# The Nature | People Spectrum:
## Linking experiences with settings and activities

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ABSTRACT: This paper presents a new framework for designing and managing urban parks that focuses on user experiences. The key variables in this Nature | People | Experiences framework are physical settings, activities and the interactions between them. The framework can also be applied to buildings and sites, leading to more sustainable cities by connecting people to "nature" experiences directly from buildings. The author further speculates that the visible use of passive energy strategies that harness wind and sun can be associated in building occupants' minds with positive nature experiences and in that way contribute restorative benefits to both people and the environment.
Keywords: user experiences, urban parks; restorative settings; opportunity spectrum

## INTRODUCTION

This paper presents a new framework for designing and managing urban parks that focuses on user experiences, which addresses the conference theme of sustainable urban design and communities from the occupant perspective. Urban parks and natural areas are essential constituents of a sustainable city. They have many psychological, social, cultural and environmental benefits such as improving individual health and well being, contributing to community satisfaction and quality of life, providing educational opportunities and providing places for community gatherings and celebrations [11].

As the effects of global warming become more visible and alarming the many *environmental* benefits of parks and natural areas will become more significant because they improve air quality, provide shade, ameliorate urban heat island effects, filter stormwater, provide wildlife habitat and increase diversity, among many other benefits. When all these benefits work together, at the site scale or the city scale, the result will be more than sum of the parts. When buildings and streets and parks co-mingle it will be possible to improve building energy performance due to access to sun, wind and light, while simultaneously providing building users with access to the pleasurable and restorative features of nature [3].

## BACKGROUND

Portland's park system is the product of its climate, physical setting, history and the cumulative aspiration of its residents over time. Early in the city's history Frederick Law Olmsted's son John wrote about the young town's possibilities: "it's landscape structure creates an admirable framework for the park system" [21]. Accordingly he devised a plan for the park system that took advantage of the city's most significant natural features. This straightforward concept continues to be an inspiration for park advocates, planners and designers. Today the system is over 10,000 acres (10% of the city's area) and it serves millions of people – it is essential to Portland's renowned quality of life and connects to everyday lives in a most fundamental way. The park system is a source of pride, belonging, meaning and lasting memories that bind the community together. Portlanders value these resources and care for them, build strong emotional attachments to them and advocate passionately for their protection and enhancement. As Portland continues to grow and become denser, it will be difficult to meet the park needs of an increasingly diverse population, requiring more efficiency (doing more with less) without sacrificing effectiveness or quality.

The Nature | People | Experiences framework (NPE) integrates Portland Parks and Recreation's three mission areas – recreation programming, park planning and development and natural resource protection – into a single policy framework (*see Figure 1*). Historically the three areas have functioned more or less independently. Integrating them into the perspective of one framework is needed to analyze and solve the city's environmental and social problems: *How can density be increased without compromising ecological systems? How can park and recreation services improve health and social problems such as obesity, poverty or homelessness? What percentage of shrinking public dollars should be spent on acquiring new park land?* The framework must be

effective at multiple scales, from the individual participant to the region and from the short term to the long term.

## URBAN PARK PLANNING: APPROACHES

Conventional park planning has been based on utilitarian values, emphasizing physical results, such as facilities and programs, rather than the more intangible ones such as meeting the demands of its users.
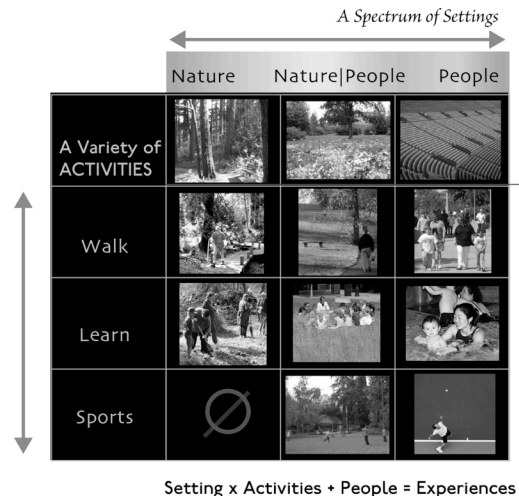


*Figure 1: Nature | People | Experiences Components*

Over the past 50 years the definition of park and recreation services has expanded to become a holistic concept that is particularly to urban living conditions. Today agencies must focus on services that contribute to human growth and development across the life cycle and on the long-term benefits of their services to the community. This represents a paradigm shift from inputs to outcomes. Community members support park services because they want and understand the value their benefits [12].

