Component: SHOPPING

General: Man's shopping has always occurred along a line, be it straight, curved or angled. The line is mostly doubly loaded and may be a pedestrian short cut or link e.g. an arcade. If the shopping line is too long, it becomes doubly decked. The psychological needs of the consumer to acquire what he wishes to buy fulfills the economic needs of the retailer. (13)

Description: Because the shops are located next to the square, they would have a prestige value e.g. boutique, interior design, book and cake shop. Other concerns could include a bank and an airline booking office. A doubly loaded shopping line would increase activity if arranged around a play area for children or space for flower selling. Places for vendors should be consciously created and reinforced by services.

Service to shops should be separated from the entrance and ample storage allowed for. Maximum visual penetration of shops by bypassers is important, the shop front being glare free, as well as seating for weary shoppers. Visual control of goods and of the entrance to the shop are requirements. Staff ablutions should be provided.

Component: OFFICES

General: Good light, fresh air, ample storage space. Edward Hall has established three hidden zones in the office which are:

1) the immediate work area of the desk top.
2) a series of points within arm's reach of the above area.
3) the limit reached when one pushes away from the desk to achieve a little distance from the work without actually getting up. (6)
Description: The offices should cater for professionals e.g. small firms of lawyers and accountants. They should be flexible in size so as to increase letting opportunity - uncluttered space also allows for flexible furniture layout. (2) Telephone, intercom and electrical services should be easily available, such as in a power skirting or at the base of a column. Natural light should be reinforced by artificial light.

The possibility of installing an air conditioning system in future should be allowed for. Services for the preparing of refreshments and ample storage space are requirements.

Offices should be clearly distinguishable to avoid confusion when a particular office is sought.

Component: LIVING UNITS

General: Refer to the psychological and sociological needs of man, and the additional concerns.

Description: Various types of living units should be designed to cater for various family sizes - one bedroom, two bedroom, three bedroom units. Privacy of bedrooms and ample storage space is required. Kitchens should be spacious and living rooms should have the best view with noon and afternoon sun. Terraces shaded from the sun enable the rooms to flow to the outside where flower boxes provide the joy of greenery. Le Corbusier's "redeeming section" which applies to the site determines the nature of sun protection to the units. (15)

Waste disposal and service should occur with maximum ease and visual penetration, such as the overlooking of a terrace from other living units should be eliminated. Access galleries to units should be minimized to use built space to maximum potential.
Where possible the bathroom and the W.C. should be separated as this increases the usability of both. Unnecessary circulation should be eliminated to increase the efficiency of the living unit. Ample light and ventilation are necessary, but heat loss and heat gain through too much glass decreases the comfort of the living unit.

SOCIAL COMPONENTS

Component: RESTAURANT

General: Suggested by the Athlone Proposals.

Description: The restaurant should be orientated for maximum social interaction by being next to a pedestrian way and having outside seating. An interesting view e.g. of vendors or pedestrians passing by increases the pleasure of dining. The diner's personal space should be respected, however, and passers-by should be kept at a distance. The restaurant would be well patronised because of its central strategic location.

Service, storage and waste disposal should be entirely unobtrusive, but food preparation may occur within view of the diners as this increases the pleasure of the meal. (Sic)

Male and female public ablutions are required close to the restaurant for the diners' convenience. A dinner-dance may be introduced on certain nights to increase night life and the attraction of the restaurant.

Component: PLAY SPACE FOR CHILDREN AND LAUNDROMAT

General: To increase social interaction between inhabitants and their children.
Description: A small enclosed play space for young children living in the building is necessary for two reasons - it provides a safe place for children to play under supervision of their mothers, and it allows the mothers to meet one another and leave their children in safe care when going out on an errand i.e. turns may be taken to look after the children.

The play space should have built-in educational toys as well as a store where smaller toys may be safeguarded. Seating space for the mothers watching the children is required. Two or three coin operated washing machines and spin dryers may provide an added incentive to mothers to bring their children to the play area, as they can do their laundry whilst keeping an eye on the children.

