# Old-Age Home in Jerusalem:

# Post-Occupancy Evaluation

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## ABSTRACT

The paper presents a housing arrangement for elderly people and a unique method of Combined Post-Occupancy Evaluation to evaluate it. The method is based on what we developed and found to be a useful checklist of housing-related needs, physical-functional and psycho-social, of elderly people. According to our findings, the fulfillment of the psycho-social needs has first priority in determining the satisfaction of the elderly with their environment. The evaluation method combines a two-fold professional evaluation and an evaluation by the users. The results of the evaluation lead to several practical recommendations, including a recommended reduction of the resources devoted to public areas in old-age homes and an increase of the investments in the individual housing units, in which most of the needs of the residents are fulfilled.

## *INTRODUCTION*

The number and proportion of elderly people in the general population of every developed country is increasing steadily. Most of these people are able to function independently and continue to live within the communities where they spent their adult years. However, together with the increasing rise in life expectancy, there is a concomitant number of households with elderly people who need special living arrangements, because of problems of health, widowhood and/or social isolation.

Living arrangements have a significant effect on human behavior and quality of life (Cooper-Marcuse, Sarkissian and Sarkissian, 1986; Michelson, 1970). If this is true of regular people, it applies all the more to the elderly, who spend most of their time in or near their homes (Churchman, 1991). This is particularly true of elderly people who live in one form or another of housing intended specifically for senior citizens, since their arrangements are very often similar to those of a total institution. A total institution is defined as a formally managed residential site with a large number of people who are separated from the general population over a long period of time and share the life of a closed society (Goffman, 1961: XIII). For people who spend most of their time in such a closed environment, it is highly important to achieve the greatest possible congruence between their needs and the ability of their physical surrounding to fulfill those needs (French, Cobb and Rodgers, 1974; Kahana, 1982). According to Hoglund (1982), the needs which must be accommodated are, first of all, the physiological and functional needs of the aged person, followed by his/her psychological needs, especially independence and privacy, and finally, the needs of those who care for the elderly.

In order to ensure this congruence, many papers have been published which propose guidelines for design in conformity with the requirements of the elderly. Among the more interesting of these are Koff (1977), Howell (1980), Raschko (1982), who compared American, Canadian, German and Swedish standards, Patterson-Greer (1982), Zeisel, Epp and Demos (1983), Carstens (1985) and Valins (1988). Innovations in this field have recently been published by Regnier (1994).

Has the availability of many publications concerning housing for the elderly actually led to the creation of housing arrangements which fulfill the needs of the residents? A salient group of studies that were aimed at answering this question belong to the Post-Occupancy Evaluation (POE) School. This school developed in the 1960s and flowered in the 1970s and 1980s, gradually expanding beyond the confines of the universities to the province of professionals, attempting to devise solutions to practical problems (Knight and Campbell, 1980; Zimring and Reizenstein, 1980; Marans and

Spreckelmeyer, 1982; Preiser, 1989). According to Grannis (1994), the POE has three characteristics: first, POE researchers approach the work of evaluation from the perspective of the occupant; second, POEs are prepared within the context of real-life settings after the home has been occupied for some time; and third, POEs are now generally prepared for a particular client with the goal of solving specific problems, rather than for the purpose of advancing or testing a theory.

Preiser et al. (1988) identified three different levels of POE: indicative, investigative, and diagnostic. Grannis (1994) explains the levels as follows: Indicative POEs, the simplest form, require only a few hours to a few days to complete. One of the most frequent applications of this level is to identify and correct minor problems in a new facility or design. The evaluation may consist of a review of building service records, interviews with staff members or the facility manager, and a personal walk-through inspection of the facility - typically conducted by an evaluator familiar with the particular settings. Investigative POEs are typically employed to determine underlying causes that give rise to more serious problems, and to suggest possible solutions. The information collected and the analyses made in the investigative POE are more detailed than those of the indicative POE and frequently involve specific evaluation criteria based on knowledge of the facility type, user group, organizational goals, and the explicit intent of the project. Diagnostic POEs are the broadest and most advanced form of evaluation. While indicative and investigative POEs are typically problem-oriented and site-specific, diagnostic POEs are designed to contribute to the state of knowledge about a facility or design product type. They require more sophisticated techniques of data collection and analysis and may take a year or more to complete.

