

:KIUAS - Cultivating Health and Wellness Through Cultural Identity

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**Abstract**

:KIUAS - Cultivating Health and Wellness Through Cultural Identity

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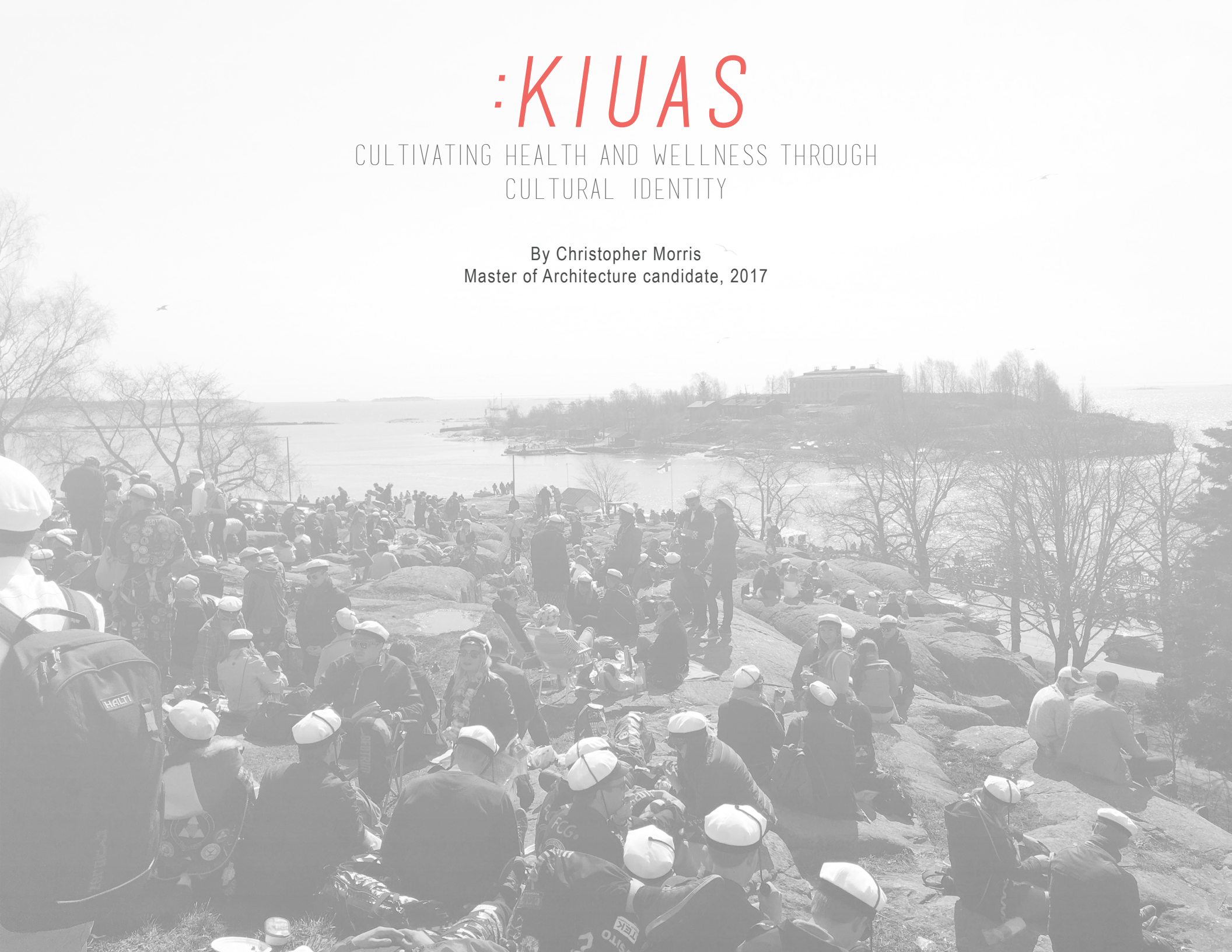
The Finnish community in Seattle has been dispersed throughout the Puget Sound for some time. As it is the 100<sup>th</sup> year of independence in 2017, bringing the community back together in one space is vital. The project provides the last puzzle piece to the Nordic identity in Ballard, as the Finnish community is the last to have their own cultural commons. This project, located in the neighborhood of Ballard, in Seattle, Washington, seeks to create a cultural center that promotes health & wellness to the greater community through means of cultural identity - in this case, sauna. The project looks back to Nordic history in the Puget Sound, as well as cultural, design, and Nordic identity for influences in design. The theoretical framework established uses patterns of design, influenced by Christopher Alexander, to guide site planning, architecture, and landscape architecture. Through the identification of 12 patterns of design, concepts emerge and incite the public, semi-public, and secluded areas of the site programming. The project, KIUAS, is presented as campus plan with multiple buildings arranged through patterns of design. The building design is fully realized through structure, tectonics, materiality, and lighting design. The project serves as a framework design for how patterns of design can be applied regardless of location.



# :KIUAS

CULTIVATING HEALTH AND WELLNESS THROUGH  
CULTURAL IDENTITY

By Christopher Morris  
Master of Architecture candidate, 2017



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# :THE NORDIC COUNTRIES



**Fig. 1-1:** The modern political boundaries of the Nordic countries.  
(Source: Finditinscotland.com)

## CHARACTERISTICS

The Nordic countries are comprised of five current countries within the larger geographic region – Denmark, Finland, Iceland, Norway, and Sweden [Fig. 1-1]. All countries share similar cultural characteristics that transcend the

political borders to a broader identity that comprises the Nordic identity. The region is also defined by language, which includes both Indo-European and Uralic languages, which also defines the two European identities in the region respectively.

The geographic characteristics of the region ranges from the swamps of Finland to the peaks of Norway. Each country emphasizes the importance of the environment and the sustainability of the region. Known as Northern Europe, the region has four distinct seasons and receives plenty of snowfall throughout the year. Additionally, the countries are all located above the 55th parallel, which affects the sunlight hours during the year and characterizes the light quality with dark winters and light summers.

The population of the Nordic countries is small compared to other European countries. With Iceland being the smallest at roughly 330,000 people, Denmark, Norway, and Finland are all around 5 million, and Sweden has around 10 million people, making it the largest of the five. Although still small, there is a strong emphasis on regionalism within the Nordic countries that comes through via industry, language dialect, and personal identity.

## A BRIEF HISTORY OF POLITICAL CHANGE

The relevant history of the region dates back to the beginning of the Kalmar Union starting in 1397. This was one of the first cooperative unions between the Nordic countries after the dissolution of the Hanseatic League. Although no political borders were solidified, this region encompassed Denmark,

Norway, Iceland, the coast of Finland, much of the southern part of Sweden. After the dissolution of the Kalmar Union, the Union of Denmark-Norway was a direct result of this, along with the formation of the Kingdom of Sweden. The Kingdom of Sweden ruled part of Finland, along with the current political borders of Sweden, while Denmark-Norway last until Norwegian independence from Denmark in 1814. In 1809, Finland was lost during war with the Russian Empire, and became an autonomous region as the Grand Duchy of Finland. Norway became part of Sweden until rule by Sweden ended in 1905.

The Nordic region had undergone many political changes by the two main empires, Denmark and Sweden. Norway led the way for full independence in 1905, after which Finland followed suit and declared independence in 1917. Iceland became the last to gain independence in 1944 at the end of World War II, leaving the Kingdom of Denmark. A direct result of both Denmark and Sweden ruling over the other countries was the development of separate identities that made the Nordic populations distinct just enough to become their own culture, with respect to the similarities in the region. The political boundaries that were established after their subsequent independence, along with the formation of the Nordic Council, became what are known now as the Nordic Welfare states. The Nordic states are part free market economies and part socialistic economies, which put the people's health and wellbeing as an important aspect in defining the politics of the countries, along with an emphasis on a group mentality which constantly questions how can everybody benefit from policies in place.

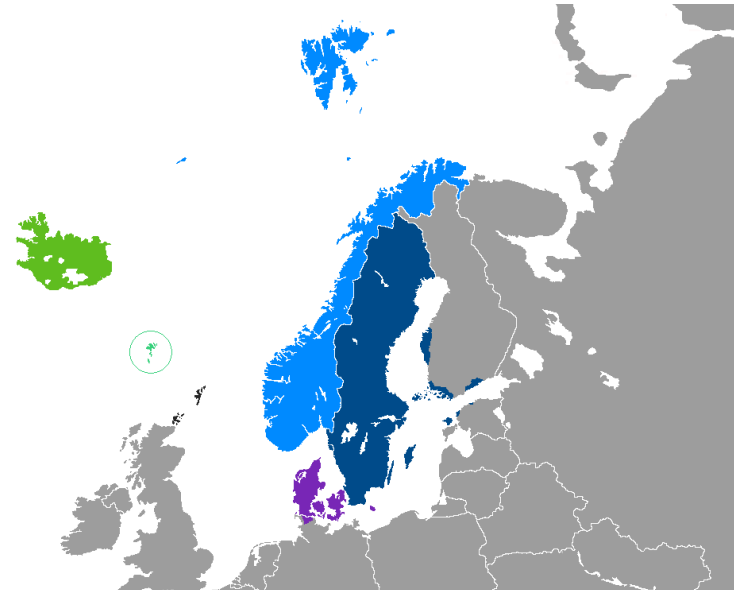


**Fig. 1-2:** The Kalmar Union territory ca. 1400  
(Source: Creative Commons, 2009)

# LANGUAGE

Language is something that defines the Nordic countries. The core three Scandinavian languages – Danish, Swedish, and Norwegian [Fig. 1-3] – are all mutually intelligible with each other, while Icelandic is somewhat mutually intelligible, with Finnish being completely separate from the four others. There are also minority languages spoken throughout the region, including the Sami languages [Fig. 1-4]. The emphasis on language supports the strong cultural identity found in each country. Particularly in communities that transcend political borders, such as the indigenous Sami people, as it was illegal to speak Sami in all of the countries until the mid 20th century after years of continued forced integration into the Norwegian, Finnish, and Swedish populations. After the mass migration to cities during the 1960s, there is a recurrence of regional dialects spoken within the city, particularly in cities such as Helsinki and countries as whole like Norway.

As with many languages, there are phenomena that occur within each Nordic language that are not able to be translated into English, but rather described. For example, across the Germanic languages, there is a concept of “ögonblick”, which mean “in the blink of an eye, or a moment in time,” however this can be described in just one word. In Finnish, the concept of “sisu” is an important cultural concept which means roughly “perseverance, resilience, or daring.” Also within the Nordic languages are a connection to nature that can be seen particularly in Finnish, where there are over 50 words that describe the snow and what is happening to the snow. Language and nature are extremely intertwined in the Nordic countries, as well as the connection to political national identity.



**Fig. 1-3:** Map of the Northern Germanic language family, showing the predominant Scandinavian language regions (Source: Creative Commons, 2015)



**Fig. 1-4:** Map of the Uralic language family showing Finnish and Sami regions (Source: Creative Commons, 2012)



# :FINLAND

## FINNISH CULTURE

As with any culture, Finnish culture has greatly evolved throughout the rule of many other empires, such as Sweden and Russia. It was a crossroads for a long time between the two empires, however the Finnish population is ethnically different from both Scandinavians and Russians. Finnish people belong to a strong identity group that also includes Estonian people. Overall, the Uralic people have had a stronger connection with nature and were once pagan, which is still reinforced today through important cultural icons such as the Kalevala and the artifacts found scattered across the country.

The aspects of Finnish cultural tradition revolve around the deeply rooted connection to nature within the Nordic environment. Nature plays a crucial role in the development of the Nordic identity, particularly in Finland where much of the population was traditionally agrarian up until the 1960s. The geographic region is very diverse, ranging from the archipelagos in the south the fells up in the north.

Finland has a rich history of regionalism across the country, which can be seen today through the various dialects of Finnish spoken throughout the country. Folklore plays a huge part in the cultural identity of Finns. The Kalevala, the national epic of Finland, is known to every Finn in the country, mainly because of requirements in school, but also because it is a cultural

treasure that sets apart Finland from the rest of the Nordic countries (besides Iceland.) Finns have a strong affinity to the sea and lakes throughout the country, with a strong sailing and fishing culture, as well as an affinity to the seasons, which partially stems from the influence of the original inhabitants of Finland, the Sami peoples. Sauna, nature, egalitarianism, and design all play key roles into the shaping of Finland throughout history and what we know as Finland today.

## FINNISH SAUNA

Sauna is a large part of Finnish culture that is predominantly overlooked by many other countries as being a large influence on the life in Finland. Throughout history, sauna has been the one thing that provided warmth and shield from the harsh winters of Finland, and it slowly became something that is identifiably Finnish. There are an estimated two million saunas in Finland, with many in apartment buildings, personal homes, and publicly located in cities and villages.

The culture of sauna is highly associated with ritual. Sauna dates back to the pagan and shamanistic culture of Finland, however now it is integrated into society to become a social event. There are five key elements that define sauna – heat, water, touch, nature, and drink. Each of these elements play a crucial role in the entire process. The heat comes in the form of fire, however has changed now to electricity for many saunas. The nature is the rocks that are used in the sauna stove, the water is the löyly that you throw on the stove to create the löyly in the air, and the touch is the tactile nature of the sauna

itself. The aspect of drinking with sauna depends on the person, however it still is heavily involved in the ritual nature of sauna, with drinks ranging from saunakalja (specific beer for sauna) to vodka.

Sauna serves as the intermediary between nature and humans [Fig 2-1]. There is a reverence for sauna among the Finns, where everybody who participates is on the same level of society, despite what titles they may hold and who they may be. This reverence is showed in the business practices and the social practices in Finland, and sauna is meant for health and wellbeing, both mentally and physically. It serves as a place of connection for all people.



**Fig. 2-1:** Kulttuurisauna in Helsinki, Finland  
(Source: Condé Nast Traveler, Photography: Neena Paul)

## CONNECTION TO NATURE

All four elements are prevalent through Finnish culture, whether it is through folklore or common practices still instilled in modern day Finns. The connection to earth is through the foods that are foraged throughout the seasons. Mushrooms, berries, and root vegetables make up a large portion of the Finnish diet. The importance of forests is still a driving force in Finnish culture, as they were home to Finns before the modern cities. Their homes and saunas were and are still predominantly built of wood, bringing warmth into the home. Byproducts of wood, such as tar, were once used for medicinal qualities, and during famine Finns would eat the bark to stay full during times of famine that plagued the region in the mid 19th century.

Air is prevalent among the folklore that remains a large part of cultural identity for the Finns. The word for air, “ilma” in Finnish, is retained through words such as “maailma” (world) and the male name “Ilmari.” Ilmarinen is a god in the national Finnish epic, the Kalevala, and is seen throughout the Kalevala as the creator of the Sampo, a staff with shamanistic powers. The word “ilma” is derived from “Ilmarinen” and is talked about nowadays in relation to industry and environment in Finland. Creating a breathable, livable, environment that factors in sustainability, air quality, and oxygenation.

