The Real Meaning of Architecture

Highlights from four works by Christopher Alexander, Gary Black, and Hajo Neis of the Center for Environmental Structure eloquently vindicate the firm's integrated, empirical approach to design and construction.

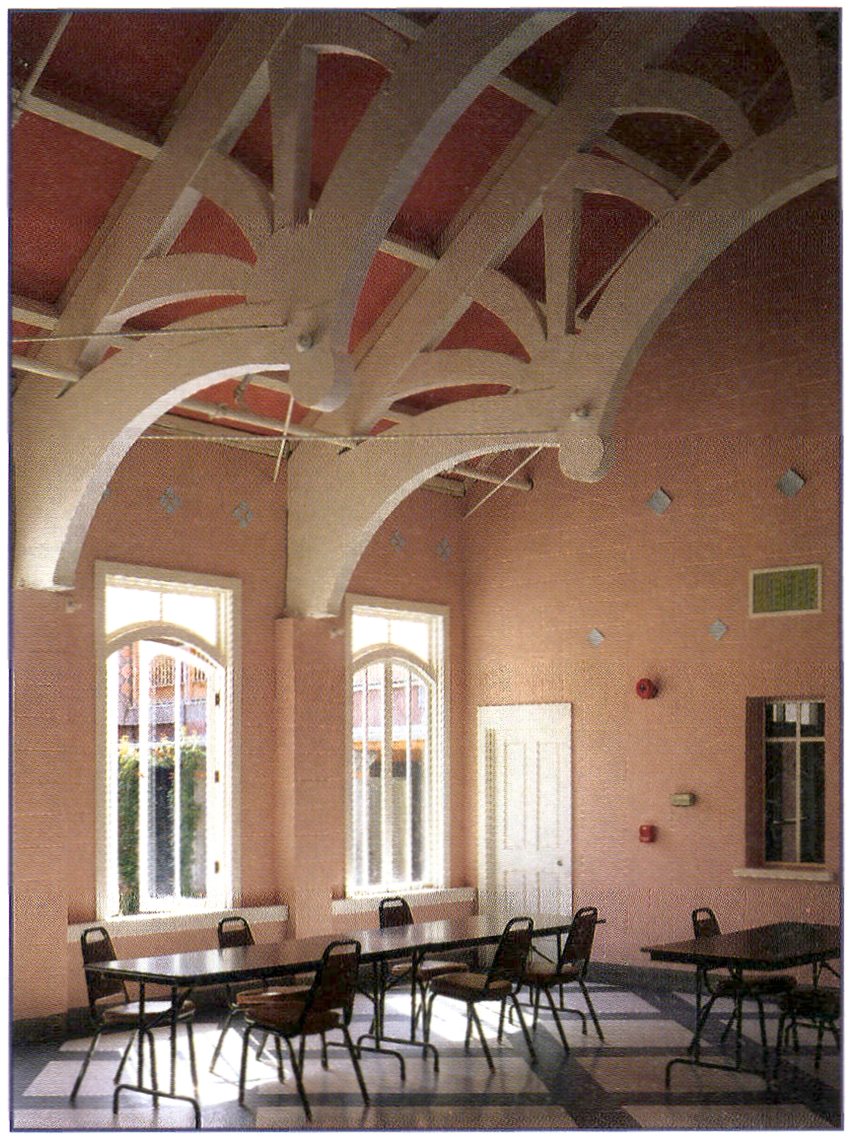
Christopher Alexander, CES

Progressive Architecture 7.91

FOUNTAIN IN COURTYARD

ENTRY FAÇADE

STREET FAÇADE



DINING HALL

Julian Street Inn, San Jose

Since at least the Middle Ages, religious and other charitable organizations have taken the lead in giving shelter to the homeless. And Christopher Alexander seems to acknowledge that in his design of the Julian Street Inn, which recalls the form and materials of a medieval cloister. The building turns monastically inward, with its perimeter dormitory structure wrapping around a central dining hall and service wing and a series of intimate colonnaded courtyards.

