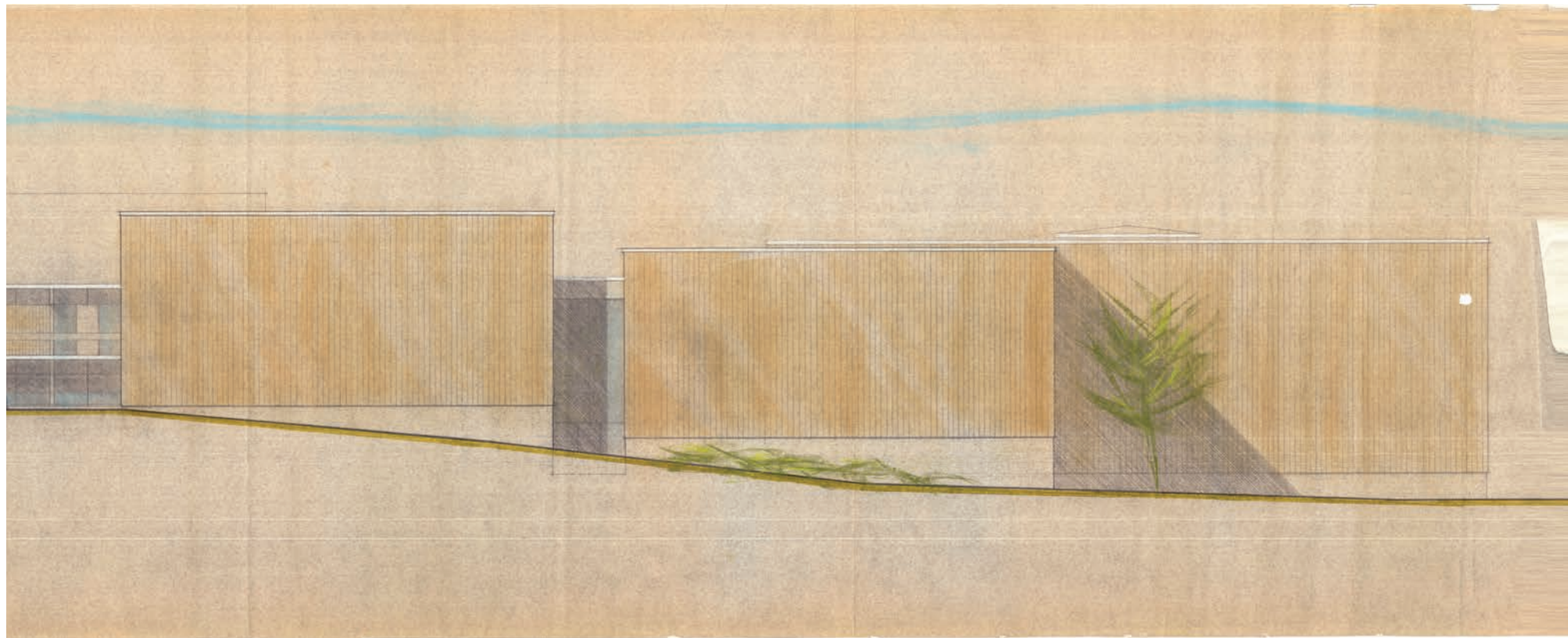


VAPA East-West elevation drawing by Robertson Ward Studio



VAPA: A GENEALOGY

Donald Sherefkin

After passing through the gates to Bennington College, and gently ascending through fields and forest, the first glimpse of a structure comes into view: the (apparently) windowless cedar clad boxes of the Performing Arts buildings.

Just over the slope of the visitors' parking lot next to the Barn, the long rectangular buildings of the Usdan Gallery and the Visual Arts building provide the first indication of entry into this sprawling complex. Paths leading

from the Barn connect to entrances on every side of the building. Exterior stairs link to doors on the second and third floors. There are dozens of entrances into the building and dozens of sliding doors connecting faculty and staff offices with the outside.

Despite the vast scale of this facility, it manages to fit comfortably into the landscape, thanks to its skillful placement along the glacial moraine that allows the great bulk of the building to step down to the meadow level below. The weathered vertical cedar planks harmonize with the surrounding trees.

As VAPA drops down towards the Jennings meadow, its long northern exposure opens up with great vistas of glass, providing even, steady northern light for all of the art studios. Tall roof monitors and interior walls of glass allow light to penetrate deeply into the space. The layering of spaces visible through these glass walls provide long views across the studios. Pausing over an engraving, a sculpture or a model,

It is often mentioned that the entire complex is more than 120,000 square feet, but I think that the figure of 2,000,000 cubic feet gives one a better sense of the overall space that is contained by the building.

one may glance up to take in a view across the Galleria, or to gaze at a broad expanse of sky. In his book *Analysing Architecture*, Simon Unwin contrasts the defining characteristics of temples and cottages. The temple is typically axial, symmetrical and elevated on a plinth, detached from the world. A cottage on the other hand, is complex and irregular. It is made with humble materials, and adjusts itself to the topography. By these definitions, the Commons Building, standing tall at the center of campus, might be considered a temple, and VAPA, a cottage.

