Children’s use of the street as a playground in Abu-Nuseir, Jordan.

by Tawfiq M. Abu-Ghazzeh

This article reviews the children’s use of the streets in Abu-Nuseir, a residential community in Jordan. The street functions as an agent of socialization. It provides a setting that is conducive to childhood development and to various types of play that enable that development. It affects the personality, character, and ability of a child. The importance of street play lies in the central role that play occupies in the physical, cognitive, social, and emotional development of a child. The spatial and temporal relationship between children and the street as affected by the accommodative forces of the street environment is explained, stressing that the physical environment of the street is an operative factor in human systems and that it is a significant factor in the development and maintenance of a child’s self-identity. Urban streets in residential communities should be designed to provide a balance between the needs of children and the needs of motor vehicles. What is required is to organize residential streets so that all can use the available space effectively. The main task that faces town managers in Jordan and in other Third World countries today is to elevate the street in the residential neighborhood from a mere traffic channel to a social institution for children.

In urban societies, the family and the street are important agents in the education and socialization of children; however, as a result of the reduced extended family in the urban setting, children can find their social experience quite limited. Children who live in cities have to rely on their parents’ willingness to allow them to visit nearby outdoor play areas. In Third World countries, the most attractive place for play is the street. Limited finances prevent many parents from providing children with other means of socialization.

Residents of urban neighborhoods, particularly children, come to the street with various expectations, lifestyles, and activities. When people encounter the street environment they perceive intrusions or benefits, and their resulting satisfaction or annoyance is affected by the street design. Because they are in the position of organizing some of the elements that make up the street environment and its eventual quality, designers play a critical role in the development of children’s street experiences.

Street play is a universal cultural phenomenon (Appleyard, 1981; Bedarida & Sutcliffe, 1980; Moore and Young, 1978; Ward, 1978; Ward & Fayson, 1973). Streets fill an especially important role in children’s loose-knit social structure by providing a locus for peer contact a few steps from home (Andrews, 1973; Bixenstine, Decorte, & Bixenstine, 1978; Devereux, 1970; Lantz, 1956; Piaget, 1970; Reid, Landesman, Treder, & Jaccard, 1989; Rubin & Ross, 1982). Streets and street corners are important meeting places and important ecological places (Carr & Lynch, 1970; Hara & Levin, 1973; Hester, 1975/1984; Levine & Michelson, 1979; Lynch, 1972, 1977; Noschis, 1994) where children meet, learn about each other and their adult neighbors, and investigate their surroundings. Designated playgrounds can add important play opportunities and attract activity, but they cannot substitute for the immediacy of the street. Streets have always been used for close-to-home play; this will surely continue in the future.

The aim of this article is to learn about the nature of children’s activities in the streets of a residential community in Jordan. This study’s approach is based on the assumption that the street is the social hub of the neighborhood; it is a behavioral setting that provides the stage on which many children’s activities are performed. The research method used in this article is based on field observation, interviews, photographs, and behavioral mapping.

STREET PLAY AND CHILD DEVELOPMENT

Like that of a playground, the design of a street should help children to identify concepts: shape, size, number, relationship between parts, and so forth. By learning to relate knowledge to experience, children begin to build up a body of information on which to base input from other types of learning and from other sources (Briggs, 1970; Cohen, 1973; Finley & Layne, 1971; Hirst, 1983; Jacobs, 1976; Moore, 1990).

Garling and Golledge (1989) explained that children receive information from the street environment. The information they receive is employed in the child’s intellectual development. In every society, children need to receive information that is...
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

life-enhancing, provides a range of choices and experiences, and is stimulating and challenging. This has implications in the provision of texture, color, sound, and aesthetics. Children should be offered those messages that are beneficial and that they must have to develop.

The street environment should provide a setting conducive to the full range of normal child development and the various types of play that enable that development. Physical development is most often associated with large-muscle or gross-motor activities, such as running, jumping, and climbing. Through these activities, children come to know their bodies, to be aware of their abilities and limitations (Millar, 1974), and to develop a sense of mastery or self-esteem by learning particular skills. Street play is an essential experience of childhood. It is not a tangential aspect or a frill but learning for life (Francis, 1985; Moore, 1986). Street play affects the personality, character, and ability of the child (Mannarino, 1978; Michelson & Roberts, 1979). The importance of street play lies in the central role that play occupies in the physical, cognitive, social, and emotional development of the child. It offers opportunities for physical exercise, sensory pleasure, testing and improving skills, emotional release, trying out autonomy and self-reliance, experimenting (learning to give and take), developing conversational and organizational skills, fantasy, creative expression, and adventure and exploration (see, e.g., Moore, 1986).

