# Wholes, Halves, and Vacant Quarters: Ethnohistory and the Historical Method

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#### Introduction

At regular intervals since 1972, ethnohistory has been treated in the *Annual Review of Anthropology* (Carmack, 1972; Krech, 1991; Spores, 1980). It is particularly relevant for historical archaeology if one accepts Wood's (1990:81) definition of ethnohistory as "the use of historical documents and historical method in anthropological research." Ethnohistory is in many ways essential to historical archaeological practice, as it provides the methods for critically analyzing and synthesizing documentary sources used by historical archaeologists, whether complementary or contradictory to the archaeological findings. "Text-aided" archaeology (Little 1992) has many practitioners who research topics from many time periods.

Ethnohistory in the last decade signals important changes paralleled within anthropology and history. As Wylie has observed (1996:255), "history is rewritten each [academic] generation." Ethnohistory continues to expand, while underscoring the importance of the underlying tenets of the enterprise—historical method. As considered here, ethnohistory draws upon the disciplines of cartography, geography, linguistics, ethnology, cognition/perception, archaeology, and history, while using a combination of the scientific method and the historical method (Fig. 1) and the lens of anthropology.

The increasing importance of the archaeological record, in conjunction with historical documents, witnesses a significant reemergence of method and data in archaeology (particularly historical archaeology) and ethnohistory (Feinman, 1997; Nassaney and Johnson, 2000). Papers in ethnohistory since 1990 also show attention to archaeology and cognitive/perceptual analyses. This discussion will use two examples from northern Great Plains ethnohistory to make observations on method, theory, foundations, interdisciplinarity, and continuities among researchers in observations and concerns over time in northern Great Plains ethnohistory, with suggestions for future research directions. Despite this emphasis on the ethnohistory of the North American Great Plains region, this chapter has materials of interest to historical archaeologists working elsewhere in North America, and for that matter, the world.

Interdisciplinary scholars, such as ethnohistorians, must retain the context of the findings and methods they borrow from other fields while applying these methods and findings to new research questions and analyses. Ethnohistorical analysis and research, while following precepts of the underpinning method and theory, necessarily also is an interpretive—and thereby, personal—exercise. Ethnohistorians and researchers in other fields of interest to ethnohistorians have been framing their research and drawing upon methods and findings in an ever-widening circle of specialized topics. With increasing sophistication of question framing and analysis comes a need for multidimensional investigation. Table 1 shows the variety of topics considered by ethnohistorians and of interest in northern Great Plains ethnohistory since about 1990. The two ethnohistory examples used here will show how later researchers may revisit and reinterpret

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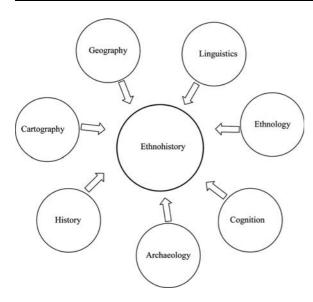


Fig. 1 Components of ethnohistory

earlier findings using added dimensions from different question-framing strategies as applied to the intersection of historical, anthropological, and scientific method that is ethnohistory.

The title of this chapter conveys the multidimensional and interdisciplinary tensions tugging at today's ethnohistory. Ethnohistory is, and remains, an interpretive and explanatory exercise. Burke (1992) and Windschuttle (1997) provide overviews of the diversity in content, method, interpretation, and explanation that exists in historical writing. Similarly, within archaeology, this diversity has been voiced by

O'Brien et al. (2005) and Feinman (1997) for its science—history dichotomy. This overview examines some of these tensions and outlines responses and advances in ethnohistory in the last decade.

### **Ethnohistory**

Implicit in Wood's (1990:81) definition of the field (see above) is the tenet that method, in addition to evidence, forms the core of ethnohistory as a research strategy (DeMallie and Ewers, 2001; Krech, 1991; Rogers and Wilson, 1993; Wedel and DeMallie, 1980). Ethnohistory has remained broad and multifaceted in content and problem orientation and in using interdisciplinary methods from history, anthropology, and archaeology. Problem orientation often draws as much from history as from anthropology (DeMallie and Ewers, 2001; Fischer, 1970).

#### **Historical Method**

Shafer (1980:40–43) and Wood (1990:84–92), among others (Windschuttle, 1997:219–221), describe the historical method. It shares common elements with the

Table 1 Selected Recent Research of Interest in Northern Great Plains Ethnohistory

