CASE STUDY APARTMENTS NO. 2 BY KILLINGSWORTH-BRADY AND ASSOCIATE, ARCHITECTS
Editor's note: While waiting impatiently for construction on Case Study Apartments No. 1 (formerly Case Study House No. 28, A&A November, 1963) to reach a sufficiently photogenic stage of construction to warrant publication, we here present our second excursion into multi-family residential architecture.

The site of the project is a corner property 129'-0" x 142'-0" located on the upper mesa of Newport Beach, California. One street is the primary traffic artery for the general area, the other is a typical street of a better residential neighborhood. At the rear of the property is a 20'-0" alley which provides for service. There is a 20'-0" building setback on the primary street and the sideyard requirements are 40'-0". However, at the side street there is an easement for underground utilities, which requires a building setback of 10'-0".

Zoning restrictions would have allowed 12 units on this parcel of land. The owner preferred to develop only 10, thereby allowing larger units and added amenities. Four of the apartments are two-bedroom units. The other six are two-bedroom, two-story studio type. The general plan has been developed as a balanced composition around a courtyard with a 15'-0" x 30'-0" swimming pool fronting on the principal street. On each side of the courtyard two two-bedroom apartments are stacked. The

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rear of the courtyard is closed with the six studio apartments. The garages face the alley and the bedrooms of the studio apartments are above these.

The building is set upon a 20'-high podium. Access to the courtyard is by means of low rise 20'-wide steps through wrought iron gates combined with facrotile glass to shelter the courtyard from the street. Paving in the courtyard is of concrete aggregate, composed of pea-size natural gravel set in a tight pattern of redwood divider strips. The 15'-0" x 30'-0" pool is by Fiesta Pools and is developed as a garden pool of simple shape for reflections as well as swimming. On either side of the pool are facrotile glass screens sheltering private gardens for the two-bedroom units on the ground level. Behind the pool, and at the focal point of the courtyard, is set a 17'-0"-high plaster panel as a background for a large bronze sculpture which is to be mounted upon a high pre-cast concrete base.

The studio apartments contain 1,310 square feet with living room, dining area, kitchen, two baths, master bedroom, and a den-bedroom combination. The width of the unit is 20'-7", the depth is 50'-0" including the master bedroom which projects over the garage space. Entrance to each apartment is by private courtyard through a tall door to the two-story-high living room. Features of this room include the two-story glass wall to the garden, a tall fireplace and the den-bedroom at the second floor as a balcony. The dining area is at the rear of the living room and is a one-story space with a wet-bar set behind walnut doors. Cabinets in the kitchen are of walnut with white plastic laminated tops. The lighting is low key incandescent, and all appliances are electric, including the water heaters. A pantry and a large serving counter to the living room are also features of the kitchen.

The second floor consists of a master bedroom and two baths and the den-bedroom combination on the balcony with a commanding view through the two-story living room to the garden beyond. The master bedroom is 13'-0" x 17'-9" with a large quantity of storage space. The master bath has two separate marble counter tops with wash basins and an individual compartment for the toilet and shower.

The four two-bedroom apartments on either side of the courtyard are duplicate units with two above and two below. Each apartment contains 1,290 square feet with living room, dining room, kitchen, two bedrooms and two baths. A small entry separates the entrance from the 16'-0" x 21'-0" living room which faces upon its own private courtyard. At the end of the living room is a room 10'-0" x 12'-0" which may be used (Continued on page 32)
ITALY — ESTHER MCCOY
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near Olbia in Sardinia.

Not unexpectedly, the consumption of tiles of traditional design is greater in the south. The north makes good use of its contemporary artists and architects. The ubiquitous Gio Ponti, however, designed some tiles for D’Agostino and a large line for Joo Ceramics of Milan and Genova Ceramics of Genoa. His associate Alberto Rosselli has also tried his hand at tile design with good results. Many of the artists whose ceramics have been exhibited at the last two Triennales of Milan have now turned to tile design with the upswing in the production. Their understanding of the medium gives their work distinction. Examples have been brought to the United States by the Cappellini Ferruccio Company of Milan.

