# Importance of Education in Landscape Architecture

Landscape Architecture Seminar: LAR 750

Kate Larkin



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# Starting Vision Statement

It is the job a landscape architect to re-envision the landscape to ensure that it is functional and aesthetically pleasing. As population grows and people are migrating to cities, landscape architects foresee the future to maximize the use of space and create good places where people would like to be. I envision the future of landscape architects to be the advocates of most design projects. We are trained to analyze the environment, understand ecology, design, and try to implement sustainable practices that will mitigate the negative influences that people introduce to the environment. These skills are

important assets that we can contribute when collaborating with architects, engineers, horticulturists, and more. The need for landscape architects is going to continue to increase because we are educated in diverse topics and we have an environmentally-friendly way of thinking.

#### Landscape Architecture described by ASLA:

'Landscape Architects analyze, plan, design, manage, and nurture the built and natural environments. Landscape architects have a significant impact on communities and quality of life. They design parks, campuses, streetscapes, trails, plazas, and other projects that help define a community...'

(ASLA, 2018)



Figure 1. Opportunity diagram that focuses of pedestrian circulation, green corridors and views to the Nile Rive in Maadi

# Common Goals for Landscape Architects

- Promote social interaction
- •Create spaces that are visually pleasing
- •Design spaces that create memorable experiences
- •Improve the environment
- •Suit the needs of a diverse group of people
- •Preserve natural resources and promote sustainability

(University of the Sunshine Coast, 2018).

# History and Evolution of Environmental/ Landscape Planning

Preserving the landscape will protect animal habitats and the original environmental conditions to allow people to escape the built environment and see the world before humans negatively impacted it. If the land continues to be developed, what is the

stopping point? The human population is going to continue to grow and we will continue to occupy more land for our own needs. There needs to be "untouched" land to ensure that animals have a space to live and natural process continue to take place. The short video "Man", that we watched in

class, was an accurate description of what has been occurring in our world over the last 500,000 years. The High Line is an example of a deteriorated space that was revitalized to create usable space in the city. The High Line is an iconic form of landscape architecture.



Figure 2. Highline: Before. (Sternfield, 2011)



Figure 3. Highline: After. (Twisted Sifter, 2018)

People need to utilize wasted space in the city to lessen suburban development. Landscape architects are able to analyze the surrounding context to connect designs to the surrounding environment. This creates a seamless transition and develops a place that belongs. Humans have had a track record of destroying things for their own purpose to show dominance. The video indicated that people show no remorse for their negative actions. They continued to kill animals, pollute water resources, test on animals, develop infrastructure, and more. The world is just as much ours as it is to other organisms and ecosystems. We shouldn't be able to take away their habitats and lives because we believe we are more important. Although, not every human is like that. There

Although, not every human is like that. There are people who care about the environment and dream of visiting natural landscapes for pleasure. Precious land should be destroyed by the people who care less about the

environment. There is already many square miles of space that we can redevelop for new demands. Preservation of natural landscapes is important because someday, if we continue to develop as we have been, there are going to be future generations looking back in books, forever wandering what it would be like to visit these beautiful places. It is not the job of the present generation to take these experiences away from people in the future. There are already present issues of people not getting enough contact with nature. It is important to our health and well-being.

if people don't understand it. Our food sources, our homes, lifestyles and more are all integrated within nature. Every ounce of harm we do it, we are inevitably doing to ourselves.

I feel as if the mindset the Muir stood for is becoming

As humans we are dependent on nature, even

more prominent as knowledge on natural resources, the importance of nature, and the population continues to grow. The reading "A Trail Across Time" talks about the steps that have been taken in

previous years and even though we still have a long way to go to improve our practices having awareness, ideas and knowledge is a start. This is where the role of landscape architects becomes more important. They spread the idea of conservation and use their skills to re-envision to future to find solutions to revitalize the landscape to create good spaces that are beneficial to all communities. We have to ability to use our knowledge of design, natural resources/ processes, ecology, and physiography to form more environmentally friendly designs and reverse some of the negative impacts that we have imposed on nature. Therefore, I feel it is important to preserve what we haven't touched and fix what we have.



