The Records of American Indian Linguistics

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In the early decades of the nineteenth century a concern for American Indian cultures in general, and their languages in particular, was a natural focus for the nascent discipline of anthropology in North America (Bieder 1986). During the early years of professionalization, beginning around 1880, and with renewed vigor during Franz Boas's domination of the field in the early twentieth century, American anthropologists understood the documentation of American Indian languages to be one of their principal goals. Since the Second World War American Indian linguistics (and American Indian studies generally) has lost much of its former importance within American anthropology, although at least some study of Indian languages still takes place within an anthropological context.1 The voluminous collections of the past, however, remain an integral part of the anthropological record, and anthropological depositories continue to receive and archive the products of research on Indian languages.

Types of Records

Lexical Lists

The oldest, and certainly the most numerous, linguistic documents on American Indian languages are lexical compilations: vocabularies, wordlists, dictionaries, and other attestations of the lexicons of particular languages. For the most part these are bilingual and, at least in the older period, were elicited from standard lists of terms in a European language of colonization. The Latin-Spanish dictionary of Antonio de Nebrija (1503) exerted a great influence on the missionary friars of New Spain, and collections of lexical forms in indigenous languages were often guided by questionnaires based on Nebrija's vocabulary. The early collection of data from North American Indian languages was less routinized, but by the nineteenth century vocabulary questionnaires were in general use. Starting with survey work initiated by Jefferson and Gallatin, standardization of lexical elicitation reached its fullest flowering in lists published by the Smithsonian and widely circulated (Gibbs 1863, Powell 1880). In the twentieth century direct elicitation of vocabulary became subordinated to other documentary techniques, particularly the transcription of texts.

Most anthropological linguistic records collected after 1890 show to some degree the influence of the Boasian tradition of text-based investigation of grammatical structures (Darnell 1990b). Previous to this time, grammatical descriptions of indigenous languages were few and usually deeply influenced by the categories of traditional Latin grammar. It was Boas's view, most directly stated in his Introduction to the *Handbook of American Indian Languages* (1911), that the grammatical systems of non-European languages could be understood only through the analysis of extensive samples of natural speech. He urged his students to transcribe long texts at the dictation of storytellers and other traditionalists, and to use these texts as the primary data for linguistic description. This technique, particularly as implemented by Edward Sapir and later by Sapir's students, often results in massive, interlocking documentations of grammar, lexicon, and many aspects of traditional culture.2

In this mode of investigation, the primary document is the dictated text. After a text is collected, the investigator translates it, word by word, with a fully bilingual consultant (sometimes, but not usually, the source of the original text). From this translated document a vocabulary list is drawn — strictly speaking, a concordance, with each vocabulary item linked to one or more occurrences in the text — and further elicitation is carried out, as necessary, with a bilingual speaker to elucidate meanings and to identify grammatical processes.

A special case of text collection was the collaboration instituted by several anthropological linguists of the Boasian tradition with linguistically-trained native speakers. George Hunt (Kwakiutl) working with Franz Boas, Alec Thomas (Nootka) with Edward Sapir, and Alfred Kiyana (Fox) with Truman Michelson, were the most productive of these indigenous linguists in North America. Using a phonetic orthography (sometimes of their own devising), they transcribed — for pay — large numbers of traditional and contemporary narratives for later analysis by linguists. A similar collaboration existed in the 1930s between Franz Boas and a Lakota schoolteacher, Ella Deloria, although in Deloria's case she did not directly transcribe the narratives but recomposed them in her own Lakota (Rice 1992).

File Slips

From about 1900 through the 1970s, most linguistic anthropologists in the Americanist tradition used $3" \times 5"$ file slips (less frequently $4" \times 6"$) to arrange linguistic data for analysis. In most cases the linguistic data on these slips was transcribed from original field notes, but some linguists used file slips during elicitation. Whether the data are primary or secondary, the arrangement of the slips in the file boxes, usually with header cards, contains important primary information on the linguist's analysis. In instances where a full analysis of the language in question was never completed, the preliminary analysis represented by file slips is of obvious value, but even where full, published analyses exist it is often revealing to consult the linguist's primary analytic files. In some situations, slip files have been worked on by a succession of linguists.

