

**Foreword by the
Public Housing Administration**

Today an increasing number of families are, or eventually will be, living in high-rise apartment buildings. Our experience clearly indicates that such an environment sometimes brings forth unusual family and management problems which thus far have not been adequately delineated and analyzed.

This report is a compilation and evaluation of the responses of local housing authorities, experienced in high-rise design and management, to questionnaires and interviews. It is neither a statement of Public Housing Administration policy nor a set of standards. Nevertheless, I believe it will prove helpful not only to local housing authorities, their architects and managers, but to all who may be considering the use of high-rise structures for family living.

Miss Elisabeth Coit's extensive professional experience makes her eminently qualified to do this provocative study. She was Principal Project Planner of the New York City Housing Authority for many years and is a fellow of the American Institute of Architects.

As Public Housing Commissioner, I am deeply concerned with the proper resolution of the problems of high-rise housing and believe sincerely we can do much more than we have in the past to orient our design to family needs and management realities. While this paper does not give final solutions, it does identify many of the perplexing situations relating to livability and operations in high-rise housing and offers suggestions for further exploration.

Marie C. McGuire

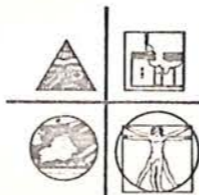
MARIE C. MCGUIRE
Commissioner
Public Housing Administration

**Report on
Family Living
in High
Apartment
Buildings**

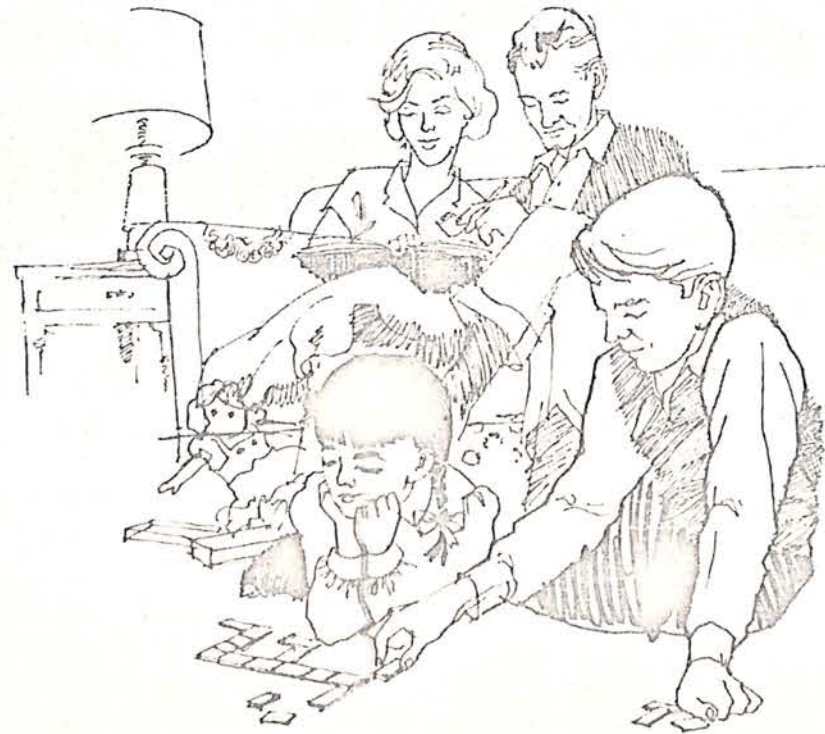
Elisabeth Coit FAIA

PUBLIC HOUSING ADMINISTRATION ■ HOUSING AND HOME FINANCE AGENCY

May 1965



Preface



Urban living is more and more the pattern of modern life all over the world. The tall elevator-serviced apartment house rises up in tiny Italian towns, in new cities of India, in Paris suburbs, and not the least in the United States, author of the skyscraper.

Housing authorities faced with high land costs are of necessity providing elevator buildings at least for part of their inventory. They are persuaded that not all design techniques used successfully in row-house and walkup apartment buildings are appropriate for high structures.

The accompanying report contains suggestions, in large part provided by these ingenious authorities, that make for ease and economy in long-term management practice and in family satisfaction and cooperation.

It is not to be taken as a final word. Authorities look for a new approach in the design of urban structures and turn to the architect for imagination and invention, tempered by a practical knowledge of problems inherent in densely occupied building groups.

Public housing developments are not in their nature "institutions" and need not look or feel as if they were. They are built for people. Their design must call forth people's interest, acceptance and understanding, must stimulate their initiative, and meet their social requirements.

Nadine Gordimer, South African author, has said in another context, "An utterly impossible job—to improve the living conditions and morals of people while at the same time stifling their opinions and taking away from them any responsibility for their own destiny".

Authorities are concerned with techniques that will result in a "possible" job. This report offers suggestions toward that end. Its purpose is to supply a foundation of experience upon which the architect will build his own New Jerusalem in a "green and pleasant land" ■

The image of a new city has been accepted by citizens and is being implemented with the aid of Federal and local government. Schemes are proposed and undertaken to break with old traditions and to provide a new, lively metropolitan complex.

Public housing is part of this complex. Its developments must be designed in keeping with the invigorated city so that they will be a satisfaction and a pride to all citizens.

Elevator-serviced buildings, 16, 20 stories, and even higher, are becoming a necessary part of the supply of "decent, safe and sanitary" housing within the framework of community development.

Renewal schemes in rundown city areas and new highways slicing through the outskirts result in masses of families turned loose, many of whom must be accommodated in public housing developments. Also the impact of in-migration from the countryside, and the notable increase of individual family size are as well known to architects as to sociologists.

This report will acquaint architects with some difficulties encountered in tall buildings populated by families many of whom lived formerly in decrepit city slums and by others unused to urban living.

All large-scale housing developments have complex problems, but there are certain ones that characterize high-rise buildings and require special thought for solution. Chief among these are:

1. Separation from the ground. Babies and small children need sunny play space close to their mothers; parents and older children want the equivalent of a nearby porch for informal gatherings, relaxation, and for making the acquaintance of new friends.
2. Loss of identity, as well as a sense of pressure in the multiple-family floor of a many-familied structure. Ranks of pigeonhole dwellings close together make difficulties both for the gregarious and for those who cherish privacy. The first type misses opportunity for self-expression in the impersonal trafficways of narrow corridors and crowded elevators; the second is oppressed by the closeness of his many neighbors.

Different, and sometimes conflicting, solutions are here offered to the architect for his discriminating evaluation.

The report also contains notes of experiments now being discussed by

authorities to further increase orderly management of the property, resulting in tenant satisfaction and consequent acceptance of responsibility for the fabric of the buildings.

The architect will need to visit existing developments, both with authority personnel and by himself, for firsthand observation. He will review housing publications and guides. He will study the results of experimental schemes and demonstration buildings as they develop, such as parking troughs at Flemingdon Park, Toronto, or the forthcoming Pratt Institute (Brooklyn) study of construction methods that is sponsored by the HHHFA. He will not scorn any scrap of practical information.

Architects and authority staff must work closely together from the first sketches to the "As-Built" drawings. The authority supplies detailed management experience, knowledge of the market, and its own official relations with city departments and community organizations. The architect should aid in developing the program and offer a physical translation of it. He provides experience with new materials and construction methods, and an inventive attack on problems posed by the authority. He will stress the importance of good workmanship as well as appropriate materials.

Both architect and authority should make use of the social scientists' contribution. For one example, a French study of workers' families showed that people with less than 8-10 square meters of space per person had twice as many social and physical disorders than those with 10-14 meters.¹

Both must have clearly in mind the end client, the tenant family. No development is better than its management but, equally, no good management is possible without tenant cooperation in the techniques of apartment living. One authority has a slogan, "Demonstrate to tenants that management cares: tenants will care."

Public housing has its own traditions, properly based on the need for rigid economy, both in capital costs and maintenance expenses. But, as M. Roland of the Paris Opéra said recently, "How agreeable it is and how necessary to break intelligently with tradition and routine".

¹ From address to the American Institute of Architects' Convention, 1963, by Dr. Edward T. Hall.

Introduction



Statue of G. W. Carver . . . Amendola, Sculptor

the Grounds

INTRODUCTION

The first view of a housing development gives tenant and visitor alike a strong impression, whether or not it is a conscious one. This is particularly true of groups of tall buildings where greenery cannot disguise and soften building shapes and positions. The high masses dominate the scene.

A simple pattern of well-spaced structures comfortably set in landscaped grounds may be attained in many different ways. A study model with movable buildings can be advantageous to architect and authority during the first phases of design. Some architects think themselves fortunate if a combination of high and low buildings is contemplated, whether attached or separated, as it gives them scope in the overall design. This, of course, must be justified by land cost and subsoil conditions and by the benefit gained by housing large families near the ground.

One-story extensions or separate low buildings for management-maintenance offices, community spaces, for a row of shops, even for a school (the authority will no doubt explore that possibility with the local board of education), all these break up vertical masses and provide eye-level accents.

Among the 12 "Aspects of Quality" listed by Robert Katz, the 2 that he thinks most neglected are "blending into the neighborhood" and "individuality." Mr. Katz also believes that a livable design should be, so far as is possible, based on a specific program with allowance for future adaptation.¹

¹ *Intensity of Development and Livability of Multi-Family Housing Projects.* Robert D. Katz. FHA Technical Studies Program, No. 509. 1963.



Study Model



High and Low Buildings . . . Harold F. Kellogg; Thomas Worcester, Architects

SITE DESIGN

Architects studying occupied developments will do well to make some visits on rainy days. A pool here or a puddle there witnesses insufficient study of drainage requirements and of the ground settlement to be expected.

They may also find, in any weather, tenant-made or even staff-made walks not in the original design, or an uninviting amount of expensive chain-link fencing.

Public streets within the site are unhandy for easy tenant circulation and are unsafe in developments teeming with children. Private streets protected by movable stanchions will take care of maintenance trucks, moving vans, or emergency vehicles for buildings within the site. Authorities prefer, if possible, to have building entrances near public streets.

Difficulties Encountered

- a. Lawns crossed by unplanned paths or caged in by high metal fencing.
- b. Traffic snarls at building entrances.
- c. Corner cutting at walk intersections.
- d. Dreary aspect of uninterrupted asphalt surfaces in walks and recreation areas.
- e. Erosion.
- f. Damage to plant material.

Suggestions

- a. Walks planned where people need and want to go; e.g., direct access from buildings to public streets, transportation stops, schools, shops, as well as convenient pathways to playgrounds and to all entrances within the site.

Lawns raised 18 inches or so above surrounding grade, sometimes higher to form a windbreak for benches set against the retaining wall.

- b. Entrances planned to avoid cross-traffic concentration.

Walks from entrances designed as a "horn of plenty" to accommodate the outrush of children.

- c. Walks curved at intersections.

Radii designed for snow-removal machinery in cold climates.

NOTE: A heating tunnel under main walkways is said to pay for itself in ease of repairing lines and in lowering snow removal costs.

- d. Concrete walks as well as asphalt, each defining certain uses. Colored concrete patterns in malls and play spaces to provide play material and interest.

Walks edged with cobbles or bricks set in cement.

Curbs designed to avoid trimming grass by hand.

- e. Turf or ground cover on steep slopes.

Drain basins with top masonry courses that can be raised or lowered easily if unexpected settlement or heaving occurs.

Raised lawn areas.

- f. Massed shrub beds have built-in protection.

Thorny bushes are more effective than "Keep Off" signs.

The budget for trees is better spent on reasonably well-grown ones than on a larger number of small trees.

Existing trees stand up best of all when site design can incorporate them.

Vines on building walls add to the supply of greenery at little expense and keep children from marking walls.

Flower beds to be used in competitions between old and young tenants or residents of different buildings stimulate respect for all plant material.

Garden plots for vegetables are successful in some areas.

