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Exploring Interspace: Open Space Opportunities in Dense Urban Areas

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Abstract: Using ideas from landscape ecology, this paper explores how small open spaces can aid urban forestry efforts in dense urban areas. A case study in Chicago illustrates the physical and social lessons learned in dealing with these spaces.

INTRODUCTION

Interspace is a space, especially a small or narrow one, between things or parts. Interspace occurs at many scales and in many contexts, but is usually thought of as leftover, lost, or forgotten space. In landscape ecology, interspaces include small patches and narrow corridors of open land between formally recognized properties or land uses. These fragments are defined more by the edges or boundaries of recognized spaces such as lawns, parks, or buildings from which they are excluded than they are purposeful spaces themselves.

Although not often talked about at the landscape scale, interspace can provide important urban forestry benefits, especially in dense urban areas that lack opportunities for increasing traditional types of open spaces. This paper explores the landscape ecology of urban interspaces, and discusses how interspaces are perceived and used by urban residents. A case study in Chicago illustrates the physical and social opportunities and constraints encountered in developing and managing urban interspaces.

IDEAS

In densely developed urban areas, interspaces are likely to be small patches in a city lot (3200 sq. ft.) or smaller in size and corridors less than 15 feet in width. Examples of common urban interspaces include fence lines, parkway strips, landscape patches or strips such as parking lot islands, and separated patches functionally cut off from main open spaces.

From an ecological perspective, interspaces are constrained in their ability to function like healthy urban forest ecosystems for several reasons. Their small size limits ecological diversity and often makes it difficult to sustain trees. Their high edge ratio makes them prone to invasion by weeds and difficult to maintain. Exposure of interspaces to full sun or full shade hinders many plant species. And the soil of urban interspaces is often compacted and low in organic material. Despite these disadvantages, other features of interspaces can enhance ecological function. Although interspaces may be small in area, their high frequency in the urban landscape in terms of total length (corridors), density, and dispersion is a great potential asset. Additionally, their close proximity to one another gives them the potential to function as an interconnected network. And finally, because the vegetation of many interspaces differs markedly from adjacent land uses, they can contribute significantly to the heterogeneity and contrast of the urban landscape.

From a human perspective, interspace is usually overlooked, under used, or otherwise perceived negatively. Its small size hinders most traditional uses of outdoor space, reducing its perceived value. In some cases "volunteer" or planted trees in such spaces are perceived negatively for functional and amenity reasons. Many interspaces lie in a grey area of quasi-public/private ownership: they are not being used by the owner, yet are not formally open to public use either. Their "no-man's land" status leaves interspaces open to neglect and abuse. On the other hand, interspaces have some useful structural features for serving urban open space needs. Most occur in highly visible areas, and they are often very close to where people live or work. And, although they are often overlooked, with the right design and management interspaces can become attractive, useful, and productive spaces in their own right or can showcase buildings and spaces they adjoin.

CASE STUDY

Physical and social constraints and opportunities of urban interspace were examined in a case study of the GreenEdges project in Chicago. This project is based on the idea that, through community greening efforts, public and semi-public interspaces can be converted from unused or misused negative space to positive and productive places that serve open space needs and increase the ecological productivity and sustainability of urban areas.

The GreenEdges Project is located in Rogers Park, a community area in Chicago that has the city's second highest residential density-- more than 33,000 residents per square mile. A 1990 assessment found Rogers Park in great need of new park development; although it recommended that 54 additional acres of open space be acquired to meet minimum standards, it noted such opportunities were very limited.

Two subsequent open space plans have examined how new forms of open space can be provided. CitySpace is a City of Chicago-wide planning initiative that has examined open space needs and opportunities. Rogers Park 2000 is a community planning effort to examine open space and recreation along with other community issues. Both efforts have identified the potential value and usefulness of small neighborhood spaces in filling open space and recreation needs for dense urban areas. In this context, GreenEdgeswas designated a CitySpace Model Demonstration Project.

The GreenEdges Project began in 1989 as a block club project to revitalize an abandoned landscape strip separating a public building from an alley behind residents' homes. This success led neighbors to green additional spaces nearby. As new sites were taken on, they started to form a green edge around the neighborhood, establishing a physical identity as seen from outside the neighborhood and a social cohesion as experienced from within. As partnerships formed with neighboring block clubs, businesses, and public institutions, efforts were unified under the "GreenEdges Project" for identity and funding purposes.

Currently, 18 spaces are being managed by project members, including gateway planters at key neighborhood entrances, fence lines and parkway strips planted to demonstrate and test various native and ornamental plant materials, and small landscape patches planted to frame and beautify neighborhood municipal buildings and/or function as community gardens for flowers and vegetables.