Slip files were also the usual method employed by anthropological linguists to compile comparative databases. Here, only a small percentage (if any) of the data on the file slips is original to the linguist; most is copied from other sources. The ordering of the file slips, however, usually contains primary information on the linguist's hypotheses regarding cognacy and other relationships among linguistic forms.

Sound Recordings

Beginning in the early twentieth century, attempts were made by a few linguists to make sound recordings of the languages they were documenting. The wax-cylinder recordings that were the only feasible medium in field situations until the late 1920s could only capture short stretches of speech, and that usually with poor fidelity. While this was a suitable medium for songs and other short performances, narrations of any length were rarely attempted. In one exceptional circumstance, however, A. L. Kroeber and T. T. Waterman made wax-cylinder recordings of at least three complete myths from the last surviving Yahi Indian, Ishi, during their work with him in 1911. The longest of these, the Wood-Duck Myth, has a total playing time of nearly two hours and fifteen minutes and required 51 wax cylinders (Keeling 1991:269).

By the 1930s more satisfactory techniques of field sound recording were available. Between 1935 and 1939 Melville Jacobs made extensive use of a specially constructed portable phonograph recorder, as well as the studio facilities at the University of Washington radio station, to document many of the languages of the Northwest Coast on relatively long-playing disks (Seaburg 1982:37-8). John P. Harrington had a battery-operated field phonograph constructed, and he and his field assistants made nearly 1,000 disk recordings between 1929 and 1941, the largest of them containing nearly thirty minutes of speech. In the late 1940s a few linguists also experimented with wire recording technology, but the advent of the tape recorder around 1950 rendered all previous recording technology obsolete.

Tape recording revolutionized anthropological linguistic field practice. The tedious *viva voce* transcription of texts from slow dictation was almost immediately replaced by the practice of tape-recording a speaker and transcribing from the tape (preferably with the original speaker in attendance to explain and repeat obscure passages). More significantly, the ease of tape recording (particularly after battery-operated portable machines became standard) allowed the recording of casual speech, conversations, and complex sociolinguistic interactions, and thus stimulated the incorporation of such phenomena into the database. Some linguists, indeed, recorded every minute of their interaction with speakers.

Unfortunately, little attention was paid then (or is paid now) to the curation and archiving of tape recordings. An ambitious project, the Archives of the Languages of the World (ALW), was initiated at Indiana University in the mid-1950s, with a strong commitment to sound



John Peabody Harrington with three Tule Indians making dictaphone records of Cuna language and songs in the Smithsonian Institution, 1924. National Anthropological Archives. BAE GN 4305 A.

archiving. However, lack of technical support facilities led to the abandonment of the project, and in the late 1980s the recordings in the ALW collection were deposited in the Archives of Traditional Music, where they were catalogued and remastered under an NEH grant (Urciuoli 1988). Tape recordings made between 1950 and 1980 by fieldworkers for the Survey of California and Other Indian Languages at the University of California at Berkeley were remastered and archived in the university's Language Laboratory (Rodriguez-Nieto 1982), but few new materials are being added to this collection.

The wide diffusion of videorecording technology since 1980 has sometimes led to the substitution of videotape for audiotape in field recording. A recent project at the University of California at Davis, focused on building a library of videotapes documenting California Indian languages, is largely motivated by the potential instructional use

of such records. Many North American Indian groups are making similar efforts at video documentation for much the same reason.

Computer Files

During the past decade personal computers have become standard equipment for most field linguists. While there are relatively few instances of computers being used for primary data collection (although this is increasing with the wide availability of battery-operated portable computers), computers have quickly become the technology of choice for analysis and processing of secondary data. Few anthropological linguists today rely on slip files for the organization of their analytic work, relying instead on the growing number of off-the-shelf databases or text processing programs available. Most texts that are collected by contemporary anthropological linguists are soon converted to computer files that can be searched and organized by concordance-making programs.

