

The Role of the Public Realm Landscape

The Softer Side of Sustainability and The Hard Working Urban Landscape

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Images as credited

In our sustainability discussions, there has been altogether too much talk focused on buildings. Planners, architects and city leaders have often been slow to recognise the important role of the broader landscape, which underlies our city's buildings. The spaces between the buildings, that Jan Gehl speaks about, desperately need to be considered if we are to create sustainable and healthy cities.

However, the focus on buildings is understandable, as the sheer fact of the intensiveness of resources and energy used in the construction and operations of buildings overshadows the less resource-hungry landscape by far.

In addition, the development of technologies for use within buildings is a financial "dripping roast" profit-maker for the tech- industries, as many of the environmental issues embodied in buildings can be addressed with a degree of simplicity and directness through technological innovation.

Without having a technological imperative for dealing with climate change, landscape architects have been relegated to providing green roofs for buildings, which is basically a technical section. On a project-by-project basis, our scope is generally small and focuses on the technical performance of the ground plane. The lack of a clear voice for the landscape architect in this discussion is both ironic and problematic, as the landscape is the actual "green" part of the "green" discussion.

One might argue that this lack of representation by the landscape profession is due to a number of reasons. Firstly, landscape has historically been understood as "garden" and only afforded by the wealthy. Building landscapes are still viewed of as a luxury, not a necessity, and are often thought of as the "cherry on top of the cake."

However, times are changing quickly, and so is the role of the urban landscape. The awareness of landscape as a built piece of infrastructure is crucial to a city's performance and liveability. It is a new paradigm and little appreciated by most planners and city-builders. New mega-cities, a vast global trend towards urbanisation and a world population of 7 billion, plus a surge of cities that are growing and regenerating, cast the urban landscape in a whole new light, forcing us to reassess the role of the urban landscape.

It is being understood as more than the leftover spaces between buildings, but as its own, distinct organ within the city that must be respected, funded, planned and designed. Collectively, the public realm landscape can provide and enable a positive life for the people who live in cities.

The urban landscape must be understood as a piece of a city's infrastructure, as we would view our sewers, power, IT connections and transportation, and as an integrated and necessary urban element that serves a plethora of needs, including places for citizens to meet, recreate and connect to one another, as well as serving the natural environment.

While the role of the landscape is being newly defined, in contrast, architecture has always been appreciated as an artefact that has captured the attention of the general audience for a building's appeal as a commodity. Architecture is easily understood: it is clearly rooted in the cultural arts and its primary function, shelter, is obvious to all. Form and technologies will change what a building looks like and its operational profile, but their function remains well defined and easily understood.

In contrast, the role of our urban landscape is a more difficult topic to understand due to its lack of boundaries and breadth of function, and more problematically, it is largely owned by the public, an often economically stressed and politically complex domain. Its purview actually rests outside of the technologies that can be marketed, thus there are fewer industries that are vested in it. Lastly, the benefits derived from the urban public realm are more difficult to quantify and measure, although this too is changing.

There are also internal issues within the profession of landscape architecture that make our core mission difficult to define, a critic which I will not address currently. However, where architecture has dominated the discourse around sustainability with "green architecture," the profession of landscape architecture lacks clarity around what our core mission is, keeping us from engaging in a more meaningful role on the topic of sustainability.

Expanded Notion of Sustainability

So, where does landscape architecture fit in the "Roundtable of Sustainability"? What is our role as professionals, if not to do green roofs and atria for "green" buildings? The answer to this rests in urban and regional scaled interventions. While dealing on a site-by-site basis is how most of us practice, the ability to impact issues of climate change and population growth are at the urban scale. It is within the expanded definition of sustainability, that our role as landscape architects resides and presides.

It is clear with the global trend towards urbanisation and the realisation that we have limited global resources that the most important role we have professionally is to encourage densification, through planning and designing liveable and healthy cities.



LEFT The beautification of a city and the accessibility to green spaces are used to entice knowledge-based workers (Photography: Jeremy San).

"Soft" Systems

Our urban public realm landscapes are hardworking landscapes, within which are embedded our sewers, water, electricity, IT connections, as well as our public transportation. It is the platform upon which we connect to each other and come together as a community.

Along with the more environmental "technical" role the urban landscape performs, the public realm landscape is shaped by other human-generated "soft systems," those being the social, cultural, economic and political operations of people and communities. These soft systems play a large role in making a community or city liveable, and are NOT rooted in technology, but in the physical, psychological and emotional operations of our own, very human behaviour. I have observed that these "soft" systems are often not given proper recognition or priority in planning and designing communities and cities. However, without understanding their inclusion in the planning and design process, it will be impossible to design successful public spaces or achieve sustainability, not only on a city-scale, but on any scale.