PARKING

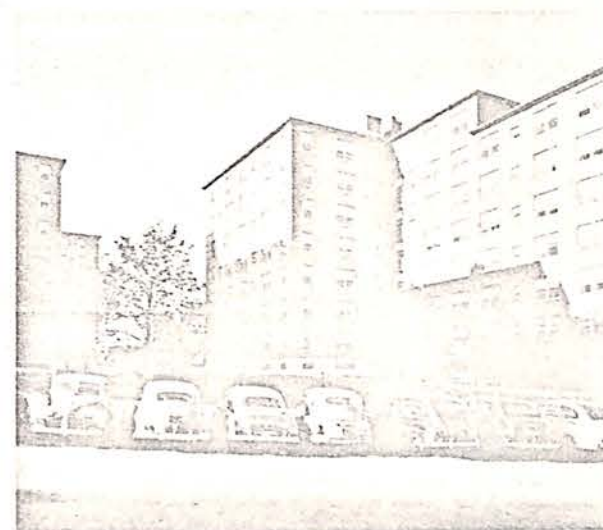
Open parking lots demand close attention during site design if they are not to draw too much attention in the finished development. They should be near public streets to avoid expensive heavy-duty access roads. They should be away from buildings to keep noise and fumes from dwellings. Decision between scattered lots and fewer larger ones



Stanchions . . . Irwin Clavan, Architect



Existing Tree



Low Parking Level . . . Thomas F. McDonough, Architect

depends partly on site characteristics; but small lots are usually considered preferable in that they are less conspicuous and can be closer to the owner's home. Parking lots that penetrate deeply into the site interrupt natural circulation and cut off buildings from each other. A sea of parking lots along the site's perimeter, on the other hand, makes an island of the building group.

Difficulties Encountered

- a. Parking lots overcrowding open space.
- b. Danger to playing children.
- c. Annoyance from noise and fumes.
- d. Space appropriated by nontenants.

Suggestions

- a. Study of amount of open space for tenant needs unencumbered by cars before parking lots are laid out.
Waivers from citywide regulations for the ratio of cars to families, if less need is demonstrable.
Parking under buildings, or in troughs covered by walks and play spaces, to economize on land use and to separate cars from people, both for safety and appearance.
Carports with playgrounds on the roofs, for the same reasons.
NOTE: Building entrances near public streets diminish the need for visitors' parking space.
- b. Fencing to keep children from pelting through the parking lot.
- c. Thick shrub planting and bushy trees surrounding parking lots to hide cars from view and to counteract fumes.
Hardy vines on fences in northern climates to prolong protection.
Parking lots slightly lower than surrounding grade level, whether by taking advantage of natural terrain or by short ramps, to diminish noise.
- d. Signs warning outsiders that their cars will be towed away.
Tags issued to residents.
List of tenants' license plates for staff use, or that of a tenant committee.
Numbered, assigned places plus violation stickers.
Key-operated chain or gate.
Electrically operated gate.

RECREATION AREAS

Small playspots for little children and for mothers sunning the baby-carriage trade are contributions to city living always offered in public housing developments. One may say that in this country, at least, private developers now copy public housing design in this respect.

These play spaces should be near entrances, but not so near as to interfere with normal traffic. They afford also gay accents through brightly colored benches and play equipment. Architects should insist on providing the color scheme for playground equipment so that it will complement and enhance overall design.

A large playground for older children and their parents is planned if a city park or playground is not nearby. Sometimes it is designed according to park department standards, built by the authority, and run by the park department. If not, an open area large enough for softball games and equipped with basketball standards, parallel bars, shuffleboard markings, etc., will be needed. A running track of four laps to the mile could border the space for many such activities and will itself be a popular attraction.

The large playground can be a useful counter to mischief resulting from teenage energy.

Chief Justice Clark has remarked that, "Most boys would rather steal second base than steal a bicycle."

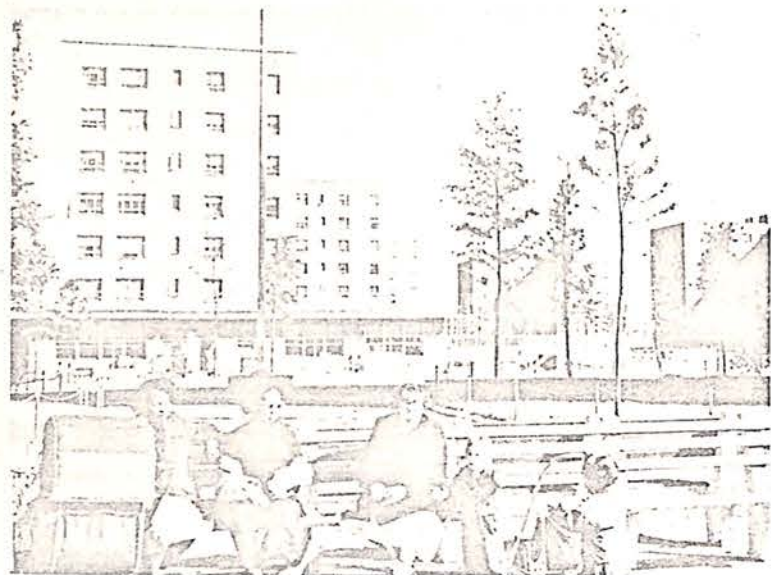
Paths for bicycle riding and roller skating are needed away from pedestrian ways, to avoid noise and accidents. It has been observed that a sign, "No Bicycle Riding," is apparently illegible to a boy who has no other track than the pedestrian way in which to show off his speed and daring.

Existing rock outcrops that lend themselves to play add an economical bonus.

Spray pools are welcomed in warm weather. Integral or applied color, e.g., swimming pool blue, in the concrete dish adds cheerfulness. The pool can be used as a skating rink in winter.

Children's Play Area . . . Kahn and Jacobs, Architects





Benches . . . Andrew J. Thomas; Simeon Heller, Architects

Difficulties Encountered

- a. Play spaces unused by small children and their mothers.
- b. Lawn areas used for play and digging.
- c. Play equipment marked up.
- d. Broken benches.
- e. Small playspots overrun with "6 to 12s".
- f. Large playgrounds little used.

Suggestions

- a. Sturdy, varied play equipment.

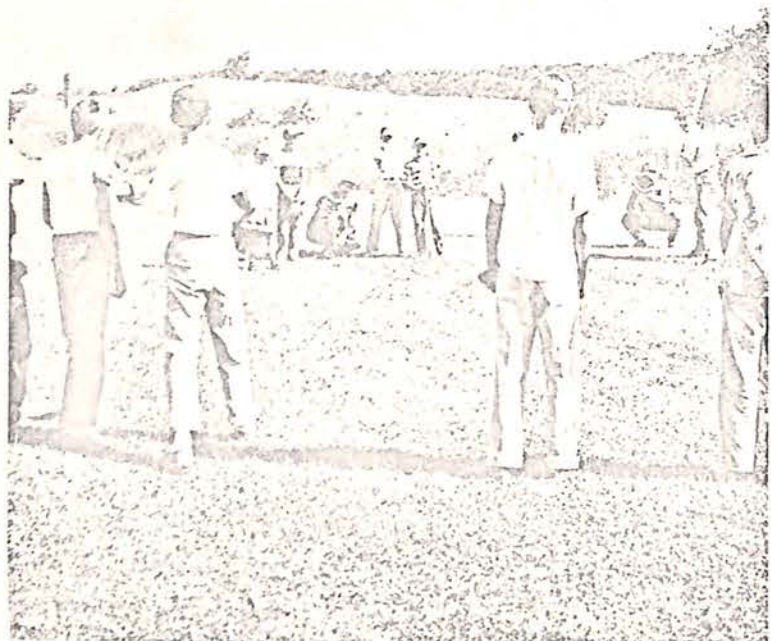
NOTE: Small children soon tire of crawling and want to climb, tire of climbing and want to jump.

Shady spots to make play spaces usable on hot days and to attract children away from entrances and lawns shaded by buildings.

Comfortable benches, a few with high metal umbrellas to protect against sun and short summer showers.

Plywood chips under equipment designed for small children.

- b. Small grass plots within or close to the play space, labeled "For



Baseball



Metal Umbrellas . . . Brown & Guenther, Architects; Albert Mayer, Architect for replanned open space

Junior Excavators," to furnish an authorized place for little children who want to—perhaps must—dig.

Caution: Sand pits as usually designed may be unsanitary and dangerous unless under constant supervision. Raised sand containers, some combining sand and water play, are now obtainable.

- c. Bright, durable paint that can be cleaned easily and that adds gaiety to the scene.
- b. Benches of pipe rail with wood slats, or of concrete with heavy plastic slats.
Slats so fastened that they can be replaced, if broken, without injury to the frame.
- e. Separate play spaces designed for "6 to 12s," with equipment such as exercise units, checker tables, removable shower, chalk games.

NOTE: Pavement marking for Hop Scotch and Tic-Tac-Toe, however, if provided also in the small playspots, will keep the older child sent out to watch his young brother or sister from becoming bored and drifting away.

Park Department Playground . . . Emery Roth & Sons, Architects



- f. The large playground as close as possible to the buildings, considering the noise involved, and in any case with easy access to it from all parts of the site.

High fencing to keep balls inside.

Benches for occasional spectators, doubling as a place to leave coats.

Hose bib for "water boy" if a drinking fountain is not feasible. It is also needed for cleaning, and can be used to transform a curbed running track into a winter skating rink.

Night lighting for informal dances or for dramatics.

Comfort station with storage space, open under supervision at definite hours.

NOTE: Swings, slides, and other fast-moving equipment are usually considered dangerous in playgrounds lacking supervision.

NEIGHBORHOOD COMMONS

"Neighborhood Commons," a program invented and put into practice by Prof. Karl Linn, Landscape Architect, completed its first demon-

Building a Neighborhood Commons . . . Karl Linn, Landscape Architect



stration at Melon Park, Philadelphia, in 1962. The movement has spread to a number of other cities.

In essence it consists of transforming a city-owned, vacant, rubbishy lot into a park-playground through the labor of volunteer workers and youth groups under volunteer professional and technical guidance. Donations of new and secondhand material from contractors, gifts of trees from the city's park department and from private nurseries, etc., are incorporated to make "a place of meeting where young and old may gather together to engage in the spontaneous celebration of public life."¹

Builders and users are the same people: adolescents offer their young muscles in construction jobs; their elders provide skilled knowledge; little children dig away with big shovels or cover retaining walls with mosaic patterns; and mothers bring refreshments, an important ingredient of volunteer work.

The resulting oases give local pride and satisfaction because of the neighborhood's involvement from the outset. This involvement, like that of tenant-maintained flowerbeds mentioned above, could increase pleasure in and respect for outdoor living space in housing developments.

NOTE: The National Capital Housing Authority, cooperating with the

¹ Excerpt from the Neighborhood Commons Charter.

Tenant Boys at Work



Department of Health, Education, and Welfare, has started such a self-help tenant grounds improvement program in a Washington development, complete with indoor meeting room, workshop, and storage space. Authorities and architects wanting to know more about the techniques and results should consult Karl Linn, Neighborhood Commons, 340 New Hampshire Avenue, Washington, D.C.

LIGHTING

Night illumination of the whole site pays in reduction of city or staff patrol through the grounds. There are tenants unfamiliar with urban living in high building developments, there are often undesirable, sometimes jealous people living near the site, there may be teenage gangs or wandering criminals who find opportunity for disturbance and violence in dimly lit open spaces away from public streets.

Lights on building corners are less expensive than standards. Usually, however, some standards will be needed for walks, malls, and parking lots.

Tenants can meet each other after a working day in well-lighted sitting areas as many of them were accustomed to meet on porches and steps of their former dwellings. Neighborly groups on benches removed from buildings will not disturb other tenants, and their presence will discourage prowlers or obstreperous youngsters.

Difficulties Encountered

- a. Insufficient general illumination.
- b. Dark pockets in malls, tree clumps, and building angles.
- c. Smashed lamps.