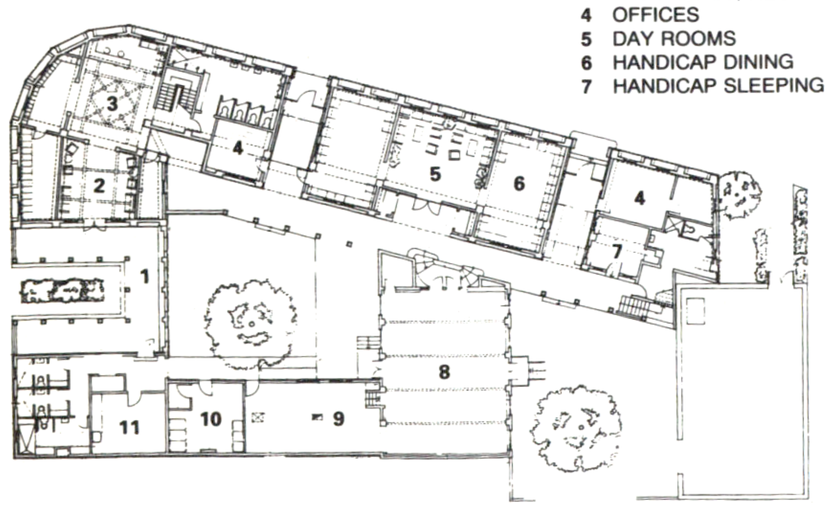
Alexander and his collaborators of the Center for Environmental Structure have managed to capture the quality and feeling of a traditional place of charity not through any specific stylistic reference, but through the building's form, materials, and scale. That is due, in large part, to the process Alexander and his colleagues employ: a design-build method in which many decisions about form and construction are decided on site with the involvement of the owners and users. His is not a seamless process: The person who runs the mission talks about the painful delays incurred while Alexander worked to get the concrete trusses in the dining hall just right. But Alexander's approach presents a fundamental challenge to us and our style-obsessed age. It suggests that a beautiful form can come about only through a process that is meaningful to people. It also implies that certain types of processes, regardless of when they occur or who does them, can lead to certain types of forms. The Julian Street shelter does not just look like a medieval cloister. It is like a medieval cloister in the best sense – the product of faith, hope, and charity. **Thomas Fisher** ■

Designed and built by Christopher Alexander, Gary Black, Eleni Coromvli, Carl Lindberg, Kleoniki Tsotropoulou, James Maguire; Oliver Construction, general contracting.