One example of a diagnostic Post-Occupancy Evaluation is the work of Preiser, Rabinowitz and White (1988) on a senior citizens' center in Albuquerque. Before the center was built, an extensive literature review helped to determine the major goals of the facility, the activities considered in the design, and the potential future needs of the facility. Four existing centers were evaluated to ascertain what worked well in the facilities and what did not. The design recommendations that resulted from this evaluation process included improved lighting, circulation and lounge areas, and the designation of a meeting area with easy access to an outdoor space. The evaluation was used to develop a program for a specific center and also to develop a generic program for future senior citizen centers (Preiser and Pugh, 1986).

This article reports on a research project that integrates different levels of Post-Occupancy Evaluation and advances the state of the art by putting forth the following research goals:

1. To propose an advanced method of Post-Occupancy Evaluation for old-age homes which:

   - is related to a substantiated list of physical-functional and psycho-social needs of the elderly;
   - combines professional evaluations of the building with the evaluations of its occupants.
2. To apply the proposed method to an appropriate old-age home.
3. To use the analysis to draw generic (even though preliminary) conclusions for improved planning and design of old-age homes.


### THE OBJECT OF THE EVALUATION:
### LIFE-CARE COMMUNITY FOR THE AGED

There are many typologies of housing for the elderly (see, for example, the list compiled by Eckert and Murrey, 1984). Shtarkshal (1978) identifies three basic forms, arranged in ascending order of support:

- Individual housing - the housing units are scattered throughout the community and the elderly occupants use the services available in the community; within the units, there are design

elements and other facilities adapted to the physical limitations and safety requirements of the elderly residents.
- Congregate (sheltered) housing - assembled housing for independent elderly residents and those who are somewhat limited; each elderly person has his/her own home and may maintain an independent household, but auxiliary services for household management, maintenance, emergency assistance, etc., are available within the complex and are used by each resident according to need and wish.
- Long-term institutional care-residence in an institution which provides housing and support services for elderly people who cannot or do not wish to maintain an independent household.

This general list omits the most recent and sophisticated development in housing for the elderly (Wilder, 1994), which includes all three types of the following housing arrangements in a single complex:

- Self-contained houses / apartments, together with communal facilities which provide meals (for those who choose this option) and social activities.
- Personal care accommodations - usually in the form of single or double bedrooms and places where the elderly can receive assistance in eating, bathing, using of the toilet, etc., according to their needs.
- Nursing home facilities - similar to the personal care accommodations, with the additional availability of medical supervision and care.

In this configuration, the complex is both an institution and a community, but its image varies according to its physical components. Where the complex is composed of a relatively large number of scattered houses and buildings, it has the image of a community; where it is concentrated in one or a very few buildings, it has the image of an institution. In all cases, at least half - and frequently more - of the residents are independent elderly people.

This kind of life-long housing arrangement for elderly people was the object of our empirical research. Because this kind is designed for the most part for the middle class, we decided to investigate a middle-class place. For budgetary reasons, the investigation was limited to one complex only. The home selected was the Mozes home for senior citizens. This is a 30-year-old building that contains all the above-mentioned housing arrangements for independent and frail elderly people. It is located in the heart of the Baka residential neighborhood of Jerusalem. Its population was suited to the research requirements: almost all of the residents were middle-class people who had a common cultural background; they immigrated to Israel in their youth, most of them from Central Europe and a few from Eastern Europe. This homogeneity enabled us to focus the discussion on the planning aspects of the old-age home, while minimizing bias stemming from the intervention of cultural variables, which cannot be controlled in a small sample.

## HOUSING-RELATED NEEDS OF ELDERLY PEOPLE

We have taken as our point of departure the "environmental docility" proposition, according to which, as competence decreases, behavior is increasingly determined by exterior factors (Lawton et al., 1984). Appropriate housing arrangements for elderly people should therefore be based on a high level of congruence between the needs of the residents and the design of their surroundings (Marans et al., 1984). To achieve this, the planner and designer must have a comprehensive list of the housing-related needs of the target population. The development of such a list was among our research goals.

The research began with a literature survey. We found lists of basic human needs, lists of environment-related needs (among them: Murray, 1938; Maslow, 1954; Spivak, 1973; Kahana, 1982), and partial attempts to identify the special housing-related needs of the elderly (for example: Byerts and Conway, 1972; Brody, 1977; Poon, 1980; Carstens, 1985; Hoglund, 1985). We used all of these to compile our initial list, and divided it into two main parts: physical-functional needs (what people,

including old, frail people, need in their environment in order to live as full a life as their physical health permits) and psycho-social needs (what they need in order to be satisfied with their environment).

