Teens in public spaces and natural landscapes: Issues of access and design

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Teens in Public Spaces and Natural Landscapes

Issues of Access and Design

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Abstract and Keywords

This chapter investigates past and current perceptions of adolescents and how these perceptions influence policies and practices around the design of public spaces. It explores the need for and benefits associated with public spaces, including natural landscapes, for adolescents. The chapter positions adolescents as a distinct landscape user group with specific spatial needs and examines ways to incorporate teens' developing needs, both physical and psychosocial, into public space design that facilitates their connection with local communities, prioritizing their engagement with public space, civic life, and natural environments. The chapter also discusses ways to harness the power of adolescents in environmental debate and in civic and natural disaster relief efforts.

Keywords: adolescent development, public space, design, policy, design guidelines, natural landscapes

For most adolescents around the world, the reality is that they have no obvious rights to public space, and their ability to access landscapes and nature is often more restricted today than in previous generations (Hart, 1987; Hart et al., 1992). As minors, adolescents are legally prohibited from property ownership and are often excluded from public spaces through design, policy, and society's ambivalence toward them (Bell et al., 2003; Childress, 2004). Further, there are concerns about access to safe public spaces free from danger, especially for girls and women (Daniel, 2016; Parikh, 2016). In these problematic positions, adolescents are often unable to explore and appropriate the outdoors for their own use and are inhibited in their ability to understand and engage with these wider environments.

While adolescents highly value natural environments for recreation, restoration, and socializing, spaces designed specifically for teens to engage with public spaces and to enjoy natural environments are uncommon (Chawla, 2002; Childress, 2000; La Rochelle & Owens, 2014; Owens, 1997, 2002; Ward Thompson et al., 2005). Disconnection from public spaces and natural environments is concerning, particularly for this age group, whose attitudes are important markers of long-term social change for the future (Wells & Lekies, 2006). This disconnect, in part, may be attributed to the negative public perceptions of adolescents generally and to adolescents in public spaces specifically (Austin & Willard, 1998; Males, 1996; Weller, 2007). All this matters because identities are being formed in adolescence, a period when people are establishing the values, attitudes, behaviors, and places in society that they will carry with them throughout the rest of their lives.

In this chapter, we investigate past and current perceptions of adolescents and how those perceptions influence policies and practices around the design of public spaces. By public spaces, we mean markets, parks, squares, streets, and beaches that are freely open and accessible to people (Daniel, 2016). We further explore the need

for and benefits associated with public spaces, including natural landscapes, **(p.362)** for adolescents. Third, we identify adolescents as a distinct landscape user group with significant spatial needs and discuss ways to harness the power of adolescents in environmental debate and in civic and natural disaster relief efforts. Finally, we examine ways to incorporate teens' developing needs, both physical and psychosocial, into public space design that facilitates their connection with local communities and prioritizes their engagement with public space, civic life, and natural environments. We discuss these issues with an awareness that we live in a global community where culture and conditions differ vastly for adolescents.

Teens and Public Spaces

Alienated Teens

While adolescence refers to an acknowledged developmental period, teenager is a socially constructed term (Weller, 2006) and has acquired symbolic significance (Jamieson & Romer, 2008). As such, we use the term teenager here to discuss adolescents' relationship with society because it is steeped in symbolism and social construction.

The research literature on teenagers' relationship to space, landscape, and the natural environment highlights their desire for a sense of belonging, welcoming, and community and the paucity of spaces meeting these types of needs (Driskell et al., 2008; La Rochelle & Owens, 2014; Ver, 2014; Weller, 2007). Recent studies, however, indicated that teenagers are excluded from, or not welcomed in, much of the public realm for a variety of reasons (Bell et al., 2003; Kato, 2009; Nemeth, 2006; Owens, 2002; Woolley et al., 1999). For teenage girls, their exclusion from public spaces can often be exacerbated by concerns about safety. In one study situated in New Delhi, 92% of females reported having been sexually harassed in public spaces (UN Women, 2013). Indian women felt uncomfortable resting, waiting, or sitting alone in these spaces. Rather, they preferred being in groups and out of the direct public gaze (Parikh, 2016).

