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Two Sunflowers



1 Drawing of *Helianthus annuus*, from *Hortus Eystettensis*, illustrated by Basilius Besler, Eichstatt, Germany, 1613.

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The widespread cultivation of *Helianthus annuus* (fig. 1), the common sunflower, is due to the ease with which this giant flower can be grown, the popular yellow dye produced from its petals, and the desirability of the oil squeezed from the seeds of the flower, said to rival the quality of fine olive oil. Doubtless too, the popularity of *Helianthus* accrued from the unusual form of the flower; an expansive array of huge yellow petals extending outward from a central disk of seeds, according to the sixteenth century botanist John Gerard, "like the radiant beams of the sun." Seemingly too large to be supported by such a tall slender stem, and according to a popular but mistaken legend, constantly facing and following the sun (hence the anglo-saxon suffix to the botanical name of *solsaece* or "sun-following"), *Helianthus* seems to be almost a caricature of a flower; an exaggerated, symbolic representation of the radiant energy of the sun itself.

Not surprisingly, this provocative image inspires an irresistible metaphor for two different architects who apply the idea to two different apartment buildings. Using the modern Italian and Spanish derivations of *Helianthus*, *Il Girasole* in Rome designed by Luigi Moretti in 1949 (fig.



2 *Il Girasole*, Luigi Moretti, Rome, 1949, south facade

2), and *Il Girasol* in Madrid designed by José Antonio Coderch in 1966 (fig. 3), both make reference to the iconographical and metaphorical content implicit in the form of this peculiar blossom. Neither building looks like a sunflower but each exploits its imagery; each opens to the sun while confronting it, simultaneously receiving yet denying the solar presence. Each, like the sunflower, extends its perimeter seemingly beyond its defined edges, heightening the impression of ambiguous enlargement; real size versus implied size. Each building, like the proverbial sunworshiper, requires a frontal relationship with the

sun for the reception of vital energy and yet each is "blinded" by that singular preoccupation and each requires the application of filtering devices to protect the life within from a withering solar brilliance.

Luigi Moretti's reputation was established by 1936 when, at the age of 29, he designed the Fencing Hall at Mussolini's heroic new sports center for Rome, the Foro Italicco, an exercise in Rationalist design during the fascist period. Later designs by this important Roman architect include work with the team that designed the

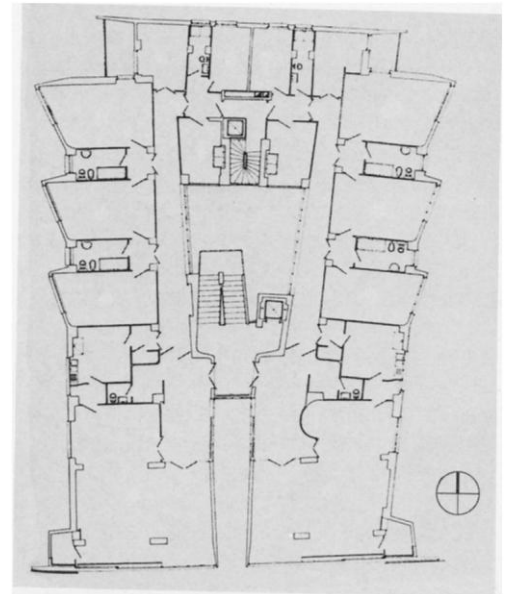
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3 Il Girasole, José Antonio Coderch, Madrid, 1966, oblique view: the south facade to the right and the west facade extending up Calle de Lagasca to the left

residential quarters for the 1960 Olympics in Rome, the infamous Watergate Apartments in Washington of 1961, an office tower in Montreal in 1962, and several commercial apartment buildings in Rome and Milan. Moretti also wrote a series of theoretical articles about structure, Spring 1985, *JAE* 38/3

space and form for the magazine *Spazio* which he edited and produced in his office in Rome in the early fifties. Later articles dealt with research into the structure and mathematics of Architecture.¹ These articles reveal an architect preoccupied with a rather vague, "organic" insight to



4 Il Girasole, Moretti, typical floor plan

building, a view generated from investigations of historic buildings, but certainly far removed from the classicism implicit in his earlier Rationalist designs. It is likely that the interest displayed in the writings and investigations of space and form result in a recurring theme in Moretti's later work, a theme of angular or irregular forms juxtaposed upon planar, regular forms. This tendency is best demonstrated with three small apartment buildings built in Rome between 1949 and 1962: Casa Astrea, 1949, Il Girasole, 1949, and Casa San Maurizio of 1962. Il Girasole capitalized and expanded on themes developed at the same time in the design of Casa Astrea. Il Girasole is the best of the three buildings and certainly Moretti's *tour de force*.

