EDGES
Edges

Edges form where different spatial domains meet. These domains may be defined by ideas, user groups, locational characteristics, or activities. The nature of the territories determine what kind of edge is created. Naturally, edges are rife with complexity as multiple domains come together, or stand in conflict with each other. This complexity makes edges a rich source of information for us.

For research purposes, we studied edges along and surrounding Bradford Beach. These edges, to name a few, include the bluff along the beach, Lincoln Memorial Drive, and the shoreline of the beach itself. Over the last century, many of the edges in this area have changed and some have even been created or destroyed. This makes the Bradford Beach/Bluff area a very interesting and dynamic edge to study.

The bluff represents an edge between the city, the beach and the lake. But it also represents an edge between the neighborhood, which has retained much of its historical context, and the beach, which is frequently updated and is the site of much development. The bluff is a fascinating juxtaposition of these habitable spaces coming into contact along a topographical drop. It is a geographic feature that helps to both unite them as well as isolate one from the other.

Rendering showing the different areas of the bluff and beach. These areas extend beyond the marked spaces to meet with each other, creating the edges that exist throughout Bradford Beach and the bluff.
Boundaries

Within the areas created by these edges, we have observed three kinds of boundaries: physical, interpersonal, and atmospheric. Physical boundaries produce hard divisions on the beach such as the concrete patio surrounding the bath house creating its own space, which is different from that of the sand and other spaces on the beach.

Interpersonal boundaries are areas between different groups of people. These boundaries can separate people based on age, gender, race, or activity.

Atmospheric boundaries change according to the time of day as well as the type of people in an area. These boundaries mark different areas based on the atmosphere or “vibes” of the area. While the objects and people in an area can affect atmospheric boundaries, less obvious influences such as music, ambient noises, and smells are also instrumental enough in marking atmospheric boundaries.
Bradford Beach History

Residents who lived on the lake used to go to Bradford Beach to swim, but in the 1960s and 1970s, Bradford Beach became a less desirable destination because of fights that would break out between beach-goers. The other reason was the lack of maintenance of beach and waters. Dead alewives would frequently wash up onshore. By the 1980s, Milwaukee County had begun trying to improve the conditions on Bradford Beach. Small additions, including a volleyball court, helped to bring more people to the beach.

The lake front is very important for the people of Milwaukee, so a number of proposals were made for activities on Bradford Beach. Many worried about the intensity of development. Residents who lived nearby were concerned about the potential for overcrowding on Bradford Beach and the lakefront. As a compromise, many changes and new buildings on Bradford Beach are designed to be non-permanent and could be removed with no lasting damage to the beach or the lakefront.

Over the last few generations, there have been a number of developmental changes to Bradford Beach, which has resulted in a change of how the beach is used. What was once a beach used by local families has become a place for young people from all over the city to swim, work out, eat, play, hang out, get a tan, and drink. The beach caters to different groups now than it did in the past. Even though the physical and material culture on the beach looks temporary, it has actually made a permanent change to how Bradford Beach is used.
Present Day Bradford Beach

Go to the beach on a warm, sunny day. What’s the first thing you see? People “having a good time,” explained the Tiki bar manager. They are playing volleyball, soaking up the sun, chatting with friends, having a beer, or watching their kids splash in the waves. But what is the story underneath this sandy place? There has to be some logic to the seemingly unorganized milieu of groups. Stay long enough, and you will find that this one “beach” is really a complex landscape of many zones and worlds that intersect in unique ways.

Before examining the different zones of the beach, we need to consider the services that the beach offers and how beach-goers utilize them. From our observations, Bradford Beach offers four different services: basic amenities (cleanliness and protection), food and drink, leisure, and health.

The beach provides basic services which provide cleanliness, protection and health. As a county park, the area is maintained for the public.

The beach provides refreshment. Food and drinks are available at the bath house, the Tiki bars located on the sand, and the North Point Custard Stand directly south of the beach. Beach-goers patronize the food and drink stands on the beach, but many people come to the beach for their lunch break, simply to eat a burger at North Point Custard or to have a drink at the Tiki bar. For these people, the beach has a different meaning than it does for those who come for leisure.