To make public spaces safe, policymakers in some countries have limited the spatial world of teens and young adults, looking on these teens and young adults with suspicion, intolerance, and moral censure (Fischer & Poland, 1998; Malone, 2002). In fact, Owens (2002) argued that teens are often purposely designed out of public spaces, and that provision of facilities for teens may actually foster their exclusion, allowing adults to watch over and control the teens' activities. For example, skate parks, one of the few public spaces designed expressly for teens, are often coupled with banning of skateboarding from other community areas. By excluding teens from other public spaces, skate parks serve as a way to control youth behavior (Owens, 1997, 2002).

There are concerns that publicly and privately owned spaces, including commercial plazas, schools, parks, and playgrounds, may use safety as an excuse to heavily police and exclude "problem" individuals (Chiu, 2009; Fischer & Poland, **(p.363)** 1998). Efforts to exclude teenagers from public spaces have even spawned commercial products, including an ultrasonic deterrent marketed as "the solution to the eternal problem of unwanted gatherings of youths and teenagers in shopping malls and around shops" (Kids Be Gone, n.d.). Public space is considered an extension of the private domain of adults (Valentine, 2004), and keeping teens "invisible" in the public domain is a means of maintaining public order (Matthews, Limb, et al., 2000; Matthews, Taylor, et al., 2000; Sibley, 1995; Valentine, 2004).

However, teens have little choice other than to be in public spaces (Lieberg, 1995). Teenagers' vulnerable social position and lack of financial resources to appropriate their own spaces make them more dependent on public and open space than adults. Classified as minors, politically they have little or no influence on conventional spheres of decision-making (Weller, 2007). Without legal rights to space, they have limited ability to manipulate, modify, or occupy landscapes (Childress, 2004; Matthews, Limb, et al., 2000). Thus, teenagers are left to claim the leftovers in the array of planned public spaces (Childress, 2004; Hall et al., 1999; Matthews, Taylor, et al., 2000; Weller, 2007), such as parking lots, abandoned lots, and underpasses where adults are not commonly found (Matthews, Limb, et al., 2000).

Urban policy and design that limit teens' access to local public space and natural environments undermines children's right to their city and impedes the creation of child- and teen-friendly cities as outlined by the Child Friendly City Initiative, an embodiment of the Convention on the Rights of the Child (United Nations Children's Fund [UNICEF], 2014). The commitments of a child-friendly city include the right to be an equal citizen of their city with access to every service, regardless of ethnic origin, religion, income, gender, or disability, as well as the ability to participate in the social and cultural life of their community, to walk safely in the streets on their own, and to meet friends and play. While children have been afforded many "rights" by the international community and have been encouraged to participate in areas such as schools, community action, policy advocacy, and governance (UNICEF, 2006), realizing these rights is a different story. As it relates to policies around public spaces, there is little evidence of such involvement by children, but rather isolation from involvement. Isolating teens from the social life of their cities through design and policy further alienates teens from the chance to express their opinion on the city that they want and further limits their sense of belonging

and inspired engagement to influence decisions about their city (UNICEF, 2014). Alienating teens from public spaces thus reduces the social capital of neighborhoods and cities, making them less resilient to stressors they may face, such as natural disasters (Daniel, 2016).

Public Perception of Teens Manifests in the Public Realm

Not helping with this public perception of teenagers is recent controversial research suggesting that the current generation of American youth are relatively **(p.364)** narcissistic, earning them the label "Generation Me" (Twenge et al., 2012). Twenge and colleagues (Twenge & Campbell, 2009; Twenge et al., 2012) have presented research clearly illustrating the generational shift of youth toward being more self-absorbed, as evidenced by increases in narcissism scores on personality measures and decreases in their concern for others, their willingness to contribute to charities, in their expression of empathy for others, and their engagement in civic activities among the current cohort relative to earlier cohorts.

