

This PDF includes a chapter from the following book:

Beyond Habitat

© 1970 MIT

License Terms:

Made available under a Creative Commons
Attribution-NonCommercial-NoDerivatives 4.0 International Public
License

<https://creativecommons.org/licenses/by-nc-nd/4.0/>

OA Funding Provided By:

National Endowment for the Humanities/Andrew W. Mellon
Foundation Humanities Open Book Program.

The title-level DOI for this work is:

[doi:10.7551/mitpress/1575.001.0001](https://doi.org/10.7551/mitpress/1575.001.0001)

The total package of drawings for Habitat was done in six months, between November 1964 and May 1965.

There were about two hundred and fifty architectural working drawings in the final set; at least an equal number of structural, mechanical, and electrical construction drawings; thousands of shop drawings; innumerable design sketches and studies.

The shop drawings had to be co-ordinated by us and checked by both the consultants and ourselves. Francon the pre-caster, alone, had four thousand, and there must have been at least two or three thousand more from the other subcontractors. Each one had to be submitted in sixteen copies to my office. In some cases we had to mark changes in red sixteen times and then return copies to Expo, to Anglin-Norcross, to the sub-contractors, and to all concerned.

These drawings are made by the manufacturer or contractor for something detailed by the architect. For example, we made working drawings of a window and the manufacturer made shop drawings of it which we had to check to make sure it conformed with our design. In the case of a shop drawing for heating ducts, the mechanical engineer had to make sure it conformed with his requirements, and we had to make sure it didn't conflict with the structural engineering drawings or with the architectural finishes.

When I left Expo I decided to stay in Place Ville Marie, where Expo had its offices. One wing of the thirty-eighth floor was unoccupied and I took it on a short-term lease, unpartitioned, and set up there. We had a very beautiful view of the site of Habitat. In a short time our office built up to about forty architects, draftsmen, and students. I insisted from the beginning that the engineers work with us in the same office, so even though we were separate firms they moved their Habitat staff right into the same office, and so did Community Development Consultants. We were all in one huge space, with a few partitioned offices within it.

The most important person on my staff was Dave Rinehart. He came from Philadelphia right at the beginning, while I was still employed by Expo.

The next group of people to join the office were Montrealers, mostly McGill graduates, some classmates and others I happened to know from school. Irwin Cleve, who was assistant chief architect with CMHC and was leaving them, joined the office, too. From David, Barott, Boulva the key person who became very important to the project was Jean-Eudes Guy. Dorice Walford, who wasn't as actively involved as Jean but sat in on our job meetings, was a great help. Then there were a number of young American architects, recent graduates, several of them attracted to the project from Philadelphia, who knew either Dave or me from our days there.

Doug Shadbolt recalled those days recently when introducing me at a lecture in Halifax: "A group of remarkably young people produced a remarkable set of drawings." I never thought of it that way until he said it, but it is an accurate statement. The office was very young. There were few experienced architects, myself included. I hadn't built a building before, nevertheless we produced what I have been told by several people was one of the best set of working drawings put together, in terms of accuracy, clarity of expression, and quality of detail.

It was during those working-drawing days that our son Oren was born.

One of my problems was that I was young and many of the people working for me were older, and the pressure of the schedule meant that I had to exercise considerable ruthlessness in making decisions. I was twenty-five when I left Expo and Dave was thirty-two. Irwin Cleve was in his late thirties, and the recent graduates were slightly younger than me. And that did create some tension. Although my inclination and my temperament is to hear out every proposal and discuss it until a conclusion is reached by consensus, there were many occasions when the mere pressure of time meant that I had to make a decision and just impose it. It was a painful process and a role I did not enjoy.

The landscape drawings are an example of that. There were many different and quite strong opinions about them in the office. Komendant, who wasn't involved with landscape at all but often volunteered opinions anyway, kept saying, "We must leave this structure pure and uncluttered. We must have grass only." Dave Rinehart and Lois Sherr, a friend working with the Expo landscape group, felt doubtful about my desire to make landscape and building one.

