

DETROIT ULTRAS:
CONCEPT SOCCER CLEAT DESIGN

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ArtDes 499.004 Integrative Project
April 23, 2020

Introduction:

Soccer is the world's most popular sport. According to FIFA, the sport's governing body, there are over 265 million active players worldwide.¹ Despite this, the sport has struggled to gain a foothold in the US... until now. Massive successes for the US women's team, the NWSL, the MLS, and individual stars, have catapulted the sport to the forefront of American minds. This rise in popularity has many influences including the triumph of the women's national team in the World Cup, the explosion of the MLS, the highest professional league in the country, and the dramatic competitions taking place across the globe. All of this has contributed to numerous semi-pro and amateur leagues sprouting up around the country as more and more people get invested in the sport and its culture. Even cities that historically haven't been influenced by soccer have been affected. Detroit is well known for its numerous professional sports teams and their rich history. However, until recently, soccer was not a part of this community. In 2012 Detroit City FC were founded to represent the city. The team immediately inspired a die-hard group of fans that organized themselves into the Northern Guard Supporters or NGS. They've created a hardcore community centered around passion for their team and city. They've been nationally recognized for the atmosphere they create at games as well as their work off the field. This organization represents the best parts of the beautiful game, and aligns with my passion for the sport and the culture surrounding it. In my project I'm celebrating this passion and representing it in a pair of soccer cleats. Footwear is one of the most emblematic aspects of soccer. It's the interface between the three most important parts of the game, the player, the ball

¹ Kunz, Matthias. "265 Million Playing Football." *FIFA Magazine*, FIFA, 2007, www.fifa.com/mm/document/fifafacts/bcoffsurv/emaga_9384_10704.pdf.

and the pitch. It's also the most customizable and personal part of the player's uniform. These characteristics make cleats a powerful way for players to showcase many things about themselves, including what kind of player they are, their fashion preferences, and even cultural symbols.

Project Brief:

In this project, I created a pair of functional soccer cleats that incorporate symbols, representations, and concepts which tie into aspects of the identity of Detroit. The construction, colorway, and material choices are key to representing soccer culture in the city.



Source: Patrick Nair

Contextual Discussion:

Soccer Culture in the US:

Whether it's Wayne Rooney signing a hat for a starstruck ten year old, or Didier Drogba literally ending a civil war in his home country of the Ivory Coast, soccer has an amazing reach and impact on communities and culture around the world. The US is no different. Moments like these have inspired people across America to get invested in soccer, and the result is the explosion of support for domestic and international leagues. The MLS has expanded from 16 teams in 2010 to 30 teams and the US women's league, the NWSL, is considered one of the best women's leagues in the world. All of these massive expansions have allowed cities across the country to showcase their identities and compete at the national level. And with them rise the fans and supporters that make the game so special.² One of the characteristics that differentiates soccer from any other professional sport in the US is the atmosphere of the games. No NFL or NBA game has fans screaming out intricate chants to the beat of never ending drums while smoke grenades and flares explode around the stadium. In soccer, this atmosphere is the work of the Ultras, or a group of the team's strongest supporters.

² Bogert, Tom. "MLS Expansion Boom Continues at Unprecedented Rate in Modern Sports." *MLSsoccer.com*, MLS, 21 Oct. 2019, www.mlssoccer.com/post/2019/10/21/mls-expansion-boom-continues-unprecedented-rate-modern-sports.

Ultras & NGS:

Ultras often express themselves and the culture of their community during matches. The Portland Timbers Ultras actually have a lumberjack with a chainsaw on the sideline. Every time their team scores the lumberjack cuts a piece off a massive log and holds it up, the crowd goes wild. The fans and the atmosphere at the games are incredible manifestations of the culture and communities the team represents.³ This is true even on a smaller scale. When Detroit, a city with little to no background in soccer, announced that it was founding a city team, Ken Butcher, Detroit native, and long time soccer fan, immediately started organizing supporters. “We had had conversations over beers, you know... If any soccer comes to Detroit we’re behind it 100%. Pass or fail, cheesy or not, we’re going out in full force.” Ken and a few others founded the Northern Guard Supporters to be the Ultras of their team Detroit City FC. Their mission was to support their team, represent Detroit, and abuse the opposition as much as possible. With slogans like “No one likes us!” and “We don’t care!” the organization brands itself as a raucous rowdy group of hardcore supporters. NGS specifically was particularly inspiring to me during this project because they not only showcase all of the aspects of soccer that I value, like the passion for the game, but they also incorporate numerous elements taken from their city and how they view it.⁴ For example, a large part of their brand is black clothing decorated with skulls and bones. Butcher explains that this was a response to how Detroit is known as a dead city, “Everyone that was firing back at us... They’re like, well you’re in Detroit, you’re in a dead city anyways... All right you can tell us we’re dead, we’re going to wear skull masks anyways.”

