This report discusses trends in the study of Athapaskan, concentrating on language maintenance and bilingualism. It presents both the potential richness and the actual poverty of studies of sociolinguistic aspects of the Athapaskan languages. Noted are two trends--(1) There is a greater interest among linguists in the studies of language in use; studies of context, of diversity, and of the sociological aspects of language which are no longer considered uninteresting; and (2) There is evidence of an increasing sense of responsibility toward the speakers of American Indian languages. The report anticipates rapid advances in the study of Athapaskan language maintenance and bilingualism. (SK)
Trends in the Study of Athapaskan Language Maintenance and Bilingualism

James Kari and Bernard Spolsky

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Navajo Reading Study

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Preface

One of the earliest activities of the Navajo Reading Study was to start a study of Navajo language maintenance (see Progress Reports No. 5, 13, and 14). At the invitation of Professor Joshua Ishman, who is preparing a volume on Advances in the Study of Societal Multilingualism to be published by Mouton, we were happy to extend this to a survey of what is known about other Athapaskan languages as well. The preparation of this paper happily coincided with the first National Indian Bilingual Education Conference, which gave us the chance to check details with some of the participants. A condensed version of the paper was read at the Workshop on Research Problems in Southwest Areal Linguistics II, held at Albuquerque on April 26-28, 1973.

We would welcome corrections and additions.

Bernard Spolsky
James Kari
0. Introduction

While the United States has long been, as Haugen (1938) pointed out, an ideal place for the study of bilingualism and language contact, the field has had little attention until recently. This is even more true in the case of American Indian communities, for although they have provided the main riches of American linguistics, it has been their language rather than their use of it that has interested the scholar. With a few distinguished exceptions, the student of an Amerindian language has paid little attention to the sociolinguistic situation of his informants, except to remark how few speakers there are or how poorly they remember the language. From their studies, one can learn incidentally about the language loss and destruction, but seldom are there indications of the process itself, of what other languages are adopted, or of the nature of bilingualism. Only very recently, with the impetus of interest on the one hand in the ethnography of speech and on the other in bilingual education has there been a smattering of studies focusing on Amerindian bilingualism.

We have chosen to concentrate in this paper on Athapaskan languages in order to provide some reasonable limit to our work. The Athapaskan language family is especially suitable because it permits us a wide territorial coverage—from New Mexico to Alaska—and because it includes the widest range
of language maintenance situations, from a flourishing Navajo spoken by 120,000 people to a full selection of dying or extinct languages. The restriction unfortunately forces us to leave out what is probably the best study of Amerindian bilingualism (Dozier's [1967a] description of the Hopi-Tewa bilingualism of Hano) but in the main, it leaves, we believe, a not unreasonable picture of the wider field.

In the paper that follows, we first give a sketch of the kind of incidental references to language maintenance that can be found in the literature. On the basis of published and unpublished studies, and personal communications we then present an outline of the present status of Athapaskan languages. In the next part of the paper, we summarize specific studies of language maintenance and bilingualism. From this, it will become clear that while the Athapaskan language family provides rich resources for sociolinguistic studies, these resources have as yet been largely untapped. Only now, when most of the languages are extinct or obsolescent, have a revival of ethnic identity and a growth of Indian nationalism promised that this might be corrected.

1.0. The Nature of the Data

Most published references to the strength of American Indian languages have been in the form of pleas addressed to linguists and anthropologists calling on them to carry out salvage work with languages about to become extinct. (2)
There have been few if any general studies or statements on language maintenance. But if one examines carefully the reports of ethnographic and linguistic research, a good deal of relevant data can be gathered. From Sapir's account of his field work with Hupa, for instance, we can infer a great deal about the sociolinguistic status of the language.

We soon discovered that first class informants were by no means difficult to secure. The old Indian culture has largely disappeared, it is true, and what remains of it cannot resist the inroads of civilization much longer, but there are many men and women who still remember the old life and the language is still spoken in its purity by many even of the younger people (Sapir 1927:10).

When the documentation on a people is particularly sketchy and when they appear to speak an aberrant language, anecdotes on last surviving speakers assume a special importance. Such a language group is the Tsetsaut. Boas gathered the existing corpus on the Tsetsaut language in Kincolith, British Columbia in 1894. The Tsetsauntu had suffered at the hands of the T'ingit and Tsimshian, and Boas reported that there were twelve of them left alive, only two of whom could speak their language correctly. Two of Boas' three informants, aged 14 and 21, spoke Nishka better than Tsetsaut, and his older informant, aged 55, spoke Tsetsaut well but was
exceedingly difficult to work with. Boas had to work with him in Chinook jargon through a Nass interpreter. Nevertheless the Tsetsaut corpus reveals a highly significant labial series, which has continued to intrigue Athapaskan scholars (Boas and Goddard, 1924:1, Rohner, 1969:155-169; Tharp, 1972; Krauss, in press). It was presumed that Tsetsaut became extinct about the beginning of this century. In 1907, Emmons (1911:21-3) discovered seven Tsetsaut living in poverty on the Portland Canal. But the language survived as late as 1927, when Barbeau learned of a woman informant, 'Ała'óó (Krauss, in press); presumably, therefore, there were other younger speakers at the time Boas did his field work. There are rumors that there are still Tsetsaut speakers alive, but a visit to Kincolith by Rigsby (1967) and correspondence with the descendants of Boas' informants by Krauss (personal communication) have failed to find any. Tsetsauts may still have lived in the Kincolity-Alice Arm area into the 1930's, but there seems to be no one alive who has even heard the language. The language probably died with Boas' two young informants, Noah and Timothy Dangeli and 'Ała'óó.

Occasionally ethnographic studies contain fairly specific information on language maintenance. In the preface to his biography of Jim Whitewolf, Brant remarks on the decline of Kiowa Apache in 1949-50:
Most of the present day Kiowa Apache know English. Among those under forty years of age English is rapidly becoming the major language of everyday affairs. The old people have a lesser command of English and tend to use the native language among themselves. Individuals of the younger generations can understand Kiowa Apache but tend to speak it haltingly and very imperfectly, employing English words freely when they cannot recall native words. Children know only English, and it seems to be merely a matter of time—perhaps another generation or two—before the native language will entirely be replaced by English (Brant 1969:18-19). Jim Whitewolf’s memory of his first days in school when he knew practically no English underscore the decline in Kiowa Apache that has taken place in his lifetime (Brant 1969:81).