The beach provides health and fitness opportunities. Many people go to the beach to play competitive volleyball. The bath house itself is used for exercise routines. The storage boxes outside the bath house are used to practice jumping, and the surrounding sand is used as a field to pull tires. The bath house is also used as a rest stop for the many bikers who cycle through on Lincoln Memorial Drive.

Barbara Elsner, interview by Niyati Naik, Milwaukee, June 17, 2013.
Second floor plan of the Bradford Beach Bath House.

First floor plan of the Bradford Beach Bath House. Lighter floor boards show where a wall once stood.

Mike White, interview by Maia Stack, Milwaukee, June 26, 2013.
Designed to look like a ship on water, the Bradford Beach bath house is centrally located on the beach. Opened in 1950, it was likely the first permanent building on Bradford Beach. The bath house is a two-storied, concrete building with bathrooms and a concession stand on the first floor; and storage space for boats and equipment as well as small offices for the lifeguards on the second floor. The second floor also has long open areas that provide beautiful vistas of the beach. The patio was originally a wooden structure, which housed showers for the swimmers and beach-goers. Presently, it has benches where beach-goers sit and talk or get a tan. The benches in the semi-open areas are usually occupied by a younger crowd, many of whom come to the beach to play volleyball or to have lunch. The bath house, because of its length, blocks the view of the road from the beach. This makes Bradford Beach seem like more of a getaway destination and allows people on the beach to feel removed from the city. A bridge connects the bath house to Lake Park, furthering the illusion of isolation from the city.
Tiki Bars

New Attractions on the Beach

The Tiki bars are temporary structures on Bradford Beach. They were part of new developments on Bradford Beach in 2011. There are three Tiki bars on the beach, each a prefabricated wooden frame structure. They resemble cottages with thatch roofing, sometimes found on beaches in tropical regions. All the Tiki bars have fencing attached to one side for storage. They have counters on all four sides, with bamboo chairs so people can sit at the bar. The central Tiki bar has a large, shaded tent attached to one side, as well as tables with shade umbrellas for customers.

Making the Beach a Destination

In contrast to the North Point Custard Stand, the Tiki bars serve alcohol in addition to food. Thus, the Tiki bars tend to attract a different group of visitors than the custard stand. For instance, the South Tiki bar mostly serves young adults and college students, as this is the area of the beach where they congregate.

All three Tiki Bars are set back from the water and are close to the spaces for other beach activities, such as volleyball. They are intermediate spaces which connect different parts of the beach. Located between those who are swimming, tanning, working out, or playing on the beach, the Tiki bars become a central feature on the beach, providing a “tropical” place to relax, eat, and drink.

This “tropical” feeling is also due, in part, to the construction of the Tiki bar itself. The thatched roof and bamboo bar stools gives the structure an exotic appearance, while the music pumping from the speakers lets beach visitors know when they are getting close to the Tiki bars. Once you approach the bar, the many refrigerators, coolers, and taps are visible. By having these items visible, the Tiki bars become iconic reminders of a carefully crafted image of Bradford Beach.
Spends a few minutes at the beach on a busy day, and it is easy to see that every person who goes to Bradford Beach has a slightly different reason for being there. At first glance, the beach may seem to be a very hectic space with people moving constantly and many different activities happening right next to each other. But after careful observation, one may discern fairly distinct sections. These sections are, perhaps surprisingly, not simply identified by demographics. Instead, these spaces mark the different tempos of beach visitors, or how quickly visitors move through a particular area. To better illustrate how the beach can be divided into sections by tempo, we have analyzed the first and second floors of the bath house.
Rhythms of the Bath House

The bath house can be divided into three different social spaces, each with its own tempo. Social Space 1, the green area, has a very slow pace of activities. These areas on the bath house patio and terrace are where beach visitors tend to sit, people-watch, and observe the activities on the beach. Visitors in the green area frequently linger for a few hours.

The steps leading down from the bath house to the beach as well as the edges of the second floor terrace make up Social Space 2, the area marked in red. This area is also where beach visitors stop and watch the activities of the beach and the street. However, this area has a quicker pace than Social Space 1. Instead of staying in the same place all afternoon, visitors in these areas stay while they eat lunch or relax after swimming. They then might move on to another part of the beach or leave the area altogether.