#### LAF Declaration

In 1966 "Declaration of Concern", they are realizing that lifestyles need to change and landscape practices are needing to improve to support the damage humans have caused to the environment. Some of the effects that made people recognize this were: water shortages in New York City, septic in Lake Eerie, pollution, and more. Even in the past, people understood that it was landscape architects that were the connection to creating a healthier, stronger Earth.

In the 2016 "Declaration of Concern" the problems had already been recognized and people were working to solve them. Landscape architects have been collaborating with other disciplines for decades to find new and improved ways to protect the environment. Today, we are more focused on designing to withstand the conditions of climate change and mitigate problems that caused it to arise in the first place. We are determined to find solutions to successfully integrate human spaces into

ecological context, due to excessive population growth. The population did not seem like it was as large of an issue in previous years.

The declarations both had very similar intents. They understand that man relies on nature for survival and that we need to change our practices to reduce the negative impacts that we have created. The declarations both mention the different skills that are necessary to make a difference. The present day have already implemented the use of these skills in practice,

while it appears that the older declaration states the skills will be needed. There are similar concerns in 1966 as there were in 2016, including the need for water and resource conservation methods and lessening pollution in the environment.

According to Marc Treib, humans have a "Declaration of dependence" on the world, meaning that we would be unable to survive without its resources and natural systems. The



Figure 4.
Landscape Architects participating in a design charrette for the autistic community (Ohio State University, 2018).

video talks about how we don't care for things outside of the quality it contains or the benefits that we receive from it. We as designers will not be able to please everyone because "Beauty is in the eye of the beholder". Landscape architects will not be able to connect and agree with everyone, but we have to design for the people that will be exposed to the area the most. Time, money, and politics are large influences on the design of the landscape and there are more issues that are present today than what there were in the past. In the end of the video, Trieb, mentions the importance of "pairing responsibility and beauty". This comment is important because if people

don't take responsibility of their actions and want to maintain the beauty of the landscape, it will deteriorate and be gone forever. This video relates to the readings because it talks about the impacts of design and the importance of connecting to surrounding people to protect beauty within the environment.

I believe that both declarations and the video were accurate in portraying the issues needing to be addressed within those time periods. During the time of the first declaration, I feel like landscape architects were still understanding the importance of their ability to connect nature to man, the steps that were needing to be taken, and the level of collaboration that was going to need to exist. The second declaration mentioned more specific issues they were addressing

as to just stating that there needed to be a change because new problems were arising. Landscape architects have made positive progress in the expansion of knowledge and the skills that we have learned to better protect the environment. We continue to progress because technology is quickly advancing. We have far more capabilities than what we have had access to in the past, and this is going to continue to grow. There is still a large demand for landscape architects and this is the case now more than ever with the amount of development needed within urban landscapes and to restore damaged ecosystems.

Our patterns of development need to change in a way that re-imagines how we relate to our environment, our resources, and each other. Landscape solutions — how we arrange and design our cities, communities, and their outdoor spaces — are fundamental to creating this alternate future.

(Landscape Architecture Foundation, 2018)



# Rivers and their Social Connectivity

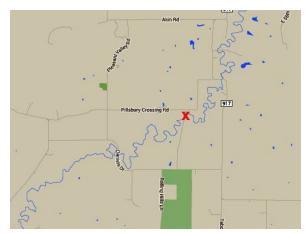


Figure 5.
Deep Creek Waterfall Map. (Stokes, 2008).

Part of being a landscape architect is being able to analyze spaces to understand how people use it and how a design can further emphasize those connections. There must be research done on the site to determine hydrology pattern, existing vegetation, animal species, materials, opportunities and constraints. This section describes the observation and research completed for Pillsbury Crossing.

#### Pillsbury Crossing

"Deep Creek" is a creek that lies southeast of Manhattan, Kansas. This creek is where Pillsbury Crossing is located, a popular low water river crossing known to most of the surrounding community. This base of the creek is on a flat limestone base with only a few inches of water, allowing for people to walk around and vehicles to cross to the opposite side of the road. A few hundred feet away from the entrance is a waterfall, known as Deep Creek Waterfall and the fall is approximately 5 feet long and 60 feet long.