The name "sunflower" is perhaps derived from the plan organization of this building (fig. 4). Two large apartments per floor back up to an interior courtyard and circulation core with rooms opening as diagonal appendages, radiating outward at the sides like the petals of a flower. The street facade, however, is singularly remarkable as an abstract surface, turned sunflower-like to face the sun. This exaggerated surface simultaneously receives then excludes the sun. Receptive but reflective—with a variety of flush, roll-down, and sliding screens superimposed in extraordinarily shallow layers, it extends beyond the implied building envelope at the top and sides (where the tracks for the sliding screens extend about one meter beyond the side of the building). In an astonishing condition

of visual levitation, this surface also cantilevers forward from the rusticated base. The facade reveals other contradictory illusions. The vertical cleft which reveals the depth of the courtyard within and which is centrally organized by means of a cantilevered vault at the top, with right and left sides misaligned at the top would seem to encourage the dissolution of planar surface, but does not. The discontinuous surface, vertical void, and misaligned cornice—at face value certainly elements of discord—still do not discourage the reading of a pedimented, classical building; a cogent demonstration of Moretti's intention to apply principles derived from historic research to the design of a modern building. The free-floating detachment from the building base, a fact further enhanced because the battered stone wall of the base partially extends beyond the side of the building, would seem to be ideas involving the destruction of traditional building form, but instead, actually enhance the street surface and implied *piano nobile*. The paper-thin detail of this surface, with taut, flush windows and screens, is further exaggerated by the recessed base and vertical cleft; a deliberate contrast is made between the rusticated supporting base and the sheer, thin membrane of the glass wall above leaving the impression of a technically sophisticated, crystalline plane emerging from a vine-covered fragment of Roman antiquity.

The glass membrane, which exists independently by virtue of the cantilever and a lack of obvious response to a distinct structural grid, seems devoid of traditional building references. However, a ghosted trabeated structural grid visible in the texture of the surface of the stone base maintains a dialogue with traditional building. The upper facade actually consists of horizontal spandrel zones of small white ceramic tile, but the image of a continuous sheer surface prevails. A combination of horizontal sliding screens and vertical roll screens cover both the floor-to-ceiling wood sash, as well as the corner balconies so that several striated layers of surface are revealed as the various screens are adjusted. The original screens were wood, but the aluminum replacements only heighten the sensation of layered reflectivity (Fig. 12).

Il Girasole was built in a district of speculative apartments in the Parioli quarter of the city and had to respond to the same limitations as the neighboring buildings. The phenomenal south facade belies a rather ordinary building in most

other respects; a brilliant creative burst, wasted perhaps, in an unsympathetic milieu. Still, this sunflower is one of the truly remarkable buildings of post-war Rome, simultaneously combining historic and modern ideas, values and materials.

Coderch, like Moretti, shows a Mediterranean infatuation with the allegorical virtues of the sunflower metaphor. Both architects designed buildings which confront yet are protected from the sun. The dwellings in each have a distinctive “stepped” form, the result of a strategy to let light into interior rooms. Each architect has applied a system of moveable screens and blinds to his buildings which control the amount of sunlight admitted to the interior.

Il Girasol of J. A. Coderch, however, is conceptually quite different from Moretti's building in Rome. Moretti displayed a fascination with the flat frontal aspect of the sunflower as reflected in his imagery, while Coderch is much more interested in the floor plan implications of the repetitive, petal-like form of the flower, a quite pragmatic scheme for the design of a very deep dwelling which admits sunlight to interior rooms. Unlike Moretti, who goes to great pains to design a sheer glass plane which faces south, and so requires elaborate protection, Coderch's Girasol is designed with almost no glass on the south and west except on protected interior surfaces (fig. 3).

