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Dialect Contact, Convergence, and Maintenance in Oregon Athabaskan

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1 Introduction

The Oregon Athabaskan languages were once spoken in an area stretching from the upper reaches of the Umpqua River in present-day Douglas County in Oregon to Del Norte County in northern California. Tensions fueled by an influx of Euro-American settlers from the 1840s onwards culminated in the Rogue River Indian Wars of 1855-1856 (Miller and Seaburg 1990, Schwartz 1997). Ostensibly for their own protection, most indigenous people of the region were dispossessed and consolidated on the Siletz and Grand Ronde reservations in the northwest part of the state, far from their ancestral homelands. Traditional food sources were scarce, and chronic undernutrition and disease took a heavy toll (Kent 1973, Bureau of Indian Affairs 1979). Those who managed to survive found themselves thrust elbow-to-elbow in a small number of reservation communities organized according to coarse-grained ethnolinguistic similarities.

As elsewhere in North America, the long-term linguistic consequences of this forced resettlement are by now all too familiar. Population loss, reservation life, and adaptation to a wage economy created an imperative for indigenous people to communicate in new ways, both with each other and with agents of the foreign culture that had uprooted them (Zenk 1988). Regional contact languages – initially Chinook Wawa (also known as Chinook Jargon), eventually English – gained new prominence in everyday life and gradually supplanted traditional forms of speech. By the mid-twentieth century, all of the Oregon Athabaskan languages were highly endangered; with the marginal exception of Tolowa, as far as is known none has survived to the present day (Pierce and Ryherd 1964, Golla 2011).

While the sociolinguistic setting leading to the obsolescence of Oregon Athabaskan is thus readily apparent, less well-understood are the system-internal consequences of reservation life on the Athabaskan languages themselves. Language shift did not happen overnight: most Oregon Athabaskan languages were still being acquired by children for the first half-century or more after resettlement, and at least three generations of speakers were multilingual to varying degrees in Athabaskan languages, Chinook Wawa, and English. There was thus ample opportunity for contact-induced linguistic changes to take place, including those due to the mutual influence of different varieties of Oregon Athabaskan on one another. Indeed, it would be surprising if such changes did not occur, since the overall demographic profile of resettlement on reservations – abrupt relocation of closely related speech varieties to a relatively restricted geographic area – is broadly similar to better-studied cases of dialect contact, such as large-scale migration to cities and colonies that led to the emergence of mixed varieties of English, Norwegian, and Hindi (Kerswill 1994, 2002; Kerswill and Williams 2000; Trudgill 1986, 2004; Kerswill and Trudgill 2005).

A common outcome of dialect contact is koineization, which can be understood as the gradual convergent leveling of dialect differences over successive generations of speakers raised in close proximity to each other. Apparently this was the result of the resettlement of Athabaskan-speaking people at Siletz as well. Reporting on his work there in the mid-1960s, Golla (1976:218) noted that most of the differences between the Lower Rogue River dialects of Oregon

Athabaskan, by then collectively known as “Tututni,” had all but disappeared: “The phonology and grammar of Mrs. Bensell’s [Euchre Creek] dialect appear to hold for all Tututni. The only major differences among the dialects that survived at Siletz at the time of my work were lexical.”¹ However, most details of what these differences might have been remain unexplored. As Golla (2011:70) has pointed out, much of what is known about Oregon Athabaskan is based on interviews conducted in the mid-twentieth century with speakers who had spent most of their lives in the reservation setting, presumably after any contact-induced changes had already run their course. It is only by examining documentation from earlier periods, closer to the time when resettlement occurred, that erstwhile differences between varieties can be detected and the effects of linguistic contact revealed.

These observations lead to the following questions of interest: which similarities between closely-related varieties of Oregon Athabaskan found in twentieth century documentation are extensions of a pre-reservation status quo, and which are the result of processes set in motion by intensive contact after resettlement? Just as importantly, which differences between varieties were maintained despite the leveling that took place in the same period? Working with documentation of the Oregon Athabaskan languages from the mid-nineteenth century onwards, the present study is a preliminary effort to answer these questions. Following an overview of the issues in the dialect contact literature that the data relate to (§2) and a summary of the languages (§3), two cases where leveling apparently did result from contact in the reservation period are considered: reduction of variation involving reflexes of Proto-Athabaskan *q and *x̣ in Tututni (§4.1), and loss of several distinctive properties of the Chetco dialect (§4.2). Despite convergent pressures, however, some dialect idiosyncrasies survived, the Galice Creek dialect in particular maintaining several distinctive features into the twentieth century (§5.1). Even closely related dialects formerly spoken on the Rogue River avoided complete erasure of differences, Mikwanti apparently maintaining a tendency to affricate onset coronal fricatives (§5.2).

Beyond its contribution to the understanding of the post-contact development of the Oregon Athabaskan languages in particular, this study sheds light on the general mechanisms by which dialects and closely related languages influence each other when they come into contact. Section §6 addresses the question of the extent to which koineization proceeds essentially deterministically, with majority variants displacing minority ones, or is instead mediated by non-linguistic social factors. Trudgill (2004) has argued for the former position in the special circumstances leading to similarities between colonial varieties of English that emerged in the southern hemisphere. Here it is argued that the observed outcomes of contact between Oregon Athabaskan varieties cannot be explained with reference only to the relative proportions of speakers of different varieties, contrary to the predictions of the deterministic theory set forth by Trudgill.

2 Theoretical Background

A well-established theory of koineization, developed over the course of many years of research by Trudgill, Kerswill, and others, is shown here (see especially Trudgill 2004, Kerswill and Trudgill 2005):

¹ Golla’s report matches that of Pierce and Ryherd (1964:142): “The amount of leveling that has taken place since these tribes were uprooted in 1856 and transported to reservations at Siletz and Grand Ronde, Oregon might tend to lead us to assume that the early nineteenth century relationships between these dialects and languages were closer than they actually were.”

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- Stage I Dialect divisions are largely maintained, the adult founders of new communities having relatively little linguistic influence on one another.
- Stage II Selection of variants gets underway: extreme inter- and intra-speaker variation as children are exposed to a range of linguistic input in the home and in the community at large.
- Stage III Variation is vastly reduced as the speech community settles on a relatively stable set of linguistic norms.

According to this theory, the formation of koineized dialects involves three distinct stages, corresponding to successive generations of speakers in a mixed dialect community. In the first stage, adult speakers of diverse dialects come into contact with each other, but their speech undergoes only rudimentary leveling due to the fact that linguistic behaviors already established by adulthood are difficult (although by no means impossible) to change. In the second stage, the first generation of speakers born in the new community starts the process of selecting from the linguistic variables in their environment as speakers accommodate one another in their everyday interactions. This stage is marked by extreme variation across the community as a whole and in the speech of individual speakers. Finally, the third generation settles on a stable set of linguistic norms, typically as social cohesion among speakers develops – so-called “focusing” in the sense of Le Page and Tabouret-Keller (1985). At this point a koineized dialect may have been formed, assuming these norms are not identical to any of the original dialects that came into contact.

According to Kerswill (2002), koineization can be impeded by various factors, especially a lack of social integration in the new community – that is, a lack of focusing can mitigate convergent pressure. However, the expectation of the three-stage model is that koineization will result where focusing takes place. This is stated most clearly in Trudgill (2004:88-89), who maintains that “focusing implies koineization.” Trudgill takes this a step further in his book subtitled “the inevitability of colonial Englishes,” claiming that not only is the fact of koineization inevitable, but so too are its outcomes, in some cases at least. Considering what he calls “tabula rasa” dialect contact, in which speakers of diverse dialects migrate en masse to a new geographic location where none has pre-established claims to legitimacy, he maintains that koineization proceeds essentially deterministically:

“...given sufficient linguistic information about the dialects which contribute to a mixture, and given sufficient demographic information about the proportions of speakers of different dialects, it is possible, within certain limitations, to make predictions about what the outcomes of the mixture will be, at least in broad outline.”
(Trudgill 2004:26)

In Trudgill’s view, socially contingent factors such as “prestige,” “stigma,” “identity,” and “ideology” play little role in the outcomes of koineization in tabula rasa situations, except perhaps in the initial dialect mixing among Stage I adult speakers who first come into contact with each other.

The data presented in this paper bear crucially on these issues insofar as the resettlement of Oregon Athabaskan people has a sociolinguistic profile similar to Trudgill’s tabula rasa dialect contact. Unlike some situations in North America where reservations were established on a

particular group's aboriginal territory, the Siletz reservation was 130 miles from the nearest Athabaskan homeland, and no single Athabaskan group had a pre-existing claim to legitimacy in the locus of contact. It is argued in §3 that the new reservation community did indeed undergo a degree of focusing in this period, leading to the expectation in the framework developed by Kerswill and Trudgill that koineization should have occurred.² Evidence for leveling presented in §4 tends to confirm this prediction; nonetheless, cases of dialect maintenance presented in §5 show that not all differences between varieties were erased by the mid-twentieth century. Moreover, despite the sociolinguistic similarity with the tabula rasa dialect contact considered in Trudgill (2004), §6 develops an argument that the outcomes of dialect contact are not what Trudgill's theory would predict: there is both too much and not enough retention of the idiosyncratic features of the pre-contact Oregon Athabaskan varieties, and the outcomes do not appear to be based straightforwardly on the relative proportions of speakers of each variety.

3 Overview of Oregon Athabaskan

3.1 Classification

Several varieties of Oregon Athabaskan have been identified in the linguistic literature, most associated with pre-contact villages located along watercourses in the region (Miller and Seaburg 1990). Figure 1 summarizes the classification of Golla (2011:70-75); abbreviations used when citing data are given in square brackets.

