THE PLANNED NEIGHBORHOOD

In his book, *The Neighborhood Unit Plan*, James Dahir made this statement:

The absence of a sense of neighborhood or community in modern life poses a serious problem for the preservation of our American democracy. Individuality and social responsibility have developed, historically, in the neighborhoods where men lived and were best known. Modern life, based on an impersonal system of prices and mass production of goods, has created a way of life hostile to neighborliness, and has largely succeeded in isolating individuals, subjecting them to mass stimuli tending to create mass men in a mass culture—the raw material for a totalitarian society.¹

Most all of us live in a neighborhood of one sort or another, but very few of us are fully conscious of this fact. Can we describe our neighborhood? What identifies it as a neighborhood? Where does it start and where does it stop? Is there a feeling of belonging, a consciousness that we are a part of our neighborhood? Unless we can answer these questions readily and precisely, our neighborhood is not all that it can be and should be.

Our city is growing constantly and growing fast. Many new residential areas—new neighborhoods—are springing up all over our city, and all around it. They are new but are they good? Do they represent the best that our present-day society knows how to produce? Do they contribute their utmost toward a full and rich neighborhood life for all of the residents? Before we can evaluate we must first determine just what makes up a neighborhood and just what makes it a good neighborhood.

Let us begin with the individual family living in a single house on its own lot. This family needs other families living around it in similar houses on similar lots. Very few people
Figure 1. Basic Neighborhood Needs
NEIGHBORHOOD SIZE

LARGE ENOUGH TO SUPPORT AN ELEMENTARY SCHOOL

500 STUDENTS IDEAL SIZE FOR ELEMENTARY SCHOOL

2 ELEMENTARY SCHOOL CHILDREN PER 5 FAMILIES

500 × 5/2 = 1250 FAMILIES IN THE NEIGHBORHOOD

Figure 2. Neighborhood Size
**Figure 3. Neighborhood Area**

Typical City Lot $60 \times 120 = 7200$

Plus space for streets
- $60' \text{STREETS } 1200' \text{ BLOCK} = 9450$

Plus Community Space
- Park School Shops @10% = 10500

$1 \text{ ACRE } = 43560 \text{ SQ FEET}$
\[ \frac{10500}{43560} \text{ PER LOT } = 4.15 \text{ LOTS/ACRE} \]

1250 Families $\div 4.15 \text{ LOTS/ACRE } = 300 \text{ ACRES}$

**Figure 4. Neighborhood Shape**

- **Walking Distance**
  - 1 mile

- **Compact**
  - 500A
  - 322A

- **Square**
  - 640A
  - 300A

- **Rectangular**
  - 307A
Figure 9. Diagram for a Neighborhood
Illustrating a pattern for complete segregation of all pedestrian and vehicular traffic.
are hermits by choice. The family also needs a school for the children to attend. The elementary school, especially, should be close by, preferably within walking distance. In addition the children should have a place to play, a place larger than the yards of the neighborhood, for such activities as baseball and football which require more space. This could be in a neighborhood park. The trees, the grass, the open spaces of the park provide a most proper setting for the quieter recreation of the older people—they bring a bit of the countryside into the heart of the city, so to speak. A nearby shopping center to provide for everyday needs is a real convenience. There is no reason why a housewife should have to travel to another part of the city to buy the family's groceries.

An elementary school, a playground and park, a shopping center—and, of course, neighbors—these are the basic needs. These are essential in the everyday life of every family. They should all be found in the neighborhood in which the family lives. There are other needs, the provision of which within the neighborhood would be a convenience but not a necessity: churches, a branch library, a post office, etc.

On a map of the city we can locate a large number of elementary schools, parks, and shopping centers. But can we locate the neighborhoods? To be identifiable as such, a neighborhood must have boundaries. These boundaries may be natural ones, such as waterways, or artificial ones, such as streets or railways. Of these, streets provide the most satisfactory boundaries. Let me explain why. First, picture our neighborhood as a single cell in the larger body of the city. There are other neighborhood cells all around. There are people living in these other neighborhoods who need to travel to other parts of the city, places beyond our neighborhood. Is there any real reason why they should cross through
our neighborhood to reach their destination? Certainly not. They should be forced to go around. But how shall we accomplish this?

It is conceivable that our neighborhood could be small enough to be treated as a partly-closed cell in the urban street system without doing violence to the requirements of general traffic circulation. Place broad, straight streets, suitable for fast movement, all around our neighborhood and through traffic will have no excuse for invading its territory. But block off one or more of these channels and the resulting pressure will force traffic through the neighborhood. Hence the desirability of streets as boundaries.

These boundary streets will be the principal streets of the city. Cities usually make it a practice to show such thoroughfares, existing and planned, on a major street plan, thus defining the neighborhood pattern of the entire area. Whether or not this strait jacket is suitable we are as yet in no position to judge. Before we can do so we must know just how large our neighborhood need be. Now it would be difficult to answer the question, "How many neighbors do we want?" For such a decision we need a more factual basis, such as might be provided by the service units of the neighborhoods: the park, the school, the shopping center.