With this initial list we approached ten professionals in the field of gerontology: social workers, designers and two managers of old-age homes. They all answered a "partly structured" questionnaire related to the comprehensiveness of the list and to the places in which the needs should be accommodated. These places were divided into three main areas of activity: within the private residential unit, within public spaces of the residential complex and its grounds, and outside this territory. Their answers were used to complete the final list that is presented in Table 1.

### *THE COMBINED POST-OCCUPANCY EVALUATION METHOD*

Earlier post-occupancy evaluations of old-age homes were presented either a professional judgment (Osterberg, 1981) or the users' points of view (Duffy et al., 1986). We are proposing a combination of the two. The combined post-occupancy evaluation method developed for this research consists of a two-fold professional evaluation (the first two items below) and an evaluation by the users of the building, as detailed below:

- *Evaluation by compliance with professional standards and/or planning guidelines* - Most of the guidelines for planning of residential units for the elderly and public spaces in old-age homes, as well as the majority of standards for dimensions evaluated in this paper, were based on Israeli standards compiled by Valdman (1981). Guidelines connected with planning of outdoor areas and elements related to visual esthetics and safety, and part of those related to planning of public spaces outside the residential units were taken from Patterson-Greer (1982). With regard to the few details which were missing, in our view, from these two sources, standards were taken from other sources mentioned above. The degree of compliance with these guidelines was evaluated, based on observations and measurements in and around the building.

- *Evaluation by professional judgment* - The fulfillment of each physical-functional and psycho-social need in the old-age home and its surroundings was evaluated by an architect with experience in the design on old-age homes and an experienced social worker. The architect relied on observations made at different times of day and night, in private apartments and in public areas in the selected complex, as well as in areas outside it, in order to relate to each of the needs that an old-age home is expected to fulfill. The social worker of the home was interviewed and requested to express her opinion concerning each of the same items.

- *Evaluation by the users* - Users were interviewed by means of a structured questionnaire which contained 150 questions, of which almost all were of the "closed" type (that is, with a few alternative answers determined in advance). The questionnaire was tested in a pilot study, changed, shortened and adapted to the research requirements and its population. The questions were related to demographic information concerning the interviewees, their behavior in the building, especially the frequency of use of its various spaces and services, and their opinions regarding the physical design elements, especially the degree of satisfaction with the areas allotted and the function of the various facilities. The questions were arranged to seek users' response regarding the fulfillment of each need on the above-mentioned list.

**TABLE 1: Housing-Related Needs of Elderly People and the Appropriate Place to Fulfill Them**

Physical-Functional Needs

Residence
- Sleeping[1]
- Eating[1,2]
- Bathing, use of toilet[1]
- Laundry[1,2]
- Hospitality[1,2]
- Storage[1]
- View of open space[1,2]
- Communication (telephone, computer)[1,2]
- Home activity (hobbies, writing, etc.)[1]

Physical security
- Protection against accidents[1,2,3]
- Protection against violence[1,2,3]
- Protection against "getting lost"[1,2]
- Climatic comfort[1,2]
- Protection against environmental nuisance (noise, contamination, etc.)[2,3]

Activities and services
- Cultural and social activities[2,3]
- Creative leisure activity[2]
- Paid employment[2,3]
- Voluntary activity[2,3]
- Commercial services[2,3]
- Convenient access by foot[2,3]
- Transportation (public, private, special)[3]

Special services for the elderly
- Cleaning and maintenance[1,2]
- Special health services[2]
- Special design and installations for residents with limitations of movement, sight, spatial orientation[1,2]

Psycho-Social Needs

Autonomy
- Personal control of a defined area[1]
- A sheltered area for intimate activity[1]
- Possibility of maintaining desired life style (maintenance of order, hours of light and darkness)[1]
- Possibility of accepting an area of responsibility and/or participation in decision-making related to old-age affairs[2]

Expression of personal identity
- Personal control over dressing, furnishing and decoration[1]
- Choice among a range of activities[1,2]

Social contacts
- Relationships with other people[1,2]
- Relationship with the community[3]
  - Participation in community life
  - Contribution to the community