Upper Umpqua	
Rogue River dialect network	
Upper Coquille	[Coq]
Lower Rogue	
Sixes River	[Six]
Euchre Creek	[Euc]
Tututni-Joshua	[Tut]
Mikwanutni	[Mik]
Chasta Costa	[ChC]
Pistol River	[PiR]
Galice-Applegate	[Gal]
Chetco-Tolowa	
Chetco	[Cht]
Tolowa	[Tol]

Figure 1: Classification of Oregon Athabaskan languages based on Golla (2011)

Figure 1 is arranged roughly north to south, with Upper Umpqua the northernmost member of the group (in the region around present-day Roseburg) and Chetco-Tolowa the southernmost

² This is not to suggest that the languages had been previously isolated from each other, as there is ample historical and ethnographic evidence that the Athabaskan groups of Oregon had deep-rooted connections with each other and surrounding groups well before contact with Euro-American society (cf. Miller and Seaburg 1990, Hall 1992). Rather, the social and geographic dislocation in this period changed the nature and frequency of interactions.

(straddling the Oregon-California border).³ Readers are referred to Golla (2011), Drucker (1937), and Dorsey (1890) for detailed discussion and maps of the various groups and their aboriginal territories.

According to Golla (2011), the varieties in the outermost layer in Figure 1 are distinct languages (Upper Umpqua, Rogue River, and Chetco-Tolowa, indicated in bold); the Rogue River group is a dialect network with several local varieties, some more nearly similar to one another than others. It should be pointed out, however, that both Pierce and Ryherd (1964:142) and Bright (1964:101) reported a high degree of mutual intelligibility between Chetco-Tolowa and the Rogue River dialects. Golla (2011) includes Galice-Applegate (“Galice” henceforth) as a member of the Rogue River dialect network but considers it highly distinctive within the group. Sapir (1914:274) reported that Galice “differed so much from Chasta Costa [in the Lower Rogue group] as to be but partly understood, if at all, by speakers of the latter,” and Drucker (1937:283) considered Galice to be “the most divergent of all the groups,” including Chetco-Tolowa. Krauss (1973:924) considered Galice “an isolated (but still not too distant) extreme”. These reports suggest that the Oregon Athabaskan languages were, at most, members of a shallowly-differentiated family with many speakers passively competent in other varieties; they might even have composed a single dialect continuum with a high degree of mutual intelligibility between adjacent varieties, as suggested by Krauss (1973:924).⁴

3.2 Documentation and Orthographies

Data presented below are drawn from a number of published and unpublished sources. The earliest documentation of Tututni is found in wordlists collected by Hubbard (published in Taylor 1860) and Kautz (1855) in the mid-1850s, around the time when Oregon Athabaskan people were being forcibly removed to Siletz and Grand Ronde. The next major round of documentation was approximately one generation later in the 1880s, first by Everette (1882), and especially by Dorsey (1884a-n), who collected wordlists and paradigms for most of the known varieties of Oregon Athabaskan. Twentieth century documentation consulted in this study includes the published materials of Sapir (1914), Drucker (1937), the microfilm edition of Harrington’s (1942/1981) field notes, Bright (1964), E. Jacobs (1968, 1977), M. Jacobs (1968), Hoijer (1960, 1966, 1973), Golla (1976, 2011), Landar (1977), and Bommelyn (1989); unpublished twentieth century sources include fieldnotes collected by Barnett (1934) and Drucker

³ As noted in §1, by the mid-twentieth century “Tututni” had come to designate all of the Lower Rogue River dialects rather than what was originally a dialect spoken near the mouth of the Rogue River (Golla 1976, 2011). In this paper I will generally use the term in the narrower sense, especially in discussions of the nineteenth century documentation. Also, while some of the varieties in the Rogue River group were not spoken on the Rogue River per se, the term is convenient to designate the geographic center of the dialect group.

⁴ Statements from speakers interviewed by J.P. Harrington also show that the languages were mutually intelligible to some extent, one stating that Chetco people “talk half-way RR [Rogue River]” (Harrington 1942/1981, reel 25, frame 989). Barnett (1934) reported Billy Metcalf saying that the Chetco and Tolowa people talk the same and “understand but talk different” from the Rogue River dialects. See also the statement in §5.1 from speaker Hoxie Simmons on the status of Galice. These questions of mutual intelligibility matter insofar as it is not clear whether all of the Oregon Athabaskan varieties considered here qualify as “dialects” in a sense relevant to understanding koineization. The evidence presented here suggests that they do satisfy a definition of dialect contact encompassing “contact between varieties of language that are mutually intelligible at least to some degree” (Trudgill 1986:1).

(1934), and a draft lexicon of Tututni prepared by Golla (2008). Notice that this timeline of documentation, spaced approximately one generation apart (1850s – 1880s – 1914 and forward), fits rather conveniently into the 3-stage model of koineization outlined in §2.

Given such a wide variety of documentation collected over so long a time span, data presented in this paper have been normalized for ease of comparison. Normalization has often involved simple transliteration, but no attempt has been made to correct transcriptions where a given researcher might not have recorded certain distinctions consistently. In many cases representations of the original transcriptions are also provided in angle brackets, especially for nineteenth century sources, although these are sometimes omitted where they interfere with legibility in tables.⁵ Normalized transcriptions for the most part use conventions similar to those found in Golla (1976, 2008), but with [ʃ] instead of the digraph [sʰ] for retroflex [ʃ], and [ts] rather than [c] for the voiceless coronal affricate; following standard practice in the Athabaskanist literature, aspirated stops are represented with [p t k q] (so [k] is IPA [k^h]). In many cases it is unclear whether the parameters of variation under discussion are phonemic versus sub-phonemic. Square brackets are generally used both for particular (normalized) transcriptions, but this should not be considered a commitment to particular parameters being phonetic rather than categorical. Reconstructed Proto-Athabaskan vocabulary is taken from Krauss (2005) except where otherwise noted.

3.3 Resettlement and Focusing

As outlined in §1, the Rogue River Indian War of 1855-1856 and subsequent resettlement on the Siletz and Grand Ronde reservations were watershed events in the history of contact between indigenous people of southwestern Oregon and Euro-American colonizers (Schwartz 1997). Most Oregon Athabaskan groups wound up at Siletz and were ultimately consolidated in a small number of communities that were partially segregated from the Takelma, Shasta, and other indigenous groups living on the reservation.⁶

Resettlement had far-ranging social consequences, among which was a partial erasure of distinctive pre-contact micro-regional identities. For example, Dorsey (1889, 1890) observed that most village groups resettled at Siletz still maintained separate burial grounds, but noted that all of the Chetco-speaking people had come to share just one, even though they had once lived in nine villages distinct enough that they could intermarry (village exogamy having been the norm in pre-contact times).⁷ The intermingling of populations is also reflected in the following state-

⁵ Readers unfamiliar with the Bureau of American Ethnology alphabet used by Everette and Dorsey are referred to Golla (2011:283-286) for guidance. Likely points of confusion are <q> (a voiceless velar fricative, not a stop as in later sources), <rx> (a voiced velar fricative, usually transcribed as either <r^x> or <'x> by Dorsey), <c> (a voiceless palato-alveolar fricative), <ç> (a voiceless interdental fricative), and the digraph <çl> (used by Dorsey to represent a voiceless lateral fricative).

⁶ The focus of this study is Siletz, where most of the Oregon Athabaskan groups wound up, but reference is sometimes made to the adjacent Grand Ronde reservation where similar socio-historical processes are likely to have been at play. The Tolowa, whose traditional territory was on the California side of the border, did not undergo this removal and instead were consolidated within their aboriginal territory; the Upper Umpqua wound up at Grand Ronde (Golla 2011:70-75).

⁷ In a similar vein, Everette (1882) reported that:

ment from the report of the Office of Indian Affairs' agent at Siletz in 1887: "It would be impossible to give the exact number of each tribe, on account of so much intermarrying among them" (Office of Indian Affairs 1887:189). This accords with the perception of people who were raised at Siletz in this period: Drucker (1934) reports one woman saying that "people down on Lower Farm [at Siletz] were all mixed up – Chetco, Rogue R., Euchre Cr., Sixes Cr., etc." At the same time, however, at the time of Dorsey's visit he found no common ethnonym in use for the Athabaskans with origins along the Rogue River (Dorsey 1890). The enduring importance of people's ancestral villages is evident moreover in the fact that people interviewed by Barnett (1934) and Drucker (1934) in the twentieth century knew with a high degree of precision the names (if not the exact locations) of their parents' and grandparents' former village affiliations, even when in some cases they had never visited these places themselves (Drucker 1937:269, fn. 24).

There is very little published information about the status of Athabaskan and other indigenous languages spoken at Siletz and Grand Ronde for nearly thirty years following resettlement, except indirectly in the annual reports of the U.S. government's agents. The earliest of these indicate increased use of contact languages – English to some extent, but especially Chinook Wawa. J.H. Huffer, the schoolteacher at Grand Ronde in 1864, complained, "I have found considerable difficulty in getting the scholars to speak the English language properly or at all, but I am now beginning to overcome that difficulty by giving premiums to those that speak the most and the best English at the end of each month" (Office of Indian Affairs 1865:94). Two years later J.B. Clark, another teacher at Grand Ronde, reported, "I find no difficulty in making them understand the English language, and I endeavor to make them communicate their ideas in the same language, but they will use that barbarous jargon, the Chenook" (Office of Indian Affairs 1866:82). This last statement shows clearly that only eight years after resettlement, Chinook Wawa had become a regular language of communication among children, in certain contexts at least (cf. Zenk 1988): the seeds of language endangerment were already sown.