Suggestions

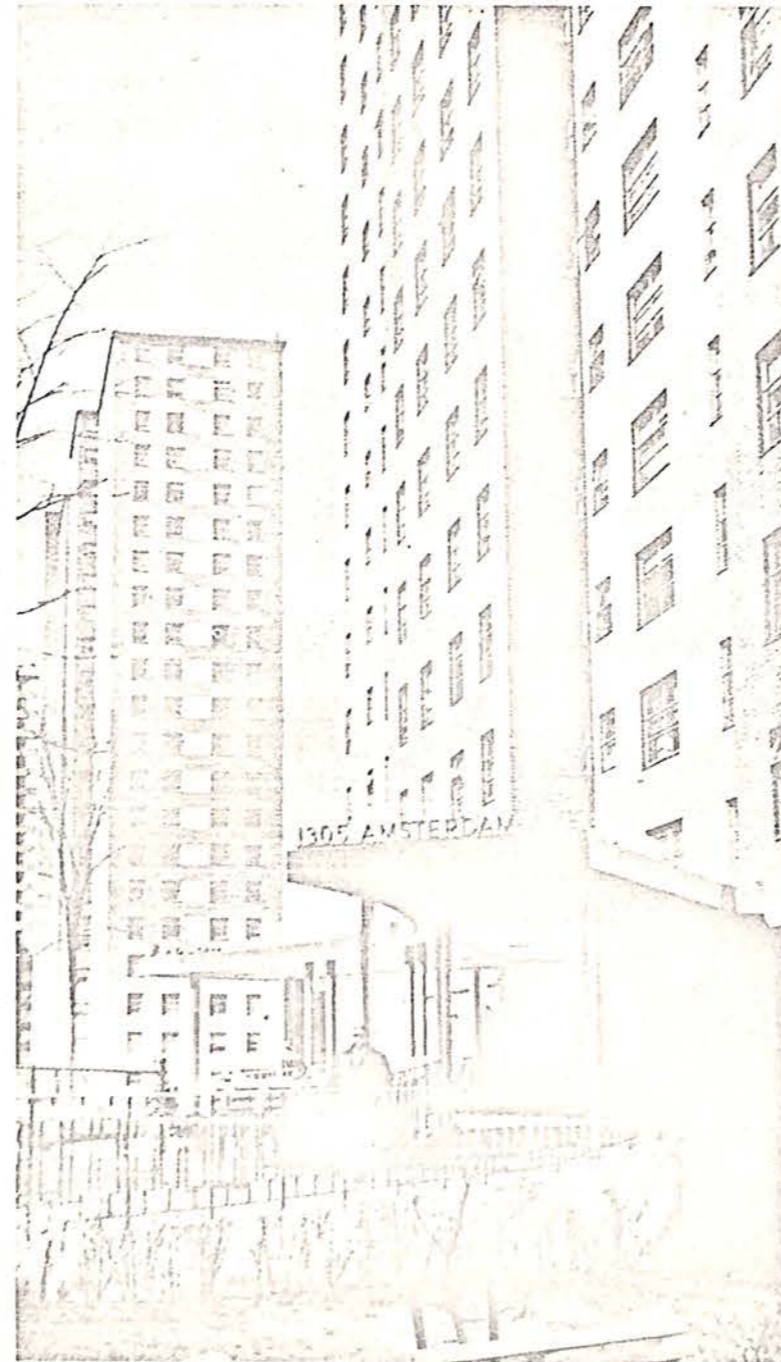
- a. Lights at entrances and building corners placed to give maximum illumination to adjoining grounds.
Lighting coordinated with present or proposed public street lighting.
Layouts taking account of tree growth as well as tree location to insure noninterference with tree roots and with the future height of growing trees.
- b. Light sources at different heights to illuminate pockets under tree plantations as well as to provide general lighting over open stretches.
- c. Mercury vapor lamps in plastic cases.
Light fixtures designed for quick relamping.

NOTE: Emergency callboxes may be installed on lighting standards for convenience of communication with the office.



Night Lights . . . Holabird & Root & Burgee, Architects

the Entrance



Entrance Canopy . . .
Eggers & Higgins, Architects

INTRODUCTION

A lively, welcoming entrance encourages good manners from tenants as much as it delights a visitor. The simplest design for easy, safe access, fortunately, provides esthetic possibilities that architects will take advantage of.

Easy approach to a well-defined and well-lighted doorway prevents accidents; a canopy protects from weather and from falling objects; smooth panels framing the entrance can be cleaned easily, house numbers must be legible from the street, and so must directional signs for buildings that do not face the street.

NOTE: Architects should be consulted on the design of all major signs used in the development, including any found necessary after the buildings are occupied, for example, a community building title or a parking lot warning, to preserve unity of color and lettering.

Thus rational design provides the ingredients for an impressive and pleasant gateway: a wide, canopied entrance that offers a horizontal contrast to the vertical structure; color and texture different from the overall facing material; and attractive accents in house labels and light fixtures.

Architects often adopt some variation in entrance treatment for a group of buildings to add sparkle to the picture.

Nonetheless, an entrance is only a passageway.

Benches or parapets at the entrance platform will turn it into a bottleneck. If steps are necessary, a baby carriage ramp will speed traffic and save wear and tear on vehicle and the mother's feelings. Sitting areas a bit removed will draw away people who come out to take the air, or tired shoppers who want to relax for a few moments outdoors before attacking their housekeeping.

Difficulties Encountered

- a. Entrance planting damaged.
- b. Walls near entrance marked up.
- c. Sash in door and sidelights broken.
- d. Doors marred.

Suggestions

- a. Raised planting beds along the walls, starting at the point where glazed tile or other easily cleaned finish stops. Plants will prevent children from marking on the walls behind.
- b. Glazed tile, ceramic tile, marble, or other impervious material framing the entrance.
- c. Acrylic plastic or tempered glass panes in door panels and sidelights, sized for easy replacement.
Lower panels of stainless steel or enameled metal.

NOTE: Acrylic plastic is scratchable, but scratches can be rubbed out in sheets of good quality. One airline, at least, uses acrylic plastic sheets with a free-form prescratched decoration on them, thus anticipating would-be decorators.

d. Doors wide enough to take bulky furniture.

Patterned stainless-steel or heavy-gage aluminum protection plates high enough to protect against baby carriages, market carts, kicks, and scratches:

Push-and-pull handles.

Sealants between frame and sash covered with metal stripping so that children cannot pull out the calking.

THE LOBBY

The lobby is a concourse, a waiting place, and several times a day it will harbor a traffic jam. Impatient children, tired parents, carefree messenger boys all belong here. All will leave their mark, whether made by muddy boots or lipstick decorations.

And an unguarded lobby may attract prowlers. Most authorities decide on one or another type of patrol system for that reason. It has been suggested that a closed-circuit TV installation from lobby to management office would be useful. Some authorities think the idea has a "Big Brother is Watching You" connotation. Others believe it would give tenants a feeling of safety.

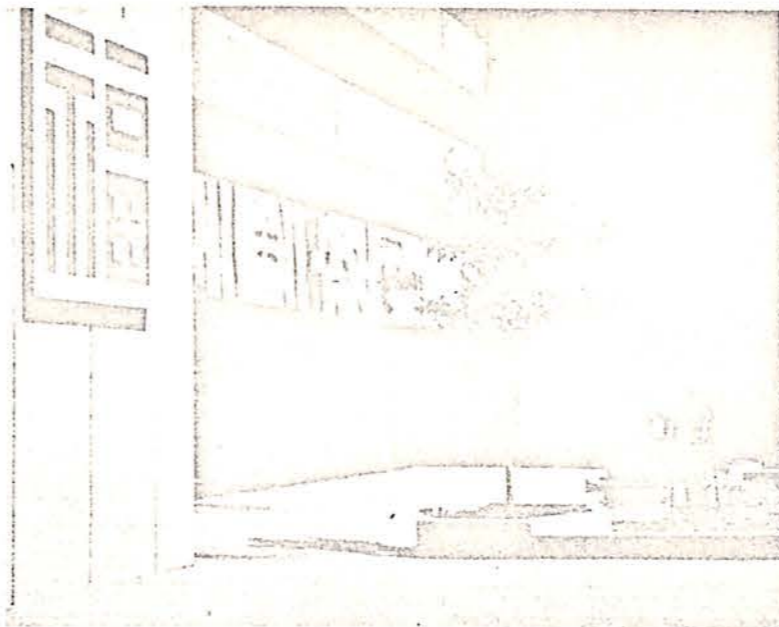
Installation costs would be high and could only be determined by a study of building location and layout, length of cable being an important factor in costs. Strong illumination is required to project the image. It seems doubtful that the scheme would be practicable for more than at most two buildings for one viewer, even if economical to install and operate. Perhaps the "Human Use of Human Beings" on a face-to-face level works better than a remote guard watching a little box.

Difficulties Encountered

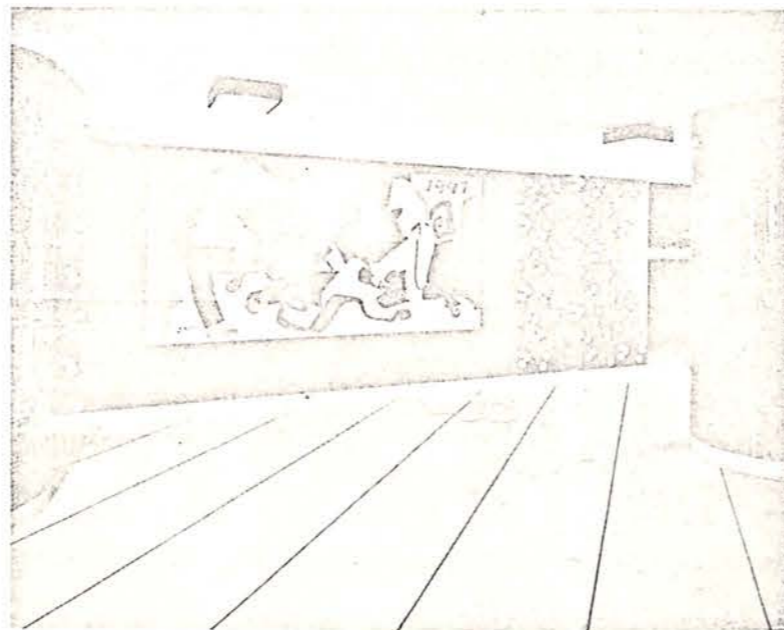
- a. Walls marked and scratched; stained floors.
- b. Lamps stolen or smashed.
- c. Lobby attractive to hoboes.
- d. Mailbox covers and frames damaged.
- e. Burning matches pushed through mailbox cover slits.
- f. Nameplates in mailboxes and directories removed.
- g. Mail pilfered.

Suggestions

- a. Wall and floor finish of easily cleaned material; e.g., walls of glazed structural tile, ceramic tile, cement-enamel block. Floors of terrazzo, quarry tile, ceramic tile.



Entrance Planting . . . John S. Bolles, Architect



Lobby Mural . . . S. Van Veen, Designer

- Mud-catching mat for stormy days.
- b. Fluorescent light in plastic cases.
Incandescent light bulbs paired in caged fixtures or recessed in ceiling, with protective covers.
 - c. Lobby design avoiding offsets or alcoves.
Entrance doors locked at night with lock keyed to apartment keys, or provision for emergency opening by night patrol, city police, or maintenance guard.
Buzzer-annunciator system to each apartment, with doors locked at all times.
 - d. Stainless-steel mailbox frame and door.
 - e. Slits protected by acrylic plastic shields, or slits so narrow that matches cannot be inserted, if acceptable to the U.S. Post Office Department.¹
 - f. Nameplates crimped at edges.
Protective plastic cover on directory.
 - g. Mailboxes in locked mailroom off lobby, opened by tenant key plus keys for mailman and staff, with wire glass panel in door and directory on inside of door panel.
Mailroom for mailman and staff only, with mail fed from back into "pigeonhole" horizontal boxes with tamperproof bronze doors on lobby side.
Package room in management office.

¹ *Principal Requirements of the Post Office Department.* Architectural Record, September 1963, p. 204.

Horizontal Mailboxes



PUBLIC TOILET

A small public restroom off the lobby is considered desirable for children in neighboring play spaces and for those waiting for an elevator during rush hours.

Difficulties Encountered

- a. Toilets misused to the point that most of those provided have been locked up.
- b. Damage to fixtures.

Suggestions

- a. A new design, not yet perfected, rather like the European "urinoir," requiring little formal supervision, easily cleanable, and with minimal fixtures. Local codes must be satisfied.
- b. Supervision during times most needed and otherwise locked. Openable only by staff or tenant key.

FURNISHINGS

The practice of providing a lobby unheated and bare of furnishings will discourage, especially in northern cities, its use as a night shelter for drifters. It may also discourage tenant pride in the lobby, and lack of interest in and responsibility for its appearance.

An increasing policy of locking entrance doors at night makes comfortable waiting space more feasible than if doors are open or removed altogether.

Some authorities prefer small lobbies to discourage "loitering" among tenants and the attendant disturbance to occupants of nearby dwellings. Recent designs, however, often avoid dwellings near entrance lobbies, using that space for laundries, mailbox rooms, a custodian's apartment, etc.