Secondary Records and "Gray Literature"

Linguistic analysis produces numerous secondary records: analytical files, recopied lists of forms, typed or fair copies of texts, drafts of grammatical analyses, and many others. It is often difficult to separate primary from secondary materials, especially where the documents reflect long-term collaborative work. In general, primary and secondary material should be archived together.

A large and poorly documented "gray literature" has sprung up since the early 1970s in the numerous language preservation and revitalization projects that have developed in many Indian communities. Frequently under tribal sponsorship, these projects typically prepare and distribute locally a wide range of documentary and pedagogical materials, including dictionaries, language lessons, collections of texts, audio and video recordings, and (in recent years) computer text files and CD-ROM disks. Although the quality of these materials varies considerably, the best of them are quite professional. Many academic linguists have ties to one or more of these projects, and an increasing amount of the recent documentation of Indian languages is carried out in these contexts, often with the obligation to deposit the products of the linguists' work in tribal archives or otherwise make them available for local educational purposes. There is an urgent need for the comprehensive cataloguing and archiving of these materials. In some cases, however, tribes require formal agreements restricting access to the material collected, even prohibiting its dissemination beyond the community.

Repositories

Linguistic materials can be found in almost any anthropological records collection. Four important repositories, however, have concentrated on American Indian linguistic records and contain the bulk of the older material.

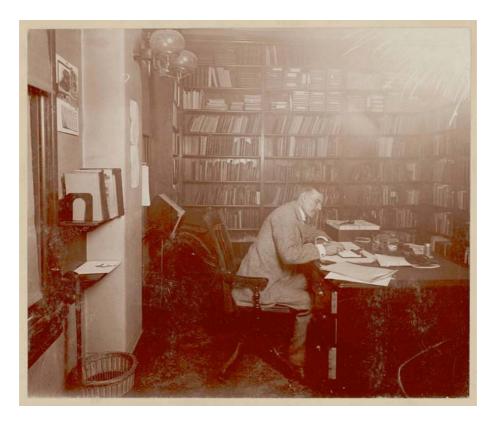
The Library of the American Philosophical Society (APS), in Philadelphia, holds the oldest and largest collection of manuscripts on American Indian languages. Thomas Jefferson, President of the Society from 1797 to 1814, made the APS the depository for his own large collection of Indian-related documents, and under the influence of Peter S. Du Ponceau, President from 1828 to 1844, manuscripts on Indian languages became the primary interest of the Library. The APS houses the largest collection of American Indian manuscript material in the world from this period (1780-1840). After Du Ponceau's time, this interest waned. In 1945, however, the American Council of Learned Societies donated to the APS the Franz Boas Collection of American Indian Linguistics. This collection included all of Boas's own notes and manuscripts, many of them concerned with American Indian languages, as well as a great deal of material resulting from fieldwork (largely linguistic) undertaken by other scholars who worked under Boas or had been supported by the Committee on American Native Languages from 1927 to 1937. This donation was immediately followed by a gift of all of Boas's personal and private correspondence.

The acquisition of the Franz Boas Collection established the APS as the primary repository for the records of twentieth-century American Indian linguistics, and probably of linguistic anthropology in general. Since 1945 the APS Library has received donations of the papers of Edward Sapir, Harry Hoijer, Paul Radin, and several other major figures. The American Indian materials of the APS now amount to over 50,000 items in 300 separate collections. Two detailed, copiously indexed guides have been published (Freeman 1966 and Kendall 1982). The first covers American Indian materials that were in the Library's collection as of 1965; the second covers acquisitions between 1965 and 1979. A substantial portion of the Franz Boas Collection (including the entire correspondence) and other records on American Indian languages have been microfilmed.

The APS continues to acquire new manuscript material on American Indian languages, through donations from retired scholars and the estates of deceased scholars, as well as from younger scholars who have received research funds from the APS.

