



The fantastic world of Paolo Soleri

BY PETER BLAKE



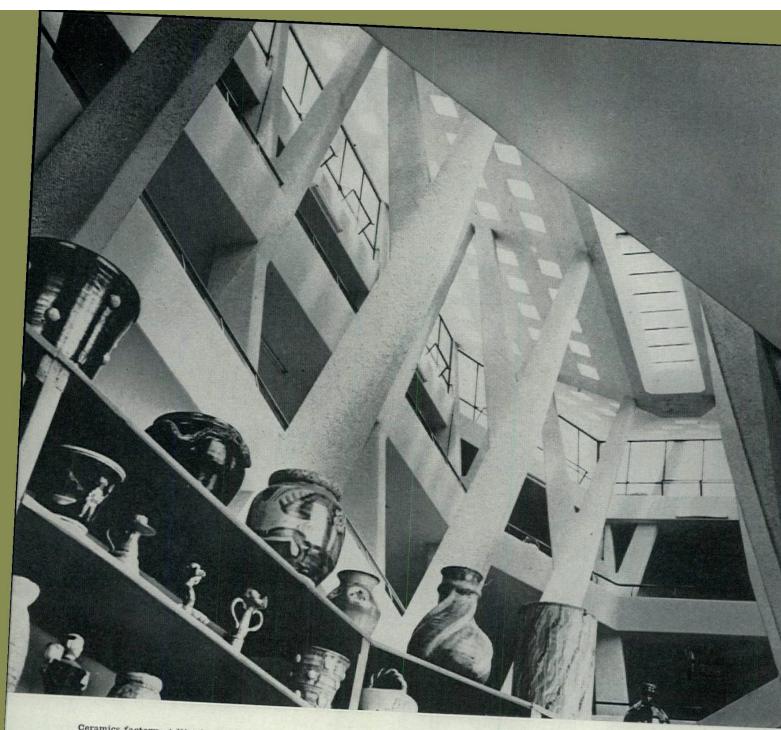


Domed desert house by Soleri and Mark Mills (top) was built ten years ago. Tubular bridge (bottom) was designed by Soleri in the late forties; it unfolds where structural stresses are small, closes back into tube shape at midspans. Opposite: detail of formwork for Soleri's new "earth houses." The small, wiry figure sitting at his long drafting board (above) is that of a 41-year-old Italian architect and visionary named Paolo Soleri. He lives, with his family, in Paradise Valley, a desert near Phoenix, Ariz., only a few miles from *Taliesin West*, where he received a part of his training under Frank Lloyd Wright's direction. In Paradise Valley, Paolo Soleri is redesigning the world.

To most of his fellow architects, Soleri is a complete stranger: it is true that a stunningly beautiful, domecovered desert house built by him in collaboration with another Taliesinite, Mark Mills, was published in FORUM'S "Young architects" issue ten years ago; it is further true that Soleri built a strangely sculptural ceramics factory on the Amalfi coast, south of Naples—but he never bothered to have it photographed or exhibited, and few Americans have seen it; finally, there is a Soleri design of pure genius for a tubular, reinforced concrete bridge—perhaps the first new bridge concept since Maillart—but it was never built. In short, Soleri is practically unknown to the "real world" of architecture: he is an "outsider," supporting his family by making ceramic bells that are weird in shape, and sound lovely.

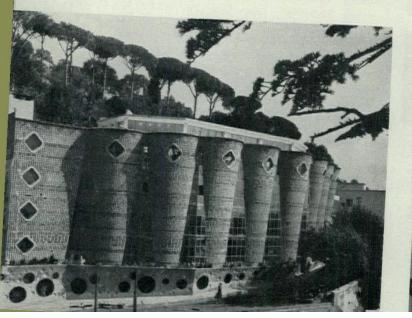
If Soleri has withdrawn from the "real world," he has created another kind of world around him: a fantastic world of form within which he lives and works. This is the first of two FORUM reports on Soleri's world: this first one is concerned with his structural experiments; the second will deal with the dreamlike "City on a Mesa" which Soleri has been designing and drawing up in meticulous detail on dozens of rolls of butcher paper, each several hundred feet long.

What is Soleri's aim? "We are put on an earth of splendor, of ever changing beauty, of power and grace," he said recently. "Architecture could offer man a way of equaling nature." He is trying to find that way.



Ceramics factory at Vietri sul Mare, near Salerno, is a single hall, about five stories high and ringed by ramps that spiral upward and are supported on reinforced concrete "trees." The space is lit chiefly from above, and is reminiscent of Wright's Guggenheim Museum. But the exterior is indigenous to the Amalfi coast: great,

tapered shells that recall the pine-cone shapes so natural to this region. Colorful patterns of ceramic tile are applied to the outside walls. Openings in this exterior shell are circular or round-cornered so as to avoid clashes with the fluid forms of the building. Soleri designed this factory during a stay in Italy in the early fifties.





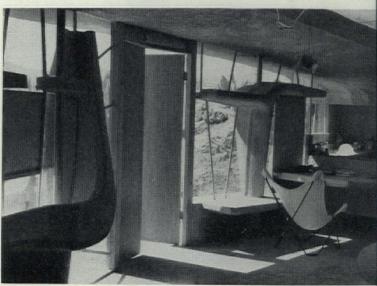
For all his withdrawal from the "real world," Soleri is a very sophisticated artist: prior to Taliesin, he received a doctorate with highest honors from the Polytechnic of Torino, and he is not unaware of the presurrealist work of Antoni Gaudi in Barcelona, or of Wright's twin principles of "plasticity" and "continuity." There are traces of all this in Soleri's buildings; but there also is unmistakable evidence of a highly creative mind.