Because the street is so important for a child’s development, it should be a fine place to play. What makes a good place for children to play? It is a location that is free from hazards, such as excess traffic, yet diverse in character with different kinds of surfaces and adequate space to play all the street games in which children like to engage, as well as a location in which they can hide and build things. Children should be able to do these things without disturbing adults. The street is a learning environment. On it, children can learn much about nature. If there are people on the street whom they can safely meet, they can learn about social life. Learning about their urban context depends on children’s freedom to roam safely in their neighborhood away from vehicular traffic and other threats, such as drug dealing and other crimes. Although such threats do not characterize the streets of the residential area covered in this study, many other places in the world do face them and children’s freedom to play in their neighborhoods is particularly compromised.

LEARNING FROM URBAN INNOVATION ABROAD

Programs of traffic tranquilization and neighborhood protection have come to be viewed as an integrated process of neighborhood planning in a number of countries in Europe (see, e.g., Bowers, 1986; H. Monheim, 1986; R. Monheim, 1986; Nielsen & Rassen, 1986). Traffic tranquilization seeks to establish greater stability, participation, and social contact, as well as to ensure that drivers travel through residential areas very slowly and carefully. Such measures engender a resident’s sense of belonging and promote greater neighborhood pride, better maintenance, and more stable play patterns among children. The city of Delft in the Netherlands has one of the most original of these programs, converting residential streets into creative, pedestrian-dominated residential yards called woonerven (singular, woonerf) (see Kraay, 1986).

The woonerf is among the most elaborate physical interventions converting local distributor roads into residential yards within the street hierarchy. Entire residential precincts are designed with an eye to eliminate through-traffic and to reduce driving speeds (Wynne, 1980). This is accomplished, for example, by rerouting traffic, narrowing traffic lanes, and building bumps into the road to slow the traffic. Sidewalk curbs are eliminated and the whole street surface is paved for pedestrians. The woonerf accommodates cars, but the street is designed so that drivers must attend incessantly to the fact that the car is only one of the users—and a guest at that. The overall design philosophy of the woonerf is to create a type of gestalt message that streets belong to residents.

The Eubank-Ahrens (1985) study of two woonerven showed that adapting streets, particularly those streets designed to serve through-traffic, not only encouraged unsupervised children to play longer but also allowed play to become more complex. Increase was noted in games requiring more space and good playing surfaces as well as in the use of bicycles and toy vehicles. Eubank-Ahrens observed that in both woonerven, as the number of children on the street increased, the amount of purely verbal communication also rose dramatically. The woonerf design concept has also provided the essential element of street life that Jane Jacobs (1961) advocated (i.e., added opportunities for children to be in contact with the adult world). Furthermore, the generous physical and social amenities in woonerven that resulted from the new design of the street domain encouraged small children to explore the environment at large.

THE ABU-NUSEIR STUDY

- Reprinted with permission. Additional copying is prohibited. -
Children's use of the street as a playground in Abu-Nuseir, Jordan.

URBAN PROFILE

This researcher has studied behavior and outdoor activities on two streets in the town of Abu-Nuseir, Jordan, a satellite community about 20 km Northwest of the capital, Amman (see Figures 1 and 2). Completed in 1987, Abu-Nuseir is a public housing project that consists of about 3,667 dwelling units. It is built on a hilly site and there are many open spaces on the slopes, some of which are planted with shrubs, whereas others are vacant and limited in what they provide for children's play (see Figure 3). There are about 22,000 people living in Abu-Nuseir. Inhabitant family size in Abu-Nuseir is about six. Most residents are middle income, with an average family earning of approximately $5,400 per year. The majority of households (about 85%) are government employees. Most parents are between the ages of 30 and 50 years, and the average family has two or three children younger than 12 years old.