But the bulk of the tile production comes off the beltlines of Joo Ceramics, Genova Ceramics, Pozzi of Milan, and the firms belonging to the Association of Industries of Sassiolo, Veggia and Spezzano di Fiorano in the area of Modena. Their combined output of gres and majolica tiles is enough to pave the European Common Market.

Modena, twenty miles from Bologna, is the hub of a large tile operation. A city with a superb Romanesque cathedral and campanile, and a great cuisine which is complemented by the light red, slightly spumante, Lambrusco wine, it began producing tile in the 15th century. Within a short drive from the city are now over a hundred tile factories, all filling orders for Europe, Asia, the Near East and America. Ceramic tiles are cheaper here than asphalt or linoleum ones, and cities and towns clothe all their new buildings with it.

At their most romantic, tiles are wonderful embroideries molded with fire, and at their simplest they are oiled clay or sandstone fired to a brick red, brick-shaped or in Roman splits, beautiful in their serviceability. D’Agostino makes them not only in the basic shapes but in hourglass, diamond and lozenge shapes.

A tile that circles the globe is the glass mosaic from around Venice. The walls of most of the railway stations in northern Italy are of glass mosaics. The SARIM plant at Mira, which at night looks like a setting for a production of Faust, has a hundred or more bins of tiles, each of a different color. An excellent use of them close to home is in the First Christian Science Church in Santa Monica, designed by the architects Risley, Gould and Van Heuklyn. On a serpentine wall the glass mosaics shade from pale sand to dark brown with darker tones on the concave surfaces. The uneven undulation of the colors was achieved by the blending of light to dark on the sheets of mosaics, and gradually working up the scale to a concentration of the deeper tones. In lights and darks, gold tiles are interlaced for sparkle. There are fifteen colors in the full range from light to dark.

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either as dining room or a small family room-dining room combination. On one wall is a wet-bar set in walnut cabinet work. The kitchen is spacious and has direct access to the private courtyard through a sliding glass door; the cabinets are of walnut with white plastic laminate tops. The two bedrooms are large, with ample storage areas, and the master bath, with a large expanse of mirrors, serves also as a dressing area at the entrance to the bedroom. The counter top is of marble and has dual bowls. The second bath is located with direct access from the other bedroom, which may be used as a study or a guest room.

The buildings are of wood frame and plaster. Heating is by means of electric wires in the ceilings of the units. First floor apartments are on a concrete slab floor. The second floor units have floors of Elastizell lightweight concrete set on wood floor joists.

Landscaping of the project will be extensive, with large olive
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trees set at either side of the courtyard entrance of the building and at the side street corner to soften the corner. Plant material in the courtyard will be set in large pots to develop a formal character. Colors of the structure throughout will be muted earth tones with a dominance of white for interior wall surfaces.

Furnishings will be of a simple linear form to reflect the general architectural character of the project.

STATEMENT — LOUIS I. KAHN
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the law of light, from which I have made a rule for myself in the design of the building.

Recently I was asked to design a town in Israel. Unfortunately I could not go to convey my ideas. But I thought of the desert being reshaped in mounds, which would contain reservoirs. And these mounds would be so placed along the winds that they would help in creating venturi which now are just flowing freely, not being controlled. And that a village be built around a venturi principle of air so that the air would be guided through small avenues and large receivers. The shape of the streets will follow the need which the buildings have there. This would not be applicable in Germany. Some of the buildings which are built in Israel today, follow the rules set down by German architects — good rules for Germany, but not good rules for Israel. This indigeneous architecture is, I think, the great excitement of architecture.