The National Anthropological Archives

The National Anthropological Archives (NAA), a division of the Department of Anthropology, Museum of Natural History, Smithsonian Institution, preserves the archival collections of the Bureau of American Ethnology (BAE), the most active sponsor of linguistic research on American Indian languages during the last third of the nineteenth century and during the early years of this century. Established in 1879 as an independent research office in the Smithsonian, the BAE, under its founding director, Major J. W. Powell, consolidated previous Smithsonian efforts to survey the diversity of American Indian languages and cultures and brought together a significant archival collection (Pilling 1881).



James Constantine Pilling (1846-1895) at his desk in the Bureau of American Ethnology, March 1892. National Anthropological Archives Photo Lot 33. Inventory 02864300.

During its early years, the BAE carried out a wide-ranging survey of American Indian languages, focused on an extensive questionnaire published in two editions (Powell 1877, 1880). The BAE also employed full-time field researchers (A. S. Gatschet, J. O. Dorsey, and several others prior to 1900, and in the twentieth century most notably J. P. Harrington), whose collections went far beyond survey vocabularies. The vocabularies and other field notes collected for the BAE before 1890 were largely used to establish a linguistic classification (Powell 1891). Two of Powell's colleagues, James C. Pilling and J. N. B. Hewitt, served as archivists during this period (roughly 1880-1920). After Hewitt's retirement the collection was maintained and some cataloguing was done, but it was only when Margaret C. Blaker assumed charge around 1950 that the archives were properly catalogued and a thorough index prepared, including extensive cross-indexing by language and author. A photographic reproduction of Blaker's card catalog has been published (NAA 1975).

When the BAE was merged with the Smithsonian's Department of Anthropology in 1965, its archives were combined with the Department's collections to form the National Anthropological Archives. In subsequent decades, under the hands of professional archivists the NAA collections, including the BAE materials, have been thoroughly catalogued and analyzed. A preliminary guide is now available (Glenn 1992), although this does not replace the 1975 BAE catalog.

An extensive collection of early printed materials on American Indian languages was made for the BAE by James C. Pilling (Pilling 1887-1894). This collection, together with some manuscripts, was acquired by Edward E. Ayer in 1903. Ayer subsequently donated these materials to the Newberry Library, Chicago, where they now reside. A catalog, compiled by Ruth Lapham Butler, has been published (Newberry Library 1941).

Beginning around 1890, BAE fieldworkers began making wax-cylinder sound recordings of American Indian music and language, and before wax cylinders became obsolete around 1940, nearly 7,000 of these recordings were in the BAE collections. In 1979 the BAE wax cylinders were turned over to the Federal Cylinder Project (a project of the American Folklife Center at the Library of Congress) for duplication, documentation, and cataloguing. Three catalogues have appeared as of this writing (Gray and Lee 1985, Gray 1988, Gray and Schupman 1990), and three more are planned.

Special mention must be made of the J. P. Harrington Papers. John Peabody Harrington (1884-1961) was employed as an ethnographic and linguistic field researcher for the BAE from 1915 through 1954. During most of this period he was the only active linguist on the BAE staff and was able to set his own research agenda. He used this independence to carry out extensive and detailed field studies of scores of American Indian languages, mainly in California and other western states, with little attention to publication. He deposited only a small fraction of his collections in the BAE archives, storing the remainder at his home and in several other locations around the country. After his death, most of these materials were returned to the BAE (and then the NAA), although some were housed at the University of California, Berkeley, until the 1970s. Between 1961 and 1976 considerable sorting and preliminary cataloguing was undertaken, both at the NAA and in Berkeley, but only a rudimentary guide was prepared (Walsh 1976). In 1976, a five-year grant to the NAA from the National Historical Publications and Records Commission (NHPRC) allowed a comprehensive sorting microfilming project to go forward, resulting in the publication of a microfilm edition of The Papers of John Peabody Harrington in the Smithsonian Institution (Harrington 1981-1991), in nine volumes, each volume accompanied by a *Guide to the Microfilm* (Mills 1981-1985; Mills and Brickfield 1986-1989; Mills and Mills 1991). The Harrington papers are divided into 108 sections and occupy 683 linear feet of shelf space, over ten percent of the entire holdings of the NAA (Glenn 1992), and the complete microfilm edition contains 500 reels. Portions of the microfilm edition are now available in a number of research libraries and other institutions, although only a few are committed to purchasing the full set due to its cost. The distributor, unfortunately, is reluctant to sell individual reels to researchers.