Street typology and traffic. Figure 4 shows the street topology in Abu-Nuseir. This includes arterial streets, arterial collectors, internal distribution local collectors, and cul-de-sacs; they all carry two-way traffic. The arterial street is characterized by heavy traffic (about 5,300 vehicles per day and 800 vehicles per peak hour). Arterial collector streets have moderate traffic (about 3,000 vehicles per day and 300 vehicles per peak hour). The traffic load on these streets renders them unsafe for children's play.

Brought into focus for this study are two internal distribution loop collector roads. This type of road is characterized by light traffic (about 400-1,200 vehicles per day and 40-120 vehicles per hour, depending on the number of dwelling units served) (see Figure 4). Although the conditions are somewhat adverse, bike riding and ball playing continue on these streets. Dead-end streets and cul-de-sac streets (only about eight cars pass in an hour) are the safest of all types of streets. Providing that traffic speeds remains slow, children can play chasing and hiding games across the full width of the cul-de-sac (see Figure 5).

Private car ownership in Abu-Nuseir is about one car per two families, and the majority of vehicles (80%) that travel along internal distribution routes are private cars. Service vehicles, including taxis, garbage collectors, school buses, police cars, trucks, and so forth, make up the remainder. Public transportation is provided by buses and taxis. Buses travel along the arterial collector roads. No vehicle type is banned from driving on any of the street types; this is checked only by street design (i.e., width, alignment, and slope).

Cultural factors. Although boys and girls in their preschool years play freely with one another, the situation is different for older children and teenagers in Abu-Nuseir. Of the people in Jordan, 90% are Muslims. The Islamic religion calls for separation of males and females in public and in places of social interaction. In this relatively conservative society, males and females are discouraged from playing together starting in their midchildhood years and, instead, are encouraged to interact with their same-sex peers. Whereas teenage males are more likely to socialize with their friends in the street, the females often prefer to undertake leisure activities either indoors or in more private outdoor open spaces. It is common practice in Jordan for adult males to sit and socialize at doorsteps and along sidewalks; they primarily use the street space close to their homes. Adult women, like the teenage females, tend to socialize in or near their homes.

In the Jordanian culture, elderly people often live with the family of their eldest son, another son, or the family of their eldest daughter. Islam urges individuals to care for their parents, particularly when they reach old age. Most elderly people have a lot of leisure time at their disposal; however, their choice of the street space for these activities depends very much on their physical capabilities.

METHOD

The two streets selected for this study are marked in Figure 4 as Street 1 and Street 2. Notice the alignment of each of the streets and the urban fabric that surrounds them. The alignment and slope of Street 2 (about 12% toward the Northern part) caused its traffic volume and speed to be heavier than that on Street 1. Traffic volumes are estimated at about 110
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

(Street 1) and 150 (Street 2) vehicles per peak hour at speeds of about 20 to 25 and 25 to 35 miles per hour, respectively. As shown in Figure 3, both streets start and terminate at an arterial collector street; thus, each of the selected streets represents the source and goal of most pedestrian movement. Residential buildings along the studied streets include three- and four-story apartment buildings and single-family, attached, villa-type dwelling units (see Figure 2). In the majority of cases, entrances directly face the street.

With the goal being to leave the normal flow of events in the street undisturbed, this researcher sat inconspicuously in a parked car and recorded the behavior of only those persons who chose to remain in the street for more than 1 minute (see Figure 6). Necessary activities (taking out the trash, waiting for a ride, or doing construction work) were not recorded. Because leisure activities (playing, relaxing, conversing, or observing the activities of others) only occur where the street’s physical and social qualities are supportive, the presence of leisure activities is felt to serve as an indicator of environmental quality.

[Figure 6 ILLUSTRATION OMITTED]

Thirty-eight 1-hour observations were made during the afternoon hours in the months of July and August, 1996, which concurred with the school children’s summer vacation. This researcher noted the number of individuals in the street, including their gender and approximate age. As far as groups were concerned, recorded data included their size, main activity, location on the street, postures, the physical elements they used, and the forms of interaction taking place.

In addition, 150 children were interviewed and asked about their activities, their home and its location relative to the street, their favorite games, the play opportunities present in the street as well as in other accessible places close to home, and other questions related to play and the street environment. Because each child is considered a unique individual, they were approached accordingly and interviews were unstructured. Fifty mothers (many women in this conservative community declined to be interviewed) were also asked about the places that their children spend their free time outside of the home. The approach used in interviewing mothers was similarly unstructured.