Many people go to Pillsbury Crossing throughout the year to participate in a variety of outdoor activities. There is a trail along the side of the creek people can walk along to reach a rope swing and cliff for jumping further down the creek, creating lateral connectivity. Pillsbury Crossing provides several opportunities for vertical connectivity, and this it why it is most visited. Active recreation includes fishing, climbing on the waterfall, swimming (even though it's not permitted), canoing, picnicking, and jumping off the 4-foot shelf created by the edge of

the limestone bed. This is a common location for people to party and socialize. Due to the low water, people would park their vehicles in the water and set up beer pong tables on nice days and drink, creating a longitudinal connection, but is less common recently, because the space is monitored by cops more frequently. Climbing on the rocks within



Figure 6. Pillsbury Crossing. (Stokes, 2011).

the waterfall is challenging, but I have seen both children and adults participate in this activity. People often bring their dogs out here and allow them to play in the water. When the university is in session this area is more popular for college students and during summer months it become more family oriented.

The trails that run adjacent to the river are man-made, but the limestone rock base is natural. Since this is a low water crossing, there is a gravel road that continues through the creek and people drive their vehicles on the limestone base to get to the other side. There is a small gravel parking lot located towards the stream and a camping area, but people must have permits to be able to camp. The rope swing further down the creek is a modification that attracts people and provides opportunities for more interaction with the water. People climbing the river bank to jump off the cliff has worn down riparian species and is causing soil erosion. There is some pollution in the water,

due to people partying and leaving behind trash and parking their vehicles in the water.

When there is not enough rain, the water level at Pillsbury Crossing gets low. This causes the water to not flow and become stagnant, providing a breeding ground for bacteria and insects. During this time people do not usually enter the water. People visiting this area will see many squirrels, several bird species,

including the blue heron and ducks, and occasionally beavers. It was mentioned earlier that a common activity, fish species include the bullhead catfish, spotted and largemouth bass, and carp.



Figure 7. Pillsbury Crossing. (Stokes, 2015).

# Unpacking the Built and Natural Environments

There are several environmental factors that must be considered when designing the landscape to reduce negative impact on the environment . Although, there are many factors, the two I believe to be the most important are hydrology and topography. Both factors can cause substantial damage if not carefully considered. Hydrology patterns must be analyzed because it shows the watersheds and drainage within a location. Landscape architects are implementing green infrastructure practices, such as green roofs, permeable paving, and bio-retention cells, to decrease hard surface and runoff in urban environments. In many locations' current infrastructure can't withstand the amount of increased runoff, therefore, urbanization is causing floods to occur. By evaluating topography, we can understand low points on the map to see where water will run and collect to ensure that future structures won't be negatively impacted. The other factor is topography. Since different site

design elements require certain slope percentages, it is important for designers to understand the landscape before considering locations for these elements. This will reduce harm to ecosystems within the area, reduce construction costs, and decrease chances of failure. Not properly considering slope

leads to landslides and soil erosion. This can be reduced by incorporating vegetation with vigorous root systems. Suitability, vulnerability and failure can be determined by creating slope maps and using Arch GIS.



Figure 8. Sustainability Metrics Creative Cluster by Sasaki. (Archisccene, 2012).

I believe that nature should be mixed, but dense within the urban environment. This will allow large enough spaces for ecosystem to thrive and provide habitats for wildlife. Large spaces will allow for natural processes to still occur, as opposed to the smaller fragmented spaces that lose natural qualities. By intertwining nature within the urban environment, it will promote social equity to ensure that it is accessible to everyone. If there were to only one, large natural area, the surrounding locations would be expensive, and it would not be sustainable for the community. Also, people located further away from the natural area¬ may not have proper transportation for them to access the green space. It is important for people to have access to nature within their daily lives for emotional, physical, and psychological wellbeing. People that live far away would not be able to experience these benefits, subjecting them to air pollution, lack in quality of

life, and "Nature Deficit Disorder" in childhood development. Peoples exposure to nature creates a greater appreciation and will determine future conservation practices. By implementing fragments of nature, I believe, it would be more beneficial to people but less beneficial to the environment. We need to find ways to incorporate nature in cities that will create accessible green space, but have successful ecosystems containing native vegetation and animals.



