Children's participation in city planning and design has enjoyed increased interest among policymakers, designers, and researchers. This activity builds on a well-established body of research and practice that suggests that urban environments are best planned with the direct participation of children and youth. We believe that this work has reached a stage of maturity in need of critical reflection and review so that it can be more effective in the future.

This paper presents a historical and critical review of children's participation in city planning and design. Past participatory efforts with children are discussed as seven realms or approaches to their child participation. We characterize these realms as advocacy, romantic, needs, learning, rights, institutionalization, and proactive. We propose a seventh, proactive realm as a more integrative and effective way to involve children in design and planning. Utilizing the authors' own projects as brief case studies as well as research of others, benefits as well as limits to participation are identified. Special emphasis is placed on developing critical theory that can be used in future research and practice.

Introduction

The participation of children in city design has become increasingly popular and common. Many cities from Berkeley, California to Milan in Italy have involved children in city planning and design processes. Some cities have also implemented children's ideas into plans and policies. International organizations such as UNICEF promote children's participation as the best way to make cities more friendly and sustainable (UNICEF, 2000). At the same time, considerable research has been done on the value of children's participation in planning and design (Hart, 1992). This research and action has matured to a point where it can benefit from a more historical and critical review.

Research on children, participation and city design

Past work has addressed a number of urban settings important for children. By children we include both children and youth. While there are important developmental differences and methods that work best with different age groups, the principles relate to all ages from early childhood to adolescence. Planning is meant to include all activities of the design and planning process including programming, design, planning, construction, and evaluation. Research and policy has addressed the needs of children growing up in cities (Ward, 1978; Lynch, 1978) and in the country (Ward, 1988). These have included studies of playgrounds (Perez & Hart, 1980) and playground safety (Frost, 1985), schoolyards (Adams, 1990; Young, 1990; Ward Thompson, 1995), preschools (Fjertoft & Sageie, 2000), and neighbourhood spaces (Francis et al., 1984, Homel & Burns, 1987). In addition, researchers have examined more non-traditional settings including healing landscapes (Marcus & Barnes, 1999; Aiken et al., 1995), the relationship between children and plants (Moore, 1993; Harvey, 1989; AHS, 1994), children and animals (Melson et al., 1991), and children and gardens (Jekyll, 1990). Studies have also explored child-friendly cities (Horelli, 1998), new urbanism (Calthorpe, 1993), and healthy landscapes (Bedard, 2000).
Past research has explored a wide variety of places for children including traditional public spaces such as schools, parks, playgrounds and streets (Brown & Burger, 1984; Altman & Zube, 1989; Carr et al., 1992; Spencer 1987) and newer, more innovative forms such as community gardens, natural areas and greenways (AHS 1994; Francis et al., 1984). The success of these places has also been found to depend on the active involvement in children and other users in their initiation, design and management. Table 1 presents a typology of some of the urban places most important for children today.

A variety of issues have been identified that face children growing up in cities today. They include more fundamental issues such as the disappearance of childhood (Winn, 1983; Postman, 1994) and a child's right to play (Rivkin, 1995). These also include discoveries of the importance of naturalistic play (Hart, 1978; Deveraux, 1991; Wood, 1993) and changing memories of childhood (Cooper, 1978; Korpela, 1991; Sobel, 1990). Research has focused on children's fears of city places (Woolley et al., 2000), perceived and actual crime (White et al., 1987), and traffic (Sandels, 1975). This research has identified some essential ingredients in creating environments for children. See Table 2 for some of the dimensions needed for child-friendly environments.

There is also now much good theory on the importance of healthy and accessible cities for children (Gaster, 1991). This includes general theories of children and cites (Parr, 1967; Noschis, 1995) theories of the geography of childhood (Hart, 1978; Naban & Trimble, 1994; Holloway & Valentine, 2000) and more basic psychological theories (Gorlitz et al., 1998; Wohlwill & Heft, 1987). In addition, some studies have been focused on children experience and sense of place and place attachment (Hiss, 1990). Others have examined environmental problems facing children such as toxic materials and the health effects of pollution (Roberts & Dickey, 1995; Sattertwaite et al., 1996). More recently studies have explored the growing dependence of children on cyberspace (Valentine & Holloway, 2000).

