

Kutenai, Algonquian, and the Pacific Northwest from an Areal Perspective*

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Kutenai is a language isolate spoken in southeastern British Columbia and adjacent areas in northern Idaho and northwestern Montana. It is immediately to the west of the westernmost Algonquian language, Blackfoot. The other languages adjacent to Kutenai are Interior Salish languages, including Shuswap and Kalispel. Although a language isolate, Kutenai bears a number of resemblances both to Algonquian languages and to Salish languages. The main thesis of this paper is that the resemblances of Kutenai to Algonquian are of a very different nature from the resemblances to Salish. In section 1 of this paper, I summarize some of the resemblances to Algonquian. There are roughly speaking two similarities. The first is that Kutenai has an obviation system that is strikingly similar to the obviation system of Algonquian languages. The second is that Kutenai has a set of words that I call preverbs that resemble preverbs in Algonquian in that they immediately precede the verb, they cover a range of meanings that are not commonly associated with a single word class in other languages, and they are preceded by a number of grammatical proclitics, including pronominal morphemes that code the person though not the number of the subject.¹ These resemblances involve quirky features, features that few other languages share.² The resemblances to Salish, in contrast, involve general typological features, like the presence of glottalized resonants and verb-subject word order, which are found in languages scattered around the world but which are particularly common, not only among Salish languages, but also among other languages in the Pacific Northwest, including Wakashan, Chimakuan, Tsimshian,

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¹ The pronominal prefixes or proclitics that precede preverbs in Algonquian do not specifically code subjects, at least on traditional analyses.

² I owe the notion of quirky features to Orin Gensler.

Haida and various language groups in Oregon, such as Sahaptian and Coos. In section 2, I discuss various examples of these features which Kutenai shares with Salish and other languages of the Pacific Northwest but which are generally lacking in Algonquian languages. The discussion in section 2 is mostly based on maps produced by the software component of Haspelmath et al (2005).

1. Resemblances between Kutenai and Algonquian

This section will be shorter than section 2, if only because most of this section simply summarizes two previous papers of mine that appeared in previous proceedings from Algonquian Conferences, namely Dryer (1992, 1999). The reader should consult these papers for more detailed discussion.

1.1. Obviation

Kutenai and Algonquian languages have similar obviation systems, sharing the following characteristics:

- (1) a. There is at most one third person participant in a sentence (or some smaller unit, depending on the language) has the status proximate.
- b. All other third person participants have the status obviative.
- c. Obviative nouns are overtly marked as such.
- d. Proximate ones are not marked.
- e. Various words in agreement with nouns or noun phrases agree in obviation.
- f. The proximate participant is often in some sense the more topical participant.

Both Kutenai and Algonquian have two basic ways to express transitive clauses, differing in which of the two arguments is proximate and which is obviative. It is convenient to have a way to refer to the two arguments in transitive clauses without employing the terms ‘subject’ and ‘object’ in order to avoid possible implications that these terms have. It is now common in the field to use the terms ‘A’ and ‘P’, where ‘A’ denotes the argument in a transitive clause that is either the agent or the argument that is treated grammatically the same way that agents in transitive clauses in that language are (e.g. experiencers in most languages), and where ‘P’ denotes the other argument, namely the argument of a transitive clause that is either the patient or the argument that is treated grammatically the same way that patients in transitive clauses in that language are. Using these terms, we can say that both Kutenai and Algonquian have two constructions for transitive clauses, one in which the A is proximate and the P

obviative, the other in which the P is proximate and the A obviative. The standard Algonquianist terminology for these two types of clauses is that the former are direct, the latter inverse, and it is convenient to use these terms of the corresponding two types of clauses in Kutenai. The examples in (2) and (3) illustrate direct and inverse clauses in Ojibwa.

- (2) aw nini wgi:-wa:bma:n niw kwe:w-an.
 that man 3.PAST-see (TA.3:3') that.OBV woman-OBV
 A P
 'The man [prox] saw the woman [obv].' (Rhodes 1976: 202)

- (3) aw kwe: wgi:-wa:bmigo:n niw ninw-an.
 that woman 3.PAST-see (TA.3':3) that.OBV man-OBV
 P A
 'The man [obv] saw the woman [prox].' (Rhodes 1976: 202)

The examples in (4) and (5) from Kutenai are analogous. The normal form of the obviative suffix in Kutenai is *-s*, whether it is on a noun, a determiner (as with the definite article *niʔs* in (4)), or a verb. Sentence (4) is direct, since the A is proximate and the P obviative, while (5) is inverse since here the P is proximate and the A is obviative; the verb in (5) is also marked inverse by the suffix *-aps*.

- (4) wu·kat-i niʔ-s paʔkiy-s niʔ titqatʔ.
 see-INDIC the-OBV woman-OBV the man
 P A
 'The man [prox] saw the woman [obv].'

- (5) wu·kat-aps-i niʔ paʔkiy niʔ-s titqatʔ-s.
 see-INVERSE-INDIC the woman the-OBV man-OBV
 P A
 'The man [obv] saw the woman [prox].'

One difference between Kutenai and Algonquian is that Algonquian languages make a gender distinction between animate and inanimate nouns, while there is no such distinction in Kutenai. One of the effects of gender in Algonquian is that inanimate nouns are generally not marked for obviation, as illustrated by *mistik* 'stick' in the Cree example in (6).

- (6) kītahtawē miskam mistik, ...
 presently find (TI 3) stick (0)
 'Presently he [prox] found a stick [inanimate].' (Wolfart 1973: 23)

But inanimates can be syntactically (or “covertly”) obviative in that they trigger obviative agreement, as in (7), where the form of *ēh-miywāsiniyikih* ‘pretty’ reflects that it has a obviative inanimate plural subject, referring back to *maskisinah* ‘moccasins’.

- (7) ..., kītahtawē kā-miskahk maskisinah otinam,
 soon find (TI 3) moccasin (0p) take (TI 3)
 ē-wā-wāpahtahk; ēh-miywāsiniyikih.
 examine (TI 3) pretty (II 0’p)
 ‘..., soon he found some moccasins. He picked them up and examined them.
 They were very pretty.’ (Wolfart 1973: 16)

One of the effects of the absence of gender in Kutenai is that inanimate noun phrases are marked obviative in the same way as animate noun phrases, so that there are considerably more nouns marked obviative in Kutenai texts than in texts from Algonquian languages. Thus in (8), the P *?akčamaʔ* ‘knife’ is marked obviative, where the corresponding sentence in an Algonquian language would normally not have obviative marking on the noun for ‘knife’.

- (8) n=aʔt-i ?akčamaʔ-s ...
 INDIC=have-INDIC knife-OBV
 ‘He [prox] had a knife [obv] ...’

