an ambience of “scholarly and domestic seclusion.”

Olmsted reiterated many of these concerns when he visited the Massachusetts

Agricultural College to review plans for the campus. The trustees had commissioned Boston architect Joseph Richards to prepare designs for a large four-story stone building topped with a Mansard roof. Olmsted, who toured the Amherst site in May 1866, quickly concluded that such an imposing structure was inappropriate for “an institu-

He warned against the dormitory, which he characterized as a “common barn or barrack-like building.”

tion of a somewhat novel character” and instead recommended a “less formal and rigid plan of building.” The customary use of large structures in campus design, he explained, had resulted from the colleges’ original location in cities rather than from any special fitness to their purpose. On a site such as the new Massachusetts college possessed, “a straight-sided, evenly-balanced, many-storied structure of stone, will not be merely incongruous to the landscape, but will certainly impose quite unnecessary inconvenience and fatigue upon those who are to occupy it.” To meet the needs of the college he proposed four smaller, two-story buildings to house, respectively, classrooms, a laboratory and museum, a reading room and library, and a gymnasium and assembly hall.

In this and other reports Olmsted couched his arguments in part in terms of greater economy and efficiency—words, he knew, that would appeal to trustees. But in each of his plans for colleges and universities he articulated the need for a scale of building appropriate to educational purposes. The classroom buildings, farm structures, and cottages he proposed for Maine’s land-grant college, for example, would be of a residential scale and designed to cultivate the tastes and habits of students. His advice to other institutions of higher education similarly emphasized the importance of a humane scale in building to the educational mission of the college or university.

3. *Student housing should approximate, as much as possible, the kinds of dwellings graduates will inhabit in later life.*

Eliphalet Nott and Thomas Jefferson each had attempted to provide student housing together with or proximate to faculty. Nott adopted the family as the metaphor for relations among faculty and students at Union College, and expected all officers and their families to live in college dwellings and dine with the students, while Jefferson incorporated student rooms adjacent to the faculty pavilions in a relationship that art historian Paul Venable Turner has likened to “guest wings” of a house. But what Nott termed the ideal of “refined domestic life” evident in both plans proved unworkable in practice. Elsewhere, most colleges continued to house students in dormitories or leave them to find accommodations in nearby households (Turner 1984).

When Olmsted became involved in the design of institutions of higher education he immediately dismissed both means of housing students as unacceptable. In his

report to the College of California he warned against adopting the kinds of dormitories erected at older eastern colleges, describing them as “large barracks and commons.” For the college to fulfill its civilizing mission the residences erected for student use should have the “general appearance of large domestic houses,” he argued, each with a common drawing room, a dining room, and private rooms for from 20 to 40 students. Similarly, in his report to the trustees of the Massachusetts Agricultural College, he advised against lodging students with neighboring families as well as the “manifest evils” of dormitories. Students should reside in structures possessing a “domestic character,” which, he explained, would contribute to their “*education in the art of making a farmer’s home cheerful and attractive.*”

To the trustees of the Maine college Olmsted once again warned against the admittedly economical dormitory, which he characterized as a “common barn or barrack-like building.” The purpose of the



The Saunders House at Hamilton College in New York. Housing 18 students, the new residence hall includes a residential assistant, a dining area, a large living room, and a big kitchen for morning and evening meals. Olmsted argued that student living halls not be “barracks” but “large domestic houses.”

college's housing should not be to accommodate students as cheaply as possible, but to do so in ways that would have a positive influence on the "character, tastes, inclinations and habits" of young men.

Olmsted also urged Harvard and Yale to erect dwellings for students that were domestic in scale, but his message went un-

The physical environment that humans occupy influences their behavior.

heeded at the time. Ironically, 50 years later these two universities began constructing residential houses or colleges that incorporated many of the concerns Olmsted had articulated in the post-Civil War era.

4. *The quadrangle is generally inappropriate for campus design because it is too inflexible and cannot accommodate future growth and changing spatial needs.*

Olmsted articulated a vision of the college as an organic entity, with buildings arranged to allow future growth that would not compromise or destroy the beauty of the campus. In his first plan for an institution of higher education, the report on the College of California, he rejected as impractical the "formal and perfectly symmetrical arrangement" of buildings characteristic of older eastern colleges and instead advocated a picturesque landscape and less formal placement of structures that would "better harmonize artistically with the general character desired for the neighborhood."

In his correspondence with Andrew Dickson White, first president of New York's land-grant institution, Cornell University, Olmsted presented a devastating critique of the quadrangle as the organizing feature of the campus. Ezra Cornell envisioned the new campus then taking shape as a quadrangle composed of massive structures on the hill overlooking his beloved Ithaca. When Olmsted first visited the site of the campus in June 1867, the trustees had already approved plans drawn by Harlow Wilcox, a Buffalo ar-

chitect, and had begun construction of its first building, South University (now Morrill) Hall. The projected second and third buildings would be adjacent to South University. Together, the three structures would constitute one side of a massive quadrangle.

Following his examination of the campus, Olmsted strongly urged White to abandon the formal plan and avoid making the "same mistake which all the large colleges of the country are now repenting." If built, Olmsted predicted, the quadrangle would stand as "another monument of shortsightedness, inconsideration & complacency with our little present." Olmsted foresaw a successful future for Cornell University and feared that its original formal arrangement of buildings would prove overly restrictive as the need for additional facilities arose. Instead of the row of buildings Ezra Cornell wanted, Olmsted suggested their placement according to a "more free, liberal, picturesque & convenient" plan.