### Table 1

*A typology of designed and planned places for children*

<table>
<thead>
<tr>
<th>Institutional places</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daycare</td>
</tr>
<tr>
<td>Schools</td>
</tr>
<tr>
<td>Schoolyards</td>
</tr>
<tr>
<td>Sports parks</td>
</tr>
<tr>
<td>Theme parks</td>
</tr>
<tr>
<td><strong>Public spaces</strong></td>
</tr>
<tr>
<td>Streets</td>
</tr>
<tr>
<td>Sidewalks</td>
</tr>
<tr>
<td>Parks</td>
</tr>
<tr>
<td>Trails</td>
</tr>
<tr>
<td>Malls</td>
</tr>
<tr>
<td>Waterfronts</td>
</tr>
<tr>
<td>Beaches</td>
</tr>
<tr>
<td><strong>Private spaces</strong></td>
</tr>
<tr>
<td>Home</td>
</tr>
<tr>
<td>Cars</td>
</tr>
<tr>
<td><strong>Found places</strong></td>
</tr>
<tr>
<td>Vacant lots</td>
</tr>
<tr>
<td>Natural areas</td>
</tr>
<tr>
<td>Waterfronts</td>
</tr>
<tr>
<td>Street corners</td>
</tr>
<tr>
<td><strong>Found/off limits places</strong></td>
</tr>
<tr>
<td>Discovery/adventure places</td>
</tr>
<tr>
<td>Vacant lots</td>
</tr>
<tr>
<td><strong>Wilderness</strong></td>
</tr>
<tr>
<td>Urban wilderness</td>
</tr>
<tr>
<td>Natural areas</td>
</tr>
<tr>
<td><strong>New and innovative</strong></td>
</tr>
<tr>
<td>Community gardens</td>
</tr>
<tr>
<td>School gardens</td>
</tr>
<tr>
<td>City farms</td>
</tr>
<tr>
<td>Greenways</td>
</tr>
<tr>
<td>Skate parks</td>
</tr>
<tr>
<td>Town trails</td>
</tr>
<tr>
<td>Front porches</td>
</tr>
<tr>
<td>Cyberspace</td>
</tr>
</tbody>
</table>

### Table 2

*Some dimensions of child-friendly environments drawn from past research*

- Accessibility
- Diversity
- Control
- Mixed use
- Adventure
- Safe but not without risk
- Meaning
- Autonomy
- Socialization
- Convivial
- Serendipity
- Participation

**Children and participation**

What began largely as an advocacy process on the part of adults to expose the needs and defend the rights of children in design and planning has now become more of an accepted and mainstream approach to planning. While not all environments are
planned with children in mind or with them directly involved, more and more communities are attempting to include children in design and planning of environments they use. This has been a slow evolution involving several stages or distinct realms of children's participation.

Children's participation like participation in design and planning in general has evolved through several distinct stages from tokenism to more effective participation to institutionalization (Hart, 1992; Francis, 1999). Advances in thinking and methods in user participation in general have aided this evolution (Davidoff, 1965; Arnstein, 1969). Significant progress has been made on techniques that effectively involve children in design and planning (Moore et al., 1987; Lepore & Lorenzo, 1990, 1993).

Additionally, better practices aided by empirical research and theoretical advances have made more convincing arguments for the value of children's participation (Chawla, 2001; Hart, 1997; Moore, 1990). Funding that supports participation in design and planning has become more readily available and policy that requires participation is more common (Figure 1).

The changing culture and place of childhood

The development and requirements for participation has been directly effected by the changing place of childhood (Holloway & Valentine, 2000). Children's lives have become more structured and controlled (Amato, 1989). Their access to the outdoors is more limited and their use of structured places has increased. The result is that many children lack control over their daily lives. We refer here principally to childhood in developed countries, although there are some signs that these issues are entering the lives of children in developing countries as well.

In the western world including the United States and many parts of Europe, childhood has become increasingly structured and controlled leading some to suggest that childhood no longer exists. Childhood today finds little time or place in the contemporary city (Lorenzo, 1992, Francis, in preparation). This has resulted in part from parents' fears about the safety and security of their children (Blakely, 1994; Frost, 1995; Watt & Stenson, 1998; Scott et al., 1998; Harden, 2000). Problems of environmental pollution and toxics have also fueled this concern (Roberts & Dickey, 1995; Satterwaite et al., 1996). It also results from the 'adultization' of childhood where children's time is filled with organized activities such as sports, music and scheduled activities.

Increasingly children's lives are spent in institutions notably schools and daycare centers. When not in institutional settings, children are, in most cases, under adult supervision at home, in malls, or in more privatized public places (McKendrick et al., 2000). Much of their unstructured time is spent at home or school in front of computers. Playgrounds have become more ordinary and less challenging (Deveraux, 1991). Rarely do children use playgrounds without adult supervision today.