I consider these soft systems to be the more important domain of landscape architects when working within the urban landscape, rather than the technical aspects, as ecological issues have or should have been exercised through planning policies and engineering, and then carried out on a site-by-site basis. In order to create a more sustainable future, we must understand that as landscape architects, our professional remit is more firmly embedded in humanism than ecology.

The Urban Landscape: Environmental and Physical Health

The public realm landscape underwrites both environmental and human health by providing access to public transportation, bike lanes and sidewalks that are well-maintained and safe. Jan Gehl has a great deal of evidence for how bicycling not only helps the environment, by cutting down carbon pollution, but keeps people more fit, which brings down the cost of public health services dramatically.

The environmental benefits of the urban landscape is well documented and discussed and serves to facilitate water percolation, reduce run-off, allow for trees to produce oxygen, create shade and reduce heat-load, capture particles in the air and assist in reducing pollution. The urban landscape provides a habitat for urban flora and fauna.

The Urban Landscape and the Economy

The public realm landscape can help to underwrite an urban economy by making sure that places of business are easily accessible, well connected and served by lively streets and open spaces. Local businesses need to be incorporated into the planning of public realm improvements. The mayors of major cities, such as London's former mayor Ken Livingstone, Mayor Bloomberg of New York and Mayor Daley of Chicago, as well as leaders of cities, such as San Francisco, Vancouver and Copenhagen, acknowledge the role that the public realm landscape plays in keeping the existing population and attracting new populations to their cities so they can grow their economies and thrive.

While serving on Ken Livingstone's Design for London Advisory Committee, I observed that as mayor, one of Livingstone's major interests was on the quality and functioning of London's public realm landscape, which he

appreciated for its role in keeping the city highly functioning by overseeing connectivity through a running, efficient multi-tiered public transportation system. He also viewed the public realm landscape of London as an attractor to both keep the population and to attract others.

Sophisticated mayors now consider well-educated people as "capital" and "resource." Without an educated population, the economies of these cities cannot compete and thrive. This is especially important against the backdrop of decreasing population in Europe. The beautification of a city and the accessibility to green spaces and tree-lined streets are used to entice knowledge-based workers to come to live and work in that city.

Mayor Livingstone well understood the relationship of London's public realm landscape in his bid to make London the world's number one Global City. He intended to invest in its building and upkeep because it created an economy. The people he needed to attract have choices and will choose a city that functions at a high level, which means a city that will deliver a quality of life that people aspire towards. The word "choice" is now an important goal in the creation of sustainability, as its attainment depends on human behaviour. If you wish to create an economy by attracting knowledge-based workers, then you must create a city that will be chosen, meaning, in part, that the city must be attractive. And something that is more attractive to people has more market value. This is because we are human, and we all value what we perceive to be beautiful.

Economic Evaluation of the Public Realm Landscape

Understanding the monetary value of the public realm landscape is extremely important when trying to get mayors and private investors to invest in city's public realm. Fortunately, there is more and more research that is being produced on this topic, with hard evidence of how well designed public parks add to the economic proposition of an entire city.

"...As towns increasingly compete with one another to attract investment, the presence of good parks, squares, gardens and other public spaces becomes a vital business and marketing tool..."

From Ecotec Report - Economic Impact of the Public Realm, 2004

"A high quality pedestrian environment and public realm is considered an essential component of the right business environment."

From "Urban Competitiveness Maze", Begg, 1999

In the U.S., without proof of economic uplift, there is zero motivation to spend money on their city's landscape, since it is generally seen as an unnecessary luxury. However, there has been a surge in hard data that shows what a park's value is to cities such as New York, San Francisco and Chicago. Many more cities, such as Portland, Oregon, Dallas, Texas and Indianapolis, are undertaking this type of research.

Since it is impossible to directly measure the actual value of a public park, a technique for measurement has been devised, named the "proximity principle."



LEFT The value for urban landscape within a city stands in stark contrast to the architecture-led buildings of Dubai" (Photo: National Parks Board, Singapore; Photography: Chuah Hock Seong).

Definition of the Proximity Principle

"This premise that parks have a positive impact on property values is known as the proximity principle and represents a capitalisation of park land into increased property values. The proximity principle suggests that the value of living near a park is captured in the price of the surrounding properties."