Social Space 3, the areas colored gray, cutting through the bath house patio and going up the stairs, has the quickest movement of the three spaces. This area marks a path that is taken by those simply passing through the bath house. These visitors are usually using the biking/walking path that runs along Bradford Beach. Sometimes these visitors might stop at the bath house to use the restrooms or the concession stand, but frequently they simply pass by without stopping at all.

Space analysis of Bradford Beach bath house, first floor.

Space analysis Bradford Beach bath house, second floor.
NORTH POINT CUSTARD STAND

1. MEN'S BATHROOMS  
2. WOMEN'S BATHROOMS  
3. FREEZERS  
4. OFFICE AND STORAGE  
5. KITCHEN

Scale: 1/8" = 1'

First Floor Plan  
NORTH POINT CUSTARD STAND,    
LINCOLN MEMORIAL DRIVE  
MILWAUKEE, WISCONSIN  
JULY 29, 2013

Floor plan of the North Point Custard Stand.
Custard Stand History

The North Point Custard Stand is located to the south end of Bradford Beach and has been open for four years. The building houses a kitchen, pantry, a small office, storage space, and men’s and women’s bathrooms. The building is very lively due to its large, red fabric canopy and its painted siding. Adjoining the building is a queue space where customers place the orders, and a paved area with benches and tables shaded by umbrellas. The surrounding area is lined with trees and shrubbery, helping form an edge to an adjacent parking lot.

The North Point Custard Stand sits between Bradford Beach and McKinley Beach. In the 1960s, very few trees existed on this part of the lakefront. A small hot dog stand existed in this place which was later replaced by the custard stand. To this day, the North Point Custard Stand and the surrounding area continues to be an attraction for the residents of the nearby Historic Water Tower neighborhood.

A Quick Retreat

The North Point Custard Stand is run by the Bartolotta Restaurant Group and sells Bartolotta food and custard. Since the Bartolottas took over North Point Custard in 2009, visitors have raved about the good food sold there. North Point Custard is a place favored by those looking for a spot to eat by the lake where they won’t get sand in their food.

Compared to Bradford Beach, the North Point Custard Stand is a more family-oriented and controlled area. There are designated areas for ordering food, picking up orders, and eating. Plants identify the edge between the restaurant area and the parking lot. The Custard Stand is situated so all of this activity takes place on the opposite side of the building from the beach. This makes the North Point Custard Stand’s link to the city of Milwaukee stronger than that of Bradford Beach. The Custard Stand attracts people from the city for a quick lunch or a break from work, and is purposefully built close to the road and downtown.

Barbara Elsner, interview by Niyati Naik, Milwaukee, June 17, 2013.
The volleyball area of Bradford Beach, clearly visible by the "walls" of volleyball nets.

A lifeguard chair and the space around it that has been left open by beach-goers.
Making a Mark

In addition to the buildings on Bradford Beach, there are a number of other man-made or influenced objects on the beach. The cabanas, shade umbrellas, and volleyball nets are there to help beach-goers have a more enjoyable time. The rocks along the edge of the beach, trash cans, warning signs, and the lifeguard chairs are there to make the beach a safer place for visitors. Each object, regardless of its primary function, also serves another, less obvious function: that of a boundary marker. These boundaries are not necessarily physical barriers preventing any type of movement across them (though in the case of the boulders bordering the beach, this is a main function); instead, these objects help to delineate the different social areas on the beach that already exist.

The tables next to the Tiki bar, mark the extent of the Tiki bar’s space. Beyond the tables are the volleyball courts. The cabana marks another area of the beach, this time with an actual rope fence. The cabana area allows beach-goers the opportunity to rent shaded chairs and beach activity equipment, and to be waited on by servers. Though perhaps only 150 feet from the Tiki bar, the cabana area of the beach is clearly distinguished as a very different space, one where visitors can relax in privacy. A perhaps less obvious type of boundary is one created by the lifeguard chairs and the trash cans. These objects are there to serve the beach-goers and they make the beach a better and safer place. The trash cans are used by all beach-goers, but by their very nature, tend to repel people from sitting or playing nearby. Similarly, the lifeguards and lifeguard chairs are an important part of beach safety, but as a “working” object, visitors tend to keep their distance.

Line stretched in the sand demarcating the edges of the volleyball court.

The cabana rental area, with the shaded lounge chairs that provide beach-goers with a sense of privacy.