As children are driven more and more to places they use, the amount of childhood life is spent in cars, often stuck in traffic (Alexander, 1993). Traffic congestion and danger have kept children from using city streets in countries such as the United States, Britain and Italy. According to data released at an international conference in Turin on transport systems, Italians in 2000 were found ‘to spend an average seven years of their lives sitting in their cars and two years in the desperate search for parking space’. Some three billions hours are reported to be lost in traffic jams and the average time spent in getting from home to work has risen from 45 min in 1994 to over an hour and a quarter in 2000. On the same day, new car sales in Italy were reported to have increased for the third month in a row increasing 5-6 per cent over the same period in 1999’ (IHT, 2000). Recent research has shown that in several Italian cities such as Milan and (even) ‘LIVABLE’ Siena, more than 70 per cent of children are driven to elementary and middle schools by their parents.

The implications of this changing culture of childhood for participation are significant. As children's lives have become more institutionalized so has children's participation. It requires planners
and parents to rethink and modify past approaches to make children stronger advocates for their needs in planning.

The seven realms of children's participation

Looking back at the more than 30-year history of children's participation in design and planning, several stages or realms are evident. While there is significant overlap between each of the periods and participants, there are unique differences as well. Each period has its own history, identity, theory and methods. The development of each realm can also be traced to changes in the political and cultural context.

Some participatory planners have remained committed to specific realms while others have contributed to the development of new approaches or worked in multiple realms. This is due to the nature of environmental psychology and city design where people's disciplinary background range from psychology to landscape architecture, child development to planning, geography to urban design. While closely related, an understanding of the special characteristics of each realm may provide a useful starting point to more effective children's participation in the future. Each will be briefly discussed including its contributions and limitations. Table 3 summarizes some the similarities and differences of each.

Romantic realm: ‘children as planners’ Children's participation has its early roots in an ideological period that saw children as a distinct life stage. It viewed children as active designers and planners with design ideas different and often better than adults. We call this the romantic period as many believed that if only kids were the planners then environments would be more successful. This grew out of the work of a number of innovative designers and researchers in the 1960s and early 1970s including Spivak (1969), Moore (1990, 1993; Moore & Way 1997), and Nicholson (1971). They sought to involve children as planners and designers of playgrounds, community gardens, schools, and other places. It also grew out of early research on adventure playgrounds in Britain and Denmark where children built their own play environments (Cooper, 1970). This led some to conclude that children were the best designers and builders of environments for themselves. An additional emphasis emerged during this period was ‘children as futurists’ where children and youth were asked to image future cities and environments (Lorenzo 1983, 1985). This work contributed concepts to the children’s rights movement pointing out important individual as well as institutional benefits of participation (Boulding, 1969; Nicholson & Lorenzo, 1980). A common method used in this period as well as the needs realm is environmental autobiography where adults were asked to remember and draw their favorite childhood places (Chawla, 1986; Soebel, 1990). Progress during this period was celebrated at the ‘Childhood City’ sessions at the annual meetings of the Environmental Design Research Association (EDRA), at International Futurists Conventions, and was published in the Childhood City Newsletter (later to become Children's Environments Quarterly). One limitation of this approach is that it often ignored adult input as part of the participatory process, leading adult decision makers to overrule the children’s ideas. While this approach to children’s participation been not found to be realistic in the context of childhood today, it has led to the development of an understanding of important concepts of childhood. Much of this ideological focus continues today and can be found within other realms of practice and theory (Figure 2).

Advocacy realm: ‘planners for children’. This period, overlapping to a large degree with the romantic period, grew out the advocacy planning movement. It resulted from planning projects in the 1960s where citizens were not allowed to have a say in projects that affected their lives. First with adults and later with children, planners became advocates for the needs of the poor and powerless. While many of these efforts resulted more in stopping projects such as inner city highways and urban renewal projects than developing new plans and proposals, some led to positive changes such as the provision of recreational space for children. A major limitation with this approach is that it was not holistic and ignored the official decision making process. Other limitations included that children were ‘advocated for’ not directly involved in the design process. Professionals active in the realm include Bishop (1992), Goodey (1979), and Hester (1999). They contributed important techniques that showed how citizens and children could be effectively involved in large and complex design and planning projects. Randy Hester (1999) has provided a useful social history of the advocacy planning movement and its key participants. (Figure 3).