³ *Portland Timbers*, www.timbers.com/.

⁴ “Northern Guard Supporters.” *Northern Guard Supporters*, 2012, noonelikes.us/.

Footwear Design (Concept Context)

In recent years, soccer cleat design has become increasingly commercial and focuses primarily on influencers and performance enhancement. However, this top down approach implies a very capitalist outlook on the soccer world that focuses on the individual. This is apparent when looking at Nike's most popular cleat, the Mercurial. Originally designed in 1998 specifically for the superstar Ronaldo, these cleats have become more and more focused on performance and influencers. Today, professional players are contractually obligated to wear the newest models. They've been redesigned multiple times to incorporate new technology that supposedly makes players faster.⁵ Marketing strategies like this imply that performance is king. The players that perform the best have done so in these cleats, therefore consumers that wear the same cleats will be rewarded in the same way.⁶ While performance is important, this message has marginalized other aspects of the beautiful game such as social engagement and community, both of which are just as important. The concept of representing these elements in a pair of cleats as opposed to performance enhancement is meant to re-evaluate which aspects of the game matter most. By designing the cleats to reflect the values of local soccer organizations, consumers can identify with the narrative behind cleats on a more personal level beyond a celebrity follower. Placing the emphasis on elements that represent a local organization or soccer community showcases an example of the passion and energy fans around the world feel for the sport.

⁵ "Nike Mercurial Sneaker History." *Nike News*, Nike, 6 Feb. 2018, news.nike.com/news/nike-mercurial-sneaker-history.

⁶ Kosaka, Kim. "Your Complete Guide to Creating an Influencer Marketing Strategy." *Alexa | Blog*, Amazon, 2019, blog.alexametrics.com/influencer-marketing-strategy/.

Footwear Design (Technical Context)

A huge part of my project is the fabrication and construction of the physical prototype soccer cleats. In order to make this pair of cleats, I've had to look at many different aspects of soccer, from the physical actions required on the pitch, to the material choices and conceptual elements that tie into Detroit and NGS. During the process of construction I created several prototypes that range from basic models made of plastic bags and cardboard to Chrome tanned leather and denim. I focused on making a "looks like" prototype so it didn't have to be completely functional. However, I did want to be able to wear and use them as minimally as possible. In a Loughborough University study, three different types of soccer cleats are discussed, "...three are linked to specific skill performance enhancing claims: The power boot for enhanced shooting performance, the touch/control boot for enhanced ball control and the speed boot for enhanced speed generation."⁷. In my design I created a hybrid between the power boot and the control boot. In general power boots have a more dramatic or ostentatious design. The latest Adidas predator cleat for example, is black and covered in flashy red rubber spikes that focus the attention on the top of the shoe. I wanted my boot to have this eye catching in-your-face style to match the brand of NGS. I also incorporated several elements from traditional control boots. One of the biggest insights I gained from several interviews with players and fans was that comfort and stability were two of the most important aspects of cleats. There was a large consensus that heel lockdown, a snug fit, and thicker materials were very

⁷ Kryger, Katrine O.. "Player Protocols for Football Boot Testing". figshare, August 12, 2019. <https://hdl.handle.net/2134/33865>.https://repository.lboro.ac.uk/articles/Player_protocols_for_football_boot_testing/9542390

important for injury prevention and comfort. One of the examples was how the Adidas F50s, which are designed as a speed boot, have super thin material on the toe box. That means if you get stepped on it hurts, A LOT. In general, of the five people interviewed there was an overwhelming preference for control boots.⁸ Specifically, cleats like the Adidas Copa Mundial or the Nike Tiempos. These interviews helped me determine the types of materials I needed on the different parts of the cleat, as well as the overall construction, where I should be putting support structures, stitch lines, laces, etc. Based on these interviews I used two layers of leather for the toe box creating a thick pliable material, a very stiff leather for the midsole and heel counter to provide support, and a comfortable denim lining for the back of the foot.

