

I went to Israel in December 1967 to give a paper at the International Congress of Architects and Engineers. It was my first return since 1954 and it was therefore a great event. At the Congress, I met the Minister of Housing, Mordechai Bentov. We had a long chat in which I briefed him on the progress of Habitat, and the project then underway in Puerto Rico.

It was just six months after the Six-Day War. I told him of my ideas for a new town for the Arab refugees and suggested that now, since many of the refugees were in areas within Israeli control, such a project could be initiated. He responded with much interest, suggested I write him a brief on the subject.

I summarized my thoughts in a report entitled "For and By the Refugees." It suggested selecting one or two locations in which a new community could be built; it could be part of an existing city or a totally new town. New industries would be established, housing factories would be built, training centers in which refugees would be trained in new skills would be organized, and the refugees would build their own town, which could also supply housing components to Israel. The program could begin immediately. In the first stage, a comprehensive design and feasibility study would be made, a site would be selected, and the leaders of the Palestinian community would be contacted and invited to take part.

It is not possible to discuss this proposal without dwelling on the political thoughts, shared by many Israelis, that motivate it: that the future of Israel is in a life of harmony and federation with the Arab world generally and the Palestinian Arabs specifically. Many, if not all, Israelis feel badly about the existence of the Arab refugees, but fewer see the solution to it in the context of Israeli action. Such action is only logical in the context of a reorientation of Israel's emphasis on its future in the Middle East. Its logical expression is a common market and a Middle East federation. The consequences to Israel as a state, with its close ties with world Jewry, are fundamental. The price for such a

federation is to acknowledge a dual allegiance: to world Jewry as well as to the region. Israeli law cannot suggest, for example, that sixteen million Jews may be permitted to come to live in a region one day at the expense of those already living there, even if this is only a theoretical possibility. This does not mean stopping immigration; it means that the responsibility of Israel is dual – to world Jewry and to its neighbors.

For me, this issue always came alive at the cultural level. Israel is an integral part of the Middle East. Over half of the Jewish population of Israel originated in the Middle East. My ancestors, in addition to Hebrew, spoke Arabic and Spanish, enjoyed Arabic music, built in the traditions of the region, and made Middle-Eastern jewellery, carpets, and textiles. Nowhere has this fact been so clear as in the architecture of Israel. As you approach Jerusalem from the valley, the road ascends to a crest overlooking the western hills of the city. Down the slopes, a deserted Arab village hugs the hill, small and larger cubes made of the stone of the mountain: domes, arches, vaults, the mosque's tower, shaded passages, all in harmony with the landscape and the sun. At the summit of the hill is a series of long four-storey apartment structures built in the late fifties. They are scaleless, inhuman. They do violence to the mountain. They are foreign, as if imported from some rainy, cool European suburb. Driving from Jerusalem to Nablus and Yonder in the hills of Shomron, you go through fields and terraced vineyards and little villages, all of which are in unity with the land. Driving from Haifa to Nazareth in the hills of Galilee, passing by the new towns and developments, you are constantly confronted by the brutality of new housing projects that rape the hills and the landscape.

I once gave a lift to a young soldier. He was on leave. We were driving toward the mountains of Galilee. He spoke critically of the Arabs; all he could think of was what sort of soldiers they were. I was impressed by the fact that though he was only a few years younger than me, he did not remember the time when Israel was founded – he had not known the Arabs, except as a minority in Israel or as subjects in occupied territory. He did not hate them, nor did he respect them. They were, he said, bad soldiers. I said to him, "That may be, but they build so much better than we do and their towns are so much more wholesome than ours. Their art, their pottery, their clothes, their jewellery, their music is the soul of this land; there is so much we can learn from them."

I have always hoped that Israeli and Arab would build together and learn from each other. Such building and working together, planning together, would mean more than negotiations and agreements.

I sent my proposal to the minister and it was discussed by the cabinet and considered seriously. The minister had a press conference and released the contents of the report. It was said that some action of this kind was being considered, but many months passed by with nothing happening. There was no question that Bentov was solidly behind some such proposal, but the cabinet, as a whole, was not in a position to act.

Several months later, the government of Israel was approached by Baron Edmund de Rothschild, of England, with a proposal that something should be done for the refugees, and immediately. Minister Bentov told the baron of my proposal and suggested we meet. Some correspondence ensued and shortly thereafter we met in Montreal. The baron had for many months been very active in discussing the possibility of a large scale program: new industries, agricultural aid, the possibility of a giant desalination plant combined with agricultural industry in the northern Sinai. Through our discussions, we concluded that future development had to be industrial in nature, and that new industries had to be complemented by the building of new communities. A program could not be imposed, it had to grow from the people. It had to be done with their participation.