Needs realm: ‘social scientists for children’. This has been the most active and published research-based periods of children’s participation with work appearing
### TABLE 3
The seven realms of children’s participation in city design and planning

<table>
<thead>
<tr>
<th>Realm</th>
<th>Approach</th>
<th>Theory</th>
<th>Objectives</th>
<th>Audience</th>
<th>Key participants</th>
<th>Research advances</th>
<th>Design advances</th>
<th>Limitations</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Romantic</td>
<td>‘Children as Planners,’ ‘Children as Futurists’</td>
<td>Planning ‘by’ children. Children define and make their own future, often without adult involvement. Much of the ‘rights’ movement grew out of this approach.</td>
<td>Child defined cities.</td>
<td>Schools, Communities, Architects and Planners, Futurists</td>
<td>Individuals: Mayer Spivak, Nanine Clay, Simon Nicholson, Ray Lorenzo Organizations: World’s Futures Society, World Wildlife Fund, Childhood City</td>
<td>Contributed important concepts and case studies</td>
<td>Provided useful ideas about what cities would be like if planned entirely by children. Developed innovative methods and proposed children’s participation as a global issue.</td>
<td>Relied on children to envision and make their own communities, future environments, etc. Did not typically involve adults in process.</td>
<td>Still practiced by those seeking more child-generated idea of the future. Visioning has become the standard first step in official participatory process such as Agenda 21.</td>
</tr>
<tr>
<td>2. Advocacy</td>
<td>‘Planners for Children’</td>
<td>Planning ‘for’ children with needs advocated by adult planners</td>
<td>Represent the interests of children by advocating their needs as adult professionals</td>
<td>Citizen group; public planning bodies making decisions and plans that effect children’s lives</td>
<td>Individuals: Paul Hogan, Jeff Bishop, Karl Linn, Randy Hester Organizations: Planners Network, Association of Community Design Centers, Congress for New Urbanism, some private and public firms</td>
<td>Developed politically sophisticated methods and theories of participation</td>
<td>Not holistic. Often created separate plans and places. No attempt at consensus building with other interests. Outside those being ‘advocated for’.</td>
<td>Largely replaced by other realms</td>
<td></td>
</tr>
<tr>
<td>3. Needs</td>
<td>‘Social Science for Children’</td>
<td>Research-based approach that addresses children’s needs</td>
<td>Define the spatial needs of children and incorporate them into design</td>
<td>Largely academic but has expanded to include design and policy makers</td>
<td>Individuals: Kevin Lynch, Roger Hart, Clare Cooper Marcus, Florence Ladd, Robin Moore, Joost van Andel, Patsy Owens, Louise Chawla, Gary Moore Organizations: Environmental Design Research Association; American Horticultural Society; Urban Parks Institute</td>
<td>Contributed key findings and principles about what makes good environments for children</td>
<td>Sometimes did not recognize the importance of children’s participation in advancing knowledge</td>
<td>Still an energetic part of environmental design research</td>
<td></td>
</tr>
<tr>
<td>4. Learning</td>
<td>‘Children as Learners’</td>
<td>Participation through environmental education and learning</td>
<td>Learning outcomes of participation is as important as physical changes; Architects teach children about architecture</td>
<td>Teachers; Environmental Educators</td>
<td>Individuals: Doreen Nelson, Elaine Adams, Sharon Stine, Wendy Titman, Susan Goltsman Organizations: Landscapes for Learning; American Institute of Architects</td>
<td>Has contributed important methods</td>
<td>Increased use of natural environment and vegetation in outdoor places for children.</td>
<td>Designers and decision makers do not always utilize research knowledge; children are frequently not directly involved in social science research. Built projects not an important goal. Process changed perceptions and skills but not many physical places.</td>
<td>A specialized but active part of child participation projects</td>
</tr>
</tbody>
</table>