Component: ACCESS WAY TO LIVING UNITS

Description: This has the potential to become a meeting and discussion place for residents as they circulate past one another. Temporary storage of bicycles and prams may occur on the access way. Safety of children using the access way to play on should be considered. Views, greenery and sun increases the pleasure of moving along the access way.
### SCHEDULE OF ACCOMMODATION

<table>
<thead>
<tr>
<th>ACCOMMODATION</th>
<th>NO. OF OCCUPANTS</th>
<th>SPACE</th>
<th>AREA</th>
<th>GENERAL NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHOPS</td>
<td>20</td>
<td>20.35m</td>
<td>700m²</td>
<td>Permissible bulk equals one. Shops are best served from Lawrence Road, and are best located on ground floor to reinforce activity on the square. Staff W.C.'s - 1:15.</td>
</tr>
<tr>
<td>RESTAURANT</td>
<td>35</td>
<td>7.10m</td>
<td>70m²</td>
<td>1.5m² required per diner. Nett. kitchen area 20% of total restaurant area. Cashier near exit.</td>
</tr>
<tr>
<td>SERVICE</td>
<td>5</td>
<td>7.15m</td>
<td>105m²</td>
<td>Access to shops from delivery. Temporary storage of goods.</td>
</tr>
<tr>
<td>OFFICES</td>
<td>50-60</td>
<td>20.35m</td>
<td>700m²</td>
<td>Permissible bulk equals one. Flexible layout of furniture and partitions. Suspended ceiling with services and air-conditioning ducts, power skirtings, service pipes cast in columns. Average spacc requirement per employee is 7-12m².</td>
</tr>
<tr>
<td>OFFICE SERVICES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Ablutions, male or female.</td>
<td>25-30</td>
<td>4.5m</td>
<td>20m²</td>
<td>W.C.'s at a ratio of 1:12 employees. To be easily accessible and visually private.</td>
</tr>
<tr>
<td>2) Tea kitchens</td>
<td>to serve 60</td>
<td>2.2m</td>
<td>4m²</td>
<td>Work area, sink, storage cupboards. Located close to wet points. Acoustic insulation</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>ACCOMMODATION</th>
<th>NUMBER OF OCCUPANTS</th>
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</thead>
<tbody>
<tr>
<td>LIVING UNITS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Room</td>
<td>7 max</td>
<td>4.4m</td>
<td>$15m^2$</td>
<td>Discussion and informal gathering in comfort. Space for T.V. Access to sun shaded terraces and greenery.</td>
</tr>
<tr>
<td>Dining</td>
<td>7 max</td>
<td>2.3m</td>
<td>$6m^2$</td>
<td>Close to kitchen. Used as circulation space because of infrequent use.</td>
</tr>
<tr>
<td>Kitchen</td>
<td>2-4</td>
<td>2.5m</td>
<td>$6m^2$</td>
<td>Close to access way and wet point. Control of front door.</td>
</tr>
<tr>
<td>Bathroom</td>
<td>1-2</td>
<td>2.2m</td>
<td>$4m^2$</td>
<td>Close to bedrooms and wet point. Possible en suite use.</td>
</tr>
<tr>
<td>Separate W.C.</td>
<td>1</td>
<td>1.2m</td>
<td>$2m^2$</td>
<td>Required in larger living units. Hand wash basin to be provided.</td>
</tr>
<tr>
<td>Master Bedroom</td>
<td>2</td>
<td>3.4m</td>
<td>$12m^2$</td>
<td>Close to bathroom, b.i.c. to be provided. Cross ventilation, access to terrace and greenery.</td>
</tr>
<tr>
<td>Bedroom 1 and/or 2</td>
<td>2</td>
<td>3.3m</td>
<td>$9m^2$</td>
<td>As above. Study space provided</td>
</tr>
<tr>
<td>ACCOMMODATION</td>
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<td>GENERAL NOTES</td>
</tr>
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<td>---------------</td>
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</tr>
<tr>
<td>CHILD PLAY SPACE</td>
<td>20</td>
<td>9.10m</td>
<td>90m²</td>
<td>Located close to living units. Warm floors, play walls. Sun light and greenery.</td>
</tr>
<tr>
<td>SERVANT SPACE TO ABOVE</td>
<td>6</td>
<td>6.6m</td>
<td>36m²</td>
<td>Service for tea making and laundromat. Overseeing by mothers and comfortable seating for discussion.</td>
</tr>
<tr>
<td>STREET IN THE AIR</td>
<td>unlimited</td>
<td>2to3m</td>
<td>–</td>
<td>Access way to living units. Pedestrian interaction way, space to talk, sit, look at view.</td>
</tr>
<tr>
<td>PARKING</td>
<td>20 cars</td>
<td>9.40m</td>
<td>360m²</td>
<td>One car per living unit and service area for delivery vehicles, storage. Removal of harmful gasses.</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY

AUTHOR

(1) Alexander C. & Chermayeff S.
(2) Boje, Axel
(3) Boudon, Phillipe
(4) CIAM 8
(5) Fleig, Karl
(6) Hall, Edward T.
(7) Hall, Edward T.
(8) Hoffmann, Hubert
(9) Illich, Ivan D.
(10) Jeanneret-Gris

(11) Jencks, Charles
(12) Jencks, Charles

(13) Kennedy, Declan & Margit
(14) Le Corbusier
(15) Le Corbusier & de Pierrefeu F.
(16) Le Corbusier
(17) Le Corbusier
(18) Leymarie, Jean
(19) Lynch, Kevin
(20) Mumford, Lewis
(21) Newman, Oscar
(22) Norberg Schultz, C.
(23) Smithson, Alison & Peter
(24) Smithson, Alison
(25) Sommer, Robert
(26) Urban Design Consultants

(27) Van Eyek, Aldo
(28) Venturi, Robert

(29) Williams, L., Brown, M. & Jacobs, D.
(30) Williams, Brown, Jacobs with Chapman, R. and Todeschini, F.

TITLE

Community and Privacy
Open-Plan Offices
Lived-in Architecture
The Heart of the City
Alvar Aalto
The Hidden Dimension
The Silent Language
Row Houses & Cluster Houses
Deschooling Society
Le Corbusier, The Artist
as Writer
Modern Movements in Architecture
Le Corbusier & the Tragic View
of Architecture
The Inner City
Concerning Town Planning
The Home of Man
New World of Space
Oeuvre Complete
Who was Le Corbusier?
The Image of the City
The Culture of Cities
Defensible Space
Existence, Space & Architecture
Ordinariness and Light
Team 10 Primer
Personal Space
Terminal Report, Crown Mine
Properties
Beyond Visibility
Complexity & Contradiction
in Architecture
The Athlone Core Urban Design
Project
Summary Review of Athlone
Core Urban Design Project

PUBLISHER & DATE

Pelican 1966
Business Books 1971
Lund Humphries 1972
Lund Humphries 1952
Thames & Hudson 1975
Bodley Head 1966
Doubleday 1959
Praeger 1969
Harper, Row 1971
Neuchatel, Griffin 1970

Pelican 1973
Lane 1973

Paul Elek 1974
Architectural Press 1947
Architectural Press 1948
Reynal & Hitchcock 1948
Boesiger & Stonorov 1910-1965
Geneva, Skira 1968
Technology Press 1960
Secker & Warburg 1940
Architectural Press 1973
Studio Vista 1971
Faber 1970
London 1965
Cliffs & Prentice Hall 1969
May 1971 Published by the
Authors
Refer Team 10 Primer
The Museum of Modern Art
Papers on Architecture 1966
Published by Authors June
1975
Chamber of Commerce 1975
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