Topic	References
Ethnogenesis	Bakker 1997; Foster 1996; Galloway 1995; Hill 1996; Moore 1987; Wood 2002
Culture history	Bakker 1997; Emberling 1997; Ewers 1997; Fox 1988; Gibbon 2003; Lyman et al. 1997; Picha 1996
Cartography	Birk 1992; Black 1997; Edney 1999; Fox 1988; Konvitz 1987; Lewis 1998; Picha 1993, 1996; Wood 1993b, 1996, 2003; Woodward 1998
Archaeology	Bernardini 2005; Brumfiel 1996; Cusick 1998; Fox 1988; Gibbon 2003; Hill 1994; Mason 1997; Robb 1998; Rogers and Wilson 1993
Historical archaeology	Feinman 1997; Little 1997; Purser 1992; Wood 1993a; Wylie 1996; Yentsch and Beaudry 1992
Oral history	Bernardini 2005; Purser 1992; Sekaquaptewa and Washburn 2004; Vansina 1992
Cognitive/ perceptual	Crowe 2004; Hill 1994; Lakoff and Johnson 2003; Robb 1998; Sekaquaptewa and Washburn 2004; Washburn 1999, 2004; Washburn and Crowe 2004
Fur trade relations	Calloway 2003; Gibson 1997; Thiessen 1993
Exploration	Allen 1997a, 1997b, 1997c; Calloway 2003; Galloway 1997; Ponko 1997; Ronda 2003; Wood 1993b, 2003
Linguistics	Bakker 1997; Campbell 1997; Drechel 1997; Foster 1996; Hill 2004; Mithun 1999
Place names	Afable and Beeler 1996; Birk 1992; Nelson 1997
Epidemiology	Alchon 2003; Barnes 2005; Scott and Duncan 1998; Trimble 1994; Verano and Ubelaker 1992

*Note*: Selected work from non-Plains regions was included when, in the author's judgment, the method and analysis could be adapted to concerns in Plains historical archaeology and ethnohistory.

scientific method as outlined by Lustrucci (1963:109) and Schumm (1991:18–27) and involves the following:

- 1. Problem formulation and document search;
- 2. External criticism—document authenticity;
- Internal criticism—credibility of details from a document;
- Independent lines of evidence—details and interpretations supported by information from different sources; and
- Reliable information transferred to narrative that is refined and defensible.

The strengths of historical method are numerous. First, the initial formulation requires that the problem be addressed in terms that permit its testing in operationalized terms (Fischer, 1970:3–39). I follow Feinman (1997) in suggesting that false dichotomies have been established between archaeology as science and archaeology as history. It is not an "either/or" situation but rather an "and" complementary combination, where method complements problem formulation. Fischer's (1970) classic work seems either to have been overlooked or forgotten by many practitioners in the field of ethnohistory.

#### **Nicollet and Densmore Case Studies**

Two examples from the North American Great Plains are used here to illustrate the role of ethnohistory and the complementary nature of historical documents and archaeological data in addressing research questions: (1) Nicollet's 1839 expedition and Hydrographical Basin map and report and (2) Densmore's studies on Mandan and Hidatsa music and thoughts on her work as an early ethnomusicologist, coupled with Catlin's and Bowers's research on the Mandans and Hidatsas, particularly with reference to the Mandan O-kee-pa ceremony. More examples abound in ethnohistorical research, e.g., Fox (1988), Picha (1996), Wood (1993a, 1993b, 1996, 2002, 2003), and Bernardini (2005).

### **Independent Lines of Evidence**

The general and the particular are often viewed as polar and dichotomous extremes when, in fact, skillfully employing both is essential to historical research. One kind of particularity is external and internal criticism of individual documents examined. From these particulars, the general is built, by using independent lines of evidence to build and bolster interpretations and inferences from the record. The general is the whole, defensible narrative.

James Hill (1994) has suggested that archaeologists use two different methods—"Established Generalization Testing method" (EGT) and "Tight Local Analogy method" (TLA)—to ensure testability and defensibility. Ethnohistorians, too, test their whole defensible narratives in part on external and internal criticism of the particulars, the documents and details summoned in fashioning the narrative.

## Joseph N. Nicollet as Enlightenment Ethnohistorian

Joseph N. Nicollet's 1838 and 1839 expeditions under the auspices of the U.S. Army Corps of Topographical Engineers resulted in the 1843 cartographic masterpiece, the Hydrographical Basin map (Nicollet, 1843), and a Senate report. James Ronda (2003:27–28) said of the Corps' principal figures, "[Colonel John J.] Abert and [Secretary of War Joel R.] Poinsett were not only bureaucratic allies—they also shared a common view about the nature of western exploration. That such exploration should put science in the service of empire was plain enough."

As DeMallie and others (DeMallie and Ewers, 2001:26) have suggested, northern Great Plains ethnohistory was an outgrowth of the expeditions of Catlin in 1832, Maximilian-Bodmer in 1833–1834, and Nicollet in 1838–1839. Of the explorer-chronicler triumvirate, Nicollet is surely the one whose contributions are least known (cf. Catlin, 1967; Porter, 2002). In my opinion, Nicollet's work lays the foundation for northern plains ethnohistory. Nicollet's ethnohistory was grounded in the French scientific tradition of Laplace, informed by the geological principles articulated in England by Lyell, and based in the German geographic tradition of Humboldt. As with Humboldt, Nicollet aimed toward synthesis of knowledge.