Finnish lakes and the Finnish archipelago [Fig. 2-2] are important sites that reinforce the strong connection to water that Finns have. Traditionally, the Finnish have their summer homes located on the lakes in historical regions such as Savor and Karjala, while the Fennoswedes have their summer homes located around the islands in the archipelago, due in part to the Swedish

rule along the coastal regions throughout history, however this is not always true. More importantly, these summer homes typically incorporate saunas along the edge of the water, which emphasizes the ritual between sauna and bathing. The importance of water can be seen in Finnish folklore as well. In the Kalevala, the Water-Mother births the world, as well as Väinämöinen, who is an important god in the national epic. From the Water-Mother comes the sea, lakes, shore, and connection to life.

Fire has played an important role in Finnish culture since the pagan times of Finland. Many traditions are instilled in Finns through fire, such as the midsummer “kokko,” a large bonfire which is specific for the midsummer celebrations throughout the country. Fire was always used to heat the sauna before modern times, light the forest during the dark winter months, and provide a source of heat for the forest homes of Finns. For the Sami populations of Finland, fire was a source of ritual and connection with the spirits and the gods, as well as heat the lavuu in which the Sami cook, live, and shield themselves from the elements. Fire is an important element throughout the Kalevala as well, as it is used by Ilmarinen to create the Sampo, heat the sauna in which Marjatta gives birth, and birthed by the lighting of Väinämöinen.

## EGALITARIANISM

The Nordic countries have been extremely progressive in social issues that affect the state of their countries since the beginning of the 20th century. There is a belief across the Nordics that everybody is born of equal nature, and that personal independence is extremely important. The attitudes that are deeply



**Fig. 2-2:** The Finnish archipelago along the southern and western coastline  
(Source: Veronika Galkina)

held within the countries are reflective on the Nordic Model for their internal politics, social values, and cultural institutions.

Egalitarianism has led the Nordic region into a status that constantly ranks high on political transparency, educational success, and some of the most well-governed states. The safety net that is provided by the Nordic model has allowed for the Nordic countries to provide basic human rights like education, parental leave, and the ability to pursue career paths aside from the STEM model that is implemented in more free market, capitalist economies such as the United States. Recently, Finland has decided to implement a basic income for people, which would replace a few benefits already given by the

government, but also allow those who are in need have enough money to survive in the country.

While believing that the benefits to society come grouped with many other things, there is a strong sense of individualism amongst Nordic people as well. Certain laws, such as the “every man’s law”, or “jokamiehenoikeus”, promote that the residents have a right to roam, fish, ski, camp, etc. on any part of the land, as long as it does not harm the environment in any way, nor the home or landowner. Of course, this comes with certain restrictions such private gardens and immediate backyards, however this falls in the sense that the individual freedom promotes the greater good for the entire population, not just the individual, yet still grants many rights to the individual.

## DESIGN CULTURE

The Nordic countries are well known for their incorporation of design into everyday life, particularly when it has a functionality that applies to everything. There has historically been an emphasis on creativity in each of the countries, with many well-known artists traveling to France, Germany, and Italy when it was important to promote the arts within the Nordic societies. When the modernist movement came to Finland in particular, there were a few key figures in the design community that pushed Finnish design along to the general population. Both Alvar and Aino Aalto have created staple pieces for the everyday Finn [Fig. 2-3]. The design that followed Alvar and Aino Aalto

really set precedent for designing for the person rather than making something that is unavailable to everybody except a single target group. Other modern designers such as Tapio Wirkkala followed suit and produced staple pieces that are inspired by nature [Fig. 2-4].

From the 1930s to the 1970s, Nordic design focused in everyday items such as furniture, household items, lighting, and textiles. There was fear that internally drove the Finnish economy to buy their own products rather than importing products from other countries in post-World War II Finland. This was also emphasized because many foreigners thought that Finnish people were Russian at the time. Although the formation of the Nordic Council happened in 1952, with Finland joining in 1955, the years prior to Finland joining the EU left the economy dependent on the other Nordic countries. This can still be seen today in the way that Finns value their own products firms and foremost, investing in sensible, mid-range priced design with their own marking and branding [Fig. 2-5]. Design houses like Marimekko and Iittala still are predominantly bought by Finnish and other Nordic people, with more popularity happening in Japan and Southeast Asia.

In architecture, the contemporary design culture is seen in the education that is being pushed forward at the design universities in Finland. Designing for Nordic identity is emphasized, while incorporating a cross-disciplinary approach, as well as a more graphic approach. The Nordic countries are some of the top producers of research coming out of Europe and around the world, particularly in areas of lumber research and lighting research.



**Fig. 2-3:** Artek Pendant Light A331 (1953) by designer Alvar Aalto  
(Source: Artek)



**Fig. 2-4:** Tapio Wirkkala's "Ultima Thule" collection  
(Source: Iittala)



**Fig. 2-5:** Design from Finland mark  
(Source: Suomalaisen Työn Liitto)



# :FINLAND AND NORTH AMERICA

## REASONS FOR IMMIGRATION TO THE UNITED STATES

The majority of the Finnish population in Seattle came in a wave of immigration from the Nordic countries during the late 19th century. During this time in Finland, there were rapid political changes occurring, widespread famine among the agrarian society, as well as gradual Russification.

The Russification of Finland is an important aspect of the immigration to America from Finland, partially because of the political instability that it created leading up to the Finnish Civil War (Suomen sisällissota) during World War I. Finland became an autonomous Grand Duchy of Finland in 1809 when Sweden handed the land over to the Russian Empire after The Finnish War. There was a great deal of uncertainty during the first half of the Russian rule, partially because of the skepticism of the Russians to whom Finland was loyal. After this uncertainty passed, Finland continued to gain more independence from the Russian Empire and garnered Finnish as an equal language to Swedish for the common people of Finland. The U.S. Library of Congress cites “At the turn of the 20th century, Finnish immigration exploded. The decades of struggle for Finnish independence from Russia were at a boiling point, and Finns fled the instability in their homeland at a breathtaking rate. Between 1890 and 1914, more than 200,000 Finns arrived, two-thirds of total Finnish immigration to that point, and more than 30,000 followed before immigration

was curtailed in 1924.” The newly gained independence of Finland in 1917 had an aftereffect on the way the Russian Empire saw Finland, starting in the last decade of the 19th century.

During the last decade, the immediate effect of Russian skepticism on the Grand Duchy of Finland was an attempt by the empire to “Russify” Finland. This was met with large scale backlash from the Finns. Finnish nationalism grew and further defined what it meant to be a Finn, however this uncertainty in the future of Finland accompanied with Russification caused many Finns to leave the country and head to America. Keeping in mind that Finland did not become a wealthier nation until the 1970s, many Finns continued to immigrate up until the 1930s before World War II in order to find a better life and reconnect with their family that had already immigrated.

## SETTLEMENT LOCATIONS

The Finnish connection to nature is undeniable. The geography of Finland is filled with lakes, dense forests, archipelagos, and some of the oldest bedrock in the existence of Earth. As it is with many new immigrants to America, plenty of Finns chose locations based on where some of their family already had relocated. However, those initial locations were vital in the concentration of Finnish Americans that we see today.

Initially, Finns immigrated mainly through New York City, however many took jobs that required little English knowledge and work skills that many already had. This meant that many Finns migrated westward to Michigan, Minnesota, and Wisconsin, where there was plenty of farmland, as well as a large coal mining industry. These regions bear quite a resemblance to the Finnish countryside, and many felt at home when they immigrated. Large Finnish communities in these states started to form, eventually with the establishment of Finnish colleges and towns named after places in Finland.

In the Upper Peninsula of Michigan, the geography is reminiscent of the Finnish archipelago, particularly along the northern coast abutting Lake Superior. There are deep forests, fells, cliffs, and lakes scattered throughout the region. There are all four seasons, with reasonably cold winters and mild,



**Fig. 3-1:** Michigan's Upper Peninsula landscape  
(Source: Ya Zhang)

moist summers. This location, in part with large Finnish communities, made it particularly comforting to new immigrants from Finland to migrate here from the large cities on the East Coast that they particularly were not acclimated to.

Continuing on the journey westward, many Finns made it to the edge of the coast and settled in both Washington and Oregon. Their expertise in the lumber industry, along with the gold rush and continual movement westward at the end of the 19th century, created a large population around both Seattle, a developing lumber town at the time, and Portland.

## FINNISH GROUPS IN THE PACIFIC NORTHWEST

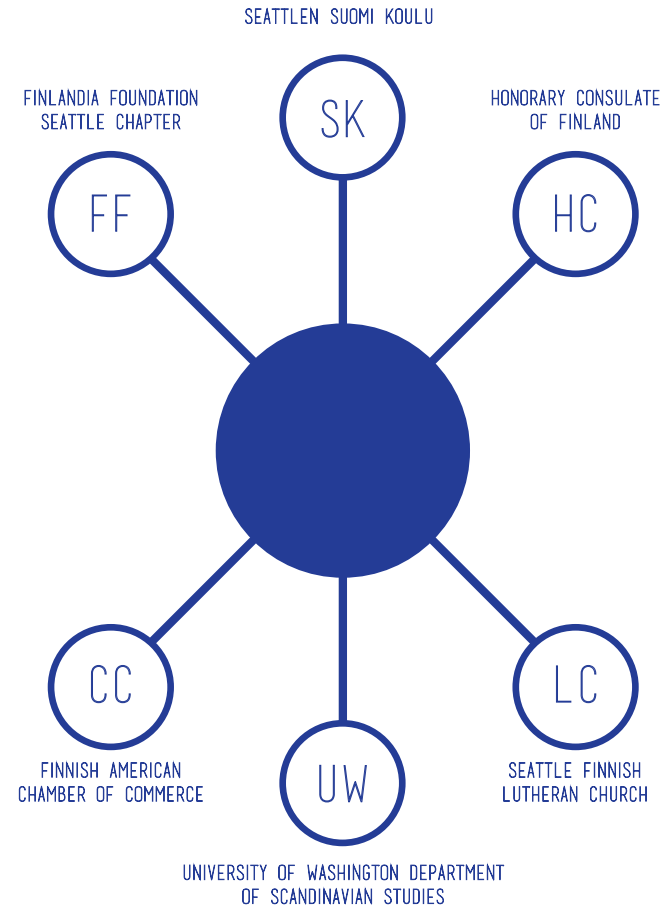
There are various Finnish cultural groups located in the Pacific Northwest, with Seattle being a key location with a high concentration of not only Finnish Americans and Finnish people, but also other various Nordic groups [Fig. 3-2].

The Scandinavian Department at University of Washington was founded in 1909 and is mandated by the State of Washington to remain a department at the university because of the cultural importance of the Scandinavian heritage in the Pacific Northwest. The Department of Scandinavian Studies is a key point of outreach to the greater community, and is highly involved in not only the five Nordic communities in Seattle, but also the three Baltic communities around the area as well. The department provides classes and resources in politics, language study, cultural study, heritage and folklore, as well as history. The Finnish program in the department had their 25-year anniversary in 2015, marking its success in the department as well as continuing its place

in providing Finnish cultural and language instruction at the University of Washington.

There are many Finnish societies around Seattle and in the Pacific Northwest that are closely tied with each other, including the Department of Scandinavian Studies at University of Washington. The Finland Foundation is a national foundation founded in 1953 that supports the continued cultural education of Finland in the United States. There are various chapters throughout the country, with a local chapter in Seattle. The local chapter in Seattle provides outreach through various means such as language teaching to the general public, with students coming as far away as three hours in order to reconnect with their heritage and learn the language of their grandparents and parents. Additionally, the chapter supports projects related to Finland through academic means, and provides support to many Finnish students at University of Washington who are participating in the Centre for International Mobility's (CIMO) language programs in Finland.

Additionally, in the Seattle area is the Finnish School of Seattle, or Suomi Koulu, which is a Saturday school that teaches young children the Finnish language and provides a cultural connection for those children growing up in the United States, but still would like a tie to Finland and Finnish culture. The purpose of the school is to give many children a chance to also practice Finnish and converse as they normally would if they were living in Finland.



**Fig. 3-2:** Icon diagram of the various Finnish societies around the Puget Sound region



# :RESEARCH AND THEORY

## DEFINING CULTURE IN THE CONSTRUCT OF CULTURAL CENTERS

Cultural centers can be found throughout the United States and belong to the longing to reconnect back to cultural identity, which many lost through the Americanization of their ancestors. Being that the majority population of America is built upon massive immigration, there are two constructs of culture – the American culture, and then the culture that one grows up with in their family. Much of the American culture is influenced by the early settlers from the British Isles, however there is an overall national identity that is defined by the will to succeed and create a life for oneself through hard work and determination. Multiculturalism has played a key role in the way American culture has been shaped, as many national identities have reinforced the construct of determination.

The culture that one grows up with, whether it be Nordic, Nigerian, Kyrgyz, etc., is present in modern America through gathering places; a place in the built environment that can be reminiscent of one's home country or cultural identity, but placed within an American context. For example, Ballard, a neighborhood in Seattle, has a strong identity link with the Nordic countries, particularly Norway, and houses multiple cultural centers that cater to the Danish-American, Swedish-American, Norwegian-American, Finnish-American, and Icelandic-American. These facilities are predominantly for those populations; however, the

general public is able to use these spaces and attend certain cultural festivities that take place here.

Another example in Seattle is the Polish Home Foundation, a group that works to promote Polish culture throughout the greater Puget Sound region. This center notoriously has a popular pierogi day at their home, which brings together all types of people through food, as well as brings them to the center to experience a part of Polish cultural heritage. There is a longing for cultural connection between groups of people, and their spaces are a means to promote a sense of community among both the target population and the greater population.

## HEALTH & WELLNESS

Health and wellness in architecture goes beyond just the program of hospitals and centers that tend to individuals' health; programmatic functions are not all there is when it comes to addressing what defines the space. Health and wellness recently has been transcended through the usage of biophilic design and space creation that puts the individual's feeling within the space at the front edge of design. Citing back to the health and wellness spas throughout central Europe, predominantly located within scenic villages that are surrounded by nature, health and wellness centers can be adapted to the American audience through engaging those that enter the space with textures, colors, plant life, and the overall feeling that the design cares about their experience.

In the Nordic countries, health and wellness enters all facets of life, particularly in the work/life balance that the region is known for achieving, and is the antithesis of the work/life balance many experience in the United States. As Signe Johansen puts it in an interview with Get the Gloss, “In the UK and the US, proof of hard work is measured by the hour. I would say that Scandinavian countries on the other hand have ‘enlightened employment’ policies. You work hard during your allocated hours, and then you go home, hang out, cook, go for a run and see your partner, kids and friends...” While speaking about hygge, Signe reiterates that hygge is maintained through cultural lifestyle that is integral to Nordic identity, where all aspects of life are part of hygge, from lighting to food to work life.

Although Seattle ranks high on many health and wellbeing analyses, there is opportunity to address health and wellbeing from a side that promotes physical health and wellbeing through relaxation. A popular stereotype throughout the world is that Americans are typically overworked, and although there is a dispute in some statistics, we should be searching on ways that mitigate this stress. Mitigating stress can be perceived through architecture, whether it incorporates smell or touch, or even the atmosphere of the space. Health and wellness architecture should serve the user through design techniques that are perceived both consciously and subconsciously.

