

LINKAGE IN COLLECTIVE FORM

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Urban design is ever concerned with the question of making comprehensible *links* between discrete things. As a corollary, it is concerned with making an extremely large entity comprehensible by articulating its parts.

The city is combinations of discrete forms and articulated large forms. It is *collective form*—the agglomerate of decisions (and abnegations from decision) in the past concerning the way in which things fit together, or are linked. Linking, or disclosing linkage (articulating the large entity), are *invariant activities in making collective form*.

«SOME THOUGHTS ON COLLECTIVE FORM...»

An earlier work identified three kinds of collective form. Each has a peculiar organizing principle, structural system, and each reflects a particular social pattern in use. Each has a different typical link.

1. *Composition* is one means of producing collective form. It is possibly the most used. The designer places individually conceived buildings on a site so that their relation to one another seems inevitable, or just right.

2. *Megastructure*. The megastructure is a large frame in which all functions of a city or part of a city are housed. In a sense, megastructure is a man-made landscape feature. It is the «hill» on which we may build contemporary towns.

Kenzo Tange identifies two time cycles which megaform serves. One, the cycle dictated by immense structures which provide movement and essential services, is a long range cycle, and is

served by the megaframe. The other, a short-time cycle, is dictated by human habitat, and the immediate spatial needs of all families. Thus small elements are built on the megaframe. As long as we can establish what is the proper long-time cycle, and what is the short-time cycle, megaform is a valid and useful concept, especially in obviously multi-functional situations, such as regional trade centers.

3. *Group-form*. Group form is a system of generative elements in space. Elements and system are reciprocal, that is, one cannot be conceived of without the other. There is no hierarchy, or even singularity of form in this system. All sources of ideas about *group-form* are in human association and collectivity—gathering, or dispersal, or stopping. Any form so conceived reflects the source of its place and shape, as readily as do the pueblo villages of Southwestern United States.

It should be apparent that those three characterizations of collective form, Compositional, Mega, and Group, cannot be understood without reference to the way in which they are assembled, or linked. In the first, compositional form, the link is an external, frequently only implied one, in which quantities and shapes of space between elements become the visually organizing fact. In the second, megaform, physical, functional and visual linkage is provided by the great frame itself, and any other means for unifying the whole is perhaps less important than a demand for variety and visual freedom.

Finally, group-form integrates unit and system inseparably by means of a link which must be understood as the generator of the system. The

means of putting units together is intermediate in the design feedback between unit and group.

LINKAGE

When a single concept of linkage produces many levels of response in the people who use it, is a successful «joint» between physical environment and its inhabitants.

Bolognese arcaded piazzas have an undeniable visual unity. Diverse arcades around a public space give one the impression that there is a social gathering implied within it. The same arcades give facing facades the air of being congenial with one another. Again, they provide a promenade sheltered against the sun and other elements. Visual, social and functional needs are served by the same link, which at the same time provides a spatial transition between the openness of the square and the building's enclosure.

That we have not adequately identified form-giving forces is perhaps due to the fact that they seem to defy formulation. At a particular scale of urban activity, they have more to do with movement through space, than with a standard vision of the shape of a place. Thus we have been notably remiss in our ability to conceive of shapes for our paths of high-speed movement, or our ever ramifying commercial clusters, or power lines.

If we must learn to integrate our knowledge of short-range movement, movement through cities from point to point, so must we attack a more subtle time concept, one which deals with the constant cycle of decay in cities. An urban dwelling may last for eighty-four years, on the average. If we allow all the old dwellings in a given area to become unsuitable for use at the same time, we are forced to declare extensive blight, clear hundreds of acres, and build new housing. There is no link between such a cleared and renewed area and the city around it. Persons who, by choice, or force of economic circumstance move into such developments feel isolation keenly enough that they cannot regard themselves as anything but «project» people. There is nothing less urbane, nothing less productive of cosmopolitan mixture, than raw renewal, which displaces, destroys, and replaces, in that mechanistic order.

Linkage is simply the glue of the city. It is the act by which we unite all the layers of activity and resulting physical form in the city.

Insofar as linkage is successful, the city is a recognizable and humanly understandable entity. We, men, are at home, with it. We depend on understanding how two events within a city are combined to make a living sequence, and we depend on understanding how men *have* lived in the city we inhabit, and we depend on understanding how we can get from place to place in the city.