From incidental references such as these, it is possible to build a picture of the speed of language loss, and occasionally to find hints on the development of bilingualism. The data are sketchy, but together give an understandable picture. In the following section, we survey the language status of the various Athapaskan languages; as we do so, it will become clear how the data have been gathered from accounts of the kind we have just illustrated.
2.0. The Present Status of Athapaskan Languages

We treat the languages geographically, with an ordering from least to most vitality. Therefore, we group the extinct Kwalhioqua-Tlatskanai language of Oregon and Washington with the Pacific Coast languages despite the fact that it is considered to be the southernmost off-shoot of Canadian Athapaskan. For each of Pacific Coast Athapaskan, Canadian Athapaskan, Alaskan Athapaskan, and Apachean (Southern Athapaskan), we discuss first the general historical situation, then we give notes on languages for which we have been able to gather information, and finally, we summarize the present language situation in tabular form. We also include the three Na-Dene languages, Eyak, Tlingit, and Haida.

The dialect relationships between the Athapaskan languages, particularly for Canadian Athapaskan, are still not understood. The language groupings employed in this survey, generally correspond to the subdivisions traditionally employed by Athapaskanists (Hoijer, 1963). However, it should be pointed out that these subdivisions are based on the Stammbaum model of language classification employed by Hoijer and do not properly reflect the dialect chains that exist throughout Athapaskan speaking areas.

The tables give language names, a maintenance classification, an estimate of the number of present speakers and their ages, and a brief comment. For the classification, we use a modified form of Miller's (1972) system, as follows:
I. Full maintenance (Miller's I, "flourishing").
Speakers of all ages; a proportion of monolingual speakers (including children); evidence of numerical increase in the number of speakers; language modernization; some literacy; relatively large population. Examples are Chipewyan and Navajo.

II. Bilingual maintenance (included in Miller's I).
A few monolinguals; speakers of all ages; regular use in some domains; small populations. Examples are Mescalero Apache and Upper Kuskokwim.

III. Bilingual loss (Miller's II, "obsolescing").
Children bilingual or English dominant; generational differences in language use; domains becoming mixed. Examples are Tlingit, Kaska, and Jicarilla Apache.

IV. Relic (Miller's III, "Obsolete"). Last few speakers. Examples are Hupa, Eyak, Sarcee, Kiowa Apache.

V. Extinct. (Miller's IV, "extinct"). No known living speakers. Examples are Bear River and Nicola.

2.10. Pacific Coast Athapaskan. All of the Athapaskan languages of Washington, Oregon, and California are either extinct or are spoken only by persons over 60. In every case, Pacific Coast Athapaskan languages were spoken by small tribal groups none of which had an aboriginal population much more than 1000. They were localized communities, situated usually in the valleys of the coastal range. There is far
more internal linguistic diversity in Pacific Coast Athapaskan than in Apachean but it was probably never an undifferentiated linguistic community. Krauss has proposed that the area be viewed as a dialect complex in terms of patterns of isoglosses. He summarizes these relationships as follows:

Hupa is rather aberrant (and relatively conservative) from the rest of the California group, which then shades through perhaps two or three stages of mutual unintelligibility or low intelligibility from Mattole (and Bear River) through Lassik, Nongatl, Sinkyone to Wailaki and then Kato. In Oregon Umpqua is the most aberrant, and most of the rest are perhaps mutually intelligible to a rather high degree, shading from Tolowa through Chetco into the Tututni (sub-)dialects (of which Euchre Creek is one), and eastward through Chasta Costa to Coquille, with Galice-Applegate as an isolated (but still not distant) extreme. The only major point that is somewhat unexpected from the geography is that Umpqua shares a number of traits in common with the California group. (Krauss, in press.)

All of the groups suffered severely from the sudden influx of white settlers and miners on the West Coast after 1850. At a very early date, the native communities were disrupted, dispersed, relocated, or annihilated. In Oregon
most of the Athapaskan speakers were herded onto the Siletz and Grande Ronde reservations in 1856. At Grande Ronde Chinook Jargon became the lingua franca, and had replaced Athapaskan by an early date. Athapaskan was retained for a somewhat longer time at Siletz (Pierce and Ryherd 1964:142).

2.11. Chasta Costa. The man with whom Sapir worked on Chasta Costa in 1906 was still alive in 1942 when Harrington gathered a fair amount of material from him (Krauss, in press).

2.12. Hupa-Chilula-Whilkut. The Hoopa Reservation was established in Northern California in 1865. Hupa is today the strongest Pacific Coast Athapaskan language for a number of reasons: 1) Despite the importation of other tribal and linguistic groups to their reservation, the Hupa were always numerically superior to the other groups present. For example, in 1910 over 450 of the 600 reservation residents were Hupas. 2) The Hoopa Reservation includes most of the aboriginal territory of the tribe. 3) There was no gold found on that particular stretch of the Trinity River.

Hupa is now spoken by about 10-20 elderly persons. It is also possible that a few persons who speak the closely related Chilula and Whilkut dialects are still alive. In 1968 a Hupa language evening course began in Hoopa. At that time the course focused on gathering materials. In 1971, two Hupas were given teaching certification, under a "distinguished persons" provision in the California certification code, and
they began teaching the language full-time in all levels of the elementary and high school. In addition, an evening language course is offered for adults.

2.13. **Mattole-Bear River.** Mattole was a relic language in 1927 when Li did his field work with an elderly informant. Mary Haas did some additional work on Mattole in the 1950's. Apparently the last reference to the closely related Bear River dialect was made by Li in 1927. "I have obtained a number of words from a Bear River woman, who, being married to a Wiyot Indian, speaks Wiyot now but has a vague memory of her native speech which she calls "Bear River talk" (1930:2).

2.14. There is a possibility that a very few persons with some remembrance of Kato, Wailaki and Lassik are still alive (Victor Golla, personal communication).

2.15. **Tolowa.** There are six remaining Tolowa speakers, none younger than 60, and there are younger persons who have partial knowledge of the language. A class in Tolowa is being taught at Smith River High School. (R. J. Parr, personal communication to Krauss.)

<table>
<thead>
<tr>
<th>Language Group</th>
<th>Rank</th>
<th>Population</th>
<th>Comments on language strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chasta Costa</td>
<td>V</td>
<td></td>
<td>extinct in 1940's</td>
</tr>
<tr>
<td>Chetco</td>
<td>IV</td>
<td>3</td>
<td>last recorded in 1935.</td>
</tr>
<tr>
<td>Coquille-Flores Creek</td>
<td>V</td>
<td></td>
<td>extinct by mid-1960's.</td>
</tr>
</tbody>
</table>
Table I: continued.

