1 ABSTRACT

Urban fragmentation reflects the lack of synergy between the built and unbuilt environments, between culture and nature, and between people and people. Greenways present themselves as a reasonable resolution to fragmentation. Then why are greenways not a prevalent practice in city design? This article examines the causes of urban fragmentation and examines contemporary landscape design responses, looking at their positions on addressing urban fragmentation and synergy. The article begins with a review of synergy and greenways before moving on to explore responses to urban form. The ability of legacy cities to offer insight into how urban spaces and infrastructures are viewed is also discussed. The article closes with the potential examination of urban greenways as a strategy to integrate Baltimore City by acting on existing vacant land, public infrastructure, open space, and cultural amenities. The underlying intent is to project synergism through productive relationships between human and ecological systems at every scale of landscape design and public decision making. The research is the groundwork for a design solution for which the built environment between greenways can be adapted to create a meaningful sense of place and synergy to an emerging greenway network. Can landscape architecture provide new relationships for the city and its inhabitants to experience distance, time, and place?

1.1 Keywords

greenways, urban fragmentation, landscape, Baltimore, synergy, city planning
2 GREENWAYS AND SYNERGY

Synergy, broadly defined, is the interaction of multiple entities to produce a combined greater entity. It can be the combination of a number of phenomena working in unison to create improved or enhanced condition. It can also be viewed as a series of systems functioning at their maximum potential working to increase efficiency and making each system stronger in the process. This paper in the format of a literature review, outlines current trends in landscape architecture when interfaced with contemporary urban form, and with an intent on framing a view on the role of greenway networks in addressing urban fragmentation. Greenways in American cities are either ecologically significant corridors and natural systems, recreational Greenways, often near water, trails, and scenery, or, greenways with Historic Heritage and cultural values (Fabos, 2003).

Randal Arendt notes that greenways broadly conceived “can encompass extensive areas comprising natural and cultural landscapes such as prime farmland and upland habitat, in addition to linear elements such as stream valleys or environmentally sensitive lands which are unfit for development due to wetness floodability or steepness” (Arendt, 2004, p.241). This macro scale definition seems to concern itself with primarily non urban areas, and rural or peripheral zones. Multiple returns on investment such as job creation and retention, improved value of adjacent land uses, improved quality of life and health of citizens and the opportunity of revenue generation-improving the tax base and providing a growing source of income for communities are noted by Flink (2012).This argument when tied with socio-economic anthropological status starts getting attention of community groups, local governments, and even the federal government. Cities struggling with a decreasing tax base, an increasingly fragmented population, and an abundance of underused land are in positions to take a look at historical greenway approaches and merge them with emerging landscape architecture theories to redefine greenways, urban form, and urban ecology.

Critical writing with explicit focus on urban greenway is still quite thin. While examples of urban greenways exist, there is little research or documentation on the strategies involved in planning an urban greenway or in literature talking about using new greenways to retrofit urban areas. While Arendt’s discussion primarily deals with how to develop new greenways outside of the city, he discusses the pertinent reality of community-wide participation. Arendt suggests the re-zoning of land which proposed routes will transect, density incentives for developers, land trusts to acquire and maintain land, and incentives to grant public access in subdivisions and other private developments (Arendt 2004, 247). As we continue to investigate urban form and potential greenway solutions Arendt’s zoning and land use suggestions might prove relevant to any design considerations we arrive at.

In one of the few texts dedicated to urban greenways- Greenways and the Making of Urban Form, Anthony Walmsley lists five categories of greenways: Urban Riversides, Recreational Paths and Trails, Ecologically Significant Corridors, Scenic and Historic Routes Comprehensive regional ‘green’ infrastructure plans (often encompassing aspects of 1-4).

These categories are not entirely independent of Arendt’s and Fabos’ classifications, but Walmsley approaches the subject from a distinctly urban point of view, articulating that there is no ‘kit of parts’ for green infrastructure, and that urban theorists often overlook streets as available public space to be incorporated into green infrastructure (Walmsley,1995, p.81). It could be argued that contemporary green infrastructure advocates have taken the public street into consideration with the growing prominence of complete streets, walkable communities, and New Urbanism, but his concern holds true today in that we don’t see much in the systems wide theory of the street grid becoming part of green infrastructure on a large scale. Walmsley refers to the premise that “a better understanding and application of natural processes (climate, water, plants, soils, wildlife, and food growing) could shape a more productive and sustainable design form for the modern city (1995, p.82). Walmsley goes on to talk about how the majority of greenways come from “residual leftovers after development, natural corridors, abandoned railroads, canals, and other rights of way and how these neglected lands could prove ecologically rich due to their due to their not being overlaid with “biologically sterile manmade landscapes” (Walmsley,1995, p.82).

These ideals and strategies are further articulated through various design phases, mainly ecological urbanism, and sustainability movements nearly 20 years later. They are resurgent indeed, but there are still gaps in contemporary practice as urban greenways are few and far between, and are not often used in the same discussions of synergy.
3 URBAN FRAGMENTATION

Many urban greenway networks were built around left over “green” in certain environmental corridors or stream valleys, and as the environmental movement gained influence these greenways were programmed into multi-functioning transportation paths, recreational parks, and environmental buffers. Is this sufficient to address urban fragmentation -to green the left-over spaces in between building blocks? Also, such an approach does not address the spaces in between the greenways?

In “City Sense and City Design” Kevin Lynch talks about the four major general models for urban form. In order they are: The Linear System, the Linkage System, the Radial System, and the Grid System (Lynch, 1991, p.76-81). Most U.S. cities followed some sort of sequencing through these four stages or were built on top of a grid system with various adaptations for local interest and importantly topography. All most all of these forms were designed in response to transpiration technologies of the day, be it boat, horse, streetcar, or automobile. Lynch talks about the hybridization of these forms, but there is room for current designers to discuss further the role that existing greenways play and proposed adaptive open space networks on reimaging what a future urban form can look like. The popular grid form seen in most cites has its value, but might be ready to progress into the next stages of being more responsive to existing urban conditions of underused space, social and environmental fragmentation, topography, organic clusters of open space and the very real prospect that the personal automobile might not be the dominate mode of transport as cities evolve into the 21st century.

While Lynch highlights the patterns of urban form, Marco Venturi talks about the paradigm transformations of theorists and landscape architects having been successful using metaphors of networks. He says, “...network language manages to take into account not only the layout of the individual ‘links’ but also old urban centers, including both in a schema which in some ways transcends them. What emerges as a result is not a new type of city or non-city, but rather many types of coexistent cities. The great phases of technological innovation also upset the time-space relations within the city. The speed of movement of goods, people and information, once similar in the various sectors, is gradually being differentiated: people are relatively stable compared to the information transmitted. This raises new problems in renewing infrastructures and of the perception and appropriation of spaces, as well as the bonds in communities or social and political groupings (Venturi, 2012, p.264). Venturi articulates the fact that urban form is based on antiquated land uses and systems and for purposes of modernity may be more of barriers than of connectors. His discussion of networks opens the door for the logical question: what type of networks do cities need and why? Landscape architects are required to look at two phenomenon for the answer; the physical conditions of a site (the city), and the wants and needs as inputted by the local community. Doing so will take landscape architects from being the theorists to the design practitioners introducing sustainable, responsive, and adaptable networks to our urban public realms. To Reinforce the idea, planner and architect Ali Madanipour notes “the modern city has gone through spatial and temporal dispersion of its functions and a de-spatialization of some of its activities which have created multiple, non converging networks against the cohesive, nodal role which the urban public space could play in the past” (Madanipour, 2003, p.214). The role of the public sphere is being diminished as transportation and communication technologies have undermined public spaces. Sociability has been diminished and barriers have been set up along these physical and cultural divides.

Venturi goes on to argue that “the city is socially and physically fragmented... people identify more with a social group than a place.” And “the city has become an obstacle to the various interests of individual social groupings as well as a hindrance to the most important form of freedom recognized today – freedom of movement” (Venturi ibid). So what can be done about it? In the same essay Venturi suggests that attention be paid to the quality, rather than the quantity of new urban expansions, with particular thought paid to the site (the existing physical conditions) rather than a market driven approach to what can be built. This very thinking and acknowledgment of fragmentation lends itself to my approach to looking at undeveloped land (vacant, abandoned, brownfield etc.) to see how it can be repurposed to act as a connector as part of a broader network incorporating ecological significance, historical value, and contemporary circulation and livability issues. Systems can be made more fluid by persevering with old stretches of continuity. Can these greenways counter the increasing fragmentation of our cities?