Other authorities believe a large lobby decreases traffic problems and will consider space for game tables in some buildings.

The appearance of lobbies in privately managed developments is considered of particular importance. It sets the tone of the building. No doubt, pride in one's home is enjoyed also by tenants of public housing where thought has been given to provide a cheery, attractive space.

Architects can suggest sturdy furniture or ornamental objects to be installed as an experiment.

A bench for mothers waiting for an elevator is hardly a luxury. Neither is a well-designed bulletin board for tenant- or staff-supplied notices of entertainments, PTA meetings, etc.

Padlocked ashtrays, a masonry flowerbox, a candy vending machine, or other inexpensive attractions could be installed and later removed.

if people took no interest in or care for them.

Caution: Vending machines need cage protection, perhaps best set into wall niches with padlocked grating when no supervisor is at hand. And perhaps music could be broadcast in lobbies at certain hours.

In any case, gay colors and patterns can be provided on walls. The London County Council initiated a successful program by inviting young artists to collaborate with architects and contractors in the development of new decorative wall treatments. The methods used had to be practicable within limits of what contractors were geared to accomplish and at costs (side from a fee to the artists) within those of the normal facing material replaced.

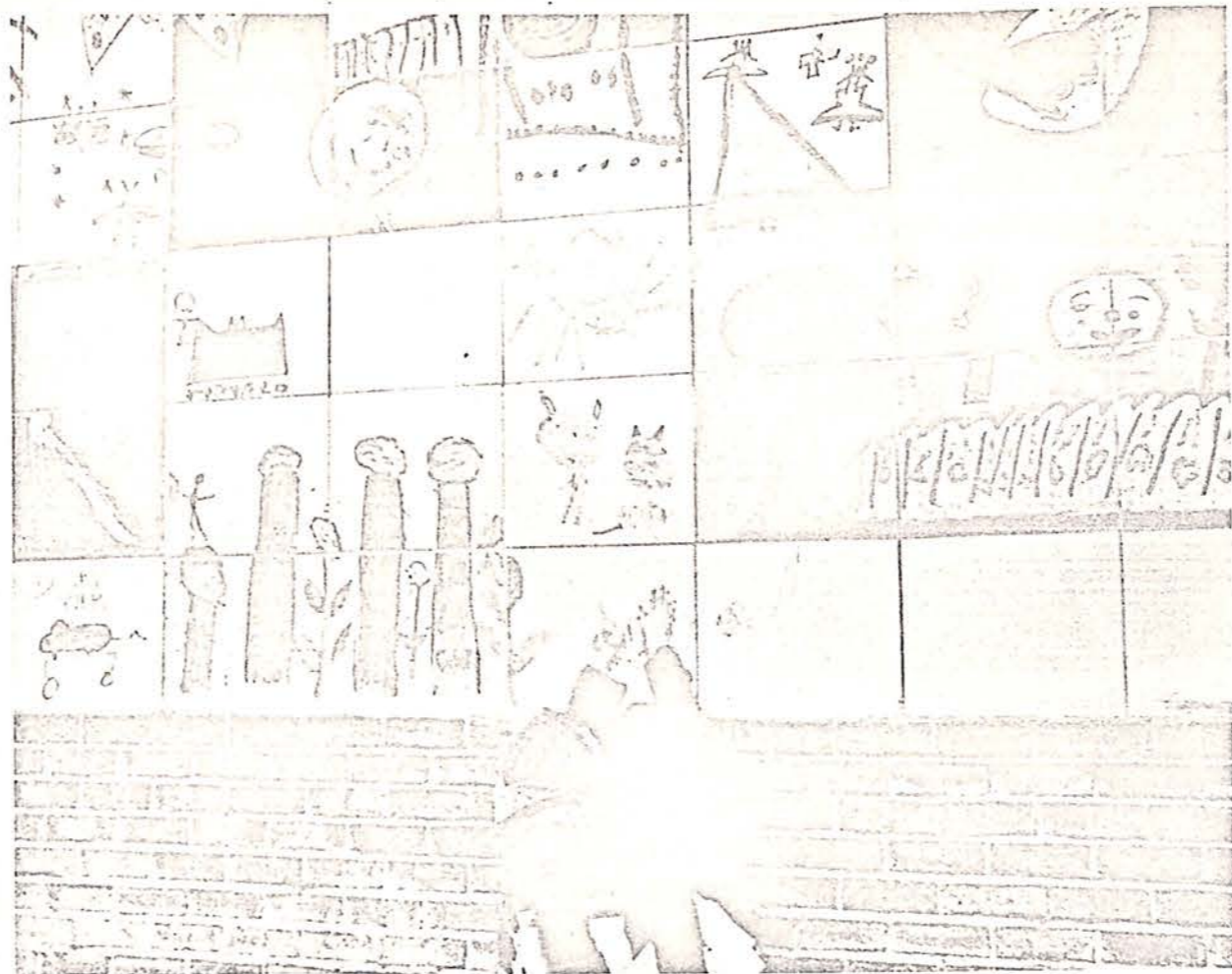
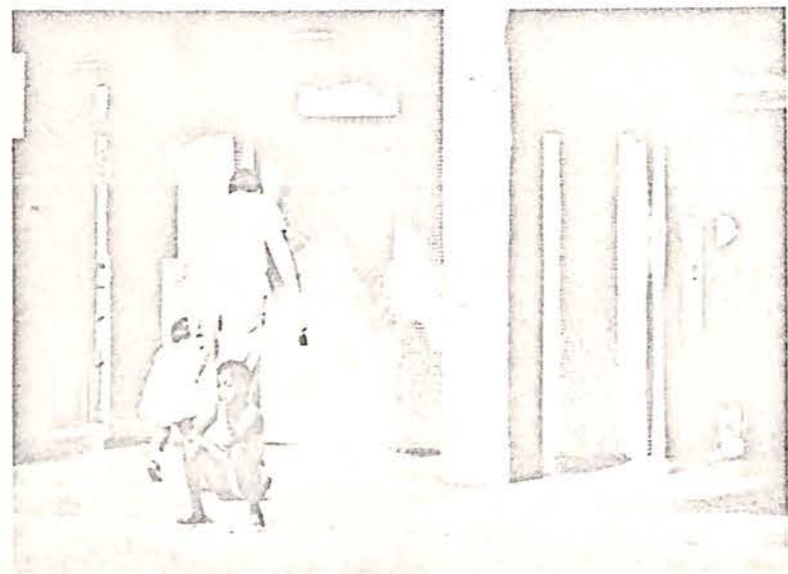
Glass mosaic tiles introduced into tiled walls, preshaped wood forms provided for the concrete contractor, polyester resin incised on chip-board panels, photostatic murals sprayed with plastic, waste wood and broken tiles from the site debris fixed in polyester resin, and many other unusual, cheap and lasting surfaces were invented.¹

Similar methods have now been adopted in other British cities.

Neighboring community houses might be happy to have their ceramic classes design decorations to be built into lobby walls under the architect's supervision.

¹ *Decorative Treatment on New Buildings.* Press and Information Division, London County Council, 1959.

Small Lobby . . . Harbeson Hough Livingston & Larson, Architects



Children's Work Reproduced in Tile

the Elevator

INTRODUCTION

The elevator is apparently the most fascinating bit of play equipment that an indulgent authority can provide for its children. Self-service elevators, moreover, can be a source of trouble and danger on occasion. No doubt the elevator is the chief reason for authorities' reluctance to proceed from rowhouse and walkup structures to tall apartment types. Some managers report that children's curiosity in the workings of an elevator wanes after several months. One cannot count on this relief in a high building bulging with children.

Peakloads at school lunchtime or at the end of a school day, will fill the lobby with hungry, excitable children. Staff or tenant committee control is commonly adopted to prevent overcrowding and misuse. Design to ease the need for control is also helpful.

Difficulties Encountered

- a. Crowded elevators with exasperating waiting time.
- b. Hatchway doors and bucks defaced; cab walls scratched; door shoes damaged.
- c. Call buttons pulled off; floor numerals scratched out.
- d. Children riding on top of cab.
- e. Urinating on cab floor.
- f. Confrontation with dangerous strangers.

Suggestions

- a. Two elevators side by side (for economy in controls and for convenience) stopping at all floors in buildings over six stories high.
Elevators speed determined by calculating acceptable waiting time in the local community.

Provision of relay for rush hours so that the car's down travel can be stopped only by a call button from the public corridor. Sliding doors, to avoid accidents and to speed service.

Attendant operation for emergency use.

Car progress signals.

One regular and one service elevator.

One elevator manned at rush hours.

A third elevator for rush hours and for bulky furniture.

- b. Stainless-steel hatchway doors and bucks.
Steel finished with heavy plastic paint.
Metal shoes for leading door edges.
Patterned stainless-steel cab walls.
Vinyl tile floors, to resist urine stain.
Epoxy-cement flooring.
- c. Steel or heavy aluminum call buttons.
Floor numerals etched into car control panels.
- d. Ceiling escape hatch openable from top only if local codes allow.
Alarm bell to ring if hatch is opened.
- e. See discussion of public toilet off the lobby and of suggestions to interest children waiting for the third or fourth appearance of the elevator, on page 12.
- f. Two protected lights in each cab ceiling.
Alarm bell designed so that a hand must be pressed on the button continuously if it is to be silenced.
Automatic alarm that rings whenever a car stops between floors.
Glass or plastic small windows in cab and hatchway doors.
Intercom in elevator, connected to management office.
Transparent material for cab and hatchway doors, where local codes permit.

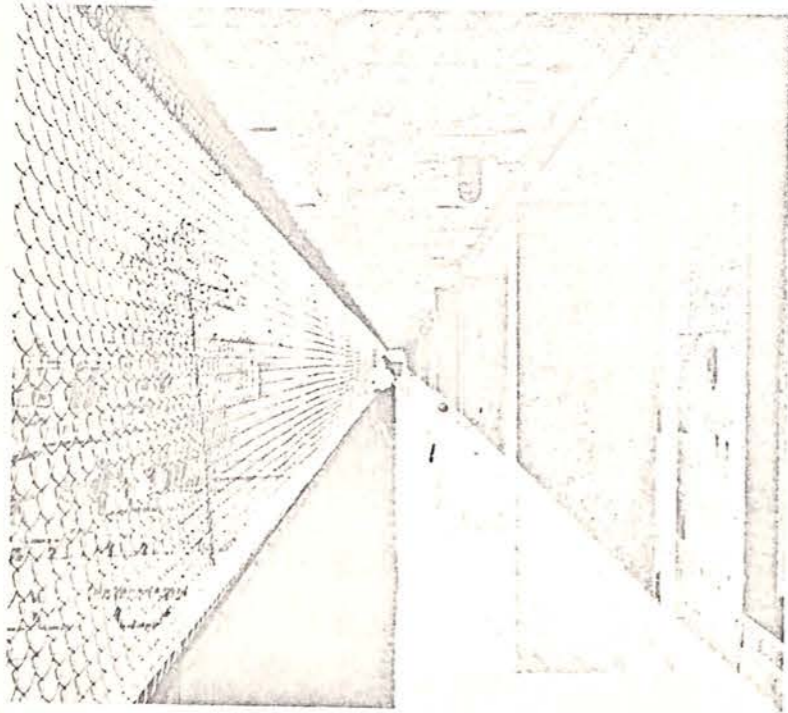
INTRODUCTION

The stretch of walkway from elevator landing to apartment door is a "sidewalk in the sky," whether designed as an open gallery or an interior corridor. The open gallery is preferred by some authorities. They praise ease of supervision. They give credit to through draft in dwellings and to the advantages of neighborly porch life. They point out the lack of cooking odors. They like the appearance on the building facade.

The "porch" space on galleries is best enjoyed by tenants if there is a fin or elongated column between each family's space. It provides a place for chair or crib out of normal circulation and also defines each family's area of responsibility. One advantage inherent in gallery access design is that tenants can observe sources of noise and litter from their dwellings and can size up a neighbor without contact, much as if the apartment were on a street.

Authorities, however, who prefer double-loaded interior corridors speak of plan economy, ease of all-weather cleaning, less traffic disturbance, and better privacy within the dwelling. They note that local codes in northern cities may require heat in gallery floor slabs.