The idea of the individual dwelling in Il Girasol originates with designs of earlier single-family houses and is a concept which undergoes more-or-less continuous development for twenty years, finally being applied in the design of extremely high density housing in several new quarters in Barcelona. Several vacation houses along the Costa Brava which Coderch designed during the fifties and early sixties are variations of a similar recurring theme. Casa Catusus of 1956 (fig. 6), is typical of these early houses; a one-story building organized around a garden patio with pool. The living areas and bedrooms of the house open to this patio and the house presents a mostly blank wall to the street. Full-height, wooden rolling louver screens operate on the outside of the windows providing privacy and solar protection as well as the security necessary for a vacation house. These sliding screens, because they are the full height of the wall, are really rendered conceptually as moveable, perforated walls which maintain the continu-

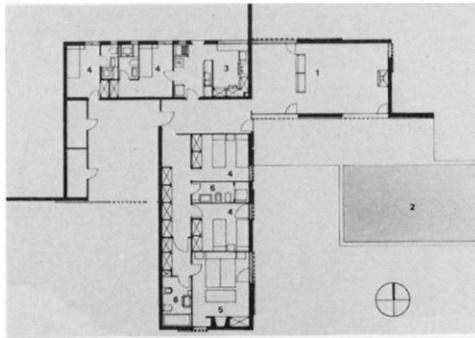
ity of exterior surface; a continuous textured surface rather than the subdivided, modulated pattern typical to a wall perforated with a variety of windows.

By 1961, in the Casa Uraich (fig. 7), the idea of this house has evolved into a more complex form, now with bedrooms extending from the central living spaces in a staggered arrangement opening, as before, to a common patio. Each bedroom has a single window producing a distinctive stepped form.

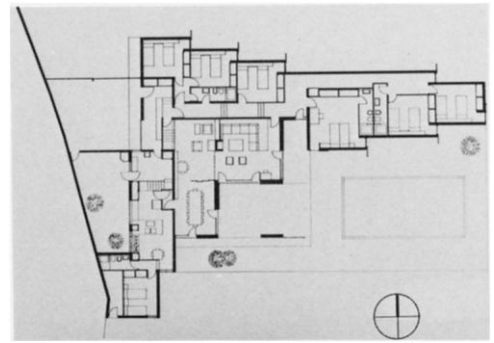
Coderch was well aware of the potential adaptation of this idea to multiple family housing. The typical floor plan of the housing block for fishermen of the Barceloneta of 1951 (fig. 8), for



5 Il Girasol, Coderch, typical floor plan



6 Casa Catusus, J. A. Coderch, Sitges, 1956, plan



7 Casa Uraich, J. A. Coderch, Atmetila del Valles, 1961, plan

example, is really just two smaller versions of the house placed back-to-back around an interior court and service core with the patio and stepping for the bedrooms now reduced to two small terraces. As with the houses, a system of wooden screens covers the glass wall and terraces as a louvered surface flush with the tile-covered wall. The complex stepped form is thus sheathed with a louvered membrane creating a simple geometric solid on the exterior.

This parti for an apartment building occurs later with six apartment blocks in Barcelona of 1967 (fig. 9), and the Cocheras quarter of twenty-three blocks of 1968 (fig. 10). In both of these later projects, the back-to-back stepped form is not covered with the louvered wall and the stepped form derived from the houses dominates the exterior. In Las Cocheras, there are plans with either two, three, or four dwellings per floor, and the idea has been adapted for different orientations. In these buildings, the floor-to-ceiling rolling screens have been replaced with a combination of hinged panels of vertical wooden louvers and roll-down screens, however, the impression persists of a system of protective screens which maintain wall surface and cover a variety of windows and balconies.

Il Girasol, unlike these buildings, is not a free-standing building. Built in a district of party-wall apartment buildings in the Salamanca quarter of Madrid, Il Girasol is built on a corner site with the long side facing west along Calle de Lagasca and the end facing Calle de Ortega y Gasset to the south. A back-to-back arrangement of apartments was hardly feasible here. Instead, the typical floor plan reads as five Casa Uraichs placed side-by-side like parallel row houses (fig. 5 and 11) in five floors of apartments raised above the street on several levels of commercial space. The sunflower here has been opened in a parallel rather than a radiating organization of petals, opening southwestly rather than southwesterly. Each petal is rendered as a separate casa complete with the stepping bedrooms and the interior patio which is now some thirty feet removed from the street facade. The impression of petals is heightened by the curving walls between apartments which are rounded like the edge of a petal creating a decidedly botanical aura. While there is a definite sense of repetition, no two apartments are alike. The southern dwelling is modified with a series of angled walls which protect the windows from direct sun, and the northern apartment is different to

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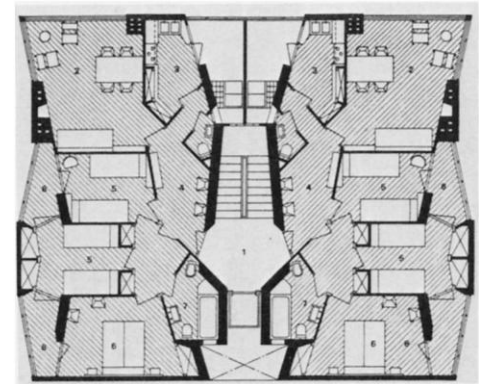
accommodate the side of the existing building to the north.