Expansion

Discussions around the construction of a building to house the visual arts had begun as early as 1958. At this stage, many ideas were considered, even the possibility of using the



Walled Garden as the envelope. But it wasn't until 1964, when the College decided that it was necessary to expand its course offerings, that the project got taken up again in earnest. The College recognized the necessity of a significant building initiative, identifying their need for a visual arts complex, new student housing, a science building and performance spaces. The board and the Art Policy Committee selected celebrated architect Edward Larrabee Barnes to prepare a master plan for the campus and to begin plans for the houses and academic buildings. During this process, however, the

In 1969, Ben Thompson married Jane Fiske McCullough, the former wife of Bennington board member John McCullough. She had long been an active member of the Bennington Community, sitting on numerous committees and taking classes at the College. She collaborated with Thompson on many projects including Faneuil Hall Marketplace (1976), Harborplace (1980), and South Street Seaport (1985), as well as their retail venture, Design Research. From 1994 until her death on August 22, 2016, she was the principal of Thompson Design Group in Boston.

relationship between Barnes and some members of the building committee soured, and he relinquished the project after completion of the houses, now called Noyes, Sawtell, and Fels.

The college then hired Ben Thompson, chairman of the Architecture Department at Harvard's Graduate School of Design, and founder of the influential Cambridge store Design Research, to begin designing a new science building. The College also retained Chicago-based architect Robertson Ward, Jr. to begin work on the Visual and Performing Arts facilities, and soon after beginning the project, Thompson asked Ward to relieve him of the science building assignment, feeling

stretched thin by his myriad other activities.

Locally, Thompson designed the firehouse in North Bennington, Mt. Anthony High School and dorms at Williams College.

Long before Ward was selected to design VAPA, the Visual Arts Faculty had developed a framework for the kind of building that they were envisioning: "a, rambling, horizontal structure "barn like" in nature." Ward was very impressed by the quality of their project outline. He wrote, "they represent, in my view, some of the best program statements on the purpose of a building that I have encountered." By the time the College hired Ward, he had

been an architect for almost twenty years, yet he did not have his name attached to any complete buildings. Since his graduation from Harvard's GSD in 1951, under the direction of Walter Gropius, Ward had been deeply involved in systems design and prefabrication. His Harvard thesis was for "a mega structure system with suspended, modular infill."

Robertson Ward was, then, a highly unusual selection for such a large-scale building project, but his training meant he was well qualified to produce the kinds of buildings that Bennington needed and asked for. Importantly, the College was explicit in seeking an architect who would not want to "make a statement." Ward was not interested in formalism.

An Education in Systems and Prefabrication

Ward's teacher at the GSD, Walter Gropius, was a key figure in the development of modern architecture. He founded the Bauhaus in Germany in 1919, and built its principal school

buildings in Dessau in 1925. The Bauhaus curriculum sought to forge a unity between art and technology.

So let us therefore create a new guild of craftsmen, free of the divisive class pretensions that endeavored to raise a prideful barrier between craftsmen and artists! Let us strive for, conceive and create the new building of the future that will unite every discipline, architecture and sculpture and painting, and which will one day rise heavenwards from the million hands of craftsmen as a clear symbol of a new belief to come.
- Walter Gropius, "Bauhaus Manifesto and Program"(1919)

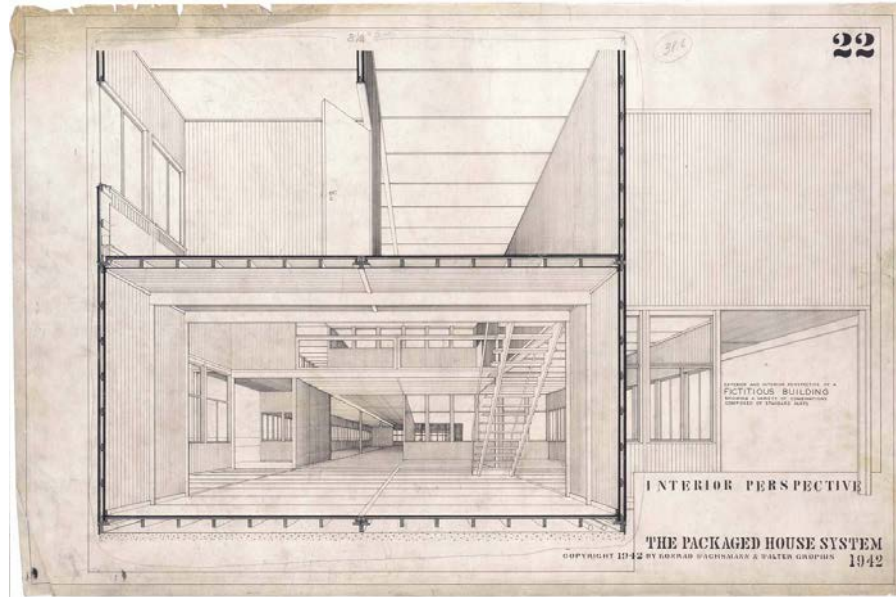
With the rise of Hitler, Gropius fled Germany and eventually found his way to the United States. He was appointed chairman of the Department of Architecture at Harvard in 1938.