Separating Fins . . . Oskar Stonorov, Architect



Difficulties Encountered

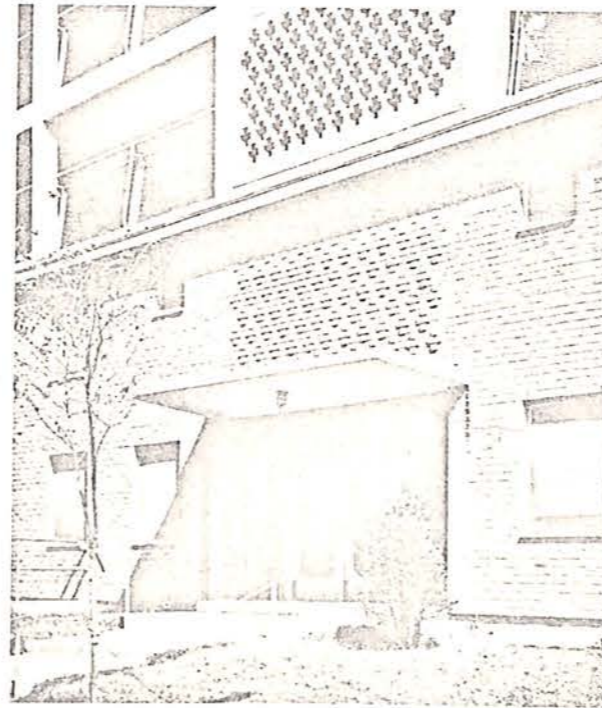
A. Galleries

- a. Danger of accidents to children.
- b. Danger that objects fall from or are thrown from galleries; fear of some residents about high places.
- c. Marking on walls; children's toys left about; wheel toy and roller skating annoyance.
- d. Lack of privacy; possible pilfering through windows.
- e. Cold drafts in dwellings.
- f. Snow removal in northern cities.

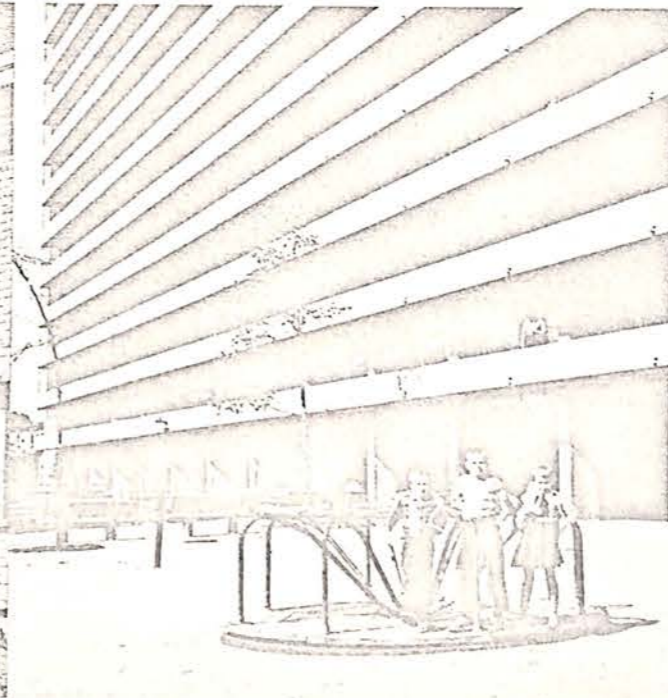
Suggestions

- a. Authorities unwilling to chance accidents provide completely caged-in galleries.
Others consider barriers 5 to 6 feet high quite safe.
- b. Curb at gallery edge.
Canopy at entrance under gallery.
Screening combined with solid panels to give a sense of security.
- c. Tenant responsibility for keeping wall and floor adjacent to his

Gallery Protection . . . William F. R. Ballard, Architect



Solid Panels and Screening . . . Oskar Stonorov, Architect



the Public Corridor

- dwelling clean and uncluttered.
- Glazed brick or other easily cleaned wall finish.
- Slop sink closet with hose bib nearby.
- Ridges on floor to discourage roller skating and the use of wheel toys.
- b. Screens and venetian blinds on gallery windows to combine privacy with ventilation.
- Bedrooms and living rooms away from gallery side.
- e. Foyer with exterior and interior doors.
- Jalousie panels in one door for warm weather ventilation.
- f. Floors pitched for quick drainage to adequate drains.
- Technique of having tenants sweep snow to curb, followed by staff removal.
- Galleries planned on lee side of building.

Difficulties Encountered

B. Interior Corridors

- a. Dreary aspect.
- b. Litter; trash spilled in front of incinerator hopper.
- c. Marking on walls.
- d. Cooking odors.
- e. Light bulbs smashed or stolen.
- f. No observation of corridor activity from apartment.

Suggestions

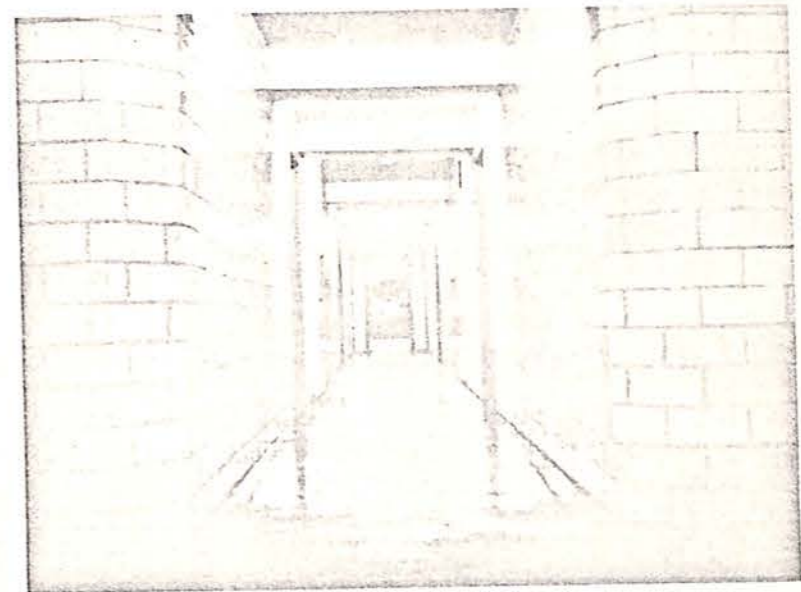
- a. Bright, light-reflecting colors on walls.
- Plastic paint on entrance doors.
- Variety in door colors on the corridor side.
- Asphalt or vinyl tile floor finish in bold patterns.
- b. Tenant responsibility for cleaning corridors.
- Slop sink closet with power outlet on each floor.
- Corridor wide enough for floor polisher.
- Incinerator hopper in shallow alcove open to corridor.
- Heavy hopper door frames anchored to resist banging.
- Hopper not too close to elevator landing, but insulated from dwelling partitions.
- Portable steel container padlocked below hopper, to catch debris.
- c. Walls of glazed structural tile, enamel block, or plastic paint.
- Colored chalkboard panels to give practical, localized encouragement for the universal childish need to scribble.
- d. Forced ventilation.
- Corridor windows.
- Common balconies opening from corridor.
- e. Fluorescent lights in plastic covers.
- Protected incandescent bulbs in pairs.

Tenant committee responsible for bulb replacement.

NOTE: The provision of left-hand bulbs, useless in apartments, usually results in their being smashed with apparently extra vigor.

- f. Interviewers in apartment doors.
- One-way vision panel from apartment to corridor where local codes permit.

Fluorescent Lights



SPECIAL FACILITIES

Authorities sometimes provide balcony play space off corridor or gallery for rainy days, for airing babies, and for informal gatherings. This arrangement gives welcome light and ventilation to interior corridors and diverts children's play from gallery walkways. A bit of play material will attract children; a small bare space, whether in the air or at grade level, is little used.

It has been suggested that a common room or an open windowed alcove off an interior corridor would be more useful than a balcony in northern cities.

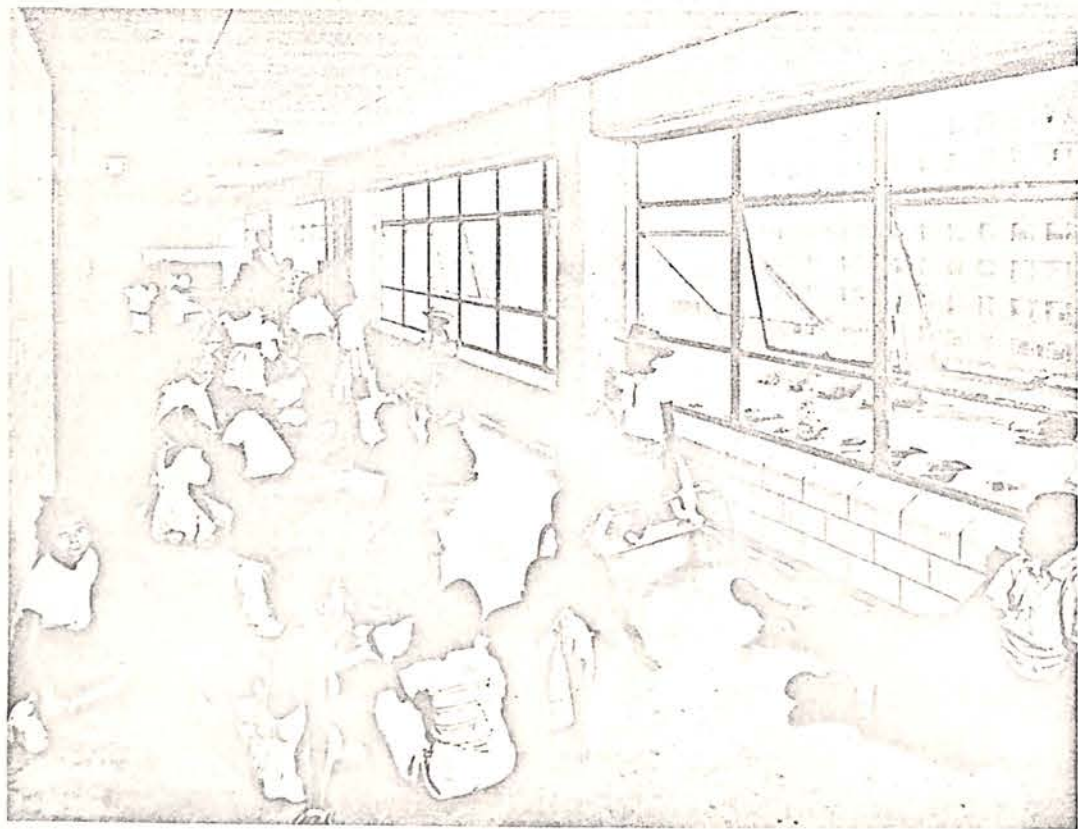
The dividing partition might be formed by low lockers where children could store push-pull toys, overshoes, and the like—an aid to neatness in the dwelling that housewives would appreciate. If lockers are not feasible, the room still can serve as a transition between outdoors and indoors as a porch does in a rowhouse dwelling.

The room should, in any case, be visible from corridor or gallery, whether by half-partition, vision panels, or otherwise. It is not necessarily provided on every floor, and should be designed with ease of tenant care and supervision in mind.

One authority records provision of a special room, supervised by retired teacher volunteers, where children may do their homework away from the distractions of the family dwelling. The children who use this room have been recommended by their teachers as those who would benefit from the program.

A competition to give people a chance to express individuality for their apartments has been suggested. The enterprise would allow tenants to decorate the outside of their apartment doors with washable poster paint. The winning door decoration could be preserved for a limited time, at least long enough to be photographed for the tenant newspaper, if not for the local press.