Photos: Mark Darley

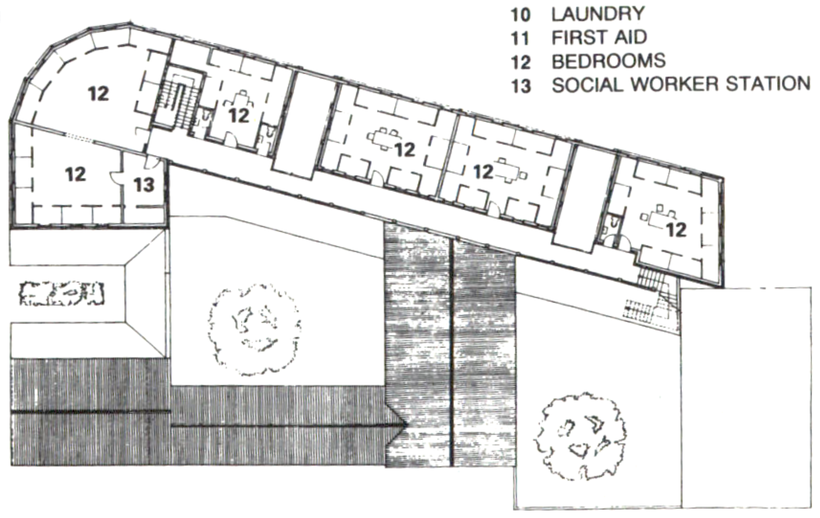
GARDEN COURTYARD

1 ENTRY COURT
2 ENTRANCE LOBBY
3 MAIN LOBBY, RECEPTION
4 OFFICES
5 DAY ROOMS
6 HANDICAP DINING
7 HANDICAP SLEEPING



GROUND FLOOR PLAN

8 DINING HALL
9 KITCHEN
10 LAUNDRY
11 FIRST AID
12 BEDROOMS
13 SOCIAL WORKER STATION



SECOND FLOOR PLAN

VIEW OF CAMPUS WITH TEA BUSHES AND LAKE IN FOREGROUND

Photo above: Christopher Alexander

CAMPUS STREET

ORNAMENT ON RECENTLY COMPLETED COLLEGE WING

Photos: Richard Barnes

Christopher Alexander

JUDO HALL

Christopher Alexander

CAMPUS IN LANDSCAPE

Shioda Tetsuya

EXTERIOR OF GREAT HALL

Hansjoachim Neis

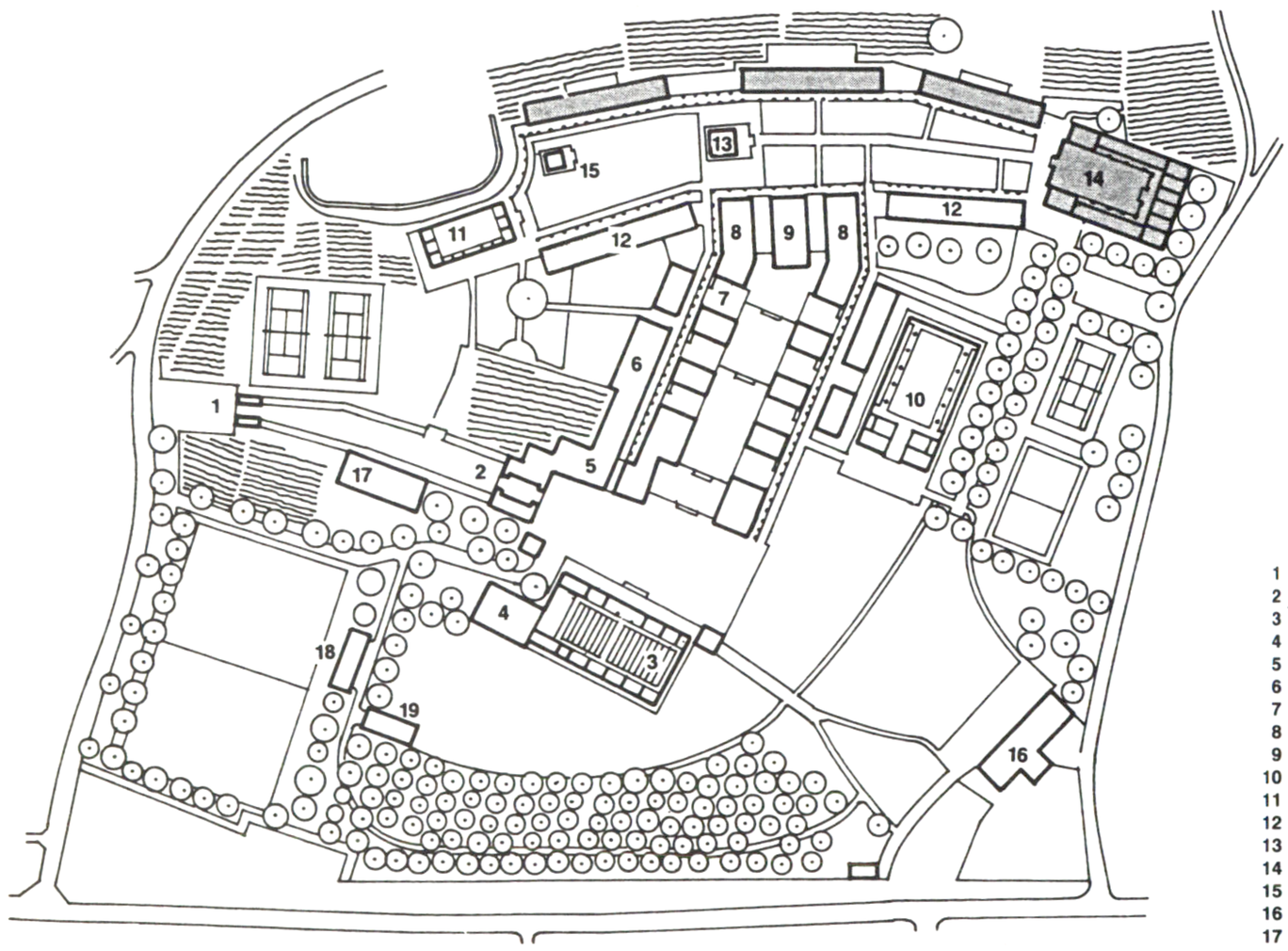
VIEW OF COLLEGE WINGS AND CENTRAL HALL

Hiroshi Kobayashi

ORNAMENT IN GREAT HALL

Christopher Alexander

CAMPUS STREET



SITE PLAN

N ↙ 100'/30m

1 FIRST GATE
2 MAIN GATE
3 GREAT HALL
4 MUSIC HALL
5 ADMINISTRATION
6 FACULTY OFFICES
7 HOMEROOM BUILDINGS
8 SPECIAL CLASSROOMS
9 CENTRAL HALL
10 GYMNASIUM
11 JUDO HALL
12 COLLEGE WING
13 STUDENT'S HALL
14 LIBRARY/RESEARCH CENTER
15 PAVILION
16 CAFETERIA
17 WORKSHOP
18 CLUB ROOMS
19 BOATHOUSE

PLANNED BUILDINGS ARE SHADED

New Eishin University, Japan

The scope and complexity of the Eishin campus have provided a unique testing ground for the empirical design/build methods of the Center for Environmental Structure, which previously had been employed only on smaller projects. With some 30 buildings completed since work began in 1982, at a cost of about $13 million, Eishin is the first Japanese institution to combine a high school and college within the same campus (P/A, June 1986, p. 92). The first step in its planning was to