Konrad Wachsmann arrived in America as a refugee of the war in 1941 and went to see his old friend Gropius in Lincoln, Massachusetts.

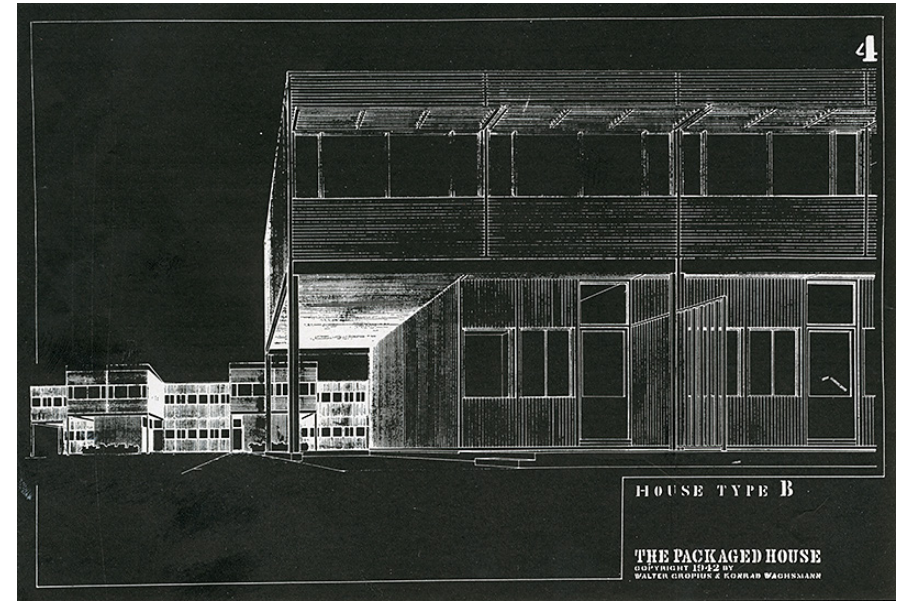
Together, they formed the General Panel Corporation under which they developed the "Packaged House System," a kit of wood panels designed for the mass production of houses. This project was not ultimately successful, and Wachsmann left Boston for Chicago in 1950, to head up the Illinois Institute of Technology's Department of Advanced Building Research. After Robertson Ward graduated from the GSD, he headed to Chicago to join Wachsmann.

While their work was focused on developing industrial processes and architectural systems, Ward's passion was for problem-solving through the complete understanding and synthesis of environment, energy and society.

During Ward's studies with Wachsmann, he participated in a tutorial that met in the apartment of another pioneer of modern architecture, Mies van der Rohe, where, in addition to discussions about architecture and building, there was a good deal of liquor consumed and cigars smoked. Though Ward's



Packaged House System 1942-1952, interior perspective



Walter Gropius and Konrad Wachsmann, design from Interiors vol. 103 no. 5, Dec. 1943, p. 38

architectural education began in Boston, the architectural aesthetic of Mies' Chicago would become deeply imprinted on all of his built work.

When I first encountered the VAPA complex, I was teaching in Crown Hall, the architecture studio building at Mies' IIT campus. I immediately recognized the strong influence of that architect's sensibilities.

Designer, Researcher, Technologist

After leaving IIT, Ward worked with leading architects on a broad range of projects around the world. In Tokyo, he worked on a prefabricated wood housing system with Skidmore, Owings & Merrill Chicago. Ward was part of the design team for the UNESCO headquarters in Paris by Marcel Breuer and Pier Luigi Nervi. And in Chicago, from 1954-60 he headed up the Department of Research and New Technologies with Skidmore, Owings & Merrill, working extensively on the US Air Force Academy in Colorado. This work involved the development of new material and product systems,

including granite cladding and reflective glass.