The contemporary form of our cities has given us the post industrial or even post modern city in which cities are becoming increasingly chaotic in their structure. The term “fragmentation” comes into the conversation. Carmona and others describe the arrival at the post industrial city as a “complex patchwork of growth and decline, concentration and decentralization, poverty and extreme wealth are juxtaposed.
Whilst downtowns may maintain their dominance of some high level service functions, back offices, and corporate plazas, research and development and university campuses, malls, airports, and logistics zones, and retail, leisure and residential spaces spread further and further around the metropolitan core” (Carmona et al., 2003, p.29). Much of this city form has to with the growing popularity and perceived practicality of the car, as various features can be located at any automobile navigable distance. And as a result the physical geography of our cities has been developed around the car. Leading to what Soja calls “carceral architecture” in which city form becomes based on protection, surveillance and exclusion as a result of the car dominating the direction of form, but also as a result of the combination of deindustrialization, internationalization of production modes and markets, and the development of new spatial trends in segregation and polarization (Soja, 1996, p.125-37). As much of the modern city has been built and formed around transportation structures which most recently have been the car, we are seeing that the public spaces of legacy cities of today are becoming increasingly fragmented as a direct result of a reliance on and designed response to the prevalence of the car.

Walter Hood offers a tangible idea of fragmentation in his history of Oakland, California. Like other cities, Oakland’s physical form evolved out of a growing railroad industry in the mid 1800s, but was drastically reshaped in the middle of the 1900s as highways and other forms of transit became popular. “Competition for land, particularly freeways and housing was greater than ever before” (Hood, 1997, 10). He discusses land use re-zoning tactics used to evict disenfranchised residents, wealthier residents fleeing to the suburbs (bankrupting the wealth and diversity needed to sustain a thriving community), home ownership declining – and public housing increasing. As disparate communities became less empowered and decreasingly economically relevant, the city became socially and physically fragmented. He speaks of the how systematic introduction of transportation infrastructure to community’s edges has led to further isolation. “Neighborhoods are dramatically isolated from Oakland’s CBD by the elevated eight-lane freeway and the elevated tracks of the Bay Area Rapid Transit,”(Hood,1997, p.9). As arterial roads morphed into ‘fortress wall’ isolating neighborhoods from downtown and the greater community, the city began to experience a fragmentation that was not always the case. This phenomenon is similar in many cities emerging from the post industrial age. As transportation infrastructure gained significance in planning strategies, marginalized populations and the space they used became increasingly less relevant to the systems theories guiding transportation planning. U.S. cities formed on the heels of transportation evolution, and that continued evolution had led to their fragmentation.

In their discussions of urban form Carmona, et al talk about the social dimension of fragmentation, and how spatial morphology can change the character of space and lead to social fragmentation as a response to the form of a city. In these instances various form of segregation take shape responding to demographic changes, or more importantly lack of access (Carmona, 2003, p.127-129). This lack of access is often the direct result of cities becoming fragmented due to de-industrialization, declining economic activity, or unequal access to the public and private transportation. This type of urban fragmentation is seen in legacy cities across the northeast as rustbelt towns become smaller in population yet retain their geographical size. Outdated and overworked infrastructure systems are subsequently insufficient to serve the needs of an increasingly segregated, fragmented, and marginalized population.

Let us approach fragmentation as a growth stage in which certain post industrial cities go through as their economies transition from production to service, their population declines, and the amount of underutilized space increases. As a result of the increasing amount of underutilized, vacant, or unproductive land, gaps are formed in the landscape which creates physical and social fragmentation in which there are breaks in the synergy of cities. Essentially cities were built on modes of transportation and human interaction based on trade. As those modes of transportation have evolved, and the markets have declined over time, our contemporary cities are situated atop a system of networks from a previous era. This has resulted in the situation in which land areas of cities are spread out, with outdated infrastructure, disconnected populations, and deteriorating public service.

3.1 Urban Fragmentation and Counter-strategies

In “Recovering Landscape” Marc Treib talks about in Nature Recalled how the designed landscape has changed over time, from public green spaces relying almost entirely on a vocabulary of naturalism(Treib, 1999, p.29), of a sort of bringing nature into the city. The argument can be made now that the passage of time has shifted the role of landscape architect from large park designer to recognizing that a new form of nature exists in cities. This nature has grown up in between the build form
of the grid, and as a result of human care, or neglect. Contemporary landscape architects are therefore now responsible for responding to time by designing for the temporal urban surface and ourselves learning how to articulate the relationship between urban nature, natural nature, the built city, and our designers’ desire for networks and green infrastructures. In his discussion of what nature is, he concludes with “While nature may be an inspiration to some, it is a burden to others, as our regard for nature is essentially a product of our culture” (Trieb ibid p.39). This is a very relevant thought for the landscape architect looking to create a network with ecology in mind which will transect diverse communities with different perspectives on how humans are to interrelate with “nature.” Christophe Girot offers Four Trace Concepts in Landscape Architecture to help guide a landscape architect in their search for recovering landscapes to become active places again. They are: Landing, Grounding, Finding, and Founding (Girot, 1999, p.60-65).

For anyone entertaining the idea of repurposing land for a modern network, but wanting to react favorable to locality, history, and place, the above mentioned concepts can help lay the framework for an extended legacy of place, and in turn a well functioning asset which has real meaning, is adaptive, and yet responsive to real phenomena. Walter Hood offers a similar set of criteria for the designer to consider when working in transformed urban areas or cities that have morphed from one point of reference and identity to another. He notes that “change and transposition are guided by individual expression, combined with social environmental and political multidisciplinary analysis, traditional design strategies, and an understanding of common, everyday objects and practices” (Hood ,1997, p.6). He calls this process ‘improvisation’, which generates a new series of goals for the designer:

In Effects of habitat and landscape fragmentation on human and biodiversity in densely populated landscapes Manuela Di Giulio et al, discuss the social impacts of fragmentation on society and how people’s relationship with their landscapes relates to their sense of identify and place (Di Giulio et al 2009). Their article notes that people prefer to have a relationship with outdoor places and prefer their public spaces to have natural features which can result in restorative experiences. The authors also talk of how historical significance is important in creating that sense of place with well planned natural features. They mention the combination of historical buildings, local culture and a few well placed trees or water features as a more effective means of creating a sense of place and therefore identity in the urban realm rather than an urban forest. This nod to preferences is key to understanding how creating while retrofitting urban areas can include ecological design, but must be responsive to community concerns about the built environment. Personal mobility and social activity across roads and other new barriers must be addressed (Di Giulio ibid). In fragmented cities these condition exist, with strong senses of identify from neighborhood to neighborhood, but landscapes and land uses acting as barriers to mobility and access across the city. Their conclusion asserts that densely populated areas require planning and management to provide access to semi-natural areas for recreation, providing populations with the benefits of access to nature, but also address how the quality of these places is more important than the quantity (Di Giulio et al., 2009). They argue that future research should be directed at how to design these places that meet the needs local human population. I would argue that a systemic network of these places as productive landscapes will address the needs of local communities while simultaneously improving the connectivity issues of fragmented cities.

In the essay Landscape Architecture and the Changing City Michael Laurie talks of the need to restore our cities’ degraded landscapes and to conserve or ecological and economic resources through healing the dichotomy between art, science, research, and intuition. He says “only then will landscape architecture and planning be capable of contributing to new, sustainable, regionally and culturally appropriate forms and to ecologically and socially sound land-use policies and plans. The result will be a new aesthetic with popular appeal (Laurie, 1997, p.159). The popular appeal he talks about is the notion that locality will resound in these new places so that they have meaning within the local community. The notion gives a nod to Richard Florida who notes that “place is becoming the central organizing unit of our economy and society” (2000). In terms of urban greenways though Laurie goes on to say that sustainable landscape design and planning seek to reduce the impacts of energy and natural resource consumption through techniques such as urban forestry, creating micro climates, and “planning communities that facilitate and encourage walking and bicycling rather than the use of automobiles” continuing on to note, “Ecological expressionism emphasizes the importance of a sense of place and it reveals the natural process of a site “(Laurie, 1997). This thinking supports the idea that retrofitting urban areas to expose some of the natural processes will help to create one layer of identity to an area, and can be done in
conjunction with greenway planning, and adaptive land reuse. It is providing a cultural connection the natural greenway, and the opportunity to experience multiple identities of the social city and ecological community. Laurie is aware that retrofitting urban areas this way will be more difficult than planning new suburbs, but he writes that these natural processes do exist no matter how altered, and they can help define the place.

As Laurie continues on about livability, sense of place, and urban ecology, he talks about the livable city which he defines as “a city of distinct neighborhoods that possess a sense of pride, place, history, safety, good housing, friendly playgrounds, parks, and open spaces” (Laurie, 1997). He goes on to describe a hierarchy of public spaces in which many do not contribute to livability because they were designed for one use, which brings us to the design challenge of looking at these in between urban spaces in the voids of disparate greenway networks of how to design an open space network which is able to be used by multiple diverse users, at different times, at the same time, and is economically viable. While acknowledging that pastoral parks do not make sense for many large urban cities today he suggests that urban ecology and open space will serve new environmental roles such as urban forestry, community gardens, microclimate modification, and contemporary forms of recreation (Laurie, 1997, p.165). I believe that in today’s terms of a legacy city and their abundance of spaces that these very community and ecological services can be the backbone of open space networks which can expand upon existing and future greenway networks, breaking down barriers to access, and increasing the synergy of systems in our urban fabric.

