

## ENRY FORD HAS BEEN ON MYMIND LATELY. THE AUTOMOBILE

fascinated early-20th-century architects. By adopting his vision of mass production, they believed, whole cities could be ordered with the efficiency of the assembly line. The squalor of the medieval city — with its cramped living quarters and dark, airless alleyways — would be erased forever.

But unfortunately that vision never materialized. The dream of a new social order quickly turned into a nightmare of suburban alienation — repetitive subdivisions tarted up in faux period styles. Most of us began to suspect that an architecture of standardized mass production was a vision of dehumanizing conformity. At its extreme, it implied a vision of purity that was perilously close to fascism.

The Villa Nurbs (which gets its name from the world of computeraided design) is an effort to salvage the more promising strains of

Breathing
room Enric Ruiz-Geli,
left, on the house's
roof; its inflatable
panels expand and
contract to let in
and block out light.
Opposite: the house,
photographed under
construction, is
conceived as a series
of spaces grouped
around an elevated
courtyard pool.

that history. Designed by the Spanish architect Enric Ruiz-Geli of the Barcelona firm Cloud 9, the house's podlike form rests amid its suburban setting, about an hour and a half outside of Barcelona, like an alien space capsule. Packed with technological gadgetry, it represents the next step on that evolutionary chain, one that is more finely tuned to individual desires.

The villa's compact design represents a seismic mental shift. Ruiz-Geli is not interested in returning to the dark ages before Modernism. His aim, instead, is to bend technology to serve the needs of the individual. As silent and amorphous as a cloud, his house functions to smooth our relationship with an increasingly complex world rather than provide a comforting veneer of nostalgia.

"The idea of a fluid continuous surface — this idea has been around since Antoni Gaudí," Ruiz-Geli says. "People dreamed of this but could never do it. Digital technology, parametric design — this allows a level of complexity that couldn't be built before. The skin, structure, climate, technology are all in balance. It allows us to build today the utopia of before."

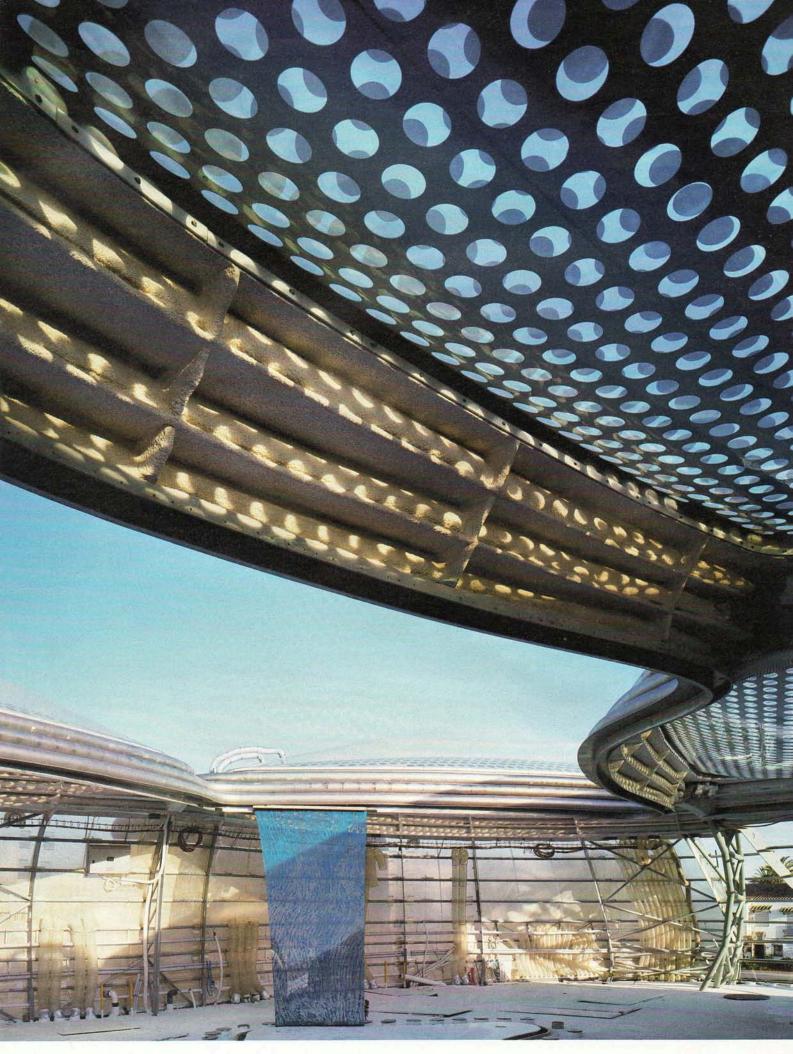
If Ruiz-Geli likes to think of himself as a model for this new age, his journey begins more traditionally. Born in 1968 in a town not far from where he is building the Villa Nurbs, he studied at Barcelona's architecture school during the run-up to the 1992 Olympic Games, a period when the city was experiencing a cultural flowering not seen since before Franco's rule. The sophistication of Barcelona's architecture and urban planning caught most of the world by surprise. For young Spanish architects, it was proof that architecture still had the power to both capture the public's imagination and uplift society.