Broadly paralleling Twenge et al.'s findings are those of Owens (1997), who identified an increase in negative reporting on teen issues from 1952 to 1992. Reporting on teen social problems climbed by 79% and reports on teen substance abuse by 93% over this period. Paradoxically, a review of US juvenile crime rate statistics revealed that property crime committed by juveniles aged 10 to17 has declined since 1980 (Snyder & Sickmund, 2006). Media depictions correspond with and arguably reinforce public perceptions of teens, perpetuating images of delinquency, violence, and nonconformity that are threatening, particularly in public spaces (Osler & Starkey, 2005; Valentine, 2004; Valentine & McKendrick, 1997). Twenty-two US states have made it a crime to "disturb" school, which includes "boisterous" behavior and "annoying conduct" (Ripley, 2016). This influences treatment of teenagers in the public realm: Despite not being engaged in disruptive behavior, they may be asked to leave public spaces under the assumption that they will cause trouble (Owens, 2002). Teen presence and activities thus may not be seen as a legitimate use of the public realm and may be considered a potential threat to public order (Matthews, Limb, et al., 2000; Matthews, Taylor, et al., 2000; Morrow, 2000).

Antisocial and at-risk behaviors among adolescents are not isolated to the United States. UNICEF reports have referenced adolescence as the time period when people from many countries engage in many at-risk behaviors, such as drug use, acts of violence, and unsafe sex (UNICEF, 2011). The unfortunate consequence is that it leaves people in these countries with negative perceptions of adolescents. In Africa, for example, youth are often perceived as being "dangerous, criminal, decadent, and given to a sexuality that is unrestrained" (Diouf, 2003, p. 4).

Teens Need to Be Seen Positively

In recent years, there has been a strong emphasis on the need to recognize the positive strengths of adolescent development, and not just problems and deficiencies (Lerner et al., 2003), and the importance of changing public perception to realize that the vast majority of teenagers are not bad, a nuisance, or narcissistic. In their interpretation of Twenge et al.'s (2012) data, Arnett et al. (2013) found no compelling evidence that there has been an increase in narcissism and also found that other, more positive, measures, such as civic engagement, showed no significant declines between 1976 and 2006 (Trzesniewski & Donnellan, 2010). Further, Arnett et al. (2013) argued that the rate of risky behaviors has gone down over the decades, **(p.365)** citing decreases in automobile fatalities, teen pregnancy, and criminal activities among youth. In light of these findings, Arnett et al. (2013) raised concerns about the dangerous message that Twenge et al. (2012) and others are sending when they portray youth as "selfish, morally deficient, and unconcerned about others" (p. 19). Such a message may lead to teens responding to negative treatment and becoming alienated from society and, therefore, not receiving the support they need to become constructive, contributing members of society. Globally, there has also been a recent emphasis by international organizations in partnership with companies to focus on empowering youth around the world by identifying and building on their strengths (see UNICEF, 2017).

Teens Need Public Spaces for Their Development

From a developmental standpoint, local environments play an important role in teens' development and social identity formation (Chiu, 2009; Lieberg, 1995), and public space in particular is an important place of transition, moving away from the restrictions of childhood toward the independence of adulthood (Matthews, Limb, et al., 2000). The adolescent period marks a shift toward greater independence in activities and choices (UNICEF, 2011). This shift is an important development in personal, social, and civic identity. Teens use public space as a stage to test ideas and train for adulthood by gaining local knowledge and input on their community (Lieberg, 1995). Socializing with others helps to develop social competencies, to begin to explore personal and social identities, and to foster young people's identities as citizens (France, 1998; Weller, 2007). Identities formed in adolescence are important for establishing the values, attitudes, and behaviors carried throughout life (Wray-Lake et al., 2010). Public spaces, whether plaza, street, or park, offer arenas for teens to explore and express themselves as they develop their public selves (Matthews, Limb, et al., 2000) and can facilitate teenagers' engagement as citizens (Weller, 2007).

However, the literature indicates that we are not currently meeting the public space and environmental needs of people across the world, and that this is detrimental to their well-being. For example, many of the megacities in Asia have high levels of pollution, noise, congestion, and crime rates and few useful public spaces, conditions not supportive to human development (Asia Development Bank, 2017). Further, specific subgroups, such as girls and teens with physical challenges, have limited access to safe public spaces, which can then hinder their physical, emotional, and social development. For example, in India, while males are at ease in most public spaces, females feel more comfortable in some versus others (Parikh, 2016).

