LESSONS

BY

BLANCHE LEMCO VAN GINKEL

Blanche Lemco van Ginkel a été employée quelques mois au bureau de Le Corbusier lors de la création de l'Unité d'habitation de Marseille. Elle nous fait part des leçons qu'elle a tiré du cette expérience.

How can you think about one problem, one element, without thinking of the universe? What is the value of "office experience", "in-office training", "apprenticeship", in the education, formation, training, realization of an architect? What value? What is architecture?

These were the questions which first came to mind when I was asked to recount my experience in the office of Le Corbusier. It would not be difficult to write a personal and factual account of the months spent in the office. It might be amusing and contain titillating gossip about the denizens of the famous 35 rue de Sèvres—Wojensky, Candilis, Woods, Soltan, Xenakis—who later made their own mark in architecture, town planning, education, music, engineering and plastic arts; and the polyglot environment in which it was impossible to learn unadulterated French. I appreciated the luxury of working in a field in which the word matters less than the deed—expressed in lines on paper, engineering figures, coloured sketches—all translatable into a built form—to serve people without words—to be used, enjoyed, understood, no matter the tongue.

Lesson : *This is the essence of architecture—that it transcends verbal explanation.*

Of course. So do all the visual arts. But then how do you teach it? To verbalize is our most expedient method of communication. And this is undoubtedly the best method to transmit acquired knowledge and basic skills. But there comes a moment when, in order to learn—particularly in the field of design—the only way is, as Siasia Nowicki says, "Just do!"

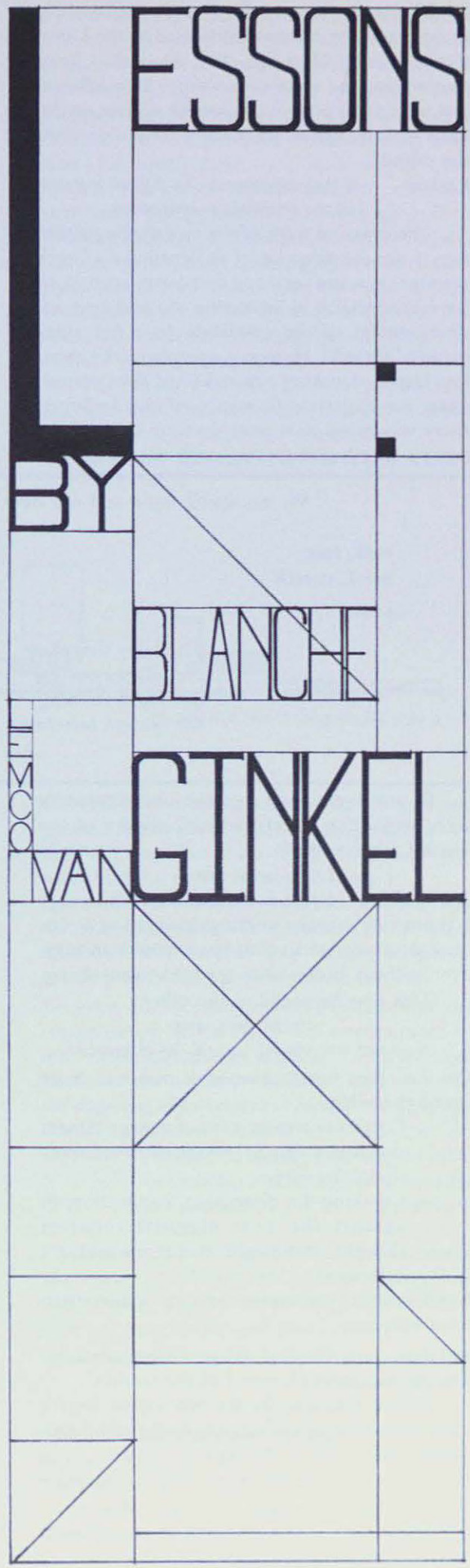
> "Young graduate in architecture. Meticulous engineering draughtsman. Experience in managing an office. Writing, presentation, communication skills. Some experience in film and equipment design, data gathering and analysis in town planning office; theatre, acting, set and costume design. In school, demonstrated ability in building construction; user/building program analysis; spatial organization."

