Sample Application Number 1

Reversing the Flow: Place, Protest, and Hydraulic Engineering in Western Sichuan

(Submitted to NEH Summer Stipends Program)
"Reversing the Flow: Place, Protest, and Hydraulic Engineering in Western Sichuan" is a digital essay using interactive maps and multimedia artifacts to explain the deep historical structures underlying a particular event: the largest rural protest in China since the founding of the People's Republic in 1949.

On November 11, 2004, fifty thousand farmers in Hanyuan County rose up to protest the loss of their land to the huge Pubugou dam, a key hydroelectric power project in China's Western Development Policy. Demonstrators blocked construction on the dam for three days and held the Sichuan provincial party secretary hostage for twelve hours before troops were sent in to restore order. Scores of people on both sides were killed or wounded, thousands more were arrested, and local officials in Hanyuan County and at the regional level of Ya'an were detained to face party discipline. Foreign press reports explained the protests as a reaction against both the low rate of compensation for inundated farmland and the embezzlement of relocation funds by corrupt officials. But local people in the eight-county Ya'an region understood the events in Hanyuan as embedded in a much more complex framework of history and landscape. In explaining the protests, they spoke about irrigation systems, land reclamation, temples, upright officials, ancient trade routes, markets, famine, ethnicity, local legends, regional identity, and invariably they spoke about their past in place. Why do they see the dam this way, and how can we understand this "thick," particular, and historical perspective?

The NEH summer stipend would give me two months to focus on these questions, allowing me to work through research materials on the Hanyuan protests already in hand, and to produce both a traditional print and a digitally enhanced article. The "Reversing the Flow" project has three objectives. The first objective is to peel back the layers of compressed historical meanings underlying the Hanyuan protests in order to more fully understand the perspectives and motivations of the protestors. The second objective is to explore more generally the ways in which hydraulic engineering has transformed the landscape of western Sichuan province in the People's Republic of China. To understand the significance of these transformations, the proposed digital essay is a detailed case study of landscape, understood as the physical, moral, and historical interaction of people with their environment, an approach that frames issues of environment, development, and protest within local cultural practices and historical knowledge. How have people in the Ya'an region experienced dams, diversions, irrigation, and other hydraulic engineering projects? How do they draw on their historical sense of place in responding to state-sponsored economic development policies? Over time, how have those development policies in turn shaped the lives of local people, and changed their understanding of the landscape? Finally, the third objective is to use digital visualizations to convey the local perspective and to reveal the landscape of this region in Western Sichuan as the people living there might see it. The project thus works toward the digital humanities goal of finding new ways to understand the experiences and thinking of others.

The method I will use to achieve the project's objectives is an online essay that is enhanced by two digital components: an interactive, layered mapping of the Ya'an region's historical landscape using GIS technology, and a gallery of multimedia artifacts that convey a rich sense of place. The artifacts are texts (of translated press articles, official documents, stone inscriptions), photos (of natural features, temples, hydraulic infrastructure), and audio/video recordings (of interviews and folk songs). The artifacts illustrate and are interwoven with the essay and linked to the map layers. The digital GIS mapping component will allow the essay's readers to create multi-dimensional visualizations of the local perspective, combining different layers to see how the spatial relationships among map features change over time. The map layers will include: 1. a base layer of GIS coordinated satellite photography showing the physical topography of mountains, rivers, settlements, and the specific shape of the Himalayan escarpment meeting the Chengdu
basin within the Ya'an region; 2. a layer showing the historical evolution of administrative
boundaries placed on the local landscape from tribal borders to military commandery to imperial
prefecture to municipality, with the subsets of county and township administrative boundaries; 3.
a layer showing the historical evolution of hydraulic engineering projects in Ya'an, focusing on
hydropower, irrigation, reservoirs, flood control, and land reclamation; 4. a layer showing the
networks of connection formed by temples of the local Chuanzhu cult, dedicated to the third
century BCE official and hydraulic engineer Li Bing; 5. a layer showing the historical evolution
of trade routes and markets throughout Ya'an, particularly the Southwest Silk Road and the tea-
for-horses trade route through to Tibet; 6. a layer showing the historical evolution of the
boundaries and interactions among Han Chinese, Tibetan, and Yi ethnicities in Ya'an. These map
layers correspond to the dimensions of meaning that local villagers, interviewed in published
Chinese press reports, associated with the particular place of the Hanyuan protests. Across the
region, people tended to talk about dams in terms of the history of irrigation and land reclamation
in the republican and socialist periods, and with reference to local gods and historical upright
officials. They also discussed long-standing ethnic conflicts and how hydraulic engineering has
benefited some groups while others have borne the costs. The project's method of enabling the
reader to interleave the map layers, artifacts, and explanatory essay should yield a deeper view of
the way people in Ya'an see these issues, and a richer understanding of how hydraulic
engineering has historically transformed the landscape in western Sichuan.