Similarly, in (9), the demonstrative adverb *qu* ‘there’ and the proper noun *kamanqukuʔ* ‘Sandpoint’ (a place in Idaho) are both marked obviative.

- (9) ... ?at k=č’inam qu-s kamanqukuʔ-s.
 HABIT SUBORD=go there-OBV Sandpoint-OBV
 ‘... and they [prox] would go there [obv] to Sandpoint (Idaho) [obv].’

The obviative marking on inanimates even applies to the word *taxa* ‘then’, which is morphologically a noun (since it can take obviative marking), though it functions like a conjunctive adverb and is common at the beginning of sentences in narrative texts, as in (10).

- (10) taxa-s n=ik-ni skinkuč niʔ-s ?akuʔak-s.
 then-OBV INDIC=eat-INDIC coyote the-OBV meat-OBV
 ‘Then [obv] Coyote [prox] ate the meat [obv].’

Another shared feature of the obviation systems of Kutenai and Algonquian is that nouns possessed by third persons are obligatorily obviative, as in the Ojibwa example in (11).

- (11) Nisiwan dash odayensiwaan igiw
 VAL.IND.3' NAD.3p:3' 3p
 they are three [obv] and their [prox] little dogs [obv] those
 Anishinaabeg.
 NA.3p
 Indians [prox]
 'There were three of the Indian's [prox] little dogs [obv].'
 (Nichols 1988: 165; Birch Island Text VIII, sentence 12)

At first sight, Kutenai looks different in that nouns possessed by third persons are generally not marked obviative, as illustrated by *waʔunak-ʔis* 'tongue-3POSS' in (12). However, noun possessed by third persons are syntactically (or "covertly") obviative in that they trigger obviative subject agreement, as illustrated by the obviative subject suffix *-s* on the verb *ʔakmuxu-s* 'fall.out-OBV.SUBJ'.

- (12) qa:ʔ ʔakmuxu-s waʔunak-ʔis niʔ watak.
 PTCL fall.out-OBV.SUBJ tongue-3POSS the frog
 'The Frog's [prox] tongue [obv] would come out.'

Although the domain of obviation varies somewhat among Algonquian languages, it is often the case that within complex sentences, if the subject of the main clause is proximate and the subject of the subordinate clause is distinct, it must be obviative, even if it realized entirely by obviative subject morphology on the verb, as in the Ojibwa example in (13).

- (13) ininiw o-gike:nda:n e:-aye:kozi-iniʃin.
 man 3-know.TI PRES-tired-AL.OBV
 'The man_i [prox] knows that he_j [obv] is tired.' (Grafstein 1984: 202)

Kutenai is similar, as illustrated by the example in (14), in which the subordinate verb *hu·kup-s* 'cooked' bears the obviative subject suffix *-s*.

- (14) n²upx-ni [ta]xa-s k-sʔ=ʔisiʔʔ hu·kup-s.
 INDIC-know-INDIC then-OBV SUBOR-ASP-very cooked-OBV.SUBJ
 'He_i [prox] knew that they_j [obv] were pretty burned.'

It is possible in at least some Algonquian languages to have sentences in which all third person participants are obviative, in which there is no proximate participant, although there is some proximate participant in the surrounding discourse that is not mentioned in that sentence, as in the Cree example in (15). In such sentences, the verb will inflect for having an obviative subject (unless the subject is first or second person).

- (15) mo·hkiciwanipe·k itah e·h-aya·yik, ci·k e·kotah mostoswah
 spring LOC be.INAN.OBV near there buffalo.OBV
 aya·yiwa.
 be.OBV
 ‘Near a spring of water were some buffalos [obv].’
 (Dahlstrom 1986: 158, lines 60-61)

The same is true of Kutenai, as in the second sentence in (16), in which the subject *ʔawu-s* ‘cow elk’ is inflected as obviative and the verb bears a suffix *-s* indicating that the subject is obviative.

- (16) qa·nax-i=ϕ ʔakinmituk-s.
 go.along-INDIC=and river-OBV
 ‘He [prox] went along and there was a river [obv].’
 qu-s ʔiyini-s qaqap-s-i ʔawu-s.
 there-OBV across-OBV be-OBV.SUBJ-INDIC cow.elk-OBV
 ‘Across there was a herd of cow elk [obv].’

The proximate participant that is subject of the verb in the first sentence in (16) continues to have proximate discourse in the sentences following (16) despite not being mentioned in these sentences. One way of understanding this is that in the second sentence in (16), the speaker is describing a scene from the perspective of the proximate character, so that the proximate participant is in the mind of the speaker and hearer, even if not mentioned in this particular sentence. The cow elk mentioned in the second sentence in (16) are obviative because they are less topical than the proximate participant in the surrounding discourse.

The examples in (15) and (16) involve intransitive clauses with obviative subjects. It is also possible, both in Cree and in Kutenai, to have transitive clauses in which both the A and the P are obviative, as in (17) and (18) from Cree and Kutenai respectively.

- (17) wa·pam-e·-yi-w-a
 see-DIRECT-OBV-3-OBV
 ‘he [obv] sees him [obv]’ (Dahlstrom 1986: 54)
- (18) n²itmasiʔt-s-i ʔakuʔak-s.
 INDIC-dry-OBV.SUBJ-INDIC meat-OBV
 ‘She [obv] was drying meat [obv].’

One important difference between Kutenai and Algonquian languages is that the inverse in Kutenai is restricted to clauses where both arguments are third person, unlike Algonquian languages in which the inverse is used when the A is third person and the P is first or second person. Clauses of this sort in Kutenai simply inflect with a set of object suffixes, as in (19) to (21).

- (19) wu·kat-**ap**-ni
 see-1SG.OBJ-INDIC
 ‘he/she/it/they saw me’
- (20) wu·kat-**is**-ni
 see-2SG.OBJ-INDIC
 ‘he/she/it/they saw you (sg.)’
- (21) wu·kat-**awas**-ni
 see-1PL.OBJ-INDIC
 ‘he/she/it/they saw us’

There are other non-Algonquian languages that have phenomena that are sometimes described using the terms ‘proximate’ and ‘obviative’. However, while these phenomena may bear some remote resemblance to obviation in Algonquian, the resemblance is small compared to the resemblance of obviation in Kutenai and obviation in Algonquian. More specifically, these other systems do not involve two inflectional values of nouns so that every third person noun phrase is either proximate or obviative and these systems do not exhibit verb agreement with proximates that is distinct from verb agreement with obviatives. The obviation systems of Kutenai and Algonquian, in contrast, are so similar that the differences between the Kutenai obviation system and the obviation system in Algonquian languages are in many ways no greater than the differences AMONG Algonquian languages.