That is the professional description for job-seeking purposes of the creature who walked into Le Corbusier's office, wanting to start "doing" something in architecture. One might have added, "unskilled and unknowing in architecture and of a generally provincial background".

Observation : Not a likely candidate to work for a world renowned architect, much less to contribute to an architectural landmark building.

However, I was hired because, characteristically, there was a rush to finish some drawings.

Lesson *to the job seeker: It is providential if you happen to arrive in an office at the right time.*



Layout by Stephen Silverman

I During the first weeks, I made engineering drawings of the concrete structure of the Unité d'habitation at Marseille. The pilotis had been poured, and the more conservative Marseillaises had mounted a protest against the project on the basis that the rats would invade the building via the pilotis.

Lesson *to the inexperienced: It is difficult to foresee all the objections to innovation.*

The exacting work of the engineering drawings under the direction of an Israeli and a Greek engineer may not seem, on first consideration, to have been useful in furthering the architectural development of the candidate (nor her command of French). However, apart from the absolute terror of making a mistake and thus prejudicing the entire performance of the building, there was more to it than drawing lines of the correct length and spacing, with the correct dimensions and notes.

There was the magic measure of the Modulor.

To some extent an intellectual conceit, it produces admirable proportion, balance, composition, design—but only in the hands of those skilled in using the tool.

— discard the inbred feet and inches
— visualize the Parthenon
— and its elements
— remember Vitruvius, Leonardo
— consider dimensions as proportionate
— consider the measure of man

Lesson: *All men are not created equal of stature. But there are basic proportions...more or less.*

Question: Is movement the common denominator?

We sit, stand, bend and roll over the same way.....
more or less

walk, run
bend, stretch

in proportion to the length of the limb
with mechanics of joint and muscle.

The baby wriggling
the infant crawling
the youth running
the ancient tottering

Are they all paced by the Modulor Man with the upraised arm?

In any event, how can the pre-occupation with proportion affect the performance of the beam I am drawing?

Let it be secure
Let it not waste material

It is possible to make working drawings of a concrete structure, under the supervision of an engineer, without understanding what you are doing.

This may be useful to the office
useful to society
but not useful to self development.

On the other hand, drawing it makes it more comprehensible.

— Correct representation of a three dimensional element by means of two dimensional drawings:
— Checking the dimension, connection, fit against the next element requires thought, and maybe means consulting a colleague.

Much easier if you understand the whole structural system.

But that is not all—that slab and beam are insignificant except as elements in the totality,

Pirko is detailing the kitchen, whose service lines are earth-originating and the branched ventilation ducts rise to the sky.

Of course, every student knows that architecture presupposes a concept.

Of course, the concept stems from user requirements, from people-spaces
which must be contained by material
supported by structure
and serviced.

Lesson: *The proof of the concept is in the realization. But before the actuality, peopled and used, the test is in the working drawings.*

It was a concept of many facets

—to free the building from the ground
—to let the ground flow through undisturbed
—to give each family views, cross-ventilation and outdoor space
—to use technology for efficient/economic production
—to have all daily needs at the doorstep
—to create a pleasure garden for the community on the roof.

It was pre-computer era, but the program could have been translated into built form by computation.

It is doubtful whether this would have produced the actual form of the Unité d'habitation:

Pilotis
sol artificiel
toit-terrasse

—integral to the structure/concept but also unto themselves.