Figure 9. Urban Forest Strategy and Precinct Plans by City of Melbourne by . Grape Vine Design, Jones & Whitehead, ARCUE, (Malishev, 2016).

# People's Right to the City

Robert Moses focused on urbanization as a way to reconstruct the city by inserting major highway systems and infrastructure, to increase vehicular use. His projects were funded by external sources; in which after constructed would continue to profit and expand to bring in surplus financing. The goal was to receive "highest possible financial rate of return" and control capital surplus. He wanted his highway systems to reach the urban core of cities, resulting in the displacement of minorities and low-income families. Moses' designs were intended to change the lifestyles of people within the city and were designed to bring new opportunities and products to the area. This would change the social atmosphere of the city by removing public spaces and displace families from their homes. Moses' priority was to develop the city; however he had no consideration of the people who called the area home. The major issue with his plan was that he forgot about his obligations to ethical behavior and instead

only focused on financial gain.

Jane Jacobs' became a representative and defender of the people whom were negatively impacted by Moses' designs. She fought for equality and preservation of original urban fabric; including communities and public spaces. Urban spaces have unique characteristics, being their structures and communities. She wanted to protect these elements from being destroyed for vehicles and infrastructure. She was a role model for the people and influenced them to get involved to fight for what they believe in Jacobs focused on the people and worked towards in creating "pedestrian friendly environments" that support health and safety.

"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody..."

(Jane Jacobs, 2016)

Moses and Jacobs are well-known rivals that fought for what they believed was the right thing. Moses believed in profiting by creating vehicle friendly environments, while Jacobs fought for the community; protecting their homes and public spaces. I think these ideas are important to consider as we continue to develop the environment. As landscape architects and planners, we are taught to protect nature and seek designs that preserve resources, however, many developers fail to practice these concepts. Developers are generally profit driven; lacking consideration of the people their designs may be impacting. David Harvey referenced instances in history that had a negative outcome, such as Paris. This circumstance was similar to the design Moses proposed for New York City that did not pass. Designers need to work to include local citizens in the development process, government decisions, and economic impact that will directly affect them. A idea of unification is supported by Harvey in a

quote found on page 13, "One step towards unification of these struggles is to focus on the right to the city as both a working slogan and a political ideal, precisely because it focuses on who it is that commands the inner connection that has prevailed from time immemorial between urbanization and surplus production and use. The democratization of the right to the city and the construction of a broad social movement to enforce its will is imperative, if the dispossessed are to take back control of the city from which they have for so long been excluded and if new modes of controlling capital surpluses as they work through urbanization processes are to be instituted" (Harvey, 2008).





#### Deforestation and Urbanization

Rapid urbanization is caused by people wanting access to more opportunities. Urban environments provide jobs, education, and people feel as if they have more access to resources that many small communities can not provide. People feel as if they have the world at their fingertips in a city. Urbanization is decreasing productivity in small towns and negatively impacting the environment in and surrounding cities. According to Tom Prugh, two top influences on deforestation are peoples increased use of resources and the built environment expanding into nature to contain the capacity of people. People who move to the urban environment develop an unsustainable lifestyle that primarily consumes excess meat and processed foods, this requires more space for agriculture and clearance of forests. I believe, that people are too driven by money, resources and lack empathy towards the environment. The issue of deforestation does not seem to phase many people, while

causing many negative impacts to the environment. Although, deforestation effecting global warming and causing environmental issues. This is concerning and influencing people to make a difference in our practices. My views on this issue is that we need to work more to protect the resources we

have and limit our level of consumption. This phenomenon can be observed through Brazil's protection of the Amazon Rainforest and how they implemented laws against logging and encroachment (Union of Concerned Scientists, 2011).



Figure 11.
Deforestation
(Sarich, 2018)

Brazil's government supports these efforts and I believe the United States government needs to work more towards supporting the environmental movement and enforcing laws reduce our resource use.