Clarence Perry, generally recognized as the author of the neighborhood unit idea, has stated that a neighborhood should provide housing for that population for which one elementary school is ordinarily required. How many people are needed to support an elementary school is a matter of varying opinion. Some school authorities hold that a school equipped with auditorium, gymnasium, cafeteria and like accessories is such a costly plant that it should handle a sizable load—1000 to 1600 pupils. Others hold that quality lies first
of all in small numbers and small classes and that 500 students is an ideal number. Although this ideal is recognized widely, construction often has been unable to keep pace of growth, and many schools have been forced far beyond this figure.

The next question is, “What proportion of the population is represented by boys and girls in the elementary school age?” Actually the ratio varies greatly. It is low in neighborhoods of expensive homes and high in low-cost areas. In new developments it tends to be higher because of the younger families that settle there. In an average new “white-collar” section it amounts to about 2 children of elementary school age for every 5 families. On the basis of 500 students this would mean 1250 families. And so our neighborhood would contain 1250 families.

Now we come to the question, “How much land will we need in our neighborhood to take care of 1250 families?” Obviously this will depend on how much land is allocated to each family. Suppose we regard a lot 60’ wide and 120’ deep as typical. This amounts to 7200 sq. ft. Assuming blocks 1200’ long and streets 60’ wide, we bring our total per lot to 9450 sq. ft. To provide land for community uses—school, park, shopping—it is customary to allow 10 per cent of the total, which brings our land requirements per family to 10,500 sq. ft., or 4.15 families per acre. The 1250 families in our neighborhood would require approximately 300 acres. This, then, is the area of our neighborhood—300 acres.

How big is 300 acres? Our neighborhood falls short of its ideal if the facilities it provides are not within walking distance of its residents. Walking distance, for adult or child, is generally recognized as not more than half a mile. For greater than this we usually resort to mechanical means of
Figure 5. A Portion of a Major Street Plan
transportation. Certainly, then, the shape of our neighborhood must be a compact one in order to minimize distances between points in our neighborhood. Of all shapes the circle is the most compact. A circle with a \( \frac{3}{4} \)-mile radius contains 500 acres. 300 acres is contained in a circle of slightly less than 0.4-mile radius.

But a circle is not adaptable to our straight-line movement and rectangular building practice. A square with a mile side contains more than double our required area—640 acres. 300 acres are provided in a square with 0.7-mile sides. In such a square even the far corners are no more than \( \frac{3}{4} \) mile from the center. Yet even the square shape may have to be modified to meet other demands. Most travel in the city is radial—to and from the center. Hence there is need for more radial than crosstown streets. To provide this need, our neighborhood might best be rectangular, say on the basis of a 2 to 3 ratio. A rectangle 0.6 mile wide by 0.9 mile long provides 307 acres within its boundaries, and 50 per cent more radial than crosstown streets.

We posed the question before, "Does the major street plan constitute a hindrance or an aid to our neighborhood unit?" Because these streets are usually spaced not more than a mile apart, they divide the city into areas that are more or less ideally suited to the scale of our neighborhood.

And now where shall we locate those community facilities that are so necessary in our neighborhood? The very heart of our neighborhood is its elementary school, the strongest unifying force available to us. It is only logical that it should be at the center of our neighborhood, a position most convenient to all of the residents, a position most remote from the dangers of traffic. Here too would be the park and playground, and for the same reason. Efficiency is served by a
Figure 6. A Community Group
A sub-city, providing for needs intermediate to the neighborhood and the city.
Figure 7. Neighborhood with Sub-Neighborhoods
common site for the two facilities. The school benefits from the playground space, the adult community by the after-hours use of such school facilities as the gymnasium, auditorium, etc.

There are many who hold that children will play in the streets before they will walk more than a quarter-mile to a playground. If this be true, then we need four supplementary play spaces at the quarter points of our neighborhood. Unfortunately this poses a problem of maintenance. Houston, for example, will not maintain or supervise a new park of less than five acres. And so, unless we can be unusually generous with land, we must either forego their inclusion or else set up a strong neighborhood organization to take charge of these secondary playgrounds.

As in the case of playgrounds, there are those who maintain that a neighborhood large enough to support an elementary school is too large to constitute a social neighborhood. A solution that immediately suggests itself further divides a neighborhood area into sub-neighborhoods with the playgrounds as the focal points and neighborhood feeder streets as partial boundaries. There is also a practical aspect to this pattern. Subdivisions of the scale of our neighborhood are seldom put on the market all at one time because of the large amount of capital involved in improvements. The sections into which they are generally divided would logically coincide with a sub-neighborhood, thereby substituting a unity of parts for a piecemeal development. Furthermore, where the neighborhood must be made up of a series of separate subdivisions, the sub-neighborhoods provide a means of achieving the larger pattern without losing the identity of the individual subdivision—a factor usually important to its developer.
The Planned Neighborhood

Unlike the school and park, the shopping facilities have no business in the center of the neighborhood. Such a location would be injurious to the neighborhood and disadvantageous to the merchants. A business use is an unfriendly use as far as residences are concerned. To protect the homes by isolating the shops is impossible in the center, but is a relatively easy matter along the periphery. Furthermore, the supplying of goods for these shops would bring numerous trucks across the paths of boys and girls going to and from school and playgrounds, as well as occasional noise and traffic in an area where quiet and tranquility should be the rule.