During this period, I met Stewart Udall, Secretary of the Interior under President Lyndon Johnson, and was invited to join his Overview group, which he had formed to undertake large-scale environmental projects. I suggested Udall and Overview act as co-ordinators of the feasibility study. Udall and Rothschild met and agreed to join forces. On several subsequent trips to Israel, I met with many individuals, Israelis who would undoubtedly be involved in such a program. I also travelled in the occupied areas. I went into some of the refugee camps and we sat in the central coffee house with the muchtar and the elders, and chatted about employment and housing and how they would react to such a program, and it became apparent that at the level of subsistence and livelihood, of employment and housing, the politics of power groups and of rigid alignments did not exist.

In the winter of 1969, Housing Minister Bentov came to see Habitat in Montreal. He arrived during the worst snow storm of the season. We walked through Habitat, the winds blowing, the snow coming down in large pieces, the place looking right out of an illustrated book of fairy tales. The minister told me of the growing volume of immigration, of the need for housing of higher standards, and of the need for new technologies to cope with Israel's severe manpower shortage. We talked of the possibility of Habitat and its feasibility in Israel. Shortly thereafter, the ministry invited me to come for a series of consultations to assess the building of the Habitat system in Israel. I spent ten days discussing each and every aspect of the project. At the end, we signed a contract commissioning me to undertake full preliminary plans, cost estimates, and feasibility studies for a Habitat building system for the Israeli Ministry of Housing. Three months later, the completed report indicated technical and economic feasibility, and delineated in a preliminary design the first community to be built in the hills of Jerusalem.

Many aspects of the program for Israel are like Habitat Puerto Rico: room sizes, apartment sizes, and densities are similar. There are some fundamental differences: a shortage of certain materials, a climate which fluctuates from severe heat in summer to a rainy and cool winter, and a difference in life-style.

To build in Jerusalem, in that most beautiful city, is almost an act of arrogance. Only much love and respect for what is there may make it possible to do it justice. In tackling the project I found there were tangible, speakable things, such as designing the outdoor terraces, in which Israelis spend much of their time, for year-round use. As a generic solution to what is now accomplished by building little roofs and asbestos shutters round these balconies, we developed a dome-shaped sliding window which could rotate; it sits toward the inside of the building in summer while a domed shutter projects to shade the terrace. Window and shutter reverse positions in winter, the glass dome enclosing the terrace as a greenhouse, capturing the heat and the sun. The building's dominant feature would change from shadowed arches in summer to sparkling bubbles in winter. There was also the intangible, the spirit of Jerusalem. I wanted to build something that was wholly contemporary, an expression of life today, but that would be as if it had always been there—a kind of fugue with two instruments, a counterpoint on a remembered melody. Thus evolved the Habitat Israel building system: modular, concrete units, sand blasted to expose the yellow Jerusalem stone aggregate, room sections made out of fiberglass domes, and rotating windows, and shutters, all interlocking on the hills.

As I write, we have completed the working drawings and are about to begin building a prototype of a dozen dwellings. Soon, I expect, a full size factory will be constructed and go into full production. As the *Jerusalem Post* put it in a headline that moved me, "Habitat Comes Home."

The combination of assistance and self help proposed for the refugee town building program has potential application to other areas in the world. Since in construction about sixty per cent of the cost is for labor, it makes good sense to develop programs in which the prospective owners of the houses could construct them and be compensated for their labor by ownership. This is relatively simple to achieve in rural housing where materials can be supplied, but more complex in the urban context.

In the Fort Lincoln project, working with the George Fuller Construction Company, and Stressed Structures Inc., we proposed a formula for such a program. The project was to be in an area surrounded by several Washington ghettos. Many of the prospective tenants were unemployed and on welfare, officially classified as chronically unemployable. We suggested that the housing factory should give priority to employing those who would live in the project. A special training center would be established in the plant, training those who had not been involved in construction before and who had for many years been living on welfare. Such a program could be extended even further; built-in furnishings and cabinets and other elements, which presently are either included in the housing package at great cost or omitted, could be built by the tenants themselves. With workshops located in the community, materials supplied by the housing agency, and the necessary guidance, tenants could manufacture to their own needs and design. Landscaping could be done in the same way with plant materials supplied by the community.

Considering the industrialization problems of the developing countries, the potential of such a scheme becomes even greater. There we have a situation in which a very substantial proportion of the population is, in our terms, unemployed. (In the United States when we talk about employing the unemployed in a construction program, we must consider that welfare payments in the U.S. are higher than normal wages in the developing countries.)

Urbanization in a country such as India could come about with the construction of new towns. Housing factories would be established, families would be drawn to build the town and make it their permanent home. They could at first be paid minimal wages and their subsistence requirements. Later on they would individually or co-operatively own the entire physical plant they had constructed. Thus, the construction of new communities could take place with a substantially lower capital investment than under normal circumstances – as much as sixty per cent lower. In the dramatic case of refugees, who are living in temporary quarters anyhow and are being fed by welfare programs, their employment in a construction program would tap unemployed energies and they would enjoy the fruit of their own labor.



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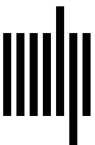
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