These large boulders were placed at the south end of Bradford Beach and help to mark the end of the beach as well as prevent erosion.
A view looking northwest from Lincoln Memorial Drive.

A staircase connecting Lincoln Memorial Drive to the top of the bluff.
Historically, the bluff marked the edge of city; it was the last bit of land before Lake Michigan. This changed when the shoreline was extended into Lake Michigan for a shore drive and a new landfilled beach. The bluff then came to serve as the edge of the beach. At this point, the bluff changed from being an edge to being an extended spatial and social zone that intervened between the neighborhood and the beach.

The bluff still divides the city (an urban area) from the beach (a natural area, albeit a man-made one). It attracts people from both the city and the beach, making it an area where strangers meet and interact.
The Historic Water Tower, built in 1873, after which the surrounding neighborhood is named.

Cross section and plans of the water tower (Courtesy of the Historic American Buildings Survey).
In its early years, Milwaukee did not have a city-wide water system. Instead, residents had to get their water from wells, cisterns, or the rivers. By the second half of the 19th century, city officials began looking into a water system for Milwaukee. After years of delays, the first Milwaukee water works buildings were built from 1872-1874. This included a water intake crib in Lake Michigan, a pumping station, and a water tower.

The original North Point Pumping Station was located directly northwest of the current pumping station and housed the pumps which drew water from Lake Michigan and sent it to the city. The pumping station underwent a number of additions and expansions in the late-19th and early-20th centuries. It was finally replaced in the 1960s with the current North Point Pumping Station.

Though called a water tower, the North Point water tower is not what we may expect. Instead of holding a large quantity of water, the North Point water tower houses a standpipe. The pumps used in the original North Point Pumping Station operated with a piston-like motion. This created surges in the water pressure and therefore an inconsistent flow in the city’s water mains. The standpipe inside the water tower served as a buffer between the pumping station and the water mains, eliminating the water pressure surges before the water entered the mains.

The water tower, designed in the Gothic style by Charles Gombert, was built in 1873 and stands 175 feet tall. It was chosen as a national landmark for the American Water Works Association in 1969 and was added to the National Register of Historic Places in 1973. The water tower is part of a much bigger water system that also includes Bradford Beach, the North Point Lighthouse, the North Point Area and the bluff leading down to the lake shore.

The original North Point Pumping Station, with the water tower in the background (Courtesy of the Historic American Buildings Survey).

The North Point Lighthouse is located in Lake Park in the Historic Water Tower neighborhood. A lighthouse has existed on the property since 1854 and the current lighthouse was built in 1888. It was in operation until 1994. After sitting empty for a few years, the lighthouse was restored between 2004-2007 and is now a museum and exhibition space open to the public. The North Point Lighthouse is also listed on the National Register of Historic Places.

Milwaukee's first lighthouse was located at the end of Wisconsin Avenue, where the Milwaukee Art Museum is currently located. This was not an ideal location as the beacon was difficult to see. In 1854, a new lighthouse was built on North Point, a site chosen because of its height on the bluff above Lake Michigan. However, it was built too close to the edge of the bluff, and soon erosion threatened the lighthouse. In 1888, a new lighthouse was built about 100 feet further back from the edge of the bluff. By 1912, the trees in Lake Park had grown too tall and were obscuring the light. In response to this, an addition was added to the base of the lighthouse tower, raising it to its current height of 74 feet.

The lighthouse today (looking northwest, towards the North Point neighborhood).

Cross section of the North Point Lighthouse after the 1912 addition, raising the lighthouse to its current height (Courtesy of the Historical American Buildings Survey).

Mark Kuehn, interview by Niyati Naik and Jonathan Schaefer, Milwaukee, June 17, 2013.
North Point Lighthouse Museum Collections, Milwaukee.
Evolution

The North Point Lighthouse has undergone a transformation in recent years. Not only has it been restored, but it also has been turned into a museum. The transformation of the lighthouse mirrors changes taking place throughout Milwaukee. In the 19th and early-20th centuries, Milwaukee was home to huge industries and manufacturing plants. In recent years, the number of manufacturing jobs decreased, and instead, Milwaukee gained more tourist destinations. As with the lighthouse, the city shifted from a very industrial place to a place that is geared towards the visitors.