⁸ User Interviews - Jody Berris, Allison Stollak, Katie Rubin, Nick Tobier, Eddie Cohen



Portland Timbers Lumberjack

Source: timbers.com



Northern Guard Supporters

Source: noonelikes.us

Methodology:

1. Ethnographic Research/Concept Mapping

During my research and ideation phase, I went through several techniques to narrow down my initial project statement and create a narrative around my concept. At first my project was very broad and lacked a specific direction. I started looking for specific areas within soccer culture and identity to focus the concept on. I wanted to explore the parts of the sport that I had the most contact with and had shaped my experience and values the most. Naturally, this led me towards fan culture and recreational and casual sports. I conducted several interviews with local soccer players, detroit natives, and members of the soccer community. It was from these interviews that I learned about the Northern Guard Supporters organization. Their embodiment of the values of the sport, their commitment to community engagement and their passion for the team and the game, all aligned with my own values and why I love soccer. Their story inspired me to design a pair of cleats based on their brand.

2. 3D models/prototypes

During the design and ideation stages of the project, I focused on representing symbols, and abstract characteristics of the organization in a cleat. I went through several stages of post-it note mapping to try and connect the concepts with physical representations. I did numerous thumbnail and rendering sketches where I was trying to visualize how the elements would fit in a shoe and what form that would take. I also did many experiments into the construction of the

shoe. I started by 3D printing a last based on a scan of my own foot. However, I quickly realized that this would fail because there wasn't enough space for my foot to breathe or move independently. I then 3D printed a pair of more traditional lasts which worked better. I utilized a strategy called last taping to translate a design from 3D to 2D then back to 3D. This was done by covering the last in tape, drawing patterns directly onto it, then cutting them out and using them as stencils on different materials. This was very helpful because it allowed me to obtain exact patterns that would fit perfectly on the last. From there I developed five separate life sized prototypes each with increasing levels of complexity over the course of the year. I also created four different clay models of the soleplate to add to the design. All of this led to the construction phase where I made final decisions regarding the composition, materials, and form of the design.

3. Construction

During the construction phase, I took my design from a number of prototypes and sketches into a final technical rendering, and a final prototypes. First, I created a technical rendering in illustrator to allow me to visualize how all the parts would fit together. Then I created the pair of cleats using a variety of methods. First, I created a 3D model of the outsole in rhino and outsourced it to be 3D printed. Then I cut out the design patterns using the last taping strategy. I assembled the lining and the outer materials separately then sewed them together around the collar, and eyestays of the upper. I stitched a seam in on the heel of the shoe to complete the upper. I created the structure of the shoes using veg tanned leather that was wet molded to the last on the bottom and heel. I stretched the completed upper over the last and hammered it into the sole using temporary nails. I then glued it to the midsole. Once the outsoles

were delivered I painted them using yellow acrylic paint and cement-glued them to the completed upper and midsole completing the shoes.

Creative Work:



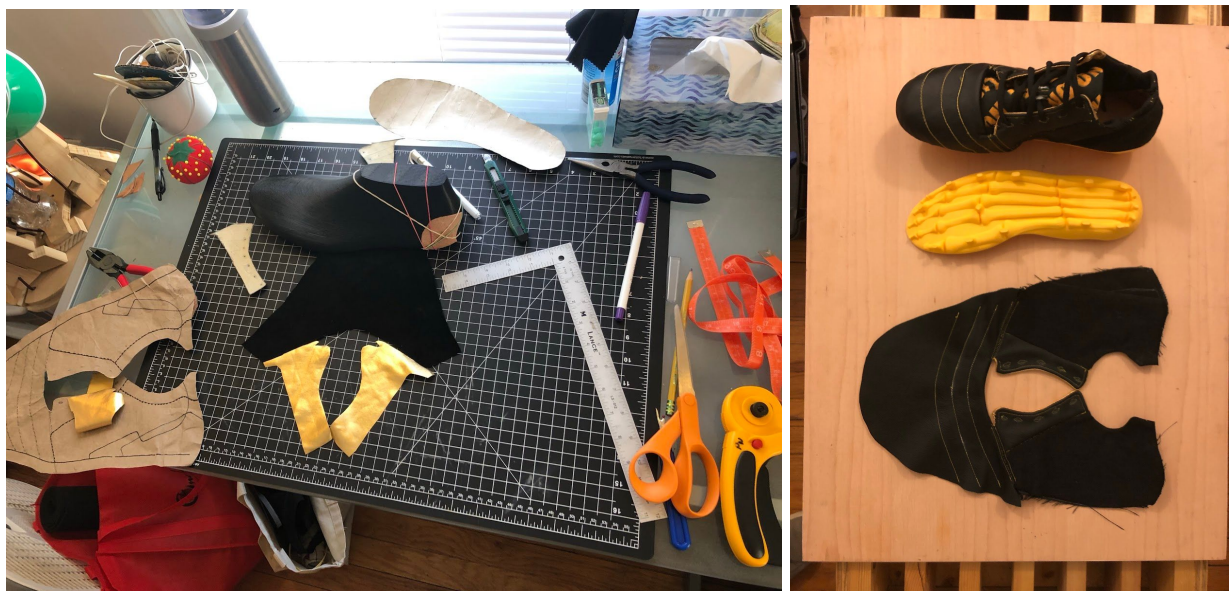
Technical Rendering:

The cleat is designed as a hybrid power boot and control boot. It emphasizes the striking power of the player while retaining comfortable agile ability. The overall design of the shoe is meant to focus on the area around the laces called the strike-zone. This area is outlined by the lining layer of gold fabric that pokes out from under the toe box as well as the gold on the lace and the tongue. The soleplate is also gold to contrast the dark black of the upper. The upper shape is highlighted by gold thread that makes up the stitchlines. These stitchlines also define the black shape of the shoe as well as provide stability to the construction. I chose black and gold for

the colorway to symbolize the black of the NGS organization and the gold of the Detroit City team.

Upper Description:

The upper consists of three main pieces. The toe box and the eyestays are made of two thin leather layers that are sewn together as a seam. I chose leather as the material to give the shoe a more punk, grunge aesthetic which ties into the rebellious brash nature of the NGS brand. It's also a very tactile comfortable material that can mold to the foot over time. The vamp of the shoe wraps around the heel and is attached to the eyestays. This part is made of a repurposed denim material that comes from a pair of black jeans. Jeans are often associated with the more grunge aesthetic that I'm trying to emphasize. This portion of the design has a number of pieces dedicated to locking the heel in place. Inside the denim layer is a stiff piece of veg-tan leather that keeps the heel and ankle from rolling inside the shoe and prevents injuries.



Source: Patrick Nair

Soleplate Description:

The soleplate makes up the interface between the foot and the ground. It's made of a rigid nylon 12 plastic that was 3D printed by Shapeways. The plate consists of three layers that are joined into one. The top layer wraps around the heel of the shoe to provide even more support to the heel counter. The middle layer is an abstract representation of the bones in a foot. NGS uses bones as one of their main symbols because Detroit is considered a dead city, by incorporating it into their brand they own the fact instead of letting it control them. In the cleat, the bones symbolize structure and the foundation of the shoe. They also leave bone-shaped prints behind in mud or sand. The studs of the shoe which are essential for traction on grass, mold into the bone abstraction. They emphasize the joints of the bones and the highest point on them.



Source: Patrick Nair

Conclusion:

The Detroit Ultras soccer cleats are designed to match the brand of the soccer community in the city. My goal with this project was to represent the aspects of the beautiful game that I value most on a cleat design. I used concepts, symbols, and aesthetics to create a pair of cleats that's inspired by the NGS organization. They pride themselves on creating a ruckus crazy atmosphere during games and representing their team and their city. They are loud, brash, rebellious, and unapologetic. They aligned with my passion for the game, and the values of fan culture. I incorporated many aspects of their brand such as the bone theme, the grunge aesthetic, and the black colorway. The cleat symbolizes the relationship between the fans and the game, it acts as a physical manifestation of a brand on the field. Because cleats are such an important

identifiable part of the game, they have come to act as a canvas for symbolism, and engagement. The Detroit Ultras use this platform to promote community and the fan culture that makes the game so powerful.



Source: Patrick Nair

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