In many parts of the developing world, youth engage in manual labor jobs, such as farming, as a form of livelihood. In fact, nearly a quarter of the world's work youth are involved in agriculture (UNICEF, 2011). Having good, safe public roads is important to transport goods from rural villages to urban markets, ensuring **(p.366)** their livelihood and a sense that they are being productive members of society (Daniel, 2016). Research has indicated that a sense of belonging and the perceived ability to contribute to the environment and experience a sense of personal control are important factors in adolescents' mental health and identity formation (Driskell et al., 2008; Evans et al., 2005). Place is also a highly specific and important feature of the development of teenage identity and sense of self (Vanderbeck & Dunkley, 2003).

Allowing adolescents to understand, evaluate, and participate in public spaces and natural landscapes around them is thus critical for these adolescents' development and could have long-term significant effects on their attitudes toward environmental degradation and conservation behaviors. Public spaces and natural environments provide an ideal venue for the practice of social participation and allow users to see and understand many social problems (Woolley et al., 1999). Though modern society may be inclined to view teenagers as apathetic with respect to political and community life, they in fact manifest clear civic values, such as supporting order and opposing pollution and litter (UNICEF, 2011; Weller, 2007; Woolley et al., 1999). While teens may have an alternative understanding of community, they are involved in novel forms of civic engagement that are (re)shaping their environments (UNICEF, 2013; Weller, 2006, 2007).

Teens and Natural Landscapes

Attitudes toward the environment provide a bellwether for the importance of ensuring that teens are engaged with the natural landscape. Research indicated that contact with nature is associated with environmental attitudes and ecological behaviors (Collado et al., 2015; Wells & Lekies, 2006). For example, studies of environmental activists provide evidence of the importance of early exposure to nature in childhood in fostering later involvement in environmental activities (Chan, 2009; Chawla, 1999; Horwitz, 1996; Matsuba et al., 2012). Hence, keeping teens from participating in nature, and discussions and decisions around the natural landscape, including social, political, and ecological aspects, may lead to a decline in their concern for conservation efforts in the future.

In fact, recent studies have identified a decline in the environmental concerns of teens over the last 30 years. Wray-Lake et al. (2010) examined trends in high school seniors' environmental attitudes, beliefs, and behaviors from 1976 to 2005. The results indicated that environmental concerns of adolescents increased into the early 1980s, but then declined across the remainder of these three decades. These trends clearly indicated that youth in the past two decades were not as willing as were young people in the late 1970s to endorse conservation behaviors, such as cutting down use of heat, electricity, or driving and increasing the use of bicycles or mass transit (Wray-Lake et al., 2010).

Most of this research takes place in a North American context; less is known about the changing youth attitudes about the environment in other regions of **(p.367)** the world. While there are youth movements worldwide in response to climate change (UNICEF, 2011, 2012), it is unclear what percentage of the youth population are aware of and engaged in environmental activities. Fein (n.d.) studied adolescents' attitude toward the environment in the Asia-Pacific region and found modest awareness of environmental concepts and issues. In Australia, Theilking and Moore (2001) found low environmental awareness and behavior among their university sample.

Adolescents' opinions and attitudes are important markers of long-term social change (Wray-Lake et al., 2010). Recent declines in environmental engagement among adolescents signal the need for a renewed focus on environmental education (Fein, n.d.; Wray-Lake et al., 2010) and for immersive exposure to natural environments. Appreciative outdoor activities (e.g., time outdoors enjoying nature), consumptive outdoor activities (e.g., hunting and fishing), media exposure (e.g., books and television), and witnessing negative environmental events (e.g., seeing a special outdoor area be commercially developed) during one's youth were predictive of later life ecocentric versus anthropocentric beliefs (Chawla, 1999; Ewert et al., 2005). Such experiences allowed significant exposure to natural environments and also provided both formal and informal education about the natural environment.