## A HEALTHY CITY

Seattle is a city that is always top ranking across the United States when it comes to livability, walkability, and health. There is a great sense of

healthy lifestyle amongst the population, particularly with transportation and local economy. Per the U.S. Census Bureau, 3.4% of workers commute by bike in Seattle, compared to a country-wide average of just 0.6% of workers commuting by bike. There is a large network of bike lanes, sharrows, and paths that allow commuters to freely bike where they choose. Although nowhere near the number of bikers who commute to work compared to cities like Copenhagen, the city ranks high for the United States and some parallels can be drawn between the two cities.

## QUALITIES OF LIGHT & HEALTH

Light is an element of architecture that is becoming more and more integral when we talk about daylighting design and overall lighting design. Many architects consider light in the beginning stages of design; however, it tends to be left when other elements of design come into focus. As humans, we are naturally drawn to light and it is integral to our circadian rhythm that regulates when we wake up and when we go to bed, and how we feel mentally, physically, and how we behave on a 24-hour basis. The temperature of natural daylighting changes throughout the day and research has shown an impact on the human response to it.

“Sunlight changes color from yellow in the morning, to blue at midday, and red in the afternoon/evening; the human body responds to this daylight color transition. The response is apparent in body temperature, heart rate, and circadian functioning. Higher content of blue light (similar to skylight) produces serotonin; whereas, an absence of blue light (which occurs at night) produces

melatonin. The balance of serotonin and melatonin can be linked to sleep quality, mood, alertness, depression, breast cancer and other health conditions (Kandel et al., 2013).” (14 Patterns of Biophilic Design, 34)

There is extensive research on the effect daylighting in buildings has on the occupants and workers of those buildings. In the 14 Patterns of Biophilic Design, the pattern of dynamic and diffuse light notes that “quality daylighting has been reported to induce more positive moods and significantly less dental decay among students attending schools with quality daylight than students attending schools with average light conditions (Nicklas & Bailey, 1996).” (34). Efficiency is proven to go up when occupants have access to windows and natural lighting and ventilation. There are systems specifically designed to maximize a spaces efficiency not only in energy savings, but also in the performance of the overall building. For specific companies, research has shown that attendance to work has gone up, production has increased, and overall moral of the employees has increased. The applicability of lighting in the workplace translates over to other spaces as well. In a public building, daylighting can be used to reinforce important spaces and areas where the users would more likely go.

Light has its place as a function in design, and it depends on the design program at hand. For instance, if the program of the space is for commuters on a public rail system, then lighting would not only be used for safety, but also used for wayfinding to entrances, ramps, and circulation areas. Lighting allows the design to create a mood for the user of the space. This mood is imperative because it is usually one of the first things that subconsciously influences somebody’s opinion on the space and interaction in the space. The lighting

program of an office space will be significantly different than the programming of a library or the programming of a restaurant.

## THE SENSES

Four of the five senses are central to the way we perceive our surroundings, and that’s integral within architecture. We perceive mostly with our eyes, however it’s the fine details that add nuance to the space – the fragrant smell of the lumber, the smooth texture of the tile, the sound of the footsteps on the floor. Every piece of material that goes into a building belongs there some way, somehow. The senses intercede with the wellbeing of the user to create an atmosphere, a place that intends to define the space whether it be made to comfort, disengage, or challenge the user in some way.

There is a large historical aspect of healing and wellbeing through the integration of the five senses in the approach to maintain a healthy equilibrium mentally and physically. The romans baths, which were once an integral part of Roman culture during the empire, used the senses to relax those who entered through feeling, smell, and sound. Stemming off of this idea of the roman bath, Therme at Vals, located in Vals, Switzerland, is renowned for the atmospheric nature that incorporates the senses into architecture. Zumthor speaks well to the way that spaces can promote relaxation and disengagement in a positive way through a means of privacy and self-guidance, something which is lost in the modern era of technology. The sound that echoes throughout the large space of the bathhouse down to the fragrance of the flowers in one of the tepid baths – all engage the sense in different ways every time.

## NATURE & THE NORDIC APPROACH

Zumthor reiterates this in the book *Atmospheres*, in which he answers the existential question he poses. “A question. A question I put to myself as an architect. I wonder: what is this <Magic of the Real> — Café at a students’ hostel, a thirties picture by Baumgartner. Men, just sitting around — and they’re enjoying themselves too. And I ask myself: can I achieve that as an architect — an atmosphere like that, its intensity, its mood.” (Zumthor, 19). Zumthor poses the question of thinking about designing for the five senses where atmosphere and mood take over the architecture, and the architecture symbiotically returns the motion. The “Magic of the Real”, as Zumthor puts it, may be achieved through the architectural relationship to sense.



**Fig. 4-1:** Thermen at Vals, a wellness center in the southern Swiss Alps, reconnects the user to the surrounding mountainside. (Source: Fernando Guerra)

The Nordic approach is similar to many other European regional standards for wellbeing. There are, however, defining elements that are Nordic. Health and wellness is extremely important to Nordic people, partially because it is still ingrained in their culture, but also because of their connection to nature. Nature and diet are huge factors in the health of the populations. A diet of predominantly fish, root vegetables, and dairy, lead to lower levels of heart disease and obesity. The diet, accompanied with a cultural institution such as sauna (integral for health and wellness in Finland,) give a healthy equilibrium to consumption and release (Backer, 2009).

Along with physical wellbeing, there is a mental component of wellbeing in the Nordic States. This mental health is predominantly tied to the social welfare state system, which allows the society members to truly focus on what works for them, whether it be satisfaction through studies such as art and design, or it be through the safety net that provide relief if ill or unable to work. These networks in place provide mental ease and stability to society.

The physical environment has a lot to do with the combined health of the Nordic people. There are numerous studies being conducted on the physical environment across the region, and are predominantly about the sense of being within a space. Gehl Architects are continually researching on ways that the built environment can improve, whether it be through biking infrastructure or recommendations in public squares. Currently, they are looking at defining the “winter city,” which among the Nordic capitals is a hot topic. The idea is that cities can be planned to be active for all year, particularly during the winter



**Fig. 4-2:** Copenhagen as a Winter City  
(Source: Mikael Colville-Andersen)

when they can be planned to engage the populations and get them out of the indoors.

## THE SAUNA

The sauna is an integral part of relaxation that is meant to renew the body and mind. The high heat of sauna is beneficial to sweating out toxins that we eat and breath every day. The relaxation that a sauna goer experiences further leads to deeper, better sleep cycles, as well as fight illnesses through the release of toxins and sweating. There is a connection to a primordial time

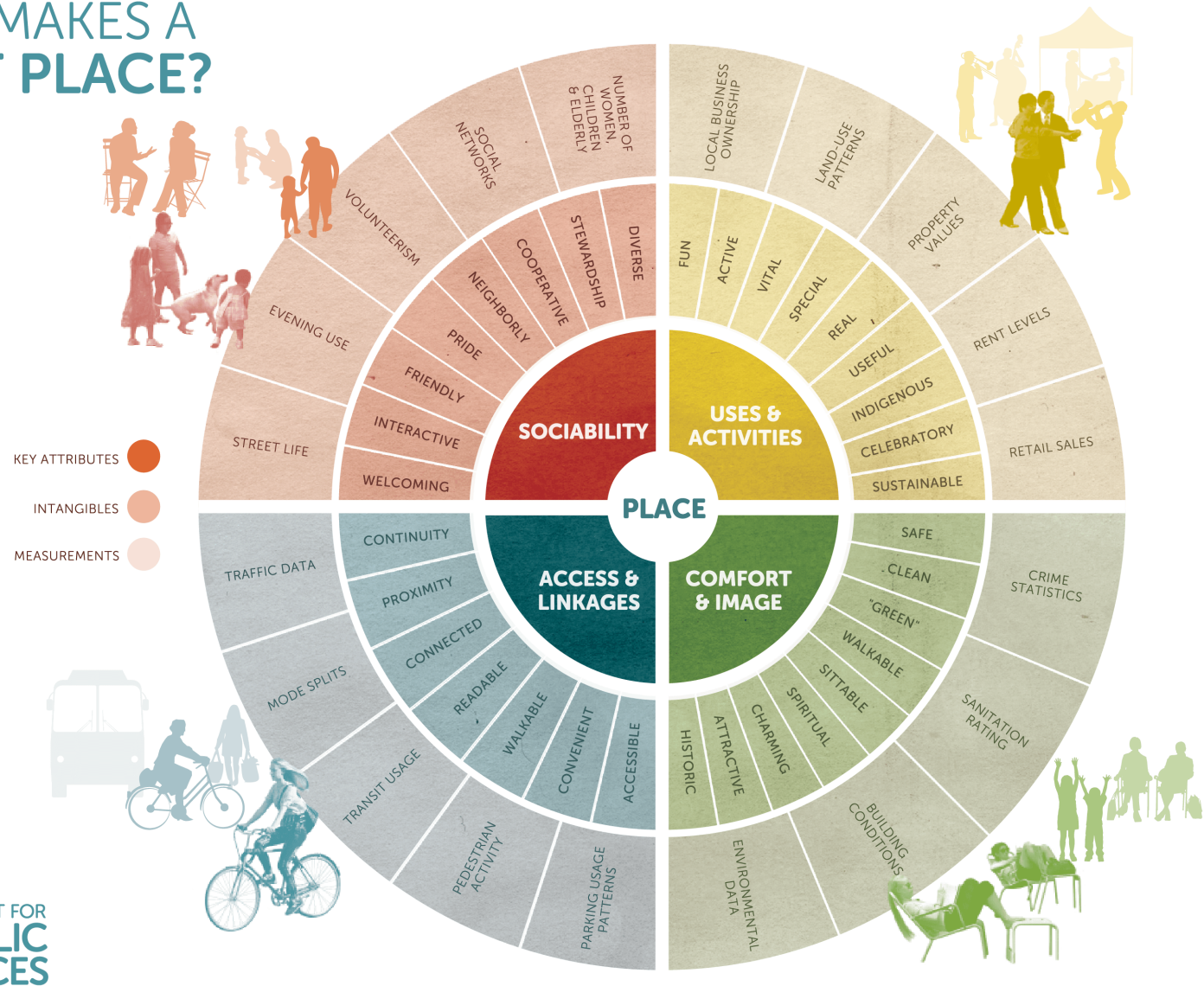
through sauna, particularly through the full body experience of being naked and connecting back with the elements through heat and water, as well as nature given the location of saunas (however not necessary, just preferred.)

The design of saunas is quite multi-faceted, as showcased through the film “Miesten vuoro” by directors Joonas Berghäll and Mika Hotakainen. The film documents the way Finnish people, particularly men, express their feelings during sauna and prove the stereotype of the stoic Finnish man wrong. The different types of sauna are documented in the film, ranging from the makeshift saunas in the countryside to the nice saunas found in apartment buildings in the city. The inclusion of sauna in apartment buildings is quite important as it continues to keep sauna as an integral cultural identity, while providing relief from the colder climate and giving health benefits to its users.

## SENSE OF PLACEMAKING FOR HEALTH & WELLBEING

There is plenty of opportunity for placemaking when it comes to providing a public space for all people. Placemaking doesn’t just belong in the fully public realm, but it has a place in larger scale buildings that generate services to the public, whether it be a transit center, public square, or in this case, a cultural center. There is a crossroads for opportunities when creating a center for culture that embraces one or a few group identities, while making the center available to other people to experience that culture through a means of something that is important to it.

# WHAT MAKES A GREAT PLACE?



**Fig. 4-3:** Project for Public Spaces' categories for placemaking  
(Source: Project for Public Spaces)

Health and wellbeing is a tremendous part of placemaking because it is directly related to the way that we feel. Spaces that make us, as users, feel safe, welcomed, relaxed, and having a feeling of social and environmental connections, are important to the built environment because they can create refuge. The Project for Public Spaces has defined many key bullet points that apply to making a place welcoming and for all people to enjoy [Fig. 4-3]. Although these key points apply to the city at a much larger scale, many of them can be directed towards an individual structure itself and how it compliments its surroundings.

## DEFINING ELEMENTS OF NORDIC DESIGN

Nordic elements of design are typically stereotyped into “white spaces” with white everything, whether it be the exterior or interior. However, there are more typologies that are added to the defining elements of Nordic design. Materiality is the main influence in Nordic design. There is a harmonious balance between textures, colors, and patterns, which all integrate seamlessly in the iconic, minimalist design that the Nordic countries are known for. New Scandinavian Design cites “Nordic design attempts to achieve a balance between form, function, color, texture, durability and cost. Designers like Alvar Aalto, Arne Jacobsen, Jens Quistgaard and Tapio Wirkkala are very nature-oriented” (9). Throughout Finland, the usage of wood is an integral part of design, particularly due to the abundance of lumber in the country, but also due in part to the warming effect that it has on the interiors, bringing lightness and brightness to a somewhat extremely lit environment.

Another example is the Danish feeling of “hygge,” which isn’t quite translatable, however embodies the feeling of the space through comfort, candlelight, nature, and darkness. Hygge doesn’t always have to be influenced by darkness, however it is part of the overall atmosphere that hygge creates. The idea of design throughout the Nordic countries is embodied by design that affects everyday life. It isn’t applied to just one particular group or meant to influence one factor of the built environment, but accompany a multitude of factors that design can help influence or shape, even in the most minute way.

## SPACES FOR GATHERING

Within Nordic design are elements that provide gathering space on the inside and outside, particularly through the transparent connection visually, blurring the interior and exterior of buildings. This transparency is an indirect result from the connection that the region has to nature, particularly in the cities where the longing for that connection is still there. Predominantly, families still escape to their summer “mökkit” or “stugor,” the Finnish and Swedish summer cottages respectively [Fig. 4-4]. However being that many Nordic residents have moved to the cities since the early 1960s, the lack of nature is something that is always in search of. Jetsonen states that “the summer villa has an obviously close relationship with nature. Most summer houses are situated in the untouched natural landscape apart from other development and preferably from each other as well” (Finnish Summer Houses, 15). Summer houses are a variety of Finnish “mökkit” that were once part of the bourgeoisie lifestyle that the wealthier Finns maintained. They were predominantly designed by architects rather than the tradesman, and are larger than the common “mökki.”

Within the Nordic capitals, green parks and squares are plentiful and are retained through their own natural sense – although landscape architecture is very important in this region as well, there is the idea that certain elements of outdoor gathering spaces should be natural, whether it's through the types of landscaping used or the location of the park. Particularly in Sweden, parks were used as meeting places and the entrances of the parks were denoted by the placement of a park gate at the “Folkparken,” or the “People’s Park.” Now, these parks have become city squares bounded by the built environment, and need the transparency between the square or park to the building to retain the connection through the meeting space (Login Gate Competition, 2016).