Play Space on Balcony . . . Hellmuth, Obata & Kassabaum, Architects



Common Balcony . . . Kutz, Waisman, Blumenkranz, Stein & Weber, Architects

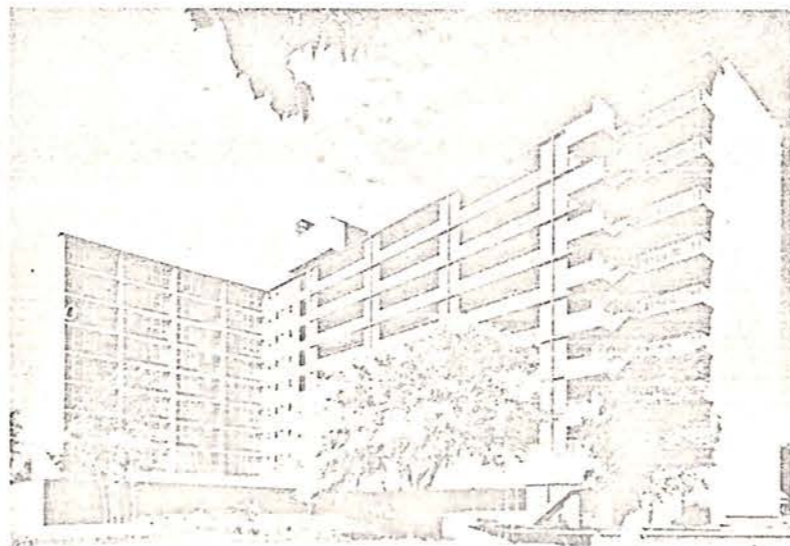
the Exit Stairway

INTRODUCTION

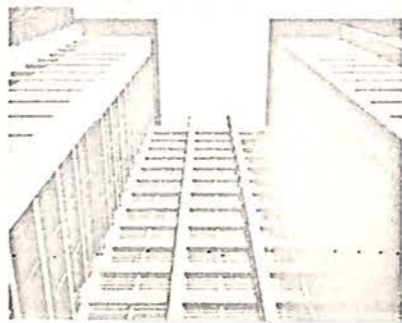
The No. 2 enemy to calm living in an elevator apartment building is the fire exit stairway: a convenient shelter for hoboes; a trysting spot for romantic adolescents; a perfect setting for smokewriting, wall cartoons, bonfires, damage to lights and to firehose, etc.

Difficulties Encountered

- a. Need for constant supervision.
- b. Defacement of walls and stair soffits.
- c. Light bulbs smashed or stolen; windows broken.
- d. Firehose slashed and nozzles stolen; flooding from valves turned on by mischiefmakers.
- e. Standpipes in windowed stairways frozen in cold weather.
- f. Handrails needing frequent repainting.



Open Exit Stairway . . . Noonan & Thompson & Krockner & Marmon & Moh, Architects



Stairways Flanking Elevator Landings . . . Harbeson Hough Livingston & Larson, Architects

Suggestions

- a. An open stairway, visible from grounds, if local codes and fire regulations allow.
Stairways planned on either side of the elevator landings with windows so arranged that there is a good view of both stairways from the public area on every floor.
Locked roof doors, if codes permit.
Glazed panels in doors.
Stairs ending at entrance floor, or a locked door at that level if stairway must go to the basement.
Door hardware that allows exit from each floor but no reentry except on the lowest two floors.
- b. Walls and stair soffits finished with easily cleaned material; for example, plastic paint. Hose bib for flushing down stairway. Caution: The bib must be placed where only the staff can get at it, possibly in a nearby slop sink closet. Floor drains, of course, will be needed.
- c. Fluorescent lighting in plastic covers. Incandescent bulbs protected by wire guards. Acrylic plastic sash instead of glass panes.
- d. Hose cabinet in public hall, for easier supervision. Agreement with the local fire department that since it uses its own hose, the requirement for a building-stored hose is unnecessary if not ridiculous and should be canceled. Arrangement by which firemen bring their own valves, if local codes permit.
- e. Fire standpipe placed on the inside of an enclosing stairway partition, if the stairway has windows. The valve is exposed on the stairway side of the partition. Standpipe insulated in corner of stairway.
- f. Vinyl handrails, to save repainting.

NOTE ON GLASS BLOCK WALLS

Glass block exterior walls or panels will light stairways effectively without danger of freezing the standpipe. Caution: A particularly ingenious form of damage, however, has occurred. A small hole is punched through the surface, a wick dipped in benzine or other volatile fluid is pushed into the hollow space within the block, the wick is lighted, and bang!

INTRODUCTION

Many large developments rent laundry space to concessionaires who run the facility with or without full-time supervision. The need for common laundries varies in different cities. A concessionaire will refuse to renew a contract if other methods of laundering make his business unprofitable.

Laundries, whether large or small, can be sunny and gay. Any laundry not close to the dwelling needs room for baby carriages and for young children's play, as well as comfortable benches.

Entrance floor laundries may overlook a play space nearby to advantage.

Laundries will foster a neighborly attitude among tenants if they are attractive. It is strictly a matter of safety to encourage mothers to bring their small children along rather than to leave them alone in their apartment; but bored children preclude a cheerful, sociable atmosphere. Commercial "laundryettes" usually install candy vending machines as well as those for soap and bleach. A laundry supervised by renter or tenant committee might well consider installing a "space rocket" or other amusement.

Although mechanical driers are commonly found in large laundry rooms, several authorities ask for clothesline drying spaces, one of them noting that "outside drying areas are the only proper and healthy means of drying."

Common Laundry



Difficulties Encountered

A. Common Laundries

- a. Laundries without attendance subject to disorder.
- b. Money stolen from cashboxes.
- c. Clothes damaged or stolen from air-drying cages.
- d. Abuse of laundry toilet.
- e. Doors damaged.
- f. Wet floors.
- e. Condensation.

Suggestions

- a. Laundries on entrance floors rather than in basements to take advantage of more light, ventilation, and informal supervision. Laundry doors keyed to apartment keys. Glazed panels (clear wire glass or acrylic plastic) in door and corridor partitions.
- b. Tokens to activate machines sold at the management office. Window guards.

NOTE: Window guards for laundries on entrance floors are preferably not of prisonlike design.

- c. Drying cages of metal, large enough so that drying lines can be well away from the enclosure. Drying machines where clients are willing to use them. Caution: Place vents from dryers where discharge will not be blown into apartment windows above.
- d. Toilet designed, if possible, as a package deal to serve laundry, lobby, and nearby play areas. See "Public Toilet," page 12.
- e. Steel protection plates for laundry door.
- f. Floor pitched away from front of machine.
- g. Glazed tile walls, terrazzo floors, or other materials to resist the effects of condensation.

Difficulties Encountered

B. Home Laundries

- a. Condensation from wet linen hanging up to dry all over the apartment.
- b. Detergent backup from automatic machines attached to waste lines.

Suggestions

- a. Small, tenant-controlled laundries on each floor with washtubs and drying cages, plus a couple of automatic machines in a locked room on the entrance floor. A key to that room is sold by

the Laundry

management for a small fee.

Laundry tub in bathroom, as in Swedish practice, with enough drying lines there for a normal wash.

NOTE: Unattached machines can be used in either of the cases above.

- b. Prohibition of machines attached to plumbing lines within apartments.

Bypass on plumbing lines at lower floors.

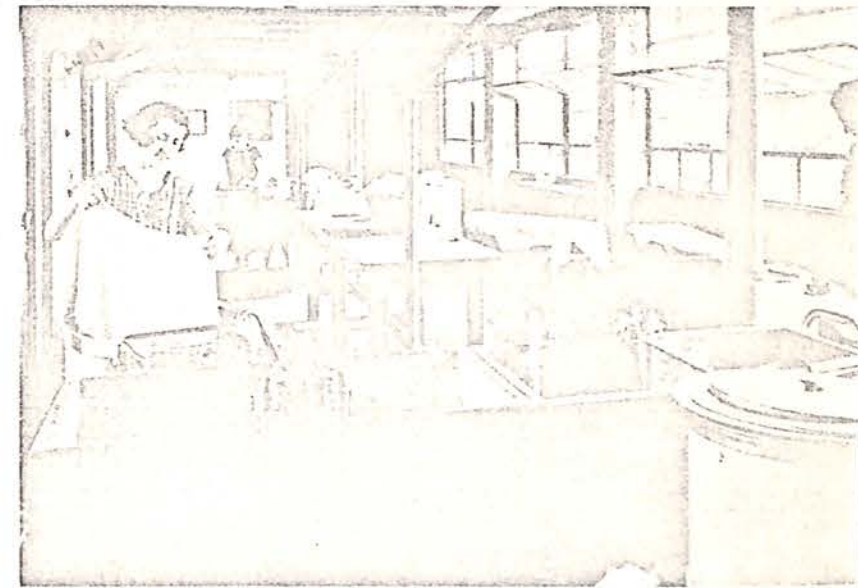
ROOF LAUNDRY

Some authorities express interest in the idea of providing roof laundries. Examples found in privately managed buildings and in some British "estates" have been much enjoyed. At Carl Mackley Houses, Philadelphia, for example, where washing machines were later installed on entrance floors, most of the residents still prefer to use the roof. Many women insist that open-air drying is desirable and take advantage of it where possible; witness not only rowhouse drying yards but also tenement house backyards gaily hung with clean clothing, as well as Paris balconies similarly adorned in spite of large "Defendu" signs. It is hard to understand the horror some people have of this innocent manifestation of urban life. It might be considered as colorful and appropriate as an umbrella on a beach.

The use of roofs for laundering, on the other hand, is looked at unfavorably by other authorities. Heavy-duty roof construction and protective barriers are costly. Elevator traffic will increase if a laundry is not provided on every rooftop. Plumbing system requirements are expensive should automatic machines be installed. Supervision of an unattended laundry is more difficult on a roof than on an entrance floor.

There are some answers to these objections. New types of roofing are bringing down costs. Most cities require some roof-edge protection whether or not tenants are allowed on the roof, and maintenance men need it on high buildings even if it is not required by code. Protection would, of course, have to be increased in height from that usually supplied. Protective barriers are not so costly as solid construction on the entrance floor, where space could be planned for large families with their own entrances instead of for laundries. Use of a roof laundry could be confined to the building tenants by means of apartment-mastered keys. Tenant desire for open-air drying and for clean, bright surroundings would facilitate tenant-organized control.

Roof Laundry . . . Kostner, Stonorov, Designers; W. Pope Barney, Architect



Tenant-Controlled Laundry

INTRODUCTION

Happy is the manager in a city where the code allows roof access doors to be locked against tenant or prowler. The urge to investigate roofs is so strong that one finds a locked cage in front of a locked door to prevent damage.

Difficulties Encountered

- Roof trespass leading to damage of roof fabric, ventilating fans, TV antennas, and to the danger of children falling or objects thrown from roof.
- Objects stuffed into plumbing vents.
- Danger to children and to equipment if children climb incinerator stacks or break into elevator machine rooms.

Suggestions

- Locked roof door, where codes allow.
Alarm bell at roof door.
TV antennae, if needed, out of reach.
- Vent stack above children's reach with wire guard protection.
- Interior locked access from top floor to machine room.
Access to incinerator stack from scuttle in roof of machine room structure, separated by partition or cage from machine room proper.

ROOF USE

A few authorities are considering the nettle-grasping response to tenants' desire to invade the roof by providing some form of activity there. A roof laundry has been mentioned on page 20, and some objections to roof use are there discussed.

Roof playgrounds are found in city schools, and sundecks in private apartment buildings, even in some privately subsidized low-rent structures. Roof lounges for adults have been successful in subsidized buildings for elderly occupants.

High buildings are largely the result of high land costs. Recent products designed to give heavy-duty performance on roofs may lower considerably the cost of a usable finish, and might even show a saving by economy in land area needed for the development. Roof spaces, moreover, are not overrun with automobiles or permeated with gas exhaust. Play equipment can be spot welded to heavy metal plates grouted to the deck finish to avoid piercing it. Vents have been raised above normal height and given metal sunshade umbrellas sleeved to the shaft.

A combination of wind-screen walls, open-mesh fencing, a bad-weather lounge or laundry (or both) would present a happy diversity, with

necessary rooftop structures such as elevator machine rooms, incinerator stacks, etc., obscured instead of standing out against the sky in the usual bleak huddle.