Security for the future
- Assurance of housing in case of declining health[2]

Expression of social standing
- Demonstration of status[1,2,3] through:
  - Location of the building
  - Composition of the population
  - Appearance of building and equipment
  - Appearance of hospitality areas

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[1]Should be fulfilled within the individual residential unit
[2]Should be fulfilled in the public spaces of the old-age home and its yard
[3]Should be fulfilled in proximity to the old-age home

### EVALUATION OF THE MOZES OLD-AGE HOME IN JERUSALEM:
### SELECTED FINDINGS

The Mozes old-age home is located at the heart of a middle-class neighborhood in Jerusalem. It is three stories high. The ground floor comprises the nursing section, which was not evaluated in this research. Elderly residents who function independently, as well as those who need some help in day-to-day functioning (but are not nursing patients), live on the second floor, which is actually the entry level of the building, and on the floor above it, which is reached by stairs or elevator. The research was aimed at the latter group and its housing arrangements.

Each single elderly person and each couple has a separate apartment. The building has two wings, an old one and a new one, with stairs and an elevator in each. The two wings are connected by a common entrance lobby. The old wing has 47 apartments for single occupancy and 12 apartments for couples, while the new wing has 29 apartments for single occupancy. The building's public functions include the lobby, administration offices, a dining room and kitchen, a library (which doubles as a club room), a lecture hall, hair dressing salon, infirmary and synagogue. The building is connected to four outdoor areas: a patio and garden at the entrance, a small garden at the end of the old wing, a patio next to the new wing and a yard at the nursing floor level.

There are three types of single-occupancy apartments, each of which has an average floor area of 19-22 square meters. These units include a central space which is used for sleeping, sitting and hosting, a tiny entrance area, kitchenette and bathroom; some of the units have balconies. A unit designed for occupancy by a married couple has an area of approximately 39 square meters and includes, in addition to the above, a sleeping area of 12 sq m and a more spacious kitchen. With the exception of a clothes closet and kitchen cabinets, all of the furniture belongs to the occupants, most of whom brought the furniture from their previous homes.

We interviewed 50 of the 93 independent occupants of the self-contained small apartments. The choice of interviewees was done in such a way as to include persons of different ages and gender, single people and married couples, occupants of apartments in both wings of the building. Contact with the interviewee was made with the assistance of the social worker or the administrator of the home. The interviews normally lasted 45-60 minutes.

The 50 interviewees included 40 women and 10 men. All of them understood the questions and answered them willingly. Two-thirds of them were from 75-85 years old and the others were 86 or older. Eleven of them were married and lived in apartments for married couples, while 39 were single. Approximately 60% had lived in the home for 1-5 years and about 25% had lived there for a longer time, while the others had moved in more recently. All of these elderly people came to the old-age home from their homes in the community, most of them from Jerusalem itself, frequently from older, established neighborhoods (such as Rehavia and Bet HaKerem). In the past, most of them had worked outside their households, usually as professionals, skilled workers, clerks or sales personnel. Three-fourths of them had at least one health problem (heart disease, bone deficiencies, problems with sight, etc.), and one-third suffered from two illnesses or more.

In the course of the evaluation, a few findings of interest appeared to differentiate groups in the home. We found, for example, that there was a tendency towards increased satisfaction among most of the people questioned which corresponded with increase in age and the length of time they had spent in the home. In our opinion, this increased satisfaction mainly reflected the idea that the people had become accustomed to the place and made their peace with their situation. These differences are not presented in the analysis below, because the subdivision of such a small number of interviewees did not produce statistically significant results. We have related, therefore, to the 50 interviewees as a single group of residents in the Mozes old-age home in Jerusalem.

The evaluation findings were arranged in the form of tables; each table was composed of four columns: the first indicated the need (physical-functional or psycho-social); the second showed the actual situation, in comparison with the standards and planning guidelines; the third presented the professional evaluation and the fourth - the evaluation of the interviewed residents. Because of the limitation of space, we are unable to present in this paper all of these findings. Interested readers can find them in Eyal-Elimelech (Hebrew, 1990, to be translated into English). Discussed below are the

principal findings only, arranged according to the three areas of activity we identified: the private residential units, the public spaces in the building, and the environment surrounding the home for the aged.

