Reading the Cultural Landscape at Dyea, Alaska

Tonia Horton, National Park Service, Alaska Support Office, 240 West Fifth Avenue, Anchorage, Alaska 99501; tonia_horton@nps.gov

If, as folklorist Henry Glassie has written, "history is the essence of place," our literacy in the cultural process of historical landscapes is of paramount importance to the American national parks.[1] Without the ability to "read" landscapes as historical phenomena that continue to evolve, interpreting their stories is largely restricted to an artifactual perspective, rather than that of constant flux and dynamism, characteristics more typically assigned to "natural" resource paradigms rather than those of "cultural"—historic preservation and heritage production. However, as the practice of landscape architecture in historic environments methodologically progresses, the implications for understanding landscapes as critical processes, rather than static fields of artifacts, portends some rather dramatic revision of the ways in which we can view park lands from the interdisciplinary stance of cultural landscapes. This paper is a short introduction to building a mapping infrastructure for a historic cultural landscape to provide park management with an on-going, integrated portrait of history, change, process, and place.

The Dyea historic townsite is located within the larger Klondike Goldrush National Historical Park, with its headquarters in the southeastern Alaskan town of Skagway. Primarily known for its importance as a gateway boomtown for the 1898–1900 gold rush to the Yukon gold fields of interior Canada, Dyea's strategic importance lay in its location at the foot of the Chilkoot Trail, one of only three non-glaciated routes to the Canadian interior. Until overwhelmed by sheer numbers of "Stampeders" and goods waiting to make their way up through the Chilkoot Pass, the native residents of Dyea—the Chilkat/Chilkoot Tlingit—utilized the site for seasonal resource harvesting (salmon and berries as prime examples) and to maintain control over the Chilkoot trail as an important native trade route between coastal Tlingit and interior Tagish communities. After the abandonment of Dyea as a boomtown in 1900, its brief efflorescence as a thriving community became a memory as the former seasonal village, trading post, and gridded townsite transformed into a handful of homesteads. These, too, were relinquished as active vernacular landscapes by the 1940s. Until the creation of Klondike Goldrush National Historical Park in 1976, Dyea's significance was largely that of isolated residences and community recreation by virtue of its open, flat tidelands amidst the steep, rocky fjord topography that characterizes the Taiya River valley.

Now part of a national historic landmark, the remains of Dyea historic townsite are located within a dramatically changing landscape. Situated at the foot of a dynamic riverine corridor, Dyea's landmass exhibits a range of environmental dynamics. The heavily sedimented Taiya River is a braided, continually meandering system which, impacted by natural (e.g., topography) and constructed (bridge and armored banks) factors, continues to erode portions of the site at key points of scouring, bank cuts, and flood zones. Nearly one-third of the historic townsite and virtually all of the Tlingit village are now in the active river zone. In contrast to archeological degradation, numerous sloughs and low-water areas, historically rich habitats, continue as active salmon spawning sites. Isostatic rebound—the decompression of land as glaciers retreat—is another aspect of rapid environmental change. Since the gold rush period of 1898–1899, the Dyea townsite has risen nearly six feet in elevation, continuing to rise at an annual rate of 0.059 inches. Vegetation patterns, too, are part of the landscape story of ecological transition. The advance of a successional forest—no longer subject to logging and left untouched by park management—obscures nearly the entire range of archeolog-

ical resources still embedded in the landscape from the gold rush and homestead eras.

In order to further park management objectives for the both park and adjacent lands (which include a mix of federal, state, and private parcels), the documentation and analysis of Dyea as a cultural landscape began in 1999, and continues to the present. As an interdisciplinary approach, cultural landscape methodology is ideal for Dyea because it focuses on revealing layers of occupation and use over time in evolving environmental conditions—an integration that suggests powerful insights into how resource contexts for any future development is proposed and evaluated. This work is particularly timely considering the rate of impacts on the site due to increased visitation to Dyea with the rise in cruise ship tourism in nearby Skagway. In addition, larger numbers of rafting, biking, and horse tours, coupled with an increase in vehicular traffic on narrow, winding access roads, further emphasize the need for understanding long-range planning at the landscape scale.