Research on recreation has increased and improved dramatically since the 1970's, in large measure due to the work of federal land management agencies and academic researchers whose work has provided scientific credibility and thus elevated the discourse about leisure and recreation. One influential method, the Recreation Opportunity Spectrum (ROS) became the starting point for the NPE framework [4, 5, 10]. ROS is tool developed to improve recreation planning for large tracts of wilderness and forest land owned by the Bureau of Land Management and the USDA Forest Service. Two of its concepts are particularly relevant to urban parks - the idea of a spectrum of recreation opportunities and the principle of diversity as a key to meeting people's needs. In other respects it is less relevant. Recreation settings in cities are very different in size, context and purpose

compared to thousands of acres of pristine forest. In the NPE framework settings are characterized not in terms of wilderness but in terms of function and purpose within the park system. The primary focus is on the experiences resulting from the degree and type of interaction between physical settings and the activities they support. All settings have value in the system; the balance is a product of both natural conditions and how people decide to use or protect them. A complete urban park system, according to the NPE framework is one that expresses and gives form to the spectrum of inextricable links between people and their environment.

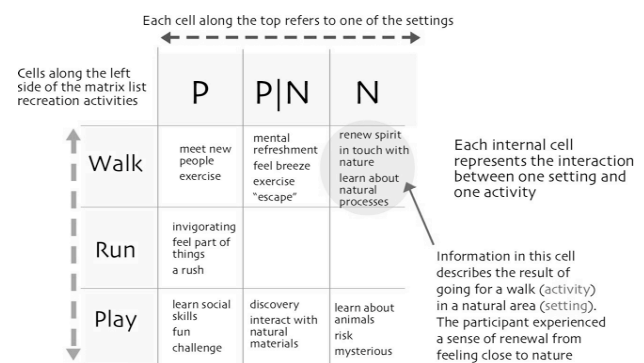## NATURE | PEOPLE | EXPERIENCES MATRIX



*Figure 2: Nature | People | Experiences Matrix & Notes*

Figure 2 shows the key variables (settings and activities) arranged along two axes of a matrix: settings along the top axis and activities along the vertical axis. The experience resulting from the interaction of a setting and activity is described in the cell formed by their intersection. Each setting has unique qualities that provide opportunities for different types of activities and levels of use. For example, one's experience of walking in a crowded downtown park would be very different from walking in a secluded natural area.
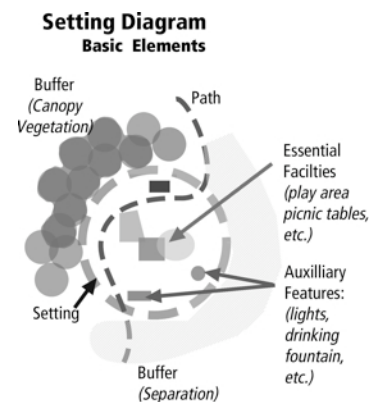


*Figure 3:  Setting Diagram*

As shown in Figures 3 and 4, a recreation setting is simply a space with specific physical characteristics, both naturally occurring and constructed, where people can enjoy recreation opportunities. Depending on its size and design a park or a building can have a few or many different types of settings. In a way a setting is like a stage set with backdrop and props that create a suitable environment for the action to be performed.
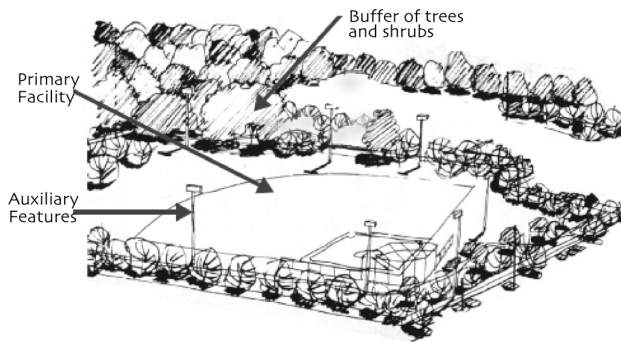


*Figure 4: A People | People Setting in a Park*

The particular attributes of a setting make it suitable for different types and intensity of recreational use. They can be modified to allow specific types of activities, within ecological and economic limits. Like a stage set, the setting can be a determining factor in the activities or it can be merely incidental to the experience. Setting qualities may be inconsequential if the demands or joys of pursuing the activity (most often in the company of others) override setting attributes. In such cases, even poor design can't interfere with participant's enjoyment of the experience.