A similar ascendancy of Chinook Wawa at Siletz is highlighted in comments by Dorsey (1889:55): "As more than twenty tribes, each having its own dialect, have been consolidated on this reservation, they are obliged to use a common language. So all speak Chinook jargon, and many are learning English." In providing population figures for the Siletz, Everette (1882) counted the various Oregon Athabaskan groups separately, but noted "all these Indians talk the same language and call it (tu=tu=těne wá wá)" – that is, 'Tututni' plus 'language' in Chinook Wawa. Everette's comments, like Dorsey's, suggest a growing role for Chinook Wawa, and also point to an emergent pan-Athabaskan ethnolinguistic identity, with all varieties of Oregon

"they are very clannish in respect to 'Burying their Dead'. Each tribe greatly preferring to be by itself; they sometimes bury, in a 'Common church' or 'Burying Ground,' but this occurs very rarely: this, of course, only refers to 'Full Blood's' of each tribe; as the 'Half Blood's,' (i.e. Indians, whose Parents and Grandparents are all of Different tribes) generally bury their Dead, at the nearest and handiest place they can find." (Everette 1882:236)

Everette further observed of the Tututni that "these Indians are so mixed by Inter-marriage, with other tribes, that they Literally have no tribal Laws or Relations of their own" (1882:236) – surely a distortion, but in keeping with the general picture of the erosion of some cultural practices associated with pre-contact village affiliations.

Athabaskan collapsed as Tututni.⁸ Ultimately, many people at Siletz also acquired some proficiency in English, and in 1889 Indian Agent Beal Gaither was able to report of people living at Siletz that “[m]ost of them speak and understand English well enough for ordinary intercourse” (Office of Indian Affairs 1889:274).

Nonetheless, the strength of indigenous languages vis-à-vis contact languages at Siletz and elsewhere in Oregon is found in the 1870 report of A.B. Meacham, Superintendent of Indian Affairs for the state, who called for the creation of boarding schools separating children from their families in order to better meet the government’s assimilationist aims. Meacham argued for this on the grounds that “so long as Indian children remain with their parents, spending all their leisure hours at home, *where they use their native language only*, they forget what is learned through the day” (Office of Indian Affairs 1870:53, emphasis added). A few years later, the continuing influence of Athabaskan languages at Siletz was highlighted in another comment by Everette. Expressing gratitude to Tututni cultural informant William Strong, he wrote, “though Educated in the ‘English Language,’ he still ‘thinks’ in the Indian Language and therefore cannot talk ‘Grammatically’” (1882:90).

The picture that emerges is that by the 1880s the Oregon Athabaskan languages, although still widely spoken some twenty-five years after removal to Siletz, were coming to be identified as varieties of a single language and were encountering new pressure from exogenous contact languages. This shift went hand-in-hand with the dissipation of some salient cultural practices associated with pre-reservation village affiliations, especially among younger people of mixed ancestry. This accords with Leavelle’s (1998:436) assessment of the situation on the adjacent Grand Ronde reservation, where “shared cultural practices and attitudes and the common reservation experience helped the Indians of Grand Ronde overcome the challenges of this diversity to forge an Indian identity rooted in the place and the history of their valley home.”⁹ The importance of this social and sociolinguistic convergence lies in the link between koineization and a focused social identity: as Kerswill (2002) observes, “for a koine to form, the speakers must waive their previous allegiances and social divisions to show mutual solidarity.” The fact that some of the regional divisions separating Athabaskan groups in pre-reservation times were dissipating in the 1880s suggests that the community was becoming focused in the relevant sense and renders it more likely that leveling of erstwhile linguistic differences might have taken place in the same period.

⁸ This usage is already found in one of the earliest summaries of the Athabaskans in the region, the 1854 report of Indian Agent J.L. Parrish, who wrote, “I have found the natives all speaking one language, and from similarity of appearance, habits, and pursuits, consider them as being one nation or people, who from their language may be denominated To-to-tin, or To-to-tut-na; the latter appellation being applied to them by their early visitors” (Office of Indian Affairs 1854:286). There is no evidence that Parrish’s opinion reflects a pre-contact sentiment shared among the Athabaskans themselves, but raises the possibility that community focusing found in the 1880s had antecedents in pre-reservation times.

⁹ This period is often characterized as a series of injustices committed against indigenous inhabitants of the region, who are portrayed as hapless victims of circumstance. Although these injustices are undeniably real, Leavelle (1998) has emphasized the agency of indigenous groups during this period in showing extraordinary resilience and creativity in adapting to their new circumstances.

4 Leveling

The expectation of the model of new dialect formation presented in §2 is that a koineized Oregon Athabaskan should have developed in the newly-focused speech community that emerged at Siletz. To some extent, this is what the documentary record shows; two specific cases are considered in this section.

4.1 k ~ x Variation in Tututni

One case of leveling involves reflexes of Proto-Athabaskan *q (an aspirated back-velar stop) and *x̣ (a voiceless back-velar fricative), which merge as a fricative /x/ everywhere in Oregon Athabaskan except Galice, where aspirated /k/ is found instead, as illustrated in Tables 1 and 2. This is considered a largely exceptionless categorical merger in published descriptions of Oregon Athabaskan (e.g., Sapir 1914, Bright 1964, Hoijer 1966, Golla 1976).¹⁰

ʂxeʔ	Coq (Harrington 1942/1981) (1SG.POSS)
x ^w eʔ	Euc (Golla 2008) (3POSS)
x ^w eʔ	Tut (Landar 1977)
x ^w e:	Mik (Landar 1977)
x ^w e:	ChC (Harrington 1942/1981)
k ^w eʔ	Gal (Landar 1977)
x ^w e	PiR (Dorsey 1884m)
x ^w eʔ	Tol (Bright (1964)

Table 1: ‘Foot’ in Oregon Athabaskan (P-A *qeʔ)

¹⁰ In the Upper Coquille form in Table 1, [ʂ] is a first person singular possessor agreement prefix. In the other varieties, labialization of the initial consonants indicates a third person possessor, historically derived from a prefix **mi-* (Golla 1976, Collins 1985). According to Golla (1976, 2011), in most cases Oregon Athabaskan labialized velars are not direct reflexes of Proto-Athabaskan labialized velars. Instead, Proto-Athabaskan labialized velars merged with their non-labialized counterparts, with contrastive labialization re-emerging subsequently in the vicinity of round vowels and labial consonants (such as the possessed nouns shown here). Thus, while the merger of velar stops and fricatives also affected *q^w and *x̣^w, I will abstract away from details of labialization in the discussion since they are orthogonal to the issues at hand.

xənnəʂ	Coq (Harrington 1942/1981)
xənəs	Euc (Golla 2008)
xənnəs	Tut (Dorsey 1884i)
xənnəθ	Mik (Landar 1977)
xənəθ	ChC (Harrington 1942/1981)
kədəθ	Gal (Harrington 1942/1981)
xenəs	Tol (Bommelyn 1989)

Table 2: ‘Canoe’ in Oregon Athabaskan (P-A *xəŋʲəts’ ‘raft’)

Despite the ubiquity of this merger, a close look at the earliest documentation of the Oregon Athabaskan languages reveals that aspirated [k] was sometimes found outside of Galice as late as the 1880s. Consider first the following selection of entries from a wordlist collected by Hubbard in the mid-1850s, one of the earliest attestations of Tututni (published in Taylor 1860). The first two columns of Table 3 show Hubbard’s original transcriptions and approximate phonetic interpretations of them; the corresponding Euchre Creek forms transcribed by Golla in the twentieth century are provided to illustrate the basis for this interpretation. As might be expected for an adaptation of English orthographic conventions to a new language, <qu> in Hubbard’s list represents a labialized velar stop, as shown by the entries for ‘arm’ and ‘knee’. The sequence <hwo> in the same entries is an indefinite/generic third person possessor prefix $x^{(w)}o-$, probably etymologically derived from the Proto-Athabaskan areal prefix *qo-, used as an “indefinite human object/possessor” in some Athabaskan languages (Leer 2005:292).¹¹ Hubbard’s <ch> in ‘woman’, ‘water’, and ‘child’ represents [x], and his <narke> is probably [na:ke], <ar> most likely a representation of vowel length by a speaker of a non-rhotic dialect of English (cf. Hinton 1979:7).

¹¹ This prefix is not included in Golla’s (1976) description of Tututni but is pervasive in the documentation of Everette (1882) and Dorsey (1884i). Its use as a generic is highlighted in minimal contrasts documented by Dorsey like <qwīc> (= [x^wiš]) ‘any nose’ versus <mīc> (= [miš]) ‘his nose’ (1884i). It is most likely the same prefix as the indefinite human possessor $\mu\theta-$ in Galice identified by Hoijer (1966), but / μ / from *q in Galice is unexpected.

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Tututni (Taylor 1860)		Euchre Creek (Golla 2008)	gloss
< hwoquarne >	x ^w og ^w a:ne	xog ^w aneʔ	‘arm (3POSS)’
< hwoquot >	x ^w og ^w od	-g ^w əd	‘knee (3POSS)’
< tsach >	tsʔax	tʂʔaxe	‘woman’
< tlchut >	təlxəd	təlxəd	‘water’
< scharchah >	sxa:xa	ʂxexe	‘child’
< hwun >	x ^w ən	xwənʔ	‘fire’
< narke >	na:ke	naxi	‘two’
< squallah >	sk ^w əla	sx ^w əlaʔ	‘five’
< quiesse >	k ^w iəse	x ^w ese	‘ten’

Table 3: Selected vocabulary from Hubbard’s Tututni wordlist (published as Taylor 1860)

The entry for ‘fire’ in Table 3, from Proto-Athabaskan *qunʔ, shows the expected velar fricative in Tututni, as does the indefinite possessor prefix (from *q) found with body part vocabulary. This is confirmed in another wordlist collected in the same period: Kautz (1855) transcribed a continuant in <whun> (= [x^wən]) ‘fire’ and several words for body parts, such as <whus-see> (= [x^wəsi]) ‘head’, where <whu-> is the indefinite possessor prefix. In the remaining forms in Table 3, Hubbard recorded a stop rather than a fricative in ‘two’, ‘five’, and ‘ten’.¹² This also is partly confirmed by data from Kautz (1855), who transcribed <nah-ke> (= [na:ke]) ‘two’ and <qui-es-sai> (plausibly [kwəse] or [kwese]) ‘ten’ with velar stops, but <swo-lah> (= [swola:]) ‘five’ with a continuant [w]. Nothing is known about the speakers Hubbard and Kautz worked with, but these data show that in the mid-nineteenth century a velar stop was found instead of [x], for some lexical items at least, in a variety of Oregon Athabaskan identified as Tututni spoken by people raised prior to resettlement at Siletz.