(continued on next page)
in journals such as *Children's Environments, Childhood, Journal of Environmental Psychology, Environment and Behavior, BEE: Bulletin for Environmental Education* and *Streetwise*. It seeks to use environmental psychology research to advance thinking about children's environments. It is an area of participatory activity made possible by significant advances in research on the environmental and place needs of children and youth (Hart, 1978; Heft & Wohlwill, 1987; Gorlitz *et al*., 1998). Researchers have shown that children have unique needs that should be considered in designing environments. This has included studies that show the importance of nature (Cobb, 1977; Chawla, 1986; Nabhan & Trimble, 1994), plants (Moore, 1993), and vegetation for children (Harvey, 1989; Moore & Wong, 1999; Fjortoft & Sagle, 2000). It also includes research that has demonstrated the differences of children growing up in rural and urban environments (Ward, 1978, 1988; Lynch, 1978). In addition studies have shown the importance of the larger neighborhood environment as a setting for children (van Andel, 1985; Homel & Burns, 1987) and the needs of adolescents in built and natural environments (Owens, 1988; Childress, 2000). This research has resulted from the often interdisciplinary work of geographers, psychologists,
sociologists, landscape architects, planners including Lynch (1978), Hart (1978, 1992, 1997), Cooper (1970), Marcus and Barnes (1999), Ladd (1978), Moore (1990, 1993 Moore & Wang, 1997), van Andel (1985), Owens (1988), Chawla (1986, 1995, 2001), and Moore (1985). Several design firms such as Moore, Iacofano, Goltsman (MIG) in Berkeley in the United States (Moore et al., 1987) and non-profit organizations such as the Children’s Environments Research Group at City University of New York and Natural Learning at North Carolina State University have worked largely in this realm. Advances in research on children’s environments have been presented at annual meetings of the Environmental Design Research Association (EDRA) and International Association for the Study of People and their Physical Surroundings (IAPS) and published in the journal Children’s Environments. A limitation with this approach is that it assumes that good social science alone can identify children’s spatial needs and that children themselves do not need to be directly involved in the design process (Figure 4).

Learning realm: ‘children as learners.’ A more recent period of children’s participation involves environmental learning and education as a central focus of participatory process. As more and more studies have documented that learning is an important outcome of planning and childhood experience (Carr & Lynch, 1969, Chawla, 1995; Lepore & Lorenzo, 1989), planners have worked to incorporate this into participatory processes with children. Key participants in this realm include Adams (1990) and Moore (Moore & Wong, 1997). Examples of projects that have incorporated this approach include architectural appreciation, built environment education, and learning from landscapes (Adams, 1990, Titman, 1994, Moore & Wong, 1997, Stine, 1999). This
approach often leads to learning and social change but not improved or changed environments. Children are often not directly involved in the decision-making process relying more on professionals or teachers to set the design or curriculum agenda (Figure 5).

Rights realm: ‘children as citizens’. A more recent movement has been to define and work to guarantee children’s rights in urban environments. First proposed by organizations such as the International Association for the Child’s Right to Play (IPA), a child’s right to play was later adopted by the United Nations in the Convention on Child Rights within a broad set of children’s rights (1989). This has been an important evolution in thinking and practice in children’s participation were children are seen as fully empowered participants (UNICEF, 1996; Bartlett, 1999; Bartlett et al., 1999). It involves principles of democracy, rights, and empowerment (Hart, 1992). People active in developing this realm include Hart (1997), Sattertwaite et al., (1996), Bartlett (1999), Moore (1990), Rivkin (1995) and Chawla (2001). Examples of projects of children’s rights include Children’s City Councils and Child Friendly Cities, both supported by UNICEF. The UNESCO led project ‘Growing Up in Cities’ is a current example of cross-cultural research and action taking place in several parts of the world (Chawla, 2001). A limitation with this approach is that it tends to focus more on children’s rights and less on their environmental needs (Figure 6).

Institutional Realm: ‘children as adults’. Recently, children participation, like its adult counterpart, has been moving toward an institutional period. Here children are often treated like adults, expected to have the same knowledge and power in the process. Participation is now generally required in many urban development projects in developed countries (Lansdown, 2000). Well intended, this realm often ignores the importance of more spontaneous and child-centered participation. It often results in limited environmental change or ideas that run counter to what children really want. It can also lead to proposals and ideas not supportive of good environments for children such as ‘Not in My Back Yard’ (NIMBYism) or cultural separation (Figure 7).

Proactive realm: ‘participation with vision’. The more recent realm is what is called ‘proactive participation’ (Francis, 1999). This reflects our current thinking and practice of participation as a communicative and visionary process. It moves beyond traditional forms of children’s participation that simply involves children to one directed at empowering children and adults to reinvent childhood and the places that support it. It recognizes children as children not just young adults that must behave and participate as adults. It attempts to not be just nostalgic about childhood but seeks to find ways to use planning and design to recreate childhood. It also incorporates the idea of a more child-centered or naturalistic childhood (Wood, 1993). Proactive practice with children takes advances in concepts about what makes good environments for children and combines them with correct principles and methods intended to generate genuine children and adult participation in the planning process. This realm recognizes participation as a communicative, educational activity (Herrinton, 1999). An important benefit of this approach to children’s participation is increased perceived control (Francis, 1989). The sustainable cities movement is a useful ally for this realm of child participation (Lorenzo, 1998, 1999a, b,
2000, *Local Environment*, 2001; Driskell, 2001). Limitations include that this approach may not be possible in every situation and that planners and designers need special training to work in this fashion (Francis, 1999) (Figure 8).