<table>
<thead>
<tr>
<th>Language Group</th>
<th>Rank</th>
<th>Population</th>
<th>Comments on language strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hupa-Chilula-Whilkut</td>
<td>IV</td>
<td>10-20</td>
<td>all speakers over 50 years of age.</td>
</tr>
<tr>
<td>Kato</td>
<td>V(?)</td>
<td></td>
<td>1925: 50</td>
</tr>
<tr>
<td>Kwalhioqua-Tlatskanai</td>
<td>V</td>
<td></td>
<td>8 in 1857: extinct before 1940.</td>
</tr>
<tr>
<td>Lassik</td>
<td>V(?)</td>
<td></td>
<td>last fluent speaker died in 1969.</td>
</tr>
<tr>
<td>Mattole-Bear River</td>
<td>V</td>
<td></td>
<td>extinct in 1950's.</td>
</tr>
<tr>
<td>Nongatl</td>
<td>V</td>
<td></td>
<td>1910: 6</td>
</tr>
<tr>
<td>Sinkyone</td>
<td>V</td>
<td></td>
<td>2-3 dozen (including half-breeds) in 1925. over 60.</td>
</tr>
<tr>
<td>Tolowa</td>
<td>IV</td>
<td>6</td>
<td>over 70.</td>
</tr>
<tr>
<td>Tututni-Euchre Creek</td>
<td>IV</td>
<td>6</td>
<td>extinct in 1940's</td>
</tr>
<tr>
<td>Umpqua</td>
<td>V</td>
<td></td>
<td>1910: 200 (mostly half-breeds).</td>
</tr>
<tr>
<td>Wailaki</td>
<td>V(?)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.20. Alaskan Athapaskan. Recent estimates by Krauss reveal that the Athapaskan languages of Alaska are, in almost every case declining rapidly. In fact, the pattern of language loss that has already taken place in Oregon and California Athapaskan seems to be repeating itself throughout Alaska at an accelerated pace. Krauss describes the situation as follows:

Alaskan Athapaskan languages are either dying fast, with only the older generations speaking them, or if children are still speaking them, the community is on the verge of capitulating to English under pressure.
from the school. In most places the youngest generation speaks only English, depending on the place, from 20 on down to even 40 on down. In many places the communities are beginning now to lament the loss of the languages, and are getting increasingly interested in practical grammars of their own languages and programs for teaching them as a second language to their own children, but often with the parents capable of speaking Athapaskan and yet speaking only English to the kids, and now wanting the school to teach Athapaskan! (Krauss, personal communication.)

The Alaskan speech communities, like the Pacific Coast communities were generally quite small and localized aboriginally. The date of initial contact with European society and the intensity of contact varies widely in Alaska. Language loss has proceeded rapidly in this century in the bush communities even though most of these villages are still predominantly native in population. English was firmly established as the lingua franca and prestige language by the 1930's.

The seven communities where Athapaskan is being spoken (such as Nikolai and Tetlin) are in most cases, quite isolated and lack a large white population; but physical isolation has not been sufficient to maintain languages in many parts of Alaska. For example, Lime Village, population 30-40, is
the most isolated village in Alaska and has never had a school. Nevertheless, no children there now speak Tanaina. Where the Pacific Coast showed the effects of a rapid extermination of languages by settlers, Alaska demonstrates rather the rapidity with which modern technology leads to the loss of their native language by small groups.

2.21. Ahtena. Most of the Ahtena villages are populated only by older people. The largest Ahtena settlement is Copper Center where some children can understand the native tongue but cannot speak it fluently.

2.22. Kutchin. Kutchin is the strongest Athapaskan language in Alaska. In the communities of Arctic Village, Birch Creek, and Venetie, Kutchin is learned as a first language while in the larger settlement of Fort Yukon most children know Kutchin and English when they come to school. The Alaska State-Operated Schools run bilingual programs now in Fort Yukon and Arctic Village under the direction of Richard Mueller, but the Bureau of Indian Affairs school in Venetie has not yet introduced the language into the school.

Apparently the Kutchin language in Alaska is stronger than it is in Canada. In the Canadian Kutchin speaking communities of Old Crow and Fort McPherson children are no longer learning Kutchin. This is an exception to the general pattern that Canadian Athapaskan languages tend to be maintained better than those in Alaska.
2.23. **Tanaina.** In all Tanaina communities (including the relatively isolated Tyonek) there are few if any speakers under 40. The only exceptions to this are Nondalton and Lime Village where there may be younger speakers. In Kenai there are only 10 speakers, the youngest of whom is 52. The forty-year-old generation can understand a great deal of the language but cannot speak it. Recently, interest in native ways has increased in Kenai and a number of the younger tribal leaders talk of reviving and passing on the language.

2.24. **Upper Kuskokwim.** The village of Nikolai is an extremely isolated, all native community. The children are bilingual in Upper Kuskokwim and English, and the parents are tending to speak more English than Athapaskan to their children now. Nikolai is also the site of a bilingual program sponsored by Alaska State-Operated Schools and directed by Ray Collins.

2.25. **Upper Tanana.** The Upper Tanana language is quite strong in Tetlin and Northway. This is true, despite the fact that Northway is just off the Alaska Highway and has a large airport. The Alaska State-Operated Schools sponsors a bilingual program in Northway directed by Paul Milanowski, but the BIA school in Tetlin has so far refused to allow one to be established there.
2.27. **Tlingit.** Krauss summarized the situation:

The future of the language seems very doubtful. Though there are over 1000 persons still speaking Tlingit, almost none of these are children. The proportion of those under twenty-five years of age competent in Tlingit is low everywhere, and almost none are under twenty except in Angoon where many as young as ten understand a lot. There are at least two eighteen-year-olds and one twelve-year-old there who speak Tlingit. At the same time as the Tlingit language continues to be thus abandoned, probably beyond the point of no return as a normally living language, a native cultural renaissance, as part of the general movement of social upheaval concerning minority groups or cultures in the United States and Canada has definitely invaded the Tlingit. These two powerful opposing forces for assimilation have converged now on the Tlingit people, who are caught in powerful cross-currents. Classes in Tlingit are becoming common in Tlingit schools, but there is a lack of trained teachers and of materials, and the movement lacks organization. With these problems remedied, however, it would be difficult to predict to what extent and what sense or function the Tlingit language may yet survive (Krauss, in press).
Since 1971 several Tlingit language workshops have been held under the direction of Krauss to train teachers in the Tlingit orthography and to produce Tlingit materials.