In order to develop a strategy for a master plan for Dyea as a cultural landscape, a major effort to document and analyze the historic townsite and affiliated areas first entailed an intensive research and mapping effort, much of which is still underway. At the outset of the project, the goal was to create a spatial infrastructure in which the history of Dyea could be "read"—namely, the construction of base maps at a workable scale (rather than the 20-foot contours of the existing U.S. Geological Survey topographic quad maps). This series of base maps is the foundation for successive historical layers locating features and resources within more traditionally conceived historical periods (such as the Tlingit occupation, gold rush era, and early-20th-century homestead occupation). Also integrated within the historic layers is an environmental history of the site, particularly showing the extent of river meander, erosion, and deposition, as well as vegetation changes.

Developing a synthetic context for spatial data—ultimately leading to the ability to create elevational models with predictive capabilities—rests on assembling and analyzing an array of historical and contemporary data sets, ranging from rare narrative accounts, period maps, homestead surveys, and an especially pertinent series of aerial photographs from the 1940s, 1970s, and 1990s. Complementing these sources is a 1986 archeological survey map locating artifact clusters and sites (including many depressions associated with lost buildings), and a 2002 Bureau of Land Management cadastral survey of park boundaries. This latter survey is especially important in that it depicts the extent of the river's incursion along the remaining eastern edge of the townsite, a baseline for analyzing the historic aerial photographs from earlier periods.

Seasonal fieldwork during the period 1999–2002 contributed critical pieces of the overall spatial patterning of the site. In the attempt to locate an axis of two major streets from the 1898–1899 boomtown, the first (1999) field survey to address historic street alignment led to a computer-aided design (CAD) composite drawing depicting the series of historic survey layers from 1898 to 1986, complete with notations on the features recorded by the earlier surveyors. During the period 2000–2002, photographic inventories of the site's natural and cultural features were systematically documented for the first time. With the completion of the 2002 boundary survey, the basis for beginning a coordinated effort at GIS (geographic information system) mapping of the site began with the most recent collection of GPS (global positioning system) trail and road data throughout the townsite in the fall of 2002. With the completion of a LIDAR (light detection and ranging) survey in 2002–2003, these data will be further refined to fit a 2-foot contour interval with recording of all features at sub-meter accuracy, allowing for future three-dimensional modeling to suit a variety of park management needs.

The initial importation of the CAD composite drawing of the townsite and cadastral survey into an ArcView environment with the GPS roads and trail data provides the park with a powerful glimpse into the complexity of site's history. For the first time, the park has the beginnings of a "real time" model illustrating the progression of the landscape and its

resources—both natural and cultural—within an integrated context. Although only in its earliest stages, the assemblage of data in a GIS model attests to the efficacy of conceiving and documenting park lands as cultural landscapes. And, most importantly, it points to the critical importance of developing a comprehensive spatial infrastructure at the outset of any landscape planning efforts.

The importance of this initial mapping effort cannot be underestimated. First, the only mapping of Dyea during the past three decades has primarily focused on archeological surveys, and those are now nearly twenty years old. The coordinated impetus toward developing the CAD/GIS base map has literally created a "new" Dyea by revealing the extent of landscape scale and change. Certain baseline information is now established: for instance, the park boundaries and extent of riverbank erosion were in question, as were the identity and disposition of many of the less apparent historic features—vegetation and road traces. Discrete features present in historic photos and surveys can now be analyzed within the overall landscape matrix, broadening their interpretation. With the future addition of the LIDAR survey and an analysis of the existing spread of aerial overlays, knowledge of the degree to which this landscape has changed in the past half-century, in particular, will be of immense value to any park development schemes, from potential trail networks to a new visitor contact station.

Additionally, by utilizing an interdisciplinary team to gather, analyze, and compile the spatial data within the context of the cultural landscape, it quickly became apparent that mapping this complex landscape as a process would be a rich field of inquiry. For example, by extending the idea of the historic landscape to recontextualize artifacts within the broader paradigm of environmental change, the history of Dyea as a place begins to shift toward the interaction between culture and nature, historic communities, and the impacts of the powerfully meandering Taiya River. In essence, the fuller landscape story decenters the mythic boomtown (the artifact) as a romantic "golden age" in favor of revealing the continuum of change wrought by the river, and our attempts to reorder ideas of resource protection in light of the inevitability of persistent riverine impacts in the future. The river, then, becomes a force of encounter, a historical agent, that cannot be abstracted from the history of place.