*Evaluation of the Residential Unit*

The area of the unit for a married couple was almost double that of a single-occupancy unit in the researched old-age home (see Figures 1 and 2). In the double-occupancy unit, the sleeping area was separated from the living room and both were separate from the kitchenette, while in the single-occupancy unit, these separations did not exist. It was no wonder, therefore, that both the professional evaluation and the degree of satisfaction of the residents were higher with respect to the double-occupancy units. The surprising aspect was that, in spite of the small area of the single units (about 20 sq m, on the average), only 22% of the single residents maintained that they lived in "crowded" conditions, while all of the others said that the unit was "adequate," or even "roomy" (12%). Only one-third indicated the need for a separate bedroom; this was the case, despite the fact that half of those interviewed invited guests into their rooms, at least once a week. Only a few people complained about the size of the kitchenette, although many ate breakfast and supper in their rooms. Nor were there many complaints about the small bathroom. Only with regard to the lack of storage space were there many complaints from the residents, and 7 of them complained that they missed a balcony.

All of those interviewed, without exception, were satisfied with the maintenance of privacy which the apartments afforded them. Each resident had his/her own apartment and the death of a partner did not obligate the survivor to relinquish the large apartment in favor of a small one. The regulations of the home prohibited staff from entering the apartments when their occupants were out, and when they were in, personnel might enter only after they had knocked on the door and been invited to enter. The residents appreciated the opportunity to furnish the rooms as they saw fit and only 4% were dissatisfied with the esthetic appearance of the apartments. All were pleased with the fact that each room contained a telephone with an outside line.

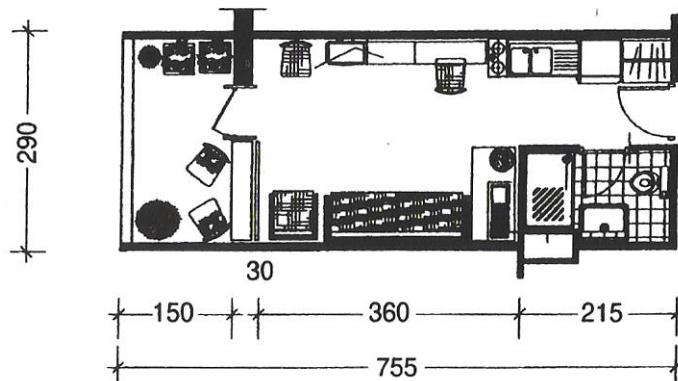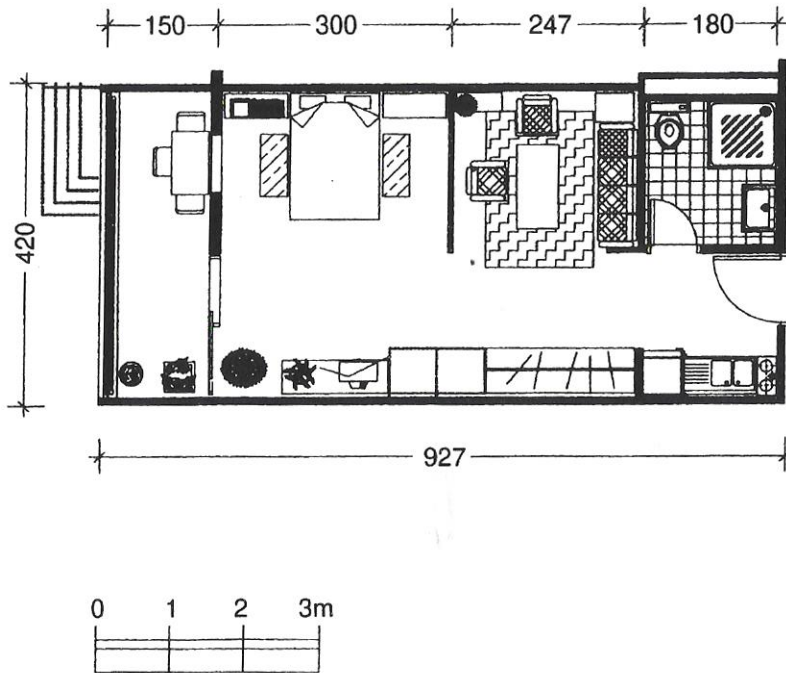FIGURE 1. A Housing Unit for a Single Person (22 sq m)

FIGURE 2. A Housing Unit for a Couple (39 sq m)



*Evaluation of Public Areas in the Building*

The evaluation by standards and design guidelines indicated that the planning complied, for the most part, with the recommended standards, in particular with respect to the lobby, sitting areas on the residential floors, balconies and gardens. The library in the elderly home was larger than required by the recommended standards, but the dining hall, lecture room, infirmary and laundry area were too small. In contrast with the standards, the home lacked clubrooms and commercial services (apart from the hairdressing salon). The special design for protection against accidents and for assistance to the handicapped conformed to the standards.