Since this paper is looking at resemblances between Kutenai and languages in the Pacific Northwest in addition to resemblances between Kutenai and Algonquian, it is worth comparing the obviation system in Kutenai with one

of these other systems that is found in the Pacific Northwest, specifically the “topical object” construction described by Kinkade (1990) that is found in Salish languages, illustrated in (22) from Upper Chehalis.

- (22) s-tálaqapi-t-n tac yá·y-n’s ʔa s-wi-ns ʔit mát-wali.
 IMPF-call-TR-3SU F.DEF older.sister-3POSS FUT IMPF-be-3 PF fetch-TOP.O
 ‘He calls his sister to come fetch him.’

The topical object construction is used for the second verb in (22) in a way that is reminiscent of how the inverse construction is used in Kutenai. A Kutenai sentence analogous to (22) would almost certainly have the A of the main verb ‘call’ as proximate, with the P obviative, and because the roles of the A and P are reversed in the second clause in (22), the verb for ‘fetch’ would be inverse. There is thus a clear similarity between the Upper Chehalis topical object construction and the Kutenai inverse. Furthermore, this a situation where a passive construction would be somewhat unnatural in English (*?He calls his sister so that he is fetched by her*).

In addition, like the inverse in Kutenai and Algonquian, the topical object construction in Salish makes it possible to have a sequence of transitive verbs in a text, without nominal expression of either argument, where the use of the topical object construction signals that the roles of the two participants are reversed for that clause, as in the text excerpt in (23) from Upper Chehalis cited by Kinkade (1990).

- (23) a. wi s-ʔáx-t-s awmš ʔu t qáx-ł s-šam’alax^w,
 and IMPF-see-TR-3POSS PL just IND many-PF s-people
 ‘and they_i see many people_j,’

...

- b. wi s-cúy-t-wali-s ʔu awmš,
 and IMPF-come.after-TR-TOP.O-3POSS just PL
 ‘and they_j come after them_i,’

- c. ʔikwa-t-ifti ʔu yáčmš,
 go.after-TR-they just near
 ‘They_i come near to them_j,’

- d. ?i?api-t-i?ti.
shoot-TR-they
'they_i shoot them_j.'

While the reference of the third person pronouns in the English translations is not clear, the use of the topical object construction in (23b) and its absence in (23c) and (23d) makes it clear that the referents of 'they' in (23a) are object in the second clause and subject in the third and fourth clauses. The example in (24) is an analogous example from Kutenai.

- (24) a. n²i?iku?-ni=?
drink-INDIC=and
'She_i drank some'
- b. xa-s k=?a?axa-s ni?-s ?a?kni?namu-?is
then-OBV SUBORD=return-OBV.SUBJ the-OBV half.sister-3POSS
'and when her half sister_j got back,'
- c. pa? qak?-aps-i " ... "
PTCL tell-INVERSE-INDIC
'She_i told her_i " ... "'
- ...
- d. sani?winaxwat-aps-i=? ...
make.angry-INVERSE-INDIC=and
'She_i made her_i mad by saying this and ...'
- ...
- e. sakqap-s-i.
be.there-OBV.SUBJ-INDIC
'[The broth] was there. '
- f. taxa-s k=qakxa? qsa?ku ni?-s naqpuk-s.
then-OBV SUBORD=in.this.way scoop.up the-OBV broth-OBV
'Then she_i scooped up that broth.'

- g. k=qanmitukuxamu.
 SUBORD=throw.onto
 ‘She_i dumped it on her_j.’

The proximate status of the referent of the subject in (24a) and the obviative status of the half sister introduced in (24b) are retained throughout this text excerpt. The use of inverse verbs in (24c) and (24d) makes it clear that the half sister is subject of these clauses, while the use of a direct (non-inverse) clause in (24g) makes it clear that the proximate character is subject (and the half sister object) of that clause.

While these similarities between the Salish topical object construction and the Kutenai inverse are indeed striking and plausibly represent some regional influence, especially since Kinkade (1990) documents a similar topical object construction in Sahaptin, these resemblances are small compared to the similarities between the obviation systems in Kutenai and Algonquian. The most obvious difference is that proximate and obviative are grammatical features within the grammars of Kutenai and Algonquian languages; in contrast, there is no reason to posit grammatical features proximate and obviative in Salish languages. The conditions on the use of the topical object construction in Salish languages would appear to involve discourse factors lying outside the grammar, although clearly the construction is sensitive to whether the topic is grammatically an object of the verb, and perhaps to be topic, something must have been the subject of a previous verb. The grammatical nature of the notions of proximate and obviative in Kutenai and Algonquian is reflected not only in that obviative nouns are overtly marked as such (though this is generally only true for animate nouns in Algonquian), with proximate nouns implicitly proximate by virtue of their lack of obviative marking, but also by the fact that there is obviative marking on determiners and on verbs as well. In other words, one can examine a text in Kutenai and identify for every nominal expression or argument coded only in the verb morphology whether it is proximate or obviative. This is not true in Salish languages.

Another important reason why the Kutenai and Algonquian obviation systems are quite different from the phenomenon represented by the topical object construction in Salish is that although the Salish construction resembles the Kutenai and Algonquian inverse in some respects, the inverse construction in Kutenai and Algonquian is only one aspect of the Kutenai and Algonquian obviation systems. Although the choice of direct versus inverse involves a choice as to which participant is proximate, there are other instances in which the choice

of what is proximate is syntactically determined, instances in which the choice of what is proximate is semantically determined, and also instances other than the choice between direct and inverse where discourse factors determine the choice. And there are instances in which the choice between direct and inverse is unrelated to what is proximate, because both arguments are obviative. Furthermore, the inverse construction is only one way in which the obviation system serves as a reference tracking system; there are other ways in which the obviation systems of Kutenai and Algonquian serve as a reference tracking system where there is apparently no analogue in Salish languages. Let us examine some of these aspects of the Kutenai and Algonquian obviation systems that go beyond what is apparently found in Salish languages.

Within clauses, the determination of what is proximate and what is obviative in Kutenai is to a large extent determined syntactically. Normally, the proximate participant is the highest third person participant on the hierarchy Subject > Primary Object > {Secondary Object, Oblique}. The inverse construction is the only way in which this hierarchy can be violated, since in inverse clauses, the primary object is proximate and the subject is obviative. But in an intransitive clause with an oblique, the subject will necessarily be proximate and the oblique obviative, even if the subject is indefinite and the oblique definite, as in (25).