This "Reversing the Flow" project is an extension of the work I have done over the last five years
on the digital monograph "Moral Landscape in a Sichuan Mountain Village." The present project
broadens the geographical scope of the monograph from an intensive study of one village and its
river valley, to a more extensive look at the interconnected eight-county region of Ya'an as a
whole, and also completes the monograph's content because its focus on the events in 2004 brings
the historical narrative up to the present day. I will include the "Reversing the Flow" essay as a
capstone chapter within the monograph, but I also plan to publish it as a stand-alone article in
print with reference to the URL of the digital version. I have applied for the ACLS Digital
Innovation Fellowship to finish the production and promotion of the "Moral Landscape" digital
monograph in 2008, and my goal is to use the NEH Summer Stipend to complete the "Reversing
the Flow" article in time to include it in the final work on the digital monograph.

The NEH Summer Stipend would enable me to devote two full months to completing this project.
During that period I will first create the map layers from historical gazetteer, GPS, and interview
data. Then I will create the artifacts by choosing the media, adding explanatory text and
translations where necessary, and linking the artifacts to the map layers. Finally, I will revise the
essay draft to reference and link to the map layers and artifacts. I have the component parts, so the
work plan is primarily about assembly and finishing the product. I am well positioned to
complete the work on this timetable. I was in Ya'an on a year's leave when the events in Hanyuan
took place, and I have all the archival resources (including primary source county and prefectural
gazetteers for the entire region) and fieldwork research materials I need to do the "Reversing the
Flow" project. I am proficient in the Chinese language and Sichuan dialect, and have already
completed most of the translations I will use in the final project. Further, I have already presented
and revised a substantial conference paper on the Hanyuan protest and "ecological engineering"
in Western Sichuan, so much of the draft foundation for the more robust digital essay is
completed. Finally, my years of work on the digital monograph prepare me to transform the
research data I have collected into the artifacts and maps of the digital essay. In sum, I am
applying technology rather than learning it, because I have experience and a clear idea of how to
proceed.
I believe that the project can engage both a scholarly and a general audience. The article will address three areas of scholarship: monographs focusing on hydraulic engineering in China and on dams in the developing world; cultural landscape studies and village studies looking at the historical interactions of people and their environments; and initiatives applying GIS technology and spatial analysis to the humanities, as well as works that consider the impact of new technologies on the ways in which we conceptualize and present scholarship. Scholarly and general works on dams tend to focus on resettlement issues, environmental damage, and the loss of cultural heritage due to inundation. "Reversing the Flow" will join and significantly expand this literature by framing hydraulic engineering in the terms of culture, history, and identity evoked in local perspectives. Cultural landscape studies bring to bear precisely this kind of deeply textured analysis, and I see my proposed project as contributing a particular case study from China, in enhanced digital format, to that scholarship. "Reversing the Flow" is inspired by William Skinner's pioneering work on spatial analysis and hierarchical regional systems, and it clearly speaks to major initiatives such as the China Historical GIS Project. I believe that my project could complement and deepen the existing work being done on historical GIS: it is particular, rather than comprehensive, and the project's case study concentration on the qualitative interpretation of landscape provides the kind of unique local portrait of place from which a more vivid broad tableau of China can be created. Finally, the grassroots scope of the research and the framing of local, regional, and global integration will be of particular interest to historians and anthropologists of China, and will also be valuable to scholars of rural development because of its case-study approach to the interaction of local knowledge and global priorities. At the same time, its accessible narrative focus on a particular event, its innovative digital format, and its availability online should interest undergraduate students and a broader public.

The project will also make two significant contributions to the humanities, one in terms of content, the other in terms of approach. "Reversing the Flow" focuses on issues surrounding hydraulic engineering in order to understand the ways in which people in Ya'an belong in place and think about who they are during this time of dramatic change. The content of the essay thus furthers the humanistic goal of working toward the cross-cultural understanding of identity. The project's approach to its subject matter also contributes to the humanities by using digital technology to give more dimension to the portrayal of the experiences and perspectives of others. "Reversing the Flow" will contribute to the new epistemological possibilities of the digital humanities by enabling readers to go beyond the confines of a single linear narrative to explore different ways of understanding the stories of people in Ya'an. I hope that the methods I use are innovative, but both the content and the approach of "Reversing the Flow" also stand squarely in the classic ethnographic tradition. The project thus seeks to "reverse" the urge to abstraction that is sometimes the pitfall of academic scholarship, and affirms the importance of understanding the particularity of place as a key contribution to the humanities.