In reality, the on-going mapping and analysis of the Dyea historic townsite reaffirms the inherent value of cultural landscape methodology in attempting to not only "reconstruct" the past on a landscape scale, but to create a historical model that responds to the future. With technological advances in mapping and illustration, the new baseline of knowledge about the Dyea landscape is the foundation for assessing future changes in the landscape and incorporating them into a living model of process, one that effectively illustrates the elliptical movement between time and place in rather enlightening ways. Ultimately, this envisioning of landscape as process is about placemaking—how a *sustainable history* can be created and interpreted from the "bottom up," rather than the typological model implied by the standard historic preservation methodology rooted in the National Register of Historic Places.[2] It eschews the idea of a dramatic discontinuity between past and present, and between past and future, by expanding the story of Dyea past the boomtown allure to one that reflects a world of constant change, and, importantly, how we map and interpret those changes with contemporary technology.

It also begins to ask very important questions about the storied nature of cultural landscapes: how are landscapes symbolically and physically constructed as repositories of a national heritage? Essentially, how are landscapes called into being by their physical representation and symbolic interpretation? How viable is the history we "write" by mapping, by our cartographic views of the world? And perhaps most importantly, how do we design new layers, stratigraphies that future generations will read as stories, voices in themselves?

The implications of a landscape literacy based on cultural landscapes methodology adds a critical dimension to the design process. How we perceive and read cultural

process in each unique environmental context, how we construct and map authentic histories of place is based on the revelation of a "deep structure" that can be graphically illustrated in sophisticated ways. But, just as there is no absolute past, but rather one that is contingent upon interpretation, there are no absolute landscapes whose history can be frozen to one time period or another. While this tenet is one that is generally accepted by most practitioners within historic preservation, the extension of the argument leads to the realization that any landscape is a medium of exchange and negotiation. This, in turn, constitutes a fundamental alteration of the historic preservation model. The central question is no longer simply one of "What is it?" (the artifact), but "How is it written?" (process), a challenge to the artificial separation between history and design, nature and culture.

This is particularly salient for the uninhabited landscapes of the national parks where the stakes for interpreting place are much higher. How we understand our designs as not solely ordering devices, interventions, superimpositions upon the land, but as woven into the tapestry of the cultural landscape as process signifies a critical self-awareness that national parks can incorporate to great advantage. As the Taiya River continues to shift and meander, altering the riverbanks by simultaneously accreting and eroding areas of the Dyea historic townsite every year, the proposed resource protection strategy of engineered logjams, as an example, is one that continues the story of human adaptation to place. Rather than being viewed as separate from the history of Dyea, they illustrate a rich window of interpretative opportunity that opens on a sustained process of change and adaptation. Situated within the cultural landscapes context suggested by the comprehensive basemapping project, the construction of engineered logjams can be incorporated seamlessly into the environmental history of place.

Ultimately, our ability to read the landscape of Dyea through advanced cartography and expanded interpretation speaks to our own contemporary perspectives and biases in constructing histories of place. The beauty of cultural landscape methodology is that it allows for a continual accretion of meaning, as the stratigraphy of physical and symbolic landscapes grows with each new layer of documentation, analysis, evaluation, and design. It poses some very intriguing questions that can be explored in equally intriguing and innovative ways. Building the spatial vocabulary—the infrastructure—through the ongoing mapping project at Dyea historic townsite has, in many ways, only just begun. But, as with any story, the deeper the excavation, the more enlightening, the more profound the tale becomes. And isn't this the real reason we cherish the national parks?

Endnotes

1. Henry Glassie, *Passing the Time in Ballymenone: Culture and History of an Ulster Community* (Philadelphia: University of Pennsylvania Press, 1982), 201.
2. I propose the term "sustainable history" as an alternative to the typological, thematic histories that are written to conform to the standards of the National Register of Historic Places. The fit between histories of landscape and those of archeological and architectural focus is uneasy, especially when considering the issues of natural site evolution, and range of environmental dynamics at play. With the principles of sustainable design adopted by the National Park Service, as articulated by architect William McDonough's Hannover Principles, a "sense of place" linked integrally with the "resources of the site" is the second determinant of sustainability, the first being the survival of the natural world (see National Park Service, *The Sustainable Grand Canyon* {1996}, in which McDonough's principles are articulated). It stands to reason, then, that constructing a history that reflects the full panorama of the landscape of place through a synthetic interpretation of its integrated environmental context, rather than concentrating on physical cultural resources and their integrity within "periods of significance," would more fully

reflect ideas of sustainability.