Each apartment is organized into a zone of smaller, enclosed rooms along one wall, and open living spaces along the other. The living room and the bedrooms open to large terraces around the central void. The blank wall of the master bedrooms and the void of the terraces create an alternating rhythm of solid and void along the west facade, recalling yet again, the sunflower metaphor. The five-story zone of dwellings, because it cantilevers out over the several recessed levels of shops along Calle de Lagasca, recalls the image of the exaggerated sunflower supported by a slender stem. A lobby area raised slightly from the level of the sidewalk gives access to the elevators and connects to lower shops and small courtyards. Service stairs and elevators at the rear connect from basement floors to the kitchens of each apartment above.

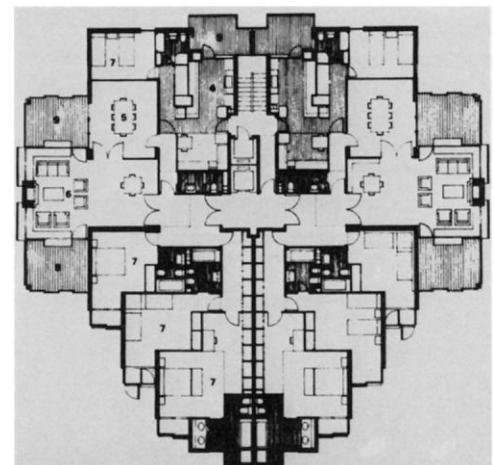
The persistent application of a single theme over a long time is not a characteristic trait of Coderch alone. However, the ability to apply the house idea to so many different situations with such single-minded thoroughness is what sets him apart. The use of the house theme here in Il Girasol has, perhaps, stretched the idea to its limits, but these beautiful apartments—urban villas, really—with large dining and living rooms, with fireplaces, opening to richly landscaped terraces, with private balconies off each bedroom, and separate service quarters independently serviced and connecting to an enormous kitchen, set a standard of quality unmatched for luxurious urban living (Fig. 13).

We can only speculate to what degree Moretti and Coderch have actually applied the sunflower metaphor to their work here; we can only guess what symbolic significance is attached to the fact that each architect named his building “sunflower.” There was an interest in biological forms as models for building during the modern period, a tendency stemming partly from a d’Arcy Thompson inspired searching for the origins of pure form, partly from the “organic” notions inherent in expressionism, and partly as a reaction to the dilemma posed by the imprecision of the canonical dictum, “form follows function.”

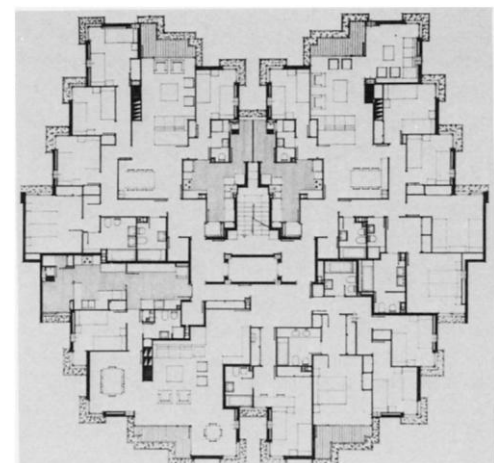
Coderch’s sunflower seems to be preoccupied with “organic” issues; it is rather “botanical” in nature, soft and rounded, and seemingly capable of imminent growth. And, while we have