In addition to his written field notes, Harrington also collected sound recordings. His many wax-cylinder recordings have been incorporated into the Federal Cylinder Project. From 1929 through 1941 he also made nearly 1,000 long-playing aluminum recordings of relatively good sound quality. An unpublished catalog of these recordings has been prepared by the NAA, but only about 400 have been transferred to tape and fully

documented as yet. In 1994 the NAA secured funding to complete this work over a two-year period.

The University of California, Berkeley

The University of California at Berkeley was the institutional sponsor of two important projects focusing on the collection of data on the Indian languages of California and immediately adjacent areas.

From 1901 through 1909, and continuing (though at a lesser rate) for several decades thereafter, the Department of Anthropology, under A. L. Kroeber, carried out an ethnological survey of the Indian cultures of California. Kroeber, who was an early student of Boas's, made the collection of linguistic data an important component of this survey. Kroeber himself collected extensive vocabularies, texts, and grammatical data on dozens of languages. Pliny Earle Goddard collected materials on the Athabaskan languages of northwestern California, while others, including T. T. Waterman, Edward Sapir, and E. W. Gifford, made smaller collections on selected languages. (Sapir, who worked for the University of California in 1907-1908 and in the summer of 1915, collected highly detailed and valuable notes on three distinct varieties of Yana.) Some of these materials were prepared for publication, but much remained unpublished in the (informal) archives of the Department and Museum of Anthropology. After Kroeber's death in 1960, these collections were catalogued (Valory 1971) and the written materials transferred to the University Archives (in the Bancroft Library). The Bancroft Library also maintains a separate collection of Kroeber's own papers and the papers of several of Kroeber's co-workers. The sound recordings (largely wax cylinders) in the collection remained with the Anthropology Department, housed in the Lowie (now the Phoebe Apperson Hearst) Museum of Anthropology. A fine catalog of the 2,510 items in this collection (including songs and spoken texts from tribal groups all over California) has been prepared by Keeling (1991). All of the cylinders have been transferred to audiotape for preservation purposes, and duplicates are easily available from the Hearst Museum for educational and research purposes.

Since 1953, the Department of Linguistics has housed the Survey of Californian Indian Languages (retitled the Survey of California and Other Indian Languages in 1965). This project, directed for may years by Mary R. Haas, provided funding (largely for graduate students working on their dissertations) for intensive field study of California Indian languages, as well as a few languages in adjoining states. The Survey requests that copies of all field notes and sound recordings be deposited with the Survey, and this request is complied with in most cases. In addition, several other collections have been added to the Survey files, most notably the Pomo field notes of Abraham Halpern. The Survey files are currently being catalogued, and access is through application to the Director of the Survey. The Survey's sound recordings are deposited in the Berkeley Language Center (formerly the Language Laboratory), where they are archived and catalogued. A catalog of holdings to 1981 is available (Rodriguez-Nieto 1982), and a revised and updated catalog is in preparation. Copies of some recordings are available for research,

although restrictions have been placed on certain items by the original collectors.