derive a "pattern language," an 80-page document worked out with the users, as a physical, social, and cultural "blueprint" for the entire project. Next, the various buildings were staked out on the 300 m by 300 m site, using hundreds of six-foot flags; the knowledge thus garnered, combined with input from users, was transferred daily to a 1:100 model. After studying the site for close to a year, Christopher Alexander and his collaborators set about compiling a palette of materials, based on their strong sense of local conditions. A 10′ x 14′ mockup took shape as a "statistical," or proportional profile of the complex mix of concrete, wood, stone, and plaster in predominant hues of black, white, green, and gray that best suited the compound's physical and emotional landscape, and the light's "odd mixture of softness and harshness." By then, a good deal of information about each building had accrued, Alexander explains. The main work remained, "to make a beautiful structure" for each in keeping with its nature.

Designed, built, and managed by Christopher Alexander, Hajo Neis, Gary Black, Ingrid King, Artemis Anninou, Eleni Coromvli, Hiro Nakano, with Fujita Construction Company.

EXTERIOR OF LIVING ROOM

STAIR DESCENDING FROM ENTRANCE

VERANDAH OFF LIVING ROOM

ARTIST'S STUDIO

Photos: Mark Darley

Residence, Lake Berryessa, California

Built on a heavily wooded mountainside, this 1600-square-foot home for a teacher and an artist steps down the slope with a series of volumes connected by stairs. The building masses themselves are symmetrical forms, which are placed in a syncopated way in response to particular characteristics of the site.