Like many of his colleagues, Ruiz-Geli was caught up in the euphoria. Just as important, however, he was nurtured within a tradition that combined a growing formal freedom with a deep respect for both the historical memory and technical skills that have always been a requirement for serious architecture.

He studied with both old Modernists like Albert Viaplana and younger talents like Enric Miralles, a luminary of contemporary Spanish architecture who died, prematurely, of a brain tumor in 2000.

"Viaplana was the first one doing this kind of poetic minimalism — fluid, natural formalism," Ruiz-Geli says. "Like [Oscar] Niemeyer, expressionistic but very minimal. Miralles took that but added to it. So I am a part of this factory."

Ruiz-Geli eventually made his way to New York, where he enrolled in Columbia University's graduate school of architecture and began flirting with a career in stage design. He met the stage director Robert





ial world Dark ceramic tiles cover the south side of the house: cover the north side.

Wilson, with whom he worked for a time at the Watermill Center, an arts organization on Long Island founded by the director.

But like many young, untested architects, Ruiz-Geli got his first major commission through family connections. Seven years ago, his mother, a midwife, delivered the baby of a young couple who owned a seafood restaurant in Empuriabrava, a seaside village in the Empordà Valley outside of Barcelona. The couple have little knowledge of architecture, but they became family friends. When they heard that her son was a budding young architect, they asked if he would design a house for them.

"They had never done anything like this before," Ruiz-Geli says with a hint of self-satisfaction. "But they have a big spirit of curiosity. They

know how to listen."

The region is an inspiring place for this kind of work. Among Spaniards, it is famous for the elaborate patterns of its clouds, which are formed by the unusual configuration of the valley and the fierce winds. It was once a favorite playground for Surrealists. Dalí, Buñuel and García Lorca all summered there.

Yet at the same time, the town itself is a vision of suburban conformity that would look at home in Orange County, Calif. An upper-middleclass tourist community planned in the 1970s, it is laid out on a suburban grid at the edge of a national park. Its endless rows of pseudotraditional houses - identical white boxes sheltered under orange terra-cotta roofs — are flanked by narrow streets on one side and suburban lawns and canals on the other. The powerful speedboats bobbing up and down in the canals are often more luxurious than the houses.

"It is a fantasy world," Ruiz-Geli says. "The boats are first-class, 'Miami Vice' boats. Supertechnology. Carbon fiber. The clients owned the site for 25 years, and there was a house on it. But all of the architecture here is folkloric, a fake coastal architecture built in the early 1980s."

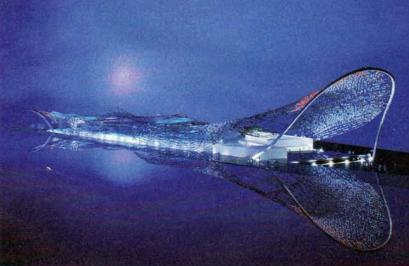
Seen amid this setting, the Villa Nurbs is closer in spirit to those sleek pleasure crafts than to the monotonous houses next door. Two cylindrical concrete legs rise up out of the ground to support an oval concrete platform. The main entry and a guest apartment are housed within these legs; the rest of the house is located above, where a series of rooms encircle a courtyard pool.

One of the design's most practical innovations is a long, tapered shed structure at one end of the lot that Continued on Page 142









Make no little plans Ruiz-Geli's current projects, clockwise from top left: a threestory-tall wave machine for San Sebastián, Spain; the Hotel Prestige Forest in L'Hospitalet de Llobregat, near Barcelona; the expansion of the New York Aquarium in Coney Island, the architect's first commission in the United States, with a weblike cover that is draped over the existing buildings; the Media-TIC building in Barcelona, which uses the same inflatable panels that are on the roof of the Villa Nurbs.

## ENRIC RUIZ-GELI

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encloses all of the mechanical systems. Ruiz-Geli has compared the structure to an astronaut's backpack. Water boilers, pool machinery, cooling and heating systems — even the vacuum cleaner motor — are all tucked away inside this space, which is separated from the house by a narrow lawn. As a result, the house is transformed into a sort of isolation chamber, an inner world where the complexities of life can unfold in near perfect silence, with only the clouds above as inspiration.