We can begin to restore natural systems and ecosystems by replanting trees and being selective about the trees we remove for production and monetary purposes. Selective logging is being proposed in Indonesia to allow for them to preserve the natural forest, while still gaining economic value from the resources that are accessible to them (Gaveau, 2011). Selective logging allows for people to cut trees, but it involves to process of carefully selecting them and leaving trees to help protect the soil from becoming too dry causing soil erosion, absorb water to reduce run-off and maintain habitats for native plant and animal species. An example of forest restoration can be seen in the Caribbean and Latin America, where

by 2020, approximately 50 acres will be restored with the help of surrounding communities and NGOs (Forest Restoration & Reforestation). As for planting trees in neighborhood, Dallas, TX is working to plant 1000 trees within their built environment to reduce heat island effects caused within the city. It was stated that before this project tree canopies only covered approximately 29% of the area (Poon, 2018). I think this practice needs to be introduced more in different urban environments to reduce the negative impacts of the built environment and allow people to be more exposed to nature.

Studies show that connection to nature has health benefits and promotes stewardship in the community to want to protect nature. All the strategies previously listen and solutions in the future, begin with education. People need to understand the implications of their actions and be knowledgeable enough to make a change. They can begin by using the three R's (reduce, reuse, and recycle) to limit resource use and waste. Businesses can also work to incorporate green practices into their structure by

recycling, implementing renewable energy, such as solar energy, recycling, reducing pasting use and generated waste (Pilon, 2018).

Our lifestyles have had many negative impacts on the environment and there are ways that we can improve the environment. People tend to think their actions don't affect anything, but every little bit helps and without everyone a change will not be made.

# Walking with Wolves

"Walking with Wolves" is a documentary about a man named Joe who studied wolves in the south central plains of India, for several years. While on this adventure he observed wolf behavior and their interactions with humans. The humans had cleared most of the land for farming; destroying the wolves' ecosystems. Several wolves were killed by nomadic farmers and their dogs, to protect their herds. This journey provided deep insight into wolves' behaviors and their techniques for survival. Joe had a frustrating, yet rewarding experience following 'Bent Ear' because he got to observe the hunting skills he passed down to his pups, the types of food they consumed, and eventually their den. One of the reasons I found this video intriguing was because I got to understand the connections the nomads had with the wolves. The farmers and wolves were doing what they could to survive. An old mythical legend, followed by the nomadic people,

protected the wolves from being hunted after killing the farmers livestock. This belief is important, because it has helped protect the wolves and created balance within the ecosystem. The nomads believed we are all brothers and are connected through the environment. The nomads understood that they were apart of the food chain and that natural cycles need to occur for other species to survive. They felt people were too greedy and privileged and often didn't have a very empathetic mindset. If the nomad's outlook on nature was followed throughout the world, I don't believe we would have as many issues, as we do today.

"One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well and does not want to be told otherwise."

Aldo Leopold (Sand County Almanac, 1949)

One of the main ideas in this video that can be seen all over the world is how humans are using land and resources for themselves and it's pushing animals out of their habitats and forcing them to scrounge to survive. We are focused on development and this is where landscape architecture comes

in to play. Landscape architects are educated on natural processes and understand the need to find ways to preserve the ecosystems and protect other species while developing. It is important for other people to understand the implications of their actions and know that every decision made can have an impact on the ecosystem. People need to

understand the importance of living more sustainable lifestyles to help create a balance in our ecosystems. We can't continue to talk advantage of what land and animals provide for us or else one day it will all be gone.



Figure 12. Suburban Sprawl (Hynds, 2012)



Figure 13. Wildlife in the City (Zerschling, 2012)

# Project Evaluation: Neighborhood

Architect: BIG

Location: Aarhus, Denmark Size: 100,000 square meters

Year: 2017

Reference: https://www.archdaily.

com/551290/big-designs-7-building-water-

front-development-in-aarhus/

Aarhus is located in Denmark on the harbor. Aarhus's population is approximately 336,411 residents and is continuing to grow. With the growing population, BIG Architects proposed to develop Bassin 7, adjacent to the harbor, to increase public space and incorporate new mixed-use development. The design includes seven, low and high-rise residential buildings surrounded by public spaces intended to support live, work, and play. Elements incorporated within this development are intended to activate the waterfront and attract people to the area. Proposed features include beach zones, theaters, swimming pools, cafés, The Aarhus waterfront development is



Figure 14. New BIG-Designed Neighborhood to Activate Aarhus' Waterfront by BIG Architects (Archdaily, 2014)

successful in reaching its overall concept to promote interaction with the harbor and maximize activity within the space. Activating the harbor and attracting people to the area will increase economic value. The activities incorporated within the design provide a variety of opportunities, while supporting play and enticing people to spend more time outdoors. The design is also effective in creating a balance between

public and private space. Public space is intertwined within the entire site and the building structures are designed to support private interior courtyards. I believe the goals of the project were reached and are beneficial to the area, but there are some changes I would make to the design.