David Hackett Fischer (1970:38–39) asserts that question framing may be as important in [ethno]-historical research as the result. The products of Nicollet's 1838 and 1839 expeditions show the importance of question framing. Nicollet framed his task as a holistic one, to depict the hydrographic basin in a map and report cumulated from diverse lines of evidence.

# Joseph Nicolas Nicollet and His Contemporaries

Figure 2 names some of Nicollet's mentors and colleagues, and it shows that his influences were drawn from international circles in science and government. In addition to his correspondence with Humboldt and Laplace, Bray (1970b:242–244, 1980:35–36) documents that Nicollet maintained contact with other scholars such as the Belgian Adolphe Quetelet—the future father of statistics and "social physics."

Nicollet's astronomic and cartographic training in France mirrored that of his mentor, Pierre-Simon de Laplace. Gillispie's (1980:84–91, 2004) review of French science of the Enlightenment and Romantic eras chronicles the ascent of the quantitative approach over the qualitative and places Laplace at the center of French Enlightenment science as the

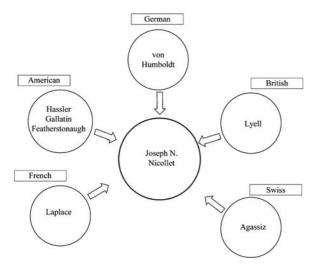


Fig. 2 J.N. Nicollet and the nineteenth-century scientific world

embodiment of exactness. The core of Laplace's method—precise measurement—carried great weight whether reflected in Nicollet's pursuits in astronomy, cartography, or ethnology. As Ponko (1997:342) has characterized this measurement-centered method: "Nicollet began his surveys from a carefully selected departure point and immersed himself in intricate work involving thousands of astronomical observations and other topographical data for the preparation of maps. He also used the barometer for the measurement of altitude."

Key among Nicollet's influences was Alexander von Humboldt. Godlewska (1999a:239) observed about Humboldt, "It is my contention that in his scientific graphics he was trying to develop or adapt from the work of others a language—or a way of seeing—that would encourage both conceptual depth and rigor and holistic vision." Similarly, Nicollet's cartography presented a holistic, rigorous scientific understanding of hydrology, topography, ethnology, and history. What Humboldt did for the natural sciences in Europe, Nicollet emulated in his cartography in North America. Bray (1980:46) reported that Nicollet aimed to add "to the progressive increase of knowledge in the physical geography of North America."

Late-eighteenth-century geographic vocabulary emphasized precision in defining terms and focused the cartographer's task on mapping the drainage basin (Godlewska, 1999b:42–45; Konvitz, 1987:84–85; Rudwick, 1997:133-56, Fig. 17, 2005:474-484, Fig. 9.1). In French, the key term is partage des eaux—the division between two water basins. Nicollet's cartographic background is reflected in what is depicted in the maps and how the particulars were incorporated. Nicollet combined depicting drainage basins (hydrology) with hachuring, or using hash symbols to depict contours of land masses (topography) (Friis, 1970:Fig. 12). Livingstone and Withers (1999:123) pose the relations in Enlightenment geography "As the meeting point between theory and practice, history and geography, the explorer and the aboriginal, the ontological and the epistemological, the archive and the field, mapping emerges as one crucial element in the evolution of Enlightenment thinking."

On the geographer Humboldt's influence in scientific circles, Godlewska (1999b:126; also see Helferich, 2004) notes, "In an era in which

description unlinked to either empirical research or theory had ceased to find favor, Humboldt sought to reintegrate description, empirical work, and theory about the cosmos." Humboldt put it simply: "Everything is related." But Humboldt did more than that: he achieved integration and synthesis of natural and cultural realms. Humboldt's achievements were exemplified by his graphic additions—isothermal lines and landform cross-sections—that nineteenth-century scientists drew upon, including Nicollet.

Nicollet referred to Humboldt as "the Nestor of scientific travellers" in his congressional report (Bray, 1970b:3). The geographic influence of Humboldt permeates the writings and cartography of Nicollet. Geologic cross-sections along the Missouri and other annotations on the manuscript maps of the 1839 expedition provide evidence in support of this claim (Wood, 1993b:Plates 43, 52, 59, 61). Prior to 1831 Nicollet was undoubtedly aware of Humboldt's work, perhaps as early as 1808, when Humboldt returned to Paris to work on his monographs, and certainly later as Humboldt's monographs neared publication.

Not a Nicollet mentor but an influence was Louis Agassiz, whose scientific stature continued to rise during Nicollet's lifetime. Nicollet had referred to Agassiz's glacial studies and offered alternative scenarios (Bray, 1970a).

Lyell's influence on Nicollet may be traced through publication, if not communication. English scientist Charles Lyell's three-volume *Principles of Geology* (1830–1833; reprinted in 1990) provided a synthesis of vulcanism in geological thought and was among the works in Nicollet's library (Bray, 1970b:242–244). Lyell's glossary includes the Basin of Paris but lacks the conceptual or analytical rigor that Nicollet applied to the hydrographic basin.