Unfortunately, relying on the education system as a delivery method for environmental education and opportunities is not realistic in many developing countries. In many sub-Saharan countries, the majority of adolescents do not complete primary school, let alone secondary school (UNICEF, 2012). In Uganda, few of the adolescents who are fortunate to attend school will participate in innovative programs around environmental education and engagement because most schools focus on traditional courses, such as English, math, social studies, and science, and do not have resources to expand beyond these core subjects (UNICEF, 2015).

Natural Spaces as Places of Retreat

While facilitating a connection to nature is essential for supporting and encouraging responsible environmental attitudes, beliefs, and behaviors, it is also essential to mental health and well-being, regardless of whether individuals reside in rural or urban environments (Maas et al., 2006). Research indicates that exercise in green settings improves mood, self-esteem, and affective and cognitive restoration (Bagot et al., 2015; Barton & Pretty, 2010; Mitchell, 2013). Natural environments are particularly rich in the characteristics necessary for restorative experiences, such as relieving stress and focusing attention (Kaplan, 1993). In Japan, researchers have studied the effects of "forest bathing," referring to making contact with the forest and immersing oneself in its atmosphere (Park et al., 2010). Park et al. (2010) reported a significant reduction in physiological stress-related measures such as cortisol levels, blood pressure, and pulse rate among those who were assigned to the forest bathing condition compared to those who were asked to walk in the city instead.

(p.368) A primary quality that defines restorative places is the psychological comfort they provide. These are often places that provide opportunities to spend time alone, escape everyday life, think, and reflect. For most of their lives, teens have been under the careful watch of parents, teachers, or other adults; the teenage years are often their first opportunity to spend time alone and become more comfortable with solitude (Larson & Richards, 1989). Thus, certain aspects of adolescent development may be overlooked if landscape design focuses strictly on public social gathering places. Places to be alone, particularly for teens, are not often a consideration in the design of public spaces. Often, such places are designed so intimacy and privacy are not possible, prioritizing surveillance and safety instead. Secluded yet safe places are needed (Owens, 1997), particularly those that provide a connection with nature (La Rochelle & Owens, 2014). Teens express appreciation for natural landscapes, considering them among the most valued types of outdoor spaces, particularly natural parks or undeveloped agricultural lands (La Rochelle & Owens, 2014). These places were valued for being restorative, with qualities such as beauty, the opportunity to be alone, and specific natural elements such as the grass, trees, and animals.

Facilitating Youth Engagement

While we have argued that facilitating teens' access to public and natural spaces is essential not only to the creation of child-friendly cities but also for their healthy development, prioritizing "inclusion" and ignoring engagement are also problematic. Iveson (2006) argued that focusing on inclusion through policy and design is fundamentally limiting as it is still dominated by a vision of social control. Engagement can be positioned as an alternative to the inclusion/exclusion framework (Iveson, 2006). Engagement embraces uncertainty and does not require a predetermined expectation for behavior. This approach should "not require young people to stop being angry about their place in the (adult) world in order to be valued, but rather seeks to engage with young people in building a shared project for social change" (Iveson, 2006, p. 50). In the next section, we present a case study of how teens are involved in shaping their space.

The Project Morrinho Case Study: The Power and Potential of Teen Agency

Project Morrinho is a teen-conceived, teen-directed play project that has ongoing a group of 20 local Brazilian teens to engage in serious and sustained reflection of their community through mimetic play for over 15 years (Angelini, 2013). The 4,000-square-foot maquette of a real-life favela in Rio de Janeiro is built on a small hill, after which it is named, abutting the city it represents. The model is constructed from painted terra-cotta bricks, mortar, detritus, and repurposed **(p.369)** objects and is populated by thousands of avatars—1-inch figurines that represent members of their community. These figurines are multiplayer characters in a simulated urban reality that includes the everyday drama of police, criminal, and civilian. These avatars are used in role-play games where the boys transform them into hundreds of different characters with different voices and histories (Angelini, 2013). Players have invested thousands of hours of labor, constructing and maintaining their areas, modeled after a real-life favela. All the players have been residents of local favelas, and new players are expected to build and maintain their own part of the model to participate and to contribute to maintenance of the common spaces (Angelini, 2013).