Within a new tourist economy, the North Point Lighthouse serves as a gateway to the history of Milwaukee and Lake Michigan as well as to the memories of its residents. Visitors to the lighthouse are able to learn about the history of the Port of Milwaukee, the growth of the city, and the lighthouse itself. Similarly, the lighthouse (as a building) no longer commands the function of the past. Originally the building was important to immigrants and merchant vessels. The lighthouse keeper maintained the beacon at the top of the tower guiding sailors safely into port. Now the building is important to tourists because of the information and knowledge held within its exhibits and its views of Lake Park of Milwaukee and Lake Michigan.

Sketched drawing of the original lighthouse built at North Point in 1854.

An elevation, cross section, and floor plans of the North Point Lighthouse tower as it existed in 1888.
Lake Park was designed by Frederick Law Olmsted, the creator of Central Park in New York City. While in Milwaukee, Olmsted also designed River Park (now Riverside Park), Newberry Boulevard, and Washington Park. The majority of Lake Park was completed by 1894, though many features have been added or updated in subsequent years.

The park was designed to be used as a natural retreat from urban life. Though there are areas to play and sit, much of the park is given to walking trails or natural beauty. There are also vista points where one can stop and watch the activity on Lake Michigan.

Looking south towards Lake Park and Milwaukee from the North Point Lighthouse, 1923.

A bridge crossing one of the ravines in Lake Park, 1894.

One of the ravines, 1895.

Detail of a lion on the Lion Bridge, after undergoing restoration.


North Point Lighthouse Museum Collections, Milwaukee.
BLUFF OBJECTS

Objects found on the bluff tend to have different purposes than those found on the beach. There are still trash cans and fences, but there is more thought given to aesthetics.

A paved walking path runs along the bluff, giving visitors to Lake Park an easy access through the park. Bridges over the ravines in Lake Park are guarded by large, decorative lion statues. A chain fence marks the division between the walking path and the grounds of the North Point Lighthouse, similar to the rope surrounding the cabana area on Bradford Beach.

While some of the objects are similar to those on the beach, they provide a much different feel to the bluff. The bluff is a much calmer and more relaxed space than the beach, but at the same time is grander in scale. Where the beach attracts people with the activities it can provide, the bluff is more likely to attract people with its beautiful scenery.
Though very different spaces, the bluff and Bradford Beach are inextricably linked through their shared ecology. For hundreds of years, storms, waves, and natural runoff eroded away the bluff at the edge of Lake Michigan and created ravines that cut into the bluff face. This was happening so fast that the North Point Lighthouse had to be moved barely 30 years after it was built to be sure that the bluff did not erode out from under it!

In the 1890s, Lake Park was built along the bluff, but while it improved and beautified the top of the bluff and the ravines, little work was done to the face of the bluff to prevent further erosion. Vegetation slowly grew up to and covered the face of the bluff. In 1905, Bradford Beach and a shore drive (later named Lincoln Memorial Drive) were created to serve as a buffer against the Lake Michigan waves. The beach helped prevent erosion, but a new problem associated with the growing North Point neighborhood arose. As the neighborhood grew larger, more runoff was flowing through the ravines onto the beach and then into Lake Michigan. Not only was this still causing erosion, but this runoff also introduced man-made pollutants into Lake Michigan. Pollution began to cause damage to Lake Michigan and Bradford Beach, occasionally getting bad enough to force the beach to close.

Several years ago, a new drainage system and six rain gardens were added to Bradford Beach along Lincoln Memorial Drive. These rain gardens help to better control the flow of water coming down from the bluffs and limit the amount that spills directly onto the beach. The rain gardens also act as a filter, helping to extract many of the pollutants in the water before they can enter Lake Michigan.
One of the rain gardens along Bradford Beach. This outlet connects to the drains at the base of the bluff across Lincoln Memorial Drive.

A sign explains the function of the rain garden and the actions taken to improve the water and beach conditions at Bradford Beach.
The term main street can be defined in multiple ways. The Wisconsin Main Street Program draws from the National Trust for Historic Preservation’s definition as it explains that a main street is a “[place] of shared memory where people still come together to live, work, and play.” According to the Main Street Alliance, such streets tend to be associated with small local businesses rather than national chain stores. We regard Downer as the Historic Water Tower neighborhood’s main street because it is a place of shared memories and a thoroughfare made of (mostly) small businesses.