OPERATIONAL CATEGORIES

We find four basic linking acts, or operations: 1) To mediate; 2) to define; 3) to repeat; 4) to make functional paths.

Keep in mind that each type of linking may be done in physical fact (as with a wall or bridge between two buildings) or by implication (as in the carefully balanced composition of buildings and spaces on a site).

1) *To Mediate*: Connect with intermediate elements or imply connection by spaces that demonstrate the cohesion of masses around them. Rasmussen says that the *stoep* is a place that is half house property, half public way. «The house, itself, cannot be built out on it but it may be used for the basement entrance or for steps up to the high ground floor... When not used to accommodate stairs or other projections, the *stoep* is raised a step above the road and covered with tiles or fine stonework». (Steen Eiler Rasmussen, «The Dutch Contribution», in *Town Planning Review*, Vol XXLV no. 3, October 1953).

The *stoep* is, then, a functional transition between the public way and the private house which is otherwise right on the way. It is conceptually the meeting of the family and its urban world, and it is visually a means by which one sees the entire streetscape as a unified entity. From house to street, it is a link by mediation, and from house to house along the street it is a link by repetition.

2) *To Define*: To surround a site with a wall, or any physical barrier, and thus set it off from its environs.

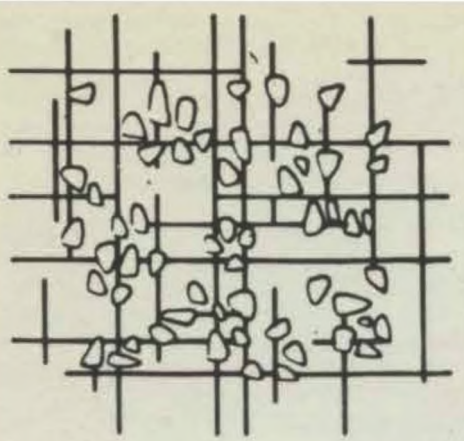


Fig. 1



Fig. 2



Fig. 3



Fig. 4

A *wall* may be many things, such as a loop of rapid transit tracks in the heart of Chicago, or a ring of parking structures in Louis Kahn's proposal for Philadelphia.

Depending on its nature, and location, the wall may be either oppressive and confining or pleasantly protective. Walls in African villages of the plains must be a welcome relief from the agro-

MEDIATE: Connect with intermediate elements or imply connection with any medium (including composed open space).

DEFINE: Enclose disparate structures with a sensible barrier. Produce unity within the barrier and separate from what is outside.

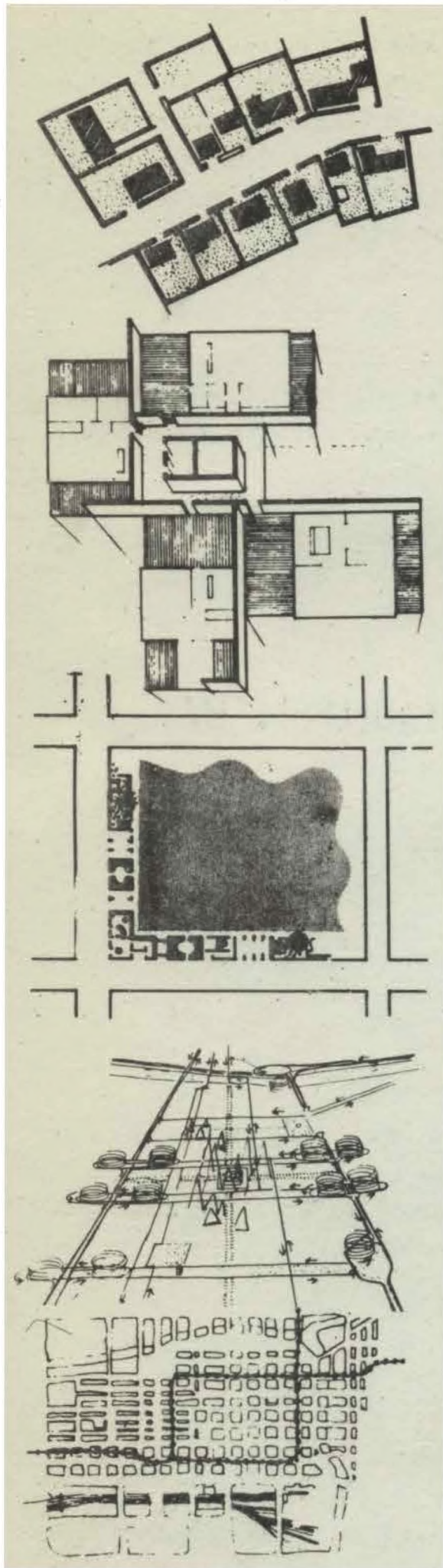
REPEAT: Give each element a feature common to all in the group so each is identified as part of the same order.