The ceramics factory at Vietri sul Mare is, admittedly, reminiscent of Gaudi's Sagrada Familia in its interiors (opposite); but it is a remarkably original building in its cliffside setting: the bulging, thin-shelled walls enhance rather than interrupt the curving cliffs that have made the Amalfi Drive one of the favorite obstacle courses for motorized Italians; and the ceramic-tile facing on the exterior declares the purpose of this building without recourse to billboards. Except for the angularity of the treelike structures inside (Soleri's original drawings showed them more curvilinear, but budget problems intervened), this factory, with all its complex surfaces and openings, does not seem to strike a single false note.

The "earth house" shown below and at right is one of two related structures built by Soleri in Paradise Valley. Its construction is described on the next page; these illustrations reveal how far Soleri has gone in his search for more natural forms that literally grow out of the earth. Here, again, are traces of Gaudi's work and some suggestions of the kind of structure that Wright used to dream about; but, once again, the forms and techniques are completely original: forms inspired by natural organisms found in the desert, and techniques developed out of the special qualities of the desert clay.

The "earth house" is about 25 feet wide and 35 feet long; its floor is 6 feet below that of the desert, and the curved and ribbed thin-shell roof (about 3 inches thick) meets the desert floor on the two long sides of the plan; the ends of the house open into two excavated patios; these patios were designed to collect rain water in special collection pits, and this water is used to grow plants in and around the patios. Eventually, planting will be used to cover the roof as well, so that the house will merge with and enhance the desert—rather than destroy it as do the tract houses all around Phoenix.

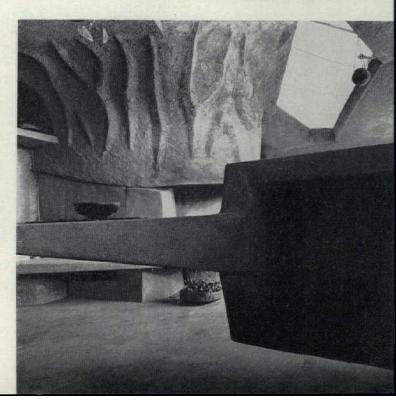




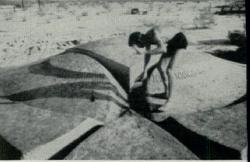
PHOTOS (LEFT AND BELOW) : STUART WEINER; (ABOVE) PETER BLAKE



First "earth house" (above and right) is centered on a concrete fireplace sculptured to resemble a natural rock. Glass walls at each end of the house are interrupted by concrete stalagmites that serve as occasional shelves. Roof shell is being covered with planting.

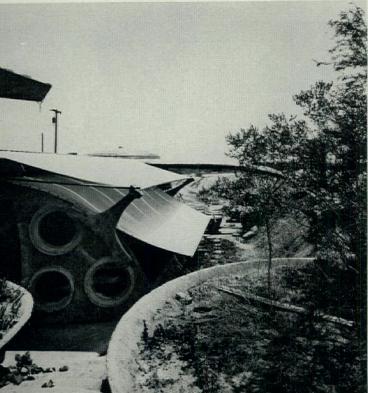






Five steps in the construction of Soleri's "earth house."





The second "earth house" built by Soleri contains his drafting room (left and page 105), and an outdoor workshop where he makes his ceramic bells. The construction of the "earth houses" is disarmingly simple (see pictures above): first, Soleri makes a huge mold out of hard desert sand; this mold is scored with V-shaped indentations that crisscross the mold from one end to the other; next, reinforcing rods are placed into the indentations, and reinforcing mesh is laid over the entire mold; after that, concrete is poured or sprayed over the mold and left to harden—being cured every so often with a garden hose; finally, a small bulldozer is brought in to excavate the earth under the concrete shell.

The excavated dirt is piled up around the shell to make the roof blend more gently with the desert landscape. Meanwhile the walls, floors, partitions, fireplaces, and some built-in furniture are formed directly in concrete, by hand. A few elements (like the Y-shaped arm shown at left which holds the canvas sunshade over the drafting room) may be precast and applied later. Circular windows are framed by sections of concrete pipe, and the skylight over the outdoor workshop is a paper honeycomb inserted into an opening left in the roof shell.

While the first two "earth houses" were built by relatively primitive means, the technique is adaptable to more sophisticated construction in areas where the ground contains a fair proportion of clay. But however primitive these first "earth houses" may appear in terms of technique, they are anything but primitive in spirit: for unlike the tract builders who have desecrated the desert all around him, Soleri has made his structures look as if they had always been a natural part of the landscape. "Violence against nature is violence against man," Soleri has said. "It is unconscious envy that makes man a destroyer of that which he cannot equal. Of all the tasks that concern architecture, the one of making an environment in cooperation with nature and in harmony with man is the most urgent." Here, in these earthformed structures, cool in the hot desert day, and warm in the cold desert night, Paolo Soleri lives and works in harmony with nature.

Second "earth house" (left and opposite) contains Soleri's drafting room (which is shaded by double sails of canvas) and his outdoor ceramics workshop, which is lit and ventilated through a skylight of paper honeycomb (right). Interior of drafting room is shown on page 105; windows are glazed sections of concrete pipe.