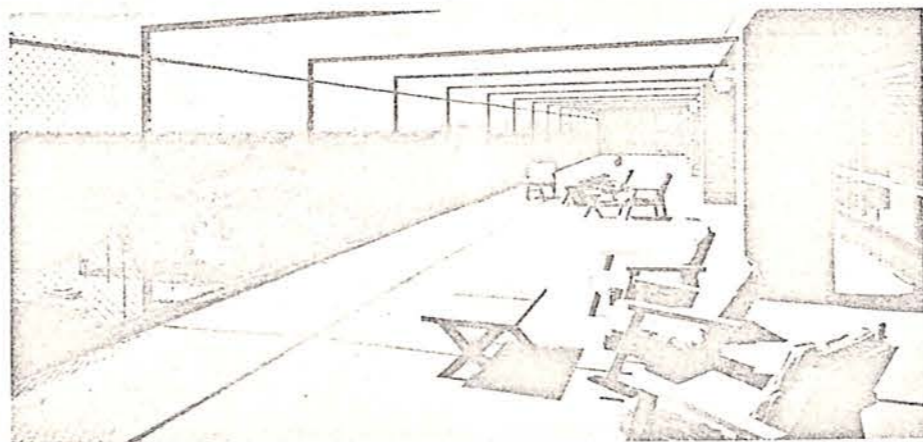
There will need to be provision also for locking roof play or lounge area, for refuge space open to the roof exit door if local fire regulations require it, and an alarm bell on the door or gate of the playground area.

Halfway between teacher-supervised roof playground and the sundeck watched over by a willing elderly tenant, this type of roof facility needs a group ready to keep order and schedule events.

Authorities with successful experience with local community organizations and tenant committees will know where to find such a group. Competition among caretakers of different roofs will maintain initial enthusiasm.

Architects can suggest roof construction and roughing for mechanical lines to make future roof use possible if an authority is not willing to experiment at the start or wants to try out one roof.

the Roof



Roof Lounge . . . George Fred Keck, William Keck, Architects



Roof Playground . . . Playground Corp. of America, Designer.



Tenant Storage

INTRODUCTION

Authorities often provide some storage space outside of the dwelling for tenant-owned bulky articles.

A room for baby carriages and wheel toys is usually provided, preferably at entrance level. This room has become empty and abandoned or has been put to another use in many developments.

Who really expects a mother with a baby carriage full of 5 pounds of potatoes, four milk bottles, three loaves of bread, two chickens, and a baby to unload and marshal this array through the lobby and up an elevator to the 18th floor? Also, only a very trusting boy will padlock his bicycle in a storage room without worrying.

Difficulties Encountered

A. Storage Room

- a. Tenant-controlled cages subject to theft.
- b. Disorder in cages and accumulation of worthless objects.

Suggestions

- a. Locked storage room accessible only to tenant accompanied by staff employee.
- b. Time limit on stored articles. Prohibition of stuffed furniture.

Difficulties Encountered

B. Baby Carriage Room

- a. Carriages damaged, dirtied, burnt.
Carriage and bicycle wheels stolen.
- b. Vehicles piled on top of each other.

Suggestions

- a. Convenient space for baby carriages within the dwelling.
Bicycle lockers at parking lots.
- b. Tenant-controlled storage space on each floor off public corridor or gallery.
See "the Public Corridor," page 15.

ALL TENANT STORAGE WITHIN THE DWELLING

General storage, if there is none outside the dwelling, is usually planned all in one place in or near the kitchen, although the PHA asks only for one-fifth, at least, of general storage in that location. Archi-



Gallery Storage

itects who observe a bicycle half in, half out of a kitchen closet may wonder how the flour bin, packaged cereals, and supergiant boxes of washing powders fare behind it.

Difficulties Encountered

- a. Lack of opportunity to organize storage of articles differing in character, size, and use, resulting in disorder and dirt pockets.

Suggestions

- a. An open alcove near entrance for baby carriage, market cart, stroller, etc., with shelving above for bulky toys, card table, hobby equipment. (An alcove large enough for a bicycle will take other vehicles as well.)

Kitchen closet shelving at various heights for storing large cartons, bottles, household aids, and also for small packaged and canned foods not needing refrigeration.

NOTE: A few adjustable shelves are better than many fixed ones.

INTRODUCTION

The dwelling is the heart of the building. The housing law requirements for "decent" and "sanitary" living conditions within the dwelling itself must be upheld more by its occupants than by the best practices of a managerial staff.

Dwelling design and equipment, therefore, should promote decent dwellings by an orderly and comfortable arrangement, and sanitary dwellings by convenience for the housekeeper.

More than that, a convenient, safe, and orderly home creates the climate for family satisfaction and pride. Tenant comfort overflows from the dwelling into public spaces, albeit sometimes aided by a management sympathetic toward families unacquainted with urban living techniques.

Design of a workable apartment within stringent cost limitations for this repetitious plan element (not one entrance door to a building, say 160; not one small toilet, but 160 bathrooms, etc.) requires an architect's devotion and most cunning contrivance.

Space organization is not easy to come by, given current room areas and relationships. One wise architect has said that apartment areas should be, room for room, larger than those in rowhouses.

For one thing, the front and back doors of a rowhouse naturally route traffic in an orderly way; for another, porch and backyard give an extra dimension lacking in an apartment.

Various ways to approximate that dimension on a communal basis have been noted in earlier chapters. Private balconies do provide occupant-controlled outdoor space, and are thought by some authorities to be worth their cost in high buildings.

The usefulness of a dwelling layout is tested by early furniture studies. Draftsmen sometimes minimize furniture dimensions a bit, and are apt to place large items where heating risers or convectors will appear in fully developed plans. Bureaus shown partly against columns are not unknown in such studies that, if so placed, would create dirt pockets. Six inches along a bedside does not give room to make up a bed. A crib with its head against a heat riser and its foot overlapping a window is probably as good a way to give the baby snuffles as any other. A high window in a two-windowed bedroom provides wall space below for a dresser if a convector is not placed under it.

It can be considered extravagant to design a space useful for only one function within the small area allotted to each family. One usual example, however, is perhaps undesirable; that of combining meal service with clothes washing, particularly for families with young children. Dinners and diapers are not compatible.

But a bedroom planned to answer the desire, the need, rather, to be alone or to be able to talk quietly (or noisily) with friends of one's own age away from the tense, competitive city atmosphere is not confined to "overprivileged" persons. Privacy within the dwelling is the first requirement for "quiet enjoyment of the premises".

Standard public housing construction for tall buildings offers more privacy than some "luxury" speculative buildings, this largely because of materials used that are suitable for long-term amortization, and the need to hold down maintenance expense and to get favorable fire insurance rates.

But unlike most European countries, the United States has at present no code provisions for sound control in apartment buildings,¹ although a start in that direction has been made. Standard construction for multifamily buildings may suffer from lightweight dividing partitions and careless piercing of partitions or floor slabs. Vibrating electrical gadgets add their share to the consequent din.

Concrete slab floors resist impact noise fairly well.

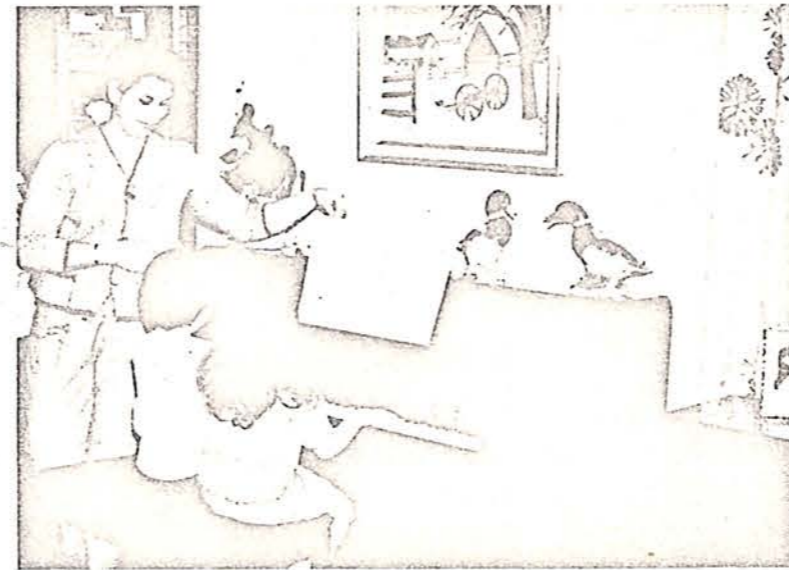
Partitions between apartments of cinder block, gypsum block, or solid plaster are acceptably sound deadening. Partitions of staggered stud design are preferred, if the budget permits.

¹ *The Owner's Viewpoint in Residential Acoustical Control*. Address to The Acoustical Society of America. Frederick P. Rose. 1963

Living Room in Use



the Dwelling



Living Room in Use

Heavy concrete cross walls used in box construction are, of course, even better between apartments.

Tall buildings with only four dwellings to a floor have been built within public housing budget limitations and provide the amenity of few close neighbors as well as that of a small, easily kept public space.

COMFORT

Difficulties Encountered

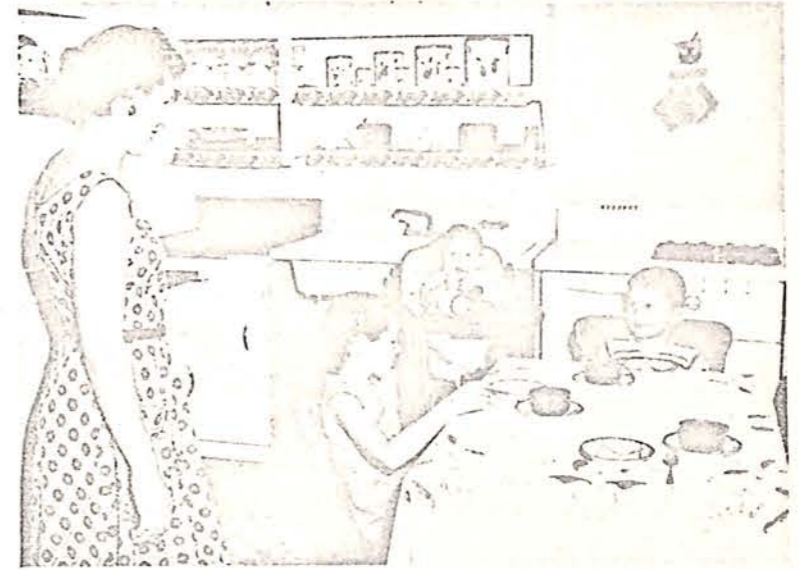
- a. Awareness of neighbors.
- b. Outside world irrupting into living room.
- c. No chance to withdraw temporarily from rest of family.
- d. Lack of separation of different home functions.
- e. Inadequate bath facilities for large families.
- f. Pull chains constantly breaking, with the result that lights are left on day and night.

Suggestions

- a. A design placing rooms of like function against partitions that divide apartments.

Closets set against dividing partitions.

Heating risers provided with escutcheons and the floor slab, opening packed with insulation (useful also for vermin control)



Dining Space in Kitchen

Wall-mounted medicine cabinets.

Lead bends from bathroom above contained in floor slab or boxed in.

Windows of adjacent apartments in an interior corner of a T- or H-shaped building well separated, or, better, one apartment wrapped around that interior angle so that windows nearest the corner are in the same dwelling.

- b. Small foyer giving separate access to living room, bedrooms, and kitchen.

Coat closet off foyer to keep mud and outside dirt from rest of dwelling.

Door bucks well anchored against wind action in high buildings.

- c. Bedroom wall space arranged to allow for desk or table in addition to usual bedroom furniture.

Space for sewing machine or other table in parents' bedroom.

- d. Dining space in alcove between living room and kitchen.

Dining space for large families in kitchen, to provide ease in serving meals and, in effect, offering two living spaces for different uses.

Kitchen equipment out of sight of living room.

- e. Lavatory (watercloset and wash basin) for large families in addition to the bathroom.

Bathroom wall material designed for future shower if not contemplated at first.

NOTE: A shower uses normally about half as much water as a tub bath and takes less time and tub cleaning.

- f. No electric pull chains in dwellings.

SAFETY

Home accidents have been well documented and publicized. Some, luckily, such as those from stairs—unless the building has two-story flats—do not concern us here. But kitchens and bathrooms are still dangerous. Accidents from things falling from high shelves, or people falling while trying to reach them, from collision with furniture, ranges, and heating risers and, worst of all, falling out of windows must be faced.

Difficulties Encountered

- a. Children and objects falling out of windows; windows difficult or frightening to clean.
- b. Kitchen ranges placed at the end of a row of fixtures where children can knock against pot handles.
Gas ranges near blowing curtains or having storage cupboards over them.
- c. Slippery bathroom floors.
Tubs lacking safety grip handles.
- d. Electric outlets near water supply.

