Positive Tension
Professor Migration: Studio
Advanced studio VI
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## Contents

ADV Studio VI | Positive Tension

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The forces at work in the site affect the degree of tension that exists at any given time. The Great Fall draws people into both the area and to the site—for aesthetic reasons (its beauty) and because it is a resource (water). People, in turn, replicated this dynamic in a number of ways. They built a school, factories, a stadium. Those constructions added new tensions to the area and altered others. The school pulled on people to remain in the area, while the factories drew people in from outside (opportunity). Gathering in the stadium allowed for a reprieve, while also permitting the strengthening of relations between certain groups. The proximity of houses to one another influenced the relations between those groups as well, creating tension (e.g., from one another’s noise) and reprieve (e.g., from the ability to talk to one another). None of this, however, produced an immutable state of affairs.

Central to the operative tension in the area are the social norms at play. Ideologies of exclusion reduced opportunities in the area, as well as overall cohesion in the community. Such ideologies strained the site’s natural resources (e.g., through who gets access to land) and its artificial ones (e.g., through norms relating to who gets what opportunity at what compensation). Dominant forces at the site, therefore, include: resources, both natural and artificial; and norms especially those relating to access, opportunity, control, and exclusion. Because we aim to create a positive tension at the site, we must find a way to harness the site’s resources to establish and promote norms that can endure.

My thesis, in a word, is that we can make the positive tension at the site by creating communal spaces that people want to inhabit—spaces that possess utility for them. My goal is to replicate the Great Fall: to draw people in on aesthetic grounds and because the grounds provide a resource that all can construe as their own.
Movement 1 - Wynter Wells Drawing
School Migration Drawing: Migration Story

This project started with the story of the evolving migration patterns of Mexican Free-Tailed Bats.

In "The Changing Climate Inside the World's Largest Bat Colony," Carolyn Kormann discusses historical migration patterns of Mexican free-tailed bats and how climate change is altering the current migration patterns of those bats from those of the last several decades. But this migration story does not just involve bats. It involves lots of bats. Kormann says that more than fifteen million Mexican free-tailed bats spend part of the year in Bracken Cave in Southern Texas, where the bats migrate to in the Spring.

I then tried to imagine the story and translate that migration into the drawing. The drawing represents sound, space, and the movement of the bats.
Movement 2 - Spatial Construction

The construction is based on the migration drawing.

Construction #1

Construction #2
Construction Description

The inspiration of this construction is a drawing of the migration of Mexican free-tailed bats between Mexico and Texas in the United States. That drawing evoked the following ideas:

• tension
• parasitic
• vibration
• reverberation
• circular
• echo
• atmospheric
• convergence
• deviation

Those ideas, in turn, guided the development of the construction.

Four materials, together with a stand, have been used in the construction to represent the ideas that the drawing generated: tensile fabric, basswood sticks, black string, and metal pins.

The materials are combined in certain ways and suspended from above to generate the drawing ideas. Specifically, basswood sticks stretch the tensile fabric, producing tension and forming tensile structures. A multitude of these tensile structures are present and their closeness to one another generates feelings of echo and reverberation. Numerous basswood sticks intersect one another in the tensile structures and black string zigzags throughout those structures, both of which constitute convergence. Deviation arises from the lack of uniformity found between the tensile structures. Small pieces of the tensile fabric have elsewhere been scrunched up, which in some cases forms circular-like balls of fabric. Those small fabric pieces become parasitic on the tensile structures by fastening them to those structures via metal pins. The atmospheric aspect of the construction is generated by hanging the tensile structures from the stand, which can easily be moved while the rest of the construction is hanging from it. When the construction is moved or exposed to wind, it gives a feeling of vibration, as the tensile structures sway back and forth.
Motion & Migration

These images exhibit the introduction of light to the construction. The light travels through the construction and produces various shadows. Those shadows, like the migration patterns themselves, are not exact but in some sense in a perpetual state of flux. The images also evoke a sense of time and location.
Movement 3: Site Analysis
Movement 3: Site Analysis

The site includes mesmerizing greens and inviting sounds from the Great Falls. The Paterson area has the most tourists between July and August due to the historical nature of the area and the weather.
Connection of Paterson Residents to Each Other

People connecting with neighbors
Connection of Paterson resident to Passaic river

Path that connects people to the Passaic River
Connection of People to stadium
Owned Vs. Rental Properties

- Owned Properties 26.1%
- Rental Properties 73.9%
Racial demographics

- Hispanic %72
- Asia %27.8
- Black % 0.2

Legend:
- Hispanic %72
- Asia %27.8
- Black % 0.2
Site Model/ 3D Diagram

- Path that connects people to the Passaic River

- People connecting with neighbors
Site Strategy Diagram
Body & Space
Program Diagram

- Stadium
- Walking path, and sitting area
- Gathering space & sitting area
- Restaurant & Cafe
- Play area, pools & water fountain
- Walking path
3D Section Progress

3D Section to study and develop the tensile structure and the cafe on the south side of the stadium
Horizontal Sections

Horizontal Section 01

Horizontal Section 02

Horizontal Section 03
Cafe & Stadium Horizontal Sections

Horizontal Sections - Level 1

Horizontal Sections - Level 2
Structural Detail

Section view of tensile structure

Top view of fabric attachment to the metal system
Study of Structural Detail
Structural Model

Side view of structural study model

Top view of structural study model
Pool views outside the cafe and stadium.
Cafe with an inside view of the stadium. First floor.