A generation after resettlement, both Everette (1882) and Dorsey (1884i) transcribed [x] in Tututni [naxe] ‘two’ and [x^we:se] ‘ten’. Documentation of most varieties of Oregon Athabaskan in the twentieth century show a fricative in ‘five’, contrasting with Hubbard’s stop, but Everette (1882) recorded [k^w] in Tututni, matching Hubbard, where Dorsey (1884i) transcribed [w], as did Kautz.¹³

¹² Leer (2005) reconstructs Proto-Athabaskan *nə:(-qe:) for ‘two’ (in the phrase *nə:(-qe:) dəne: ‘two persons’); Krauss and Leer (1981) reconstruct *q^we-nə:z-ya:nʔ for ‘ten’ (although the long vowel *e: makes it unclear whether or not this is the etymological source for ‘ten’ in Tututni). There is no published Proto-Athabaskan reconstruction for ‘five’ in the sources consulted for this study, but Leer reconstructs a velar stop for this word in an unpublished comparative Athabaskan lexicon.

¹³ Galice has /k/, as expected, and some other varieties show /w/ instead of /x^w/. The labialization here is likely due to an original round vowel following /k/ (Golla 1976), as in the Chasta Costa forms transcribed by Sapir and Harrington.

ʂx ^w əlləʔ	Coq (Harrington 1942/1981)
swala	Six (Dorsey 1884l)
sx ^w əlaʔ	Euc (Golla 2008)
sk ^w əʎla	Tut (Everette 1882)
swala	Tut (Dorsey 1884i)
sx ^w əla:	Mik (Landar 1977)
sxola:	ChC (Sapir 1914)
ʂxolla:, ʂwəlla:	ChC (Harrington 1942/1981)
sko:loʔ	Gal (Landar 1977)
swəla	PiR (Dorsey 1884m)
ʂwelohne	Tol (Bommelyn 1989) ‘five people’

Table 4: ‘Five’ in Oregon Athabaskan

In the 1880s, then, it appears that some speakers of Tututni still produced a velar stop rather than a fricative in ‘five’, a continuation of variation that was also present in the 1850s.

Another item of interest in Hubbard's wordlist is an entry *kowlawo*, glossed ‘tooth’. The syllable <la> is mysterious, but the root is probably <wo> ‘tooth’ (lenited [ɣ], transcribed as such by Harrington and others) and <ko> a possessive prefix. We might expect initial <hwo> here for the indefinite possessor, matching the other entries for body parts in his list (e.g., the first two forms in Table 3). This form is anomalous until we compare it with Dorsey’s and Everette’s documentation. Dorsey consistently transcribed a fricative for this prefix in Tututni; Everette frequently did so as well, but there are numerous examples (many in a list of body parts) where he transcribed a stop instead. A sample of these forms is given in Table 5.¹⁴ Notice that Everette transcribes ‘heart’ twice, once with a fricative [x^w] in the prefix (in a list of human body parts) and once with [k^w] (in a list of animal body parts).

¹⁴ Everette sometimes wrote <k> or <k^w> for this prefix, the apostrophe diacritic indicating that the consonant is “exploded” (Everette 1882:232); here and elsewhere, he appears to have used it for any sort of exceptional laryngeal noise, both glottalization and aspiration. Interestingly, in Dorsey’s (1884e) documentation of Chetco he notes that “kwũ can be prefixed to any noun (S.3) to form the generic,” offering examples such as <kwũ-ʔa> ‘mouth, a mouth’ – notice that in Chetco he transcribed a stop instead of a fricative. One speaker used both variants, explicitly identifying the one with the fricative as Tututni and the one with the stop as Chetco.

Dialect Contact in Oregon Athabaskan

Everette (1882)		Dorsey (1884i)		gloss
< qwǒ'ni >	x ^w oni	< qoni >	xoni	'face'
< qo'-la >	xola	< qwa-la' >	x ^w ala	'hand'
< kwûsa'-qe' >	k ^w əsaxe	< qwo-sě'-qě >	x ^w osexe	'saliva'
< k'wûc >	k ^w əš	< qwic >	x ^w iš	'nose'
< hwû'se' >	x ^w əse	< qwû-sě' >	x ^w əse	'heart'
< k'wû'sä >	k ^w əse	-	-	'heart'

Table 5: Indefinite possessor prefix in 1880s Tututni

Similar variation is found in Everette's transcription of words formed on the roots for 'foot' (cf. Table 1 above) and 'fire'.

Everette (1882)		Dorsey (1884i)		gloss
< ck'e' >	ške	< qo-qwě' >	xo-x ^w e	'foot' (1SG.POSS / 3POSS)
< tcăc-k'we >	č'əš k ^w e	< tc'ac qwě' >	č'aš x ^w e	'bird's tracks'
< k'wû'g-qe >	k ^w əkxe	-	-	'hoof'
< qo'-qe' >	xoxe	< qo-qwě' >	xox ^w e	'footprint' (3POSS)
< qe'-năL-me' >	xe nəłmeʔ	-	-	'(bird's) spur' (lit. 'feet knives')

Table 6: 'Foot' and related vocabulary in 1880s Tututni (< P-A *qeʔ)

Everette (1882)		Dorsey (1884i)		gloss
< qhwûn >	x ^w ən	< qwûn >	x ^w ən	'fire'
< qhwûn-sit >	x ^w ənsid	< kwûn-sit' >	k ^w ənsid	'charcoal'
< qhwûn-tse' >	x ^w əntse	< qwûn-se' >	x ^w əntse	'ashes'
< qûn'-ta' >	xənʔda	< qwûn-ʔa' >	x ^w ənda	'fireplace'
< qûn-ta'-Let >	xənda ʔed	< qwûn-ʔa' >	x ^w ənda	'smoke-hole'
< k'wûn-ta' >	k ^w ənda	-	-	'smoke-hole'

Table 7: 'Fire' and related vocabulary in 1880s Tututni (< P-A *qunʔ)

Overall, Everette's documentation suggests ongoing variation involving [k] and [x] in different tokens of some words and the indefinite possessor prefix.

Dorsey's notes, collected only two years later, show much less evidence for [k], not only in Tututni but in the other Lower Rogue dialects he documented as well (Dorsey 1884d,f-l). However, Dorsey did transcribe [k^w] in the compound 'charcoal' built on the root 'fire' in Table 7,

where Everette had recorded [x^w]. Moreover, for at least one lexical item Dorsey's Tututni consultants showed considerable variation. Recall the form *scharchah* [sxa:xa] 'child' from the Hubbard wordlist in Table 3. Both Dorsey and Everette transcribed this word in various ways, sometimes with [k], sometimes with [x], as the normalized forms in Table 8 show.

sxexe, tsxexe	'child'	Six (Dorsey 1884l)
tsxeyt'i	'she had a child' (-t'i 'propriative')	
skeke yasle	'boy beginning to walk'	Tut (Dorsey 1884i)
tsxexe	'young man'	
skexe, sxexe	'boy'	Tut (Everette 1882)
ts'axe sxexe	'girl baby'	Mik (Dorsey 1884f)
ts'axe skeke yasli	'female infant'	ChC (Dorsey 1884d)
sxexe	'boy'	

Table 8: 'Child' and related vocabulary in Lower Rogue dialects, 1880s

Strikingly, both of Dorsey's Tututni forms in Table 8 were produced by a single speaker, Shem Lafayette, and both of his Chasta Costa forms were elicited from Jake Orton. Notice also the intermediate form [skexe] transcribed by Everette, with one velar stop and one velar fricative, perhaps a hybrid 'interdialect form' commonly found in dialect contact situations (cf. Trudgill 1986:62-65). Table 8 gives the impression of speakers using sometimes one, sometimes another of several variants of the same word available at Siletz in the 1880s.¹⁵

To summarize the data presented thus far, variation involving [k] and [x] is found in nineteenth century documentation of Tututni. In the 1880s especially, variants of some words and the indefinite possessor prefix are found with [k] instead of [x]. In some cases it is clear that this variation involved different tokens of the same word, sometimes as produced by a single speaker. The timing of Everette's and Dorsey's visits to Siletz becomes significant: one generation after the Oregon Athabaskans were consolidated on the reservation, the documentation shows precisely the inter- and intra-speaker variation predicted by Kerswill and Trudgill (2005) for Stage II speakers. The interpretation of these data is that speakers of Oregon Athabaskan who grew up at Siletz from the 1850s onwards were exposed to a wide variety of dialects, some with [k], others with [x], and some (like Tututni) most likely with both. By the 1880s, [k] was losing ground to [x] as leveling of the closely related Rogue River dialects got underway.

Twentieth century documentation of Oregon Athabaskan presents a much less complicated picture, with variation associated with [k] ~ [x] in the 1880s reduced in the last generations of first-language speakers (modulo Galice, discussed in §5.1). Although aspirated velar stops are rare in twentieth century sources, there are enough tokens recorded to warrant consideration.

¹⁵ The fricative is probably innovative in this word: Babine-Witsuwit'en, which retains Proto-Athabaskan *q as such (Krauss and Golla 1981), has a word *sqaq* 'child' that appears to be cognate with the Oregon Athabaskan *sxexe* (Hargus and Tuttle 1997:203-204). Initial [ts] vs. [s] in Table 8 is discussed in section 5.2.