## THREE BASIC SETTINGS – OVERVIEW

**Nature | Nature** settings are intended primarily to protect the city's ecological health, and diversity of wildlife and native plants. Some natural areas are zoned to allow nature-based recreation such as hiking and people can have access through volunteering to restore habitat, or using the site to learn about nature. In other areas there is no visitor access, temporary or permanent, due to resource sensitivity. They also can be enjoyed by viewing from afar. Portland residents value nature and would like to see more wild areas.

**Nature | People** settings are important for linking people with the natural world in contrast to the surrounding urban environment. Vegetation is dominant, creating opportunities to see wildlife, smell fragrant flowers, hear leaves rustling and mark the natural progression of the seasons. The traditional pastoral park is a main example, but others include botanical gardens and other urban green spaces with few amenities except beautiful old trees, smooth grassy areas and attractive shrub beds. These settings easily accommodate informal recreation such as walking or having lunch or just relaxing. Many people enjoy this urban type of nature experience and prefer it to Nature | Nature settings in part because of security concerns, but also because there is a variety of vegetation, open areas and colorful flowers.

**People | People** settings are primarily social. People enjoy coming to them to interact with others. They come with friends or family or as part of a group such as a team or club. Examples include community centers, pools, stadiums, event venues and fields for competitive sports. The setting is important as a backdrop, ideally fully controlled to highlight the action. People | People settings are in high demand, especially facilities such as swimming pools, community centers and meeting places.

According to national and local preference surveys over 95% of the population engages in some form of recreational activity in parks and the range of pursuits is very diverse [7]. Over time, individual activities rise or fall in popularity with changes in demographics and values, which make it challenging to match supply with demand. Added to the mix are new types of activities, off-shoots of innovations in technology, such as mountain biking, skateboarding, geocaching and more extreme sports. With their rising popularity comes a demand for new types of settings so aficionados can enjoy new experiences without the distraction of other users. Natural areas that are often the preferred settings for many new activities, creating dilemmas for managers of Nature settings, whose goals are directed at protecting ecosystem health rather than providing settings for experiencing extreme sports.

## EXPERIENCES

People acquire experiences, not in a moment, but through cognitive processes over time. People create experiences in the course of making sense of their environments. Recreation agencies and designers such as landscape architects or architects create opportunities for experiences by designing or managing settings and activities. Many factors contribute to the type and quality of experiences that people will have, including age, gender, level of expertise and a variety of cultural and political factors. Individuals share their experiences, either during the activity or by reporting after the fact. Shared experiences become the basis for bonding people together and to the places they value in common [6, 8, 19, 20].

Providing a setting and programming activities will not guarantee that a person will have a positive experience, but providing a wide variety of both improves the likelihood that people can find the experiences they want.
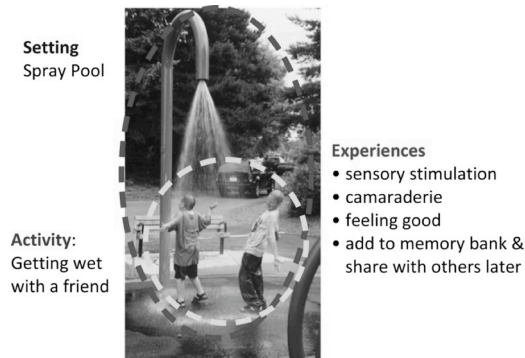
*Figure 5: Settings X Activities = Experience*



*Figure 6: Example of a preferred setting – a broad meadow*

Our knowledge about recreation experiences visitors have, want or expect is still developing. We know, for example that people form strong attachment to places, but don't fully understand the mechanisms underlying how and why such bonds form or of the many different ways people interact with their environments [14, 18, 22].