**Fig. 4-4:** Finnish mökki along the lakeshore  
(Source: Petteri Kivimäki)

## METHODOLOGY FOR LIGHTING DESIGN

Lighting is one of the most important elements to Nordic people. There is a strong history of lighting design that is met with embrace, particularly through daylighting design. There are architects that are legendary in this field – Aalto, Utzon, Lewerentz, Leiviskä, Asplund, etc [Fig. 4-5]. They all worked with the atmospheric lighting of the space, portraying the store of emotion through the sculpting of light and the dynamism of light. Steven Holl’s essay “Nordic Shadow” in the book *A New Golden Age: Nordic Architecture & Design* reflects on the way lighting designers work in the Nordic countries, particularly on the Kiasma in Helsinki. He states “My project architect on the Kiasma Museum, Vesa Honkonen, was also the Lighting Designer for the knut Hamsun Center. With darkness, Honkonen has recently imagined and realized an amazing “Church of Shadows” in Chengdu, China. He has transformed the darkness of his Nordic youth-including the soft light of the snow tunnels-into his musical instrument. It is an instrument rarely given the prominence it deserves” (19). [Fig. 4-6]

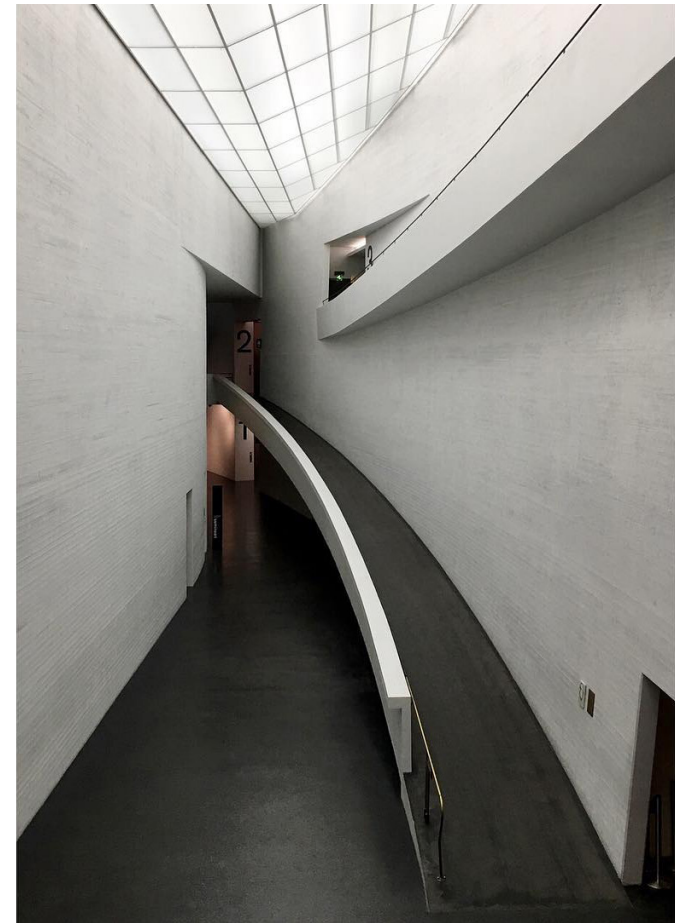
The program of the buildings designed by modern architects in the Nordic region were not solely churches, but ranged from office buildings, public buildings, to academic buildings. The architects saw a way that light bring life back into architecture to portray a feeling or influence the person within the space. Light is interconnected to biophilic design, however there are different typologies of Nordic light, as referenced in *The Guide to Nordic Light – Case Studies Across the Region*. These four definitions of light within Nordic architecture serve as a platform for designing a Finnish cultural center in Seattle, as they are applicable to the architectural atmospheres that many are

accustom to in that region (20-23).

The process to analyzing the different types of lighting within a set space should involve prioritize the function of the space, the materiality of the space, and the atmosphere that the space aims to create and influence. By strategically prioritizing the program of the building, there is opportunity to create focus on certain spaces, which in turn would provide a contrast and journey throughout the entire building. That does not mean there is neglect to the other spaces; the result needs to focus in how the overall space is influenced through lighting design, while other spaces gain more importance depending on their needs.



**Fig. 4-5:** Stockholms stadsbibliotek (1928) in Stockholm, Sweden by Gunnar Asplund



**Fig. 4-6:** Kiasma Museum (1998) in Helsinki, Finland by Steven Holl



# :PATTERNS OF DESIGN

Influenced by Christopher Alexander's work "A Pattern Language," there are overarching concepts of design that are influenced by the design identity of the Nordic countries. Alexander states "in short, no pattern is an isolated entity. Each pattern can exist in the world, only to the extent that is supported by other patterns: the larger patterns in which it is embedded, the patterns of the same size that surround it, and the smaller patterns which are embedded in it." (xiii). Alexander establishes that "a pattern language has the structure of a network," (xviii) in which no single pattern is separate from the identity it gives to built environment. Just like any language, there is a flow and a means to combine multiple patterns together to create a uniformity.

The primary focus of creating patterns of design is looking at a pattern that can be taken from Nordic design identity, but then modified to influence design regardless of location. The focus is on the way the design patterns that focus on how design makes a space feel for everybody, not just a certain user group. The framework consists of 12 different design patterns:

"The Kiuas"

"The Social Hearth"

"The Social Greenhouse"

"The Vertical Current"

"Reawakened Connection to Nature"

"Outdoor Living Rooms"

"Long Thin Buildings"

"Engaging Space Through Massing"

"The Beautiful Blank Façade"

"Ethereal Quality of Light"

"Light from Above"

"Warmth Through Natural Materials"

The patterns within this framework are applicable to the site design, architecture of the buildings, landscape architecture, right down to even the detailing of the project. "The Kiuas" pattern guides the placemaking aspect of the entire site. The kiuas in sauna is the main stove, which comes from a combination of the words "kivi + koda" meaning "stone" and "stone house" respectively. The kiuas is made of heated stones, which evaporate the water into steam for the sauna, and is typically located between the benches or in the corner. Sauna users typically are around the kiuas, and when this pattern is used within the design of the site, "the kiuas" are locations that promote a centralized gathering of people.

"The Social Hearth" is a pattern of design which focuses on the transition spaces throughout the site where a user would come to meet their friends, linger, and move on to a different location. This pattern should connect the main spaces to one another and act as an interstitial space that is well designed, but not the main focus. "The Social Greenhouse" is the equivalent of an active atrium space, where users can gather, look below, and engage the five senses by having a connection to other parts of the building. "The Social Greenhouse" is the space that promotes the mixing of users there for different reasons, and tries to bring them together through interaction in circulation. "The Vertical Current" is the pattern that seeks to highlight the main circulation space through materiality and focus. This can be seen as a glassy atrium, a differentiation in materials in the façade, color usage, or simply having it be the main entrance with an "irresistible stair" as the focal point. The three of these patterns should work in conjunction with each other to provide a space that allows for the ebb and flow of users.

“Reawakened Connection to Nature” is a pattern that is integral to biophilic design and bringing the user back to focus on the outdoors, light, and sight lines. This pattern is very important in the Nordic countries due to the weather and latitude of their location, however can be applied to similar climates such as Seattle’s climate. The health benefits and productivity of people significantly increases when there is access to natural daylight and the outdoors. It promotes the movement of going back to nature in architecture and designing in conjunction with nature, particularly in an urban environment.

“Outdoor Living Rooms” is the design pattern that treats the boundary between the indoor space and the outdoor space as something that has more of a fluid property. The “Outdoor Living Rooms” engage the space directly outside the interior space and serve to extend the function of the indoor to the outdoors. It directly relates back to the “Reawakened Connection to Nature” pattern, as well as influences the pattern of “Engaging Space Through Massing.” The design pattern of “Engaging Space Through Massing” is an idea that the design can create usable outdoor space by carving away at the boundaries of the massing, while providing a differentiation in façade and allows for a more interesting composition of massing from the exterior architecture perspective.

“Long Thin Buildings” stem directly from the need to engage daylighting throughout the space, as well as allowing air and light quality to be at the forefront for the design direction. Due to the latitude of Seattle, this is quite important during the winter months when the sunlight is at its solar minimum and the daylight hours are around eight hours per day. This is similar across the Nordic region where the daylight hours during the winter are significantly less than Seattle. “The Beautiful Blank Façade” heads more towards the

design development direction where materiality starts to play in the way that blank façades may still be interesting without very much glazing. Choices come through materiality and building form, however the façade may be “blank” but rather active through green walls, contrasting materials, and differentiation in massing.

The last three patterns are directly tied back to light and the feeling of “hygge” that is so strong throughout the Nordic region, but can create the comfortable “hygge” feeling regardless of location in the world. The patterns of “Light From Above,” “Ethereal Quality of Light,” and “Warmth Through Natural Materials” are mostly internally focused to the interior design of the buildings. Allowing a majority of white materials on the inside to lead the design, the whiteness allows for the reflectance of light more so than darker colors or darker woods, which in turn brightens and livens up the space. The “Ethereal Quality of Light” works in conjunction with “Light From Above” to engage the space through daylighting design. The daylight that comes through may be shifted through materiality, skylight design, or glass opacity. The “Ethereal Quality of Light” is reminiscent of the forest and guides the daylight design as well as the electrical lighting design through placement of skylights/windows and luminaires.

1. THE KIUAS

2. THE SOCIAL HEARTH

3. THE SOCIAL GREENHOUSE

4. THE VERTICAL CURRENT

5. REAWAKENED CONNECTION TO NATURE

6. OUTDOOR LIVING ROOMS

7. LONG THIN BUILDINGS

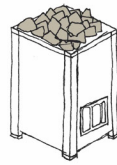
8. ENGAGING SPACE THROUGH MASSING

9. THE BEAUTIFUL BLANK FAÇADE

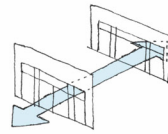
10. LIGHT FROM ABOVE

11. ETHEREAL QUALITY OF LIGHT

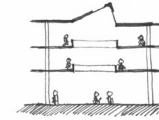
12. WARMTH THROUGH NATURAL MATERIALS



1



2



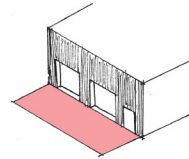
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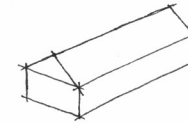
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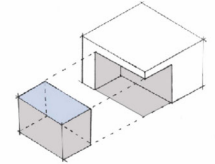
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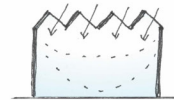
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Fig. 5-1: Patterns of design that serve as the theoretical framework for KIUAS



# :PROJECT SITE

## LACK OF A COMMON SPACE

The Finnish community is scattered throughout the Puget Sound area, and just like the community, many of the outreach groups such as the Finnish School of Seattle and the Finlandia Foundation Seattle Chapter, there is a lack of a common place where everybody can gather. The Finnish community is the only Nordic group in the area that doesn't have some public commons, such as the Swedish Cultural Center or the Leif Erikson Lodge.

When designing a cultural center, there is a need to make it integrated within the community in a broader sense. In other words, how can the Finnish community create something that appeals to non-Finnish community members in the Puget Sound area. A cultural center should reflect the heritage it represents, but it should also be designed to make everybody feel welcome. Making a place comfortable for the user incorporates materiality, space creation, and cultural aspects that are integrated in design. For example, defining the Danish design aspect of "hygge" is quite difficult in English, partially because "hygge" is felt in the space and felt through the atmosphere. There is no one definition of "hygge," but rather it is a personal, definitive feeling for a space that brings warmth and comfort to the user. A user unfamiliar with the concept will not experience the phenomenon of "hygge," however they will have an emotion that comes forth because of the "hyggelig" design.

It has been vocalized throughout the Finnish community in Seattle that the lack of common space has splintered the community to relying on various locations to serve the population, but also under-serving it. For example, families that take their children to the Seattle Finnish School often come so that their children can learn Finnish. Sometimes there is one Finnish and one non-Finnish parent, and the non-Finnish parent happens to not know how to speak Finnish. The school at one time offered Finnish classes for the parents, however because of the lack of space, along with a distance to drive, the classes were not attended.

## REACHING OUT

Creating a public building that doesn't lie dormant for most of the time is a challenge when it comes to making it for a specific cultural group in the United States. There are ways to program the building so that there are amenities that benefit the entire community. Sauna is a way that the Finnish community can reach out to the rest of the area, particularly through the promotion of the benefits sauna has on health and wellness. Sauna is a way to break down the barriers between people, mainly because the way Finns view sauna is through the leveling out of various types of people from different backgrounds.

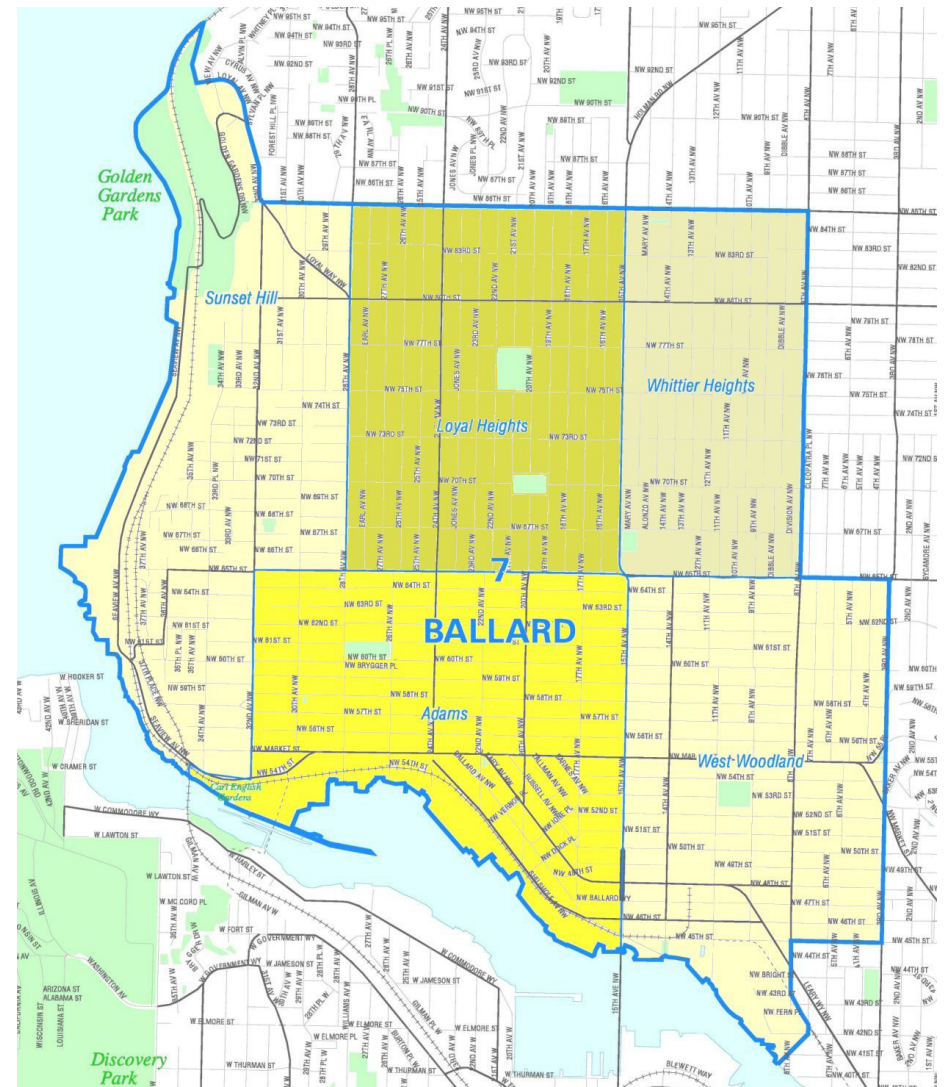
# CONTEMPORARY BALLARD

Ballard is built upon five neighborhoods [Fig. 6-1], which help build a strong identity for those who live and grew up in the neighborhood. The edges along the shipping canal are marked with industrial fishing infrastructure, while just a few blocks over is the character core of Ballard. Ballard is predominantly a neighborhood full of single family housing. From N 85th Street south to around N 58th Street, Ballard has the charm of suburban living that was common amongst families of the 1950s and 1960s, however it lies within an urban city.