Some normalized examples are given in Table 9. These data are especially difficult to interpret due to the lack of consistency across varieties and transcribers, but they do suggest that aspirated [k] was found outside of Galice in some lexical items in the twentieth century, in some cases in the same items where [k] was transcribed in the nineteenth century. Sapir (1914:284) had found a single exception to the velar stop~fricative merger in Chasta Costa, aspirated back velar [k^w] occurring in <k^wΛS/t^ʰá/ne> [k^wəsta:ne] ‘six’. Later, Harrington (1942/1981) transcribed <k^ʰ>, an aspirated velar stop, in a handful of words in Upper Coquille, Chasta Costa, and Tututni (Upper Coquille examples given in Table 9) consistently enough that it is unlikely to be a mis-transcription; he may, however, have intended a front velar rather than back velar articulation in some cases.¹⁶ Similar considerations apply to a handful of words transcribed with [k] by Golla (2008). Many of these same words were transcribed with velar stops most plausibly interpreted as aspirated by Dorsey and/or Everette, suggesting that for some lexical items an aspirated velar was also found in the 1880s and transmitted as such transgenerationally throughout the reservation period.

Tut (Dorsey 1884i)	ChC Sapir (1914)	Coq (Harrington 1942/1981)	Euc Golla (2008)	gloss
sakətʃ	-	ʃa:kk ^w ət	ʃaʔkuʃ	‘beaver’
θikədled	-	θi:kkəhd	sikad	‘top of head’
k ^w ət-tʃi	-	x ^w əttʃiʔ	k ^w ətʃiʔ	‘clay, mud’
k ^w əstane	k ^w əsta:ne	g ^w əθta:nne	g ^w əstane	‘six’ ¹⁷
dəmmilke	dəmelʔge	dəmmel:keʔ	-	‘pelican, crane’
katʃa	-	ka:tʃəʔ	-	‘crab’
kəllixe	-	kəlli:xxe:	-	‘moccasin’

Table 9: Aspirated [k] in Rogue River dialects

Variation involving [k] and [x] in particular lexical items is found only rarely in twentieth century documentation: most words have [x] and a few may have [k], but for any given word speakers seem to have converged on one or the other. Direct comparison with the nineteenth century Tututni data presented above is impossible in many cases due to the small number of forms recorded in the twentieth century with speakers identified specifically with the Tututni-Joshua dialect. However, the words in Table 10 were transcribed by Harrington with [x] in both Tututni (as spoken by Lucy Smith) and Upper Coquille (as spoken by Coquelle Thompson), where either Everette (1882) or Dorsey (1884i) had recorded [k] in Tututni.

¹⁶ Many of Harrington’s aspirated tokens are transcribed with lowercase <k>, as opposed to the much more frequent (when unaspirated) small capital <K>, perhaps indicating a front-velar vs. back-velar articulation.

¹⁷ In his documentation of Chasta Costa with Wolverton Orton, who Sapir had worked with thirty-five years earlier, Harrington (1942/1981) transcribed ‘six’ once with aspirated <k^ʰ> and once with glottalized <k>.

Everette (1882)	Dorsey (1884i)	Harrington (1942/1981)	gloss
k ^w askəs	h ^w əʔ haʔ	x ^w əʔxa:ʔ	‘flea’
kxãne, k ^w əxẽ(?)e	-	xənʔe:-	‘river’ ¹⁸
skexe, sxexe	tsxexe, skeke	sxe:xxe	‘child’

Table 10: Variable [x] ~ [k] in nineteenth and twentieth century Rogue River dialects

In each of these cases, Harrington transcribed [x] in both Tututni and Upper Coquille, suggesting that speakers of Tututni in the mid-twentieth century tended to converge on [x] for words that varied between [k] and [x] in the late nineteenth century documentation of Dorsey and especially Everette.

Compare also twentieth century tokens of words containing the root ‘fire’ in Table 11 with the nineteenth century forms in Table 7 above.

x ^w ənʔ	‘fire’	Coq (Harrington 1942/1981)
x ^w ənʔʂeʔ	‘ashes’	
k ^w ənʔθid	‘charcoal’	
x ^w ənʔ	‘fire’	Euc (Golla 2008)
x ^w ənʔsid, k ^w ənʔsid	‘charcoal’	
x ^w ən	‘fire’	Tut (Harrington 1942/1981)
x ^w ənʔθid	‘charcoal’	
x ^w ən	‘fire’	Mik (Landar 1977)
x ^w ən	‘fire’	ChC (Harrington 1942/1981)
x ^w ən xənəs	‘steamboat’ (lit. ‘fire canoe’)	
k ^w ənʔ	‘fire’	Gal (Landar 1977)
k ^w ənʔθid	‘live coals’	

Table 11: ‘Fire’ in twentieth century Rogue River dialects (P-A *qunʔ ‘fire’)

Here again, Tututni *x^wənʔθid* ‘charcoal’ as transcribed by Harrington (1942/1981) has a fricative rather than a stop. In other dialects, some residual variation between [x] and [k] is found in similar compounds, as demonstrated by the two forms meaning ‘charcoal’ recorded in both Euchre Creek and Upper Coquille.

The upshot is that even in the twentieth century, Stage III speakers (the second generation raised in the mixed dialect reservation community) retained some variation involving [x] and [k], but to a much lesser degree than was found in the 1880s. With few exceptions (such as ‘char-

¹⁸ Transcribed by Harrington in Tututni [xənʔe:ttʔəyəs] ‘river snake’ (tʔəyəs ‘snake’), Upper Coquille [xənʔe:kkʔwət] ‘on the river’ (-kʔwət ‘on’).

coal’), most lexical items became uniformly [k] or [x], both within and across speakers. The stop variant may have been retained sporadically, but there was an overall tendency to prefer the fricative. What had been a linguistic variable in the Siletz reservation community in the 1880s and probably earlier largely ceased to be so in the twentieth century. The exception, as usual, was Galice, which maintained /k/ throughout, a point that will be considered in §5.1.

4.2 Chetco

As discussed in §3, Chetco-Tolowa is generally considered a language distinct from the Rogue River varieties. The earliest documentation of Chetco is found in Dorsey (1884e), where at least three features distinguish it from his documentation of Tututni (1884i). The first is nasalization: Proto-Athabaskan coda nasals are lost following long vowels in all of Oregon Athabaskan, but they are maintained as vowel nasalization in Chetco-Tolowa (Bright 1964, Golla 2011), transcribed by Dorsey with superscript <n>. The others are coda [tʃ] (Dorsey’s <tʃl>) in Chetco versus [l] in Tututni, and two words beginning with [ʒ] (Dorsey’s <ʒ>) in Chetco but [d] (Dorsey’s <t>) in Tututni: ‘man/male’ and ‘elk’. Examples of these Chetco features as compared with Tututni are shown in Table 12.¹⁹

Chetco (Dorsey 1884e)		Tututni (Dorsey 1884i)		gloss
< ts’a ⁿ -qe >	ts’ãxe	< tsa ^l -qe >	tsaxe	‘woman’
< qwa ⁿ -k’qi >	x ^w ãk’i	< qwa ^l -k’qě >	x ^w ak’e	‘rib’
< ʦi ⁿ -tcu >	dĩču	< di ^l -i-tcu >	diču	‘mountain lion’
< r ^x i-tūtʃl-ta ^l -k ^w ě >	γitutʃtag ^w e	< qwa-tūl ^l -tu-kwě ^l >	x ^w ətəltək ^w e	‘calf (3POSS)’ ²⁰
< r ^x i-mūtʃl-kūl-lě >	γimətkəle	< qo-mūl-kūl lě >	xoməlkəle	‘bladder (3POSS)’
< natʃl-mě >	natʃme	< nal ^l -mě >	nalme	‘knife/iron’
< ʦūs ^l -sně >	ʒəsne	< ʦi-sně >	disne	‘man/male’
< ʦis ^l -tcu >	ʒisču	< ʦēs ^l -tcū ^l >	desču	‘elk’

Table 12: Features of Chetco vs. Tututni documented by Dorsey (1884e)

It is important to note that even in the 1880s, there was variation along these lines: while two of the Chetco speakers Dorsey worked with on the whole agree in the features given in Table 12, a third offered Tututni forms like <ʦisne> ‘man’ (with initial [d] rather than [ʒ]) and <tsa^l-qe>

¹⁹ Tolowa is described as having allophonic [tʃ] for coda /t/ (Bright 1964), so the first of these differences might involve phonemic /t/ vs. /l/ with the affrication a regular allophonic rule in Chetco. However, there are many other cases where Dorsey transcribes coda <ʃl> (= [tʃ]) in both Chetco and Tututni, so it is unclear precisely what conditions the difference. Dorsey (1884g) noted variation in Tututni involving [ʒ] and [d] in proximal deictics such as <ʦi> ~ <ʦi> ‘this’, which can perhaps be interpreted as due to dialect mixing in this period.

²⁰ The possessed nouns ‘calf’ and ‘bladder’ differ in the definiteness of the pronominal element: *γi-* (Dorsey’s <r^xi->) in the Chetco words is a proclitic demonstrative glossed as ‘that’ by Golla (1976); *xo-* or *x^wə-* (Dorsey’s <qo-> and <qwa->) in the Tututni words is the indefinite possessor prefix discussed in §4.1.

‘woman’ (with the vowel in the first syllable oral instead of nasalized).²¹

In the twentieth century, Chetco people living at Siletz appear to have adopted the Tututni values for these features. The main source of information about Chetco in the twentieth century comes from Billy Metcalf, who was interviewed by Homer Barnett and Elizabeth Jacobs in the 1930s. Metcalf’s mother was Chetco and his father was from Rogue River; he was born in Tolowa country in California and lived at Smith River until the age of nine before moving to Siletz (Barnett 1934). Jacobs (1968) estimated him to be in his mid-fifties in 1935, so he was born around 1880, squarely in the generation of speakers that would be identified with the third stage of Kerswill and Trudgill’s (2005) theory of koineization outlined in §2.