- (25) manqay-ni k=wi#qa nu?kiy ?a·kma-nam-is.
 roll-INDIC SUBORD=big rock road-NONSPEC.POSS-OBV
 ‘A big rock [prox] rolled onto the road [obv].’

Furthermore, the fact that this hierarchy applies to the highest *third person* participant means that if the subject is first or second person, proximate status automatically falls on the primary object, unless the clause is intransitive, in which case proximate status falls on an oblique (if there is one).³ This also makes it clear that proximate is topical only in the fairly special sense of being topical relative to other third person participants in the clause. In other words, the speaker and/or hearer may be highly topical and some inanimate oblique may be fairly nontopical, but that oblique will still be proximate. Thus, the underlined third persons in the text examples in (26) are proximate, not because they are

³ A reviewer suggests that one way in which Kutenai is more like Salish than Algonquian is that the Kutenai obviation system is restricted to third persons while the Algonquian one is not. But this is misleading. The Algonquian obviation system is also restricted to third person. It is true that the Kutenai inverse is restricted to third person while the Algonquian inverse is not, but that is a property of the inverse constructions, not a property of the obviation systems.

especially topical in the text, but simply because they are the only third person participants in their sentences. The proximate participant in (26a) is indefinite and that in (26b) nonspecific, and thus are clearly not discourse topics. Neither is referred to in the subsequent text. The proximate participant in (26c) is definite, but has no previous mention and is not important in the subsequent text. These participants are proximate simply because they are the only third person participants in their sentences.

- (26) a. hu wanukiʔt-i ɕupqa.
 1SUBJ drag-INDIC deer
 ‘I dragged a deer [prox] here.’
- b. ʔat hu ʔitkikx-naʔaʔ-ni tuhuʔ.
 HABIT 1SUBJ not.get-1PL-INDIC char
 ‘Then we never got any char [prox] to eat.’
- c. taxa-s hu ɕxaʔ ʔitqux-ni ka ʔa·qutaʔ.
 then-OBV 1SG FUT sharpen-INDIC 1POSS axe
 ‘Now I am going to sharpen my axe [prox].’

In (27), the initial word *taxa* ‘then’ is a connective word mentioned above that commonly occurs at the beginning of sentences in narratives. But it is formally a noun, since it is marked obviative in sentences containing other third person participants, as illustrated in (10) above. But in (27), the only other participant is first person, so here it is proximate.

- (27) taxa ma k=u=s-ʔ ʔaqakaʔɕʰinak.
 then PTCL SUBORD=1SUBJ=ASP-PREV run.away
 ‘Then [prox] I ran away.’

But given its status as a connective word, it is nonreferential, and clearly is in no sense topical. And in (28), *ɕupqa* ‘deer’ is proximate while *qus* ‘there’ and *ʔiʔnis* ‘the other side’ are obviative, not because the deer is more topical but simply because it is the object of the verb, while the other two expressions are oblique.

- (28) hu n=upx-ni ɕupqa qu-s ʔiʔni-s.
 1SUBJ INDIC=see-INDIC deer that-OBV other.side-OBV
 ‘I see a deer [prox] there [obv] on the other side [obv].’

Another situation in which the choice of proximate is syntactically determined is the possessive construction. As discussed above and illustrated in (12), when a noun is possessed by a third person possessor, the possessed noun (and hence the entire noun phrase) is necessarily obviative. What this means is that in a transitive clause in which the P is also the possessor of the A, the clause is necessarily inverse, as in (29), since the A is necessarily obviative.

- (29) *wu·kat-aps-i ma-ʔis misaʔ.*
 see-INVERSE-INDIC mother-3POSS Mike
 ‘Mike’s mother saw him.’

As far as I am aware, the topical object construction in Salish languages would not be required in this situation.

Semantics also plays a role in determining what is proximate, independently of discourse status. Namely, a proximate participant cannot be less animate than an obviative participant. Example (30) is odd because it treats the dog as equal to a human.

- (30) *ʔʔxaʔʔin n=itʔx-ni paʔkiy-s.*
 dog INDIC-bite-INDIC woman-OBV
 ‘A dog [prox] bit a woman [obv].’

To express the meaning of (30), the human participant would normally be proximate and the nonhuman participant obviative, so an inverse clause must be used, as in (31).

- (31) *paʔkiy n=itʔx-naps-i xaʔʔin-s.*
 woman INDIC-bite-INVERSE-INDIC dog-OBV
 ‘A dog [obv] bit a woman [prox].’

Furthermore, animacy overrides discourse topicality when the two are in conflict. Thus, if some asks ‘Where’s my food?’, the only appropriate answer is (32), in which *misaʔ* ‘Mike’ is proximate and the food is obviative.

- (32) *ma n=ik-ni misaʔ.*
 PTCL INDIC=eat-INDIC Mike
 ‘Mike [prox] ate it [obv].’

In other words, despite the discourse topicality of the food, the food cannot be the proximate participant in this context; *misaʔ* ‘Mike’ must be the proximate participant. An inverse clause like (33), treating the food as proximate, would not be acceptable, because the food is inanimate.⁴

- (33) *ma n=ik-naps-i misaʔ-s.
 PTCL INDIC=eat-INVERSE-INDIC Mike-OBV
 ‘Mike [obv] ate it [prox].’

Consider next situations in which discourse factors determine what is proximate, other than ones involving the A and P in a transitive clause. One situation is clauses in which one of the participants is a possessor. As mentioned above, the possessed noun in such cases must be obviative. But if there is another participant in the clause, there is a choice as to whether that other participant or the possessor is proximate. The sentences in (34) and (35) illustrate two ways to express the meaning ‘Mary saw Mike’s mother’.

- (34) maʔi wu·kat-i ma-ʔis-is misaʔ-s
 Mary see-INDIC mother-3POSS-OBV Mike-OBV
 ‘Mary saw Mike’s mother.’

- (35) ma-ʔis misaʔ wu·kat-aps-is-ni maʔi-s
 mother-3POSS Mike see-INVERSE-OBV.SUBJ-INDIC Mary-OBV
 ‘Mary saw Mike’s mother.’

In (34), Mary is proximate and Mike is obviative, while this is reversed in (35). This is an example of a situation where there is a choice as to which of two participants is proximate which does not involve a choice between the A and the P. Algonquian languages exhibit the same pattern, but there is apparently no analogue to this in Salish languages.

Another situation of this sort involves complex sentences, where there is a choice as to whether a participant mentioned in one clause is proximate rather

⁴ Strictly speaking, the relevant constraint is independent of obviation status, since if both Mike and the food were obviative, it would still be necessary here to use a direct clause rather than an inverse clause. Given the arguments in Dryer (1991) that the P in inverse clauses, both those with a proximate P and those where both the A and the P are obviative, is grammatically subject, the relevant constraint is that the subject cannot be lower in animacy than other participants in the clause.

than a participant in the other clause. The sentences in (36) represent two ways to express the meaning ‘Mary said that Mike danced’; they differ as to whether the matrix subject *maʔi* ‘Mary’ or the subordinate subject *misaʔ* ‘Mike’ is proximate.