The context of Nicollet's scientific contributions paralleled that of Humboldt. Both men's careers encompassed Enlightenment positivism and the Romantic era onset in Europe and America. Richards (2002:520–521) proposes that the German Romantic tradition includes the mid-nineteenth-century writings of Humboldt, his *Cosmos* in particular.

Natural and social science circles in America were small in the first decade of the nineteenth century. By the late 1830s, scientific circles were expanding, but the natural and social sciences remained a small cadre of well-informed and knowledgeable participants. Shortly after arriving in America in early 1832, Nicollet was introduced to Ferdinand Rudolph Hassler, superintendent of the U.S. Coastal Survey in Washington. Aided by Hassler's network of Washington political and natural science connections, Nicollet in 1838 became affiliated with the U.S. Army Corps of Topographical Engineers. Through this affiliation, Nicollet was to embark on a remarkable journey through the Southeast, Midwest, and Northern Plains that would consume the remainder of his too-short life.

American ethnologists include American scientific acquaintance, Albert Gallatin (Bieder, 1986:16–54). Foremost in carrying out the American scientific tradition of the early-nineteenth century, Gallatin was better known as secretary of the treasury in President Thomas Jefferson's administration. The Swiss-born linguist and ethnologist founded the American Ethnological Society in 1842. Gallatin's 1836 "Map of Indian Tribes of North America" proved influential—although aspects of its northeastern Plains cartography were superseded by Nicollet's masterpiece (Bieder, 1986:16–17, 31–33). Gallatin's classification of American Indian languages and the customs of the peoples who spoke them foreshadows the work of anthropologist Lewis Henry Morgan.

Nicollet's natural science contacts in America included geologist George W. Featherstonhaugh. The sum of geologic, geographic, and cartographic knowledge of the northeastern Great Plains prior to 1838 can be gleaned from Keating (1959) and from Featherstonhaugh (1836:153–155; Friis, 1970:124). As Featherstonhaugh (1836:13) recommended in his 1836 Congressional Report:

A geological map of the whole United States, where all the formations would be exhibited on a large scale, and the most important deposites of fuel, metals, and useful minerals be accurately be laid down, would be a monument both useful and honorable to the country at home and abroad, and I trust the day is not distant when Congress will direct such a map to be constructed upon a scale commensurate with the importance of the undertaking.

Nicollet's hydrographic work under the Topographical Engineers was indeed part of the cumulative efforts urged by Featherstonhaugh.

### Nicollet's Legacy

Nicollet's legacy to northeastern Plains ethnohistory entails much more than the few place names in the modern-day states of Minnesota and North Dakota that either bear his moniker or imprint. Relations between humans and their environment rested at this interface—the Humboldtian tradition—later spelled out in *Aspects of Nature* (Humboldt, 1849). Nicollet's work in Great Plains cartography and geography garnered sincere acknowledgment by Humboldt in *Aspects*.

#### **Enlightenment and Romanticism**

America in the 1830s was in a state of flux among competing "isms": capitalism, expansionism, Jacksonianism, and romanticism. Nicollet was steeped in Enlightenment methods of science, yet influenced by Romanticism. Ever exact and precise, Nicollet at times delved into romantic descriptions of the prairie and the forest and its peoples in his journal writings (Bray, 1980:240–241).

#### Reconnaissance, Mapping, and Archive

In American geography and cartography, Nicollet's application of the "hydrographic basin" is a revolutionary concept. French mapping of the early nineteenth century had applied hydrographic analysis to the "Paris Basin" (Gillispie, 1980, 2004; Gillispie et al., 1997). What Nicollet did with the hydrographic basin was comprehensive and, indeed, holistic. Ponko (1997:342) observed of Nicollet's 1839 expedition: "As they passed the divide between the Missouri and the James River, Nicollet began thinking of the entire region as not just a land of hills and valleys but as a "basin" within which all the water ultimately flowed to a single outlet—the Gulf of Mexico via the Mississippi River." John C. Frémont-the Pathfinder, Nicollet's assistant and protégé—applied the concept of the hydrographic basin on a grand scale to his mapping and explorations of the "Great Basin" in the 1840s. Matthew Edney (1999:165) has reflected on Enlightenment "reconnaissance, mapping, and archive" in the following terms:

Enlightenment map making—which might more properly be referred to as "mathematical cosmography"—lay at the core of geographical representation and, indeed, served to epitomize Enlightenment encyclopedism. Specifically, geographical knowledge was idealized as constituting a comprehensive archive, constructed through the geographic practices of reconnaissance and mapping [emphasis in original].

# Place Names, Cartography, and Anthropogeography of Place

Place names and their etymology remained the focus of Nicollet's scientific graphics: "In general, I recognize everywhere that the names of places in this region, those which the French gave them and those which the Americans translate from the French are all from the original Indian and are only the translation of savage names in two modern languages" (Bray, 1969:36).