In the published edition of a text dictated to her by Metcalf, Jacobs noted that he identified himself as a speaker of Chetco even though his speech lacked the vowel nasalization typical of Chetco as documented by other researchers.²² She suggested that “[s]ince Mr. Metcalf had resided at Siletz most of his life, these phonological differences may reflect an assimilation to the predominant Tututni dialect continuum spoken there” (E. Jacobs 1977). Moreover, it is evident in the texts transcribed by Jacobs (1968, 1977) that Metcalf had coda [l] rather than [tʃ] and initial [d] in ‘man’, both features associated with Tututni rather than Chetco. Other direct comparisons with Dorsey’s (1884e) documentation of Chetco are hard to find because the texts transcribed by Jacobs happen not to include vocabulary found in Dorsey’s wordlists. However, some points of comparison are shown in Table 13, and also in Table 14 if the Pistol River dialect documented in Dorsey (1884m), where coda [tʃ] is pervasive, can be used as a proxy for Chetco.²³

²¹ The same speaker offered body part vocabulary distinct enough from the other Chetco speakers that Dorsey (1884e) noted “may belong to some other dialect.” There were also evidently differences among speakers in their treatment of possessed noun paradigms. This is further evidence for the high degree of dialect variation at Siletz in this period, as expected in the model of dialect contact presented in §2.

²² Jacobs further noted that Metcalf’s speech lacked the prominent retroflex consonants documented in Chetco by other researchers, reflexes of a Proto-Athabaskan palatal series (cf. Bright 1964, Golla 1976, 2011). The retroflexes in Chetco-Tolowa are described by Golla (1976:219) as “strongly r-colored, lip-rounded palatal sibilants.” In most other varieties of Oregon Athabaskan, the distinction between plain versus retroflex consonants “is reduced to a subtle flat versus plain contrast, difficult even for a linguist with a trained ear to hear consistently in the speech of surviving speakers.” Retroflexion is mostly absent in Dorsey’s Chetco notes, but he did transcribe it in the few Tolowa words he recorded and probably was able to hear it accurately. Thus Tolowa <t^raⁿ-qe> ‘woman’ (Dorsey 1884n) but Chetco <ts’aⁿ-qe> (Dorsey 1884e), superscript <r> doubtless indicating retroflexion (cf. Tolowa [tʃ^rãxeh] in Bright 1964:102). Interviews with Chetco speakers conducted by Golla and Bright took place at Smith River (Golla p.c.), so the salient retroflexion detected in their speech might be a contact-induced assimilation by people who lived in close proximity to the Tolowa.

²³ The Pistol River is located between the Chetco and Rogue Rivers along the Oregon coast. The dialect from this region, as documented by Dorsey (1884m), also matches Chetco with respect to vowel nasalization and the pronunciation of ‘man/male’ and ‘elk’, suggesting that it may have been linguistically intermediate between Chetco-Tolowa and the Lower Rogue dialects (contra Golla 2011:73).

Chetco (Dorsey 1884e)		Tututni (Dorsey 1884i)		Billy Metcalf	gloss
< ts'a ⁿⁱ -qe >	ts'ǎxe	< tsa ⁱ -qě >	tsaxe	ts'axe	'woman'
< qa ⁱ - ^r xûtçl-kět >	xayətłked	< ha- ^r al ⁱ -kět >	hayalket	hayəłged	'(animal) skin'
< tçûs ⁱ -sne >	žəsne	< tışně ⁱ >	disne	disne	'man'

Table 13: Tututni features in Billy Metcalf's twentieth century Chetco

Pistol River (Dorsey 1884m)		Tututni (Dorsey 1884i)		Billy Metcalf	gloss
< tûtçl-qût >	tətłxəd	< tûl ⁱ -qût >	təl xəd	tə:lxəd	'water'
< ne-tetçl ⁱ -yu >	nedetłyu	< nas-tîl ⁱ -yu >	nasdilyu	nayasdəlyu	'beads'

Table 14: Coda [l] in Billy Metcalf's twentieth century Chetco

However, not all Chetco features are lacking from Metcalf's speech. Thus, while he has the Lower Rogue initial [d] in 'man', Barnett (1934) transcribed [ž] in two tokens of 'elk' produced by Metcalf.²⁴

Although Billy Metcalf identified his language as Chetco, presumably due to a connection to his mother's family's home territory, he was in fact speaking a variety of Oregon Athabaskan that was virtually indistinguishable from a variety also known as Tututni. What this suggests is that in the development of an Oregon Athabaskan koine at Siletz, there was a partial decoupling of linguistic structure and ethnolinguistic identity. As noted in §3.3, it is clear that knowing the place of origin of one's parents and grandparents remained in the twentieth century an important part of people's family histories, since nearly everyone interviewed by Drucker (1934) was able to provide that information. Some people identified their language as "Tututni" regardless of whether or not their ancestors happened to come from the mouth of the Rogue River; others called their language "Chetco" according to their ancestral place of origin. The evidence considered here suggests that the structural details distinguishing these varieties from one another were minimal, the result of dialect leveling among Stage III speakers raised in the mixed dialect community at Siletz.²⁵

Another point of interest is that the Chetco-Tututni leveling is directional: "Chetco" of twentieth century Siletz resembles the Tututni of the late nineteenth century rather than vice-versa. Whether this is always the case or whether in some cases Chetco features can be found in

²⁴ Metcalf's speech as transcribed by Barnett also lacks nasalized vowels, and this is also the case for other Chetco speakers documented by Philip Drucker (1934) at Siletz. However, it is unclear whether or not Barnett and Drucker were reliable transcribers in this regard (see discussion for Galice in §5.1). Drucker also transcribed what might be coda [tł] in four placenames provided by a speaker identified as Chetco, but the interpretation of his orthography, superscript capital L with underdot (<^l>) is uncertain at present.

²⁵ This is modulo residual lexical differences separating dialects noted by Golla (1976). Indeed, comments by people at Siletz in the notes of Barnett (1934), Drucker (1934), and Harrington (1942/1981) show that well into the twentieth century there remained awareness within the community of certain words being associated with particular varieties.

twentieth century Tututni remains to be explored, but this is probably what Trudgill's (2004) theory of tabula rasa dialect contact would predict. Although the Chetco were a relatively large group at Siletz (see Table 18 in §6 below), they were a minority overall, so Chetco-specific linguistic features would have been at a disadvantage for selection as an Oregon Athabaskan koine developed.

5 Maintenance

While Chetco became largely indistinguishable from Tututni, other varieties of Oregon Athabaskan spoken at Siletz maintained their idiosyncrasies more or less intact into the twentieth century. We will consider two dialects for which this was true: Galice, which was relatively divergent compared to other varieties in the Rogue River dialect network, and Mikwanutni, a dialect that was otherwise thoroughly Lower Rogue in character.

5.1 Galice

Galice, as documented in the twentieth century, maintained several phonological properties that set it apart from the emergent Oregon Athabaskan koine that developed at Siletz: retention of nasalized vowels, merger of Proto-Athabaskan *q and *x as /k/ instead of /x/, denasalization of nasal stops before oral vowels (Krauss and Leer 1981), and lenition of intervocalic /ɣ/. These features are all evident in the nineteenth century documentation of Dorsey (1884b) and in twentieth century sources such as Sapir (1914), Barnett (1934), Hoijer (1966, 1973), M. Jacobs (1968), and Landar (1977). Most of the twentieth century documentation came from speaker Hoxie Simmons (b. 1870s), and his retention of these idiosyncrasies is shown in Table 15.²⁶

Galice (Dorsey 1884b)	Galice (Hoijer 1973)	Euchre Creek (Golla 2008)	gloss
< kwûn >	kʷanʔ	xʷənʔ	'fire'
< kwe' >	-keʔ	-xeʔ	'foot'
< t̥sañ-kě >	ts'ã:ke:	t̥s'axe	'woman'
< t̥li¹-iⁿ-tcũ >	ʔli¹-čoh	ʔli¹-čuh	'horse'
< tũ¹-dě >	dəde:	dəne	'person'
< da¹-ě >	-da:i	-nəyeʔ	'eye'
< -ts'a-dě¹ >	-ts'ədeʔ	-ts'əneʔ	'leg'

Table 15: Dialect features retained in twentieth century Galice

²⁶ Barnett (1934) did not transcribe nasalized vowels with Simmons or with Nettie West, the other Galice speaker he worked with, but his transcriptions are most likely in error since they disagree with all other researchers who worked with Simmons. West, whose speech has the same features as Simmons', did not move to Siletz until the age of ten, so she might have been unlikely to acquire the Oregon Athabaskan koine in any case, given that people exposed to new dialects in late childhood are less likely to acquire them accurately, if at all (cf. Labov 2007:349-350). Note, however, that Chetco speaker Billy Metcalf moved to Siletz in late childhood as well but apparently did acquire competence in the reservation koine.

The point is simply that the Galice dialect retained the most salient features setting it apart from other members of the Rogue River group even among Stage III speakers raised in the mixed dialect community at Siletz. Moreover, this lack of convergence does not seem to be due to a lack of awareness of differences or of competence in Tututni (i.e. the Oregon Athabaskan koine known by that name), as comments by Simmons paraphrased in Harrington’s fieldnotes suggest:

“It is funny – these coast Inds. can’t talk our Gal. lang, but they can understand what we say. Hox can carry on a conversation in the coast language & can give the equivalent of almost every Gal. word in the coast language, but the coast Indians rarely indulge in trying to say a few Gal. words and then say them poorly.” (Harrington 1942/1981, reel 28, frame 42)

This statement indicates that Simmons had awareness and command of the language of the ‘Coast Indians’ (Tututni), and moreover that there was an asymmetry in accommodation, with the speaker of Galice competent in Tututni but not vice-versa. Nonetheless, this does not seem to have had a significant impact on how Galice was spoken.