Photographs were used to document children’s behavior (see Figures 7-13; see also Figure 5). An effort was made to develop street portraits in which photographs, descriptions, and personal details would function to support numbers, tables, and behavioral mapping in conveying a comprehensible feel for the design and use of streets in Abu-Nuseir.

[Figure 7-13 ILLUSTRATION OMITTED]

FINDINGS

NUMBER OF USERS AND LENGTH OF STAY

Observations of people going in and out of buildings confirmed that most of those spending time in the street were residents.

Table 1 shows the mean length of stay (in terms of average number of 5-minute time intervals observed) of various street users (see also Figure 6).

<table>
<thead>
<tr>
<th></th>
<th>Street 1</th>
<th>Street 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children</td>
<td>2.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Teenagers</td>
<td>2.2</td>
<td>1.6</td>
</tr>
<tr>
<td>Adults</td>
<td>2.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Elderly</td>
<td>1.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>2.05</td>
<td>1.175</td>
</tr>
</tbody>
</table>

(a.) Mean length of stay was calculated in terms of the average number of 5-minute time intervals observed.
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

AGES OF USERS AND TYPES OF ACTIVITIES

Different user groups have varying demands. Because the observation was intended to be unobtrusive, only approximate age groups could be determined. Children were the principal users of the streets for leisure.

Table 2 shows the number of users and percentage of total observed population.

TABLE 2
Number of Users and Percentage of Total Observed Population

<table>
<thead>
<tr>
<th>Street 1 Users</th>
<th>Street 2 Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>Percentage</td>
</tr>
<tr>
<td>Children</td>
<td>128</td>
</tr>
<tr>
<td>Teenagers</td>
<td>42</td>
</tr>
<tr>
<td>Adults</td>
<td>72</td>
</tr>
<tr>
<td>Elderly</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
</tr>
</tbody>
</table>

Tables 1 and 2 show that children were the principle users of both Street 1 and Street 2 for leisure. They spent more time on the street than other user groups. Therefore, it is important to design streets in a way that enhances the experiences of children in the street. Previous experience (Eubank-Ahrens, 1985) shows that improved street design increases both the number of people in the street (particularly children) and the length of stay (amount of time people spent on the streets). This indicates that street design has a role to play in the increased visual, social, and functional offerings of the street environment. On both Street 1 and Street 2, it was noticed that as the number of children increased (see Table 2), the amount of verbal communication also rose dramatically.

CATEGORIES OF ACTIVITIES

Table 3 shows the principal activities and corresponding behavior categories that were observed in Street 1 and Street 2.

TABLE 3
Principal Activities and Corresponding Behavior
Categories Observed in Street 1 and Street 2

<table>
<thead>
<tr>
<th>Principal Activity</th>
<th>Behavior Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males kicking soccer ball</td>
<td>Children’s play (activities of children only)</td>
</tr>
<tr>
<td>Males balancing along top of low wall</td>
<td></td>
</tr>
<tr>
<td>Two preschool children playing in planter box</td>
<td></td>
</tr>
<tr>
<td>Older males and females bicycling and skating up and down the street</td>
<td></td>
</tr>
<tr>
<td>Preschool children taking turns riding in go-cart</td>
<td></td>
</tr>
<tr>
<td>Males running and romping, playing hide-and-seek</td>
<td></td>
</tr>
<tr>
<td>Females singing and clapping hands, skipping rope, pretending to be in a wedding</td>
<td></td>
</tr>
<tr>
<td>One male climbing electric pole</td>
<td></td>
</tr>
</tbody>
</table>
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

Observation of people who repeatedly went in and out of buildings confirmed that most of the users who chose to spend time in the street were residents. Table 3 shows that the users of Street 1 and Street 2 were members of different age groups and had varying demands. Observing people on the streets in Abu-Nuseir showed that people choose such spaces for leisure activities because of their location near one’s home and not so much for their intrinsic qualities.

Observing children’s behavior, as shown in Table 3, provided valuable insight into their favorite places and the ways in which they use their environment. Particularly children in midchildhood play in the street because it is the only near-to-home public space large enough and appropriate for energetic games.