In the same vein, Nicollet wrote, "It is of great interest in the history of Geography to conserve the relationship of these names, retain their etymology and their useful names" (Bray, 1969:36). William H. Keating (1959:II:33) echoed these sentiments in his narrative of the Long Expedition: "It is to be regretted that the practice of retaining the Indian appellations has not been more generally adopted by travellers [sic]; they have rejected the melodious and original names, to substitute others less pleasant to the ear, and worn out by the frequent use, not only on this, but also on the other side of the Atlantic." It is conjectured that Nicollet's musical aptitude played into his linguistic skills as a faithful transcriber of American Indian languages he encountered in his plains expeditions. Seventy years later, Frances Densmore used her musical aptitude to expand knowledge of Mandan and Hidatsa music—the second case study discussed.

# Ethnohistorical Contributions of the 1839 Nicollet Expedition

Several examples serve to characterize the complexities and contributions of Nicollet's cartography and ethnohistory. Nicollet's ethnohistorical contributions draw upon these primary sources—oral

traditions, journals, field notes, manuscripts, and early printed maps—emanating from separate lines of evidence, capable of internal and external criticism. Additional sources and interdisciplinary insights will be used in revisiting and reinterpreting examples from Nicollet's map.

The expedition left St. Louis, Missouri, on April 4, 1839, aboard the steamboat *Antelope*. The goal was to ascend the Missouri as far as the American Fur Company post at Fort Union. Reconnaissance and mapping were to include the vast region to the Missouri Coteau and Coteau des Prairies—the eastern two-thirds of the modern-day state of North Dakota. The 1839 expedition's ascent was slowed by low springtime water and snag obstructions. Hopelessly delayed, the point of initial departure for overland reconnaissance was changed to Fort Union's downriver sister post, Fort Pierre—in northern modern-day South Dakota.

Among the expedition members were several individuals with extensive guiding experience and at least bilingual interpretive skills in the northeastern Plains. These include Étienne Provost, Luison Frenière, William (Dickson) Dixon, and Pierre Dorian. Many place names on the hydrographic map undoubtedly derive from information garnered from conversations with and observations of Native peoples the Nicollet party encountered. G. Hubert Smith (1977:70) observed some 50 years ago, "Dialectial forms of place names sometimes reveal, as in Nicollet's evidence, traditional claimants to particular streams, valleys, and other physiographic areas and landmarks."

#### Rivière à Jacques and the James River Valley

Nicollet's travels through the James River Valley of modern-day North Dakota provide written and cartographic records of significant detail that render Featherstonhaugh's 1836 observations pale in comparison. The James Valley's physical setting comprises an entrenched, meandering, and heavily timbered stream that is backed by elevated uplands, just as Nicollet described. One of the stream's names in Dakota—Tschan-sansan or cream-colored tree—refers to the abundance of this critical but often uncommon resource in prairie ecosystems. In other writings and winter-count documents, the

watercourse is known as the Dakota River for the Yanktonai Dakotas that settled along it (Picha, 1993:95, 1996:13, 44–45, 54–56).

#### **Sheyenne Valley and the Salt Water Region**

Nicollet continued to the northeast along stretches of the Sheyenne Valley on his trek to Mini Wakan or Devils Lake. Nicollet's composite manuscript maps of the Sheyenne Valley bear several annotations that are worthy of discussion.

One place name, Okiedan Buttes, is of interest because as a landmark it has a history. Nicollet, unfortunately, does not discuss the place or the origin of the name, not in annotations on his map or in his report or journal. Okiedan or Okiedan Buttes only appear on the final manuscript map and on the published Hydrographical Basin map. DeMallie (personal communication, 2002) believed the place name could derive from the Yanktonai Dakota *okiye* "to help" or *okhiye* "to talk, make peace with," and he was inclined to favor the latter as a proper place name—Peace Buttes.

Louis Garcia (DeMaillie, personal communication, 2002) suggested that Okiedan was a transcription error of the Yanktonai word, *okicize*, and that the appellation refers to the location of an 1836 battle between the Yanktonai Dakotas under Waneta [or Wahanantan] and a Mandan–Hidatsa war party under Wounded Face. Jeffrey Hanson (1983) has described this mortal confrontation.

I tend to side with DeMallie's interpretation, and Nicollet's journal entry of July 21, 1839 (Bray and Bray, 1976:177), may be of relevance: "Camp on Spring Creek, 3 miles from the junction of the Sheyenne. Send a message of peace to the camp of *Wahanantan* and *La Terre qui brulé*, and announce my arrival." The matter must remain unresolved, given that we do not have Nicollet's original transcription or his translation of the place name.

Three days later, on July 24, 1839, Nicollet recounted in his journal along Bald Hill Creek near the Sheyenne River confluence (Bray and Bray, 1976:181): "Here the bald hills are remarkable. They resemble Indian mounds made by the hand of man." Bald Hill Mounds and the Biesterfeldt archaeological site—ancien village des Chayennes, as recorded by Nicollet—are known by

archaeologists (Wood, 1993b:Plate 75A). Other undocumented oral traditions that appear as annotations on Nicollet's manuscript maps await investigation and treatment by historians and archaeologists.