5.2 Mikwanutni

As noted in §1, Golla (1976) found no significant non-lexical differences between the Lower Rogue dialects spoken at Siletz in the early 1960s. There is, however, evidence for one feature that set the Mikwanutni dialect apart from the emergent Athabaskan koine in the twentieth century, perhaps a continuation of an older dialect difference. Dorsey (1884f) transcribed <ç> in a number of words before onset <s>, <c> (= [š]), and <ts> in Mikwanutni but not in Tututni. This is shown in the first six forms in Table 16; the remaining forms in the table show that this was not the case for all onset coronal fricatives, even ‘child’ (where Dorsey had transcribed both initial [s] and [ts] in Lower Rogue dialects in the 1880s – cf. Table 8 above). Given that Dorsey transcribed only a few dozen Mikwanutni words, the density of this exceptional <ç> before <s> is striking; it is found almost nowhere else in his documentation of Oregon Athabaskan.

Mikwanutni (Dorsey 1884f)		Tututni (Dorsey 1884i)		gloss
<çsi>	(ç)si	<çi’>	θi’	‘head’
<çsũ-gă’>	(ç)səgə	<çũ’-ga>	θəga	‘hair’
<çsũ-rxě’>	(ç)səyə	<sũ’-rxě’>	səyə	‘ear’ (P-A *džəyəʔ)
<çsê’-rxě’>	(ç)seye	<qo-sě’qě’>	xosexe	‘saliva’
<ts’a’-çci>	ts’a-(ç)ši	<ts’a’-sĩ’>	ts’asi	‘widow’
<çts’ě’>	(ç)ts’e	<qwa-ts’ě’>	xʷəts’e	‘(his) navel’ (P-A *ts’e:q’əʔ)
<sa’-çlu>	saʎu	<sa’-çlu>	saʎu	‘tongue’
<sqê’-qě’>	sxexe	<ske’-ke> <tsqě’-qě’>	skeke tsxexe	‘child’

Table 16: Exceptional <ç> transcribed by Dorsey in 1880s Mikwanutni

The phonetic interpretation of Dorsey's <ç> here is uncertain. Its usual value is [θ] in the Bureau of American Ethnology alphabet Dorsey was using, as in the Tututni forms for 'head' and 'hair' in Table 16. However, Dorsey also used <ç> in ad hoc digraphs he invented to represent sounds not accounted for in the BAE alphabet, such as <çl> for [ʃ]. That he might have intended some sort of quasi-affricated quality is suggested by its appearance in transcriptions of 'navel': Mik. <çts'ë> (Dorsey 1884f), PiR <çs'ë> (Dorsey 1884m, practically the only example of <çs> outside of Mikwanutni) alongside Tut. <-ts'ë> (Dorsey 1884i), cf. Euchre Creek <-ts'e?> in Golla (2008); the appeal of this interpretation will be apparent shortly.²⁷ While Dorsey's intent for this letter is uncertain, it is clear enough that in the 1880s Dorsey sometimes detected a difference between fricatives in Mikwanutni versus Tututni and other Lower Rogue dialects that warranted a special representation.

Mikwanutni as spoken by Miller Collins (b. 1880s) in the twentieth century – tape-recorded by Morris Swadesh in the 1950s, transcribed and published by Landar (1977) – has a number of words with initial affricates where other dialects have a plain fricative, shown in Table 17. Merger of Proto-Athabaskan *ts, *dz, *s, and *z as /s/ (/θ/ in some dialects) is one of the hallmarks of Oregon Athabaskan (Sapir 1914, Golla 1976). Remarkably, Collins produced [ts] or [tθ] in nearly all of the words for which Proto-Athabaskan reconstructions with *ts are available, the main exception being [sən] 'star' (reconstructed by Krauss 2005 variably with or without an initial affricate). Collins also tended to produce [ts] in 'child', a word that exhibited a great deal of variation in the 1880s (cf. Table 8). In many cases Collins' affricate is found alongside [s] or [θ] as a variant, e.g., the root meaning 'head/hair' in the compound [θi:doge?] 'grey-haired', or the possessed noun [č'əθən] 'some animal's meat'. The last four forms in Table 17, 'star', 'skin', 'liver', and 'ear' show that Collins did not always produce onset coronal fricatives with affrication; in one such case ('ear'), Dorsey (1884f) had transcribed <çs>.²⁸

²⁷ Dorsey's Mikwanutni vocabulary also includes <nû-rxût'-sûs> [nəʔətsəs] 'upper eyelid' alongside <nû-rxë' ya-rxë'-än sûs'> [nəʔe yəʔə'n səs] 'lower eyelid'. <nû-rxû-> ~ <nû-rxë-> here is equivalent to Tututni *nəʔe* 'eye', and <sûs> is *səs* 'skin' (< P-A *zëts'). The <t> in <nû-rxût'-sûs> 'upper eyelid', then, can be considered another affricated onset in Mikwanutni (cf. Tut. <qo'-na-řë' sus> [xonəʔe səs] 'someone's upper eyelid'). But notice that <t> is not transcribed in 'lower eyelid', which has plain <sûs>.

²⁸ Landar (1977) also transcribed Collins producing [tθe:] and [tse:] 'dry' (P-A *tsa:y) and [tθo:] 'yellow' (P-A *tsux^w), the former with an affricated onset and the latter without. The affrication in 'dry' could be due to an independent process, identified by Harrington (1942/1981) in Upper Coquille, of affrication separating clusters of fricatives like /ʃs/ created at morpheme boundaries (e.g., [tθuwwi] 'yellow', [tθe:] 'dry', both beginning with a prefix /t-). The process applies more often than not in Harrington's notes, but apparently not exceptionlessly, as would be the case here with Collins' 'yellow'.

Mikwanutni (Landar 1977)	Euchre Ck. (Golla 2008)	gloss	Proto-Athabaskan
tse:(ʔ), tθe:, tsi:(ʔ)	siʔ	‘head, hair’	*tʃiʔ
θi:dogeʔ	si-təlge	‘grey-haired’	
tse:γoʔ	siγ ^w əs	‘brain’	*tʃi:γa:ŋʔ
tθən, tsən	sənʔ	‘meat’	*tʃəỹ
čʰəθən		‘some animal's meat’	
tse:, θe:	se	‘stone’	*tʃe:
tsa:ʔo:, tθa:ʔo:	saʔuʔ	‘tongue’	*tʃu:(ləʔ)
tsxei, tsei, sxei	ʃxe	‘child’	-
sən	sin	‘star’	*tʃəw̃, *səw̃
səθ	səʔs	‘skin’	*-zəʔs’
čʰəθəθəd	-	‘its liver’	*-zəʔ
səye:	srəyeʔ	‘ear’	*dʒəyəʔ

Table 17: Onset coronal fricatives in Miller Collins’ Mikwanutni (1950s)

Although the Euchre Creek equivalents in Table 17 are on the whole typical of other Rogue River dialects, affricated [ts] and [tθ] were occasionally produced by speakers identified with varieties other than Mikwanutni as well. Landar (1977), for example, transcribed in Hoxie Simmons’ Galice both [tθe:] and [ʃe:] ‘stone’, [tʃi:ʔ] and [ʃi:h] ‘hair’, and [wastsəʔ] ‘its meat’. Sapir (1914) and Harrington (1942/1981) transcribed [tsxa:xe] and [tsxe:xe] respectively for ‘child’ in Wolverton Orton’s Chasta Costa. Thus, affricated coronal fricatives were found outside of Mikwanutni on occasion, although Mikwanutni appears to have had them most consistently. The variation associated with [ts] and [s] in the twentieth century is reminiscent of that found with velar obstruents in Tututni in the 1880s: There is a lack of consistency both across varieties and in the speech of individual speakers. The significant fact is that whereas the [k] ~ [x] variation had largely leveled out by the mid-twentieth century, the [ts] ~ [s] variation seems to have remained in a state of flux, speakers not having converged on a single value. Moreover, although it remains unclear whether the affrication of Miller Collins in the twentieth century can be fully equated with the exceptional <č> of Dorsey (1884f), such an interpretation is plausible. If correct, Mikwanutni appears to have maintained from the 1880s into the mid-twentieth century a stronger tendency to affricate onset coronal fricatives than other dialects did.

6 Discussion and conclusions

The main findings presented above can be summarized as follows. First, certain differences between closely related varieties of Oregon Athabaskan spoken at Siletz were the targets of leveling in the reservation period, with [k] ~ [x] variation becoming more or less uniformly [x] in all but Galice in the twentieth century. Second, differences between more distantly related Oregon Athabaskan varieties underwent leveling: Chetco in the twentieth century had no nasal-

ized vowels, coda [l] instead of [tʃ], and initial [d] instead of [ʒ] in ‘man/male’ (but [ʒ] still found in ‘elk’). Third, some dialect differences resisted leveling: Galice as spoken by Hoxie Simmons and Nettie West in the twentieth century retained a number of idiosyncrasies, including /k/ instead of /x/, denasalized *n before oral vowels, nasalized vowels, and lenition of intervocalic /y/. Even some differences between closely related Lower Rogue dialects were apparently maintained: Mikwanutni as spoken by Miller Collins had initial affricated [ts] instead of [s] in many words, plausibly a continuation of a dialect difference involving coronal fricatives also manifest in the documentation of Dorsey (1884f).

These data bear on issues of current interest in the study of contact-induced language change, especially the degree to which the outcomes of dialect contact are deterministic. Trudgill has argued that they are, in gross outline at least, in cases of *tabula rasa* contact where “there is no prior-existing population speaking the language in question, either in the location in question or nearby” (2004:26). He maintains that koineization in the development of southern hemisphere dialects of English proceeded according to a principle of majority rule: variants that were common to most dialects survived in the koine and minority variants perished, such that “the minority quite simply and mechanistically accommodated to the minority” (2004:148). There can be no doubt that the relative proportion of speakers in a population (or, more precisely, of particular variants in a mixed dialect population) is an important consideration in many, perhaps most, language contact situations: as Thomason (2001:66) puts it, “numbers count.” The question is whether they always count equally, or whether entrenched social attitudes can alter the outcomes in unpredictable ways, even in the special *tabula rasa* circumstances that Trudgill (2004) considers.