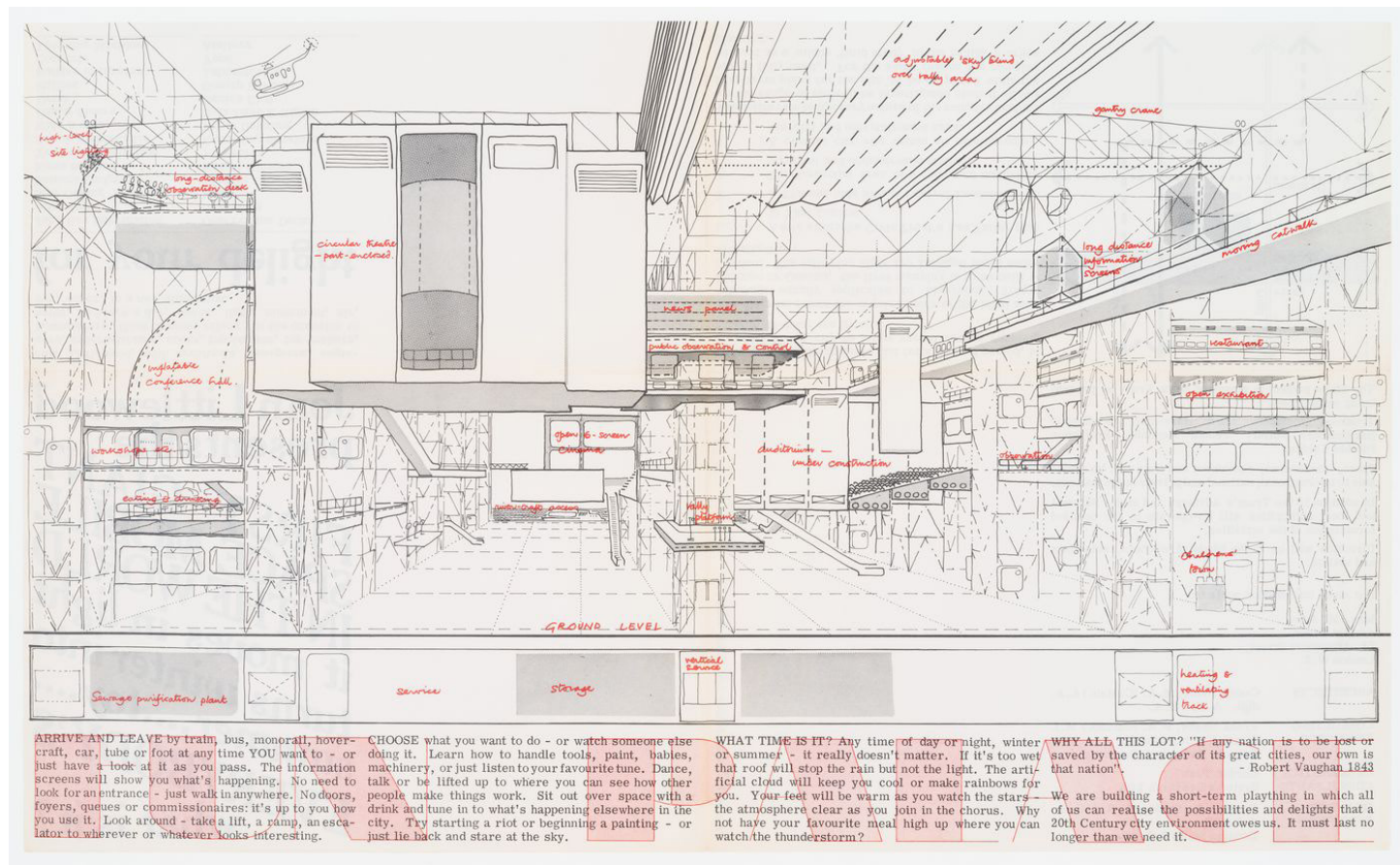
In 1963, Ward became involved in the School Construction Systems Development project (SCSD) in California. The state's population growth was creating a large demand for new schools. In an effort to find an efficient process to manage this demand, a joint project was formed between the School Planning Laboratory at Stanford and the Department of Architecture at the University of California, Berkeley. This project developed a series of coordinated components that architects could employ in their designs for individual school projects, promoting cost efficiencies and adaptability.