In addition to the records produced by the Department and Museum of Anthropology, the Bancroft Library holds a number of manuscripts and notes relating to the Indian languages of California and the West. The most important of these are the standardized vocabulary lists collected from over 100 California Indian languages and dialects by the naturalist and amateur linguist, C. Hart Merriam (1855-1942), between 1902 and 1935. Merriam's lists (collected in schedules that he had printed for this purpose) focus on terminology for plants and animals (see Merriam 1979), but they also contain valuable data on ethnogeography as well as more general vocabulary. These records were deposited in the Bancroft Library in 1977 by Robert F. Heizer, who had personal possession of them between 1950 and 1977 and who prepared a catalog (Heizer 1969). In 1993 the Bancroft Library received a grant to recatalog and conserve the Merriam materials. Handwritten copies of many of Merriam's California Indian vocabulary lists are in the Manuscripts Division of the Library of Congress.3

The Jacobs Collection, University of Washington

Melville Jacobs (1902-1971) made arrangements to deposit his correspondence, field notes, sound recordings, and other items relating to his long career as an anthropologist and linguist in the Manuscripts and University Archives Division of the University of Washington Libraries. The collection also contains field notes, recordings, and other materials of some of his students and colleagues. Included are primary documentations of about fifty Indian languages of Washington, Oregon, and adjacent areas from Alaska to northern California. The materials in the Jacobs Collection have been thoroughly archived, and an excellent guide to the Native American materials is available (Seaburg 1982). Access to the collection, however, is limited by the conditions set by the donors, which stipulate that the collection may be consulted only by "individuals who are able to demonstrate a clearly defined research need" in a written proposal to the Board of Trustees, a process that may take up to three weeks. These provisions will remain in force until 2006.

Interpreting the Record

One of the major tasks of linguistic anthropology in the decades ahead will be to exercise appropriate stewardship over the archival record of American Indian languages. As more and more North American Indian speech communities disappear, the demands put on the surviving documentation of extinct languages will inevitably grow. The task, however, will not simply be a matter of transmitting that documentation intact to future generations of scholars (and to educators, community leaders, and even individual language learners). Effective stewardship will also require the transmission of the large and complex body of analytic and philological skills necessary to use the documents meaningfully, as well as an historically-situated understanding of the goals of earlier work and the paradigms in which it was carried out.

Users of older documents require considerable guidance in the various modes of phonetic transcription that were used in their construction. This requires, as a prerequisite, an understanding of phonetics, preferably acquired in a course on field methods, and also considerable research into specific practices. As Ives Goddard has noted in an essay on the need for philological training in American Indian linguistics, "a prime desideratum . . . is a comprehensive survey of the phonetic alphabets and transcriptional practices which are encountered in the documents" (Goddard 1973:76).

More generally, users of a specific documentation need to know the context of the investigation out of which the document arose. What were the guidelines the collector was following? Was he/she, for instance, eliciting words from a standard vocabulary list? What was the prior experience of the collector with this language, or with languages of the same area or family? What were the basic goals of the investigation: classifying languages into families? discovering grammatical structures? collecting oral literature?

A complex, but illustrative, situation is presented by the J. P. Harrington Papers (principally in the NAA, as noted above). The small group of scholars who worked with the papers in the first two decades after Harrington's death in 1961 had considerable experience with similar materials. In recent years, owing largely to the dissemination of the collection through microfilm, dozens of new researchers are beginning to make use of the data. Many are individuals with little experience in research of this kind; some are Native Americans, including descendants of the men and women from whom Harrington obtained his data. Whatever their background and goals, all serious users of the Harrington materials must surmount a number of difficulties, largely philological in nature, ranging from determining the precise significance of Harrington's phonetic symbols and deciphering various shorthand devices he used, to understanding the sequence and context of the data as a whole.

Although invaluable orientation is provided by the guides to the major sections of the microfilm collection prepared by Elaine L. Mills, these are primarily inventories of the microfilm, specifying the contents of each reel. Since the collection is arranged language by language, in large geographic divisions, the guides provide no chronological synthesis of Harrington's work. Significantly for the neophyte, neither the guides nor any other readily accessible publication supplies general biographical information on Harrington (or his co-workers and consultants), discusses his methods, catalogs the scholarly work on Harrington materials, or accurately describes and cross-references the entire collection.

