



# Design to Culture

Albuquerque Case Study

MARCH 22, 2017



# Why study design and culture

- Outcomes may be more dependent on the environment and culture than we realize.
- New Mexico is unique and offers specialized learning from our culture.
- Resources in New Mexico have always been constrained and yet still produce sustainable solutions and innovative opportunities.

# Research Approach

- Use secondary research – they have already reviewed the primary sources.
- Start with the geography – it shapes how communities form.
- Look for drivers of why people develop into communities.
- Look for key characteristics of the people.
- Look for themes across geography, community development and people.

# Geography

## Volcanos and history

- Not all magma erupted, leaving pools underground that cooled.
- Lava becomes brittle over time. Caused shifts & uplifts that formed mountains and underground space to collect water.
- Mountains & deserts interact in ways that affect wind, water and soil.

# Biological/Human Interaction

- **2-way interactions:** Geography shapes human settlement and humans shape geography
- **Biological diversity:** NM has 6 of the 7 US biological life zones
- **“Where edges meet”:** Tony Hillerman refers to the stark difference of mountain to desert altitudes, wind patterns, and resulting water pathways as **edges** of biological systems that influence cultural systems.



# New Mexico Communities

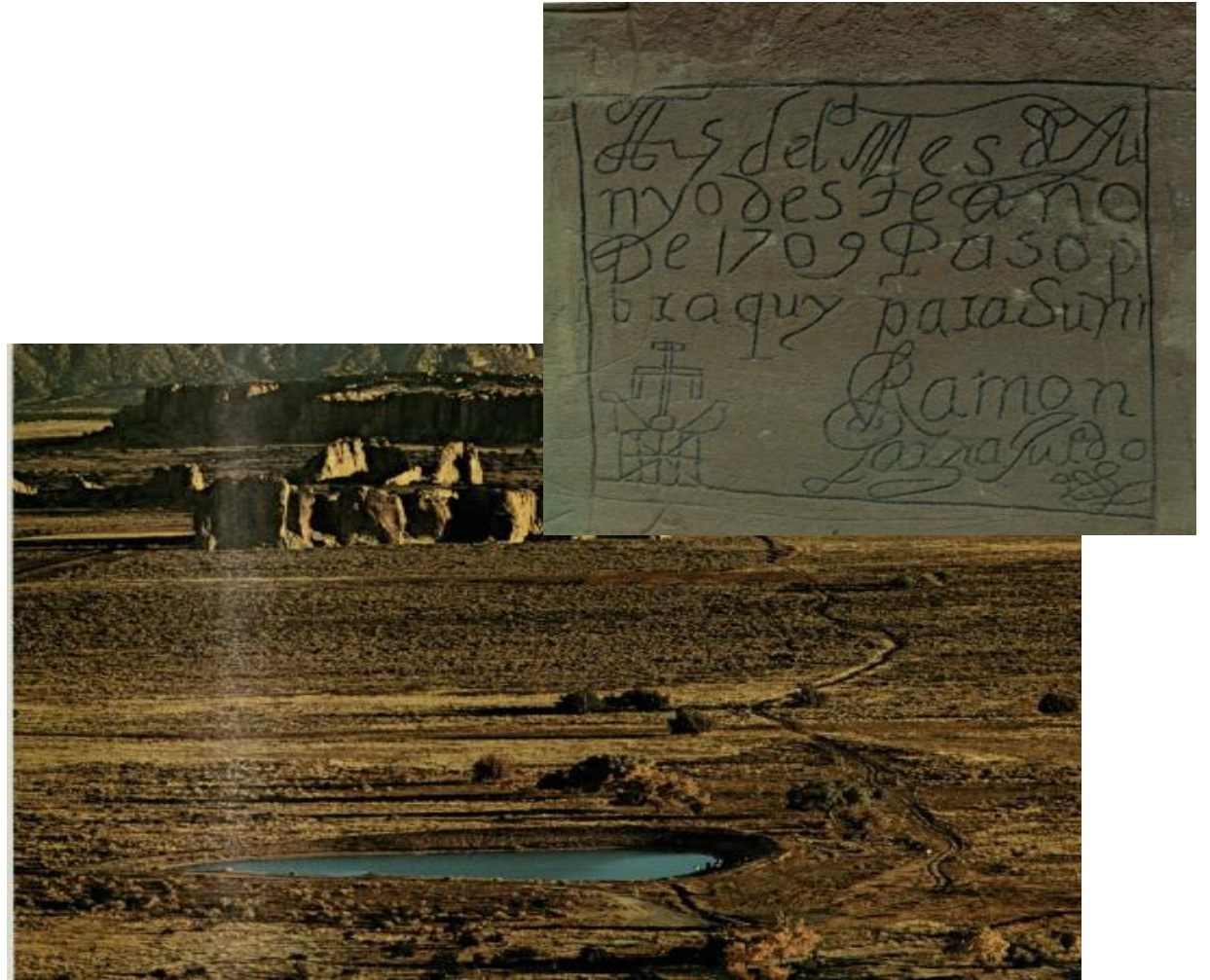
## History affects culture

**Acoma Keres Pueblo** oldest continuously occupied settlement in US

**Camino Real** North/South Road from Mexico through US

**Santa Fe:** 2<sup>nd</sup> oldest city in US. Coronado travelers left a mark

**1880:** Railroad created East/West access to Albuquerque. Healthcare triggered Albuquerque's growth.



## Mosaic vs. Mixture

- Manifest Destiny lacked force of wealth as in other western states. Did not force mixture.
- Diverse cultures remained intact, thus creating a mosaic of communities.



# Water, Soil and Development

## Access to water:

- Albuquerque was considered the “best watered city in the Southwest.” (Simmons) Water permeated underground volcanic and limestone layers creating a natural reservoir.
- 1880s marketing encouraged sugar and tobacco planting in an “unlimited resource” environment.