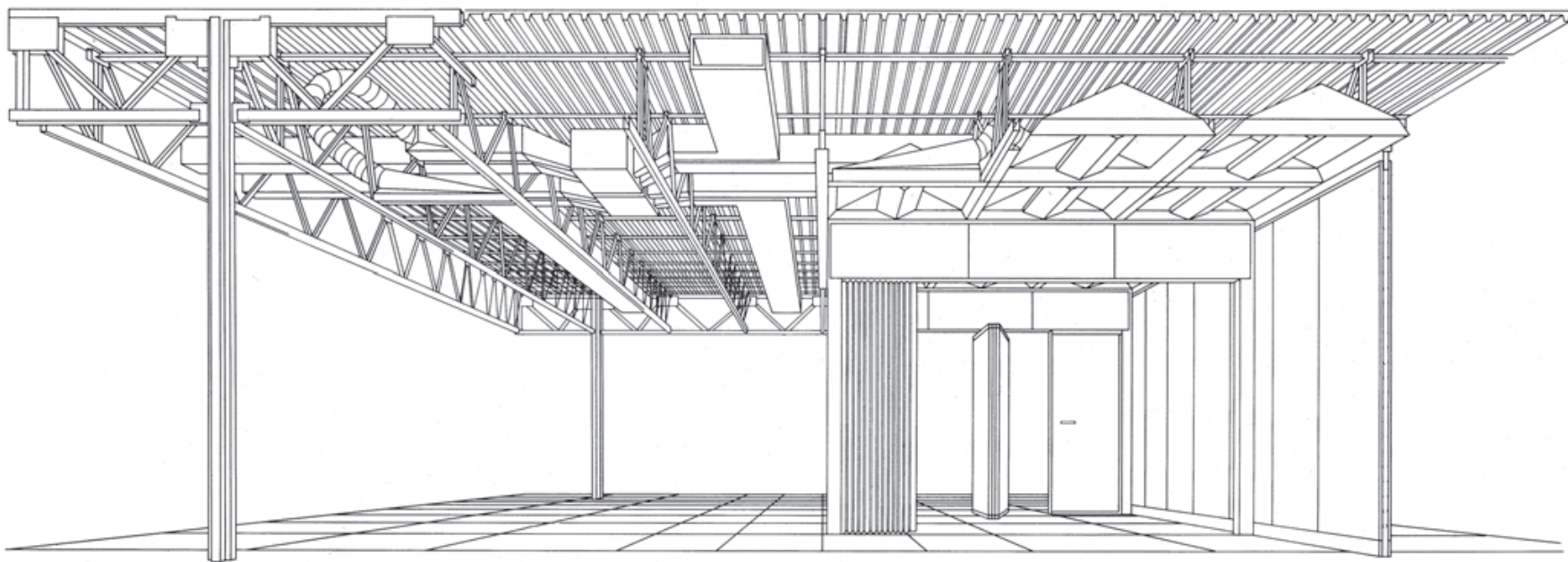
For SCSD, Ward designed, developed, detailed and tested ceiling systems, as well as movable interior partitions. His structural ceiling design incorporated long span structures that integrated lighting and mechanical systems, permitting highly flexible interior divisions with prefabricated panels.

During this time, Ward traveled to London to consult with Cedric Price on a project known as the Fun Palace. Ward worked with systems integration on this legendary unbuilt project for Joan Littlewood, founder of the Theater Workshop in East London. The intention for this "laboratory of fun" was to create a highly responsive venue for dance, music, drama, fireworks and gardens. It was to be a vast steel framework with endlessly variable walls, platforms and stairs inviting continuous transformations.

"Choose what you want to do – or watch someone else doing it. Learn how to handle tools, paint, babies, machinery, or just listen to your favorite tune. Dance, talk or be lifted up to where you can see how other people make things work. Sit out over space with a drink and tune in to what's happening elsewhere in the city. Try starting a riot or beginning a painting – or just lie back and stare at the sky." - from the original Fun Palace planning documents