In general, the professional evaluation was in agreement with the evaluation by standards, but it contributed a few additional details. It gave high points to the location of the lobby, the dining room and the sitting areas, as well as to the operation of the library and to the general form of the building. It included a detailed specification of the weaknesses of the dining room and recreation room and agreed with the evaluation by standards concerning the need for additional commercial services and a waiting room outside the infirmary. It emphasized a need for rooms for small group activities and additional public patios.

A decisive majority of the interviewees indicated a high degree of satisfaction with all of the services and public spaces provided for their use in the elderly home. Satisfaction was also expressed with regard to the security and safety arrangements in the building, the level of cleanliness and, especially, the existence of a nursing section, which gave a feeling of confidence with regard to the future.

However, great diversity was shown when it came to the degree of use by the residents of the various services and public spaces: the patio outside the new wing was spacious, attractive and well cared for; most of the residents praised the landscaping and care expended on it, but about 80% of them never used it and another 10% used it only "on rare occasions." Likewise, almost nobody visited the small garden by the old wing, even though its location was considered to be good by the professional evaluators and it was well protected from sun and wind and had suitable outdoor

furniture. The spacious lobby, which was well divided into intimate areas, was the most frequented public space, but even here, 30% never used it and 40% sat there only infrequently. On the other hand, the recreation room was small and crowded, its location in the old-age home was considered to be unsuitable and its lighting and ventilation were insufficient; most of those interviewed complained that it was a stuffy room. In spite of this, 78% of the responders said that they used its services at least once a week and frequently more often, especially to listen to lectures and concerts. Almost all of those questioned (95%) were satisfied with this service and the dual function of the room and saw no need for a separate club room.

### *Evaluation of the Environment Surrounding the Old-Age Home*

The location of the building within a good residential area constitutes an important advantage, by any measurement. We found that the residents frequently used the nearby shopping center (82% made purchases there at least once a week), and a similar majority took walks through the neighborhood streets. All of those interviewed, without exception, expressed satisfaction with the possibility of reaching various parts of the city. About half of the residents used the transportation facilities, which were quite convenient, to go to a theater or a concert and many more went out to visit family and friends. About 10% worked at volunteer jobs outside the old-age home.

The planning guidelines call for participation by outsiders in the cultural and religious activities of an old-age home. Most of the residents were not in favor of this idea. Those of them who were religious were interested in opening the synagogue to the general public, because it was difficult to gather sufficient people from among the residents (a minimum often males is required for prayer in a synagogue). But the other activities-- lectures, clubs, library, infirmary-most of the residents preferred to reserve for the permanent population of the old-age home. They were generally interested in expressing their ties with the community outside the home, rather than in it.

## DISCUSSION AND CONCLUSIONS

With increasing life expectancy and significant increase in the population of the very 0ld -75 years or over- the number of people who cannot or do not wish to maintain independent households is growing. Most of them, especially the more independent among them, do not have an appropriate housing solution, because almost all arrangements for long-term care-boarding homes, personal-care homes (domiciliary care), nursing homes, etc. - are designed for people with severe physical handicaps (for example, according to data presented by Lawton (1986: table 5.3) for residents of nursing homes in the United States, 86% were impaired in their ability to bathe and 58% were senile). For these mostly independent old persons, as well as for a smaller number of younger senior citizens, the solution of a life-care community seems to be most appropriate. It allows them a considerable degree of independence when they enter it, together with the highly important feeling of confidence that they will not be obliged to leave their environment in the future, even if they have to be (temporarily or permanently) nursing patients, or even if they become infirm. This kind of housing solution was the object of our research.