Lesson: *according to Le Corbusier (and others) "C'est dur, l'architecture."*

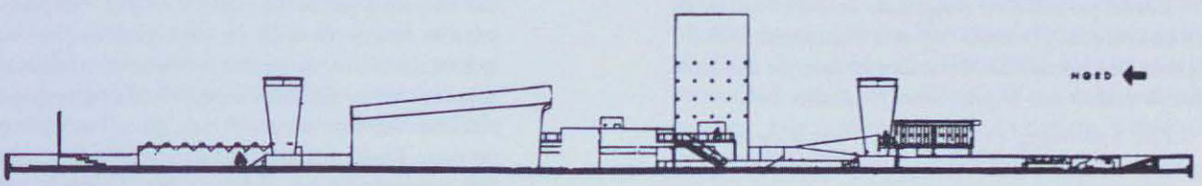
II Happy day! The candidate is charged with design of the *toit-terrasse.* Visions of little children enjoying life in the nursery school, skipping through the play spaces; everyone exercising in the gymnasium and running around the track (30 years before our fitness fetish); music and theatre under the sky; leaning on the parapet to absorb the Mediterranean view, air, sun; Wow!

Given, were the structural and mechanical drawings up to roof level and a perspective sketch by Le Corbusier.

Question: Can you do a good job, earn your salary and learn at the same time? If you work for a great "master" do you only execute his wishes?

The overall design, "landscape", and parti of the roof was self-evident. It grew from what was beneath it and from the program. If you understood the concept, if you absorbed the spirit of the design—and with the Modulor omnipresent—it was not difficult to design and detail. Nevertheless, there were some elements whose form was not obvious, for which the intellectual exercise did not produce an undisputed solution—for which there were options: the gymnasium, the nursery school and two ventilator structures. The gymnasium had been given form by Le Corbusier—a *casquette.* The nursery school was the second main building mass in the town-square-on-the-roof and was unresolved. The ventilators were in the form of cylindrical columns—the vertical elements, beloved of all architects in their compositions.

The nursery school became a pavillion, scaled to both adult and child (hopefully). It had walls. Concrete walls. Le Corbusier was not happy. Many illustrated lectures on walls—



Elévation du toit-terrasse

LE CORBUSIER 1946-52, LES EDITIONS ZURICH

dissertations over the draughting table for my edification. Reacting against the gratuitous decoration of my Montreal formation, I have nothing positive to offer. I question and demur. As Le Corbusier said, "You young people, you are such purists!"

After a week of struggle I discovered what the wall should be. (Premonitions of Louis Kahn?)

Lesson: *A wall is more than a wall.*

It had something to do with its Mediterranean context—an environment which I had not yet experienced. But by then, through immersion in the office, and in particular through Le Corbusier's life-simulating, poetic exhortation there was at least a vicarious experience.

Lesson: *The history of architecture is much more than A1 Ortega's "blotting paper slides". The vicarious experience of the past is useful to the appreciation of today and potentially stimulating to a vision of the future.*

Warning: Distinguish between
the spirit and the manifestation
the philosophy and the principle
the whole and the components.

The ventilators were another matter. They were taken for granted as tall concrete cylinders raised on a concrete cube. Perhaps I was intoxicated with personal discoveries—I dared question their form. The purist at work again. What was in the cylinder? What was in the cube? Tripartite mechanical equipment. Consequently, the ventilator became a trefoil in section, and splayed out to the sky. (Comic strip representation of exhalation. Also the classic wind creatures blowing in the corner of a map.)

Question: Form followed function. But was this enough to make the ventilators of the Unité d'habitation at Marseille one of the most photographed architectural elements of its time?

Between the mechanical requirements and the resolution of airflow there still were options of line, subtle though they might be. And the line of Le Corbusier was most subtle. There was also the detailing of joints and of formwork, which ultimately produced the form.

Lesson: *Nothing has been designed until the smallest detail has been resolved, until every line and dimension is precise—and capable of execution.*

One could have learned this from a sculptor like Brancusi or Hepworth; or from an engineer like Maillart. But we are dealing with architecture—at once reality and simulation

for vulnerable people with durable materials,
bread and dreams.

This, one could learn at the atelier of Le Corbusier, 35 rue de Sèvres.

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