Cedric Price's Fun Palace,
as described on opposite
page

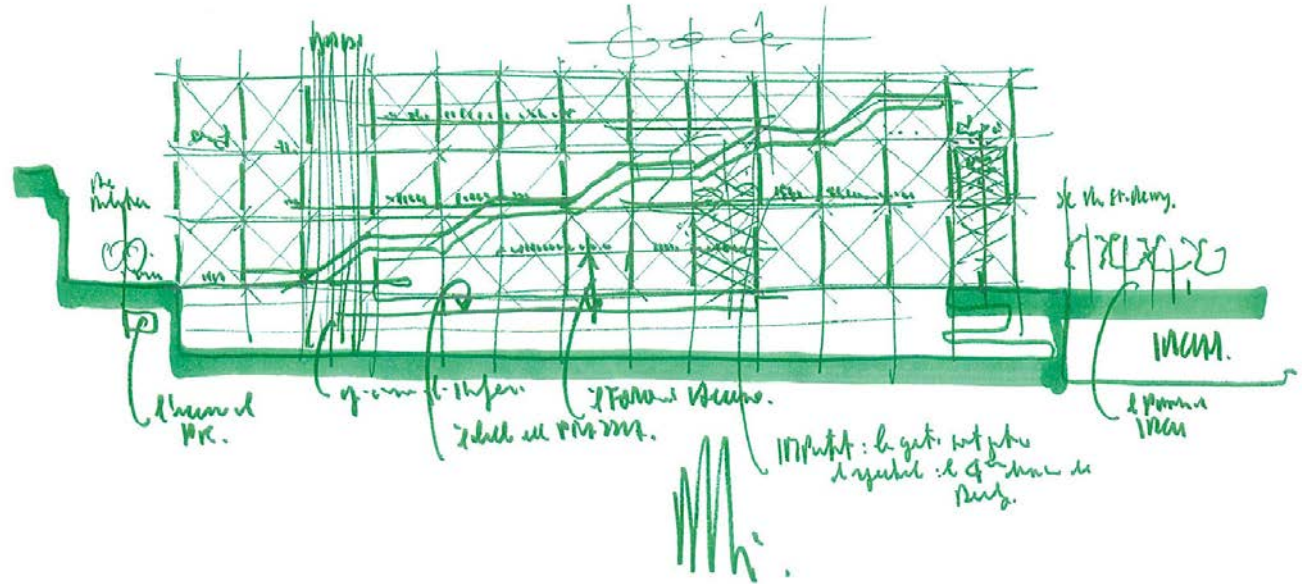




School Construction Systems Development component parts (ca. 1967)

When architects Norman Foster and Richard Rogers finished their studies at Yale, they took a road trip across the country. In California, they came across the SCSD project, to which Ward's work had been so crucial. The SCSD principles of collaboration with industry and the development of a set of prefabricated elements can be seen in many of Foster's and Rogers' buildings, including Foster's iconic Hong Kong Bank and Rogers and Piano's Pompidou Center.

Centre Georges Pompidou (c)
Renzo Piano and Richard Rogers



The Lessons of Japanese Building

For many early modern architects, traditional Japanese architecture was highly influential. Its key characteristics, such as the relationship between inside and outside, a simplicity of elements, the use of a module or *ken*, the flexibility of the sliding wall panels, and the relationship between the building and landscape provided much inspiration.

Walter Gropius wrote the foreword for Heinrich Engel's book *The Japanese House: A Tradition for Contemporary Architecture* in 1964. In it, Gropius praises all of these qualities and makes this assertion: "To the Western architect it will show up as the missing ingredient in our own civilization, the coherent effort at attaining unity in diversity."

The Bennington Campus Projects

Before VAPA, the visual and performing arts studios, theaters and galleries were spread across the campus in various buildings. Painting,



Above: Shoin of Katsura rikyu, 1660. Kyoto (c) Bigjap, 1999

Below: Shokin-tei tea pavillion (c) Raphael Azevedo Franca, 2007



architecture and theater were located on the third floor of Commons. The Carriage Barn held the exhibition space. Darkrooms were in the basements of student houses. Sculpture was housed in the brick maintenance garage (now the DownCaf). Chicken coops, sheds and barns held various other workshops and studio spaces for ceramics and printmaking. Students and faculty were used to "making do," but they were eager for the chance to envision what would be possible if given a purpose-built facility.

In 1964, the Art Policy Committee prepared a report that described the goals of the Visual Arts Program and a projection of their expectations for the development of new facilities. In the section where they anticipate the character of this new building, they write: *Several images come to mind to express the spatial character that is desired: we have talked about hangars, factories, lofts, and barns. All describe a neutral, open, unfettered, well-lighted space that has free access from the out-of-doors, a flexible working space that will allow*

large-scale painting and sculpture to be done in comfort, a rugged heavy-duty space with usable walls. Ceiling and floors that will accommodate the mess and confusion of work in progress.

In a 1965 letter regarding campus planning, trustee Betty Brown used language evocative of a living, breathing organism to describe a vision of the future Visual and Performing Arts buildings. She wrote:

There are many possibilities to be explored. For example, why not think in terms of a continuous whole, something that would be neither one big building nor forty small ones, but both—something supple and wandering—partly indoors and partly outdoors, a weaving of rooms and courts and walks—jumping a space here to form an island, flinging out a wing there, two stories somewhere and one story somewhere else...all this not exactly one building, not exactly many, not exactly a building at all, simply a stream of energy rising and falling with areas of concentration and areas of expansion, each piece capable of having its own architectural identity...able to push its way up through the roof

or out through the walls or down into the ground if it wants to and yet all these separate identities able to speak to one another, each division, even each subject able to be itself and yet able to open out in many directions. A structure like this doesn't need to have any particular beginning or end—certainly no monumental center; it can be expanded almost indefinitely, and at almost any point; its interior spaces can be reassigned in almost any way as points of pressure shift.

Willard Boepple, who had worked as the College sculpture technician, remembers faculty member Jules Olitski insisting that however the spaces were to be distributed, students should be required to walk through adjacent studios to get from one place to another. There should be no 'silos' among the arts.