Leisure activities observed taking place on streets and near homes in Abu-Nuseir, as shown in Table 3, did not require special effort or equipment; they were spontaneous and casual. Their nature was such that, if asked, most subjects would not be able to recall them; most people would not cite a short conversation with a neighbor on the way to a street vendor as an example of how they spent their leisure time. The opportunity for verbally communicating and experiencing people and events is generally what makes streets attractive to residents in Abu-Nuseir.

Figure 14 shows that children’s play was the chief street activity. A major activity for teenagers, adults, and the elderly in both streets that were studied was verbal communication in the form of chance meetings and spontaneous conversations. Other grown-up activities, such as active recreation, passive relaxation, and observing people and events, were recorded infrequently.

[Figure 14 ILLUSTRATION OMITTED]

The layout of streets, as well as the design of adjacent spaces and approaches to residential buildings, unfortunately does not allow for a great deal of social interaction by adults. The designs do not provide the privacy, withdrawal, and contemplation of or communication with nature that are characteristic of parks or visually protected private open spaces. People in Abu-Nuseir were observed to choose spaces not so much for their intrinsic quality as for their location.
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

The foregoing data relates to actual use; however, this is not the only method of assessing children’s relationships with the physical environment. Vital information in this study comes from the children’s own responses (i.e., how they perceive their behavior and how they feel about their surroundings). One out of three children interviewed in Abu-Nuseir said streets and associated spaces were their preferred afterschool play areas. When asked where they went to meet their friends, 50% of the 150 children questioned referred to the same space.

Among mothers interviewed, 36% said that their children usually played on the street; however, because the number of mothers interviewed was low, this figure is only suggestive. Complaints by mothers about vehicular speed were widespread; 54% of mothers felt that the traffic on their street was moving too fast and many would not allow their preschool children to play in the street domain without a parent present. The second most common complaint concerned careless and speeding drivers. Mothers complained that police enforcement and surveillance in Abu-Nuseir, particularly along local collector routes, was rare and traffic offenders were not likely to be caught. Control of drivers who do not obey the rules is one of the most challenging tasks in the creation of streets that are suitable for child’s play. A traffic tranquilization program is needed to contend with the problem of a street design that often encourages driving faster than the speed limit.

Table 4 shows the preferences for types of street play mentioned by children and their preference by age groups.

<table>
<thead>
<tr>
<th>Preference by Interviewed Children</th>
<th>Type of Play</th>
<th>Preschool (%)</th>
<th>Middle Childhood (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball games</td>
<td>10</td>
<td>38</td>
<td></td>
</tr>
<tr>
<td>Other physical-motor,</td>
<td>4</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>large-muscle play</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical-motor, small-muscle play</td>
<td>15</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Play involving bicycle or toy</td>
<td>32</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>vehicle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rule games (other than ball games)</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Role and fantasy play,</td>
<td>4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>entertaining</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passive behavior (watching others)</td>
<td>12</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Social play, communication as</td>
<td>21</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>main activity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (all 150 subjects)</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows that both preschool and midchildhood groups prefer to engage in a variety of play types on the street. They play games requiring more space and good playing surfaces (such as ball games). The number of children playing on streets, as shown in Table 2, and the types of play they engaged in, as shown in Table 4, reflect that the physical and social amenities of the street play an important role in encouraging small children to explore the environment at large.

Table 5 shows the location, physical elements, and space use mentioned by children to be associated with their behavior in the street domain.
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

### TABLE 5
Location, Physical Elements, and Space Use Mentioned by Children to be Associated With Their Behavior In the Street Domain

<table>
<thead>
<tr>
<th>Element Used by Children</th>
<th>Preschool (%)</th>
<th>Midchildhood (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Border zone (building features, house entrances, etc.)</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>Street element (curb, retaining wall, tree support, light pole, manhole, storm water ditch, etc.)</td>
<td>25</td>
<td>30</td>
</tr>
<tr>
<td>Large impermanent objects (cars, garbage containers, etc.)</td>
<td>10</td>
<td>26</td>
</tr>
<tr>
<td>Special props (toys, bicycles, found objects, etc.)</td>
<td>35</td>
<td>24</td>
</tr>
<tr>
<td>Total (all 150 subjects)</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Many children interviewed would like to have easy access to conventional playgrounds and standard equipment, such as swings and climbing structures. Unfortunately, such playgrounds in Abu-Nuseir are rare and too far away from children’s homes to make everyday use feasible. Streets, on the other hand, are invariably available. Some children are pushed to the streets because of the lack of play opportunities elsewhere, whereas others are pulled (even if other play spaces are available) by the special attractions of the street not duplicated elsewhere. All children like to be where the action is, where the life of the community takes place, where street vendors are, or where maintenance people are working. In Abu-Nuseir, all this and much more takes place in the street.