- (36) a. qakiʔ-ni maʔi k=aqwiʔ-s misaʔ-s.
 say-INDIC Mary SUBORD=dance-OBV.SUBJ Mike-OBV
 ‘Mary [prox] said that Mike [obv] danced.’
- b. qakik-s-i maʔi-s k=aqwiʔ misaʔ.
 say-OBV.SUBJ-INDIC Mary-OBV SUBORD=dance Mike
 ‘Mary [obv] said that Mike [prox] danced.’

In discourse, the choice of whether the matrix subject or the subordinate subject is proximate would be determined by which was more topical in the surrounding text. If the meaning was ‘Mary said that he danced’, where the referent of ‘he’ was proximate in the immediately preceding discourse, then the more natural form would be (37), with the subordinate subject proximate.

- (37) qakik-s-i maʔi-s k=aqwiʔ.
 say-OBV.SUBJ-INDIC Mary-OBV SUBORD=dance
 ‘Mary [obv] said that he [prox] danced.’

The examples in (38) are similar examples from texts, where the matrix subject is represented by the nonspecific subject suffix on the verb but the verb is marked as having an obviative subject, while the subject of the subordinate clause is proximate.

- (38) a. qaky-am-is-ni k=qaki k=qa
 say-NONSPEC.SUBJ-OBV.SUBJ-INDIC SUBORD-say SUBORD-not
 qaqap-s
 be.SO-OBV.SUBJ
 ‘People_i [obv] say she_j [prox] said it_k [obv] was not so.’
- b. qaʔwiy-nam-is-ni k=ʔxa-ʔ
 believe-NONSPEC.SUBJ-OBV.SUBJ-INDIC SUBORD=FUT-PRVB
 haʔkiks skinkuʔ paʔ k=s-iʔ
 camp.overnight coyote MIRAT SUBORD=DUR-PRVB
 yunaqap-s k=iʔwa.
 many-OBV.SUBJ SUBORD=shoot.kill
 ‘People [obv] thought Coyote [prox] would not come home before night, because he had much game [obv].’

There is clearly no analogue between the way the obviation system works in complex sentences in Kutenai and the topical object construction in Salish languages, since both participants competing for proximate status are subjects.

When a matrix clause contains no third person participants, a third person in a subordinate clause (or one of them if there are more than one) will normally be proximate, regardless of its discourse topicality even when that third person participant is indefinite, as in (39a) or nonspecific, as in (39b) and (39c), where the third person participants are represented only by the nonspecific subject suffixes on the verb.

- (39) a. ?at hu qa#wiy-ni k=#i?=in ?a:k#i#qakupku.
 HABIT 1SUBJ believe-INDIC SUBORD=IRREAL=be fence
 ‘I believe a fence [prox] used to be there.’
- b. ?at hu qa#wiy-ni tuxa k=#
 HABIT 1SUBJ think-INDIC almost SUBORD=FUT
 quqak-am k=wanaqna-nawas.
 come-NONSPEC.SUBJ SUBORD=attack-1PL.OBJ
 ‘I’m always thinking that someone [prox] would come and attack us.’
- c. hin n#upxa=s-# huwas-nam.
 2SUBJ INDIC=know=DUR-PRVB hungry-NONSPEC.SUBJ
 ‘You know that people [prox] are hungry.’

Contrast (39b) and (39c) with sentences with a third person participant in the matrix clause, in which case these subordinate clauses with nonspecific subjects would be marked as having obviative subjects, as in (40).

- (40) n=u#pa#nitit-ni k=awasxu-niy-am-is.
 INDIC=hear-INDIC SUBORD=sing-REFL-NONSPEC.SUBJ-OBV.SUBJ
 ‘He [prox] heard someone [obv] singing.’

This point is perhaps best illustrated by the contrast in (41).

- (41) a. qałwiy-ni k-wałuqkukut-s.
 think-INDIC SUBORD-rain-OBV.SUBJ
 ‘He_i [prox] thinks that it_j [obv] rained.’
- b. hu qałwiy-ni k-wałuqkukut.
 1SUBJ think-INDIC SUBORD-rain
 ‘I think that it [prox] rained.’

The subordinate verb *wałuqkukut* ‘rain’ in these examples is a verb whose grammatical subject is purely formal and necessarily nonreferential (like *it* in English *it rained*) and is realized at most by an obviative subject suffix on the verb, as in (41a). In (41a), this obviative subject marking is obligatory, since the sentence contains another, referential, third person participant, that serves as subject of the matrix verb. In (41b), however, the subordinate verb is not marked as having an obviative subject, indicating that its subject is proximate. But its subject is purely formal and nonreferential, and thus not topical in any sense. It is proximate, not because it is topical, but simply because it is the only third person ‘participant’ in the sentence.

A final way in which the obviation systems in Kutenai and Algonquian have no analogue in the topical object construction in Salish languages is that there are situations in which the choice of direct and inverse in Kutenai and Algonquian is not determined by which argument is proximate, namely situations in which both the A and the P are obviative, as illustrated in (18) above, repeated here as (42); this is an example of a direct clause in which both the A and the P are obviative.

- (42) n=itmasi?t-s-i ?akułak-s.
 INDIC-dry-OBV.SUBJ-INDIC meat-OBV
 ‘She [obv] was drying meat [obv].’

This example occurs in a text where the proximate participant is not mentioned in this sentence, although this participant remains proximate since the sentence comes from a description of a scene from the proximate participant’s perspective. The sentence in (43) from a text in Nichols (1988: 130) is an example from Ojibwa.

- (43) Megwaa dash esibanan iniw endazhi-miginaaninijin.
 NA,3' 3' VTA,CON,3'-3'
 at.the.moment and raccoon that who is barked at by them there
 ‘And that raccoon was the one who was at the moment being barked at
 there.’ (Nichols 1988: 130; Birch Island Text I: Sentence 28)

But it is also possible, both in Kutenai and in Algonquian, to have inverse clauses in which both participants are obviative; this is illustrated for Kutenai by (35), repeated here as (44), and by (45), from a text in Boas (1918).

- (44) ma-ʔis misaʔ wu·kat-aps-is-ni maʔi-s.
 mother-3POSS Mike see-INVERSE-OBV.SUBJ-INDIC Mary-OBV
 ‘Mary saw Mike’s mother.’