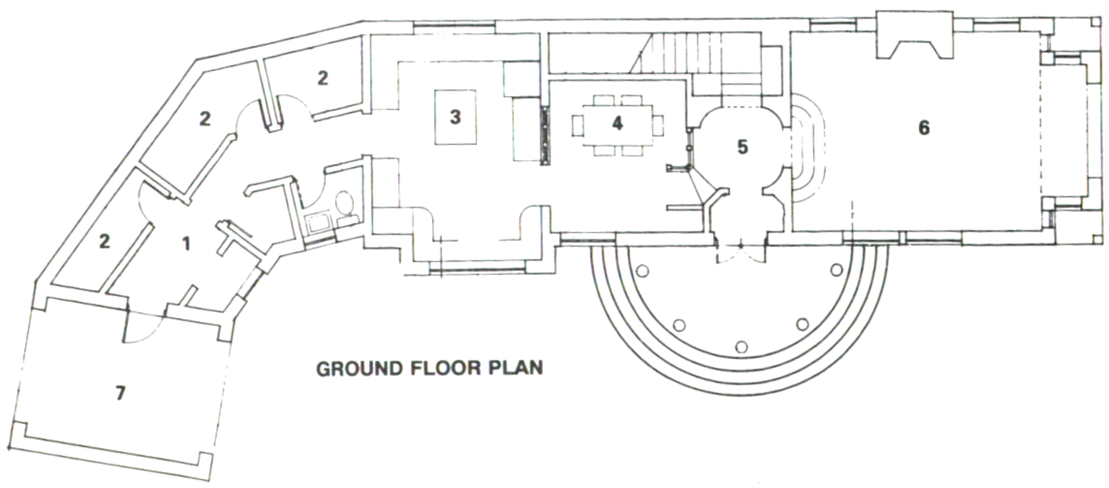
The number and relation of the house's various components were derived from the "pattern language work," or intensive discussion with the clients, that is an inalienable part of CES's design process. The next step was to "stake out" the building on the land. In this case, the procedure was made all the more crucial by unique site constraints. With only rough sketches to work from, the CES construction crew went up early on to walk about the site, locating immovable natural obstacles such as rocks and trees, and accordingly adapting and placing the formwork for the exterior perimeter of the buildings. Only after this was done could the house be drawn up in a conventional manner.

Other major considerations for the disposition of the house's parts were light conditions and views, as they changed every three or four feet. "That plan is not a style," Alexander asserts. "It came about because of a fundamental process of relating the building to the land." The climate in the area, some 80 miles north of San Francisco, can be very hot, and so the building needed to be of cementitious materials. The construction technique, one pioneered by CES, employed a 6x6 post and beam system for the vertical structure, with a 2-inch concrete shell forming the shear structure.

Designed and built by Christopher Alexander, Gary Black, Artemis Anninou, Bob Theis, Carl Lindberg, Seth Wachtel.

STAIR ASCENDING TO ENTRY PORTICO

FRONT AND BACK VIEWS OF EXTERIOR



GROUND FLOOR PLAN

1 ENTRANCE HALL
2 STORAGE
3 KITCHEN/FAMILY ROOM
4 DINING ROOM
5 FOYER
6 LIVING ROOM
7 GATEWAY

N 10'/3m

CENTRAL FOYER NEAR STAIR

LIVING ROOM

ENTRANCE HALL

STAIRWAY

Photos: Mark Darley

Residence, Whidbey Island, Washington

This house for a couple occupies a tiny knoll in the midst of acres of steep, forested terrain on an island in Puget Sound. Culminating a long and complex series of probing conversations with the clients, the architects of CES realized that the physical form suggested by the couple's life together was that of a building whose rooms were arranged "like a necklace of beads." At the same time, the CES crew spent a good deal of time on the site trying to pinpoint the most suitable disposition of th..t elongated volume. In this case, "construction" began virtually from the first visit: The knoll was so heavily wooded that it was necessary to cut some trees just to be able to grasp the lay of the land – a sensitive, non-reversible operation Alexander likens to "brain surgery."

From the knowledge that the house was essentially a long, thin volume stretching southward on the site, the plan took shape as a progression of spaces, with the entrance at one end, leading through a series of secondary rooms to the kitchen and family room at the center of the chain. The living room occupies the most protected, light-washed, southern end. The organization of the second floor similarly locates the "very precious" library and master bedroom at the extremities of the house. As Alexander puts it, "a deep understanding of form leads you to an understanding of function." **Ziva Freiman** ■

Designed and built by Christopher Alexander, Gary Black, Kurt Brown, Jim Dow, Bryan Almquist.