Table II: Alaskan Athapaskan

<table>
<thead>
<tr>
<th>Language Group</th>
<th>Rank</th>
<th>Population</th>
<th>Comments on language strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahtena</td>
<td>III-IV</td>
<td>250</td>
<td>all speakers over 20 years of age.</td>
</tr>
<tr>
<td>Han</td>
<td>IV</td>
<td>30</td>
<td>over 20.</td>
</tr>
<tr>
<td>Holikachuk</td>
<td>IV</td>
<td>30</td>
<td>over 20.</td>
</tr>
<tr>
<td>Ingalik</td>
<td>IV</td>
<td>100</td>
<td>over 30.</td>
</tr>
<tr>
<td>Koyukon</td>
<td>IV</td>
<td>600</td>
<td>over 30.</td>
</tr>
<tr>
<td>Kutchin</td>
<td>II</td>
<td>900</td>
<td>all ages in some communities.</td>
</tr>
<tr>
<td>Tanaina</td>
<td>IV</td>
<td>300</td>
<td>over 20.</td>
</tr>
<tr>
<td>Tanana Central</td>
<td>IV</td>
<td>200</td>
<td>over 30.</td>
</tr>
<tr>
<td>Transitional</td>
<td>III-IV</td>
<td>110</td>
<td>some children at Tanacross.</td>
</tr>
<tr>
<td>Upper Kuskokwim</td>
<td>II-IV</td>
<td>100</td>
<td>all children at Nikolai.</td>
</tr>
<tr>
<td>Upper Tanana</td>
<td>II-IV</td>
<td>300</td>
<td>most children at Tetlin and Northway.</td>
</tr>
<tr>
<td>Eyak</td>
<td>IV</td>
<td>3</td>
<td>over 70.</td>
</tr>
<tr>
<td>Tlingit</td>
<td>III</td>
<td>1000</td>
<td>over 20.</td>
</tr>
</tbody>
</table>

2.30. Canadian Athapaskan. The data on Canadian language maintenance are rather vague and inaccurate. (5) Chafe's (1962) estimates are the only figures in many cases. One
additional source of information, the band population figures published by the Department of Indian Affairs and Northern Development (1970), is of little use as a gauge of language strength. Some tribal affiliations given in that work, e.g. Nahani for Kaska, or Kutchin for Tutcheone, do not correspond to what we know about the dialect groupings. Krauss (in press) has reinterpreted this data and we now have a fair idea of the Canadian language situation.

In Table III Chipewyan is presented as a monolithic language spoken by over 5,000 speakers of all ages while the actual fact is that the strength of Chipewyan differs from community to community.

Anthropologists and linguists have long noted the quite arbitrary bases that underlie the traditional Canadian tribal classifications. Teit noted in his field work with the Kaska and Tahltan in 1915, "The Indians seem to consider all within their ken as bands or scattered groups of the family speaking the same kind of language differed only in slight degree in certain localities. They seem to take no cognizance, for instance, of the linguistic groups of the Nahani, Sekani, and Slave" (1956:104).

Some of the troublesome aspects of Canadian Athapaskan language classification are touched on by Richmond who is gathering data on ethnic identity and language differences for the Southern Artic Drainage Athapaskans:

Athapaskan speakers will often not attempt to speak another Athapaskan language or dialect but will be
able to understand it. Visitors usually speak in their own dialect if they assume the people present know enough to understand what is being said. This practice has undoubtedly preserved many local speech variations and has encouraged the sense of being one group of related people over an extended area. Of course it is not the case that all Southern Artic Drainage Dene can understand each other. It is simply that there are no sharp language boundaries and probably not even focal centers. When full data for speech communities is available, I predict that they will show only gradients of change (1970:143-144).

In contrast to the situation in Alaska, the Athapaskan languages of Canada are relatively strong. There are many conservative, isolated bush speech communities (such as Nahani Butte Slavey described below) where there is still a large percentage of monolinguals. Generally speaking, the maintenance of Canadian Athapaskan reflects provincialism and a less accelerated technological development. Nevertheless, linguistic replacement is taking place rapidly in a number of the Canadian communities. This is most evident along the Alaska Highway where since the highway's construction in the 1940's Sekani, Kaska, Ft. Nelson Slave and Tutchone have undergone rapid language loss and disruption of their communities.

2.31. Carrier. Robert Young (personal communication) reports that Carrier was spoken by speakers of all ages in 1939.
Carrier and Chilcotin in Central British Columbia are by no means isolated language groups, but, apparently both languages are maintaining well.

2.32. Kaska. The community of Lower Post has undergone rapid linguistic acculturation since 1941 when the Alaska Highway was constructed. In 1944-45 there were 200 Kaska at Lower Post plus numerous construction workers and service men (Honigman 1965:201). Today it seems that no children speak Kaska there.

2.33. Robert Young (personal communication) reports that in 1939 Sarcee was still a viable language with speakers of all ages. Apparently the language has declined rapidly since then to the point that Cook reports there is only a handful of elderly speakers (Krauss, in press). The Sarcee Reserve is practically within the city limits of Calgary now, and apparently there has been considerable intermarriage.

2.34. Nicola. Very little is known about Nicola. In 1895 they were visited by James Teit in the Upper Nicola Valley of British Columbia. At that time there were only a few elderly Nicolas. They had intermarried with Okanagan and Thompson Salish and their language was replaced by Salish. Apparently Harrington was unable to locate a Nicola speaker in 1942 (Rigsby, ms.).

2.35. Slavey. The ethnological field data of Holly Reckord gathered in the Slavey community of Nahani Butte, Northwest
Territories, offers very interesting insight into the dynamics of language contact. Nahani Butte is an isolated all-Indian community that can be approached only by boat or by air. It has a population of 64. About 50% of the community is monolingual in Slavey. The oldest English speakers are in their late 20's. These English speakers were the first members of the community to attend school. School was instituted in the community in 1956. Since that time, there has been increasing English usage amongst the younger generation. Most of the children are essentially monolingual in Slavey until they arrive in school. In some larger families pre-school children learn some English from their older siblings. Generally, the children use Slavey amongst themselves (with a degree of English loanwords) and English is confined to the school and to occasional meetings with outsiders. Generally, the level of English in Nahani Butte is described as quite limited. The best speakers are those who have attended twelve years of school and have worked outside in larger communities.

It is of interest that a few of the elders are literate in Slavey, the result of literacy efforts by Oblate missionaries earlier this century. There is a newspaper in Ft. Simpson that publishes a page in the Slavey syllabary that is read by the elders. Also there is some letter writing in the Slavey syllabary. In the past year or so the local school is making some effort to use Slavey, but this is treated as
a separate language lesson, and has very limited technical support. It cannot be considered bilingual education.

The degree of language maintenance in the northern bush areas apparently varies from community to community and is clearly correlated with the onset of schooling and the relative isolation of the community.

2.36. Tagish. The Tagish were "Tlingitized" during the latter part of the 19th century. At present there are fewer than five Tagish speakers in the Carcross area, all of whom are over the age of 70 and all of whom know Tlingit. It is uncertain if any of these Tagish can consistently sort out their Tagish from their Tlingit.