LESSONS LEARNED

Although the size of interspaces limits activities mainly to greening projects, these projects have yielded a range of leisure, aesthetic, social, biodiversity, and safety benefits to the community, and have attracted individuals across age, gender, and ethnic groups. The following lessons learned from our six years with the project have increased our ability to work within the physical and social constraints and opportunities related to greening neighborhood interspaces:

Site diversity and sustainability increase with the size of interspaces: Larger spaces are better at accomplishing these goals than smaller ones, and patches are easier to care for than linear spaces. Large areas allow greater plant diversity, while small spaces require plants adapted to adverse conditions. Our most successful spaces combine tree, shrub, and ground cover layers that imitate the structure and function of a forest ecosystem, if only on a symbolic level.

Soil modification is highly desirable: Many interspaces have poor soils, and soil amendments prior to planting can make or break efforts. In our project, access to a free supply of woodchips and mushroom compost greatly supplemented topsoil purchased with small grants.

Plant selection is critical: Low maintenance and high tolerance to adverse site conditions are top goals of GreenEdges. We use many drought resistant native and introduced species, and are testing new species constantly. Due to space considerations, small trees and shrubs are often favored over large trees, and prairie grasses and forbs or hardy perennial and annual flowers are often chosen for the smallest plots.

Maintenance is intensive: Because of size constraints and related implications, interspaces require regular maintenance. In the GreenEdges Project, some sites suffer from extreme exposure to sun and wind, and in dry periods need to be watered. Many sites also collect blowing litter, which can easily detract from all the positive efforts put into them, Finally, most sites require periodic weeding.

Isolation and fragmentation of open space should be minimized: For example, in areas where safety or utility routing is not a problem, sidewalks could be located next to streets, relocating the traditional parkway strip closer to buildings. This would eliminate much of the trampling and abuse that happens when such strips are isolated, and would give property owners a greater sense of ownership and responsibility to care for the space.

Although our experiences with the physical aspects of interspaces have been very instructive, our most important lessons relate to the social dimensions of interspaces:

People's concern for interspace decreases with distance to their doorsteps: Many homeowners take on projects on the parkway strip in front of their homes or in the alley behind their garage, but fewer help on sites further away. As ownership becomes more ambiguous and routine care less convenient, people are also less prone to invest their time. Once they are committed to "the big picture," however, distance to other neighborhood sites is less of a factor.

Signs of care and changed use are critical: When interspaces that have long been neglected or abused are taken over for greening, positive improvements may not always be recognized or accepted by those who come into contact with them. Woodchip mulch appears messy if it spills onto sidewalks, and young perennials may not be obvious to passersby in the first season of growth. Increased maintenance; use of edging, signs, and names given to each site; and other visual and verbal cues can help demonstrate care and use of new spaces.

Visible activity is important: Negative perceptions and behavior are often changed through personal contact with people working on sites. Vandalism, flower picking, and littering have been minimized by direct contact with these individuals. Over time, awareness and appreciation of such areas have grown, as has participation in greening efforts.

Site context is important: In some highly visible landscape patches, we have opted for hardy but showy plant materials in formal designs. Regular maintenance here is critical, and good soil preparation and access to water help ensure the success of such spaces. Less visible areas allow for greater experimentation with plant materials and less diligence in maintenance.

Species diversity can be beneficial and instructive: An important educational goal has been to display a fuller range of plant species suited to urban settings. We have worked with local agencies on this goal, and have passed on knowledge through personal contact with residents and building managers. On-site signs can help interpret various thematic gardens, such as our native prairie garden. There, seeds from rare plants grown for the Nature Conservancy's Wild Garden Program are harvested for use at forest preserve ecological restoration sites. Plant diversity has led to a greater number and diversity of butterflies, bees, worms, and other species of interest.

Human diversity is also necessary: People with a variety of skills and interests are needed in greening projects. Site preparation often requires heavy labor, and those who may not consider themselves gardeners often get involved in garden construction projects. Others help with planting, watering, and litter pickup. Youths help on many projects, and a special garden involves young children in neighborhood greening. Finally, projects cut across the cultural and economic diversity of the neighborhood, uniting neighbors in a common purpose.

Greening can connect neighborhoods: Greening can be a contagious activity, and the GreenEdges Project continues to expand beyond its original boundaries into adjacent neighborhoods. Greening connects neighborhood block organizations, adding another tie to broader networking efforts such as Community Policing.

Partnerships are essential in accomplishing mutual goals: Besides leisure activity and beautification, community greening can

s also help stabilize and improve the neighbor-

hood economy, establish social networks that reduce crime, and provide other benefits. These goals are widely held among community residents, store owners, public agencies, and private organizations.

CONCLUSION

Ideas from landscape ecology can help us understand the physical and social constraints and opportunities of managing small urban open spaces. By applying these ideas to interspaces, we can help expand urban forestry for recreation, aesthetics, biodiversity, and other values. Lessons from the GreenEdges Project in Chicago can be useful in increasing open space opportunities, especially in dense urban areas where few larger open spaces are available.