## VARIABLES AFFECTING EXPERIENCES

Despite our gaps in knowledge about all the complexities of human environment interactions, the literature available provides useful data about environmental preference [13, 16, 18]. Some settings have broad appeal – in them people feel safe and comfortable, which contributes to having satisfying experiences. Some attributes interfere with satisfaction. Common culprits are confusing layouts or circulation systems and lack of information about what settings and activities are available and how to get there. Temperature and relative humidity are standard measures of indoor comfort, but in outdoor environments, especially unfamiliar ones, these attributes are less important than ones that contribute to understanding and exploration such as legibility or feeling welcome. We feel comfortable and safe in places that meet our basic needs for information – places in which we can find our way easily, where we can see others without necessarily mingling with them, where we can explore and where our senses are stimulated but not overloaded. Cleanliness, safety, access, naturalness, aesthetics and appropriate (compatible) development are the most commonly mentioned attributes of preferred settings. These dimensions are interdependent and also seem to hold across a range of environments and show remarkable consistency even across cultures. In the US for example, there is no significant difference among urban, suburban and rural residents. Some of the most highly valued features of preferred settings are attractive vegetation, evidence of daily and seasonal variations and the presence of water. One reason we are attracted to and respond positively to these setting characteristics, according to some researchers, is because they are biologically favorable [1]. "Preferred habitats for humans as well as other creatures are those settings that are supportive of mind and body." [15].

## NEED FOR CONTACT WITH NATURE

Globally, the majority of people now live in urban environments – an evolutionary watershed. The effects of urbanization and the unprecedented disengagement of humans from natural environments have triggered a reconsideration of the interdependence between people, health and physical and social environments. Too much artificial stimulation and a purely human existence may undermine health, causing exhaustion and loss of vitality. For people who spend the majority of their time insulated from outdoor environmental stimuli, parks and natural areas may be the only means of access to nature experiences. Contact with nature (broadly defined) has psychological, emotional and spiritual benefits including positive impacts on blood pressure, cholesterol, outlook on life and stress level. Psychological benefits include feelings of pleasure, sustained attention or interest, relaxed wakefulness and reduced negative emotions such as anger and anxiety. Even the simple act of viewing a natural scene (or even a tree through the window) can be beneficial [14, 15, 17].

People need spaces to regenerate and restore themselves, not from hard physical labor (that too) but also the mental labor of directed and focused attention, which creates fatigue and reduces cognitive functioning. Many city dwellers responding to preference surveys say they want to go to a park to get away from the everyday world, to relax and enjoy peaceful pleasures of sitting under the shade of a tree. This type of "quiet fascination", usually found in natural settings, has a "special advantage" according to psychologist Stephen Kaplan because it provides an opportunity for reflection [16, 17]. The experience of being in a large park without being aware of the surrounding urban environment where one could wander without "thinking" is just what FLO thought was the most important benefit of the beautiful pastoral scenery parks he fought so hard to achieve.

Today, it is more difficult to have this type of experience because most urban parks are too small to ramble freely out of sight and sound of the city. The

Nature People Experience framework is useful in this regard. Restorative experiences so important in today's cities don't have to be available only in the city's natural area parks. Nature People settings can be deliberately designed to provide rich restorative experiences that depend on vegetation such as trees, flowering shrubs, flowers, colorful grasses and on the artful use of water, even if in small quantities. Connecting these types of settings to buildings to allow occupants convenient access to them could enrich the experience of work as well. The same natural materials could also be used strategically to provide sun, wind and light in ways that improved building energy performance. Such an approach could expand the meaning of restorative environment beyond people benefits to include energy benefits by forging connections in building occupants' minds with the use of nature in the form of wind and sun to create sustainable and sustaining environments [2, 15)].

## CONCLUSION

The Nature | People | Experiences framework currently being implemented in Portland, if successful, has potential application to buildings and streets if they are integrated with park settings at the scale of the city. The Nature | People spectrum integrates people with Nature in its diverse forms, enabling them both to flourish and which can lead to a sustainable community. People experiencing multifunctional and integrated Nature | People settings for example, could see and feel the direct connection between environmental values and sustainability.

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