- (45) qa ʔitʰx-naps-is-ni kʔawʔa-s.
 NEG bite-INVERSE-OBV.SUBJ-INDIC grizzly.bear-OBV
 ‘Grizzly Bear [obv] had not bitten her [obv].’
 (Boas 1918: 36; Text 23, Line 5)

Sentence (46) is an example of a double obviative inverse clause from Ojibwa, cited by Rhodes (1990: 112) from Bloomfield (1958: 158).

- (46) wiiikiwenhen wgii-dkamgoon niw gnebgoon.
 ‘The snake_i [obv] bit his_i friend_j [obv].’

Although the topical object construction in Salish languages resembles the Kutenai and Algonquian inverse in some respects, it apparently has no analogue to double obviative inverse clauses like (45) and (46).

The general point is that the topical object construction in Salish languages may bear some resemblance to inverse clauses in Kutenai and Algonquian, but Salish languages lack a grammatical distinction between proximate and obviative and lack complex obviation systems of the sort found in Kutenai and Algonquian. Furthermore, while the obviation systems in Kutenai and Algonquian are both complex, the two systems are remarkably similar. This is thus a clear instance of a way in which Kutenai resembles Algonquian in a way that it does not resemble Salish languages.

1.2. Preverbs

Let me discuss more briefly another area of similarity between Kutenai and Algonquian, discussed in greater detail in Dryer (1999). Algonquian languages have a set of words, commonly called preverbs, which precede the verb and which host prefixes (or proclitics) that occur on verbs if there is no preverb. For example in (47) from Malecite-Passamaquoddy, there is a preverb *tapi* ‘be back’ that precedes the verb *hutephal* ‘take out’ and the third person subject prefix *w-* occurs on the preverb.⁵

- (47) **w-tap-i** nutephal.
3-be.back-PRVB take.out
 SuPro-Preverb Verb
 ‘He is back from taking him out.’ (Leavitt 1985: 75)

Kutenai also has a set of words that precede the verb and that are preceded by a number of grammatical proclitics, including the mood indicators for indicative and subordinate mood and first and second person subject markers. For example, in (48), the verb *ʔupxni* ‘see-INDIC’ is preceded by two preverbs *ʔisi-ʔʔ* ‘very’ and *qa* ‘not’, and these are in turn preceded by a first person subject clitic *hu* and an indicative clitic *n=*, the latter clearly attaching phonologically to the first preverb.

- (48) *hu* *n=* *ʔisi-ʔʔ* *qa* *ʔupx-ni* *ʔupuŋqamik*.
 ISUBJ INDIC= very-PRVB not see-INDIC proper.name
 SuPro Indic Preverb Preverb Verb
 ‘I never saw Joe Kootenay there.’

Apart from their syntactic similarities, preverbs in Kutenai and Algonquian cover a similar range of meanings, a range that is quite unlike any word class in European (or most other) languages in that they have meanings that correspond to English adverbs, degree words, auxiliary verbs, other verbs, and adjectives, and quantifiers. See Dryer (1999) for further discussion and examples.⁶

⁵ The examples from Malecite-Passamaquoddy are taken from Leavitt (1985) or Leavitt and Francis (1984) (LeSourd’s dictionary)

⁶ It should be noted that Salish languages also generally have a class of preverbal predicate modifiers that resemble in some respects preverbs in Kutenai and Algonquian (Beck 2000: 161, 173). They differ in that these preverbal predicate modifiers cover a range of meanings much less broad than preverbs in Kutenai and Algonquian, mostly what could be broadly described as adverbial.

One might object that the similarities between preverbs in Kutenai and Algonquian reflect the fact that in many languages (particularly verb-initial languages), various sorts of grammatical words immediately precede the verb. In Nisgha (Tarpent 1987), for example, one gets various such preverbal words, as illustrated by the initial words in the examples in (49)⁷.

- (49) a. *ła:* *náks-t.*
 by.now married-3
 ‘S/he is married now.’ (Tarpent 1987: 201)
- b. *wila:* *hó:ks-t*
 how used-3
 ‘how it is used’ (p. 202)
- c. *yùk^w* *nə* *hó:x-t.*
 PROG 1SG.ERG use-3
 ‘I am using it.’ (p. 203)
- d. *nì:-ti:* *má:tim.*
 not-INTENS snowfall
 ‘It is not snowing.’ (p. 204)

But these words in Nisgha differ from preverbs in Kutenai and Algonquian in the following ways. First, there is no evidence that these words in Nisgha form a single word class. In Kutenai and Algonquian, the preverbs are characterized by occurring before the verb but after various grammatical morphemes that occur as prefixes or proclitics on the first preverb (or the verb if there is no preverb). Many of them are also characterized by bearing a suffix that marks them as preverbs, *-(i)(ʔ)ʔ* in Kutenai, *-i* (for example) in Malecite-Passamaquoddy. But the preverbal words in Nisgha do not seem to form a single word class. Tarpent describes the word *ła:* ‘by now’ in (49a) as belonging to a class of words she calls modifiers, the word *wila:* ‘how’ in (49b) as a subordinator, and the words *yùk^w* ‘progressive’ and *nì:* ‘not’ in (49c) and (49d) as verbs⁸. Second, the number of

Furthermore, there is no set of grammatical prefixes or proclitics that precede these predicate modifiers, in contrast to Kutenai and Algonquian.

⁷ I am indebted to Henry Davis for bringing the possible parallels with Nisgha to my attention.

⁸ It is not clear, however, on what basis Tarpent classifies these last two as verbs, apart from the fact that some of the words like these exist independently as verbs.

preverbs in Kutenai is at least two hundred, and Algonquian languages appear to be similar. Admittedly, the set of words Tarpent calls “modifiers”, like *ła*: ‘by now’, contains at least fifty members. However, even these do not seem to form a well-defined word class, since some of them cannot modify verbs. Among those that modify verbs, there are words in this class with the meanings listed in (50).

- (50) ‘suddenly’, ‘intensive/contrastive’, ‘reflexive-intensifier’, ‘separately’, ‘by oneself’, ‘alone’, ‘already’, ‘precisely/instead’, ‘must’, ‘real’, ‘earlier than expected’, ‘continuing’, ‘always’, ‘only’, ‘not’, ‘extremely’, ‘thoroughly’, ‘finally’, ‘at the beginning’, ‘actually’, ‘by now’, ‘again’, ‘very’, ‘firmly’, ‘too (in the sense in *too big*)’, ‘just’, ‘outward/downward’, ‘close by’, ‘greatly’, ‘approximately’, ‘foolishly’, ‘obviously’, ‘formerly’, ‘ahead (of others)’, ‘relative past of future’

While there is a wide range of meanings in (50), they do not cover as wide a range as preverbs in Kutenai and Algonquian. For example, expressions of manner are generally expressed in Kutenai by preverbs, as in (51).