The model and its role-playing game allow the participants to engage in certain narratives about their community, exploring issues such as class, race, economics, corruption, and crime and positioning themselves within the social order of the everyday world (Angelini, 2013). Angelini, an ethnographer, observed that the play at Morrhino was not escapism, but rather a form of commentary where teens "explore the reality that is all

around them and circulates through power relations, ideology, and media representations" (Angelini, 2013, p. 195).

Morrinho was conceived outside of what could be considered traditional forms of engagement, which are typically inspired by government initiative, nongovernmental organizations (NGOs), art, or academic institutions. The model itself is a theater for youth engagement and participation in their community, allowing the participants to grapple with aspects of their own life. It is also an act of expression, demonstrating a set of beliefs through representation and the mechanics of the game.

Morrinho has been recognized for its aesthetic value and ingenuity and has become a popular international exhibit and tourist attraction. However, the project was not always so well received. The boys who first built Morrinho were chastised for the age and gender appropriateness of their play (Angelini, 2013). The police who first stumbled on Morrhino accused the youth of building a three-dimensional map for tactical invasions on other favelas, suspicious that the boys had ties to a local drug gang. They were ordered to dismantle the model at gunpoint, but refused, and the model was later dismissed as harmless child's play. What is clear is that, through play, the youth built an important working knowledge of their community. Planners in Rio took the opportunity to engage with its participants to better understand favela youth's perspective of the city (Angelini, 2013).

Other Ways Youth Have Been Engaged

Tapping into the on-the-ground knowledge and agency of teens is an important strategy. Teens (and young adults) have been at the forefront of global justice and social change movements, including the American civil rights struggles, the "Chipko" movement in India, and the Palestinian youth's intifada challenge of the Israeli military (Quiroz-Martinez et al., 2005) As documented by UNICEF's **(p.370)** The Participation of Children and Young People in Emergencies, teens have been on the front line of natural disaster relief, instrumental in the building back of communities (UNICEF, 2007). After the 2004 tsunami in Southeast Asia, for example, children and teens made significant contributions by providing emotional support, helping find food and shelter, and joining guard duty. Some of their activities preceded the action and implementation of aid agencies (UNICEF, 2007).

Such demonstrated capacity in the wake of natural disasters and the range of activities they have undertaken have led organizations to advocate for youth participation in disaster preparedness and mitigation work, assigning particular roles and actions to youth in the event that emergencies occur (UNICEF, 2007). This can have an especially significant impact in the global south, where youth make up a large portion of the population (UNICEF, 2007). Youth participation in relief, recovery, and rehabilitation helps them feel valued; is an antidote to depression, frustration, and boredom; and is considered one of the best therapies for dealing with traumatic events (UNICEF, 2007).

From a global perspective, evidence suggests that teens and young adults are an attractive target group to engage in leading the development of a culture of environmental sustainability (Riemer et al., 2014). Studies suggested that more youth-based environmental engagement programs (EEPs) are needed to help combat the impact of climate change (Sayal et al., 2016). Engagement programs can include a wide variety of activities, such as conferences, organizations, afterschool activities, and community and political engagements. These activities can be integrated into formal education, but often they are independent and community based.

Teen-centric Design and Spatial Characteristics That Support Teens

With few precedents of spaces strategically designed to invite and accommodate teens, this section focuses on design strategies recommended by research on the spatial and environmental needs of this age group, expanding on strategies and offering possible applications to enhance teenagers' connection to their communities.

Hanging Out

Lieberg (1995) identified two landscape characteristics that support the specific needs of teens: places of retreat and places of interaction. Places of retreat afford teens the opportunity to withdraw from the adult world and into their personal spaces or the social world of their peer group, whereas places of interaction allow teens to "meet and confront the adult world" (Lieberg, 1995). In terms of landscape opportunities, retreat and interaction are characteristics that can be found in both urban and natural public space settings. While teens look for a variety of **(p.371)** recreational activities in their local environments (Weller, 2007), the primary activity that public space can support for teens—whether in retreat or interaction—is hanging out.

