



About

LayerCake--an interactive mapping tool--was initiated by Sharon C. Smith, Ph.D., Program Head of the Aga Khan Documentation Center at MIT (AKDC@MIT) and she serves as the PI for the project. Working with designer and programmer, James Yamada (MDes, Harvard GSD, 2014), the tool is currently under development at AKDC@MIT. A 3-axis mapping tool, LayerCake enables users to build maps layering narrative, time, and space simultaneously. It is our intention that LayerCake be used by scholars, researchers, and students to tell stories, display collections, and reveal complex temporal and geographic relationships in ways that purely spatial maps cannot.

In LayerCake, latitude and longitude are mapped on the horizontal axes while time is mapped on the vertical axis. The scale of the time axis is remapped to accommodate the chronological span of items on the map. Users may explore the map by panning, orbiting, and zooming their point of view. They may also click on map items for detailed information.

Avenues for further development include micromaps that focus on smaller geographic areas, such as cities, complexes, or buildings. Synthesized maps in which users map their own content via spreadsheet or search our database for existing content are another possibility.

LayerCake was developed using three.js, moment.js, OrbitControls.js, socket.io, node.js, pickpoint.io and mongoDB, as well as scripts from the Harvard Math Department and Panagiotis Michalatos at the Harvard Graduate School of Design. It shares DNA with the metaLAB (at) Harvard Book Biography Machine project.

We welcome your comments and suggestions. Please contact us at layercake@mit.edu

For this prototype of LayerCake, Yamada and Smith worked with Ali Asgar Alibhai (Ph.D. candidate, Harvard NELC) to describe the hajj of Ibn Jubayr, a twelfth century pilgrim. Ibn Jubayr's journey took him from Granada to Mecca, and beyond into modern day Iraq, before returning home. Referencing Ibn Jubayr's text in the left column (by date, place, and chapter), the sites and cities he visited on pilgrimage are displayed as points in geographic and temporal space. Highlights are linked to Archnet--AKDC's globally-accessible, intellectual resource focused on architecture, urbanism, environmental and landscape design, visual culture, and conservation issues related to the Muslim world--for context and further exploration.