- (51) $\text{ɕ}i\text{-}\text{ɕ}$ ‘rapidly’

$\text{ɕ}i\text{-}\text{ɕ}$ $\text{ɕ}xa\text{-}ni$.
 rapid-PRVB speak-INDIC
 ‘He spoke rapidly.’

Malecite-Passamaquoddy has analogous manner preverbs, like *menakaci* ‘slowly’. It is not clear from Tarpent (1987) how such meanings are expressed in Nisgha. Both Kutenai and Algonquian have preverbs of associated motion away from or toward the deictic centre, as in the Kutenai examples in (52).

- (52) $\text{ɕ}ina\text{-}\text{ɕ}$ ‘to go and do, to start going’

$taxa\text{-}s$ $\text{ɕ}ina\text{-}\text{ɕ}$ $\text{?i}\text{ɕ}ki\text{-}ni$ $kya\text{q}nuka\text{?}t$ $nu\text{?}k\text{-}anana\text{-}s$.
 then-OBV go-PRVB search-INDIC eagle pine.pitch-OBV
 ‘Then Eagle went in search of pine pitch.’

- (53) $\text{ɕ}ika\text{-}\text{ɕ}$ ‘to come and do, to do something while coming, to start coming’

$taxa\text{-}s$ $\text{ɕ}ika\text{-}\text{ɕ}$ $haqwi\text{-}nam\text{-}is\text{-}ni$.
 then-OBV come-PRVB dance-INDEF.SUBJ-OBV.SUBJ-INDIC
 ‘Now they started dancing toward him.’

Malecite-Passamaquoddy has similar preverbs *naci* ‘go and’ and *ckuwi* ‘toward here’. Again, Nisgha lacks preverbs with this sort of meaning. And Kutenai and Algonquian have preverbs that correspond to main verbs that take verbal complements in English, as in the Kutenai examples in (54) to (56).

(54) $\text{c}xaki\ddot{\text{t}}$ ‘to begin doing something and to continue doing it for a time’

taxa-s s-i $\ddot{\text{t}}$ $\text{c}xak-i\ddot{\text{t}}$?ik-ni ni?-s $\ddot{\text{k}}am-ni\ddot{\text{n}}tak-is$
 then,OBV dur-PRVB begin-PRVB eat-INDIC the-OBV child-PLUR-OBV
 ni? ti $\ddot{\text{n}}amu$.
 the old.woman
 ‘Then the old woman started eating the children.’

(55) $hu\ddot{\text{t}}$ ‘to finish doing something, through doing’

k=in hu- $\text{?}\ddot{\text{t}}$ $\text{c}xa \text{?}$
 SUBORD=2 finish-PRVB speak
 ‘Are you through talking?’

(56) $\text{?uniyi}\ddot{\text{t}}$ ‘know how’

k=in $\text{?uniyi-}\text{?}\ddot{\text{t}}$ $\text{c}xa$ suyapi?
 SUBORD=2 know.how-PRVB speak white.man
 ‘Do you know how to speak English?’

Again Malecite-Passamaquoddy has preverbs expressing the same meaning as these, including *mace* ‘to start doing something’, *ehqi* ‘to stop doing something’, and *tawi* ‘know how, be good at’. But Nisgha lacks preverbal modifiers of this sort. In general, the preverbal modifiers in Nisgha lack the degree of specific lexical content found in many of the preverbs found in Kutenai and Algonquian, while the preverbs illustrated above from Kutenai and Malecite-Passamaquoddy have meanings that are expressed in English by adverbs derived from adjectives or by verbs.

The similarities between Kutenai and Algonquian are unlikely to be coincidental. The similarity between preverbs in Kutenai and Algonquian by itself could be coincidental. But the existence of this similarity in the context of geographically contiguous languages that share remarkably similar obviation systems makes it less likely that the similarity in their preverbs is coincidental.

But these similarities are also unlikely to reflect common genetic inheritance. For one thing, there are no similarities between the form of the relevant morphemes in Kutenai and Algonquian.⁹ In fact, there is in general no evidence of any similarities in the form of semantically similar morphemes between Kutenai and Algonquian, beyond what one might expect due to chance. If Kutenai and Algonquian are genetically related, the relation is very remote, so remote that it would be surprising for them to retain such similarities between their obviation systems and preverbs after such a long period of time. In other words, the similarities are in some sense too striking to be a common historical retention. Instead, it seems that the similarities are most likely to be due to contact. While perhaps the most likely scenario is that Kutenai acquired these features due to contact with Algonquian languages, there are many possible scenarios. It is even possible that proto-Algonquian (or an ancestor of proto-Algonquian) acquired these features by contact with an ancestor of Kutenai. But we have no basis for choosing from among the various conceivable scenarios.¹⁰

⁹ As noted in Dryer (1992), “Various people, most notably Sapir (1929), Haas (1965), and Greenberg (1987), have proposed that Kutenai is genetically related to Algonquian. The proposals of Sapir and Greenberg are that Kutenai and Algic (Algonquian plus Yurok and Wiyot) form two of three branches of a group Almosan, the third branch consisting of Salish, Wakashan, and Chimakuan. While Haas used a question, ‘Is Kutenai Related to Algonquian?’, as the title of her paper, she concludes (p. 88) that the “evidence adduced is too substantial to be explained away as entirely the result of borrowing or accident”, apparently an affirmative answer to her question. But it is not clear to me that Haas’ evidence is any greater than what one might expect to be due to chance. Similar remarks apply to the resemblances noted by Greenberg. Morgan (1991) assesses the possibility of a relationship between Kutenai and Algonquian, primarily examining the potential cognate sets listed by Haas, eliminating a number of them of the basis of the apparent morphological structure of the Kutenai forms cited. He claims that there are at most 24 potential cognate sets and concludes that the list is about what one would expect due to chance. While further examination of the question deserves attention, there seems little doubt that any genetic relationship would be at most a remote one. Boas (1920: 373) specifically claims that the similarity between the obviation systems in Kutenai and Algonquian is ‘due to a contact phenomenon, because we find hardly anywhere else a similar development ...’.”

¹⁰ The most promising genetic relationship for Kutenai would be Salish. Morgan (1980, 1991) provides evidence of similarities of grammatical morphemes in Kutenai and Salish that is intriguing but at best suggestive.