In Planning and Design of Ecological Networks in Urban Areas, Ignatieva, et al talk of the ecological significance of providing greenway systems in urban areas for biodiversity and habitat conservation, as well as the historical idea that cites were built around green networks of transportation from rivers and valleys, but how that has largely disappeared today in our urban form. They spend an equal amount of time talking about the essential social benefits and services provided by green areas including “improved climate, hygiene, aesthetics, recreational opportunities...while meeting the social and psychological needs of the urban population”(2011, p.18). They mention that landscape architecture language refers to urban open space as an integral part of urban frameworks and networks, while also mentioning affiliated research which address the “potential ecological, cultural, and social benefits of open space networks and their contribution to a democratic society” (Ignatieva, 2011, p.18).

Ignatieva et al argue that, “A new multidisciplinary approach to planning and designing ecological networks in contemporary cities requires the integration between ecologists, landscape architects, urban planners, politicians, ethnic or cultural- especially indigenous representatives. They will improve biodiversity, aesthetics, cultural identity, and be an important part of the framework for creating sustainable cities” (Ignatieva, 2011, p.23). This again reinforces ideas of landscape architects being leaders who will emerge to synthesis the ecological and cultural data to and organize the relevant stakeholders and actors to bring about new types of networks or productive, and appropriate landscapes to urban areas in need or responsible, pragmatic, and forward thinking scenarios of the new public realm.

Modern greenways theories are all encompassing cross-disciplines with an increased attention to ecological services and infrastructure, thus acknowledging the city as set of inter-dependent physical,cultural and ecological systems. There have been a number of theories related to planning and landscape architecture discussing the dilemma of urban areas’ ecological and social impact. While they don't all address the questions of ‘How can greenways be used to retrofit underused space in cities and provide new aspects of synergy?’ They have brought relevant topics to the table about city form, systems, land ethos, and landscape planning techniques. It could be argued that the modern progression of these theories stem from Ian McHarg’s publication of his book “Design With Nature” (1969) in which he was critical of the previous design movements as ‘subjugations of nature,’ and began to promote his environmental determinism in which designers responded more soundly to what the ecology of a site is telling us. McHarg was writing at a seminal time in American history. The environmental and civil rights movements were gaining significance in national dialogue, and there was awareness that there needed to be more scrutiny placed on how land was developed and space was planned. McHarg hoped that landscape architects would take the helm on these initiatives. Most recently, Transportation Oriented Development and New Urbanism emerged as and acknowledgment of increasingly automotive society. Landscape Urbanism came to fore almost simultaneously. This may be a result of the re-emergence of a different kind of landscape architecture redefining professional responsibility to overlap the realm of urban design and planning. Chris Reed defined this evolution as, “Contemporary landscape practices are
witnessing a revival of sorts, a recovery of the broader social, cultural, and ecological agendas. No longer a product of pure art history and horticulture, landscape is re-engaging issues of site and ecological succession and is playing a part in the formative roles of projects, rather than simply giving form to already defined projects” (Reed, 2006, p.269). Frederick Steiner credits the relatively new concept to integration of Ian McHarg’s ecological advocacy with James Corner’s urban design vision. He writes, “The basic premise of landscape urbanism holds that landscape should be the fundamental building block for city design. In traditional urbanism, some structure, - a wall, roads, or buildings- led development. Green spaces were relegated to left over areas, unsuited for building, or were just used for ornament. Through landscape urbanism, cultural and natural processes help the designer to organize form” (Steiner, 2011, p.333). The approach is to understand large scale systems and to have meaningful design responses to them. However critics of landscape urbanism suggest that few projects have been built within this school of thought, and that it remains largely a theory. James Corner and Chris Reed are advancing the prospects through projects such as the High Line, Fresh Kills, and the Lower Don Lands, but critics suggest there is not enough research into the ecological realm for these projects to provide any real environmental services.

The ecological urbanism approach “has the capacity to incorporate the inherent conflictual conditions between ecology and urbanism” is the later addition to urbanism (Mostafavi, 2010, p.17). Steiner is critical of these early approaches to ecological urbanism in that he feels there is value in the theorists’ foundation in landscape urbanism, but room for significant expansion in terms of ecological research. He believes these urbanist projects can be improved by enhancing ecosystem services which he defines as “the benefits we receive from nature: resource services such as food, water, and energy; regulatory services such as purification of water, carbon sequestration and climate regulation, waste detoxification, crop pollination, and pest and disease control; support services such as nutrient dispersal and cycling, and seed dispersal; and cultural services including cultural, intellectual, and spiritual inspiration, recreational experiences, ecotourism, and scientific discovery” (Steiner, 2011, p.336). Steiner therefore argues in favor of a more in-depth understanding of urban ecological systems will yield a more responsible practice based field of landscape architecture and urbanism and advocates for landscapes ecological urbanism.

In a nod to Ecological Urbanism, Derya Oktay promotes Human Sustainable Urbanism as the culmination of previous schools of thought stretching back to McHarg. He strengthens the bridge between physical and cultural by noting that “we live in environments that have been very damaged, in ecological, social, and cultural terms, there is an urgent need for a radical shift towards a holistic approach to sustainable urban planning/design combining ecological and social-cultural sustainability. This calls for sensitivity to traditional urbanism and impact of global ideas, practices and technologies on local social and cultural practices” (Oktay, 2012, p.25). This is essentially a reinforcing summary of the evolution of thought pertaining to the city as an ecosystem. In terms of the social side, the notion of sustainability comes into play, as the human component of synergy, but in affirms the growing trend of designers looking at cities as more than a collection of buildings, but as a multifaceted system which requires in-depth analysis to provide rational and responsive design solutions.

The division in thought comes from landscape urbanists wanting to create a sense of place with a response and acknowledgment of natural systems and the landscape ecological urbanist camp wanting to doubly create place but also serve a productive ecological function in the process. This presents an interesting scene when we talk about new types of greenways in retrofitting fragmented cities. If we assume that these cities have an abundance of land, we are afforded the opportunity to create regenerative landscapes or productive land uses through in fill and design along our greenway networks. Ecological urbanism requires more astute research but offers the designer a chance to become proactive in building sustainable landscapes and planning cities which are adaptable to future challenges.

In concluding our discussion I would like to note that city forms seem to have been predominantly imposed on the land, engineered or planned on top of ecological and cultural phenomena rather than as a response. Therefore today, we are left with cities in which physical form and the resulting responses of culture are leftover remnants of land planning which lacked acknowledgement of (a) underlying geographical and ecological systems; (b) the value of an activated public realm as an actor in a systems wide approach to urban synergy and connectivity; and (c) the relationship between humans and nature. This project looks to acknowledge these three prospects and will seek to identify landscape architecture theories which address the fact that there is a need to use landscape design to use a variety of urban and
ecological systems to create a more cohesive and productive urban realm responsive and adaptive to ecology, economics, culture, and place.

4 UNIFIED CITIES AND SYNERGISM

In many urban areas there may be an acknowledgement of the natural world, but there is often little recognition of the valuable interdependency that human systems, urban systems, and the natural world have in shaping a synergistic realm. The above review of theory and practice offers sporadic strategies and promises to address fragmentation and stitch the surface of the city through green network. The emergent urban construct is possibly synergistic, “a hybrid that is not entirely one or the other” (Beardsley, 2007, p.202). Meyer's articulation expresses our intentions*replacing this binary way of thinking with other conceptual strategies, landscape architecture can foster a land ethic and an aesthetic predicated upon a continuum between human nature and nonhuman nature, upon a recognition that the land is a cultural and physical product and that people are living organisms” (Meyer, 1997, p.51). Green networks purposely designed as part of a larger green infrastructure can begin to effect synergism and dismantle the disconnect between nature and culture.

In Programming the Urban Surface Alex Wall talks about the contemporary metropolis and how peripheral sites are often overlooked by designers as the core downtown areas are heavily programmed for tourists, or visitors, or day time workers, he observes that” The gifting of new instruments and equipment onto strategically staged surfaces allows for a transformation of the ground-plane into a living connective tissue between increasingly disparate and unforeseen programs” (Wall, 1999, p.234).

New greenways or adaptive networks can act as infrastructure – as the basis for future growth or current connection, and that previously built on sites can be reactivated both as places of their own and as parts of a larger network as instruments unfolding the new urban realities. This also enables the landscape architect to become more intrinsically engaged in “programming the urban surface.” The physical connections which will activate peripheral zones by infilling blighted cities through realizing new greenway networks based on a recognition of the interaction between the public and private realms, and the built and natural environments as all interconnected parts of one larger system of urban synergy.

5 CONCLUSIONS: ONGOING PROCESS

While many of the contemporary theories hold significant value and perhaps bring very relevant topics to the dialogue of urban planning and landscape architecture, we have yet to see the culmination of a cohesive theory which is more than just a theory, that is, which can be applied to U.S. cities, to bring a sense of synergy to the post industrial city. Additionally we have not seen the synthesis of urban greenways theories with regenerative urban design theories. We have seen theories which propose parks, and which propose ecological planning, and which propose greenways, urban farms, regenerative landscapes but there is little which has combined these programs as part of a city-wide, or even regional network, or system of synergy. Whether synergism should be approached as an attitude or ethic, or a designed effect is the question that will be further researched in continuum.