### SPATIAL BEHAVIOR

The physical elements used by children were related to the type and location of play. Areas in which children played were clearly visible in the behavior maps constructed for Street 1 and Street 2 (see Figure 15). On both streets, children used the entire width of the street, including the traffic lanes (see Figures 10 and 11), particularly for football and for playing with wheeled toys. Parking lots saw intensive use (see Figure 12). The sidewalk zone was used on Street 2 because traffic speeds are faster and this street is less safe. This interviewer found that the high volume of traffic also has a negative impact on resident’s sense of possession of the street.

[Figure 15 ILLUSTRATION OMITTED]

The constructed retaining walls along both sides of Street 1 attracted many children to sit and balance along them (see, e.g., Figure 7). Features including recessed house entrances and stairs (see Figure 7) were used more on Street 2 than on Street 1 because of the traffic volume and speed.

Location of teenage, adult, and elderly activities. Although verbal communication was observed to take place among teenage males walking along sidewalks (see Figure 16), sitting on retaining walls, and standing at building entrances, the verbal communication of female teenagers and adults generally occurred near building entrances. Pastimes such as observing people and events, as well as passive relaxation, also occurred near building entrances. Few teenage females were observed to stop and talk with peer group members on sidewalks or at doorsteps; for outdoor socialization, females would more often seek recessed areas and places that were somehow secluded from the public right-of-way. However, a number of females in midchildhood were observed in the streets playing individually (i.e., riding bicycles). Male teenagers were observed to spend most of their leisure time with their peers, and meetings of teenage males often took place in the streets. Active elderly people were observed to take excursions along the neighborhood streets; those people who were physically less active were noticed sitting on the front steps, observing the action on the street. By creating more areas
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

near house entrances protected from pedestrian and traffic flow, designers in Jordan and conservative societies in general can support spatial expansion of verbal communication and passive relaxation among adults.

[Figure 16 ILLUSTRATION OMITTED]

ON CHILDREN AND THE USE OF THE STREET AS A PLAYGROUND

The residential street in Abu-Nuseir is a natural play area for young children. It is a world as exotic as it is familiar. Table 5 shows that in the street, children played in the interstices between parked cars, along the curbside of the slopes, down in the bottom of storm water ditches, and among the insect life of sidewalk verges. Children who played on the street witnessed the comings and goings of tradespeople, tree-trimming crews, and hole diggers unearthing mysterious pipes, as well as the quotidian details of their neighbors’ domestic lives. The street playground offered patches of dirt used for constructing imaginary landscapes and building materials, such as sand piles. The street was also an intimate extension of the realm of the home; it is a place out in the open, close to one’s dwelling, that was linked physically and psychologically to home and hearth. This complex conjunction of polar characteristics opens potentialities in play that are not to be found in centers of domestic activity (e.g., home, school, or playground). As a domestic hearth, the street in Abu-Nuseir offered a place for children living up and down the clusters of homes to meet, gather, and pursue their activities in a territory that was neither strictly supervised by parents nor completely disassociated from their watchful gaze.

According to Hart (1978), the environmental competence of children is directly related to their ability to gain safe access to built and natural environments. The space nearest the home environment in Abu-Nuseir was found to be especially important; yet, home-based recreation is often given the least consideration in the design of the town. Young children are especially dependent on the quality of the environment near their home to meet their needs for movement and exploration as well as to experience and learn from the outdoors (see, e.g., Cohen & Horm-Wingerd, 1993; Heft & Wohlwill, 1987; Lidz, 1968; Weinstein & Bearison, 1985). Teenagers characteristically spend most of their leisure time with their own age group. At gatherings of teenage males in Abu-Nuseir, some will invariably show off and try to attract the attention of others or to provoke adults (see Figure 16). Yet, what adults may view as pointless hanging around and rough-housing seem to be necessary behavioral outlets for juveniles who are seeking identity and territory in the transition from childhood to adulthood.