Although Trudgill initially takes pains to limit his arguments to *tabula rasa* scenarios (2004:27), he situates his claims in a broader debate about the extent to which people’s attitudes concerning variation matter in determining the course of language change (2004, ch. 7). For Trudgill and others working in this framework, long-term outcomes of dialect contact are the cumulative result of accommodation between speakers in micro-interactional settings. The extent to which people actively use their knowledge of the social world in tuning their speech to interlocutors is an area of current research (cf. Babel 2009 for a recent example). Trudgill adopts a mechanistic view attributed to Labov (2001) whereby metalinguistic evaluations of variants (or people who employ them) play only a minor role in delimiting the diffusion of linguistic changes. Such evaluations might, of course, influence how frequently people interact with each other, and thereby indirectly affect the outcomes of language change, but under this view they have little or no direct impact on linguistic behavior when interaction occurs. This is at odds with practice-based theories grounded in ethnographic observation in which conversational interactions take place in a dynamic social-indexical field and local meanings and related acts of identity are crucial to understanding the diachronic trajectories of sociolinguistic variables (cf. Eckert 2008).

As noted in §2, the Oregon Athabaskan case considered in this paper satisfies Trudgill’s definition of *tabula rasa* dialect contact. The Siletz reservation was established in northwestern Oregon near Corvallis, and the nearest homeland of any of the Athabaskan groups residing there was at least 130 miles to the south. While the distance between place of origin and locus of resettlement is not as extreme as in the cases of overseas colonial resettlement studied by Trudgill, upon arrival in Siletz no Athabaskan group had any special claim to legitimacy there.

Nonetheless, the outcomes of contact between Athabaskan varieties that underwent mixing at Siletz are not predictable based strictly on the relative proportions of dialect features in the

population as a whole. Table 18 presents the census figures for the Oregon Athabaskans living at Siletz from available government sources.²⁹

		1855	1858	1861	1865	1878	1882
Athabaskan	Coquille	105	[313]	[221]	[142]	[84]	[114]
	Sixes	143	242	218	320	74	53
	Euchre Creek	102	84	177	150	59	40
	Tututni	120	202	168	227	137	83
	Joshua	120	179	188	250	84	44
	Mikwanutni	135	129	247	348	-	40
	Chasta Costa	[132]	110	214	162	47	55
	Pistol River	51	-	71	161	57	33
	Galice	-	-	-	-	18	37
	Chetco	241	215	262	221	63	69
Other	-	575	259	331	466	430	
Total		1149	2049	2025	2312	1089	998

Table 18: Population of Siletz, 1850s-1880s

These numbers must be used with some caution, since it is unclear how the ethnic determinations were made, and the extreme fluctuations in some cases may be due more to administrative whim than to how the people being counted might have chosen to self-identify.³⁰ Nonetheless, Table 18 offers a rough sense of how many speakers of each variety resided at Siletz in the years after the reservation was established.

The key things to notice in Table 18 are that the Chetco, Tututni-Joshua, and Mikwanutni groups were among the most numerous on the reservation while the Galice, for the years in which data are available, were a minority.³¹ It has already been noted in §4.2 that the outcomes for Chetco, whose distinctive dialect features did not survive the leveling associated with koineization, are probably as predicted by Trudgill’s deterministic theory. Although the Chetco were one of the largest groups at Siletz, they were outnumbered by speakers of the Rogue River dialects that lacked nasalized vowels, coda [tʰ], and onset [ʒ] in the relevant vocabulary items. These features were at a disadvantage for selection in the emergent koine and for the most part were not retained, even though the ethnolinguistic label “Chetco” survived.

²⁹ Data are drawn from Office of Indian Affairs reports for each of the years listed. The 1855 report gives the population of each group in situ, before relocation to Siletz; the number of Chasta Costa adult males is missing for that year and is here estimated at 32 (the remainder after subtracting all other groups from the total number of adult males). Population tables for all years except 1855 list simply “Coquill”, so it is unclear whether Upper Coquille (Athabaskan) or Lower Coquille (Milluk Coos) is intended; comments in Everette (1882) suggest that the 1882 figure is for Milluk rather than Upper Coquille. The sharp decline in population in the 1870s is likely due to the fact that people started leaving the reservation to seek their livelihoods elsewhere (Kent 1973:23, Leavelle 1998:449).

³⁰ See Hall (1992) for discussion of the problem of assigning people to discrete ethnic categories where identities were probably considerably more fluid.

³¹ Although it is known from government reports that some Galice people were present at Siletz at least as early as the 1860s, they were not counted separately until the late 1870s, 20 years after the establishment of the reservation.

Trudgill's deterministic theory, does not, however, explain how idiosyncratic features were maintained in Galice and Mikwanutni. It is surprising that Galice's distinctive properties survived into the twentieth century at all, given that the Galice contingent was one of the smallest at Siletz. And while it is true that the Mikwanutni were a large group, in most years for which data are available they were no more numerous than the Chetco. Nonetheless, if the interpretation of the data presented in §5.2 is correct, Mikwanutni speakers in both the 1880s and 1950s had a tendency to affricate coronal fricatives. In both cases (Mikwanutni and Galice vis-à-vis Chetco), population asymmetries do not explain the outcomes of contact. If a group as small as Galice maintained its distinctiveness, Chetco should have too; if a group as large as Chetco succumbed to leveling pressure, it is surprising that Mikwanutni speakers did not do so as well. One cannot simply count the number of speakers of Galice, Tututni, Chetco, and Mikwanutni and anticipate the outcomes of contact – something needs to be said about the social configurations in which the contact took place.³²

It becomes important that Galice speakers living at Siletz, in addition to their linguistic distinctiveness, also had a number of cultural practices that were significantly different from other Oregon Athabaskan groups. Their homeland on Galice Creek was adjacent to that of the non-Athabaskan Takelma. According to Drucker's ethnographic analysis, Galice people had in pre-contact times adopted many aspects of Takelma material and intellectual culture: "Probably never a large group, these people had become through daily contact and intermarriage almost wholly Takelman in culture ... [The Galice Creek culture] is so permeated with Takelman elements as to be scarcely distinguishable from the culture of these alien people" (Drucker 1937:283; cf. Gray 1987). The affinity between Galice-speaking people and the Takelma was a community-internal perception as early as the 1880s: Dorsey (1884b), in a wordlist collected with Galice Creek Jim, paraphrased a Tututni speaker saying that "these are not real Galice Creek words, but Jim's pronunciation of Tutu words. The G.C. lang resembles the Takelma." Thus, while from a structural standpoint the Galice language is unmistakably Athabaskan, its speakers were considered more closely affiliated with Takelma. Their ongoing distinctiveness from other Athabaskan-speaking groups in the twentieth century is suggested by Hoxie Simmons' use of the term "coast Indians" to refer collectively to the non-Galice Athabaskan groups at Siletz (§5.1), and two of Harrington's consultants suggested that Simmons most likely knew "quite a little" of the Takelma language because "he was raised by the old people" (Harrington 1942/1981, reel 27, frame 568).

This returns to Kerswill's observations about the relationship between koineization and social integration in a new community, mentioned in §2. While many Athabaskan groups at Siletz began to forge a new, focused identity whose linguistic consequence was koineization, the Galice and perhaps other groups may have maintained a quasi-exogenous status afforded to non-

³² It is also worth pointing out that structural distance also does not seem to be an adequate explanation for the outcomes of dialect contact at Siletz. As often noted in the language contact literature, structural/typological distance between varieties in contact can impede (if not prevent entirely) some kinds of contact effects (cf. Thomason and Kaufman 1988, Winford 2003). Perhaps Galice's idiosyncracies were maintained because, as discussed in §3.1, it was structurally divergent from other Rogue River varieties spoken at Siletz. However, this would fail to account for the fact that Chetco's distinctive traits did not survive koineization, even though Chetco was divergent enough to be considered a language distinct from Rogue River varieties (unlike Galice in the classification of Golla 2011). Moreover, for the most part Mikwanutni is otherwise indistinguishable from other Lower Rogue dialects, providing no structural explanation for its retention of unusual onset coronal fricatives.

Athabaskans. Under this view, Galice maintained its distinctive properties because Galice-speaking people did not face the same pressure to assimilate linguistically as did other groups who had more pre-existing social affinities with one another. Whether this explanation can be extended to account for the maintenance of Mikwanutni distinctiveness remains to be seen – the Mikwanutni homeland was located squarely among the other Lower Rogue dialect groups and there is no evidence that the Mikwanutni were culturally distinct in the same way as the Galice were. However, it seems a promising line of explanation to suppose that the linguistic outcomes of Galice's contact with Tututni and other Athabaskan varieties are due at least in part to the fact that they had to overcome a greater social distance from the outset.

Overcoming social distance, however, is not to be equated with infrequent interaction. In the current context, Trudgill's determinism could perhaps be salvaged by maintaining that Galice retained its distinctiveness because Galice speakers did not interact regularly with other Athabaskan groups. However, while there was some degree of segregation according to ethnolinguistic divisions at Siletz, this mainly affected non-Athabaskan groups such as the Takelma. The historical record and reports from people who lived there suggest that the Athabaskan groups at Siletz were closely intermingled, sharing resources, intermarrying, and so on, making it improbable that Galice speakers would have interacted with Tututni speakers less frequently than, say, the Chetco did. Instead, Galice remained distinct because its speakers did not simply and mechanically accommodate to the majority variants in the sea of Athabaskan dialects engulfing them (even if they had some degree of command of those variants, as Hoxie Simmons apparently had). More generally, social factors are very much relevant to understanding the outcomes of linguistic contact, and not only in constraining the frequency of interaction between speakers – even in the *tabula rasa* cases considered by Trudgill.

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REPORT 15

**SURVEY OF CALIFORNIA AND
OTHER INDIAN LANGUAGES**

*Structure and Contact in
Languages of the Americas*

John Sylak-Glassman and Justin Spence, Editors

Andrew Garrett and Leanne Hinton, Series Editors

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