Commemorating acquaintances, colleagues, and Native peoples, and accurately capturing hydrology and topography on the 1843 Hydrographical Basin map match the best science and practice of the time. Nicollet's practice of transcribing place names used by Native peoples has been recounted. Other place names on the map commemorate people known to expedition members. In North Dakota, Lake Jessie—named for Jessie Benton, John C. Frémont's fiancée and future wife—appears on the map. In South Dakota, the Topographical Engineers' leadership is represented in Lakes Abert and Poinsett, the former corrupted to Lake Albert.

# Summary of Nicollet's Contributions to Ethnohistory and Ethnohistorical Method

The ethnohistory of northeastern Great Plains peoples received initial treatment in the prolific but under-recognized contributions of Joseph Nicollet, who can be counted among the first generation of northeastern Plains ethnohistorians. His northeastern Plains maps and the landscapes he depicted retain the imprint of the peoples who named and used them. Place names on nineteenth-century manuscript maps and documents serve as a conduit linking the Native American world with the one reinvented by Euroamericans of the same period. Joseph N. Nicollet was an enlightened and revolutionary investigator; his work is encyclopedic in scope. Few investigations have produced the wealth of ethnohistoric information that Nicollet's did.

# Frances Densmore as Cognitive Investigator

The study of traditional music, ethnohistory, and culture history shares common methods and foundations, as Frances Densmore demonstrated in her six-decade career. Revisiting Densmore's publications

on Native American music and her thoughts about her work provides the opportunity to acknowledge her now largely overlooked or forgotten contributions. Comparing Densmore's field recordings, song analysis, and thoughts about her work with Alfred Bowers' and George Catlin's works on the Mandans and Hidatsas reveals parallel findings on symbolic metaphor as embodied in Mandan and Hidatsa music and ceremony, as transferred to material culture, and as may be encountered tangibly in the archaeological record (DeBoer, 1991). Catlin's (1967) O-kee-pa narrative from the 1830s and Alfred Bowers' (1950, 1965) texts on *Mandan* and *Hidatsa Social and Ceremonial Organization* bracket Densmore's work.

### Frances Densmore as Musicologist

Ethnomusicology is often relegated to the purview of folklore, or it is pigeonholed somewhere among three subject approaches that Neil Judd (1967:4) identified as those that the Bureau of American Ethnology (BAE) studies embraced—Philology, Mythology, and Habits and Customs. Aptly, Bruno Nettl (1983:252) captured the essence, "The History of Ethnomusicology is the history of Fieldwork." Frances Densmore's career epitomized that essence. But, as she observed, "there is more to the preservation of Indian songs than winding the phonograph" (Hofmann, 1968:v).

Densmore undertook her fieldwork among the Mandans and Hidatsas on the Fort Berthold Indian Reservation in 1912, 1915, and 1918. Bowers's fieldwork among descendants of the same people began in 1930, and his investigations resulted in two classic treatments of Mandan and Hidatsa social and ceremonial organization (Bowers, 1950, 1965).

The State Historical Society of North Dakota (SHSND) supported Densmore's first season. She used BAE equipment and contacts supplied her by the SHSND. Densmore's relationship with the SHSND Secretary, Orin G. Libby, might best be characterized as tentative and professional. Archival inquiry reveals that correspondence occurred intermittently during the 11-year interval between the initiation of fieldwork and the 1923 publication of *Mandan and Hidatsa Music* (Densmore, 1923).

Primary documentation (Libby, n.d., Box 10, Folder 6; Box 28, Folder 7) suggests that BAE-SHSND relations were strained on occasion—largely as a result of publication giving more credit to the BAE than to the SHSND, and the BAE retaining ownership of Densmore's recordings.

Densmore's theoretical orientation included a cognitive component, as (Hofmann, 1968:62) noted in an October 20, 1943, letter, "In regard archaeology vs. ethnology: Long ago I invented the phrase 'archaeology of the mind.' The idea was that my work was digging down into the *minds* of old Indians, going through one layer after another until I got to what they remembered of the oldest traditions."

#### **Culture History**

The operational definition of *culture history* used here combines Jan Vansina's *culture* with Bruno Nettl's *history*. Of culture, Vansina (1992:5) observes:

People can act only on the basis of their cognitive reality, not on the basis of physical reality itself; cognitive reality is culture. ... Moreover, cognitive reality always includes features for which there is no physical counterpart. The cognitive landscape of peoples in the rain forests [I interject Plains] encompasses the abode of spirits. ... Cognitive reality is not a selection of features drawn from the physical habitat; rather, it is totally congruent with the physical world as the whole world.

Densmore's remarks about archaeology of mind certainly show awareness of and concern to know the cognitive realities of her cultural informants.

