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09 Oct 1970

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Recommended Citation

Friedjung, B. E., "Development By Means of Semi-Permanent Building: A new, practical approach in Housing and City-planning" (1970). *International Symposia on Low Cost Housing Problems*. 23.
https://scholarsmine.mst.edu/islchp/23

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DEVELOPMENT BY MEANS OF SEMI-PERMANENT BUILDING

A new, practical approach in Housing and City-planning

by

B. E. Friedjung[1]

The argument presented herewith shows two different main aspects. First there is put forth a new, general practical approach in housing and city planning, a dynamic one which at first might be viewed as shocking and dangerous by many planners, builders and administrators which are trained and used to a more static manner of thought, the one applied to practical planning in former epochs. By and by they will learn to judge this novel approach more positively. The general principle of "built-in" obsolescence in a time of transition like ours will become accepted in not too far a future.

Further, there is the suggestion to start systematic technical research on a broad base, now, and to coordinate research work already in hand.

The deciding aspect, especially in view of the plights of urbanization with the underveloped nations is the technical one. There is a cluster of highly technical and techno-economical problems to be solved. The algorithms for optimization of so many workable "Systems" have to be found out and made use of--starting from a table of different planning assumptions and of different basic building materials and methods. Both, planning models and (say) building materials will call for much research, preliminary and factual, per se and in view of their reciprocal influence.

The task might be summarized as follows:
For housing a houseless mass-population of inferior means or no means at all, there are till now two principal alternatives generally accepted:

A. The erection of solid, multistory structures next to the centres of employment, complete with the necessary public services, allotting a separate sanitary core for each dwelling and leaving the completion of the residential units to the inhabitants, to be realized gradually in the course of time.

B. The allocation and preparation of "squatter" communities near the fringe of the cities, including provision of streets and all-weather paths, water and drainage etc., educational and other social services and guidance of the settlers to build their own homes with the help of subsidies and/or building materials according to local conditions.

Now there should be a third principal possibility viewed, developed and compared in its economics with the other two mentioned above before a decision is reached: This is the erection of low-rise high-density settlements of semi-permanent buildings in the outer districts of the big cities, buildings for the local social services also, for a period of use of twelve to fifteen years only, allowing for a double period in case of emergency.

A flawless sanitary service has to be warrented for all the time of possible use, by a solidly mass-produced sanitary core. This permanent part of a semi-permanent structure may perhaps be used again on another site.

The cost-factor will be decisive. Here it may be realistic to clearly distinguish between housing people with restricted means and people with no means at all. Yet both strata of the population need the same minimal "shell" as fit for a certain family size in the terms of a certain region. As both sorts of people need strong public subsidies to place just such a minimal shell at their disposal, the natural (and human) solution seems to be to let the bits of private means available go for a less primitive equipment, of the same basic minimal dwelling type!

The erection of semi-permanent settlements surely takes into account, if rightly organized, methods of using not only the self-aid of the future settlers but other nearly untrained labor available, also.

When preparing specific small pilot-projects as objects for "trial and error", it should be done in different alternative ways of layout, financing, execution and local management, always comparing the cost-benefit ratios of more traditional solutions with pioneering ones.

How much we are yet in need of practical research may be shown by a recent experience in Israel.

The technical branch of the Israel Housing Ministry was nearly ready this year to erect some housing estates complete, from high-class asbestos huts for about $7.70 net building costs per sq. foot, because this meant a quick erection. Now this would have been even more expensive than erecting three-storied buildings, solid buildings from precast concrete slabs, costing net $8.10 per sq. foot! Then it was decided to plan indeed for and erect these housing estates from precast concrete slabs, but only one story high! This enables quick building: 3 to 4 months only, from the clearing of the site till the moving in of the residents. The net building costs total $7.10 per sq. foot only. Gross density will be 150 to 200 families per acre and with a second floor flat added eventually, accessible by open stairs, may be increased to 300 to 400 families per acre. Altogether it is not a bad achievement but it eliminates completely the alternative of semi-permanent, quick and cheap building. This is the situation today!

The presumption of a novel, more dynamic general planning approach, too, deserves a bit of elaboration.

Concerning the manifold aspects of planning in our times there is first the speed without precedence, of technological development and change. One cannot compare this with anything before. It is a fascinating and, to a certain extent, even hypnotizing process.

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On the other hand, our real and scientifically supported knowledge of good planning for human beings is decidedly smaller than usually supposed. On the contrary: the very foundations of the basic values concerning physical planning, namely our perception of Man, is not at all secured today and such perception may change rapidly with new breakthroughs of research.

So some of the foremost planning problems are not only unsolved but unsettled. We know much less that we thought but with this judgement we shall progress!

It is true, in the past there was much of the art of good living and good planning for a certain strata of wealthy people, together with some nicely balanced functionalism in popular housing. However this stemmed from a near-to-intuitive knowledge. Alas, we have successively lost this natural gift and we never will find it again even when aping the glories of the past. Moreover, our frame of life has utterly changed.

Mankind is "coming of age", so to say, liberating itself from the former natural and mental bonds. This is a profoundly new situation, one of responsibility and of danger. We are unsure where the travel leads. We know only that it has started. The values of old break up whilst new situations and new values emerge, some perhaps transitory, others perhaps permanent. During such extensive break-up it would be unwise to accept the prevailing planning perceptions of today as a straight and secure guide to truth and reality.

Here the argument draws its last justification:
If basic values are changing rather radically and may change again, it seems only an honest suggestion to view the residential quarters and new towns to be erected, not as permanent structures but as provisional ones, as semi-permanent ones. Even to plan now for the year 2000 is objectionable! An architect in Jerusalem, Mr. Darmell, put it lately, "To discuss a physical plan for anything beyond 15-20 years--is science fiction". One could envisage an urban community designed and built for use during a period of 15 years only, then replanned and rebuilt for another 15 years' use and erected again, always in a much-altered way, using the newest socio-psychological findings and technical means, and this instead of the static urbanities of former epochs. A minimum only which must be chosen from the changing conditons would be built for permanent use, maintaining continuity.

This exposition should be closed by coming back to a very simple practical case of some small rural or semi-urban community as may be erected in one of the poorer developing countries. A minor remark may hint at the human aspect of such a task.

When planning this physical focus of local community life within the framework of semi-permanent structures, a solid permanent feature should be added in order to form a real contrast and a supplement. It should be designed and executed very carefully and as it will be small in scale, should not prove to be expensive. The most natural setting will be a combination of this feature with a fine shadowy tree or a cluster of trees.

Here will be the actual "navel" of neighborhood life as a socio-psychological reality. It will help the population to take root in their new locality. Its character will depend on the settlers' background and may be a traditional symbol, a shrine or a memorial. This will constitute an element of constancy in the mid of non-permanency.

An urban quarter to be substituted after expirement of its term of use could be rebuilt on another site, on an unbuilt or cleared area prepared for this end. The former area might even be left "open space" for some time and such a proceeding could be compared to the rotation-system usual in agriculture (a proposal of H. Bernoulli's, as early as 1945).

The problem of financing for all this rebuilding business might be less when considering the technological process going on in the meantime--likely even in acceleration, till another substitute will be due. It will cause a general increase in national wealth of a given population; meanwhile more technical cheapness will be made ready.