Some examples of proactive participation from the United States and Italy

To illustrate the more proactive mode of children participation, we offer two brief examples from our own participatory work in California and Italy.

Children in a Sustainable Community—Village Homes, Davis, California

U.S.A. Village Homes was designed and developed in the late 1970s as a model ecological and sustainable community (Corbett & Corbett, 2000; Francis, 2001). While not designed specifically as a child-oriented environment, it has been found to provide important opportunities and spaces for children (Francis, 1985). Open channel drainage collects all rainwater on the surface of the neighborhood landscape and uses weirs and small ponds to return it to the water table, rather than more expensive storm drain systems. This provides for water play for children and a more naturalistic landscape. Most plants are either native or edible increasing its habitat and wildlife value. Bird and insect life is abundant. The design of the neighborhood also includes the provision of unstructured play areas such as vineyards, orchards, and natural areas with a high level of play value.

Children were directly involved in the design of the neighborhood landscape including common areas and the Village playground. In designing the playground, children’s use of existing spaces in the neighborhood was mapped (Francis, 1988). They
were also asked to draw maps of their favorite outdoor places. In addition, children aged 8–12 were given instant cameras and asked to take photographs of their favorite outdoor places. This map of 'favorite places' was particularly useful in developing design ideas for the playground. Design workshops were also held with parents where the results of the research were discussed and children presented their own design ideas. This involved a proactive process between children and adults where design differences were clarified and negotiated.

Other common landscapes were designed with children's participation. For example, rather than designing and building the common areas between houses, the developers Mike and Judy Corbett set aside the construction funds and had the new residents design what they wanted (Francis, 2001). As a result, each common area is different. Ones with families with small children included custom-built play equipment while ones with older residents often have vegetable gardens (Figure 9).

**Children's participation in a city plan—Empoli, Italy**

Perhaps more than any other western country, Italy has recently officially embraced children's participation in planning. In the last five or six years, major architecture journals in Italy have devoted issues to children's participation. The Italian Architects Association and National Planning Association have signed a national agreement with Ministry of Environment for a national campaign including sponsoring projects and design competitions, training, and conferences on children's participation. There are currently hundreds of Italian cities in which some form of children's participation is transforming the urban landscape or the perception of children's needs and rights in planning.

One such example is the City of Empoli, a city of 48,000 near Florence. City officials decided to develop a new city plan through a major investment in children and youth participation. Citywide surveys were carried out in the City's High Schools and two pilot neighborhood workshops involving four elementary and four middle school classes in the planning of two peripheral 'problem' neighborhoods. The children's participation served as a catalyst for the involvement of adults in the city plan. The children's ideas and citywide consultation process led to numerous changes in the City's original general plan. For example, development proposals were reduced in some areas to allow for increased pedestrian areas and greenways for children. Several streets have been converted into child friendly 'woolfer' type streets. A historic farmhouse has been saved and will be developed into a children's urban farm and environmental education center. New buildings with innovative mixed uses were built around two new piazzas. The success of this process was recognized by the Italian government in 1999 when Empoli was awarded a first prize for 'Sustainable Cities' for small cities. The jury cited the 'Children's Participation' component of the plan as a 'most effective vehicle towards city-wide acceptance of sustainable principles and practices' (for more information see www.comune.empoli.fi.it).

**Conclusion and future directions**

Clearly the state of the art of children's participation has advanced beyond isolated romantic efforts and projects to more common and even national initiatives. While becoming more institutionalized and mainstream, child participation is a major area of environmental design proactive and research today. Yet considerable research and practice is needed to expand its influence. For example, we need a larger number of empirical studies that show the importance of children's participation in making good environments.

Future research and practice in children's participation in planning and design will draw to some degree from all past realms. What has been important is that past work has attempted to integrate the best principles and practices from environmental design and environmental psychology in the making of children's environments. Yet a central question with this work remains. Is children's participation
a way to create a more democratic world? Or is it a way to simply to create better places for children? This dilemma must be addressed in order for future practice to lead to positive environmental and community change. Nevertheless, participation promises to be an important and vigorous part of research and action in the future.

References


Notes

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