Baltimore city is noted as one of the former industrial urban centers that is losing population either to other cities or to suburbs. Such exodus, leaves behind fragmented urban surface and a deprived serveg the local population. Baltimore offers us the opportunity to re-evaluate our practices on spatial design and the role of greenway networks in unifying the urban grid at multiple levels and generate synergy.

6 REFERENCES


SCULPTING IN TIME: TRANSIENT LANDSCAPES AND TIME FOCUSED URBAN DESIGN

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1 ABSTRACT
This paper explores the idea of temporality in landscape, and proposes its role as an active and formative design element in shaping contemporary Landscape Architecture discourse as well as physical design. This time-focused design inquiry is based on research into precedent projects around the world as well as studio-course design investigations and proposals.

The paper is divided into four main parts. The first examines historical and contemporary landscape precedents to identify the significance of transient landscapes in the conceptualization of landscape architecture and urban design. The second part focuses on case studies of the “farmer’s market” typology to assess the mechanics of temporary event based public space and how different locales, demographics and networks of produce and product are brought together to reveal and evoke different social and agricultural landscapes of a region. This is followed by a study of “Shikinen Sengu” - an extraordinary example of the “permanent” transient landscape of the Ise shrine and how its cyclical rebuilding engages the fabric of time to manifest the culture and nature of its landscape, both through history and in the present moment. The last part of the paper reviews time-focused, urban design proposals by students that offer potential for transient programming, activation and mobilization within the urban public sphere.

Each of the projects described in this paper is a place that engages time, especially of cyclical nature within its site. Their cyclical time organization allows these projects to renew themselves and thus makes them pertinent to current human experience, in order to bring the sense of being here and now into the public sphere. Together, these investigations suggest adaptable, community initiated, resilient ways to approach ever changing urban conditions in the realm of our current landscape of urbanism.

1.1 Keywords
temporality, transient landscape, farmer’s market, urban design, time-focused design
2 INTRODUCTION

This paper explores the idea of temporality in landscape, its role as an active and formative design element in shaping contemporary Landscape Architecture and further, its potential impact on the realm of Urban Design. Through a study of precedent projects as well as studio based design proposals, this paper considers time as an essential part of landscape and urban design praxis. By accepting time as an operational tool within these fields, perhaps designers can conceive of new methods and design processes that address the multiplicity of interests in urban spaces where varied communities and systems overlap and that connect these contemporary urban site to nature and their cultural heritage. The premise stems from an investigation into contemporary attitudes towards the design of public urban landscape manifested in temporary, small-scale urban design projects. These recent transient projects seem to be successful in bringing the sense of being here and now into the public sphere. Moreover, they provide more adaptable and flexible scenarios that address ever-evolving and increasingly complex and diverse social, cultural, economic and ecological issues of the contemporary urban condition. Contemporary society is changing rapidly and faces the multifaceted challenges of globalization, virtual social networks, technological advances, an internet-dictated lifestyle and global ecological crises to name a few. Yet, Landscape Architecture and its governing disciplines, including governmental policies and zoning laws to city planning guidelines, seem to be based on a different clock where most design projects go through a painfully long permit process and may take decades before they are built. Sometimes by the time a project sees its completion, the public view or the social, economic or political situation surrounding the project has shifted and the project’s original designed intent seems to have lost its context. This is especially true in the realm of fast moving urban design where politics, bankruptcy, or a real estate development can change a neighborhood overnight. It is in this context that a proposal for a time-focused design of space is called for, as an attempt to reconcile these different time schedules.

In recent years, we have witnessed increasing numbers of so called “transient projects” from farmer’s markets and “parklets” to “popup” stores, spring up in North American cities everywhere. This trend is in part a direct response to a dire economic situation, a stop-gap measure in the effort of urban revitalization where bigger and more “permanent” projects have been stalled. It may also be due to rising public awareness of grass-roots community activism that proposes urban revitalization through small-scale and affordable interventions, or even as a critique of a car-oriented society. The New York Times art critic, Michael Kimmelman notes that this new temporary D.I.Y. trend in creating public space has been “developed from a democratic mix of top-down and bottom-up governance” and that the traditionally authoritative approach to public spaces is backward in addressing public needs. (Kimmelman, 2013) The transient quality of these projects by its nature suggests less applicability and thus less conformity to city planning regulations and their usual long permit process. In return, these transient urban projects are granted both immediacy and flexibility to creatively reflect on current public interests and needs from diverse demographics, especially the younger population. Moreover, these small scaled projects might hold potential keys for making a long-term impact on urban revitalization in the larger public realm of the city through a bottom up, community based approach, by building up a resume of successful, quick, cheap and often times non-traditional precedents, in order to affect and accelerate the more traditional top down, slower, planning policies. Therefore, the research goal of this paper is not only to examine how temporary programs, time-share uses, and occupations structure and transform their physical spaces as they take place but also to propose a time-focused urban design methodology as a way to address larger systems of nature and the city. How can we connect the design of our everyday environment to the larger cycles and rhythms in our contemporary world? Indeed, the role of time and temporality in landscape and urbanism is in need of close examination.

This paper is divided into four main parts. The first examines the embodiment of time in landscape in landscape design projects in order to identify the significance of transient landscapes in design. Particularly, it will look at the concept of “preservation” and “decay” in historical landscape design and some defining qualities of contemporary transient landscape projects, such as time-shared programming, event, seasonality and community involvement. The second part focuses on case study research conducted during a design studio at UC Davis in the Fall 2012, comparing three different farmer’s markets in the Bay Area. This comparison assessed the mechanics of how different locales, demographics, networks of product, and even ideologies are brought together temporarily, to reveal and evoke the different social and agricultural landscapes of the region. Additionally, it examines the mechanics of how to design time in space as it happens in a farmer’s market, where various and often
conflicting scales of time and space converge to create a contextual urban landscape—one of the most ubiquitous public space typologies of our time. The market is where the idea of locality (of being in a specific place) cannot be distinguished from a regional scale agricultural condition and where a temporary market-day simultaneously connotes a cyclical urban event and the cycles of seasonal growth on the calendar of agricultural production. This is followed by a brief study of the unique Shintoist ritual of "Shikinen Sengu" (directly translated as the ceremonial year shrine transfer) as an extraordinary example of how a cyclical rebuilding of the Ise shrine, once every 20 year for the last 1300 years, manifests an enduring history, culture and nature of the place in the present by managing different cycles, temps and durations of time in the landscape of the community. Shikinen Sengu is instructive in showing how an entire community, the communal memory, and the growth cycles of plant materials come together in a specific time and space creating a transient landscape that embodies a level of permanence. This enduring transient landscape highlights the permanence of the process of landscape-in-the-making. The last part of the paper focuses on proposals for time-focused urban design projects that offer potential for transient programming, activation and mobilization of the urban public sphere through unique revelations of landscape brought into the contemporary city. Together, these investigations demonstrate adaptable and resilient ways to approach ever changing urban conditions in the realm of our current landscape of urbanism.

3 QUESTIONS OF TEMPORALITY IN LANDSCAPE ARCHITECTURE: PRESERVATION AND DECAY OF TIME AND HUMAN INTERVENTION

As the 2013 CELA conference theme, "Space, Time, Place, Duration" suggests, Landscape Architecture is a profession of designing with time. In other words, the profession operates through the coordination of ever-changing living and natural systems as design praxis. Unlike other spatial design professions such as architecture, ours is often without a clear and well-defined sense of a finished design “product.” As James Corner states, “(l)andscape and image are inseparable” and that there is a long landscape design tradition stemming from landscape painting in Europe that is to reshape land “according to prior imaging.” (Corner, 1999) To put it plainly, Landscape Architecture trades in the currency of imaging. In lieu of a completed design “product” on the day of a project opening, a promised land(scape) image is given to the client or users as a token, so that they can anticipate that one day the landscape will become the very “picture” where trees are fully mature and wildlife thrives. Therefore, designing landscape inherently involves setting up and organizing time—it be it, expected plant growth, growth patterns, scheduled maintenance or the future projection and programming of what is to happen in the designed space. This projection and manipulation of time(s) is perhaps as determining in the success of a design as the formal layout and materiality of physical space.

Meto J. Vroom in Lexicon of Garden and Landscape Architecture defines this notion of time in landscape architecture in the entry, Dynamic. Sequence. Rhythm” as follows:

Natural and cultural landscapes develop and change over time. Landscapes are dynamic. An observer witnesses a momentary glimpse of an ever-moving and changing environment. Natural dynamics are the result of physical processes (such as erosion and sedimentation) and of biological processes (involving growth, blossoming and decay). ... Society also changes, and shifting views on realities influence our perception of the real world. (Vroom, 2006)

In this sense, what we design as “landscape” is not a product/object, but we design the “landscape of becoming.” The notion of changeability is so fundamental in thinking about landscape and yet, it seems that the question of time in landscape hasn’t been sufficiently, nor explicitly studied. This suggests a brief examination of historical and contemporary designed landscapes that evidence “time on terms with space.” An understanding of time as it has been embedded in landscape can be instructive as a way to think about a new time-based design strategy that can be deployed in the urban sphere.

