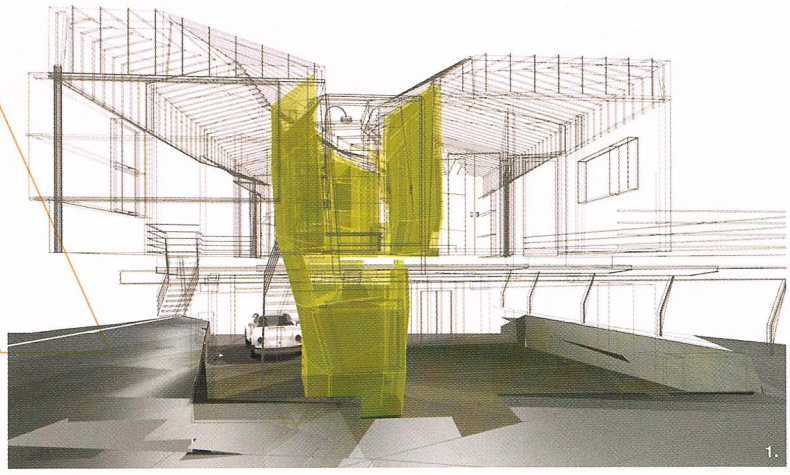
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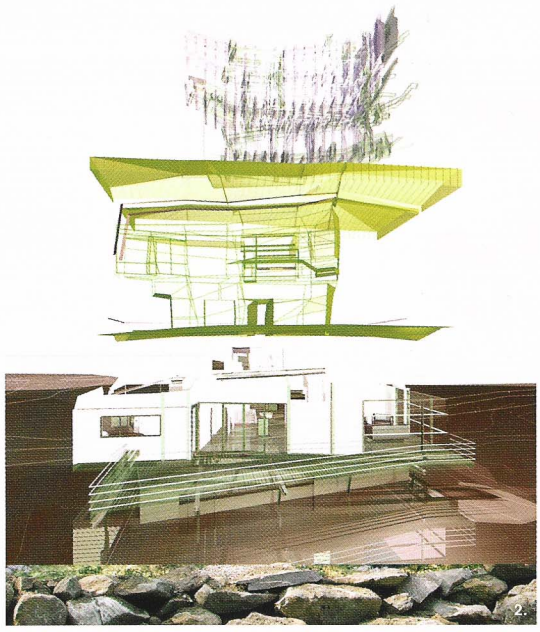
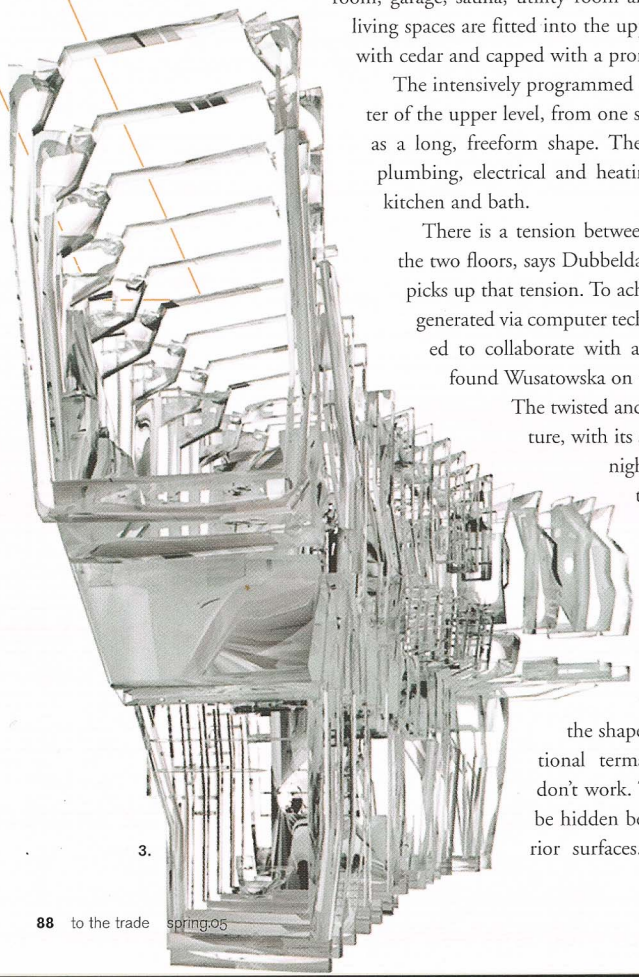

2.

At the Gypsy Trail house, Dubbeldam has revised the traditional domestic arrangement of hallways and rooms. The living areas are divided according to functional intensity, with a "hyperactive" function and circulation core in the center and expansive, relaxing spaces at the outer sides.

The two levels of the house are stacked askew, with the lower level oriented to the entry drive and the upper floor cantilevered at an angle to face the lake. The lower level, clad with stone from the surrounding land, holds a guest bedroom, bathroom, garage, sauna, utility room and exercise room. Further living spaces are fitted into the upper level, which is covered with cedar and capped with a prominent zinc roof.

The intensively programmed core cuts through the center of the upper level, from one side to the other, expressed as a long, freeform shape. The core contains all of the plumbing, electrical and heating systems as well as the kitchen and bath.

There is a tension between the rotating volumes of the two floors, says Dubbeldam. The core, or armature, picks up that tension. To achieve her vision, which was generated via computer technology, Dubbeldam needed to collaborate with a very special builder. She found Wusatowska on the internet.


3.

The twisted and faceted vault of the armature, with its skylit crown, is a structural nightmare for most contractors. For Wusatowska, it was another one-of-a kind obstacle–the kind she thrives on.

The intense, step-by-step wood framing of the armature was so unique and particular to the shape of the space that conventional terms like "beam" or "truss" don't work. The bearing points had to be hidden behind the undulating interior surfaces. At the same time, the structure had to be stiff enough to stand up to the expansion and contraction of the steel beams beneath the floor. Because of the offset levels and cantilevering, the beams are exposed to outdoor temperature changes, a condition that might be overwhelming to the average builder. But not to Wusatowska, with her grasp of engineering and her search for the next challenge. "You're building a flying house, hovering over the lake," says Dubbeldam, in retrospect. "For Lidia, understanding that was normal."

The analogy to airplanes does not end with the structure of the house. "We see architecture as industrial design," says Dubbeldam. "We tend to detail like big furniture." As a result, the floors and walls were actually veneered with bamboo on site. Sound systems and storage were built into the walls. And behind those undulating walls, Wusatowska and her team installed plumbing, heating, air conditioning and electrical systems.

Wusatowska's next client had no curving walls. But he brought a whole new set of difficulties to her with his 150-year-old mansion in Beacon, New York.

Max Protetch, who heard about Wusatowska through Dubbeldam, is the force behind the Max Protetch Gallery, a cultural center for art and architecture in Manhattan. Known as the world's preeminent dealer of architectural drawings and advocate for creative excellence in responding to the World Trade Center site, Protetch had long dreamed of a space for showing sculpture and architect-designed furnishings. He discovered it in the old industrial town of Beacon, now home to his new Dia:Beacon Museum.

The house, which Protetch purchased along with five acres and two additional buildings, had previously served as a factory owner's mansion and company headquarters. While Protetch was anxious to preserve some of the soul of the original structure along with the six fireplaces, he worked with architect Aryeh Siegel to divide the three-story building and its basement into four thoroughly modern apartment units–one of which will be filled with artist- and architect-designed furnishings as well as art, and will be open by appointment.

"It's not an ordinary design process. The building itself sort of told us what it was going to be. And in the process," says >>>