Cornell's trustees ultimately rejected Olmsted's advice and constructed the quadrangle its founder envisioned. The haste of getting the university under way left no time to rethink premises; and the remedy for the initial plan of building, President White conceded, had to be left to an indeterminate future. As the university grew in succeeding years, however, the quadrangle could not accommodate the various uses and new buildings the university needed, just as Olmsted had warned.

In an April 1870 letter to William Augustus Stearns, president of Amherst College, Olmsted argued that in planning buildings for institutions of higher education, "not the use of years but of centuries should be considered." This was equally true of campus design: Olmsted's principal of a picturesque, organic landscape, then, was not simply an aesthetic component of campus planning but a practical one as well.

Landscape as an educational force

5. *The campus—landscape and buildings—is part of the civilizing mission of higher education.*

Some advocates of higher education in the post-Civil War era, such as Daniel Coit Gilman, considered the physical space in

which education takes place of minimal importance. Perhaps because President Gilman devoted Johns Hopkins to graduate and professional education rather than to the teaching of undergraduates, he thought a campus unnecessary and conceived of buildings in practical terms. Comparing the university to a lighthouse, he argued that it had no need of splendid architecture; what planning was essential was in mapping a curriculum and selecting a great faculty. Unsurprisingly, Gilman organized his fledgling university in a series of seemingly unrelated structures along several blocks of Baltimore (Gilman 1906).

By contrast, Olmsted was certain that the well-designed campus was integral to the education of students, and in this he extended the argument presented by A.J. Downing in the antebellum years. Downing had advocated a program of education that would influence students through the proper design of buildings and grounds and thereby "impart new beauty to our rural scenery, and make each neighborhood

Few campuses today employ geometric patterns; most exhibit a naturalistic design.

an object of attachment to those familiar with its local attractions and reared under its influence" (Schuyler 1946).

The proposals Olmsted prepared for colleges and universities in the post-Civil War era similarly were predicated upon the belief that the physical environment that humans occupy influences their behavior. In his report to the trustees of Maine's land-grant college, for example, Olmsted argued that during their years at the school students would establish "tastes, inclinations and habits" that, in later life, would shape their domestic environments and the communities in which they resided.

What united Olmsted's plans for college campuses during the immediate post-Civil

Frederick Law Olmsted (1822-1903) was the preeminent American landscape architect and city planner of the second half of the century. After trying his hand at scientific farming and publishing, Olmsted, together with Calvert Vaux, submitted an entry in the 1858 competition for the design of New York City's Central Park. Their "Greensward" plan won first prize, and Olmsted was named Architect-in-Chief and Superintendent. The success of Central Park led to numerous other commissions, including the design of parks in 30 cities, among them Prospect Park in Brooklyn, N.Y., Belle Isle Park in Detroit, Mount Royal Park in Montreal, and Roger Williams Park in Providence, as well as park systems for Buffalo, Louisville, Boston, and Atlanta. Olmsted also designed several public and institutional commissions, including the grounds of the U.S. Capitol (1874), the grounds of several asylums for the insane, college campuses and school grounds, and the site plan of the World's Columbian Exposition in Chicago (1893).

In his career as a landscape architect Olmsted promoted his conception of a civilized society. His designs for public parks and suburban communities attempted to recast the shape of metropolitan America, to promote the refinement and culture he believed citizens of a republic could attain. In his books on the effects of slavery on Southern society, published in the decade prior to the Civil War, Olmsted had criticized the South for the absence of social and cultural institutions that could raise the level of civilization there. The parks he designed were part of a broad reformist program that would provide for the poor "an education to refinement and taste and the mental & moral capital of gentlemen." This philosophy of the importance of the designed environment in shaping human behavior also informed Olmsted's plans for college and university campuses.

War years was a personal philosophy of education. He believed that the location and design of the campus played an essential role in the students' educational experience, one equal in importance to such academic subjects as philosophy, mathematics, and languages. The properly designed campus was part of the civilizing mission of the college or university, educating the taste and the sensibilities of students. A well-designed campus, he informed the president of Trinity College in Hartford, Connecticut, would promote the "acquisition of the general quality of culture which is the chief end of a liberal education."

What is striking today is the degree to which college and university administrators are applying some of the lessons of Olmstedian campus design. Few campuses employ geometric patterns in the landscape; most exhibit a naturalistic or park-like design. The era of monumental or architect's signature buildings also seems to have passed with the demise of modernism. Most recently erected academic buildings are, if not domestic in scale, at least designed to fit into the campus landscape, and at some colleges even residence halls are beginning to take the shape of clusters of large family homes. Olmsted believed that an active, experiential education would prove more effective than passive or theoretical learning; and this too has enjoyed a renaissance in the collegiate curriculum.

Welcome though this renewed attention to the campus landscape has been, it remains incomplete. Olmsted emphasized the importance of the physical landscape to the college's responsibility for refining the taste, the manners, and the habits of students. An attractive campus landscape today is too often thought of simply as a strategy

for student admissions and retention, not as something central to the educational mission. This is dangerous because it leaves a vitally important element of the physical plant vulnerable to budgetary cuts in times of austerity. And it is shortsighted because it reflects a narrow view of the educational process at the very time when visual and environmental dimensions to learning are becoming increasingly important. ■

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