Perhaps one of the most familiar examples of time-related concerns in landscape architecture may be the issue of “preservation.” Be it historic preservation or the preservation of nature, the term preservation intrinsically implies keeping things in the present tense and freezing time so as to avoid decay, decomposition, or disappearance. Unlike the historical preservation of a building, however, the ever shifting and evolving nature of landscape conjures complicated and conflicting questions related to
preserving historical gardens. For example, how do you preserve the gardens of Versailles, originally designed by André Le Nôtre in the 17th century? These gardens have already gone through centuries of addition, renovation, restoration and replanting and have been subject to different governing bodies responsible for their maintenance. In this context, historical preservation presupposes a “picture” of the gardens at certain crucial historical moments to be frozen in time as a point of reference in order to ensure that the gardens stay the same as the picture. Preservation efforts are implemented with cyclical replanting of the original species; it is believed that no tree in Versailles from the time of Le Nôtre still survives, due to their natural life expectancy. (Thompson, 2006) Here, time is manifested and materialized through a series of pictures of the past. In the case of Versailles, Corner’s idea of prior imaging, initiates the preservation effort and leads to human intervention toward reconfiguring times past. The image is manifested in space and reinforced by innumerable reproductions and representations in postcards and guidebooks that become re-imaging tools to shape and reinforce the communal memory of the historical place and time past. In short, a natural evolution or ecosystem of the gardens of Versailles is subjugated to the picture of a time past and preserved.

The preservation of historic gardens can also be achieved from a totally different angle. The famous moss garden at Saiho-ji Japan (1339 -), occupies a significant place when thinking about the time revealed in landscape. Unlike the meticulously maintained and preserved geometric gardens of Versailles, at first glance, Saiho-ji moss garden refutes the concept of human intervention in that the material, moss itself, becomes the manifestation of the duration of time past, as if to present a perfect picture of untouched nature. Moss preservation does not allow people to stroll freely around in the garden. One of the main moss species in the garden is Leucobryum juniperioides. It is a native species from the mountains of Japan that grows at the foot of trees, on roots, stumps and fallen trunks. Together, with the poetic display of the moss’s native habitat in close association with the life cycle of trees - their birth, decay and rebirth in the garden - it is as if the moss itself functions as a preserver like snow falling on top of the forest floor. Saiho-ji moss garden gives the illusion to the visitor that it embraces the passing of time in landscape in a preserved and pure form. Yet, the fact is that it is a carefully orchestrated display of time that requires constant human intervention and prevention to keep up appearances. Moss is one of the most fragile and hardest plants to maintain. In fact Zen gardeners go to great lengths in Japan to carefully and meticulously remove leaves that have fallen on top of moss by hand.

Thus, it can be said that preservation of time in landscape -whether naturalistic or artificial in its expression- shows how we, the humans, reveal and organize time in space and that time, almost as a material, is shaped by human interventions in natural and designed systems and environments. The question of time is inherent in preserving design. The problem of landscape preservation, however, is that the “preserved picture/image” or “preserved material” wins out over engagement in the moment and the evolution of society, people, culture or ecosystems. In other words, the distance between the preserved past and the present where our “preservationist efforts are made never grows closer - indeed it grows more distant, as the present keeps moving on to future. This conundrum brings up a question -has there been a different approach to time in terms of space/ landscape that is not about preserving a moment in time?

At first glance, the idea of decay seems to be the opposite of preservation. A prolific writer and artist, Robert Smithson, was one of the first influential land artists who took interest in the concept of time without obvious human interventions. His concept of entropy proposed a new attitude towards landscape with which to embrace the temporal aspect of the natural environment including the decay and impermanency of his own work as an artist. He saw landscape as “carriers of the unexpected and of contradiction of all levels of human activity, be it social, political or natural.” (Smithson, 1973) Similarly, centuries prior to Smithson, Japanese cultural embrace of the aesthetics of “Sabî”, literally meaning, “rust”, shows appreciation for the evidence of old age and decay. (Tarkovsky, 1986) More specifically, this citation points out the particular phenomenon in Japanese history when revealing time’s passing in old materials became a particular national aesthetic. Japanese Buddhist temples originally came in bright colors when first imported from China, but stopped being repainted sometime around the 9th-12th centuries during the process of naturalization of Buddhism in Japan. This allowed the original natural wood materials to be exposed to reveal its age; the fragility of human life is thus implied as contrast. In this case, the visualization and materialization of old age where time is revealed in materials and in space becomes a way of mastering time in a narrative format. However respectful to the time’s passing and process of change, both examples of “decay” still fail to engage with the “now.” In contrast to the
preservationist relationship of the past and the now, where the now keeps moving away from the permanently frozen past, in these examples it seems that the only clock that is ticking is the decaying time that forever keeps moving away from the somewhat irrelevant now. In both cases, the problem seems to be that the idea of time is conceived as the linear passage of time. In linear time organization, now is always one step ahead of the past and the past and the present never meet nor interact with each other. This fundamentally creates a distant view, a cold gaze that makes these landscapes, regardless of aesthetics, an object or a picture, rather than a place of engagement with continuity to the present day.

From the historical examination of time in landscape so far, it seems that neither the preservation of the past nor the cultivation of decay harnesses time as an element that engages the immediacy of the now in dynamic social, ecological and special systems. Therefore, it seems a different time organizing model other than a linear system may be required in thinking about the immediacy of here and now as an essential part of a time-focused design approach. In understanding a different system of time it is indicative that an ecological planner, Nina-Marie Lister states that “ecosystems don’t follow a linear path of development toward a particular biologically diverse and stable “climax” state.” (Lister, 2007) How this ecosystem analogy plays a role in understanding a time-focused design strategy will be elaborated in the next section.

4 TEMPORALITY AND URBAN CONDITIONS IN CONTEMPORARY URBAN DESIGN: A RECENT TREND

“If there is to be a “new urbanism, it will not be based on the twin fantasies of order and omnipotence; it will be the staging of uncertainty; it will not long be concerned with the arrangement of more or less permanent objects…. “(Koolhaas, 1995)

Travelling centuries back to the future of our contemporary urban landscape, the question of how this concept of designing with time in landscape can be applied to contemporary urbanism amidst everyday life in a decidedly democratic society will be considered. As mentioned, in recent years, there has been a surge of transient projects in North American cities that make an interesting statement about the potential impact of a new kind of urban design. While temporary urban landscapes of the past might have merely suggested a few planters in temporary parking lots, this new trend attempts to take advantage of its very temporary quality and taps into social, cultural and commercial resources for revitalization and activation in the making of temporary public spaces. Additionally it suggests that these new types of transient urban projects are more than urban spectacles, mere art installations or special event promotion, but are instead rooted in everyday quotidian life, as commentary on social, political and cultural issues surrounding cities. They have the potential to have long lasting influence as well. For example, “Proxy project” by Envelope A+D, which is part of the Octavia Boulevard urban revitalization in San Francisco, California has been instrumental in creating a new destination in itself, bustling with social life and amenities including a café, a specialty ice cream shop, a beer garden and a bike shop among others. Initially started as an RFP from the SF Mayor’s office that requested design proposals for temporary uses of lots resulting from the removal of a freeway structure, these narrow strips of land by a busy traffic thoroughfare have a few specialty shipping container lots, each one with a parking lot/ backyard of its own. The layout successfully breaks down the scale of a traffic thoroughway/ highway off-ramp and creates the illusion of a small cozy neighborhood.

“Proxy is a temporary two-block project located in San Francisco which seeks to mobilize a flexible environment of food, art, culture, and retail within renovated shipping containers. Envisioned as transitioning into a more permanent housing plan in roughly four years, proxy is both a response and solution to the ever changing urban lifecycle, existing as a temporary placeholder and an instigator of evolving cultural curiosities in art, food, retail and events. Our design embraces the vast diversity of a city and encourages the rotation of new ideas and businesses as well as innovative public art installations which come and go like new visitors at the site.” (http://proxysf.net/)

This manifesto suggests that the success of Proxy project is partially owed to acceptance of its transient nature and because it embraces changeability and revolving cultural attractions. Similarly, in San
Francisco there is a series of Parklet projects, which temporarily occupy parking spots to create pocket parks to encourage social gathering. Street Food Park (http://somastreetfoodpark.com/) utilizes an empty parking lot through short term lease from the city and is filled with a rotating roster of food trucks - each truck’s whereabouts and scheduled appearances at the site are tracked by tweets- in order to provide diverse food options at lunch hour. The rotating schedule and changing food options create excitement that is in touch with the pulse of urban public life. The same is true for the Proxy project’s rotating art gallery, food and retail events. The projects are successful in creating a public social space that is filled with program, events and activities in leftover and underutilized nooks and crannies of a space in the city and are also remarkable in finding a way to steer public interests by hosting revolving events and attractions. Due to the temporary nature and its small scale, the site that each of these transient projects occupies has little significance and is often interchangeable. The interchangeability and placelessness is a good thing in this case for working on the public’s desire for urban spectacle. On the other hand, it is also observed that a lot of these events, programs and people gathering tactics depend on commercial activities, suggesting that commercially driven programs are necessary ingredients in successful transient urban design projects. Are commercial driven programs the only answer to engage people in activating urban public space today?