Suggestions

- a. Heavy-duty screens on all sash openable more than 4 inches.
Locking device on windows without screens to limit opening to 4 inches, except when window is being cleaned or children are being watched.
Windows, of whatever type, of glass size and design so that window cleaning is possible with no more than an elbow outside.
NOTE: Removable sliding sash are obviously the easiest to clean, and also a broken sash can quickly be replaced by a tenant's trip to the maintenance office.
Casement sash close to grade or on galleries or balconies are hazardous.
Awning windows that swing out beyond the building wall run the risk of being shattered by an object falling or being thrown from above.
- b. Ranges placed between worktops or other barriers.
Ranges at least two feet from windows.
No cabinets over ranges.
- c. Nonslip bathroom floors.

Sturdy grab bar at tub.

- d. Electric outlets and pull chains (if pull chains there must be) at a safe distance from tub, basin, and sink.

NOTE: The dangers to children who push hairpins into electric outlets, bump against heat risers, and swallow poisons are perhaps only to be countered by their mothers. The tenant "welcoming" booklet, clearly illustrated by the architect, can warn tenants. Authorities who provide radiant heating in floors have solved part of the problem, and consider the system economical in first cost and upkeep.

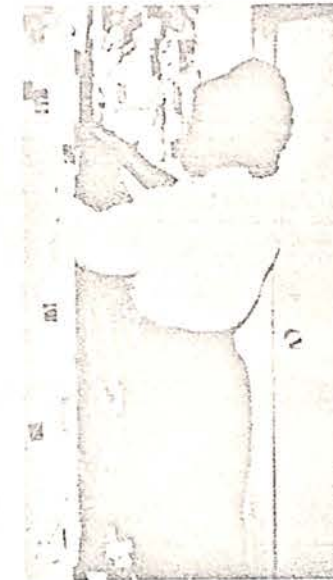
ORDERLINESS

Planning for privacy, as noted above, in itself promotes orderliness by separating activities.

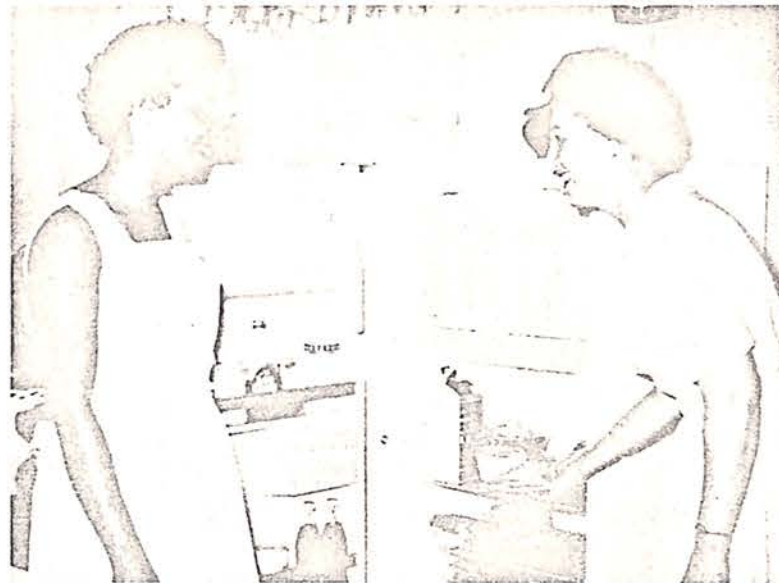
Most clutter results from poor organization, and dirt results from clutter.

Easily cleaned finishes in dwellings are standard; attractive pastel colors will get more tender, loving care than will drab, neutral tones. Asphalt tile patterns in midtones show footmarks less than very light or dark unpattered ones, and are less likely to be covered with thin linoleum carpets that do no good to the underlying tile and may harbor vermin.

Family Participation



Closet Curtain



Large Refrigerator



Family Towel Racks

NOTE: Linoleum is now obtainable in square tiles, thus overcoming one reason for the preference for asphalt and vinyl tiles.

A kitchen planned for more than one worker lightens the mother's load and encourages family participation in housework.

Opinion varies as to the need for closet doors. Authorities who agree with vocal tenants and shocked critics have provided them on all closets. Others are content to put them on foyer and passageway closets only, and on living room closets if, by an unhappy chance, precious wall surface is used for a closet there.

Authorities who look for good housekeeping standards may well consider providing doors on all closets, since tenant-provided curtains are apt to be flimsy and neglected. Even when clean and well hung, they give a slipshod appearance to the dwelling and do not protect clothing from dust.

Open shelves over convector runout pipes take the place of toy storage boxes at slight expense. They also protect the pipes from children and the children from pipes.

Difficulties Encountered

- a. Condensation within the dwelling.
- b. Wall space interrupted by scattered columns, doors, windows.
- c. Storage spaces inadequate, particularly in the kitchen.

Suggestions

- a. Dwelling design to provide some positive air leakage even at the risk of slight heat loss on the coldest days.
No laundering within the apartment. See "the Laundry," page 19.
Tile or other impervious finish around tub.
Positive ventilation for kitchen range.
- b. Some uninterrupted wall space for large pieces of furniture in each room.
Furniture layouts carefully studied, preferably showing more than one possible arrangement.
- c. Flush doors, cabinets, and baseboards.
Convector louvers on vertical surfaces, not on the top.
Tile behind range.
Chair rail to protect wall if dining table is in kitchen.
Use of plastic paint to lengthen repainting cycle.
Tenant repainting.

NOTE: Paint rollers with patterned surfaces have been used on corridor walls. They might be lent to people eager for individuality in their dwellings.¹

¹ *Psychiatrics or Paperhangers?* Editorial in "Housing and Planning News," Citizens' Housing and Planning Council of New York. October 1963.

- d. Kitchen shelving planned for both large and small articles.
- Kitchen cupboards with backs, for vermin control.
- Utensil drawers.
- Range and refrigerator sized for the family's needs.
- High and low hanging poles in children's closets.
- Dado strips in bathrooms at 3 and 5 feet from floor, for family towel racks.
- Space in bathroom for clothes hamper.

NOTE: Organization of general tenant storage space is discussed on page 22.

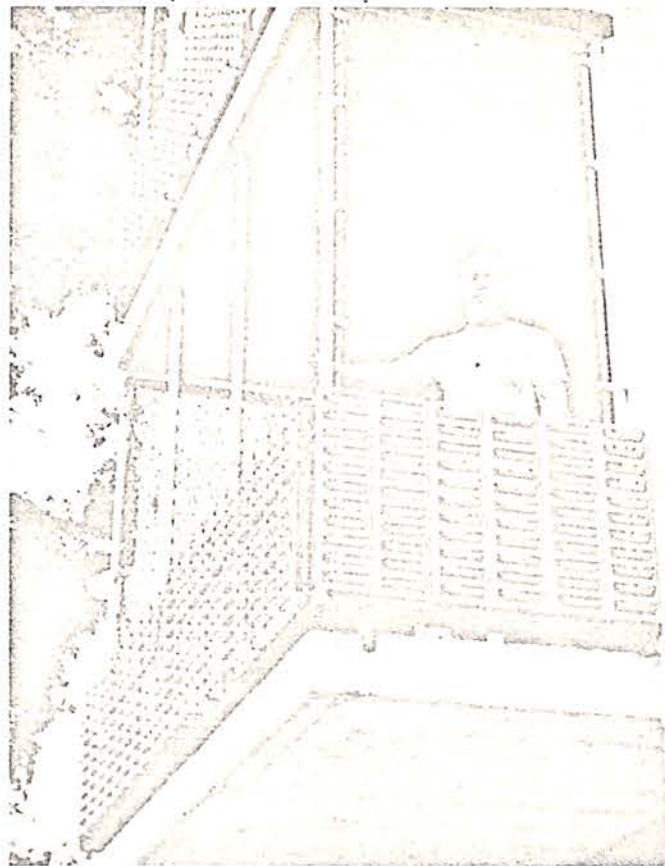
REDESIGN

Some authorities show interest in a proposal to redesign the standard apartment layout by planning a small living room off the foyer and a large kitchen-dining-play (or study) room. This arrangement justifies the prevalent housewifely habit of "keeping the kids out of the living room." It allows a busy mother to keep an eye on infants

Model Apartment



while doing kitchen chores; it is a place for TV, plastic-covered furniture, games and homework, children's and adults' gatherings. It divides living space into noisy and quiet areas within a tightly



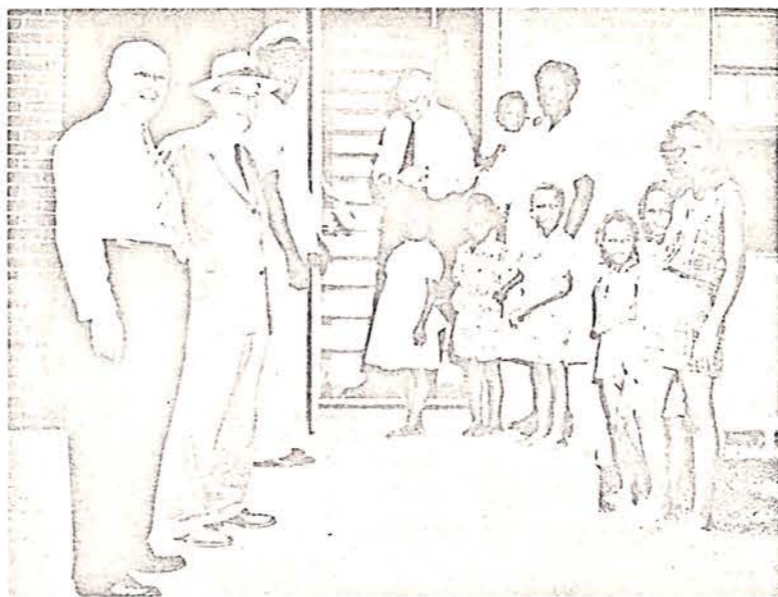
Private Balconies . . . Harbeson Hough Livingston & Larson, Architects

packed apartment, and it gives the house-proud (and latent house-proud) homemaker a chance to show friends and the priest or rabbi, or the Fuller Brushman, a neat reception room.

A bedroom so planned that it later can be divided into two small rooms will provide flexibility for a family with growing girl and boy. A sliding partition would allow daytime use of the entire space.

MODEL APARTMENT

A model apartment has been found useful to suggest inexpensive, space-saving furniture rather than old-fashioned huge pieces. Chairs, sofas and dressers based on Scandinavian designs, and knockdown packaged furniture can be found in city shops or obtained through mail-order houses. Reconditioned pieces, such as are sold by the Goodwill Industries, for instance, are at bargain prices. Bunk beds



Two-Story Flat . . . Howard R. Meyer, Architect

are not unknown to or scorned by former tenement house dwellers. If the model apartment is to be left in a fully occupied building to be used for homemaking classes, its location and exits should reflect that use.

BALCONIES

Private balconies have been noted earlier in this chapter as providing a porch for tenants who live far from the ground. Babies and young children can play out of doors without leaving their quarters, and adults can cool off in slippers during hot evenings. Costs and local customs weight the decision about including them, as well as the desire and ability of tenants to pay for the advantages of a balcony of their own.

Architects will be happy with the effect of balconies on an otherwise sheer facade if the need for them is demonstrable.

A solid parapet for the first few feet of barrier gives a feeling of protection and hides the array of children's toys or household mops and pails put out to sun.

TWO-STORY FLATS

Apartments for large families have been designed rather like two-story rowhouses on the entrance and second floor of tall buildings. This

arrangement offers each large family privacy and easy access to outdoors, even to an outdoor family playspot, and also relieves pressure on elevators.

A NOTE ON WINDOW SHADES

Window shades are standard equipment for public housing developments, so much so that they often serve to distinguish public from private apartment buildings.

They are cheap, they do their work well. But that they are far from attractive is not disputed. So far no equally trustworthy and economical method has been found to darken bedrooms, to set the stage for TV entertainments, to shut away the outside world.

Possibly a window casing detail for curtain rods at the outside and shades inside would be acceptable to authorities who enjoy the "happening" made by different families' differently colored curtains.

Possibly new side-hung fabrics will be priced one day to compete with shades. In that case tenant curtains will not be needed and the color pattern can be built in.

Certainly the architect who devises a sturdy, inexpensive, attractive substitute for the window shade will find a monument to his ingenuity lifted high against the sky.



"What we need is a brand new idea that has been thoroughly tested."

At Ross, Delineator • courtesy, Saturday Review