Accepting and embracing "hanging out" as one of the primary ways that teens spend their time and recognizing this activity as an acceptable use of the public realm will better serve this specific landscape user group. In terms of evaluating the quality of the spaces they live in, the opportunity to hang out is highly desirable to young teens (Chawla & Malone, 2003; Weller, 2007). Growing Up in Cities (GUIC), an international effort to understand the youth perspective in urban planning, compiled a wealth of material using participatory action

research with young people in low- and mixed-income neighborhoods. The resulting "child-based" indicators described positive and negative neighborhood characteristics, including two main qualities: communities where teens felt accepted by adults and local spots where they could hang out (Chawla & Malone, 2003). Hanging out happens in everyday places that have a range of characteristics. They can be in highly visible public locations with spaces that also allow users to fade into the background, what Lieberg (1995) described as "backstage" into border zones for withdrawal and privacy. Hangout spaces can become "haunts" that are regularly visited over and over and used for socializing (Childress, 2000; Lieberg, 1995; Weller, 2007). However, hanging out is a "roving" activity, creating a web of hang out spaces in teen geography and community life (Lieberg, 1995; Matthews, Limb, et al., 2000; Weller, 2007).

Hanging out and walkability.

The GUIC child-based indicators also identify the importance of places where youth can navigate freely and safely to meet friends and participate in activities (Chawla & Malone, 2003). Teen landscapes should be walkable, helping make them easily accessible, as well as promoting active transport through the landscape (Carlson et al., 2015; Kurka et al., 2015). Walking (or riding bicycles) appeals to other needs of teens as well. Childress (2000) described a characteristic "right-nowness" of teenagers, as their focus is on the immediate in thought and action as they move through the world. This focus on the immediate has the side effect of making teenagers susceptible to boredom. The ability to walk to an appealing destination, by themselves or with friends, is a means to satisfy this need for immediacy (Childress, 2000).

Spatial characteristics of hanging out.

Hangout spaces are flexible, accommodating a single person and embracing different scales of groups (Childress, 2000; Lieberg, 1995). This can be expressed in the scale of the space as well as through spatial elements like seating or other site furnishings. Seating options are critical, including flexibility in orientation and posture, design and arrangement, and placement (Childress, 2000). Researchers at the play equipment design company Kompan Incorporated determined that **(p.372)** teenagers sit on benches differently from adults, preferring to sit up high with their feet propped, leaning, and huddling (Owens, 2002). Holahan (1978) found that successful outdoor spaces at a housing project were characterized by seating arrangements that simultaneously facilitated informal social interactions and presented a vantage point to the activities of those nearby. Placement of seating is thus important. Teens want to socialize with their friends in public. However, park designs typically include benches scattered along pathways that are for single users or couples and do not encourage gatherings and large-group conversation (Owens, 2002).

Good design for teens also has to take into account bringing people together in a way that seems accidental and allows people to retreat easily. Thus, teen spaces are best located near paths to facilitate easy entrances and exits, making entering and exiting the space a definite social act (Childress, 2000). Anchoring objects to lean on, whether seating, tables, planters, walls, pillars or corners, create comfortable sites for social interaction (Childress, 2000). Spatially, Childress (2000) observed that teenagers choose small and strongly bounded spaces that are often enclosed on two or three sides. This finding was echoed in the GUIC study, which revealed that young people appreciate localities with strong geographical boundaries (Chawla & Malone, 2003).

In addition to the need for togetherness, teens need places of retreat for hanging out, providing stillness and calm as a counterpoint to the constant motion of their day (Childress, 2000; Lieberg, 1995). To facilitate this, places of retreat should provide access to nature and offer views of the landscape. Childress (2000) connected this need to the introspective nature of adolescents, their basic developmental task of finding themselves and meaning in their world. Situating prospect-refuge experiences strategically to reveal a view and the activities of others while recreating in the park is ideal for teens (Owens, 2002). This safe vantage point also affords the opportunity for people watching, which is a strong draw for teens. Platforms that raise the viewer up offer more extent and drama to the view. Strategically placed swings that allow users to fly over the landscape also work well for teens.

It is also important to identify hanging out as a program element in and of itself. This approach could be applied to the regional parks mandate as a means to accept and accommodate teen users. Childress critiqued the American park systems' preference for "program" over "hangout" (Childress, 2000). In his history of the American parks system, Cranz (1982) traced this idea back to a nineteenth-century emphasis on structure and scheduled activities for groups segregated by age and sex. For the parks system, lack of activity is seen as problematic rather than as an end in itself.