2.37. Tutchone is a loosely defined dialect area in the Southern Yukon. In most Tutchone communities children are no longer learning the language (Milanowski and Henry, 1969). For example, in Burwash and Champagne, Indian communities on the Alaska Highway, most persons under 25 cannot speak the language. Even in an extremely isolated community, such as Aishihik, children are reported to be rather weak in Tutchone (Holly Reckord, personal communication).

2.38. Haida. The Northern Haida dialect spoken in Hydaberg, Alaska has about 100 speakers, most over 50, but there are some 40 year old speakers. One person of 28 is reportedly a good speaker. Reports on the number of speakers of the other Northern Haida dialect, Masset, vary. Some children may speak it, and they may
number 75-100 in Alaska (with some in Seattle) and 100-300 in Masset. The Southern Haida dialect, Skidegate, is only intelligible with Northern Haida. Total population is 250 and fluent speakers are over 50. The total number of speakers may be 25-50. The first Haida language workshop was held in 1972 under the direction of Krauss, and the revitalization movement is now very strong in Hydaberg and Ketchikan.

Table III: Canadian Athapaskan(6)

<table>
<thead>
<tr>
<th>Language Group</th>
<th>Rank</th>
<th>Population</th>
<th>Comments on language strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaver</td>
<td>I</td>
<td>300[789]</td>
<td>all ages</td>
</tr>
<tr>
<td>Carrier</td>
<td>I</td>
<td>1000-3000[5155]</td>
<td>all ages</td>
</tr>
<tr>
<td>Chilcotin</td>
<td>I</td>
<td>1400</td>
<td>all ages</td>
</tr>
<tr>
<td>Chipewyan</td>
<td>I</td>
<td>3400-5600[5612]</td>
<td>all ages</td>
</tr>
<tr>
<td>Dogrib</td>
<td>I</td>
<td>800[1202]</td>
<td>all ages</td>
</tr>
<tr>
<td>Hare</td>
<td>I</td>
<td>600[715]</td>
<td>all ages</td>
</tr>
<tr>
<td>Kaska</td>
<td>III</td>
<td>200-500[533]</td>
<td>few children</td>
</tr>
<tr>
<td>Kutchina</td>
<td>I</td>
<td>1200 (including Alaskan)</td>
<td>mostly adults in Canada.</td>
</tr>
<tr>
<td>Nicola</td>
<td>V</td>
<td></td>
<td>extinct in early part of century.</td>
</tr>
<tr>
<td>Sarcee</td>
<td>IV</td>
<td>10</td>
<td>over 50</td>
</tr>
<tr>
<td>Sekani</td>
<td>III</td>
<td>350</td>
<td>no children</td>
</tr>
<tr>
<td>Slavey</td>
<td>I</td>
<td>1000-2000[3334]</td>
<td>all ages</td>
</tr>
<tr>
<td>Tagish</td>
<td>IV</td>
<td>5 or less</td>
<td>over 70</td>
</tr>
<tr>
<td>Tahlitan</td>
<td>I</td>
<td>[702]</td>
<td>all ages</td>
</tr>
<tr>
<td>Tsetsaut</td>
<td>V</td>
<td></td>
<td>extinct in 1930's</td>
</tr>
<tr>
<td>Tutchone</td>
<td>III</td>
<td>1000</td>
<td>few children</td>
</tr>
<tr>
<td>Haida</td>
<td>IV</td>
<td>300-550</td>
<td>over 50, some children in Masset.</td>
</tr>
</tbody>
</table>
2.40. **Apachean (Southern Athapaskan).** Of all areas, the fullest range of language maintenance situations, with an example of each level.(7) It has also been the area in which the languages have been most successful in surviving modern contact.

2.41. Most striking is the case of Navajo, which with over 120,000 speakers seems to have the strongest prospects for survival. In the 1940's, descriptions of the Navajo language situation referred to almost complete monolingualism, to "a definite disinclination to learn and speak the languages of other people" (Reed, 1944). In the thirty years since then, there has been a marked change, for while there has been absolute increase in the number of speakers of Navajo, there has been an even greater increase in the use of English by Navajos.

There have been a number of recent studies of Navajo language maintenance. As a preliminary to a study of the feasibility and effect of teaching Navajo children to read in their own language first (Spolsky and Holm 1971), a survey was carried out of the language use of six-year-old Navajo children entering school. In 1969 and again in 1970, teachers in a hundred or more schools on or near the Reservation were asked to rate, on a simple five-point scale, the language capability of their six-year-old pupils. In the 1969 survey (Spolsky, 1970) data were thus obtained on a total of 2893 children; in the 1970 survey (Spolsky, 1971a),
the survey included 3653 children, which was 84% of the six-year-old Navajo children in school. The validity of the procedure was checked by teams of bilingual judges using a specially developed interview (Spolsky, Murphy, Holm, and Ferrel, 1972). The surveys showed that 30% of the children were judged on entering school to be monolingual in Navajo, compared to 5% monolingual in English. Another 40% were reported as dominant in Navajo, knowing a little English but not enough to do first grade work in it; and another 20% to be equally at home in either language. On this basis, one could guess that 70% of the children came from homes where Navajo was the only language used, 20% from homes where both languages were used, and 10% from homes where English is now used. The data also revealed a clear distinction between Bureau of Indian Affairs schools, where the normal situation is for a child to come from a Navajo-speaking home, and Public Schools, where about 20% of the children seem to come from English-speaking homes and another 30% from bilingual ones. Analysis suggests that this reflects the relative accessibility of the school and the nearest town as factors in the spread of English (Spolsky, 1971b). On the basis of these surveys, it is possible to make some general guesses about the speed of language loss. Assuming, conservatively, 1949 as the last year when almost all Navajo children would have come to school monolingual in Navajo, by 1969 we find
that 30% have some serious exposure to English before coming to school. With near universal education, the proportion knowing English will continue to increase rapidly. Given present trends, one would very soon expect to find three clear divisions among Navajos: English speakers living away from the Reservation whose children know no Navajo; bilinguals in the more urbanized parts of the Reservation whose children speak English but hear Navajo from their grandparents; and a continually decreasing group of Navajo speakers in rural areas whose children will start learning English at school. There are factors which could change this, such as the growing nationalist movement with its related move to Navajo-controlled education, or speed it up, such as a flurry of road building. But of all Athapaskan languages, Navajo seems to have the best prospects for survival (Spolsky, in press).