Beginning in 1992, over fifty Harrington researchers have held a series of meetings focused on exchanging practical information on working with the Harrington material, on building a scholarly network (including devices for maintaining it), and — most importantly — on making plans for the development of appropriate research tools. These plans include:

- (1) Compilation of a comprehensive "Users' Guide" to the Harrington Collection, including a complete chronology of Harrington's work, a cross-indexed list of languages and consultants, and a comprehensive guide to Harrington's phonetic transcription and other symbols.
- (2) Setting up of a "Harrington Resource Center" that will include a complete set of the microfilm, a library of published and unpublished works resulting from research on the Harrington materials, a collection of biographical material (including audio- and videotaped interviews with Harrington's surviving co-workers), and other materials.
- (3) Establishment of a regular newsletter or similar publication to be circulated to as many Harrington researchers as can be reached. (The ninth issue of this newsletter appeared in October 1994.)
- (4) Convening of a working group of Harrington scholars and computer consultants to lay plans for using advanced data-processing technology (including sophisticated database software and CD-ROM optical-disk hardware) for gaining better access to and greater flexibility in using Harrington's material.

Historical Knowledge

For the longer term, there is a need to carry out large-scale interpretive studies of the history and intellectual context of American Indian linguistics. To date, the most important landmarks of scholarship in this area are Hinsley (1981) and Darnell (1990a). However, these booklength studies need to be connected with smaller-scale, sustained research, published in accessible journals and represented (at least to some extent) in the curricula of graduate anthropology and linguistic departments.

An especially important aspect of this research is its interdependence with the preservation and cataloguing of the linguistic record itself. There are few if any archival collections that focus on the history of American Indian linguistics *per se*; rather, documentation of the history of the field is intertwined with the documentation of more general anthropological work and anthropological institutions, and at the same time, it is an integral part of the primary documents themselves. This means that the historian of the field must work closely with the curator, and vice versa. For example, no historical understanding of J. P. Harrington's work can be separated from the content and organization of his field notes; but also, the sorting and cross-referencing of those notes, and using them to their fullest potential, require more than a superficial understanding of his life, career, personal and professional relationships, and scientific goals.

New Directions

Interest in North American Indian languages is on the rise, on the part of both linguists and other scholars and Indian people themselves. It is a safe prediction that the future use of the archival documentation of these languages will be at once more intensive and more varied in its goals. Several initiatives are already under way or being discussed that would facilitate access and use, as well as address at least some of the problems of transmitting interpretive skills and knowledge.

Microfilm and Computer Databases

Linguistic documentation, particularly that which is extensive and complexly organized, usually must be worked with intensively over a long period before it can yield productive results. Even the preparation of a short dictionary from manuscript wordlists frequently requires a detailed reworking and resorting of the primary material. To ready a set of narrative texts for publication may take years. Under these circumstances, most researchers must work with these materials off-site, in microfilm, microfiche, or photocopied form.

For the most part, microfilming and photocopying is done on an item-byitem basis, as the need arises. However, in at least two instances, largescale microfilming has been undertaken. Many of the materials in the Franz Boas Collection of the APS have been microfilmed in their entirety as a matter of archival policy, and copies of the microfilms are sold to researchers at cost. And, as noted above, the entire Harrington collection in the NAA has been transferred to microfilm and is available (at least to libraries) from a commercial publisher. The NAA now considers the microfilm to be the primary means of scholarly access to the Harrington materials, and the originals have been transferred to a satellite storage site.

A number of universities and museums in North America maintain small research collections of microfilmed material from the APS or NAA, but only a few large institutions have made a significant investment in developing such collections. The University of California has purchased the full 500 microfilm reels of the Harrington papers, housing them in the Rivera Library at UC Riverside and making them available to researchers on other campuses through interlibrary loan. The Alaska Native Language Center, at the University of Alaska, Fairbanks, has a nearly exhaustive archival collection (in a variety of formats, primarily photocopy and microfilm) of all published and unpublished material on Alaska Native languages (see Krauss and McGary 1980 for a shelflist).