So far this paper has largely discussed contemporary transient projects from the aspect of program and events at all levels of human activity, including politics, commerce and lifestyle. In contrast, the following section explores a different aspect of designed time in urban transient projects that focuses on the sense of time embedded in the physical aspects of landscape itself, such as ecological cycles, biological evolution and expression of season. One such project is the Paris Plages project. According to its website (http://www.paris.fr/english/visit/highlights/parisplages/rub_8208_stand_34146_port_18969), the city of Paris transforms the riverside thoroughfares by the river Seine into a pedestrian only beach resort, complete with real sandy beaches, a swimming pool, cafes, sun-bathing decks, showers, music concerts and all sorts of beach side sports for four weeks in the summer since 2002. Besides its massive popularity among the native citizens and tourists and its evocative power due to the physical transformation of the familiar riverside landscape of the Seine, the Paris Plages is appealing in its subtle social message. It provides a summer beach holiday in a city where everyone is obsessed with going away on holiday, to those who cannot afford to do so. Similarly engaging in the local river landscape, “Badeschiff”, translated as spa barge project in Berlin, Germany is also a place of seasonal social, cultural and leisure activities that is open to the public. In the summer it becomes a floating swimming pool and in the very cold winter in Berlin it is a floating hot tub. In fact, the seasonal transformation of natural landscapes has been celebrated as a social event all over the world. Especially notable is the cherry blossom season in Japan. Each year, complete with a blossom forecast on national TV, millions of Japanese make it an excuse to have parties under cherry blossom trees in the park, on the streets, or even in the cemeteries for a few nights, temporarily transforming the urban cityscape into that of the country. These examples set up a transformative mis-en-scene in the midst of a busy cityscape. These transient and cyclical projects punctuate the city and slow down its pace by revealing a slower but dramatic cycle of seasons that is usually hidden from the quick cycle of city life. Therefore, these more landscape based, seasonal temporary projects show another potential for time-driven landscape design criteria that takes advantage of landscape’s seasonal transformative potential. These transient designs are social, cultural and natural at the same time and none is solely dependent on commercial activities for success.

Castro Commons is a peculiar transient urban project. This example is not commercial, physical, nor seasonal, but is the most transient in nature. It shows the transformational power of the regular and repetitive occupation of space by a particular group of people. “Castro Commons” started out as a non-descript parklet, in the form of a mini plaza/ median, at a busy intersection in the Castro neighborhood of San Francisco. Its physical configuration is minimal, with planters and a few chairs defining the space. The space became prominent when a group of nudists started to gather regularly and the plaza got named as the first US urban clothing optional nudist plaza (“Social nudity” entry, in Wikipedia) in the middle of a public thoroughfare. It is generally observed that Castro Commons’ peculiar success came from its contextual location in the city, that is to say, the Castro being known as one of the most prominent gay capitals in the US. Somehow, the particular physical intersection known for its progressiveness and acceptance of transgressive social behaviors became the social intersection for nudists of all types and origins such as nude beach denizens, out of town visitors and Castro gay nudists, to meet and to make a
visual statement in the city. It is also notable that the particular intersection provides one of the few dependably sunny spots in foggy San Francisco and the nudists' temporary occupation largely depends on the emergence of the sun.

In his groundbreaking work in the 90s, architect Bernard Tschumi proposed a new urban typology often referred to as "event architecture," stating that, "... there is no space without event, no architecture without program." (Tschumi, 1994) His proposal was partly a critique on the historicism, modernist formalism and subsequent Postmodernist formalism that dictated architectural discourse in the 70s until the late 80s and partly a suggestion for a new methodology of architectural representation and drawing that reflected his take on the city. He felt that cities provide a stage where a complicated web of narratives and bodily movement unfolds. In short, he brought in the concepts of program and notation to urban design through a series of notative graphics, diagrams and sequential photos. His idea of event architecture is suggestive in thinking about a time-based landscape/urban design strategy, since program, event and bodily movement are the very essence of time-based urban projects. This paper expands his notion of event architecture to include the specifics of urban contexts, including social, cultural, economic and political conditions.

From what has been discussed so far about time-based urban transient projects, each imports its own rhythms and pace to intervene and bring energy to the existing cadence of public life, whether it is a lunch schedule, a social and cultural calendar, or a slower change of a season, or even the ephemeral and localized occupation of a sunny spot in a plaza by urban nudists. Time-focused design interventions are successful for being attuned to individual and diversified needs and pulses of local urban life, in contrast to a traditionally planned pocket park, for example. Moreover, the transient project's inherent quality of interchangeability, repetitiveness and revolving programs, occupations and occurrences, proves to be more resilient and adaptive in ever shifting urban conditions. It is catered to individual needs and its small scale makes it easy to quickly address changing public needs. In contrast to a linear understanding of time displayed in the historical examples in the previous section, the quality of contemporary transient projects can be said to offer "alternative scenarios that take place temporally as well as spatially. " (Lister, 2007). That is to say, recent urban transient projects seem to possess a quality that is analogous to what Lister describes as an essential component of resilient and adaptable ecosystems. Indeed public urban landscape can be said to act as one big ecosystem within which each cycle of time of different agents and systems, such as individual, community, plants, climate for example strives to survive and thrive in the immediate moment and place. At the same time, the ecosystem of a transient landscape seems to sustain and function as a dynamic whole as a successful public space typology mainly because of its ability to constantly change shape and the space in which it takes place. Lister points out that living systems go through phases of stability to instability cyclically and that "(c)hange in an ecosystem as a result of natural catastrophe, .... is a normal and usually cyclic event, although it is considered catastrophic, even tragic." (Lister, 2007) Urban life too can be understood as a cycle that goes through different phases as a loop, from decay to rebirth. Ephemerality is always paired with permanence and vice versa. This idea offers a methodology and strategy for a time-focused urban design. The farmer’s market is an event that orchestrates several overlapping cyclical times and makes an excellent case study that embodies such a transient spatial typology.

5 FARMER’S MARKET STUDY

“When you make a note in your Filofax you are taking an (the only) opportunity to organize evasive time. You can make the idea of time visible. Perhaps this suggests an answer to the tough question of how to understand that landscape means capturing the abstract idea of space in elements and layout patterns.” (Latz, 1999)

In the Fall of 2012, UC Davis Landscape Architecture students engaged in a farmer’s market study as part of their design studio in order to dissect the mechanisms of a transient urban project. The farmer’s market was also chosen because it is one of the most well-known transient typologies that have been around for a long time. In the article “The Meaning and Design of Farmers’ Markets as Public Space,” Mark Francis and Lucas Griffith describe an increasing popularity of farmer’s markets in recent years – in fact, the number has jumped three times more in the 15 years between 1994 -2009 – the authors go on to posit the importance of the farmer’s market as an integral part of the diverse public realm
of cities and stress its role in economic revitalization (Frances and Griffith, 2011). Their article is informative in three ways. First is the fact that the farmer's market is now considered part of the new types and forms of “public space”, alongside which they list community gardens, skate parks and ecological parks as other examples. Secondly, the farmer's market's economic vitality plays an important role in revitalizing contemporary civic life, as market activity historically has been the center of social life since the beginning of civilization. Lastly, the market is an increasingly popular and successful program for public space invigorated with social and cultural engagement of the civic life that takes place.

In Frances and Griffith's example of new types and forms of urban public space, the farmer's market stands out since it is the only example in the midst of sustainable parks and community gardens that is: non-site specific, program-oriented and temporary urban “space” (ibid.). In fact, this temporal characteristic seems to sit uncomfortably with the authors in their definition of new urban public space. They go on to declare that their goal is to provide a permanent home to farmer's markets in “the planning of official public open-space systems.” so that they are no longer “temporary events in leftover spaces” and the farmer's market program cannot be displaced by development pressures (ibid.). The dilemma here is that the farmer's market is by definition nothing but a communal and commercial activity that cannot be reduced to a spatial typology. In contrast, our studio's farmer's market research started from the hypothesis that the temporal character of the market is an active “place maker” in itself and is a prime catalyst for bringing civic space to life by stimulating vital social, economic and cultural communal activities. Furthermore, this research attempted to test out the idea that the flexibility and changeability allowed by this time-based urban design typology, which does not always conform to more rigid official urban planning norms or policies, might hold a key to engage in more grass roots, community and activity oriented place making strategies as an alternative to traditional master planning.

The first task in the studio was to conduct a spatial comparison of a market day and a non-market day at the Davis farmer's market in Davis, California. Davis farmer's market, designed by none other than Mark Frances, was the first farmer's market in the US that had a permanent market structure in place as a part of a larger central park. This exercise aimed to reveal how the space is used differently and transformed by temporary events/programs. Visualization and representation of the time organization, as well as remarks and analysis that students gathered on the site, were carefully studied in the process. Students set up a datum point, to record the rhythm, meter and intervals of engagement and finally analyzed the raw data as a visual sequence. This allowed students to draw conclusions about dealing with time and temporality in space.