Ballard has slowly been densifying in areas along main arterial roads, particularly along Market Street, N 15th Ave, and N 24th Ave. These locations have seen an increase in apartment and condominium buildings, which provide ease to transportation right outside their door. Ballard has seven key character areas per City of Seattle Urban Design and Transportation Framework. The seven are as follows: Civic Core, Character Core, Residential In-Town, Commercial Mix, Residential/Neighborhood Retail, General Commercial, and Industrial. Each of these character areas take into consideration was Ballard was, how it is now, and how the city can help guide design for the future.

The character core of Ballard is the most identifiable part of the neighborhood, which is predominantly Ballard Ave NW and Market Street NW. The urban landscape is predominantly brick masonry with a consistent footprint and height, and housing lively retail and restaurant spaces below. The Civic Core is the new area of Ballard where Ballard seeks to make an identifiable modern neighborhood with all the amenities for the neighborhood like a large park, library, commercial campuses, and retail. Other zones, such as the

Industrial Zone, define Ballard in a different way. The long history of beer making in the neighborhood, as well as the fishing industry, have shaped the urban environment for production and functional use, rather than uses such as the Civic Core.



**Fig. 6-1:** Neighborhood of Ballard (Source: City of Seattle)

# MARITIME CULTURE

The maritime culture of Ballard is very visible upon entering the neighborhood boundaries. Coming with the maritime history is the infrastructure that helped build up Ballard, along with the annexation into Seattle in 1907. Ballard is boarded by water on the south and west sides of the neighborhood, giving great access to the Puget Sound. The Hiram M. Chittenden Locks [Fig. 6-2] were the first piece of infrastructure that allowed the flow of boating traffic into Lake Union and Lake Washington, as well as access from those lakes to the sound. The ease of access, along with the demographics of being Nordic, gave way for the growing lumber and fishing industries in the area.

It is well known that Nordic people have a strong connection to the sea. It dates back in their history to the times of the Vikings, and when the settlers came over to Ballard, they brought a lot of seafaring traditions with them. In the



**Fig. 6-2:** Hiram M. Chittenden Locks  
(Source: U.S. Army Corps. of Engineers)

early years of Ballard right before the turn of the century, Golden Gardens was location to an amusement park that allowed visitors to see the sound in full, along with giving views to the Olympic Mountains across the way. This brought many people into Ballard, and accompanied with cheaper real estate, those who settled in this area could cultivate an industrial culture that included what many did back in their home countries.

Ballard today is home to a large fishing community, providing supplies to the various companies, as well as marine manufacturing. Due in part to the roots of the Norwegian community in Ballard, King Harald V of Norway visited the Pacific Fisherman Shipyard and Bergen Place in the summer of 2015, showing the prominence of the former Norwegian dominated maritime community in Ballard.

## NORDIC AMENITIES

The Nordic heritage and culture is very much present throughout Ballard. You can see the flags of the five Nordic countries at Bergen Place, Norwegian flags scattered throughout the neighborhood, and even find the Old Ballard Liquor Company, which distills different kinds of spirits, particularly aquavit. Within the neighborhood boundaries, there are locations that cater to the pan-Nordic community through food, worship space, and lodging. Among these are the Nordic Heritage Museum, Scandinavian Specialties, Leif Erikson Lodge, while in other close neighborhoods such as Northgate and Westlake, there is the Northwest Danish Association and Swedish Cultural Center, respectively.

Missing among these more public centers is one for the Finnish population here in Seattle. Although there is a Finnish Lutheran Church located at the north end of Ballard on N 85th Street, there is no centralized location, which has led to the Finnish groups throughout Seattle gathering at locations such as the Swedish Cultural Center [Fig. 6-3]. Although there is somewhat of a comedic aspect to this, it is one thing that lacks within the Ballard neighborhood. Thinking about how the other communities reach out to the greater public is something that keeps their centers going. For example, the Swedish Cultural Center has a Swedish pancake breakfast on the first Sunday of every month, and the Norwegian population teaches various classes on rosemåling. Each respective community has languages classes offered to the public, along with the Finnish population, which provides opportunity for those interested in these languages, which are rarely taught at universities, a chance to learn culture and language at the same time.

## THE SITE

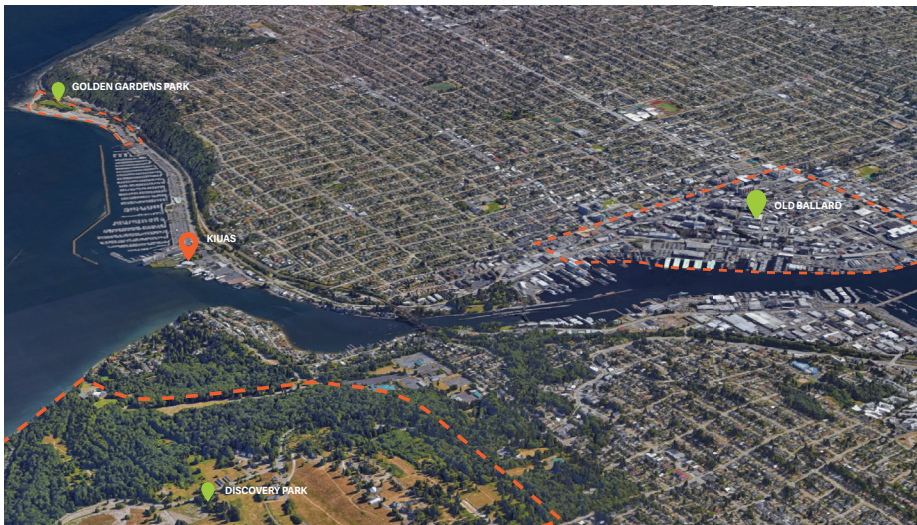
The location of the new cultural center for the Finns in the Pacific Northwest will be in the Ballard neighborhood of Seattle due to its rich Nordic heritage, integral to connect to a community that lies outside of the Finnish community already here, as well as the number of other Nordic groups and buildings that already exist in the area. The site is located on the western shore of the neighborhood and is along the coastline just north of Ray's Boathouse, an established restaurant in the area. The Ballard Elks Lodge currently sits on the site with a parking lot adjacent to the building [Fig 6-5, pg. 44]. There is opportunity for connection to the sea through a tiny shore area that exists along



**Fig. 6-3:** Nordic cultural centers located around Seattle, being concentrated in Northwest region of city limits

the edge. The location of the site on the waterfront ties directly back to Nordic design identity, which is emphasized in *New Nordic: Architecture & Identity* stating “the waterfronts of the Nordic capitals, in particular, are emblematic of the vitality and effectiveness of these new cultural energies. Helsinki, World Design Capital 2012, contemplates new visions for its South Harbor, including (up until May) a Guggenheim Museum-Helsinki, as well as new bridges, a city central library, and a new Aalto University campus to add to its just-opened Helsinki Music Center” (139). Seattle’s similar emphasis on waterfront design ties back the local Pacific Northwest Culture to the site, as well as draws a parallel with the cultural emphasis on waterfronts in the Nordic countries.

The density of the area is not very high compared to the urban village part of Ballard, which is key to the proposed function of the site. The low density of the surrounding area, along with low roof heights of surrounding buildings,



**Fig. 6-4:** KIUAS is situated between two major Seattle parks , along a major bicycle route, and near the historic district of Ballard.

provide ample daylighting opportunities to be incorporated in the design. The predominant use of Seaview Avenue in this part of Ballard is to connect the neighborhood to Golden Gardens, a highly-used city beach park [Fig. 6-4]. There are many connections to Golden Gardens that run past the site, including the bike path to the park that goes along Seaview, the railroad tracks, and the copious amounts of boat moorage that is provided in the harbors to the north.

As of November 2016, voters in the Puget Sound decided to fund the Sound Transit Package 3, which is an integral transportation package in connecting Ballard to the sounding areas through the expansion of light rail and rapid ride buses. In the package, a light rail connect to downtown would end at Market Street in Ballard, and a study to connect University District and Ballard and replace bus number 44 with light rail would be conducted. There are plenty of public transportation routes that connect the future site of the cultural center, which would strengthen the ease of getting to and from the center without the means of auto transportation. The site would allow for some surface level parking if needed, but overall it has the qualities of being open to the sea, sky, and amenities that are not too far off.



**Fig. 6-5:** Top, The frontage of the current site for KIUAS, which contains copious parking and the current Ballard Elks Lodge  
Middle, The frontage across the street from the current site  
Bottom L-R, Views from the parking lot and Shilshole Public Beach

# PROGRAM NECESSITIES

There are three key groups that are targeted in the development of the program for the cultural center – the Finns, the health guru, and the surrounding community. For ease, the programming was separated into two groups – public and private. After consultation with various members



**Fig. 6-6:** The program diagram containing three programmatic priorities - office space, classrooms, and library; sauna, café, relaxation room; retail, restaurant, and flex hall

of the community, it was decided that there would need to be both a public and private function of the spaces, but more opportunity to allow for other communities to use the space as well. The public functions of the space are focused on how the Finns can reach out to the surrounding community and show how health and wellness is integral to culture, but also provide a means to introduce cultural entities, such as sauna, to the public.

## PUBLIC PROGRAMMING

The public programming side of the cultural center is a means for the Finnish community to connect with the public. This can be achieved through introducing them to the ritual of sauna, predominantly through a health and wellness factor. The program of sauna is integral to the experience, particularly to those unfamiliar with how sauna works. There is a key subset to the sauna programming, which includes changing rooms, showers, resting area, and the sauna. Along with the sauna, the site has a fantastic opportunity to connect with the Sound. There is a part of sauna that when you get too hot, you need to cool down. This is provided through a shower in many urban saunas, however a connection to the sea is almost always preferred. Providing a small barge with a sea pool gives the user that connection back to nature, despite being in an urban environment in Seattle. Aside from the facilities included in sauna, the other public programming will include a café and bar. This would provide usage of the facility all year round, as well as at various points during the day when people are not using the sauna, nor using the other facilities in the private functions [Fig. 6-6].

## PRIVATE PROGRAMMING

The private programming is separated from the public programming in this sense because they are facilities that are meant for the Finnish community, however may be rented out to others. After assessing the needs for the community, there are three predominant programs that have been unaddressed in the community, mainly due to the scattering of facilities throughout the Puget Sound area, and a lack of a common space. Classrooms, flex space, and a couple small offices are key programs to accommodate the needs for the Finlandia Foundation language classes, as well as the Seattle Finnish School's need for space. The offices are key to housing the various Finnish groups throughout the Puget Sound, and by grouping them together in one common location, it would bring people to the center, which in turn would give their visit benefit to the other programming.

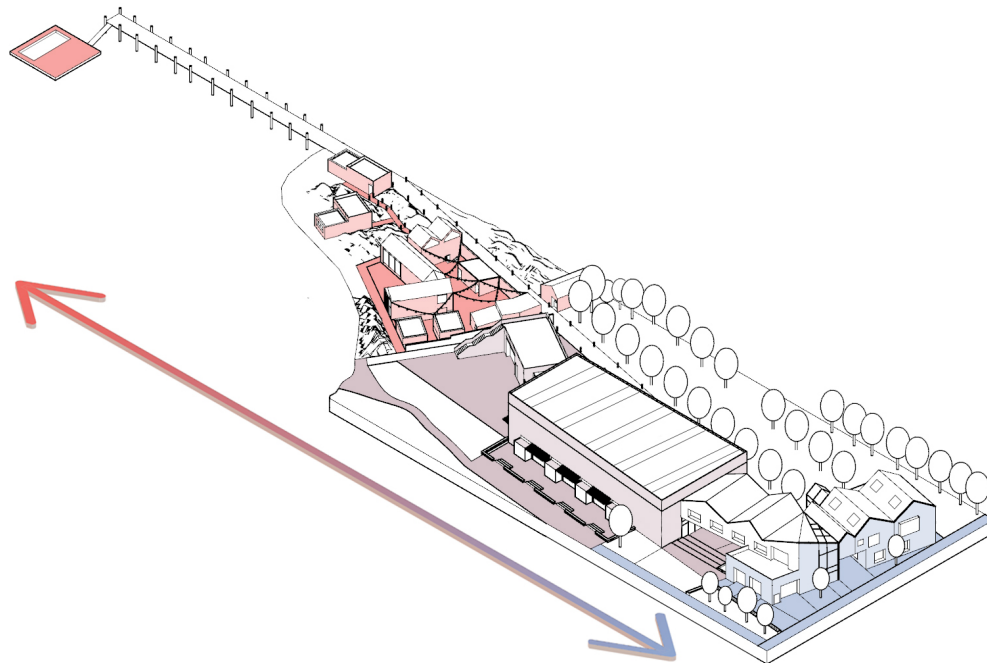




# :FINDINGS

## THE THREE DESIGN ELEMENTS

The site consisted of three design elements that needed to be addressed – an overall campus design element because of the size of the site, the architecture of the buildings that are designed in conjunction with site planning, and finally the landscape architecture that interacts with the other two. All three of these elements needed a fluidity that allowed the blurring of spaces, as



**Fig. 7-1:** The overall site builds on a gradient from a very public frontage along Seaview Ave NW to a semi-public area midblock, before finally becoming more secluded near the waterfront.

well as to be designed from the lenses of zooming in and out to get an overall sense of the three working together.

Starting out with the site, being that it is a large site, there was campus design that needed to be addressed because of the programmatic elements that take place on the site. The concept that formed through site analysis was iterated through the idea of “city to archipelago,” tying back to Finnish design identity. The city is the place that most Finns live, however also leave to go to the archipelago to escape the urban environment, reconnect to nature, and revitalize their physical and mental states. This concept created the necessary gradient through the site of the more public frontage on Seaview Ave NW to the

more secluded sauna area towards the shore and Puget Sound frontage of the site [Fig. 7-1].