I believe this design was successful in reaching its overall goals to maximize efficiency in the space allotted and attract people to the area. I also feel that if someone proposed this design to me there would need to be modifications before I 'signed-off' on it to have it constructed. The "bath" section

extending into the water is disruptive to existing ecosystems and fish habitats and would have been more ecologically-friendly if is had stayed closer to the shore. The area is surrounded by hardscape and I believe there is a missed opportunity to incorporate more nature elements and restore some of the shoreline. There is a lack of trees that would

create shade for seating structures and people walking along the pedestrian promenade. The article on-line discusses the importance of culture in Aarhus and how that was a focal point of the design, but I haven't seen how the elements reflect these ideas and there aren't any diagrams indicating these intentions. I am unable to find whether a landscape architect was consulted during the design process for this neighborhood or not, but I believe an educated landscape architect would have been influential in making the design more ecologically- friendly and would have introduced more vegetation.



Figure 15.
New BIG-Designed Neighborhood to Activate Aarhus' Waterfront by BIG Architects (Archdaily, 2014)

# Project Evaluation: Inter-State

Inter-State

Project: The National Creative Cluster

Location: Beijing, China

Designer: Sasaki Year Completed: 2012 Size: 357 Hectares References:

http://www.worldarchitecturenews.com/ project/2012/20552/sasaki-associates-inc/thenational-creative-cluster-in-beijing.html

http://www.sasaki.com/project/258/the-

national-creative-cluster/

The National Creative Cluster is intended to revitalize a part of Beijing to create a "knowledge hub" to inspire creativity and attract creative people. This was completed by incorporating various activities, dense, interactive communities, and capitalizing on new transit to allow connections to the surrounding regions. The design framework was formed around 5 different principles.

These principles were to connect the landscape to the building, include green spaces, create connections to the surrounding context, and implement stormwater management.

"...Designing a landscape that is both beautiful and functional. These landscapes encourage biodiversity, filter stormwater, and provide seasonal interest and color..." (Archiscene, 2012).

This design was successful in considering the surrounding landscape and integrating the building forms in a sustainable way. The diagram on-line indicated Sasaki paid close attention to sun patterns to orient the buildings to maximize sunlight to reduce energy consumption and incorporate solar panels. They also incorporated dense vegetation and green roofs to reduce heat and provide insulation

for the buildings. The design captured stormwater and harvested it for future use, had green infrastructure to reduce runoff while improving quality, and recycled water.

There weren't very many downfalls I noticed while analyzing this project. Sasaki did a great job at considering the environment and implementing sustainable practices to help reduce energy and conserving resources. They also did a good job at creating a new identity for the area, but I feel like they focused on creating so man y new ideas that they might be losing some historical and cultural value. The design is also intended to attract new creative people to the area and it may cause gentrification and push people who were originally there out of the area.

Guidelines I would adopt include:
1.) Make sure there is affordable housing to reduce the possibility of gentrification within

the area and ensure that people previously living in that environment aren't forced to move.

- 2.) I would incorporate some historical and cultural features to make sure this area doesn't completely lose its identity with the new design.
- 3.) I am unsure about the types of resources they are using to construct this, but I would propose they use regional sources to reduce transportation cost and fit their sustainability concept.
- 4.) Many elements incorporated within this design seemed to be relatively high maintenance. Maybe reduce some of these features and implement more naturalized areas.
- 5.) Larger naturalized areas would create space for ecosystems and habitats for organisms. This goal could be reached by incorporating more verticality and making the buildings more dense.



Figure 16. Master Plan for Creative Cluster by Sasaki. (Archisccene, 2012).