![Figures 1 & 2. (Works by Javan Bowsher and Amie Patel from LDA 191, Fall 2012)](image)

With the techniques of juxtaposed diagrams and sequential photos, Figure 1 successfully depicts both spatially and temporally how the park space is used differently, or sometimes not used at all, on a market day and non-market days. Figure 2 on the other hand, notates the park users' movements in the park and overlays the information with a sun and shade study. Overlaying information is effective in situating the raw data in context, of the city, climate, culture, demographics, etc. Despite the desire expressed by Frances and Griffith, students found that the park is underutilized throughout the day on non-market days and that the physical specifics of the park and a permanent structure for the market have little to do with the success of the market as a social event. If the success of a farmer's market cannot
necessarily be measured by the physical setup of the space, then what are the other key elements beyond the spatial in determining the success of a farmer’s market?

The next exercise was to compare three different farmer’s markets in the Bay Area, namely Davis, Alemany and Ferry Terminal Plaza. It is noted that each farmer’s market is one of the most popular and successful in the area and each has distinctive physical features and very different audiences that create distinctive cultures of their own. Students looked into how the physical space in each specific location affects the success of each market’s temporary programs as well as how time-shared uses and programs are organized. A comparative study made it possible to illuminate each market’s specificity through our site visits, overlaying, and juxtaposing the data to draw conclusions in the studio, as well as on-site interviews with the users. Students were divided into 4 groups, to research four categories of specific investigations. Those groups were: “physical space” (size, plan layout, circulation, vegetation, etc.) “product and produce” (price, where they are from, season, marketing, etc.), “regional/ local scale” (Accessibility, locations of farms, the site’s connection to a larger context of the city in which it is located, etc.) and lastly, “people” (demographics, # of visitors, where they are from, what are they buying, activities etc.).

Figure 3. Physical spaces. (works by Javan Bowsher, Johan Holvick-Thomas and Brooks Taylor from LDA 191, Fall 2012)

Each farmer’s market has distinct physical features that are totally different from each other and each is situated in a totally different urban context. Davis farmer’s market has been in the very pastoral central park since 1975 in the college town of Davis, an agricultural research center in Northern California. The Ferry Terminal is in downtown San Francisco with spectacular views of the bay, the Bay Bridge and the Golden Gate Bridge and is at the termination spot of many modes of public transportation in the city. Even without a market, the ferry terminal building is a host to daily operating gourmet stores and thus is a major tourist attraction, trying to cast itself as the symbol of the slow food capital of America. Alemany Farmer’s market on the other hand, is in a parking lot framed by intersecting highway overpasses adjacent to low income housing in the Southern part of San Francisco. It does not have the physical/ spatial appeal of Davis nor the financial support system of the Ferry Terminal, nevertheless it is a long standing market, operating since 1943, started as a part of the victory garden movement during the world war II (http:// sfgsa.org/ index.aspx?page=1058), and beloved by the local community. Spatially, these markets could not differ more from each other. Is the key to each of their success in the commercial activity itself?

Figure 4. Produce and product. (works by Anthony Parker, Iqra Anwar and Tyler Erickson from LDA 191, Fall 2012)
One group researched where merchants for each location came from, what kind of products they sold, how produce was related to seasonality, market price comparison with each other and with local super markets and the marketing strategy of each market. Some of the most interesting research outcomes were: 1. Each market has specialized produce and products that cater to specific clientele. For example, Ferry Terminal caters to visitors desiring gourmet, organic and restaurant branded food whereas Alemany market is decidedly ethnic and sells rare Asian vegetables that can’t be found elsewhere. 2. Due to its specialization, Ferry Terminal sells the highest priced produce and products on average. However, generally speaking the prices are not so different between farmer’s markets and supermarkets. The year round produce is the most consistent in price. 3. The governing body of each market makes each market totally unique. For instance, Ferry terminal is run by CUESA, Center for Urban Education about Sustainable Agriculture, which is an active advocator for local sustainable food and advertises its value; complete with a comprehensive website and signage as to the location of each farm at all the produce booths. In contrast, Alemany market is run by a city agency and the managing office at the site was very reluctant to release any information on the merchants, not even the numbers of merchants nor kinds of produce. 4. The locations where the farmers and merchants are from are nearly identical in all three locations. However, farmers’ choice of where to sell their produce depends on the specialty of each market. One Davis farmer doesn’t go to the Davis market but instead drives all the way down to the Ferry Terminal to sell his lavender flowers and herbal salts. The locality of farmers also depends on the seasonal availability of certain produce. For example out of season strawberries have to travel much further from the south. The locality map thus is seasonal and temporal as well.

Figure 5. Regional. (works by Micheline Chagniot, Peter Chang and Chris Norgaard from LDA 191, Fall 2012)

In fact, the issue of locality brings up an interesting question, when the intrinsic value of a farmer’s market is to get locally produced food. The regional group began by assessing how “local” produce is defined. Davis farmer’s market contains the most locally produced produce of all the markets by far. Surprisingly, the CUESA run Ferry Terminal has the longest driven merchant, from 533 miles away, that even surpasses the Whole Foods market chain’s definition of “local” as a 400 mile radius.

People:

Perhaps, the most interesting and varied research outcome came from the “People” group. They conducted on-site interviews and data collection on demographics at each location and the results are compiled in graphic boards and a video. In summary, in the interviews, the Davis market was revealed to be about socialization and social events, suitable to a family-oriented wholesome lifestyle where locally grown food is an additional bonus. On the other hand, people, many of them tourists, come to the Ferry Terminal market for fresh produce in support of the slow, organic food, sustainability and the farm-to-table movements, while enjoying the view of the amazing San Francisco Bay. People don’t come to the Ferry Terminal in search of a good price but instead for the “scene”. In contrast, Alemany stood out as the venue for local people to get their week’s worth of groceries quickly so there is not much emphasis on socialization nor on events. The clientele is decidedly Asian in search of rare ethnic vegetables that are only sold there. Organic produce is minimal and is not particularly well advertised, as if the value of organic produce doesn’t have much relevance in this particular market. In this way, it is an everyday people’s market without an external promotional campaign.

Overall, the comparative study revealed that a farmer’s market is made up of the complex web of social, cultural, political, economic and ecological networks that overlap at a specific time and place over
specific intervals, schedules and seasons. Moreover, those time-organized occurrences, such as a market-day event itself and the comings and goings of seasonal produce from different locales, happen in a cyclical manner as in Lister’s revolving and shifting model of successful ecosystems. The farmer’s market is a place to connect people to the cyclical loops of both urban and agricultural landscapes. In this way, transient landscapes, as seen from the case study of farmers’ markets, can be called dynamic, adaptive and always a work in progress. Additionally, it is apparent that a community of people who supports and comes to a market not only plays a role in setting the mood of the place, but also adds value. The community is an active part of making this landscape in both time and space. The rhythm and repetition of a market day and market day activity connects people to their cultural, seasonal, regional, urban and agricultural landscapes in ways that are not the same in other parts of their everyday life. Time, intrinsic to these landscapes, becomes pertinent to their lives through produce, people, programs and events. Farmer’s markets revealed another aspect of time in landscape. That is the making of a “communal” time in public space, by sharing and experiencing the time and space together by the participants. The communal time here needs to be distinguished from a communal time that is derived from a one time only event or a spectacle. By the nature of various cyclical times in a farmer’s market, the cyclical communal time has both the freshness of the shared present moment as a community, as well as the enduring experience of such shared public space and its supportive community in-the-making. The next section attempts to explore such a cyclical and communal transient landscape in-the-making through a treatment of “Shikinen sengu” in Japan. It will focus on how an entire community creates a permanent communal memory of the place in history, culture and nature, that is refreshed and renewed every 20 years by a large, elaborate and cyclical temporary landscape process. The cycle involves the supporting community in the rebuilding of the main shrine with timber from nearby forests and ritual celebrations of each step in the process.

6 SHIKINEN SENGU: A DESIGN OF SHARED COMMUNAL CYCLICAL TIMES

The ritual of “Shikinen Sengu” literally means ‘ceremonial year shrine transfer’. Ise shrine in Japan, the largest and central home shrine for the Japanese native religion, Shintoism, can be seen as a very unique transient landscape project. It is an extreme case of age-defying “preservation” landscape tactics that takes the form of ritual. Its recurring ritual has had an enduring history for hundreds of years, and is observed even to the present day. As stated on Ise Shrine’s website (Isejingu.or.jp), Naiku the inner sanctuary of the main building gets reconstructed in exactly the same form and materials once every twenty years at an identically sized site adjacent to its former site. This has gone on since late in the 7th century A.D. for 1300 years. Shikinen Sengu takes about 2 years of preparation involving the local community of faithful followers processing the holy timber from a holy forest and washing holy white stones in a local river for the new entry courtyard. Even the source of timber used for rebuilding has been managed through forestry and cyclical replanting. The sizes of the timber required means that the trees for harvest must be on average 200 to 900 years old. Planting and replanting hinoki cypress (Chamaecyparis obtusa) and preparing for the next cycles of Shikinen Sengu are crucial parts of this landscape’s image as well as its making. The repetition of the ritual over 1300 years makes the preservation of the historical landscape pertinent to an evolving present time and space. The sense of time is carefully managed. It manifests itself in the continuation and repetition of the ritual itself carried out by a community of people, rather than through building materials or the physical site that the building occupies.