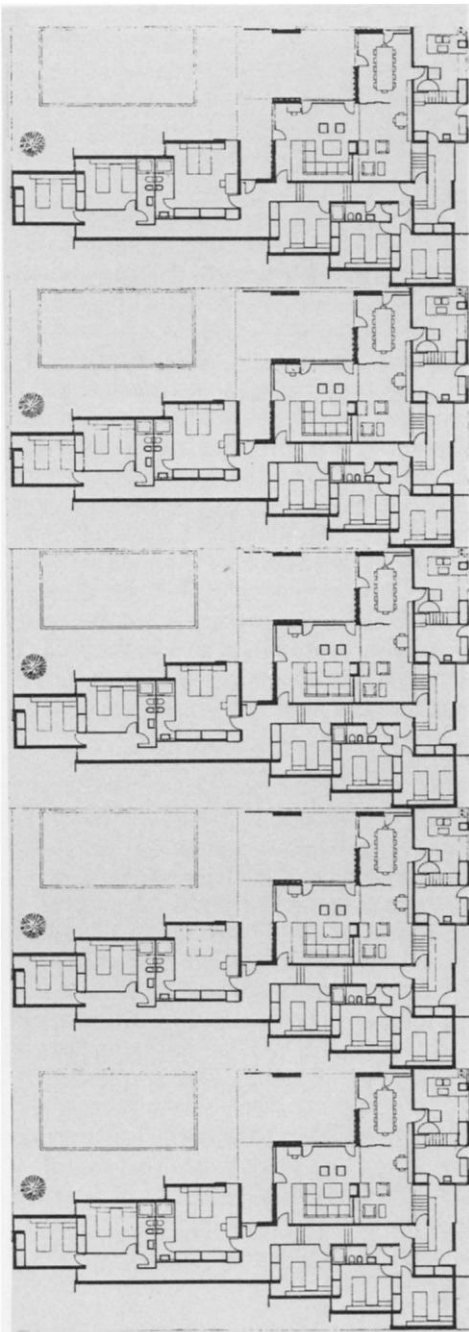
8 Barceloneta housing, J. A. Coderch, Barcelona, 1951, typical floor plan



9 6 Apartments Blocks, J. A. Coderch, Barcelona, 1967, typical floor plan of one block



10 Las Cocheras, J. A. Coderch, Barcelona, 1968, typical floor plan of a typical block



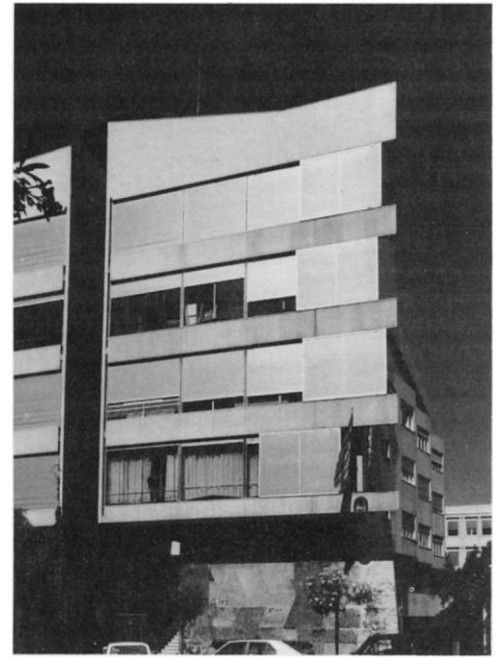
11 Plan, hypothetical apartment building derived by combining 6 Casa Uraich plans; note the similarity with Il Girasole plans



12 Il Girasole, Moretti, south facade, detail

seen that Coderch's ideas evolve in rational fashion from building to building, Il Girasole still projects a highly intuitive, perhaps "organic" ambiance. Moretti's sunflower, on the other hand, is much more analytical. In spite of a preference for irregular forms and a highly intuitive demeanor, as evidenced in the plans of Il Girasole, the facade is highly cerebral and analytical. The plan idea might be a throwback to expressionist attitudes but the street facade is all rationalist.

Perhaps the most important aspect of Moretti's building is that it is the result of a very early attempt to reconcile the need to retain and apply historic building ideas and forms while, at the same time, responding to the material and economic restrictions of a modern building. The courtyard form, *piano nobile* organization, rusticated base, and pediment are quotations from a historic tradition while the frame construction, functional plan, and sheer glass facade are decidedly modern ideas. This thoughtful, even ironic juxtaposition of historic and modern elements anticipates by almost forty years the many recent attempts to supply new buildings with a veneer of historic character and detail. The power of Moretti's lesson is that the accommodation of tradition can result in powerful and provocative ideas; there is an alternative to what has become the fashionable technique of applying classical detail to ordinary buildings. ■



13 Il Girasole, J. A. Coderch, west facade, detail

Notes

- 1 See Thomas Stevens' introduction and translation of two of the *Spazio* articles in, *Oppositions* 4, October, 1974, pp. 109–139. Other Moretti theoretical writings appeared in seven issues of *Spazio* between 1950 and 1953, as well as earlier articles in several issues of *Architettura* between 1932 and 1941.

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