# Project Evaluation: International

Project: Global Sustainability Initiative Location: Dublin, Ireland Theme: Support sustainable practices across the world and improve quality of life By Kate Larkin and Mack Yeager

"To create a sustainable and safe economical model based upon levering natural capital resources for the benefit of communities and leveraging these assets to provide the social impacts and projects that support the people living in the communities...."

(Global Sustainability Initiative, 2018)

The Global Sustainability Initiative in an international independent standards organization composed of entrepreneurs and experts from across the world. Their global headquarters is located in Dublin but they also have offices in Geneva, Douglas, Washington DC, Lisbon, Perth, Brussels and Cape Town. Their overall goal is to work toward implementing sustainable practices through food, water, health, energy, education, and technology. Each category contains sub-projects that the organization is working on. To encourage countries to make these sustainable changes, GSI developed a virtual currency called BioCertz. This currency is similar to carbon pricing or an Emission Trading Scheme. It works by paying money to countries/ organizations that hit certain sustainability quotas such as planting a large number of trees in an urban environment. BioCertz can be traded for other currencies, assets, retired, or donated. The topic we focused on was food and nutrition, specifically, "ready to use foods".

The food initiative goals are to provide food security to those suffering from malnutrition by developing and mass producing ready to use foods. These foods are oil based, made from locally grown materials and high in calories and nutritional content GSI uses village, community, and city farms to maximize production efficiency. Vertical farms are more profitable because they are capable of producing more food for the same amount of area, increasing productivity and reducing the overall cost. The Village farm produces approximately 500 servings of food a day, the Community Farm produces 5,000 and the City Farm provides a permanent location while distributing produce across multiple regions. This idea helps people across multiple countries by providing low-cost nutritional food. GSI is constantly experimenting with new ideas to create ready-to-use foods that are healthy, affordable and easily accessible. Accessibility. This orga-

nization mitigates many of these issues if it is done successfully and people are educated.

While the GSI's initiatives are noble and seemingly well-thought out, the website is lacking some crucial information. This reduces credibility and raises questions about the foundation of their organization. There is not a date provided to show when the organization was created or who the founders are. Judging from the technology and projects listed on the website, GSI appears to be founded recently. This also raises questions about possible unintended outcomes that may result from their experiments. This appears to be a successful organization, but possibly needs more time to really get going. If the initiatives are already in place, better documentation of the results should be posted on the website. If they are simply in the idea stage, that should be clearly stated as well. Much of the wording on the website is vague, for example this

statement taken from the page on ready to use foods sounds nice but raises questions as to how it would actually work in the field: "GSI regards malnourished people as legitimate customers and not as passive victims or mere beneficiaries. We are endeavoring to tailor nutritional products (recipes, formats, sourcing and delivery) to their needs as opposed to those of the agencies involved in supply." The organization seems to be tackling more than one group can handle. They also ask for donations to support the initiatives. If they are going to ask for money, more precise information should be shared.

#### Vote:

If we were given the opportunity to encourage the GSI project, we would. It seems to provide many creative incentives to help people and the environment in new ways. The initiatives support environmental sustainability as well as social sustainability by creating products that promote equality and well-being for everyone. If the intentions could become reality they would make a substantial positive impact. GSI needs to work on educating people about the orga-

nization and the opportunities it promotes to allow people to become more knowledgeable. Three Actions to improve the project-

- 1.) People need to be more aware of this project. It provides many great opportunities that are supposed to help people, but they can't take advantage of their resources if they don't know they are there. A way to do this could be to increase advertisement and develop small interactive groups that would allow people to socialize and spread information.
- 2.) Checks and balances should be implemented so that people know their money is actually going towards the promised outcomes, not just someone's pocket.
- 3.) More information is needed in general on the website.



#### Semester Debate

I am against the master plan proposal for the new city of Senegal. The plan lacks information and does not efficiently represent the local people living in this location, the environment, or the existing culture. The idea behind the plan is to integrate a design that supports political stability, diverse cultures, education, business, nature, and wellness. The proposal seems to solve many problems and gives the impression that it will have a positive impact, but it's too good to be true. The information presented lacks depth and reasoning. I am analyzing the proposal through the eyes of someone of the "Greens" team, meaning that I concentrate on the depletion, damage, and pollution of surrounding ecosystems and the negative implications of population growth. The Master Plan for the New City of Senegal does not consider the environment. The video states that the plan works towards connecting people to the environment and emphasizes

views to nature, but it is not described with any more detail.