![Figure 6. Different time lines of Shikinen Sengu by the author, Spring 2013.](image-url)
The idea of “Shikinen Sengu” is particularly intriguing, since it combines a repetition or reenactment, the community participation and involvement thus maintaining the landscape’s relevance to the present on one hand and acknowledges the duration of time through which the act is continued and renewed, on the other. Time manifested in space here is not just a preservation of image like in the Versailles gardens nor is it a preservation of material appearances, as in the idea of decay and rebirth in the moss garden. Shikinen Sengu is an active cultural movement rather than an aesthetic end in itself. At Ise Shrine, the design concept does not let nature take its course so as to diminish traces of the human interventions nor the designer’s intentions. Rather, the program is an active and conscious agent of time/space-making that simultaneously creates a physical space such that the Naiku, inner sanctuary, stands here and now at the moment of creation and is as well a historically enduring space through time in its sameness. This combined form and action suggests a creative agency in which there is a great potential for time/space-making as a new way of designing landscape. Landscape can then be understood in terms of time revealed through community activity and use, or even through more transient groups of people, society or cultures.

7 URBAN DESIGN PROPOSALS

In the last section of the paper, some of the key ideas of transient landscape, such as cyclical times, immediacy of being here and now, time-organized programs, adaptable and revolving events and making of communal and shared time in space, are reviewed through ideas tested out as design proposals in the studio. The question that students were asked to consider for their proposals was how to mobilize time, schedule and people in order to create a successful and lively public space that can directly connect with the present urban conditions. The site chosen was a parking lot, adjacent to a steam plant in a derelict part of downtown San Francisco. Students were first asked to define a series of design parameters, such as who the targeted users are, how to socially and spatially activate the space through their proposed temporary programs, how to set up and organize their temporal rhythms, how to use affordable, reusable and easily (re)movable materials, to name a few. It was also stated that the space-activating program should not simply rely on commercial activity to compel students to propose alternative ways of attracting people. The project, needed to consider different aspects of program and spatial and temporal organization, through key words such as “people”, “regional, economic and social impacts”, “products”, “materials” and “physical space” along the same line as the farmers’ market study was conducted.

The physical site and its location in downtown offered a couple of questions for the students to think about. It is in a transitional leftover space sandwiched between the Tenderloin area with its persistent and transient homeless populations and derelict open land in close proximity to the popular tourist destination, Union Square. The space needed to be flexible, multi-purposeful and was asked to be an active force in the development of new forms of civic life and social exchange addressing the complex neighborhood context and the seemingly conflicting interest groups.

Two projects stood out in their effective use of time to orchestrate and structure program and space, as a way to engage and integrate different social groups and urban contexts. One is called “The Stacks.” This project took advantage of the secluded nature of the parking lot, proposed to close off vehicular access on both alleys that frame the lot and to transform it into an exclusive spot that hosts a range of time specific activities and events, from music concerts to food trucks that are scheduled and promoted through social media such as facebook and twitter. The name came from the site’s existing steam stacks as well as their use of stacked gabions filled with reclaimed asphalt from the parking lot to arrange temporary and changing boundaries of the proposed activities on site. There is a unique juxtaposition of two different kinds of time in this proposal. One is a regular rhythm of the lunch time schedule with rotating food trucks, strengthened by the presence of more permanent food and cultural activities such as sidewalk cafes in a new alleys-turned-into-pedestrian-plaza space. The regular daily programming creates a sense of security and activates the formally derelict space. This regularity is punctuated with an irregular set of cultural and music events for a much larger audience, promoted only through social media to make it very exclusive, immediate and to build up a sense of excitement for an anticipating crowd. The active use of social media makes it appealing to the younger generation and also keeps the element of surprise as a part of this urban experience. In some ways, the use of social media as a part of time-focused design proposal shows some potential for being an effective method of creating a new kind of urban community that could in turn make a temporary space as in the case of “Shikinen
Sengu.” It is the community that physically transforms and affects the process of public space making. The social network’s virtual community has a tremendous power to mobilize people. When “designed” well, it might become the powerful tool in engaging in the contemporary public space.

Figure 7. Works by Aaron Domingo, Tyler Erickson from LDA 191, Fall 2012.

Another notable proposal made use of steam from the steam plant as a way to reconnect the divided neighborhood. Tapping into the ephemeral quality of steam, the project proposed different uses for steam, a heating pad for warming people, inclusive of the existing homeless population, an outdoor hothouse, steam lighting art and a green house. All of these uses creatively adapt to designated programs, and visually and poetically express and address temporality and place activating programs, using the inherent urban landscape and phenomenon. This project makes use of the transient quality of steam, an essential part of industrial urban landscape and successfully transforms it into programmatic attractions that are pragmatic as well as poetic. The proposed programs pulsate and change with a dynamic stream of steam available to the site at specific times of the day. The changing volume of steam was a deciding factor in changing programs on site. The Steam Work is also successful in addressing the diverse population that uses the space, whether it is a tourist or a homeless person and shows the potential for the power of landscape’s ability to transform physical space through transient interventions.

Figure 8. Works by Johan Holvick-Thomas and Chris Norgaad from LDA 191, Fall 2012.

8 CONCLUSION

“...we must accept and embrace change as a normal part of life and through our designs and plans, adapt to it in a more flexible and responsive manner.” (Lister, 2007)

Studying time and its power to shape and organize space, one can say that time is landscape as much as space, place or activity is landscape. Throughout the research, transient landscape projects have proven to be effective in connecting the often abstract ideas of landscape, place, time and people to very immediate urban conditions. Small scale, temporary landscape/urban design projects work as portals into the contemporary interests and activities of their milieu and thus, these projects have the potential to affect change in the structures and policies that govern, define, manage and structure the development of public space on a broader scale in the city. The dominant methods of planning disciplines towards the design of public space are often distanced and rigid, which is evidenced by the ubiquitous use of plan-
view zoning maps, or from the distant perspective of the aerial view. These methods are challenged by the actual use and bottom up development of transient projects. The planning discipline often seems to be based on a very linear understanding of time, where the past is always prior to the present and those two instances only converge in a fairly contrived way as often is the case in historical preservation. Transient projects on the other hand come from a D.I.Y., experiential, experimental and bottom up sensibility that transforms small leftover spaces of the city one by one. As these transient projects get realized, each has the potential to engage its site and community in an active process that becomes a living part of the urban landscape.

The notion of time in transient projects leads to a notion of “locality of time”. This concept is analogous to the notion of genius loci – or spirit of the place, but focuses on a spirit of the time, or perhaps, more specifically, the spirit of the moment. Thus a “locality of time” refers to the amalgamation of a number of “times” as experienced and lived by people, as opposed to a more universal and scientific time organization as measured by a clock, a calendar or a time zone. The locality of time cannot be described by a linear calendrical system, but can instead be understood by the mapping and overlay of the different rhythms and systems that apply to a particular location/population. Through design that responds to and cultivates this “locality of time” the people, the agents in these spaces, can be brought back into the design of public space. This is urgent at this point in history, as people aggregate in cities and spend more and more time in virtual space, many of us are becoming disassociated from real time and physical places. Instead of placing and organizing people, programs and events in a universal calendrical and linear time, understanding “locality of time” is based on the idea that Landscape Architecture is made up of individual times, communal times, biological times, evolutionary times of the natural world, geological times, etc. When we design landscape, we actually create a specific time comprised of all these different times that is now lived in the designed space.

This inquiry into time focused design can be called “sculpting in time” in Landscape Architecture. The phrase “sculpting in time” was coined by the Russian film director, Andrei Tarkovsky as a way to describe the act of collecting, editing and thus mastering individual and factual times, in order to create the designed time of film – the time that is lived in the duration of a film.

In what form does cinema print time? Let us define it as factual. And fact can consist of an event, or a person moving, or any material object. …But the virtue of cinema is that it appropriates time, complete with that material reality to which it is indissolubly bound, and which surrounds us day by day and hour by hour.” (Tarkovsky, 1986)

Similarly, the sculpted time of landscape architecture, created in space, needs to be firmly grounded in both the material and experiential realities of a site’s life cycles. When proposing a new kind of “operational” landscape design tactic, Corner reminds us of the Old German word landschaft referring not to scenery but to environment of a working community” which is in contrast to the idea of landskip, which was a traditional landscape design method, focused on creating beautiful “scenes”. (Corner, 1999) Landschaft is “more than an organization of space; it connoted too the inhabitants of the place and their obligations to one another and to the land.” (Stilgoe cited by Corner, 1999). Along these lines, transient landscape design can be a way of engaging a working community that supports, shares and operates the cycles of lives and various time schedules of the environment surrounding inhabitation as seen in the example of Shikinen Sengu. Through repetition and adaptation, a transient landscape firmly grounded in a working community can endure, evolve with its changing environment and last as long as, or longer than, more “permanent” projects. Each of the projects described in this paper is a place that engages time within its site, however, each also evokes rhythms and landscapes beyond its boundaries through overlapping systems and communities. Their cyclical time organization allows these projects to renew themselves and thus makes them pertinent to current human experience.

9 REFERENCES