

The primary goal of this investigation is to construct a Dynamic Atlas inclusive of the processes of weather patterns along the tract of land between Allahabad and Benares in Uttar Pradesh, India. The Gangeatic Plains of India is a territory that is particularly subject to the influence of climactic and seasonal changes due to the Ganges River and the monsoon season. However, it has not been subject to mapping processes that take into account weather as a dynamic agent that can influence the way this territory is traversed and inhabited. In addition, this area contains one of the fastest growing populations in the world (25% during 1991-2001) as well as the majority of arable land in India. Mappings of this territory do not layer relationships between weather, land use, and cultural practices. Consequently, these maps use older forms of representation, which portray spatial settings as inanimate and fixed. This investigation will track the phenomena of weather and climate at multiple scales to explore the forces that form this context over time. Chorographic methods of representation will be used to introduce another way of mapping weather and climate as dynamic processes that affect spatial and cultural practices of the region. Unlike other modes of representation, chorography brings together different scales of representation onto one picture plane and is not defined by any single system of spatial representation. Changes in scale reveal different forms, meanings, and significance of phenomena on a space. As a result, chorography represents different viewpoints and relies on the juxtaposition of views to relate spatial structures and relationships. Concurrently, the Ganges River will serve as an animate datum to expose these intensities and influences across this landscape. Digital and analog forms of representation will be combined to capture the dynamic qualities of the terrain. There is an urgent need to vividly map the dynamic conditions of this region to better inform the way in which architects, planners, and engineers intervene in this volatile landscape. Ultimately, this investigation will serve to aid in developing methods of intervention that are more attuned to the needs of those living in this dynamic landscape.

The manner in which one views, represents and collects data have a profound effect on the connections and conclusions one draws from it. The scientific gaze and the picturesque gaze are two modes of observation that continue to influence the mapping of Uttar Pradesh. These two techniques dominated the way in which the British surveyed and mapped India between 1765 and 1843 to construct an archive of their empire. As a process of observation, each gaze attempts to correct "abnormalities and deviations" within the landscape. The scientific gaze frames observation by foregrounding the object of inquiry as an artifact with fixed, precise relations and properties. The picturesque gaze extends the view to the background and exaggerates aspects of the landscape as a means of making it more aesthetically pleasing. Each method of representation attempts to portray a stable and unified image based on a geometric order. Whether for corporations or tourism, these outdated methods of observation continue to be used amongst the surveying institutions of India, but have become dulled and less effective. With the advancement of aerial and digital forms of observation, images of this area are beginning to be seen as dynamic; however, they are still viewed as formal, autonomous images. They are not layered with the social, cultural, and political practices of Allahabad and Benares. The abnormalities that the British sought to mute actually index the transformations occurring along the surface of the land, and offered clues on how to better engage the topography rather than mute its dynamic qualities.

This investigation will introduce another, third way of mapping the tract of land between Allahabad and Benares, in which weather becomes a critical and projective agent that speaks to the animate nature of this place. Capitalizing on the number of previously constructed maps, both scientific and picturesque, the project aspires to construct a Dynamic Atlas of the territory. By layering the maps of the Ganges River over time, one may begin to map out settlement patterns in relationship to shifts in the river's width, depth, and course. Rather than mapping and recording an average, these maps will establish a range to changes in the Ganges River.

Operating on both global and local scales, weather affects the physical formation of ground through precipitation and run-off between Allahabad and Benares. During the monsoon season this dramatically affects the way people live and the role that infrastructure plays in negotiating a dramatic change in water and soil. Chorographic changes in scale are a necessary tool in measuring the effects of

weather across a wide and varied spectrum. By reducing or enlarging the scope and space that a particular phenomena generates changes their form, their significance, and their meaning in relationship to other conditions. Once layered with the solar and lunar cycles as well as cultural and religious festivals, one may expose latent relationships between these varying influences on the landscape, infrastructure, the community, and the individual. Similarly, climatic patterns coincide with local religious festivals and celebrations and may determine the outcome of crops. This in turn may cause or correlate with famine, malnutrition, and birth defects.

To investigate the meaning, significance, and generative possibilities of chorographic representation, different techniques of mapping dynamic systems will be employed to flexibly frame the provisional nature of this region. Serial, digital, as well as video representation will be used to measure and construct this Dynamic Atlas. By combining these methods of representation with the initial base maps, the investigation will begin to reveal latent relationships between the built environment and the indigenous culture. This will be achieved through the use of a Powerbook G4 laptop and a camcorder/camera, all of which are compact enough to fit into a backpack. By superimposing satellite images, drawn maps and photographs (taken over the course of six months) of the territory onto one picture plane, will allow the tracking of shifts in land use, run off, and weather patterns at the local scale of a community in relationship to global changes at the scale of the tract of land between Allahabad and Benares. These maps will generate active relationships between the land and those that make it their home. Going to India will not only allow me to witness the nature of this place, but also allow me the opportunity to participate in local customs and events. By arriving in June, I will be able to experience the monsoon season beginning in July and ending in August. This is a vital aspect of the research and commitment to generating dynamic representations of this territory.

Integral to this research and involvement in Allahabad and Benares is a network of individuals involved in the representation of Uttar Pradesh. Professor Harry Misra of the Department of Geography at the University of Allahabad has agreed to aid in acquiring maps of the region as well as assisting in the use of facilities and resources at the university. Ravi Gupta of Map India, an Annual International Conference and Exhibition in the field of geographic information technologies, has expressed an interest in this work being part of next year's Map India Conference and has agreed to assist in sharing documentation of the region. In addition, Professor Kamla Gupta of the National Family Health Survey of India, an International Institute of Population Sciences, has agreed to help with demographic information of the region and introductions to individuals working in Uttar Pradesh.

Mapping generates more maps. This proposal seeks to not only map the animate nature of this tract of land, but also raise public awareness and discourse. Following the first six months of mapping (which would begin in June), an online database will be constructed to make the mappings of this Dynamic Atlas accessible to the public. It will be developed over the remaining three months of the academic year in collaboration with the Department of Geography at the University of Allahabad. If the relationships between land use, weather, and settlement continue to be systematically ignored the region will remain impenetrable. The value of this investigation is to both develop a Dynamic Atlas over the course of nine months as well as to generate an interest in this emerging part of the world. Traveling to India will provide me with the experience and knowledge needed to better understand how one might intervene in a dynamic place. Successful fulfillment of the proposed course of work will not only be a passionate objective of mine, but also an unassailable public compromise with the profession and community.

Editor's notes:

Complex, scholarly topic handled well – emphasizes the academic and scientific scope of the project; good explanations of complex material, and good flow through paragraph sequence.