POSITION PAPER 2

THE OVERALL STRUCTURE OF MULTIFAMILY HOUSING

A SINGLE IDEAL BLOCK

Center for Environmental Structure
Christopher Alexander
Artemis Anninou

Daniel Solomon and Associates
Daniel Solomon
Kathryn Clarke

with Phoebe Wall

In order to grasp the problem at its most general and most global level, we have tried to construct an "ideal" block for Pasadena multi-family housing.

This block incorporates the structures of open space, street, gardens and courtyards, and building forms, which seem to us most typical of Pasadena in its inner character.

We have made this study, to try and see, for ourselves, what are desirable parameters and relationships which the zoning ordinance should strive to produce.

The study consists of four drawings:

1. GARDENS

2. PARKING

3. BUILDINGS

4. GARDENS, PARKING AND BUILDINGS TOGETHER

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1. GARDENS

We first tried to make a drawing which would describe the most beautiful street we could imagine, from the point of view of outdoor space -- courtyards and gardens. This street has large gardens, large courtyards, deep setbacks where the setback has posityiver value as outdoor space, and shallow setbacks where it does not, with a pattern of interconnection between the gardens, that makes a continuous and beautiful fabric.

It is important to notice that the drawing itself -- the pattern of space which is made by the gardens, is a beautiful structure.

2. PARKING

We next tried to make a drawing which would describe the most beautiful parking we could imagine. This drawing was made on top of the drawing for gardens, and within the structure provided by the gardens.

In case it seems odd to say that parking might be beautiful, we want to emphasise that many of the older buildings in Pasadena do indeed have beautiful parking, where the driveway, and parking lot and garages, themselvces form beautiful and pleasant space, humane in its own terms.

As we placed the parking, we concentrated on the fact that it should be beautiful in its own terms, in a similar way, that it has its own integrity as a structure of parking lots and driveways: and we placed it, in such a way that the space left between the parking and the gardens was always about the thickness of a building -- a thickness between 16 feet and 32 feet, most often in the range of about 24 feet to 28 feet.

It is important to notice that the drawing itself -- the pattern of space which is made by the parking, is once again a beautiful structure.

3. BUILDINGS

We next tried to make a drawing which would describe the most beautiful buildings we could imagine. This drawing was made on top of the drawing for gardens and parking, and within the structure provided by these two earlier drawings.

In this case, we took the space left by gardens and by parking, and rearticulated it, so that it would still produce the forms of gardens and parking we had defined, and slightly altered it, so that the building forms became beautiful.

To do this we simplified the forms, tried to make likely buildable volumes, with their own definiteness of shape. We also broke the continuous "sausage" of building space, and broke it down into small and asrticulate building volumes.

We also made small passageways connecting parking with the inner garden, tried to imagine the building as a structure which lay at the "head" of its garden, and tried to make sure that most apartments would open directly into the garden or courtyard. We also allowed the buildings to be placed in such a way that gardens and driveways, though most often separate, could sometimes cross, or run side by side.

Becuase of their relative narrowness, all the building volumes guarantee good daylight and sunlight in the buildings.

Once again, the drawing itself -- the pattern of volumes which is made by the buildings -- is a beautiful structure with beautiful component parts.

4. ARITHMETIC

Up until this stage, the drawings were made without regard for practical problems. They were made, only, to show the ideal space which could be produced in Pasadena.

We now describe the key arithmetic parameters which show that the space defined in these drawings exactly describes the practical realities which Pasadena faces.

KEY STATISTICS

The block has a total of 365,000 square feet, allocated as follows:

GARDENS	124,000
DRIVEWAYS	19,000
PARKING (NOT INCLUDING DRIVEWAYS)	61,000
BUILDING FOOTPRINT	161,000

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We shall assume an average FAR of .70. This is the permitted average of all multifamily zones at present (combining 124% at RM16, 61% at RM32 and 15% at RM48). It also happens to be our guess of the best density for the zone now known as RM32.

If we assume an FAR of .70, we then get:

BUILT SPACE (.70 x 365,000)	255,000
NUMBER OF APARTMENTS (at an average of 1000 sf/apartment)	255
REQUIRED PARKING SPACES (at 1.5 spaces/apartment)	383
REQUIRED PARKING AREA (at 300 sf/space, including aisles but not driveways)	115,000

We assume that no parking is underground or depressed. If we then subtract total parking already provided on the parking drawing, from total required parking we find the amount of parking which must be under buildings:

PARKING UNDER BUILDINGS (115,000 - 61,000)	54,000

If we subtract parking under buildings from total building footprint we get

FIRST FLOOR BUILT SPACE 107,000
(161,000 - 54,000)

We get second floor space, by subtracting first floor built space from total built space:

SECOND FLOOR BUILT SPACE 148,000
(255,000 - 107,000)

Since second floor built space (148,000) is less than total building footprint (161,000). It is therefore not necessary to go to three stories.

CONCLUSIONS.

This set of ideal drawings gives us the following remarkable conclusions.

Although the drawing was drawn idealistically, with no reference to arithmetic constraints, but only to what is ideal, nevertheless, the actual statistics show that it is possible, in principle to get this configuration under the following three conditions:

1. DENSITY: At an FAR of .70, which is exactly corresponds to the average of all current permitted densities in the RM districts, and which is virutally the same as the density currently permitted by RM32.

2. PARKING: All parking at grade, and no expensive undergrounding.

3. TWO STORIES HIGH. All buildings kept to a two storey height limit, which is ideal for Pasadena.

Thus, this configuration is not only possible. It is possible under the most economical conditions.

IMPLEMENTATION.

This kind of configuration has three essential features which make it possible.

1. Lot lines are ignored.

2. The number of driveways is drastically reduced.

3. No land is wasted on setbacks.

In order to get these features under practical real conditions, we shall have to devise methods which allow adjacent properties to cooperate with one another to an extent hitherto almost unknown. The whole solution to the environmental problem lies in this cooperation.

In the real situation this area consists of 42 lots. Most of these lots cannot be aggregated before developmnent. At present less than 10% of all applications are aggregated, and we believe it is unrealistic to increase this number very dramatically, even though incentives can be used to create some increase.

Instead, we believe that the solution to the problem, lies in a process where we encourage individual developments, on single and double lots, to create the kind of development portrayed in this paper, by various forms of cooperation which make it possible to reduce wasteful driveways and setbacks.

In short, we must find ways of implementing a very high degree of cooperation between development on adjoining parcels, so that the overall and cooperative effect can produce this kind of coherent environment, within the framework of single-lot development.

We believe that this is possible. In the next stage of our work, this is what we shall set out to do.