The “city to archipelago” design concept also informed the building massing that took place throughout the site. Towards the more “city” portion of the site, the need for keeping the street frontage open and engaging to the public influenced the arrangement of program and the visibility of the more public element, thus engaging more with the urban environment. Moving west through the site, the more semi-public programming, such as the event hall and restaurant space, are located mid site towards Shilshole Beach, which is one of the only public beaches along Seaview Ave before

Golden Gardens Park to the north. The semipublic spaces are geared towards group events, during which the space may be rented out for events such as weddings, Elks Club meetings, and other public events, so that the space remains engaged when it is not serving the Finnish Cultural Center. Moving to the very western portion of the site, this is where the “archipelago” comes into view through the arrangement of the sauna programming. The buildings are lower in height and more dispersed throughout the site, reminiscent of the “mökit” (Finnish cottages) throughout the coastal archipelago.

The larger architectural moves for campus design include the situation of the buildings together to create a flow throughout the site. The interaction of the buildings interlock with each other, creating a larger mass towards the



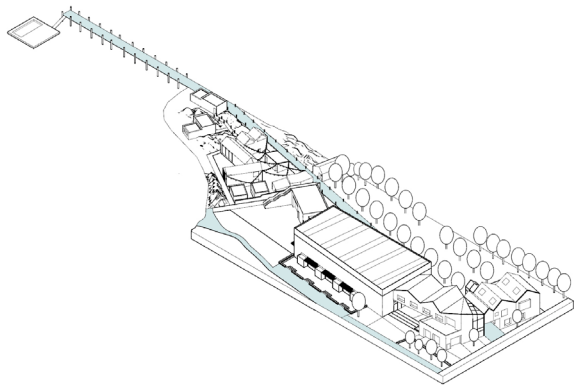
**Fig. 7-2:** The figure ground massing of KIUAS shows the grouping of buildings based on their scaled need, with the flex hall towards the public realm and mökit toward the private realm.

eastern portion of the site, which houses the more public programming such as the cultural center, but also allows for public interaction through the more semi-public portion of the site [Fig. 7-2].

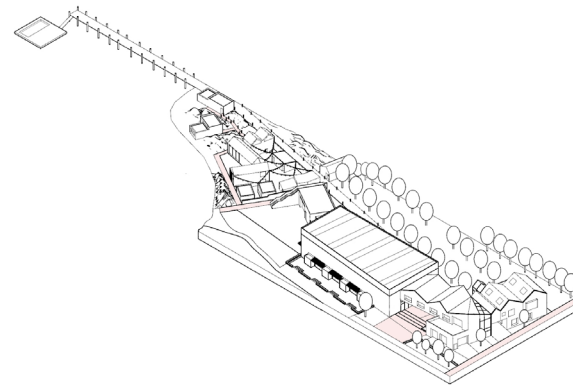
## APPLIED PATTERNS OF DESIGN

After the massings throughout the site were formed and created a gradient of public to secluded, the program housed within the buildings was further explored and guided through the patterns of design that are set up in the theoretical framework for the cultural center [Fig 5-1, pg. 37]. Diving into the patterns, there are three key groups of patterns that relate to each other in the way of space creation, materiality focus, and lighting. The patterns of design also relate back to the larger guiding framework seen in Figures 7-3 through 7-8 where the colors highlight the patterns that are related to the overall site design.

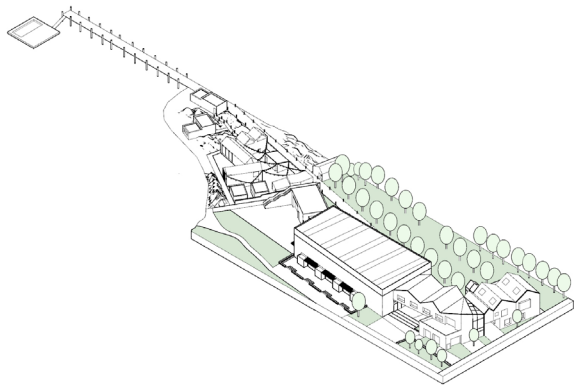
Looking at the public portion of the cultural center, there is a definitive move with the massing that angles inward in order to guide the user toward the outdoor room created outside of the café space on the bottom level, as well as highlight the public beach access path next to the café [Fig. 7-9, pg. 52]. As a user walks to the south on Seaview Ave NW, they will pass the long, linear path that give access to both the public, semi-public, and more secluded areas of the site design, all which interact along the path out to the waterfront. Next to the long, linear path is the main entrance to the cultural center programming, which is an atrium space that showcases an irresistible stair in a double height space. This directly relates back to the pattern of design that is “the



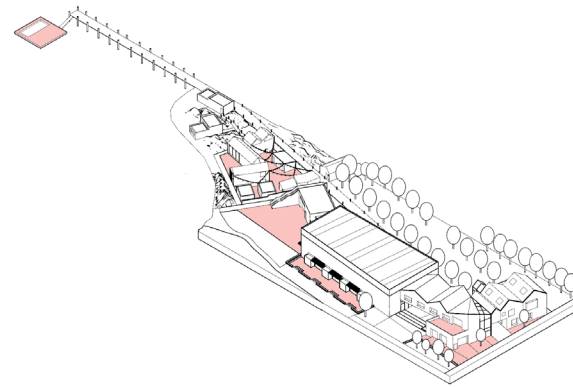
**Fig. 7-3:** The public beach access and linear path through the site shown.



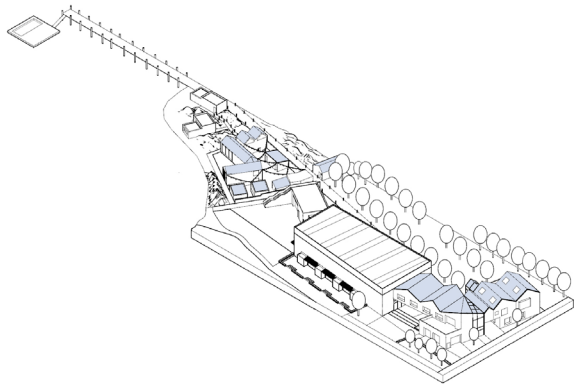
**Fig. 7-4:** “The Social Hearths” are shown as interstitial spaces, where gathering occurs, but users move elsewhere in the site.



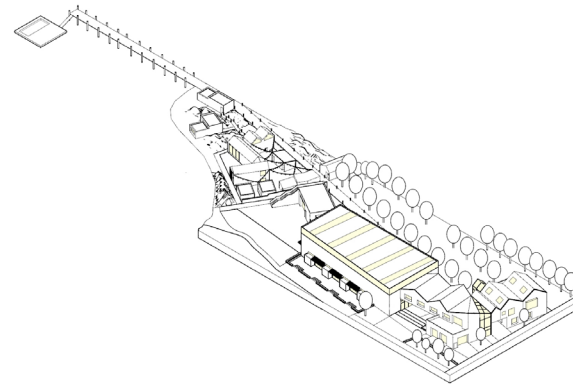
**Fig. 7-5:** The green spaces are shown throughout the site, emphasizing the Nordic guideline of increasing greenery throughout the city.



**Fig. 7-6:** The outdoor rooms shown directly adjoin major spaces throughout the site.



**Fig. 7-7:** The roofline is reminiscent of contemporary Nordic design, however falls within the realm of Pacific Northwest roofline design as well.



**Fig. 7-8:** There is daylighting design in almost every space, predominantly through light from above and side lighting.

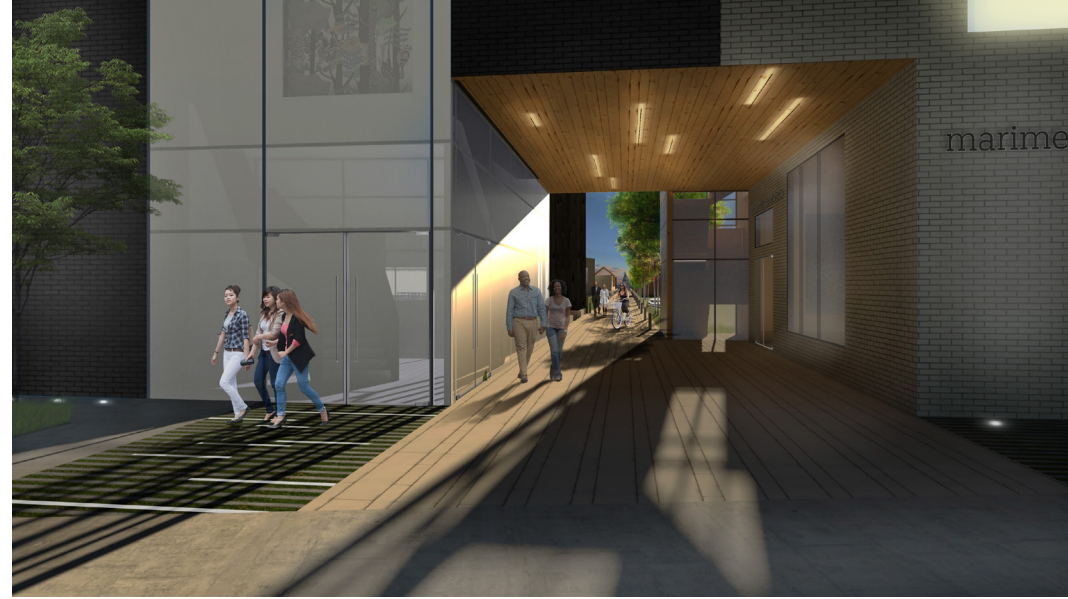


**Fig. 7-9:** The frontage of KIUAS incorporates all 12 patterns of design, with primary focus on “Outdoor Living Rooms,” “The Vertical Current,” and “Warmth Through Natural Materials.”

social greenhouse.” The social greenhouse gives a chance for interaction and gathering within the atrium space, while joining the cultural center on the second floor to the café space on the ground level. Expanding more on the social greenhouse, “The Vertical Current” pattern of design seeks to find a way to emphasize the main circulation points in the public space through differentiation on the exterior [Fig. 7-9]. The vertical current comes in the form of a glassy atrium that flows from the street at night and allows visual reference from the street of where to go and move throughout the building.

Walking along the linear path that heads out to Puget Sound, there are two instances which are guided by the pattern of “The Social Hearth,” acting more as transition spaces and lingering spaces for the users that are walking throughout the site [Fig. 7-10]. The idea is that a user would use this space as a meeting point with other people, where they would linger and choose to go elsewhere within the site. This stems back to the folketspark in Sweden, which used “gates” to signify the entry point to the park, although there was never any barrier between the property lines of the park and the public right of way. The social hearths within the site are situated at key locations of entry for larger programmatic functions, such as the social hearth underneath the bridge at the entry to the flex hall, or the social hearth between the two retail spaces where there is also entry to the cultural center.

The frontage of the building along Seaview Ave NW is reminiscent of Nordic vernacular architecture, mainly through the roofline and materiality that is used throughout the project. “Long, Thin Buildings”, “The Beautiful Blank Façade”, “Warmth Through Natural Materials” are all patterns that stem from the design identity of the Nordic countries, where light and local resources are



**Fig. 7-10:** The view shows both “The Vertical Current” and “The Social Hearth” interacting with one another as they both join the long linear path to the saunas and Puget Sound.

key to the design development of architectural identity. These three patterns guide the building forms in the sauna court and are driving forces in the more intimate aspects of the site. The use of natural materials throughout a place of refuge are essential to the program of sauna, where wood is a key component of not only the structure of sauna itself, but also through the ritual of sauna. Every part of the tree is used in sauna, from the lumber to the leaves of birch that are used to cleanse the body and deposit essential oils through the hitting of the birch to the skin.

The locations for “Outdoor Living Rooms” are located along key programming such as the flex hall and the restaurant, which spill out into the public beach access and invite the user to enter the spaces that they adjoin. The outdoor living rooms [Fig. 7-11, pg. 45] serve as a mixing space that blurs the outdoors and the indoors, and enhances the pattern of “Reawakened



**Fig. 7-11:** The outdoor living room directly joins the flex hall with movable slats for privacy, that open up and create a porosity through the space for large gatherings, and emphasizes the connection to nature.



**Fig. 7-12:** The large flex hall inside boasts skylights that span between heavy timber framing with a king truss underneath, clad in white, giving emphasis to the warmth of the wood.

Connection to Nature.” This pattern stems from the influence of biophilic design and the Nordic connection to nature that is inherent within the culture and parallels that of the Pacific Northwest design identity. Joining that pattern is “Light From Above” and “Ethereal Quality of Light” patterns, which focus more in the essence of feeling. These patterns focus on letting the quality of light and seasons chance the lighting throughout the space.

The spaces become these dynamic places that show the way light can change throughout the day and throughout the year. Serendipity takes over the space through the means of the sun, while the ethereal quality of light comes through the way the light interacts with the interior surfaces, colors, and design. This is all guided through skylights within the main flex hall space, as well as through plenty of south facing glazing along the cultural bridge that space from the main public frontage to the flex hall [Fig. 7-12]. Within the sauna court, the relaxation room and seaside saunas take advantage of windows to show off the views from the site while allowing users to reconnect with their biorhythms through nature.

## MATERIALITY

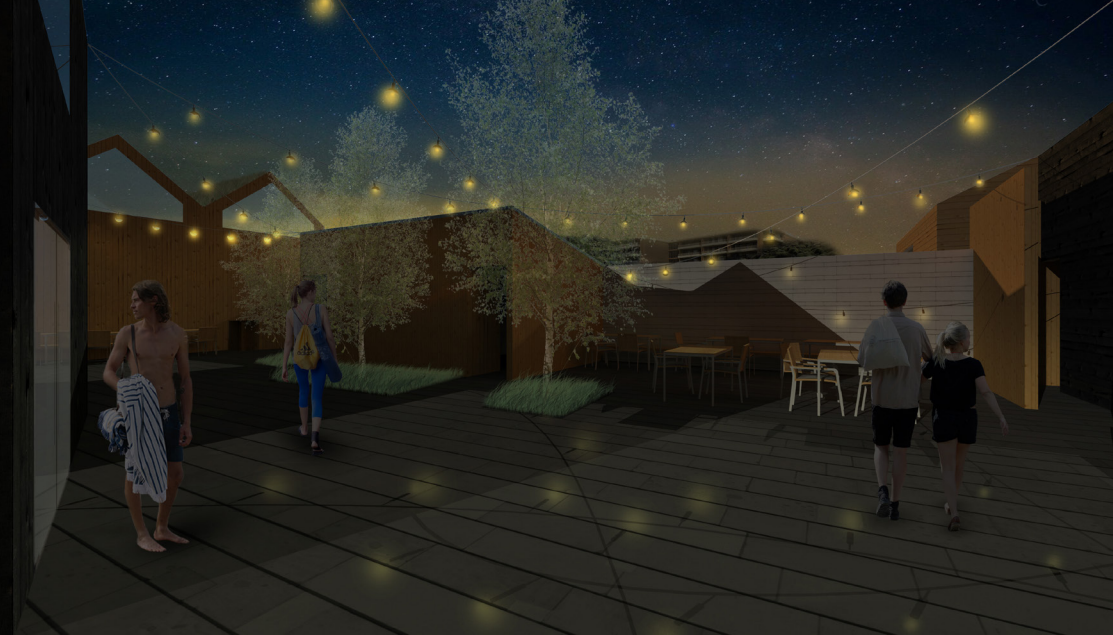
The façade materials contrast each other quite well, not only through the colors, but also through the actual material itself. The predominant color scheme used is black, white, and natural wood. The darker materials are black brick and wood that is treated with charred, thus



**Fig. 7-13:** The site plan shows the ground floor and the materiality of the site, with the “park for cars” that provides service for the flex hall. Upon entering, the “park for cars” is like a boreal forest for the users and creates an atmosphere that is reminiscent of the Nordic region.

creating Shou Sugi Ban, which is preserved in a such a way that it evades the decay of other wooden materials. On the opposite site, there is both natural wood planks that run vertically, along with white brick to bring an overall lightness to the buildings and engage with the white color palette on the interiors. The brick is used at the public front to bring a sense of grounding to the project, while the windows are inset and accented with light, natural wood planking to contrast the brick and highlight entrances and windows. Brick is avoided in the sauna court area, primarily because the connection to nature throughout this area is strong, and the use of natural materiality reiterates that connection.