2.42. There are about 11,000 Western Apaches living on the two Arizona reservations. About 7,500 live on the Ft. Apache Reservation and about 4,500 on the San Carlos Reservation. The Apache language at Ft. Apache appears to be very strong. There are still a few monolingual Apache speakers, most of whom are women over the age of 65. Almost all children know Apache, but there are few, if any, who are monolingual in Apache when they reach school. There is a clear split in the use of Apache by the children, English being the language of school and the outside world and Apache the
language of intimacy. About 8 years ago there was some anti-Apache sentiment expressed by tribal leaders but in recent years the Tribal Council has given strong support to the use and maintenance of Apache. Although from the external point of view the language at Ft. Apache appears to be thriving, elders within the tribe perceive changes in the language of the children. They claim that the youngsters do not speak well. In particular, they note that elaborate verbal constructions are being regularized. Interest in bilingual education is growing but as yet there is no formal effort to use Apache in the school.

The language situation at San Carlos is not as well-known, but there are signs that there is an increase in English use by children there.

2.43. Although there are no precise figures, it is estimated that about 1200 of the 1500 Indian residents at Mescalero are Mescalero speakers (total population on the reservation is 1740). Most of the population is concentrated in the town of Mescalero. Mescalero has always been the dominant and preferred language on the reservation. It is likely that all younger persons speak Mescalero rather than Chirichua. There are still a few elderly people who are monolingual Mescalero speakers but the formal function of interpreting on the reservation ceased in the late 1940's or early 1950's. By the early 1960's tribal council meetings were predominantly in English with spot translations to clarify issues for the benefit of the elders, and for private conferences. In 1958,
Scott (1960) tested 53 Mescalero high school students in English. From his results, it is possible to assume that for most of them, Mescalero was still the dominant language. The five Mescaleros that Scott found speaking English as a first language each had one parent who did not speak Mescalero.

Today few if any persons under the age of 60 are monolingual in Apache. There is relatively little outside marriage and Apache is the predominant home language. Most children know some English before they come to school, and there are signs that English usage amongst younger children has increased in the last four or five years. Children over 10 almost always play in Apache while 5 and 6 year olds use noticeably more English. Still fewer than 10% of the Apache children know only English. In recent years there has been growing loyalty to the Apache language. Parents remark on the change in the speech of their children. The tribal chairman often urges parents to use Apache with the children in order to carry on the language. At present Apache is not being used in the school, but apparently there is some interest in bilingual education.

2.44. The Chiricahua Apache were moved to Mescalero in several stages from southeastern Arizona and southwestern New Mexico in the latter part of the 19th century. It is not certain how many persons can still speak Chiricahua, but it is likely they are all of the oldest generation. Chiricahua is very close to Mescalero, a mutually intelligible dialect. Today, there is an awareness of Chiricahuaisms in
the language now spoken at Mescalero, but evidently all younger Apaches speak a single Mescalero Apache dialect.

2.45. The Lipan were moved to the Mescalero Reservation in small groups between 1879 and 1905 from southwestern Texas and northern Sonora. When Opler and Hoijer did field work in Mescalero in the 1930's there were about seven families that were all or predominantly Lipan and another nine families that were part Lipan. Opler notes that even in the 30's the Lipan speakers had a hard time separating their language from Mescalero or Chiricahua. There are reputed to be a few elderly Lipans at Mescalero, all over 70, and it is not certain if they can speak Lipan. One elderly Lipan woman is reportedly bilingual in Spanish.

2.46. There are signs that the Jicarilla language has been slipping rapidly in recent years. Most of the 1800 Jicarilla tribal members are in or near the town of Dulce (but the population is less concentrated than at Mescalero). A fairly large percentage of the marriages of Jicarilla tribal members are to non-Jicarillas. Generally parents use English with their children while grandparents talk to them in Apache. Only a minority of the children entering school speak Jicarilla well and children's play is predominantly in English. On the other hand, many 17 or 18 year old Jicarillas can speak Apache. Recent efforts by two teachers to use Jicarilla in the Head Start program have focussed primarily on vocabulary identification. No written language is being used. In the past parents have generally expressed a concern that their children learn
English rather than Apache. Adults over 60 are clearly dominant in Apache, but most know English. English is the language of administration. Tribal council meetings are mostly in English while Apache is used in private conferences. A tribal leader in recent years made one of his campaign issues the fact that he was a better speaker of Jicarilla than his opponent. There is a fair amount of trilingualism amongst persons over 40 in Spanish-English-Apache. The twenty year olds, however, tend to know just English and Apache. There is some consciousness of language loss in Dulce, particularly amongst the high school students.

2.47. The Kiowa Apache aboriginally were a small group that lived with the Kiowas in the Plains area. Although we know of no reference to the aboriginal sociolinguistic situation of the Kiowa-Apache, they did maintain their language strongly until this century. In 1891 Mooney reports that there were 325 Kiowa Apache living in Oklahoma. They suffered from a severe flu epidemic in 1892 and in 1905 their numbers were reduced to 155 (Mooney 1910:703). As mentioned above, Brant observed that only older persons knew Kiowa-Apache in the late 1940's. Today there are 10-20 persons over the age of 50 who know the language.

To fill out the range of possibilities in the Southwest, there is evidence that before 1700 there were other groups in the area which are sometimes classified as Athapaskan. These include the Janos, Jumanos, Jocomes, Sumas, Cholomes, Mansos, Pelones, and Sibolos (Forbes, 1959). All these
groups were extinguished or assimilated with other Apaches at an early date.

Table IV: Apachean (Southwest Athapaskan)

<table>
<thead>
<tr>
<th>Language Group</th>
<th>Rank</th>
<th>Population</th>
<th>Comments on language strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chiricahua</td>
<td>IV</td>
<td>100(?)</td>
<td>all speakers over 50 years of age</td>
</tr>
<tr>
<td>Jicarilla</td>
<td>III</td>
<td>1000</td>
<td>over 10</td>
</tr>
<tr>
<td>Kiowa-Apache</td>
<td>IV</td>
<td>10-20</td>
<td>over 50</td>
</tr>
<tr>
<td>Lipan</td>
<td>IV</td>
<td>1-5</td>
<td>over 70</td>
</tr>
<tr>
<td>Mescalero</td>
<td>II</td>
<td>1200</td>
<td>all ages</td>
</tr>
<tr>
<td>Navajo</td>
<td>I</td>
<td>120,000</td>
<td>all ages</td>
</tr>
<tr>
<td>Western Apache</td>
<td></td>
<td>10-11,000</td>
<td></td>
</tr>
<tr>
<td>Ft. Apache</td>
<td>I</td>
<td>7,500</td>
<td>all ages</td>
</tr>
<tr>
<td>San Carlos</td>
<td>II</td>
<td>4,500</td>
<td>all ages</td>
</tr>
</tbody>
</table>