Creative Space Making

The design of public spaces needs to be flexible and adolescent friendly in order to accommodate the fact that teenagers have different needs, values, and priorities **(p.373)** and, as a result, often use public spaces in ways different from other age groups. One approach has been to design dedicated spaces for teens. However, these spaces, despite the best of intentions, have been critiqued as largely an excuse to design teens out of other

public spaces (Owens, 2002). In effect, such approaches isolate rather than integrate teens into the wider society. Further, places planned explicitly for teens, such as "teen centers," may be shunned by teens because they may be considered "uncool" and represent the planner's agenda and interpretation of what teenagers are supposed to do, rather than that of the adolescents themselves (Childress, 2000).

An alternative approach to design and policy on adolescent accessibility is to integrate teens into existing public areas by layering teen-centric design onto public spaces, rather than developing areas specifically for teens. This approach is responsive to the needs of teen users. Most adolescent behaviors and activities do not need specific environments because they can be performed in a variety of settings (Childress, 2000; Owens, 2002). Many of the aspects that adults value and require from landscapes are similar to those expressed by teens, such as views of nature and opportunities for recreation, restoration, and socialization in safe environments (Gearin & Kahle, 2006; La Rochelle & Owens, 2014). Providing for multiple user groups can be addressed through flexible site programming. The move toward institutionalized activities in childhood and adolescence, such that the majority of their time is expected to be organized and supervised, has resulted in youth activities taking place in formalized and organized settings that intensify the spatial segregation of generations (Rasmussen & Smidt, 2003). While teens may be enrolled in specific recreational programming, this model is averse to the flexible hangouts that teens require. Indeed, youth in the international GUIC study identified neighborhoods with a range of spaces for unprogrammed activities as a positive feature (Chawla & Malone, 2003).

Teens appear adept at identifying underutilized space and considering multiple uses for landscapes (Gearin & Kahle, 2006). Chiu (2009) described how skateboarders' use of public spaces often contradicts or reinvents intended uses. They identify niches for skateboarding, noticing and using details in the landscape, such as handrails and planters, which are typically unnoticed or ignored by other users. Another study examined adults' and teenagers' thoughts on urban green space in Los Angeles, finding that adults focused on activities and cited a need for additional recreation-oriented parks for teens (Gearin & Kahle, 2006). In contrast, no teens suggested playing fields or skate parks. Their focus was on modifying places to be accessible to youth and flexible enough for multiple, unstructured uses. Teens, unlike the adults, identified places that were typically overlooked in terms of greening opportunities, such as the neighborhood underpass and local alleyways (Gearin & Kahle, 2006). As Childress (2000) observed, while asphalt painted with white lines may represent a parking lot during the workday, in the evenings it can become a meeting hall, cycle track, and skate park, among other things.

(p.374) Underutilized and undervalued spaces appear in many forms, and some of the most successful have been sites that allowed for constant manipulation by teens so that they can challenge themselves and where they are allowed responsibility to accomplish real things (Childress, 2000). Nature and natural materials can provide some of the most flexible spaces for this sort of activity, in addition to providing many of the important mental and physical health benefits described previously.

Giving teens the ability to appropriate and modify spaces in their local communities challenges the notion of teenage apathy. The shaping of local spaces empowers disenfranchised adolescents to become political actors through "developing and redeveloping" areas within their communities. Participation in constructing one's surroundings heightens the meaning of places and gives people a greater sense of control. It also highlights the need for a broader societal acceptance of teenagers as active citizens (Weller, 2007).

Conclusion

Adolescents' developmental needs and emerging identities must be supported by inclusive and welcoming public space design that engages them in their physical and social worlds. Rather than public spaces that seek to marginalize teenagers, flexible designs that are considerate of diverse and multiple users can encourage teenagers' participation in society, increasing cross-generational contact that can help break down stigmas, fears, and perceived barriers across age groups in order to promote teenagers' civic engagement and help to nurture future stewards of society and the environment, both natural and built.

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