From "Do Parks Make Cents? An Analysis of the Economic Value of Parks in San Francisco" Karin Marie Edwards, 2007. Prepared for the San Francisco Neighborhood Parks Council // May 2007.3.1

There have been some fascinating studies on some of the most well-known and established urban parks in the United States, notably the one done by Sarah Nicholls in her Parks and Recreation Study, March 2004. She states a number of surprising results from her evaluation of Central Park:

- "Central Park is valued at \$627 million an acre or 26% more than the entire 2006 U.S defence budget."
- "The net value of all of Manhattan would be less after Central Park was developed."
- "The city council keeps Manhattans Central Park un-built not because Greens rule the Big Apple but because property values overall are higher with the park than luxury condos on the site".

Chicago's Millennium Park, completed in 2004, has had an extensive study conducted on its economic impact, undertaken by Goodman Williams Group and the URS Group. Some excerpts from their findings are remarkable:

- The park attracted an inward migration back to the city by attracting 20,000 new people to downtown

- The total value of Residential Development Attributable to Millennium Park - \$1,400,000,000
- Total visitor spending over the next ten years from 2005 to 2015 will range between \$1.9 billion and \$2.6 billion.
From Millenium Park: Economic Impact Study, "Goodman Williams Group and URS Corporation, 2005. Prepared for The City of Chicago, April 21, 2005, Department of Planning and Development.

DeVries estimates that the Park:

- Increased hotel earnings annually by \$42-58 million a year
- Restaurant earnings by \$67-87 million
- Retail earnings by \$53-71 million. This group's purchases now account for about 30 percent of downtown retail business, roughly comparable to what suburban shoppers provided a generation ago.

These studies, as well as many more that are available, do great justice to those who intuited the great contributions these urban landscapes make to the quality of life in cities, and are, in part, what makes these cities "great". The value of these public realm organs within a city stand in stark contrast to the architecture-led buildings of Dubai, a great experiment of the "naught", which demonstrated clearly that buildings, alone, do not make a city. The character of a city comes through good planning, the quality of the housing stock, and the design of attractive streets and pedestrian walkways, parks and open spaces. These are the elements that create a city's "character"- much more so than individual signature buildings. The specifics of the architecture make little difference to the overall image of a city. We all choose to live in a neighbourhood first and then

choose the house. As well, we choose to live in the city first and then look for a nice neighbourhood.

The Public Realm Landscape and Politics

The public realm landscape must serve a political agenda, as the will of the greater public is expressed in the public services and spaces needed for people to work and live. The offer of parks, recreational activities, beauty and quality of life, reflect the demand of a city's citizens. If the design and planning of these elements are done in a way that the citizens and stakeholders are not included in the process, then the outcome may not be valued and maintained over time, nor serve a sustainable goal. As well, given the public nature of this territory, the political landscape must be understood in order to "make it happen." Not understanding this territory is one of the major reasons for projects failing.

The Public Realm Landscape and Social Health

Very importantly for new and evolving cities, the public realm landscape provides the arena for social interaction and integration of immigrant communities.

The ability for new cultures to evolve from older ones as a result of shifting demographics and world economies are done in cities which are typically their first port of call. It is here in the cities' parks, sports fields and plazas, where people from different backgrounds meet and eventually forge new cultures, a necessity for growth and social evolution. Social integration is an earmark of cities that remain relevant, attractive, politically stable and economically and culturally active. In cities, people of different backgrounds and cultures influence one another as they incorporate progressive lifestyle changes into the fabric of their diverse daily lives. The public realm landscape is the "pot" in which the melting happens. The acculturation of a population cannot be done in the suburbs or in one's living room.

Lastly, the cultural aspirations by which a society wishes to see itself and be seen by the world is expressed in a city's major civic open-spaces. All of these components are part of the public realm landscape: an open space infrastructure that in its complexity underwrites a healthy and sustainable city.

Cultural Life and the Landscape

The ability for the public realm landscape of a city to provide the forum for the cultural life of a city is now of utmost importance, as the cultural and environmental health of cities is at the top of a mayor's "to do" list to attract people. The cultural offer of a city is a huge attractor and is itself, a new industry. Activities that were once found only inside museums and theatres are now in the streets and spaces of cities, where one can enjoy street performance, concerts, art installations and dance. The public realm landscape is the new stage for cultural events. This openness and generosity reflects a lively and open city where people from all parts of the globe can participate, integrate, and enjoy themselves.