3.0. Studies of Athapaskan Bilingualism and other Sociolinguistic topics

3.1. Language Maintenance Studies. Considering the importance and the complexity of the topic, it is surprising that there are so few hard data or detailed studies dealing with sociolinguistic aspects of American Indian languages. For the general area of language maintenance, this is equally true. Fishman (1966) does not deal with the subject, except for a reference to Chafe (1962) with his estimate that only 40% of the 300 American Indian languages or dialects still extant had more than 100 speakers, and that more than half of these had speakers of very advanced ages only. The Congressional hearings on bilingual programs in 1967 had before them estimates of the United States Indian population, but the
only figures on language were the unofficial estimates made by William Gage in 1960 for Navajo (65,000), North Eskimo (10,000), Ojibwa (12,000), and South Alaskan Eskimo (14,000). Kinkade (1970) gives data on the languages spoken by Indian students at Haskell Institute in 1969, repeating an earlier study at the same school by Stuart (1962). But, as Kinkade points out, the data are not strictly comparable, nor do they provide a basis for studies of language loss or maintenance because the sample is very biased. Recent studies such as those referred to above for Navajo and others for Alaska have been motivated by the relevance of the data to language education policy.

One notable exception are the extensive references to Athapaskan languages in Voegelin, Voegelin and Schutz (1967). In this, they summarize (unfortunately without precise references) a number of studies of Apachean, suggesting the place of the languages studied within the Arizona language situation. They quote various estimates of numbers of speakers, and gather a number of sociolinguistic observations. They conclude that while the Navajo remained monolingual during the acculturational periods, that they will soon become bilingual.

3.2. Studies of Bilingualism. Other than the recent research on Navajo language maintenance described above, there are only passing references in the published literature to the
incidence and degree of Athapaskan bilingualism. For example, Krauss (in press) mentions that speakers of Kuskokwim Ingalik are bilingual in Eskimo. Brant (1969:19) notes that "in their contacts with other tribes, the Kiowa Apache usually employ English. In the event of intertribal contacts with old people who know no English, the tendency is to use Comanche, which has become a sort of Indian lingua franca because it has the reputation of being very easy to learn".

For Navajo, as well as the implications of the maintenance studies, there have been comments on the relative use of English and Navajo (Spolsky, 1972). Of all domains, the one most closely related to English is the school. With the exception of the still few bilingual programs, and of the practice within dormitories, school is the one institution that demands spoken English. Traders make an effort to use Navajo (see below); Public Health and other officials use interpreters. Tribal Council and chapter meetings use Navajo, and Tribal courts also permit the giving of evidence in Navajo. A large number of radio stations on or near the Reservation broadcast for many hours a day in Navajo. Thus, all institutions except school permit spoken Navajo. But almost all writing (and reading) is in English. Signs in trading posts and stores are in English; Tribal Council minutes and court records are kept in English; the announcers speaking in Navajo work from English scripts. And the
official Tribal newspaper is in English. The situation is clearly exemplified by a tribal councillor addressing, in fluent Navajo, a conference on bilingual education: his speech was in Navajo, but the typed text in front of him was in English. Only with the recent revival of literacy associated with Navajo bilingual education has written Navajo slowly shown signs of gaining ground. Further evidence on the nature of Navajo bilingualism is to be found in the loanword study referred to below (Holm, Holm, and Spolsky, 1971), where the two major groupings were objects associated with the domain of school and non-Navajo foods.

A start on a study of the nature of adolescent bilingualism in the work by Dubin (1971) who reports a number of tests of language proficiency and attitudes in a group of Navajo high school students.

3.3. Studies of Linguistic Acculturation. Alongside these somewhat sketchy studies of Athapaskan bilingualism one may place studies of another aspect of language contact—linguistic acculturation.

In 1921 Sapir remarked "The Athapaskan languages of America are spoken by peoples that have had astonishingly varied cultural contacts, yet nowhere do we find an Athapaskan dialect that has borrowed freely (one might say, 'has borrowed at all' E.S.) from a neighboring language. These languages have always found it easier to
create new words by compounding afresh elements ready to hand. They have for this reason been highly resistant to receiving the linguistic impress of the external cultural experiences of their speakers" (Sapir, 1921:196).

Documentation on Athapaskan linguistic acculturation is still spotty, and the deep implications of Sapir's statement—that Athapaskan languages structurally resist loanwords—i.e. that lack of loans is not just a product of social isolation, has not received direct attention.

In their survey of American Indian dictionaries for signs of linguistic acculturation, Voegelin and Hymes note that Li's (1933) 1500 item Chipewyan stem list shows no loan words. They raise the question that loans may have been purposely excluded by the author: "The effect of linguistic acculturation appears almost entirely in the extension of old Chipewyan forms" (1953:638). Based on Chipewyan field work done in 1967, Haas (1968:170) notes numerous extension of native materials, but she also gives a few French loanwords. Hoijer's (1939) study of Chiricahua yielded only 19 loanwords from Spanish including two interesting verb loans. Krauss (1965) notes 103 loans in Eyak of the largest number of which are from neighboring and genetically related Tlingit. The recently published Western Apache dictionary lists 22 loanwords from Spanish (Perry, 1972:122).
The literature on Navajo contains few loanwords. Sapir and Hoijer (1967) and Reichard (1951) list fewer than 40 loanwords. Haile (1941:1) writes, "Pueblo contact has not influenced Navaho to a noticeable degree, while Spanish elements are comparatively few, and English elements practically none."

Based on published evidence of Athapaskan loanwords it would appear that Sapir's hypothesis has been corroborated. Yet there is evidence that in the Navajo of today, loanwords are being used more freely. A computer count of loanwords in the speech of Navajo six-year-olds revealed that 9% of the words used by the children were loans, these were 3.6% of the total words used (Holm, Holm, Spolsky, 1971). This marked increase in loanwords in Navajo in the past 30 or 50 years corresponds with the changing language situation on the Reservation, supporting Dozier (1967b) in his intuition that socio-cultural rather than structural factors explain whether a language will be ready to accept loanwords.

