Climate Patterns in Our Midst: A 5-Week Workshop on Local Climate Lexicon Development

Workshop Overview

This 5-week hands-on workshop will guide participants through the process of using Habitat Evolution to develop a local climate pattern language. Participants will learn to identify, document, and analyze climate patterns in their local environment, creating a shared lexicon that bridges personal experience, community knowledge, and scientific data.

Workshop Goals

- Create a community-based understanding of local climate patterns
- Develop a shared lexicon for discussing climate change impacts
- · Use Habitat to detect and analyze patterns across personal observations and public data
- Bridge the gap between lived experience and scientific understanding
- Empower participants to read and interpret the changing climate around them

Week-by-Week Syllabus

Week 1: Reading the Changing World Around Us

Theme: Pattern Recognition and Personal Climate Narratives

Session 1: Introduction to Pattern Languages and Climate Change

- · Welcome and workshop overview
- Introduction to pattern languages (Christopher Alexander's approach)
- · How climate change disrupts established patterns
- Introduction to Habitat Evolution and its approach to pattern detection

Session 2: Personal Climate Narratives

- Hands-on Activity: Climate memory mapping
 - o Participants document personal observations of climate change in their locality
 - o Create timeline of noticed changes in local weather, seasons, plant/animal behavior
 - Share and discuss observations in small groups

Session 3: From Observation to Pattern

- Introduction to pattern documentation structure
- Hands-on Activity: Pattern extraction from personal narratives
 - Using Habitat's document processing to extract initial patterns
 - Identifying recurring themes across participant observations

Community Assignment:

- Document 3-5 climate changes you've personally observed in your locality
- Take photographs or collect artifacts that represent these changes
- Interview an elder or long-time resident about climate changes they've observed

Week 2: The Language of Local Climate

Theme: Building a Shared Vocabulary

Session 1: Local Climate Data Exploration

- Introduction to available local climate data sources
- · How to read and interpret climate data
- Hands-on Activity: Data exploration
 - Using Habitat to process local climate data
 - Extracting statistical patterns from temperature, precipitation, etc.

Session 2: From Data to Language

- How scientific terms translate to lived experience
- Hands-on Activity: Term extraction and categorization
 - Using Habitat's lexicon building tools to extract key terms
 - Categorizing terms based on local relevance and meaning

Session 3: Bridging Personal and Scientific

- Hands-on Activity: Cross-modal pattern integration
 - Connecting personal observations with statistical patterns
 - o Identifying relationships between lived experience and data

Community Assignment:

- Collect local news articles, government reports, or scientific papers about climate change in your region
- Begin developing a glossary of terms that describe local climate phenomena
- · Document any disconnects between official terminology and local understanding

Week 3: Constructive Dissonance in Climate Understanding

Theme: Exploring Different Perspectives

Session 1: Multiple Ways of Knowing

- Indigenous and traditional ecological knowledge
- Scientific climate knowledge
- Lived experience as valid data
- Hands-on Activity: Constructive dissonance exploration
 - Using Habitat to identify apparent contradictions in understanding
 - Exploring these contradictions as sources of insight

Session 2: Community Pattern Mapping

- Hands-on Activity: Collaborative pattern detection
 - o Creating physical and digital maps of local climate patterns
 - o Identifying pattern relationships and interactions

Session 3: Pattern Relationship Analysis

- Hands-on Activity: Using Habitat's field-pattern bridge
 - o Analyzing relationships between identified patterns
 - Visualizing the pattern network

Community Assignment:

- Interview someone with a different perspective on climate change (different generation, profession, background)
- Document areas of agreement and constructive dissonance

• Begin drafting pattern descriptions that incorporate multiple perspectives

Week 4: From Pattern to Action

Theme: Applied Pattern Language

Session 1: Patterns as Guides for Action

- How pattern languages inform adaptation strategies
- Hands-on Activity: Pattern-based scenario planning
 - Using identified patterns to envision future scenarios
 - o Developing adaptation strategies based on pattern understanding

Session 2: Pattern-Aware Communication

- Hands-on Activity: Using PatternAwareRAG
 - o Crafting queries that incorporate pattern context
 - Analyzing responses for pattern awareness

Session 3: Lexicon Refinement

- Hands-on Activity: Collaborative lexicon development
 - o Refining term definitions based on community input
 - o Creating visual and textual representations of key patterns

Community Assignment:

- Draft a pattern language entry for a local climate phenomenon
- Create a visual representation of this pattern
- Identify actions that could address or adapt to this pattern

Week 5: A Living Lexicon

Theme: Sustaining the Pattern Language

Session 1: Pattern Evolution Over Time

- How patterns change and evolve
- Hands-on Activity: Using AdaptiveID
 - Setting up pattern tracking for long-term observation
 - o Establishing metrics for pattern evolution

Session 2: Community Pattern Library

- Hands-on Activity: Creating a physical and digital pattern library
 - o Compiling pattern descriptions, images, and relationships
 - o Designing an accessible interface for community use

Session 3: Workshop Showcase and Future Directions

- Presentation of community pattern language
- · Discussion of ongoing pattern observation and lexicon development
- Planning for continued community engagement

Final Project:

- Complete community pattern language documentation
- Publish physical and digital versions of the local climate lexicon
- Establish protocol for ongoing pattern observation and lexicon updates

Workshop Materials and Resources

Required Materials

- Habitat Evolution system (local installation or web access)
- Local climate data sets (temperature, precipitation, etc.)
- Historical weather records for the locality
- Maps of the local area (physical and digital)
- Journaling materials for pattern documentation
- Cameras or smartphones for visual documentation
- Recording devices for interviews and oral histories

Supplementary Resources

- Christopher Alexander's "A Pattern Language"
- Local climate assessment reports
- · Historical photographs of the locality
- Indigenous knowledge resources (with appropriate permissions)
- Local news archives related to weather and climate events

Workshop Approach

This workshop emphasizes:

- 1. **Participatory Learning**: Participants actively contribute to pattern detection and lexicon development.
- 2. **Multiple Ways of Knowing**: Scientific data, personal observation, and traditional knowledge are all
- 3. Local Context: Focus on climate patterns specific to the participants' locality.
- 4. **Constructive Dissonance**: Different perspectives are explored as sources of insight.
- 5. Practical Application: Pattern language development leads to concrete adaptation strategies.
- 6. Community Ownership: The resulting lexicon belongs to the community and continues to evolve.
- 7. **Technological Assistance**: Habitat Evolution provides Al-powered pattern detection while keeping humans at the center of meaning-making.

This workshop structure creates a framework for communities to develop their own climate pattern languages, using Habitat Evolution as a tool to bridge personal experience, community knowledge, and scientific data. The resulting lexicon provides a shared vocabulary for discussing climate change impacts and adaptation strategies, empowering communities to read and respond to the changing climate around them.