The conclusions drawn from this research are related to its method, to its modest contribution to theoretical understanding, and to its implications for the planning and design of old-age homes. An advanced method (a "diagnostic" analysis in the terms of Preiser et al. (1988)) of "combined post-occupancy evaluation" was successfully implemented in the empirical research. It was based on what we developed and found to be a useful and fruitful checklist of housing-related needs - physical-functional and psycho-social - of elderly people in a Western society, and it combined (a) a two-fold professional evaluation (by published standards and by on-site visits of professionals) of features in the building and around it; and (b) an evaluation by the users of the building. By shedding light from different directions on the various planning and design components, their advantages and disadvantages were disclosed.

Our findings support the theoretical proposition according to which the fulfillment of psycho-social needs has first priority in determining the satisfaction of people with their environment. People tend to be satisfied with the fulfillment of their physical-functional needs to a lesser degree, providing a higher degree of fulfillment of their psycho-social needs is available. Grandiose construction is not a precondition for satisfaction and certainly does not guarantee it.

The findings pointed at a limited space and several other physical disadvantages in the single-occupancy apartments, but these apartments fulfilled the psycho-social needs of their occupants almost to perfection; we assume that this is the reason for their very high degree of satisfaction with the apartments. Investigation of the public facilities revealed that it was not the size and convenience of a room which determined the extent to which it was used and the degree of satisfaction with it, but rather the nature of the service it provided, the quality of the service and its importance in the eyes of the interviewee. Of course, this does not mean that space and landscaping are unimportant. We found that the elderly took notice of elements in their physical environment, complained when they were unsatisfactory and praised that which they felt to be praiseworthy, but their order of priority between the physical and the psycho-social was clear.

Our research led to another conclusion related to the order of priorities: as with other ages, elderly people consider the individual domain to be more important than that of public spaces. The private apartment was depicted as the most important space for the residents, because it was there they spent most of their time and, apparently, fulfilled most of their needs. It is worthwhile emphasizing this conclusion, because it is not congruent with the recommendations of researchers / planners such as Howell (1980) and Ziesel et al. (1983), who attribute great importance to public areas adjacent to the apartments of the elderly, claiming that it is these areas which ensure social interaction. Nor does it conform to the generally accepted planning standards for the design of old-age homes (especially those located in a single building or a small number of buildings).

Accepted planning allots to public areas a very large portion of the total area and resources invested in the construction and equipment of old-age homes. We found that in the home we researched, 44% of the total area of the building was devoted to public areas, which is similar to several other plans of old-age homes we studied on other occasions. We also found that 70%-90% of the residents never, or only rarely used the gardens, public patios, lobby, or even the sitting areas on the residential floors; although the design of these areas was considered by both the professionals and the residents to be good, they were seldom in use. Hence, we recommend considering the possibility of a significant reduction in the resources devoted to such public areas. This subject should be investigated in other old-age homes, which have different populations with respect to age as well as their cultural, social and economic composition. If here too the findings are similar, the planning guidelines and standards will have to be adjusted. It will then be advisable to allot more space and resources to those functions which are used intensively, especially the individual residential units, and less to the public areas in general, especially those which are used rarely or almost not at all.

Other specific conclusions based on our research:
- The apartments, even if they are small, should be divided into separate spaces for daytime activities and entertaining company, sleeping, kitchenette and bathroom; a balcony, even if it is small, is important to many elderly residents.
- It is both possible and desirable to have public areas serve more than one purpose in order that they should be filled with activity during many hours of the day and week; a large room might be used as both library and club room, or as club room and place for prayer, according to the wishes and customs of the population.
- The desirable contact between the home and the community is outward - rather than inward - directed; the residents were less interested in making the facilities of the old-age home available to the neighborhood in general, but did want easy access to the services of the community and the city.

The old-age home we investigated in this research was built several decades ago. Its construction is not pretentious, but of good quality. Despite the general rise in accepted standards, it is a good home for its occupants even today, both according to the professional evaluation and the degree of satisfaction with it of the residents themselves. In our opinion, its main advantages, in order of

importance, are: the provision of separate residential units for each single person and each married couple which include, in addition to living and sleeping space, a kitchenette, bathroom and private telephone; the existence of a nursing section within the complex; a close-to-homogeneous population; location within a "good" (middle-class) urban community, with easy access through organized transportation to all parts of the city; provision of services which are important to the specific population within the elderly home (in our case, these included lectures, concerts and a respectable library); and finally, good quality construction and design which gives a feeling of space and beauty to its occupants.

## Acknowledgement

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