Today we can no longer identify a core of loans, e.g. bááh, béeso, only from Spanish. Rather there is, at least among younger persons, a looser use of English terms (and consequent replacement of some older vocabulary) which reflects the increase in competence in English. An early sign of the affects of bilingualism on Navajo is Young's excellent analysis of a slang loan verb, jaan, that was used for a time in the 1940's (Young, 1945).
The other aspect of Athapaskan linguistic acculturation, the languages' propensity for "compounding afresh from elements ready to hand" has received little concentrated study although there exist a number of sources for pursuing such research. Sapir's study of Sarcec personal names (1924); Young and Morgan's list of Navajo personal names (1951:428-445) and the various studies of Navajo place names (Van Valkenburg, 1941, Young and Morgan, 1947) amply document the tendency for Athapaskan to coin elaborate descriptive terms. Examples of semantic extension are illustrated in the classic analysis of the etymology of four Navajo words by Sapir (1936) and the study of Western Apache car terminology by Basso (1967) in which he shows the car terms to be based entirely on extension of body part terms (e.g. liver = battery).

3.4. Ethnographies of Speaking. Thus far there have been few detailed "ethnographies of speaking" studies of Athapaskan speech communities. Most notable is the study of silence in Western Apache culture by Basso (1970). In a study based entirely on secondary sources, Darnell (1970) reconstructs in considerable detail Kaska speech behavior. She characterizes the Kaska speech community by its informality, and its lack of formal speech roles.

A most significant contribution to Navajo and Athapaskan ethnography of speaking research and to linguistics in general is the study by Werner (1963) of the Navajo being spoken by
four anglo traders. Trader Navajo is a pre-pidginized language that is used by the traders in their intercourse with Navajos. The Navajos respond almost entirely in regular, non-simplified Navajo. Trader Navajo is not a language, to the extent that no two people ever communicate with one another in it. Though each of the four traders studied varies in proficiency and has learned his version of Trader Navajo independently, there are some remarkable similarities in their phonemic inventories and verb morphology. Silverstein (ms) has demonstrated that these similarities in Trader Navajo can be explained by marking conventions, where the traders most naturally seek the least marked member of the paradigm. Another interesting fact revealed by Werner's study is the difficulty with which all four traders handle verb morphology. In fact, Werner observed that the two better speakers had more incorrect verbs than the two worst speakers.

3.5. Dialect Studies. Due to their extreme morphological complexity, the Athapaskan languages are of particular interest for studying dialect diversity and linguistic change. To date there have been only five such studies. Hill (1963) has noted some of the dialect differences between San Carlos and White Mountain Apache. She focused mainly on phonetic differences.

The best known studies of Navajo dialect diversity are by Reichard (1948, 1951: 369-382). Recently Saville-Troike and Kari have presented some new dialect material.
These Navajo studies cover a wide range of speech variation, lexical, phonetic and morphophonemic.

The study of morphophonemic variation has particular relevance for future sociolinguistic research. There are numerous indications that the complex Navajo verb paradigms are undergoing various kinds of change and reanalysis. For example, a very restricted, morphologically marked rule that truncates the oh-second person dual pronoun to o- in perfective verbs φ- or θ- classifier is being used optionally by many speakers. At the same time this highly marked rule is being extended to a new environment that involves the presence of an absolutely neutralized d-classifier. In fact, the over-generalization of this rule seems more predominant than its suppression. Such a marker as the oh-truncation rule could be neatly incorporated into a sociolinguistic investigation of generational speech differences. It appears that morphophonemic variation in Navajo will show both regional, i.e. dialect diffusion, and generational i.e., rule simplification, differences. Thus, there is evidence that Navajo and other Athapaskan languages will be most productive media for the study of linguistic change (Kari, 1973).

4. Conclusions

This review, sketchy though it has been, will hopefully have made clear both the potential richness and the actual
poverty of studies of sociolinguistic aspects of the Athapaskan languages. Two trends must be mentioned that will supply correctives to this situation. The first is of course the greater interest among linguists in studies of language in use: studies of context, of diversity, and of the sociological aspects of language which are no longer considered uninteresting. The second is concerned with the fact that whereas those working with Amerindian languages were usually motivated by a concern for the language itself, there is evidence of an increasing sense of responsibility towards the speakers of the language. This is manifested in two ways. First is the fact that so many scholars are now working in association with bilingual education programs. Thus, whatever their primary interest, they are necessarily involved in a form of educational sociolinguistics. The second is the increasing emphasis on training native speakers as linguists. Thus, where once an Athapaskan linguist meant a scholar studying Athapaskan, it will soon also mean an Athapaskan speaker studying linguistics. As this becomes more true, we may expect rapid advances in the study of Athapaskan language maintenance and bilingualism.
Notes

(1) The preparation and writing of this paper was partly supported by a grant from the Ford Foundation for the Navajo Reading Study of the University of New Mexico. We gratefully acknowledge the help of a number of researchers in preparing it; in particular, we thank Michael Krauss, Robert Young, Holly Reckord, Keith Basso, Faith Hill, Bruce Rigsby, Harry Basehart, Elaine Clark, Karen Cantrell and Morris Opler for providing unpublished information without which this paper would have been even more sketchy. In particular, we thank Michael Krauss who read an earlier version of this paper and contributed many valuable suggestions and much recent information.

(2) Cf., e.g. Voegelin (1941), Chafe (1962), Pierce and Ryherd (1964).

(3) Unless stated otherwise, information on the status of California Athapaskan groups in the early part of this century is from Kroeber (1925). Information on Oregon Athapaskan is from Pierce and Ryherd, 1964. Information on Hupa is from Kari. Information on Chetco and Tolowa is from R. J. Parr. For spelling of language names throughout, we generally follow Krauss (in press).

(4) Information on the population and status of Alaskan Athapaskan is from Krauss (in press) and from numerous personal communications. Information on Ahtena is from Holly Reckord and on Kenai Tanaina from Kari.

(5) The source of information for Slavey is Holly Reckord; for Nicola, Bruce Rigsby; and for Kaska, Tagish, and Tutchone, Kari.

(6) Population figures in brackets are from Department of Indian Affairs and Northern Development (1970). Those not in brackets are from Chafe (1962) or are more recent estimates quoted in Krauss (in press).

(7) Data on the Western Apache are from Keith Basso and Faith Hill, on Mescalero and Chiricahua are from Harry Basehart, Elaine Clark, and Robert Young; on Lipan, from Morris Opler and Elaine Clark; on Jicarilla, from Karen Cantrell, Robert Young and Kari.

(8) From 1943-57, there was a newspaper published in Navajo. For an account of this and of the history of written Navajo, see Young (1972).
Doyen of such Athapaskan-speaking linguists is William Morgan, Sr., whose work with Robert Young in the 1940's led to the dictionary and grammar; Young and Morgan are now collaborating on a revision of the dictionary. Among Navajos studying with Hale at MIT is Paul Platero, who has played a major part in the development of an annual Navajo Linguistics Workshop. Also, an experienced Navajo bilingual teacher, Laura Wallace, will be studying Northern Athapaskan with Krauss at the University of Alaska.
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