Design and Sustainable Cities

The sustainability of any city is rooted in the natural conditions and constraints that underlie that city. Layered on top of these fundamentals are a series of socially, politically and culturally derived soft systems. These layered "soft" and "hard" (or "technical") systems often need to resolve in physical form. The physical form, or design, will often determine the longevity of a piece of built environment. If successful, the design will

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enable people to make an emotional connection to a place by imbuing it with character, memory, identity, orientation and individuality. The actual form and content of the design can largely determine the success of regenerated and newly built urban environments.

In their ability to synthesise large amounts of information and then translate a planning exercise into a physical reality, designers act as "translators" between the wants and needs of a community and the myriad of professional consultants, who often are tasked to sort out a sustainable strategy. We are charged with understanding both hard and soft systems that extend far off our site-boundaries yet influence the outcome of a particular site. Just as important, we are asked to come to a physical resolution that integrates these systems, functions at multiple levels and balances the multiple hard realities of budgets, politics and social issues with the community's desire to create a public space that, in the end, is much greater than the sum of the parts.

In addition to making sure that the public realm landscape is properly planned to provide many services to the citizens of a city, perhaps even more important is our responsibility, through design, to achieve the creation of a "sense of place" and engender a sense of belonging.

As we globalise and become more homogenous, there is an increasing need to create a new or enhanced identity that differentiates neighbourhoods or cities. Our practice is often asked to create a "there, there" and establish an identity, as distinctiveness and uniqueness may give a city a competitive edge, which is of crucial importance to new and regenerating cities.

Public spaces have the potential to not only function as places to sit, recreate and enjoy, but also serve to create a symbol or image for a particular community. Along with all the other pragmatic requirements is the usually unarticulated requirement that the space performs as the "face" of the neighbourhood or city. Designers are tasked to decipher what that image should be - one that is unique to a particular place, strong enough to create an identity and will be embraced by the public.



ABOVE The urban landscape must be understood as a piece of a city's infra-structure, as we would view our transportation. (Photography: Jeremy San).

Self Image

Creating places, which are memorable, describable and have a strong image, serves an even higher function: to fulfil a community-scaled desire to be represented as a group or as a city, or even a country, to the outside world. Even further and of greater importance is that the landscape (and its quality or lack thereof) forms the bedrock of our own self-image and self-esteem.

It is the specifics of the planning and design that will play a large factor in whether anything, sustains over time. It is a false belief that one can achieve sustainability based only on "smart" technologies and functioning ecosystems. People are part of the environmental equation. Nothing can sustain itself over time if people are not invested in it either intellectually or emotionally. All the smart technologies, appropriate materials and energy used to build a technologically LEED's rated project or community will be wasted simply because it was not designed to the spiritual, psychological and emotional needs of people. It simply has no appeal and therefore a limited shelf-life. Good and great design can help to achieve this.

Design in itself cannot make cities successful, as cities are a very complex layering of moving parts. However, for a city to function maximally, the design quality of a city's public realm components becomes extremely important. Design quality is a crucial factor in whether a city can reach its fullest potential. A city's public realm landscape needs to be designed to be more than merely functional, but as wonderful, inspired, attractive places to live and work for all socio-economic levels.

Conclusion

Our primary role as landscape architect is to understand and synthesise the vast elements of both hard and soft systems that operate on and in our urban landscapes, and then, give shape, form and meaning to the built, physical environments in which we live collectively. We determine the physical character of the public realm environment which, in turn, determines whether or not a city is attractive to people, and whether people will choose to live in a city over time.

Design must be appreciated as a crucial factor in sustainability. Ignoring design and its importance in connecting people to place is to miss a crucial step in the creation of sustainability. This is where our profession is at its best - in the understanding and synthesis of these complex and multi-fold social, economic and environmental systems that interact in and on the ground plane, and to plan and give shape to the ground plane so that people will use and come to cherish the places where they live, work and play. Our job is to achieve buy-in from our end-users, the public, if we are to achieve sustainability at community or city level.

Our most valued role in the future is to be well-informed generalists who are able to understand the inter-relationships between multi-fold, complex systems and synthesise the information so they are in balance and respond to a particular place. We must be both master-strategists and artists that can translate strategies into culturally valuable places.

We must expand our remit to advocate for densification and within this goal, our role as landscape architects expands exponentially, as the understanding of all the operative systems, both hard and soft, are our core area of knowledge. We must grasp the task at hand in its expanse and complexities, and step up to the plate in our advocacy of sustainability at the urban scale. For as long as we trail behind the architects by "greening" their buildings, we are simply fiddling while Rome burns. 