Having the commission for all of the new buildings allowed Ward to take a comprehensive planning approach. Over the course of 1967 and 1968, he embarked on a collaboration with Dr. Robert Gutman, Professor of Sociology at

the Rutgers Urban Studies Center. Together they began a unique study intended to "explore ways in which the behavioral sciences [could] contribute to the design of more useful and satisfying buildings." The study was supported by a grant to Rutgers from the Educational Facilities Laboratory, a body organized under the auspices of the Ford Foundation to conduct research on the challenges of college and university building. (This same Laboratory originally funded the SCSD Project in California.) The insights gleaned from this study—which involved in-depth interviews with Bennington students, faculty, and staff—informed extensive meetings with faculty that Ward conducted from 1968-1969 to further assess their needs.

The visual arts faculty saw flexibility and adaptability as particularly important to the new building, and these capacities had long been central concerns for the architect across his other work. Modularity was also a natural requirement, in that it provided the best option for economy as well as flexibility. A key

datum for the project was the College's Barn building, which, due to its simple form and successful adaptation to its changing academic and administrative functions, Ward saw as the finest building on the Bennington Campus.

Ward decided to fit the Visual and Performing Arts buildings into the natural landscape, along the edge of the ridge formed by the glacial moraine, allowing him to minimize the impact of introducing such a large structure into the existing campus. He relocated the entry road and reconfigured the parking areas. No part of the new facilities was to be higher than the roof of the Barn, and the image of a classic Vermont barn became the model for envisioning the form and materials of the new structures. Simple, large-scale wood structures would encompass spaces for teaching, work, performance and exhibition, coupled with partitions permitting reconfiguration as needed.

With the site chosen for the building, Ward

established a module for its various spaces: the Visual Arts section makes use of a 10-foot module and a 40-foot bay, and a 20-foot module is used to frame the 100-foot by 100-foot dance workshop and the 60-foot by 100-foot music and drama workshops. The topography, curriculum, natural light, and circulation provided the rationales for an enormously rich spatial development. All of the exterior openings of the buildings, with the exception of the entrance doors, are sliding wood panels—a reference to both the barn door and the Japanese shoji screen. Through these choices and others, Ward's twin interests in Japanese design and Miesian principles are manifested in VAPA's design.

For the tectonics of VAPA, Ward and his team developed a structural system of laminated Douglas fir columns and beams. The exterior cladding would be a sandwich of Douglas fir faced with cedar, chosen for its weathering characteristics. All of the wood components were prefabricated in California and then shipped through the Panama Canal to a port in

Boston. From there the materials were trucked to the campus. Each element had been cut to size and pre-drilled, allowing the building to be assembled with the help of cranes that would lift the beams while workmen guided them into position and installed the bolts.

Ward's design left the structural and mechanical systems visible, a decision he intended to be pedagogical. All of the columns and beams are exposed, and where a drywall partition meets a column or a beam, there is a very deliberate 'reveal' or gap between the wall plane and the structural member. Where there is glass, it is floor to ceiling, a transparent plane. Where there is a door in a studio, in most cases, it is fourteen feet tall, running floor to beam. The exterior vertical tongue and groove planking extends below the floor level, and above the roof level. When it comes to a corner, it projects beyond. There are no wall cavities; the exterior planking is fully visible on the interior. In all of these cases, the emphasis is on the planar quality of the chosen material. VAPA is a

clear expression of the art of building. Or, as Mies van der Rohe termed it - Baukunst.

Whenever technology reaches its real fulfillment, it transcends into architecture. It is true that architecture depends on facts, but its real field of activity is in the realm of the significance. I hope you will understand that architecture has nothing to do with the invention of forms. It is not a playground for children, young or old. Architecture is the real battleground of the spirit.

- Mies van der Rohe, "Architecture and Technology," Arts and Architecture 67, no.10 (1950): 30

The Spaces Visual Arts

The Visual Arts facility is composed of six 40-foot wide bays. The first is the Usdan Gallery, and the sixth is the Kiln building. These two structures were constructed first, with the remaining bays added next. On the entry level, a corridor runs perpendicular to the bays and connects them all. There are multiple exterior work pads and decks.

The main section of the Visual Arts facility is the two-story space known as the Galleria. Its northern wall is 45 feet high with 12 feet of clear glass running the full 180 feet of length. The painting and drawing studios and critique spaces are given the full advantage of the northern light. Spiral stairs originally connected the meadow level with studios on the entry level. The studios that required fixed equipment, including Photography and Printmaking, were located on the meadow level.

.... the Galleria is designed as a multiple function group work area and, by opening movable walls, as a temporary expansion space for adjacent studios and shops. Working platforms can be constructed at various levels and circulation altered by arranging movable bridges, ramps and simple stair units. Natural and artificial light can be controlled and modified. A light materials-handling crane will traverse the entire area. The Galleria will open at both ends so that the workspace may be continued outside in good weather.