The rapid development in recent years of computer databases and large-scale digital storage capacity in CD-ROM format has stimulated proposals — none so far realized — to transfer large amounts of archival data on American Indian languages to a digital format. Unless the material is scanned in as a visual image, however, the difficulties posed by handwritten documents in specialized phonetic orthographies has so far made this impractical. Most linguistic documents can be digitalized only by keying in large amounts of material by hand, and the work must usually be done by linguistically sophisticated typists. Even so, hundreds of pages of the Harrington papers have already been keyed into a digital database in a project at UC Davis, and plans are being made for further work, since the end result — at least when the work is done properly — is a document that can be searched and restructured nearly instantaneously.

The availability of microfilm and photocopied versions of documents, together with the easy availability of photocopies, is stimulating the development of regional archives or study centers supporting work on specific languages or the languages of a region. The archives of the Alaska Native Language Center are perhaps the most comprehensive archival center of this nature (Krauss and McGary 1980), but there are similar centers for Algonquian languages at the University of Manitoba and for the Siouan languages at the University of Colorado, (see Rood 1981), and smaller collections elsewhere. One of the most interesting aspects to this development is that, increasingly, it is being sponsored by Indian tribal groups. Thus, the Confederated Tribes of the Coos, Siuslaw, and Lower Umpqua maintain at their tribal offices in Coos Bay, Oregon, a quite thorough archive of the published and unpublished documentation of their traditional languages (all of which are now extinct), including copies of sound recordings made by linguistic fieldworkers.

Plans are now being made in California for a California Indian Languages Resource Center to be located at UC Davis, which would serve as a regional study-center and archive for California Indian languages (including microfilm of the full Harrington papers and microfilm, microfiche, and photocopies of all relevant materials in the UC Berkeley collections). It would also serve as a coordinating center for smaller collections throughout the state, many of them tribally controlled, to loan and duplicate materials where needed as well as to offer training in archival and philological skills.

A center of another sort is being planned by the Center for Research and Cultural Exchange at the American Indian Arts Institute in Santa Fe, New Mexico. This site has been designated by the Native American Languages Act of 1992 as the repository for all materials (published or in other form) produced under NALA funding.

The archival treasure house of American Indian linguistics will grow more valuable as the years pass and these languages generally cease to be spoken. It is inevitable that American Indian linguistics in the twenty-first century will largely be an archival and interpretive discipline. Linguistic anthropology will have a key role to play as the custodian of the record.

Summary

- The records of American-Indian languages constitute a voluminous, irreplaceable resource for scholars, native groups and other users, whose value will continue to grow as many of the languages documented cease to be spoken.
- The diverse forms and materials in which linguistic data were recorded over the history of the field present complex preservation challenges, which are being addressed through both traditional archiving and cataloguing efforts and the application of new technologies.

- Stewardship of these records requires linguistic anthropologists not only to ensure their preservation and archiving but also to transmit the linguistic skills and historical understanding necessary to their proper use.
- The development of regional study centers promises a fruitful model for other fields of anthropology.

Notes

1. In 1994, 78 members of the Society for the Study of the Indigenous Languages of the Americas (SSILA) listed an anthropology department for their mailing address, while 130 listed a linguistics department. This ratio probably holds throughout the field: roughly two nonanthropological linguists work with American Indian languages for every anthropological linguist who does. Meanwhile, 188 (or 32% percent) of the members of the Society for Linguistic Anthropology in 1993-94 were also members of SSILA, which can be taken as an indication that about one-third of all anthropological linguists are American Indianists.

- 2. For example, Sapir's Nootka materials, originally collected between 1910 and 1914 but added to later by Sapir himself, his Nootka colleague Alec Thomas, and his students Morris Swadesh and Mary Haas, include 186 narrative texts, a lexical file containing 65,000 slips, and hundreds of pages of notes on traditional culture scattered though 24 field notebooks. Only a small portion of this material has been published.
- 3. Merriam made these copies to consult while he was in Washington, where he regularly spent half the year. The set of lists at the Library of Congress is not identical to the Berkeley set, and researchers should consult both collections.