Bruno Nettl (1983:193) defines (ethnomusical) history as a series of types of transmission:

Beginning with the microcosm, the piece and its history, let me propose that there are types of histories, four kinds of things that a piece, once composed, may experience. In Type I it may be carried without change, more or less intact. In Type II it may be transmitted and changed, but only in a single version or one direction, so that it continues differently from the original but without the proliferation of variants. In Type III it may experience the kind of transmission that produces many variants, some of them eventually abandoned and forgotten, others becoming stable once differentiated, others again changing constantly. In all three of these types the history of the composition is essentially self-contained, all forms derived specifically from the original creation. A fourth type is similar to type III, developing within the family principle but borrowing material from other, unrelated composition.

Densmore characterized her work as "study of Indian music" (Hofmann, 1968:62), insisting that "Music is a human expression, originating in a mental concept, and is not the product of laws. My effort has been to present music from the standpoint of the Indian, with such comparisons to our music as would aid our approach to it, but the origin has, in all the important old songs, been the 'dream." Densmore's interest first was in recording the oldest, most traditional songs. Among the Mandan and Hidatsa, she noted in successive field seasons that singers, both male and female, of personal songs at times changed lyrics to reflect events or changes of mood and outlook that had affected them. Densmore appears to have dealt regularly in her fieldwork both with "the dream" or with types of cognitive reality, and with several types of traditional songs that informants brought to her.

Densmore plumbed her subjects' cognitive realities and recorded several of the types of histories that Nettl proposed. Densmore also was interested in symbolism embodied in musical instruments such as the drum and the drumstick. She noted the faint but still visible goose tracks painted on the Goose Society drum she collected. Other comments Densmore made about her fieldwork with Indian tribes whose songs she collected indicate Densmore's awareness of use of symbols to convey song and ceremony.

#### **Ethnohistory of Symbolic Metaphor**

The relevance of symbolic metaphor to music and to material and cognitive culture has its roots firmly planted in Boasian anthropology. Recent attempts have focused on conjoining metaphor and plane symmetry as sources for framing testable hypotheses in the ethnographic and archaeological records of the American Southwest (e.g., Washburn, 1999, 2004; Washburn and Crowe, 2004). Robb (1998:342) has observed, "Symbolism of colors, textures, forms, and compositional styles may be the link between social relations, semantics, and artifact variation."

Metaphor is at the center of Native American musical and ceremonial traditions, as Washburn and colleagues (1999; Sekaquaptewa and Washburn, 2004) assert. Catlin (1967) asserted

that the Mandans' O-kee-pa ceremony embodied metaphoric symbolism; and several metaphoric features of the ceremony are explored here.

Particular attention in future investigations should focus on the role of dualities and dichotomies as cognitive symbols that may crosscut media in the Plains Village archaeological record (VanPool and VanPool, 2002). Plane symmetry and its variants have been classified in a number of ways by Crowe (2004). Recently, Whiteley (2004) has raised additional important points about Puebloan social organization (moieties and clans) and its importance in human terms—and possible tangible expressions in the archaeological record of the American Southwest.

Just as Alexander Henry, Maximilian-Bodmer, and Lewis Henry Morgan missed arriving at the Mandans' and Hidatsas' villages in time for the O-kee-pa ceremony, so did Densmore for the Ute's Sun Dance. With the Utes, a group who expressed hostility to her collecting efforts, she still was able to collect song from them, and she was given information about the by-then-prohibited Sun Dance. But Densmore was successful more often than not in recording ceremonies central to the Indians she visited. She was able to record Corn Priest and Goose Society songs—some of the oldest Mandan songs central to their identity as a people. Harrod (1995:117, Note 2) has observed, following Bowers, "The songs of the Okipa ritual memorialized, in historical order from ancient to more recent, the names and locations of past Mandan villages on the Missouri River between the Knife and Grand Rivers." Catlin did not record the songs, and neither Densmore nor Bowers were able to obtain them from informants, as the ceremony was last performed in 1889 or 1890.

Importantly, Densmore built on her earlier work among the Chippewa in recognizing cognitive aspects of Native American song and symbol: "An old woman, member of the [Chippewa] Grand Medicine Society, sang one of its songs and drew the picture by which such songs are identified. Later I showed it to a member of the Society at White Earth who recognized it and sang the same melody" (Hofmann, 1968:23).

Densmore recognized use of traditional symbols in a drawing as representation of a song of a long-standing ceremony of a society among a Native American group. For her, connections between song and symbol were immediate and part of what she and her informants experienced in communication of song.

Among the Mandans, dualities of color symbolism and metaphor and their significance remain little studied. Densmore (1923:38) and Bowers (1965:488) reported on color dualities in regard to "redstone" domestic and wood ceremonial pipes. As elaborated by Bowers, and as shown in Catlin's Okee-pa renderings, these color dualities are thought to include (1) yellow-black, (2) red-brown, and (3) other variants red-black-white, black-white, red-white.