- From Quadrille May 1969

The emphasis on flexibility and adaptability has been instrumental in keeping this facility vital. OSHA restrictions ultimately prevented the use of suspended work platforms in the Galleria, but over the past forty years, the building has accommodated much change. It has incorporated new studios for Animation, Video and Digital Arts as well as a screening room. The Photography and Architecture studios have expanded to accommodate a larger student enrollment. These changes have been facilitated through the movement of partitions, the shifting of studios, and the addition of a new floor deck in the Galleria.

Performing Arts

In designing the theaters, Robertson Ward created facilities that are of a professional caliber, both in scale and conception. Each theater space is conceived as an experimental workshop, capable of multiple configurations for seating and performance. The adjacent scene shop is equipped with 14-foot high doors to facilitate the movement of sets between shop and theater - even requiring

a drawbridge. The dance theater, called Martha Hill, is equipped with a special resilient wood floor.

The Gallery

The Suzanne Lemberg Usdan Gallery is the most frequently reconfigured space in VAPA. It is a simple rectangular, skylit space, 100 feet long, 40 feet wide, and 16 feet tall and includes six movable L-shaped walls each 10 feet wide and 14 feet tall. In order to move these panels, Ward designed a special rolling jack. Three of these jacks permit the easy movement of the walls to any location within the gallery. When Ward visited the College for the 25th anniversary in 2001, he was delighted to see that his system was still actively in use.

Ward's initial design for the Gallery's display walls envisioned hanging panels suspended from the roof beams. In conversation with Pat Adams (who taught painting at Bennington from 1964-93), he adopted the movable L-shaped walls. Adams had been using a similar configuration for her students' studio spaces as they transitioned from working at an easel to using the walls and floors.

A Vacuum, A Plan

I think the architectural role can only be that of forming an envelope, a fabric of facilities which invites the user to participate. This vacuum is created and is complete only when the activity takes place within it. Otherwise the architect has failed. If the architect creates something complete in itself, the user will continue to be a guest within its space, not a participant. An architect has to think of all aspects of a building and its social activities, from the grossest points of foundation and utilities to the subtleties of how people will feel as they use the building, and how they will move in and out of it. One has to think about the relationships of sequences of spaces, changes in seasons, light, scale, and years as various things transform and grow, and activities change. The buildings and environment must be something which can respond to, and change as the community changes. The environment can invite change; and by this invitation stimulate the activity which is going on.

- Robertson Ward, Quadrille October 1967

Judith DiMaio ('72), Dean, School of Architecture and Design, NYIT, had the opportunity, while a student, to work in Ward's office in Chicago and make a contribution to the project. She was given the task of developing the space plans for the Printmaking studio.

I believe that VAPA is a powerful metaphor for the Plan Process at Bennington. Students are introduced to a wide range of possibilities, from which they are encouraged to explore, discover, and create a particular path of inquiry. While this process necessitates a focus and a development of depth within a particular range of subjects, a continued engagement with the rich potential of all areas of study at the College is important. VAPA provides the platform for work in the arts, but it is the students and faculty who energize the spaces.

Beyond Bennington

The campus projects at Bennington, including a new dining room, the maintenance shed

(now the Rec Barn) as well as Dickinson and VAPA, spanned almost ten years, from 1967-76. During that time, Ward also designed the science center at Deerfield Academy and Vassar's Powerhouse Theater, as well as working on Felix Candela's soccer stadium for Real Madrid. After this period of intense building activity, Ward returned to research and consulting. The oil embargo of 1973 had a profound impact on the construction of VAPA, and has had lasting repercussions for the world's economy. This may, in part, explain the direction that his research took in the five years after VAPA was completed. With grants from the Department of Energy he pursued a number of renewable energy projects in the Caribbean. For one project, his research station was a catamaran sloop in the Virgin Isles, where he was testing a demountable 13-foot diameter sail windmill generator. Later, he moved back to Boston and became a Research Affiliate in the Laboratory of Architecture and Planning at MIT. After a long career, Ward passed away on December 9, 2014 at the age of 92.

In 2003, Ward contributed an essay to a book on Cedric Price. He closes the essay with a discussion of famed "Building 20" on the MIT Campus, a space often referred to as the "Magical Incubator" and where numerous important projects, from atomic clocks to underwater cameras, were born. Ward felt that Building 20 was a successful structure not because of any grand architectural vision but because it was "a minimal, adaptable, adequate shell offering the maximum of personal and group choice." By the time of his writing, Building 20 had been demolished and was being replaced by star architect Frank Gehry's "Stata Center." Ward was skeptical that a building with "...fixed geometry of...willful playfulness" could ever be as successful.

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Cserna