MAKE SEQUENTIAL PATH: Place activities that are done in sequence in identifiable spatial relation to one another.

phobic vista that otherwise occupied its inhabitants' gazes.

3) *To Repeat:* To link by introducing one common factor in each of the dispersed parts of a design, or of an existing situation. That common factor may be formal, or material, or even functional—historical.

4) *To Make a Sequential Path:* To arrange



TYPICAL JAPANESE RESIDENTIAL DISTRICT: Houses are surrounded by six to ten foot walls, which lend privacy to an otherwise open and transparent environment. The walls unify the street facade. Also used in China.

HIGH-RISE WALL: (Fumihiko Maki and Masato Ohtaka) Here, corridor is street. Walls divide lots. Residents can build houses between walls that have great flexibility of arrangement. The wall is a mediating link.

COMMUNITY WALL: (Fumihiko Maki and Masato Ohtaka) Proposal for a community border which mediates between street and houses.

GATEWAY INTERCHANGES: (Louis I. Kahn) The garage is a link between automobile and pedestrian movement. It is a symbol of arrival.

THE CHICAGO LOOP : Elevated tracks bring people into this commercial heart. They also enhance its concentrated nature by being a sharply defining edge.

buildings, or parts of multi-use buildings in a sequence of useful activity. Further, to reinforce such a path by any means necessary to propel persons along a general, designated path. Finally, to design a path, or reinforce a path in the natural landscape which will catalyze and give direction to new development along its course.

Designers make sequences of functions on pa-

per, and connect them with arrows, and establish the logic of the flow diagram. In some cases the three dimensional realization of that diagram is a building in which each symbol has become a room, and the arrows simply doors. The case we are interested in, however, is one in which each symbol is a place with the scale of a building.

The following chart is to demonstrate interde-

PRIMARY LINK	SECONDARY LINK			
	Mediate	Define	Repeat	Make Sequential Path
Mediate		*	*	*
Define	*			*
Repeat	*			*
Make Sequential Path	*	*	*	

pendent effects in linkage. It is one of the primary theses of this study that once a link is established for any reason, it takes on a complicated secondary system of meanings and uses. See the discussion of the *stoep* in Amsterdam, for example, or of Bologna's arcades.

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NOTES ON THE EASTWICK DEVELOPMENT IN PHILADELPHIA BY DOXIADIS ASSOCIATES

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FOREWORD

Two years have elapsed since the Eastwick Redevelopment Project in Philadelphia was awarded to a developer and this seems to be an appropriate time for an outline presentation and first evaluation of the Doxiadis plan on the basis of which it is now being built.

This plan was initially developed as a proposal to the Redevelopment Authority of the City of Philadelphia sponsored by the Reynolds Metals Company and Samuel and Henry Berger, Philadelphia builders, in the competition of 1959. On the basis of this proposal the project was awarded to the Reynolds-Berger group in May 1960. In September 1960 Doxiadis Associates, Inc., established an office in Philadelphia and started a year of intensive work on the final development plans. During this processfull use was made of the surveys and studies conducted by the Redevelopment Authority prior to the competition and close consultation was held with both this agency and the Philadelphia City Planning Commission.

Ground was broken in October 1961 and model houses were opened to the public on January 20, 1962. The first section of the project is now under construction and over 100 units were sold by July 1962.

In several respects the Eastwick development is unique. It is understood to be the largest of the Title I projects thus far and in contrast to most down town redevelopment projects, Eastwick undertakes to deal on a huge scale with the problem of private redevelopment *for lower income families*.

THE MASTER PLAN (See Cover)

The site comprises twenty-five hundred acres of low lying land in southwest Philadelphia: north and west adjacent to dense residential development (predominantly row housing), south and east adjacent to industry. Manufacturing industry requiring a close to town location, good transportation and