2013 THIRD PLACE

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LYCEUM
A traveling fellowship in Architecture
Contaminated Development:
Community for Interpretive Landscapes

Excavating the earth has left mining communities with a giant hole in the ground, along with toxins in the air and soil. The community of Bisbee, Arizona is unaware that the soil is contaminated and that gardening is not healthy. Awareness and agriculture is missing in the community.


define: to represent by means of art; bring to realization by performance or direction
CONTAMINATION

A. Bisbee
  pH: 4.00

B. Lavender Pit
  pH: 4.50

C. Segovia
  pH: 4.60

D. Bolivian
  pH: 4.90

E. Briggs
  pH: 2.00

1903 - Start of Bisbee, pH 4.00

1919 - Start of Open Pit Mine

1969 - Overburden dug, 1st exposure

1970 - Mid-exposure, Sulfate Acid

1974 - Full exposure, Sulfate Acid

Pit contamination
Wind-blown contamination
Points of entry

Combination level
pH: 2.40
Most citizens of Bisbee are unaware of the severity of acidic levels in the soil...

Effects of the Pit - Soil in the town also contaminated.
Restoring the Pit requires the community...

The town finally sees greeneries.

Programmatic strategies

To stitch together the town of Bisbee and the pit requires a suite of interventions guided by community performance. This process requires several individuals to educate the community in order to raise awareness about the soil acidity levels. This is done by arroyaching acidic sites and measuring acid levels in the soil beneath, exposing the hidden intermixture. The final proposal consists of terraced gardens along the surface of the pit. Instead of reducing government costs to stabilize the pit, the proposal seeks out the local community of Bisbee and its environmental benefits to fulfill the project. The community of Bisbee becomes the caretakers of the garden, and therefore the architecture comes with them. People need to build positions, display their art, and sell crops in order to help with their personal lives and attract tourists to their spaces. Comfortable spaces will allow for more sustainable areas like gardens, where time is slowly captured, absorbed, and mixed by utilizing the terraces. Fortunately for Bisbee, tourism is successful so the city profits from these services. The proposal will attempt to minimize itself into the economic cycle of Bisbee by feeding the town back with crops, good soil, and education for the community and tourists. There are more opportunities created through this, and the environmental contributions are great. Utilizing the pit brings the community closer to it and lets them understand the unique terraced landscape that allows the gardens to grow. More specifically, the artist community facilitates the expansive landscape to produce their personal work.

RECOVERY
Bisbee community reaches out...
Community understands the soil after becoming familiar with it.
Mapping the Expansion of surrounding soil through acidic rods

Progress of the community:

- **SOIL**:
  - Soil Content after Development
  - pH: 7.00 (lead)

- **ECONOMIC**:
  - Supplies
  - Tourism
  - Urban Agriculture

- **SOCIAL**:
  - Education
  - Community
  - Market

- **ENVIRONMENTAL**:
  - Sustainable Farming
  - Reclamation of Pit

- **PRESENT**:
  - City of Bisbee

- **PROPOSED**:
  - City of Bisbee

- **AFTER 1 YR**
- **AFTER 2 YRS**
- **AFTER 5 YRS**

**Location**:
- Bisbee
- Lavender Pit
- Becker
- Bisbee

**Data**:
- pH 7.00
- pH 6.00
- pH 5.00
Future prospects:

The cultures of mining towns differ from place to place. It depends on the economy of the country itself, the influence of mining companies, as well as traditional values. These cultural differences are not understood until one understands the communities around the sites. It is hard to understand how a mine affects the world, how materials travel to make products, and how much humans are reliant on resources. I am interested in the industry of mining, but more interested in the communities that are affected by mining. How do communities differ in their way of living because of the PKP 2B countries with stronger cultures have stronger mining communities? I wish to cross borders because I do believe mining communities elsewhere are definitely going to be quite different than the ones in the U.S. The copper mines in Chile, Peru, and Indonesia are especially interesting because they are very active at the moment. Most of the country's copper is coming from those three locations. Pebble Beach in Alaska is at risk of losing fishing communities because of potential mine operations. The fact that mine can easily take over a 100-year industry makes me want to understand how the people of the fishing communities are responding to these extreme situations. The Democratic Republic of Congo is appealing because it is also a potential site for a large deposit. Congo has some of the richest soil and it is in the source of the pit. Mining is going to keep happening in the future so it is important to confront the issues associated with it. Education the mining industry is so hard to compete against. I believe it is more important to propose possible solutions for the environment and for social groups that surround it. Contamination is going to keep growing not just in mining but other industries as well. It is important to be aware of these issues and to prepare for ways to minimize the coming problems. Education is going to play a bigger role than before in keeping communities environmentally safe and up to date with the mining industry.