# Water, Soil and Development (cont.)

## Management of water:

- Acequias, arroyos, irrigation impact human survival (agriculture and animals)
- Political and community systems developed around water.
- Scarcity of water key driver of decisions.

## Water, Soil and Development (cont.)

Dry farming considers the best use of the "bank" of soil moisture. Practices include:

- Wider spacing for more water per plant.
- Controlled Traffic.
- Minimal tilling of land.
- Strict weed control (water to intended crop only)
- Mulch to reduce evaporation
- Selection of crops suited for dry farming practices.

Water stress *can* produce nutrient rich crops.

# Albuquerque Culture

**Edges** create tension *and* opportunities as they interact (the intersection)

- Railroad and healthcare launched in pivotal city growth. Presbyterian Hospital sits at the Big I - NM East/West, North/South access.
- Cooper Center sits near intersection of Camino Real and Balloon Fiesta (Albuquerque Box). Ancient and current implications.
- Populations we serve: nearly half Government funded, yet commercial business must balance.

## Albuquerque Culture (cont.)

- **Mosaic Population.** Not just White, Hispanic, and Native American.
- **“We believe in winning together”**  
(National Hispano Chamber of Commerce)



NM 1976 Bicentennial token with arrows/pot, mining, and conquistadors representing mosaic of culture

# Albuquerque Culture (cont.)

## Constraints drive development like dry farming:

- **Limited resources:** Learn from history. Long-term survival is possible in constrained environments. It forces collaboration.
- **Stewardship:** Sustainable solutions take into account long-term resource impact.
- **Fit & value:** What you plant should fit the environment. Tobacco isn't a New Mexico fit. Tomatoes, beans, chile, grains: value is critical.

# Application

With a partner, discuss:

- Identify at least 2 competing forces in a project/program/issue you face. What are key intersections of the “edges” in a project, program or community issue?
- What mosaic of expertise could be engaged?
- What concepts of Dry Farming can be used to make use of scarce resources for your project, program or issue?

# Group Feedback

Could the design principles be incorporated into your work?

Did you find new ways to think about your approach?

Did you learn something new about your partner's work?