The interiors are highlighted by heavy timber framing and columns, which bring a natural warmth to the space, while the walls and ceilings are completely white, thus allowing light to be the dynamic presence within the space, all while maintaining and engaging the light levels needed for the functions within the space. The white interiors also allow the inhabitant of the space to make it their own and give way for artwork, posters, and exhibits to be the focal point rather than the construction material. Materials for the landscape architecture are predominantly wood and concrete, with various types of hardscape like “grasscrete” and paving stones. Wood is used to create direction in various places through the way the planking comes together, as well as create the walkways that are reminiscent of the seaside in the Nordic countries.



**Fig. 7-14:** The sauna court at night provides play and warmth through lighting design. The main fixtures of hanging string lights that guide the user from sauna to sauna, while lighting up the court.



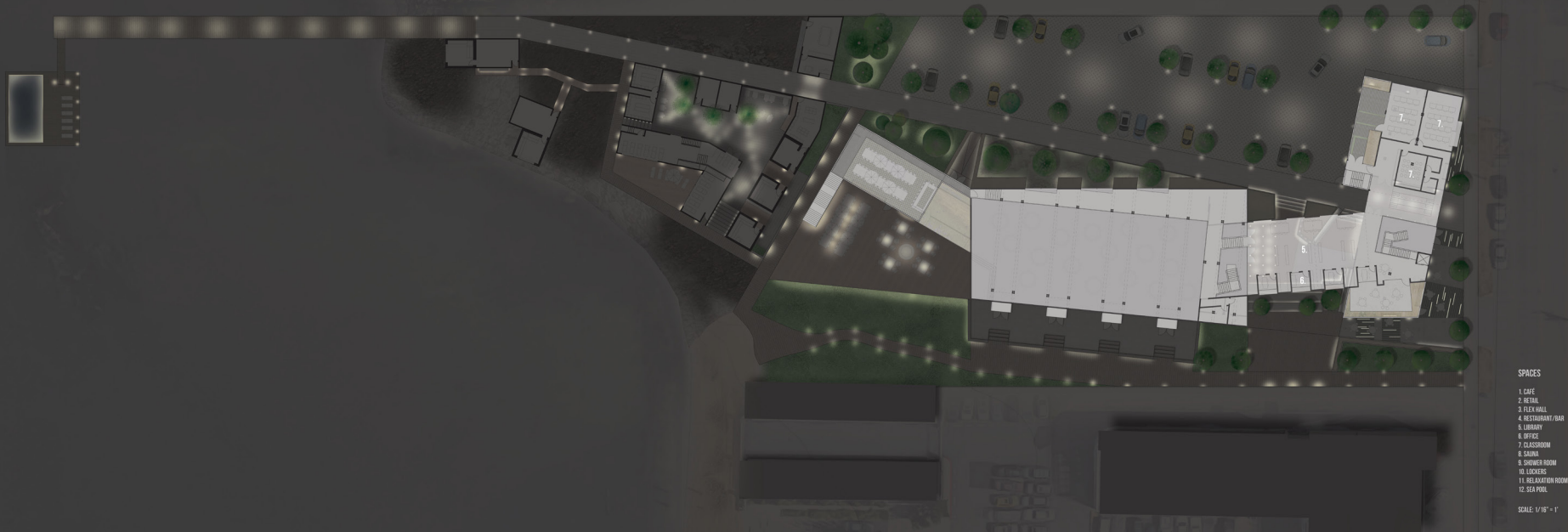
**Fig. 7-15:** The bollard lights along the pathway emphasize rhythm and provide a path to the sea. The saunas, clad in Shou Sugi Ban, disappear into the night sky and highlight only their lit entryways

## LIGHTING DESIGN

Reinforced by Henry Plummer’s nine categories of Nordic light in *Nordic Light – Modern Scandinavian Architecture*, The cultural center uses a combination of daylighting and electric luminaire lighting that are integrated through the concept of Kiuas. The guiding categories defined by Plummer that are integral to the lighting of KIUAS are “whiteness, rhythm, journey, forest, tranquility, diffusion, and darkness.” These categories help define the materiality interaction with light, the lighting zones that are important throughout the site, and the overall Nordic quality of light that is established throughout KIUAS.

The lighting falls into three main organizing elements aside from Plummer’s categories: pathway lighting, social hearth lighting, and interior lighting. The exterior lighting plan has an evident rhythm that emphasizes that column grid and the tree grid in the parking lot. Along the linear path that leads through the site, an established rhythm of bollard lighting provides safety lighting at night and guides the user through the site to other areas that are further away from city provided lighting at the street frontage. A more modern, clean luminaire is provided both at pedestrian bollard size and larger street lighting, giving back to the overall feel of being in a Nordic influenced project [Fig. 7-15].

The social hearth lighting is highlighted through linear lights that emphasize the interstitial spaces, particularly at the entry to the flex hall. This entry is bounded by landscaping and seating areas that are lit from underneath with linear lighting, while the soffit above lights the area



**Fig. 7-16:** The lighting plan shows the rhythm that is established through the linear, bollard, and string lights. There is plenty of safety lighting throughout the site, with dark areas emphasized predominantly at the more secluded zone where the saunas are located. The second floor plan is ghosted on top, showing offices, classrooms, and the mezzanine spaces.

underneath through recessed can lighting. The sauna court is given a different, more secluded atmospheric lighting design through use of string lights with a nice soft glow through lower temperature lamps. The lighting strings from one sauna to the next, providing not only visual reference to eat sauna, but creates a special vibe for the ritualistic nature of sauna [Fig. 7-14]. Within the relaxation room, there are can lights that are recessed in the ceiling and provide light to counter the contrast from the large floor to ceiling glazing on the south side of the room. Within the flex hall, small high-efficiency high bay luminaires are provided to fully light the space because of the height of the ceiling. The special high bay luminaires are placed in the ceiling that is between the column grid, which works in conjunction with the skylight daylighting design and

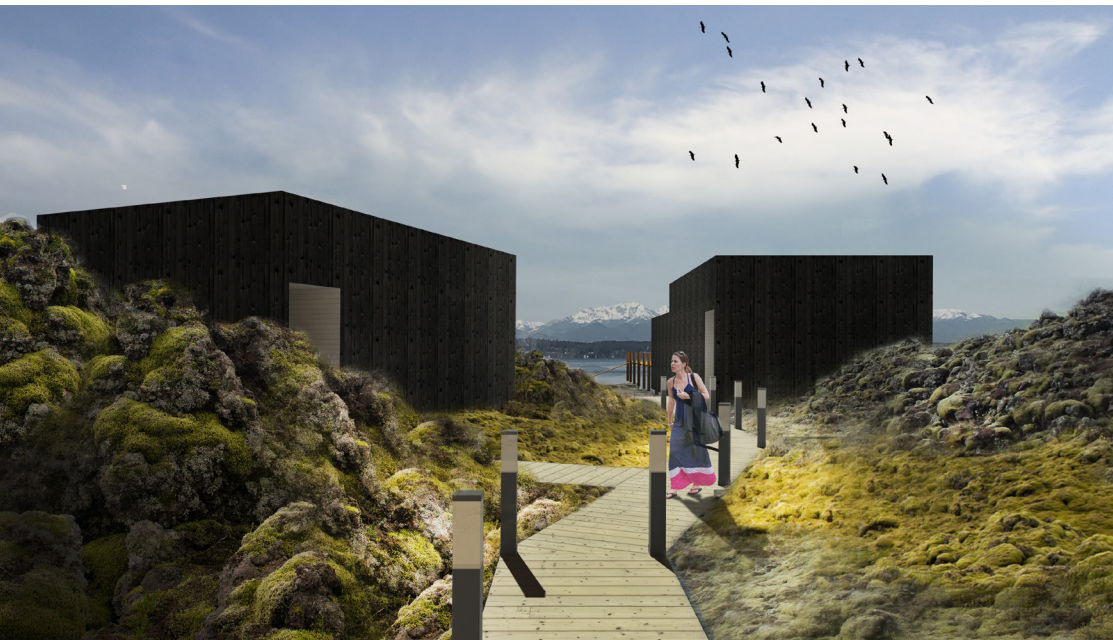
provides enough light at night to the ground below for celebrations within the space.

The lighting throughout the site has moments where the lighting design is guided by the four qualities of Nordic light referenced in “A Guide to Nordic Light – Case Studies Around the Region.” Dynamic qualities of light are designed to enhance the entrance and engage the user, which are located at the Seaview Ave NW frontage and entrances to the site, where much of the very public engagement is happening [Fig. 7-16]. Porous qualities of light are emphasized by the patten of “the vertical current” where there is an effervescent glow of light at night which emphasizes the porosity of the glazing,



**Fig. 7-17:** The sauna court during the day has seating along the walls and is recessed five feet into the ground to emphasize the secluded nature of the sauna, as well as the need to disconnect from the urban environment.

which is typically not very transparent at night when not lit from inside. Nodal qualities of light can be seen in the rhythmic placement of the bollards throughout the site, which guide the user through and serve as emphasis to transition spaces and public circulation spaces. The “hygge” quality of light is primarily in the sauna court and relaxation room, where the lights may be a bit more like candlelight, or give a sense of particular spaces outdoors in the Nordic region to bring an overall feeling of comfort and “hominess” to the space.



**Fig. 7-18:** The seaside saunas are surrounded by mossy rock that builds up along the path to bring a seclusion to the saunas and allow the user to reconnect with nature.



**Fig. 7-19:** Section AA through the main public frontage shows the atrium space, where users will predominantly interact, as well as the roofline that is reminiscent of contemporary Nordic architecture.



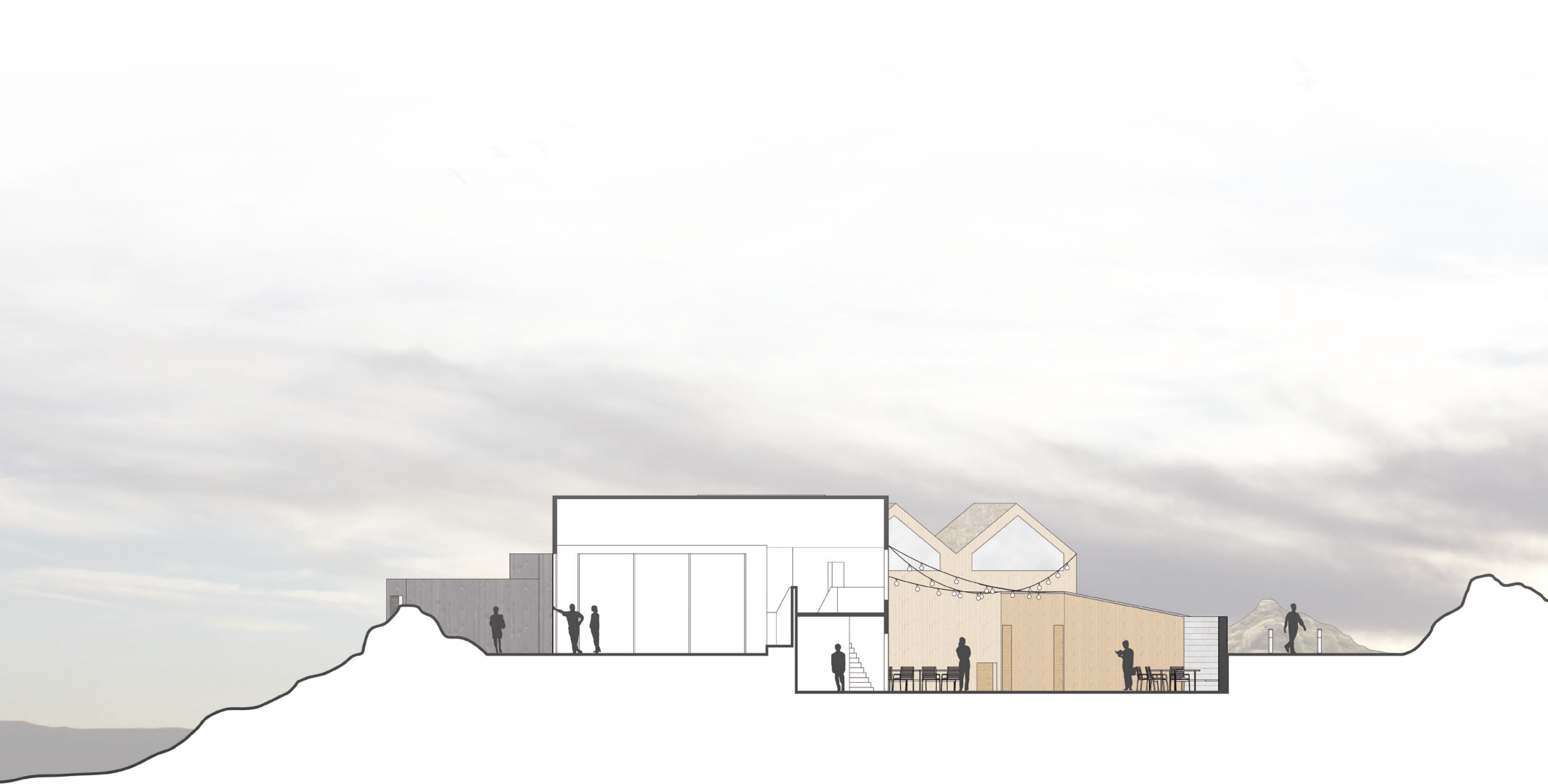
**Fig. 7-20:** The nighttime interior of the flex hall shows the high efficiency high bay lighting that appears similar to the structural system in place.



**Fig. 7-21:** Section BB through the flex hall shows the mezzanine level and the triple height roofline, which is lit from above through large skylights during the daytime and high efficiency high bay lights at night.