This faith in technology and its ability to liberate us from the mundane annoyances of everyday life is further explored inside. The main living areas wrap around the pool, with the living room, kitchen office and spa on one side and the bedrooms on the other. The bedrooms overlook the pool area through a glass-enclosed corridor. The rest of the house is conceived as a series of interlocking zones. There are no doors. Instead, each zone is conceived as its own microenvironment, like the passenger seats of a luxury car. Lighting, temperature, sound and windows can be adjusted with hand-held remote controls.

The entire space is enclosed under a taut translucent skin made of ethylene-tetrafluoroethylene (ETFE) — a matrix of inflatable plastic roof panels. The oblong panels are imprinted with negative and positive grids on each side. When they are injected with air, they expand to let in daylight; when the air is let out, they contract again, blocking out the light and views up to the sky. The effect looks almost like a living organism — an enormous grid of robotic eyes.

Yet if the house's space-age form seems out of place in a traditional neighborhood, it is attuned to its context in other, more subtle ways. In keeping with the suburban mood of its surroundings, the house has a somewhat defensive posture. A wide asphalt drive connects it to the street; there are no exterior windows. The north facade is clad in white Corian, a hard translucent plastic that will glow inside during the day and outside at night. Its other end is clad in inky ceramic tiles that protect the interiors from the harsh southern sunlight. The tiles were hand-painted by the Spanish artist Frederic Amat to give the house "an element of random chaos," Ruiz-Geli says.

The shifts in color, texture and material create a lyrical tension between light and dark, hard and soft, inside and out, that brings the

design to life.

"Most of the architects and artists who come here say the design is so incredible, but the area is so ugly," Ruiz-Geli says. "But I'd rather work in a very down-to-earth place and try to inject sophisticated architecture into it. The Brazilian planner Jaime Lerner talks about urban acupuncture, how architecture is like a seed. When you plant this seed, it affects everything around it. So this house is a seed in the context. We hope the seed will generate and transform the place."

A few hours later, after mulling over this conversation, Ruiz-Geli sent a text message, adding: "It is a historical moment for architecture."

This kind of grandeur can be off-putting. Ruiz-Geli is not the first to explore these themes. Architects first took notice of the inflatable roof panels at the Eden Project in Cornwall, England, in 2001, and since then many of them have been studying ways that they could be used in a more mainstream building. And even the idea of a "performative architecture" is not new. The Los Angeles architect Greg Lynn, for one, began proposing models for an organic architecture based on the computer design techniques used in advanced car design studios nearly a decade ago.

But if Ruiz-Geli is not a man of wholly original ideas, he is also more than just a good salesman. His house may be the first to apply these themes in the real world with such a high level of refinement. In some sense, it is the culmination of a century's worth of ideas: from Le Corbusier's famous axiom that a house should be "a machine for living in" to R. Buckminster Fuller's Dymaxion House — a prototype for postwar housing that was intended to adapt the American militaryindustrial complex for peacetime use.

And Ruiz-Geli is already beginning to broaden that vision. In his competition-winning design for the expansion of the New York Aquarium in Coney Island (in collaboration with the landscape architectural firm WRT), he turns the logic of the introverted house on its head. A weblike cover would be draped over the existing aquarium and a series of new pavilions like an enormous fishing net.

A series of red L.E.D. lights are woven through the cover's fabric, a gentle reference to the thousands of gaudy lights that illuminated Coney Island in better days. Plexiglass balls hang down from the structure with little sea creatures swimming around inside. A series of overlapping steel plates run along the structure's spine to shield the space

from sun and rain.

The canopy's structure was designed in collaboration with the German architect and engineer Frei Otto, whose own tentlike structures first received international attention when they were unveiled at the 1972 Munich Olympic Games. But Ruiz-Geli's design has a more playful relationship with its kitschy surroundings. Parts of

the weblike enclosure peel up to create entries along the boardwalk. Other parts fold down to allow an existing garden to flow up onto the roof. The steel frame that supports it is modeled on roller coaster designs. The idea is to create an organic landscape that is not completely cleansed of the seediness that has always given Coney Island its alluring edge.

In a design for the Media-TIC building, currently under construction in Barcelona, Ruiz-Geli uses the ETFE panels once again, this time wrapping them around a 10-story cube that will house exhibition spaces for a science and media museum. The pillowy triangular panels open and close at various points in response to climate and light conditions,

as if the building is breathing.

These projects are already garnering Ruiz-Geli international attention. The FRAC (Fonds Régional d'Art Contemporain) Centre in Orléans recently approached him with an offer to purchase the study models he created for the Villa Nurbs, even though the house is still months from completion. He is designing an elaborate three-story-tall wave machine for a beach in San Sebastián in northern Spain. And several potential clients have asked him if he could create a new, more elaborate version of the Villa Nurbs for them.

The question is how Ruiz-Geli will weather the oncoming storm of attention. Will he be able to expand the scope of his work while digging deeper into the ideas that drive it? Is he merely infatuated with technology? Or is there something deeper brewing here: a strong point of view about how to live in the world.