The MacKay Pier peninsula was man-made. It was fill, rock put there by man. It wasn't a rolling natural hill with grass and trees. There was no vegetation. I felt, therefore, that it ought to express the feeling of a man-made garden, and it was quite proper for the geometry of the building to extend into the landscape, so that the building would apparently stretch from the St. Lawrence River to the Montreal harbor, from one body of water to another. The retaining wall on the harbor side, the road, the terraces, the different levels, the building itself, the

plaza, the spray ponds, the pools, and the wall along the river were all one structure and Habitat was part of it. I wanted plant-life to be a dynamic part of it too, changing through the year. In spring, certain terraces would be red; then those flowers would wither away and other terraces would become yellow; later other terraces would become blue – constantly changing patterns.

The arguments went on and on, and all the time the pressure to produce the drawings was growing. I would make sketches and because of the controversy people would not develop them. At one point I decided to sit down and draw it myself. I took a large roll of paper and spent two days and a night drawing the whole thing up – every level, every terrace – and colored it with pastels to express the texture of planting, the grass, the flowers in each area. All this was drafted into working drawings and built as it was in the sketch.

On the whole the spirit in the office was incredibly good. People worked every day and every night, Saturday and Saturday night and Sunday night, for three or four months. I found the pressure to keep up with the two-fold job of running the office and working with people on their particular drawings and details so enormous that I couldn't find time to sit and think out basic questions. I got into the habit of coming into the office at four o'clock every morning, and after a while Dave started coming in early too. I would work on my own from four until nine, when everybody else came in, and then I would work with them or give them sketches that I had developed earlier in the morning. Dave and I would invariably stay until about eleven o'clock or midnight every night. We literally got by on four or five hours' sleep a night for a very long time.

It was not all smooth sailing. Here was a group of very devoted people, each giving a project all he had, all that was in him and each also in his particular way feeling possessive of the part on which he was working. Add to this the intensity of day after day and night after night of working together under severe pressure and our occasional family flare-ups were understandable.

Those who had more responsibility were in the most difficult situation. Dave Rinehart, Jean-Eudes Guy, Al Meyer, and Irwin Cleve were each responsible for certain areas. Al was in charge of developing the house plans, Jean of the specification and the material selection. Dave had all the public areas in the building – the streets and the elevators and so on. Irwin Cleve was in charge of detailing the interiors of the houses. Each had a number of younger people working with him.

Had the office been a highly regimented place with a clear hierarchy, the organization would have worked quite smoothly. I would have discussed each aspect of the building with the associates and they in turn would have worked with the groups responsible to them. But such a rigid hierarchy was contrary to the entire spirit of the office and individuals took more or less responsibility depending mostly on their temperament and initiative. I worked with everyone in the office, often to the great confusion of those who were responsible for the

work in a particular area of the building. What I had learned from Lou Kahn was also becoming clearer, every detail was part of the whole and the success of the environment as a whole depended on all its parts. It was this lack of organizational hierarchy with its apparent inefficiency that made it possible for such a large group of people to work together and to produce something that had unity.

I suppose that these group dynamics are common, but for me it was a new experience and the source of much pain. In the case of Dave Rinehart there was a much more subtle relationship. Dave was older than me. I discussed ideas more with him than anybody else. He was I felt, the most creative man in the office. He was the one whose opinions I trusted more than any other architect I knew. All this made it tougher, because there was I in the limelight for what was coming to be known as a very important building.

I feel today that it was the assertion of our affection and our commitment to the project, the idea, that possessed us, that made it possible for us all to overcome problems and work together.

During those four or five months there was hardly time for any personal life. But after the excitement of the bids coming in and the construction starting, things loosened up a little. Once the construction was underway I went to India for three weeks at the invitation of the Indian government. Another very enjoyable experience was the Montreal International Film Festival competition for a fifty-second film on the theme Man and his World. The first prize was ten thousand dollars and there were nine silver medals. I was on a jury of five. The others were Pat Watson, the TV personality of *Seven Days*; Claude Jutra, the Montreal film maker; Geneviève Bujold, the actress; and Wolf Koenig of the National Film Board of Canada. We spent three days and three nights looking at the two hundred and sixty-five entries. It was, as Claude put it, instant friendship for all of us.

Then the Montreal Film Festival people did something very nice. They invited the ten top winners, who were from widely scattered parts of the world – a Russian, an Italian, a Japanese, a Czech, a couple of Canadians, a couple of Americans, an Indian, and an Englishman – and treated them and the jury to a weekend in the country. We went out to Sun Valley in the Laurentians in the middle of winter. There was wonderful wine and good food and sleigh rides and skidooing and walking in the snow. No movies. It was very nice. This was before the opening of Expo, and at that point life became very exciting in Montreal.