My group decided that this design would ruin the environment. The way the structures would be implemented would chop the ecosystems and divide them into separate pieces that would not support native vegetation and animals living in the area. The team that support this design stated that it was just a small section of land that would be destroyed, and it doesn't matter. But if every developer had this mindset, there would be no preservation of ecosystems or consideration of the surrounding environment. The construction of that many structures near the waterfront would increase runoff and pollution contaminating Pink Lake. This design is built in sections with no integration between the different uses. The proposal transforms the site and attracts new people, this will eventually lead to gentrification and people with a lower income will not be able to benefit from the different opportunities. It was stated within the debate that the proposal doesn't support future development and will create a utopia for high-class, rich people. People who are only focused on the economy and socialism may feel as if it will reduce poverty by giving people the opportunity for people to build their way up. The group that supported this proposal believe this design would provide good infrastructure and give people a chance to work together in the community, as well as, support diversity and suit the needs of a variety of people.



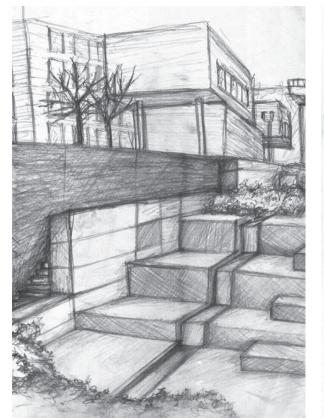
The proposal for the Senegal is not sustainable for all people or the environment. But this may not be recognized without proper education or ecological mindset.

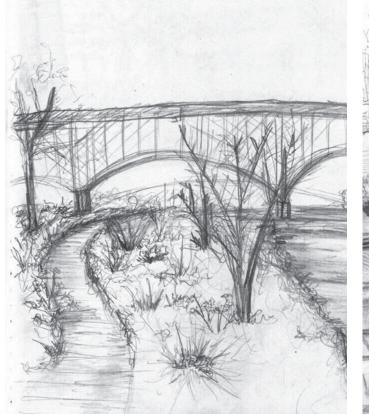
Figure 17. Senegal Pink Lake City Master Plan by illo Space/Design/Group (Space Design Group, 2009).

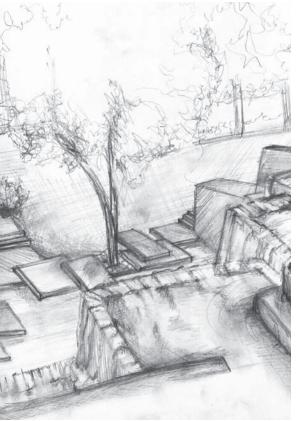
#### Refined Vision Statement

As a Landscape Architect I believe we need to carefully consider the environment and the people we are designing for in order to connect them. We need to continue to become more knowledgeable and increase awareness to influence other people to become educated on environmental issues, so they can help make a change.

A Landscape Architect promotes social equity and provides opportunities for all people to experience outdoor spaces. They create meaningful designs that connect people to the environment and influence sustainable practices. Landscape architects have knowledge on many different topics that allow us to make educated decisions when developing the environment. We can share this knowledge and use it motivate other disciplines to be cautious and make smart decisions.







Sketches of Landscape Architecture in Portland, Oregon (Kate Larkin)



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## *Images*

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- Figure 6. Pillbury Crossing. 2011. Photograph. Accessed December 5, 2018. http://kansastravel.org/pillsburycrossing.htm
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- Figure 16. Creative Cluster Master Plan 2012. Photograph. Accessed December 5, 2018. https://www.archiscene.net/location/china/masterplan-national-creative-cluster-sasaki-associates/
- Figure 17. Senegal Pink Lake City Master Plan. 2009. Photograph. Accessed December 6, 2018. https://www.archiscene.net/location/china/masterplan-national-creative-cluster-sa-saki-associates/