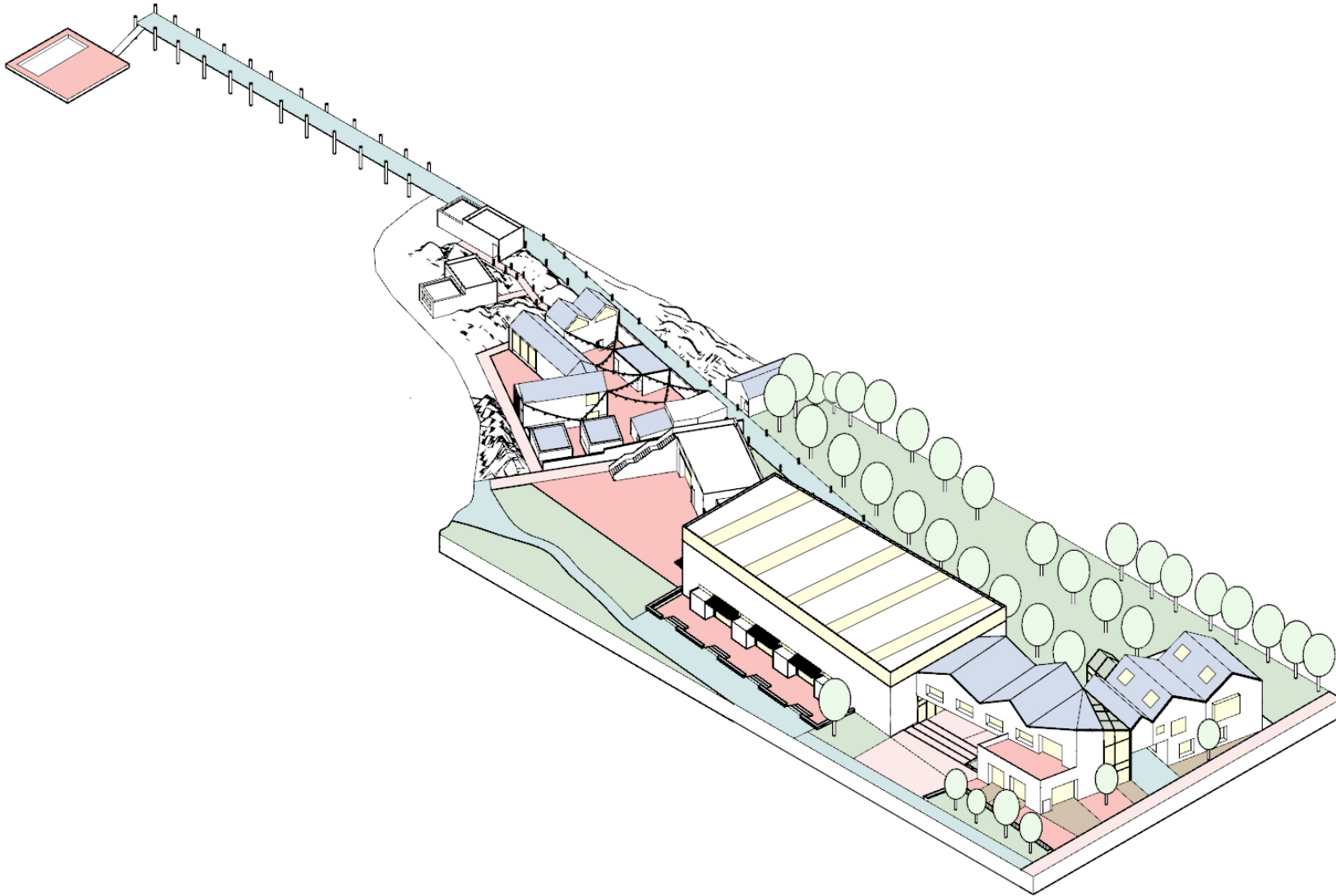
**Fig. 7-22:** The relaxation room takes the patterns of “Warmth Through Natural Materials” and “Ethereal Quality of Light” by providing plenty of glazing for users to relax in the daylight. The wood’s natural acoustic quality works to absorb sound in the space.



**Fig. 7-23:** Section CC through the sauna court and relaxation room shows the very distinct nature of the more secluded area of the site, where rock builds up along pathways to give privacy while the sauna court sinks down five feet to emphasize the difference in program.



**Fig. 7-24:** Made out of tradition sauna wood, such as aspen, the sauna inside provides tactile benches and glorious views to the Olympic mountains. As sauna is ritualistic, the views, wood, heat, and daylight all influence the “hygge” quality of the space, as well as the relaxation the user experiences.



**Fig. 7-25:** Combined together, the six guiding concepts for the site come together to create a “kivas.” It gives the “steam of life” that one experiences in the sauna to the entire site and project, and breathes life back into Ballard and the Finnish community’s identity in Seattle.



# :REFLECTIONS

KIUAS is a project that has used patterns of design prevalent throughout the design identity of the Nordic countries, and focuses on the health and wellness culture that has strong parallels to the regional identity of the Pacific Northwest and the Nordic cultural identity. Through the location of the project in Seattle's Nordic neighborhood, working with the various Finnish groups to provide a common space for gathering and serve the needs of the currently disjointed community, and designing through guiding patterns of design, KIUAS successfully integrates together spaces and design which address the public and private realm of architecture. Working in various aspects of lighting design, the Nordic qualities of light throughout the project are designed through both daylight design and electrical lighting design. By carefully choosing the luminaires, placement, and interaction of light throughout the site, the lighting provided covers aspects of safety, Nordic simplicity, and the feelings brought forth by evocative lighting.

By providing the community center to the Finnish population in Seattle, the community is brought together in one space. KIUAS is the last puzzle piece to the Nordic amenities throughout Seattle, adding the last cultural center to the other four that have historically served the Scandinavian groups in the area. The design of the building, guided by the framework of patterns influenced by Christopher Alexander, takes the site from city to archipelago and creates a feeling that is reminiscent of Finland, while allowing the user to guide themselves throughout the site and have a feeling of being back in the Nordic region, offering a secluded atmosphere to escape the city, all while learning

from a culture that is not as large or well known throughout the Puget Sound region.

The applicability of the patterns that influenced KIUAS doesn't stop solely at this project. Culture is always changing; it ebbs and flows with the generations that come to exist. It influences our way of thinking about the built environment. However, the built environment designers can play upon that ebb and flow to bring new and positive change to the spaces we inhabit in a more global society. Patterns of design seen throughout architecture are there for a reason - because they work time and time again in a positive way. These patterns of design can be applied to all facets of design in the built environment to slowly change our work culture, life at home, or regional identity. They shed light on the need for biophilic spaces, as we should make architecture feel great to be in. Through space design, materiality, and lighting design, it can surely be done.

# :WORKS CITED

- Alexander, Christopher, Sara Ishikawa, Murray Silverstein, Max Jacobson, Ingrid Fiksdahl-King, and Shlomo Angel. *A Pattern Language - Towns, Buildings, Construction*. Vol. 2. New York, NY: Oxford U, 1977. Print.
- Backer, Stina. "Nordic Delights: The Scandinavian Diet Is among the Healthiest and Most Delicious in the World." *The Independent*. Independent Digital News and Media, 25 Mar. 2009. Web.
- Browning, William, Catherine Ryan, and Joseph Clancy. *14 Patterns of Biophilic Design - Improving Health & Well-Being in the Built Environment*. Ed. Sally Augustin, Judith Heerwagen, and Lance Hosey. Comp. Scott Andrews, Gail Brager, Zafir Buraei, Nancy Clanton, Chris Garvin, Namita Kallianpurkar, Alan Laird Lewis, Tanja Meija, Heather Nelson, Susan Painter, Nikos Salingaros, Chris Starkey, Heidi Theunissen, Edward Vessel, and Jonce Walker. New York: Terrapin Bright Green, 2014. PDF.
- Frampton, Kenneth, Steven Holl, Vesa Honkonen, and Marianne Ibler. *A New Golden Age: Nordic Architecture & Design*. Aarhus, Denmark: Archipress M, 2015. Print.
- Hunter, Anna. "Hygge: How to Do 'Wellness' The Scandinavian Way." Editorial. *Get The Gloss - Expert Health and Beauty*. N.p., 4 Sept. 2016. Web.
- Jetsonen, Jari, and Sirkkaliisa Jetsonen. *Finnish Summer Houses*. Trans. Gareth Griffiths and Jüri Kokkonen. Ed. Nicola Bednarek. Comp. Paul Wagner. New York: Princeton Architectural, 2008. Print.
- Järfälla Municipality. *Login Gate Competition*. Login Gate Competition. Järfälla Kommun, 2016. Web.
- Kjeldsen, Kjeld, Jeanne Rank. Schelde, Michael Asgaard Andersen, Michael Juul. Holm, James Manley, and Glen Garner. *New Nordic: Architecture & Identity*. Humlebæk: Louisiana Museum of Modern Art, 2012. Print.
- Miesten Vuoro*. Dir. Joonas Berghäll and Mika Hotakainen. Nordisk Film, 2010. DVD.
- Morris, Christopher. *A Guide to Nordic Light - Case Studies Across the Region*. Seattle: Self Published, 2016. Print.

Oriol, Anja Llorella. *New Scandinavian Design*. Ed. Paco Asensio. Trans. Scott Klaeger, Marion Westerhoff, Almudena Sasiain, and Sara Tonelli. Comp. Emma Termes Parera, Cristina Granero Navarro, Martin Rolshoven, and Mireia Casanovas Soley. New York: TeNeues Group, 2005. Print.

Plummer, Henry. *Nordic Light: Modern Scandinavian Architecture*. London: Thames & Hudson, 2014. Print.

Project for Public Spaces. "What Makes a Successful Place?" What Makes a Successful Place? Project for Public Spaces, 30 Dec. 2009. Web.

Zumthor, Peter. *Atmospheres: Architectural Environments, Surrounding Objects*. Basel: Birkhäuser, 2006. Print.

# :FIGURES CITED

Fig. 1-1: Map of the Nordic Countries [Map] Retrieved from <http://www.finditinscotland.com/images/Nordic-countries.png>

Fig. 1-2: Ssolbergj (2009). The Kalmar Union [Map] Retrieved from [https://en.wikipedia.org/wiki/Kalmar\\_Union#/media/File:Kalmar\\_Union\\_ca.\\_1400.svg](https://en.wikipedia.org/wiki/Kalmar_Union#/media/File:Kalmar_Union_ca._1400.svg)

Fig. 1-3: Fobos92 (2015). The Northern Germanic language family [Map] Retrieved from [https://en.wikipedia.org/wiki/North\\_Germanic\\_languages#/media/File:Lenguas\\_n%C3%B3rdicas.PNG](https://en.wikipedia.org/wiki/North_Germanic_languages#/media/File:Lenguas_n%C3%B3rdicas.PNG)

Fig. 1-4: Free Ottoman (2012). The Uralic language family [Map] Retrieved from [https://en.wikipedia.org/wiki/Uralic\\_peoples#/media/File:Fenno-Ugrian\\_languages.png](https://en.wikipedia.org/wiki/Uralic_peoples#/media/File:Fenno-Ugrian_languages.png)

Fig. 2-1: Neena Paul (2013). Kulttuurisauna in Helsinki, Finland [Photograph] Retrieved from <https://media.cntraveler.com/photos/53e2dd36c2d3f39d3610622c/master/pass/kulttuurisauna-helsinki--credit-neena-paul.jpg>

Fig. 2-2: Veronika Galkina. The Finnish archipelago along the southern and western coastline [Photograph] Retrieved from [https://www.finlandtours.fi/wp-content/uploads/2016/04/shutterstock\\_206303110.jpg](https://www.finlandtours.fi/wp-content/uploads/2016/04/shutterstock_206303110.jpg)

Fig. 2-3: Artek (2017). Artek Pendant Light A331 (1953) by designer Alvar Aalto [Photograph] Retrieved from [http://www.artek.fi/inc/imageresize.php?file=images/22cbd61a09d5d0228cd48c54515f5599.jpg&type=lightbox&filename=P\\_A331\\_1\\_photo\\_Juha\\_Nenonen.jpg](http://www.artek.fi/inc/imageresize.php?file=images/22cbd61a09d5d0228cd48c54515f5599.jpg&type=lightbox&filename=P_A331_1_photo_Juha_Nenonen.jpg)

Fig. 2-4: Iittala (2017). Tapio Wirkkala's "Ultima Thule" collection [Photograph] Retrieved from [https://iittala.scene7.com/is/image/iittala/?qit=90&op\\_usm=1.2,1,0,0&src=is{iittala/iittala-ultima-thule-beer-glass-60\\_cl-2-pcs?size=1890,1890&wid=945&hei=945&scl=2.2}&extend=52,52,52,52](https://iittala.scene7.com/is/image/iittala/?qit=90&op_usm=1.2,1,0,0&src=is{iittala/iittala-ultima-thule-beer-glass-60_cl-2-pcs?size=1890,1890&wid=945&hei=945&scl=2.2}&extend=52,52,52,52)

Fig. 2-5: Werklig (2013). Design from Finland mark [Symbol] Retrieved from [http://www.underconsideration.com/brandnew/archives/design\\_from\\_finland\\_trio.png](http://www.underconsideration.com/brandnew/archives/design_from_finland_trio.png)

Fig. 3-1: Ya Zhang (2009). Michigan's Upper Peninsula Landscape [Photograph] Retrieved from [https://photos.smugmug.com/Landscapes/Michigan-Upper-PeninsulaOhio/i-8Dh6W8G/1/L/\\_MG\\_7424-2-L.jpg](https://photos.smugmug.com/Landscapes/Michigan-Upper-PeninsulaOhio/i-8Dh6W8G/1/L/_MG_7424-2-L.jpg)

Fig. 4-1: Fernando Guerra (2016). Therme at Vals, a wellness center in the southern Swiss Alps, reconnects the user to the surrounding mountainside [Photograph] Retrieved from [https://static.dezeen.com/uploads/2016/09/vals-peter-zumthor-bathhouse-spa-switzerland\\_dezeen\\_2364\\_col\\_14.jpg](https://static.dezeen.com/uploads/2016/09/vals-peter-zumthor-bathhouse-spa-switzerland_dezeen_2364_col_14.jpg)

Fig. 4-2: Mikael Colville-Andersen (2010). Copenhagen as a Winter City [Photograph] Retrieved from <https://www.flickr.com/photos/16nine/5286615020/>

Fig. 4-3: Project for Public Spaces (2009). Project for Public Spaces' categories for placemaking [Image] Retrieved from <https://www.pps.org/reference/grplacefeat/>

Fig. 4-4: Petteri Kivimäki (2016). Finnish mökki along the lakeshore [Photograph] Retrieved from [http://static.iltalehti.fi/mokkiextra/mokkihinnatetu\\_1003JID\\_503\\_mo.jpg](http://static.iltalehti.fi/mokkiextra/mokkihinnatetu_1003JID_503_mo.jpg)

Fig. 6-1: City of Seattle (2017). Neighborhood of Ballard [Map] Retrieved from <http://clerk.ci.seattle.wa.us/~public/nmaps/images/NN-1170L.Jpg>

Fig. 6-2: US Army Corps of Engineers. Hiram M. Chittenden Locks [Photograph] Retrieved from <http://www.nws.usace.army.mil/Portals/27/siteimages/120605-A-DT641-003.jpg>

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CULTIVATING HEALTH AND WELLNESS THROUGH  
CULTURAL IDENTITY

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Master of Architecture candidate, 2017