STREET USE AND ENVIRONMENTAL QUALITY

Based on field observations and interviews completed in Abu-Nuseir, great differences exist between adults and children in their perception and use of the street environment. Whereas streets are functional resources to adults, children value them as playgrounds. Field observations showed that children determined the quality of the street environment by the presence or absence of the mundane play opportunities discovered in curbstones, overhead wires, parked cars, trees, piles of waste material, flights of stairs, retaining walls, driveways, building entrances, and so forth—not by the ease of traffic flow and parking (see, e.g., Figure 7).

The persistence of street and sidewalk play in Abu-Nuseir is dramatic. Whereas there exist many open communal spaces around residential buildings, a substantial number of children who were observed (more than 60%) make the street their playground. Streets and sidewalks were the most popular places within a more broad category of hard-topped circulation spaces woven into the fabric of residential areas. Traffic-segregated pathways and parking areas represented appealing places for play. Nearly 30% of observed activity occurred in parking lot areas, and almost 5% of all children’s play took place on asphalt and sidewalk surfaces. The rest of children’s activities happened in street-associated spaces and on physical elements connected to streets (i.e., stairways, retaining walls, etc.).

STREET PLAY AND TERRITORIALITY

There are many things that attract a child to playing in the street. Streets are the social hub of the neighborhood, where children meet and learn about each other and their adult neighbors (cf. Clausen, 1968; Cochran & Brassard, 1979; Keri, 1989; Mathews, 1992) and investigate their surroundings (see, e.g., Proshansky & Fabian, 1987; Sebba, 1991). They are in close proximity and easily accessible. Their hard, linear play surfaces are appropriate for many everyday games and play activities. Streets in Abu-Nuseir fall within the habitual range of childhood territory (i.e., they are close enough to
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

home to be used everyday and they are available anytime that children want to play). Multistory apartment buildings in Abu-Nuseir suffer from a lack of private outdoor open spaces. There are no spaces equipped for play close to home. Because of the inherent site constraints and opportunities, the design of open spaces between buildings is inadequate for various types of child play, such as football games and bicycling (see Figure 8). This has left children with very limited choices of play areas; thus, the near-to-home street has become the favorite and most appropriate location for child play.

It is important to stress another very pragmatic reason why streets and sidewalks are so important in the lives of the children in Abu-Nuseir. Walking is the universal mode of transportation and the means by which children travel around the neighborhood and, perhaps, the town. All of the children who were interviewed said that they got to their favorite afterschool places by foot; however, this does not mean that they walked in the adult sense of the word. Out on the streets of Abu-Nuseir, children were observed jumping, climbing, skating, sliding, running, chasing, sitting, leaning, and the like. They played along the way to any destination as they investigated, with mind and body, every opportunity presented by the street cum gymnasium.

MAKING STREETS IN ABU-NUSEIR LIVABLE FOR CHILDREN

Children have a central need for games and continuous movement because they are developing physically and must learn to adjust and revise previously learned movements (cf. Becker, 1976; Verker & Rijpma, 1984). Observations of activities in the streets of Abu-Nuseir showed children engaging in games constantly, often giving up one game for another quite suddenly. Up to the age of 11 or 12 years, play rules were noted to be quite indeterminate and changeable. Some would show off, trying to dash across the road just before a car passed, or stand and fight in the middle of the road. Children find it difficult to grasp and follow the rather complicated rules to which traffic conforms. They cannot predict the movement of cars and they expect the street pavement to be safe at all times. Their eye level is low (directing their attention to the pavement and items of interest in the road itself), making it difficult to see any road signs placed high above their field of vision. Depending on their age and the matter in question, children do not necessarily have the ability to respond to dangers or figure out solutions. Research has explained that children’s acuity does not fully develop until around the age of 12 years (Sandels, 1968). Only in the final years of childhood are they fully equipped, biologically, to judge the speed and distance of oncoming traffic. In the streets of Abu-Nuseir, children were noted to react to everything that interested them with their whole personality. For example, 6- and 7-year-old children did one thing at a time; they were unable to cross the road and watch traffic at the same time. This researcher saw children in the same age group so taken up by a sharp emotion, such as joy or anger (see, e.g., Figure 9), that they entirely forgot the traffic around them. The adults who design streets need to compensate for the lack of traffic sense in children.