In a dormitory I'm doing for Bryn Mawr College, I had a feeling that the dining room, living room, reception rooms and entrance were different, in every respect, from the sleeping quarters. And I kept the sleeping quarters apart from these rooms, believing that I was expressing that one was different from another. But I discovered my mistake. I realized that a person sleeping in a room felt well about his house if he knew the dining room was downstairs. The same with the entrance to the building. The sense of hospitality, or reception, of getting together must be part of the fabric of the house itself. I changed, much to my delight, the whole conception, and I made these spaces part of the fabric of the other spaces. To me, this is realization in form.

Now if I had just looked at it as design, as I did before, I would have been led to something which may look well, but which had no power to convey one very wonderful thing about architecture. Because architecture really is a world within a world. When you build a piece of architecture, you build a kind of location for an activity of man which is, let's say, different from another activity of man, even though it may be in the same general realm of activity.

One of the most wonderful buildings in the world which conveys its ideas is the Pantheon. The Pantheon is really a world within a world. The client, Hadrian, and the architect, whom I don't know the name of, saw the demand of this pantheonic requirement of no religion, no set ritual, only inspired ritual. He saw the round building, and a very large building. I imagine that he probably thought the building should be at least 300 feet in diameter; he changed his mind because there were no craftsmen who would make such a building, and it was out of the stream of economy. Economy meaning here that there's no man around to do it. I don't mean money — I don't mean budget — I mean economy. And so the Pantheon is now a hundred and some feet in diameter. The dome, the first real dome made, was conceived with a window to the sky. Not because of ethereal reasons, but because it's the least distracting, the one that is most transcending. And there is a demand form saying nothing specific, no direction; that's what form says to you, feeling and philosophy. It says no direction to this . . . no oblong . . . a square not satisfying here . . . too far and away at the corners. The round building is something which is irrefutable as an expression of a world within a world.

Now architecture — if you think of it in terms of school — also probably began with a man under a tree who didn't know he was a teacher, talking to a few who didn't know they were pupils. They listened to this man, and thought it was good. And they liked to have their children and their children's children listen to such a man. Of course, that was in the nature of man impossible. School then became a room, and then an institution. Read a program today from the institutions called schools, and what do you get? You get a program that sounds like this: There should be a nine-foot fence around the school; there should be corridors, probably nine feet wide because statistically this is supposed to be enough. These, being corridors, are possibly the best place to have the air conditioning return system and lockers.

In this environment you go to your classrooms, which, by reason of the fact that all classrooms have 30 pupils in them, are all alike. You have perfect air conditioning, ventilation and light — this is always given. And the cafeteria can be in the basement, because actually you don't spend much time there. This is the kind of a program you get from the School Board.

Now I think the first act of the architect is to change this; to change the program for what is good for the institution, for the continuation of the institution of learning. Man has established that for which he feels an inner need to know, to relate knowledge to himself. And that school is as much a part of him as though it actually grew with him. That's really what an institution is. It's an extension of man and his needs. And this must be made greater and greater by the architect. He must refuse the program, he must change the client's program — which reads in the form of areas — into spaces. He must change corridors into galleries; he must change lobbies into places of entrance; he must change budgets into economy. Architectural space is a space within which you read how the space is made; within the space, the columns, the beams, and the stones are in the space itself. A great span must have nothing in it, but that which is captured by the span. And the decision of the structure of the span is also a decision in light. A column, next to a column is an expression of opening and light. A vault is a choice in character of light. You wouldn't open one room to the other to find out how the space is made. Within the space itself is the structure of that space. That makes architecture different from building, just building. All building is not architecture.

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less blocked, except the single outlet through his fingers. “Arch-angel” the once-famous dancer Maud Allen breathed aloud, when I spoke of her beloved friend Ferruccio Busoni. “Archangel — and Archdevil!” Richard Bublig, who had known Busoni well, growled back at her across the table. They did not quarrel, each remembering a man outside the common knowledge.

Guy Maier told me of taking the young Vladimir Horowitz to