Now a good business site is one that is accessible to the most people. More people pass the corners of the neighborhood unit—the intersections of the boundary streets—than any other points in the area. Should we go a step further and make these corners the portals of our neighborhood, then surely here are the best locations for the shops. Another recognized business principle is that shops tend to cluster. Each shopkeeper seeks to locate where customers interested in his line are most likely to be found. Even the disadvantage of greater competition does not counteract this commercial tendency. Located at the intersection of two boundary streets, a shopping center can serve parts of four neighborhoods. The residents of these neighborhoods will thereby enjoy a wider range of shopping opportunity.

The location of other facilities, such as churches, depends largely on the scope of their service area. Rare indeed is the instance where a church draws its congregation entirely—or even largely—from any one neighborhood. If this were the case, a central location near park and school would be ideal. Otherwise, such a location would bring unnecessary traffic into the heart of the neighborhood, and fill the local streets
Figure 8. Neighborhood Shopping Center
Located at the intersection of two major streets: The meeting point of four neighborhoods.
The Planned Neighborhood

with parked cars. Locations near shopping centers not only provide for a transition of use but permit Sunday use of commercial parking lots.

One feature of our neighborhood remains to be discussed—the system for internal circulation. Our problem is essentially this: to provide for ease in entering or leaving the neighborhood, ease in moving about the neighborhood, but difficulty in passing through the neighborhood. Traffic that is destined elsewhere has no business in the area. It adds hazard, noise and confusion to life in the neighborhood. Nowadays, much engineering skill is expended on the design of expressways to meet the needs of vehicles moving directly and rapidly over the area of the city. Why should we not plan as carefully for the pedestrians moving safely and conveniently over the area of the neighborhood? We started by scaling our neighborhood to walking distance. Now, let us make it as easy as possible to utilize this means of transportation.

If we accept the general practice of using the streets for pedestrian as well as vehicular movement, our first job is to slow down traffic on these streets by making them indirect, curving, and discontinuous. Walking speeds are unaffected by such devices. A pedestrian can turn a corner without slowing down. Then our task becomes one of laying out a circulation network that will provide the walker with an easy and convenient means of reaching the focal points in the neighborhood. As yet we have only touched on the many possibilities of achieving maximum safety and quiet in our neighborhood. If we were willing to go a little further and accept the automobile as a service vehicle and the street as a service lane, we could literally turn our back on the noise and hazards of traffic. Our houses would face interior walks instead of streets. Our neighborhood would cluster about a central park rather than a central boulevard.
This is no new idea. It was tested as early as 1929 at Radburn, New Jersey, by Henry Wright and Clarence Stein. The ensuing depression blocked completion of the plan, but enough was built to demonstrate the values inherent in the scheme. Here the whole life of the community revolves about its central block park system. Once the car is put away the street is forgotten. All activities, including walking from one home to visit friends in another, take place over the park walks. Here children play because the things that attract them are centered in the park or made accessible from its walks, instead of from the street. The question may occur to you, “Why are not more neighborhoods laid out with segregation of pedestrian and vehicular traffic?” Perhaps it is because we are too jealous of our privacy from our neighbor to give up our walled-in back yard; too unconcerned with the privacy of our neighborhood to bother walling it in. Perhaps we are too much impressed with the importance of our automobile and too little with the importance of our home. Which is the cause and which is the effect, I cannot be sure.

Another question remains to be answered: “Is our neighborhood stable? Will it remain as a desirable place to live in for many years to come? Or will it exhaust itself, forcing us to move on the greener pastures?” In short, what have we done to build permanence into our neighborhood? Simply this:

1. We have made the boundary streets so adequate that regardless of the future growth of the city no traffic need force its disruptive way through our area.

2. Our neighborhood faces inward so that adjacent developments—however adverse—will have little effect on our neighborhood.
3. We have defined our boundaries so clearly that visually our community is a distinct entity, an incentive for local pride insuring local improvement.

4. There are provided within our neighborhood all the facilities necessary to the building of a community life strong enough to resist the huffs and puffs of the urban confusion about it, a community life that will return to us the feeling of belonging, a feeling long ago lost in the vastness of the impersonal city.

Finally: “Can we afford such a neighborhood? How much will it cost us?” Yes, we can afford it. It will cost us no more. It is simply a matter of planning to insure that the amount of money that is to be spent anyway is spent the right way. It is not so much a matter of “Can we afford it?” as “Can we afford to do without it?”

James Karl Dunaway

NOTES

2. Clarence Perry, Housing for the Machine Age (New York, 1937), and The Rebuilding of Blighted Areas (New York, 1933).