All aspects of the streets in Abu-Nuseir, such as signs and angles, are geared to adult dimensions and capabilities. There is no consideration given to the physical, cognitive, and psychological limitations of children, which affect their ability to learn and follow safety rules and to control their own behavior. Society pays lip service to the importance of children and to the central place that they have within it. The message communicated by the design of urban streets should reflect this centrality. The way of any appropriation effort to facilitate the accommodation of the child in the street lies in an informed consideration of the child’s needs and characteristics and a commitment to implement these in planning and design.

CONCLUSION

There is a need to pay attention to the quality of life in our residential neighborhoods. The problems inherent in the urban environment are not specific to a single nation, much less to a single city; perhaps with some modification, approaches adopted by one community or country can be adapted by another. Research following the implementation of street renovation programs designed specifically for enhanced residential use in a number of European countries offers useful information regarding the impact of such programs. Research findings also emphasize that street design in residential neighborhoods needs to respond both to traffic volumes and to the character of the neighborhood; however, designs should be guided by a common objective (viz., a balance of power between nonmotorized and motorized users). This is essential in making residential streets truly public places.

Streets and public spaces are critical elements in helping us achieve a sense of importance within the urban society. The main task of city managers at this time should be to elevate the perception of the street in residential communities, particularly in Third World countries, from a design concept to a social institution.
Children’s use of the street as a playground in Abu-Nuseir, Jordan.

Streets in residential neighborhoods need to be safe for children and adults. They must also function as part of the symbolic environment, optimizing the community’s sense of place and expressing collective territoriality. None of this is possible as long as the automobile retains its supremacy in the domain of the residential street. Children, in particular, should not be forced to withdraw from the street because of the hazards posed by traffic. The street environment should have places in which people can sit, converse, and play. Inhabitants need to see the street of their neighborhood as a place rather than a traffic channel. Residential streets should be destinations, not routes.

In Abu-Nuseir, as in other residential towns in Jordan, streets are where most children are reared and where most housewives and elderly people spend their time; they are just outside the home, the most important part of the human’s urban environment. Yet, the design of streets in most residential areas overlooks these considerations. The street is a dangerous, impersonal domain that residents are able to do little, if anything, about.

Street play is here to stay. This means that the renaissance of street space as a significant resource for people will continue to flourish. Urban streets in residential communities can be humanized; the balance between the needs of children and the needs of motor vehicles can be redressed. Many successful examples already exist. Decision makers in Jordan and in Third World countries are invited today to make a greater effort to ensure that children’s needs are not only recognized but thrust into the forefront and represented by children themselves.

Research findings emphasize that traditional modes of moral education (subjugation under adult authority) are no longer appropriate in a rapidly changing world. This is particularly true in Third World countries. An alternative education process based on children’s experience, assessment, and decision making about their personal world could offer greater advantage. This would introduce an essential base of sound urban environmental values and, at the same time, meet the conventional academic aims of self-motivated experiences as the springboard for acquiring knowledge and skills.

Public initiatives are key elements of the strategies that are needed to develop more human areas within cities and residential communities in Jordan. Although this applies to residential areas that are already constructed, it is particularly needed in newly planned residential neighborhoods. There is a need to include design gestures that will effectuate both aesthetic and functional improvement. Over the long term, this is expected to contribute to the development of more livable urban environments. Let us hope that a revival to take the necessary steps toward humanizing our streets will contribute to a declaration of the right of the child in the city.

REFERENCES


Children’s use of the street as a playground in Abu-Nuseir, Jordan.


Children’s use of the street as a playground in Abu-Nuseir, Jordan.

Psychology, 133, 105-110.


Children’s use of the street as a playground in Abu-Nuseir, Jordan.


TAWFIQ M. ABU-GHAZZEH is associate professor of architecture at the University of Jordan in Amman, Jordan. From 1989 to 1996, Abu-Ghazzeh formally taught at King Saud University in the College of Architecture and Planning in Riyadh, Saudi Arabia. He holds a master’s degree in architecture from the University of Michigan at Ann Arbor and a Ph.D. in architecture from the Catholic University of America at Washington, DC. His recent work focuses on environmental design and environmental behavior.