I wish to pose two questions and provide possible answers to them that derive from consideration of color and symbolic metaphor expressed in the Mandan O-kee-pa ceremony. First, what is the function of the triangular or V-shaped bastion-like (wooden) structures depicted along the palisade in both Bodmer's 1834 painting and Prince Maximilian's map of the Mandan Village at Fort Clark (Wood, 1993a) that have vexed archaeologists and ethnohistorians? May these V-shaped constructions be temporary visible markers or symbols to the passersby that the Mandan O-kee-pa ceremony is commencing or in progress? Similar motifs of concentric circles bordered by triangular projections are depicted at the hip and shoulder of the Buffalo Dancer as depicted in Catlin's (1967) O-kee-pa. Alfred Bowers (1950:159), in his informant interview with Wolf Chief, suggests a natural source for the O-kee-pa buffalo [bison] bull dancer designs, "They painted him on the chest, legs, and arms with red, black, and white. All this was representative of this bug in color [... the worm on the chokecherry bushes]." The eastern tent caterpillar (Malacosoma americanum) is the taxonomic candidate that matches the coloration and markings depicted.

Second, what is the source of the "yellow dirt" mentioned by Catlin (1967:60-61) and used in the O-kee-pa ceremony to discolor and disarm the power of the black-painted evil one? At the Mandan Village at Fort Clark, yellow subsoil was exposed along a high vertical cutbank. Yellow subsoil also would have been exposed in areas where topsoil had been removed. Catlin's painting of the village illustrates exposed yellow subsoil in the village plaza. Traditional cultural preferences may be informative about the symbolic and cognitive connotations and about the duality expressed between the yellow earth (subsoil) and black (topsoil). Color dualities are worthy of further investigation in the Plains Village archaeological record.

# Summation of Densmore's Contributions to Ethnohistorical Method and Investigation

Two conclusions are drawn about Densmore's ethnohistorical work and contributions. One, Frances Densmore can be counted among the pioneers of Mandan and Hidatsa culture history. It is time to add her to the roster of innovative formative American anthropologists and ethnohistorians. Two, symbol and metaphor are central to Native peoples and are expressed linguistically and ceremonially. As Alfred Bowers (1950:viii) said of the Mandans, "behavior was traditional and stemmed from institutional sources, the sacred rites, and ceremonies."

Symbol and metaphor need to be reintroduced to the question framing and investigative reservoir tapped by Northern Plains archaeologists and ethnohistorians. Analysis needs to begin with the meaning and importance the cultural group assigns its symbols and metaphors. As Washburn (1999:558, Note 3) foresees, "I predict that the specific geometry used to metaphorically visualize cultural perpetuation will differ among cultures depending on the different ways cultural groups conceptualize essential life processes and relationships." Informants' (and investigators') cognitive realities and autobiographical memory of symbol and metaphor need to be taken into account as we carry on as anthropological archaeologists.

#### **Future Directions**

Ethnohistory is guided by the research questions posed, the supporting evidence marshaled, and the data generated—scientific method. It culminates in a defensible narrative—the historical method. Ethnohistorians have at their disposal the training and tools to investigate a host of topics relevant to a worldwide audience that few other disciplines do.

#### Wholes

Wolf's Europe and the People without History (1997) emphasizes articulating historical and holistic relations that involve people. Holistic investigation escapes the false dichotomy of viewing social and material relations

as separate, rather than as inextricably tied. Culture history signaled an emphasis on history of peoples, just as recent investigations of ethnogenesis do (Galloway, 1995; Hill, 1996; Moore, 1987). The archaeological record may supply one of the independent lines of evidence that Olson (1959) enumerated nearly five decades ago and as later discussed by Lyman et al. (1997) and Nassaney and Johnson (2000).

#### Halves

Halves, by definition, imply equal and divisible parts of the whole. Ethnohistory offers the vehicle to draw together the parts—an integrative synthesis as narrative. The two case studies focus on contextualizing and integrating the investigator (Nicollet and Densmore) with the investigated (Hydrographical Basin map and Mandan and Hidatsa music). Revisiting and reinterpreting historic context using evidence and additional analysis is a cumulative exercise that results in fuller explanations to the questions posed.

#### **Vacant Quarters**

Using interdisciplinary and multidimensional precepts that comprise ethnohistory has been a call that often has fallen on deaf ears in both academic and public communities. Ethnohistorians may rectify absences of interdisciplinary and multidimensional approaches through their research. Narratives that address the context of human history in all its complexities are testaments to the contributions of ethnohistory. These narratives are particularly critical to the practice of historical archaeology.

#### Conclusion

Ethnohistory has expanded in scope in the last two decades. It includes an array of topics beyond the traditional ones of culture history and culture process (Nassaney and Johnson, 2000; Wood, 1990). The expanded scope includes ethnogenesis, cognitive/perceptual analyses, and other topics. Ethnohistory is guided by scientific and historical method. Tensions that pull at ethnohistory are no different than those in the history of science in the eighteenth- or twenty-first

century (Bowler and Morus, 2005; Cahan, 2003). As Taper and Lele (2004:534) assert, "Evidence is a summation of data in light of a model or models." Ethnohistoric research parallels and complements the method that guides it.

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