2. Kutenai and the Pacific Northwest

While Kutenai bears a number of striking similarities to Algonquian, there are other respects in which it resembles languages in the Pacific Northwest, particularly Salish languages. In the remainder of this paper we will look at some of these resemblances. But there is a fundamental difference between the sorts of similarities that Kutenai shares with Algonquian and the sorts of similarities that it shares with languages in the Pacific Northwest. Namely, the similarities discussed in section 1 with Algonquian involve quirky features that are relatively uncommon outside Kutenai and Algonquian, and perhaps in some cases, only found in Kutenai and Algonquian. For example, if we define obviation systems fairly narrowly, in terms of there being an inflectional distinction between proximate and obviative that is found on both nouns and verbs, where the distinction applies only to third person participants, and where at most one participant per sentence (or clause) can be proximate, all others being obviative, where nouns possessed by third persons are obligatorily obviative, then we can say that, at least on the basis of evidence from languages that are documented, only Kutenai and Algonquian have obviation systems in this narrow sense. And while there are many languages that have words that have been described as preverbs, it is not clear that there are any languages outside Kutenai and Algonquian which have a class of words of this sort that immediately precede verbs and which are themselves preceded by a set of proclitics or prefixes that code a number of grammatical features of the clause, including the person (though not number) of the subject.

The similarities between Kutenai and languages in the Pacific Northwest, in contrast, involve more general typological features, where it makes sense to produce maps showing the presence and absence of that feature among the languages of the world, since languages possessing the feature and languages lacking the feature are both found in other parts of the world. In this section, we will examine a number of such features, drawing on maps produced by the software component of Haspelmath et al (2005).¹¹ Many of these features are areal features of the Pacific Northwest, so that they simply illustrate that in many respects, Kutenai is part of the Pacific Northwest linguistic area. The majority of

¹¹ The software can reproduce copies of maps in the hard copy version of Haspelmath et al (2005), but all of the maps I use in this paper are altered in some way from the way they appear in the atlas. First, I employ colours on a greyscale. Second, the maps I use here are simplified either in excluding certain types or in collapsing types. Third, the maps at the end of the paper involve combining data from separate maps in the atlas.

the maps that we will look at involve features that are found only in a distinct minority of the languages of the world, so that the probability that these are shared areal features is more likely. At the same time, we will see how Kutenai generally contrasts with Algonquian languages as far as these features are concerned.

The discussion in this section of the paper presupposes that the Pacific Northwest is a linguistic area in exhibiting a number of shared features among genetically unrelated languages that is due to contact over a long period of time. That the Pacific Northwest forms a linguistic area is well-known (Thompson and Kinkade 1990, Kinkade, Elmendorf, Rigsby and Aoki 1998, Beck 2000), though the question of whether Kutenai belongs to this area is generally not discussed. Thompson and Kinkade's discussion deals with a smaller area than what I will assume here constitutes the Pacific Northwest, since their area is the more specifically the Northwest Coast and excludes languages further inland, like Kutenai. However, their restriction to Northwest Coast languages is largely due to the fact that their paper appears in a volume on the Northwest Coast; Thompson and Kinkade (1990), Kinkade, Elmendorf, Rigsby and Aoki (1998) and Beck (2000) all observe that the features that Thompson and Kinkade attribute to the Northwest Coast extend inland, justifying a broader area. That the features of the Northwest Coast extend inland to include Interior Salish languages is hardly surprising; they might even be features that date from a time when the ancestors of Interior Salish languages were spoken closer to the coast. But this makes the extent to which Kutenai conforms to Pacific Northwest traits particularly interesting; Kutenai is one of the few languages exhibiting such traits that is not near the coast, other than Interior Salish languages. The only other language in the region that is even close to being so far from the coast is Nez Perce. But Nez Perce is simply the most eastern of the Sahaptian languages; the overall domain of Sahaptian languages stretches much closer to the coast. Nez Perce appears to possess Pacific Northwest traits to about the same extent as Kutenai, as many of the maps below will illustrate.

Kutenai is discussed in the surveys of the Plateau area by Kinkade, Elmendorf, Rigsby and Aoki (1998) and Sherzer (1976), raising the question of whether perhaps we ought to be considering the extent to which Kutenai belongs to a Plateau linguistic area. However, neither Kinkade et al nor Sherzer present any evidence that there is any such linguistic area. Rather, in both cases, their point of departure is a Plateau culture area, and in both cases they examine the distribution of various features throughout this area. But demonstrating that there is a Plateau linguistic area would also require demonstrating the absence of these features outside this area, something that neither Kinkade et al nor Sherzer do. To

the contrary, Kinkade et al note (p. 63): “There is no outstanding set of language traits that sets of the Plateau as a major linguistic diffusion area distinct from other regions; rather it is part of a larger area that includes the Northwest Coast culture area.” The title of Aoki (1975) (“The East Plateau linguistic diffusion area”) might suggest a claim of a linguistic area in the Plateau region. But in fact, Aoki’s paper deals only with similarities between Salish and Nez Perce that would appear to be due to contact, and he describes his paper as a contribution to evidence for a Pacific Northwest linguistic area. I will return to both Thompson and Kinkade (1990) and Kinkade et al (1998) after presenting the evidence from Haspelmath et al (2005).

Many of the maps below show the distribution of features that Thompson and Kinkade (1990) and others have observed are associated with the Pacific Northwest. But since Thompson and Kinkade only discuss the Northwest Coast, one cannot be sure to what extent the features they discuss are local to the Northwest Coast, or to the broader Pacific Northwest, or some larger encompassing area. In combination with Kinkade et al (1998), one can extrapolate which features are shared between the Pacific Northwest and the Plateau, but what features are shared is not addressed directly. Sherzer (1976) provides data for languages of North America north of Mexico, but it would require considerable work to figure out the distribution of individual features throughout this area. But most significantly, none of these sources discusses the distribution of these features in the world as a whole. The maps in Haspelmath et al (2005), and the variations on them that are produced by the software component of Haspelmath et al, provide a way to see the extent to which features found in the Pacific Northwest are found not only elsewhere in North America, but in the world as a whole. Some of these maps show the Pacific Northwest emerging as a particularly well-defined area, because some of these features are relatively uncommon outside the Pacific Northwest. Crucially, Kutenai in general patterns with languages of the Pacific Northwest. The relative infrequency of these features outside the Pacific Northwest makes it unlikely that it is a coincidence that Kutenai shares these features with the Pacific Northwest.

The first set of maps we will look at are phonological. Tables 1 and 2 provide a chart of the phonemes of Kutenai.¹²

¹² The orthography I use for Kutenai, based on Morgan (1991) and generally the orthography used now by the Kutenai, employs <ɬ> to represent a voiceless lateral fricative [ɬ], <ɕ> to represent a voiceless alveolar affricate [ts], and <x> to represent a voiceless uvular fricative [χ].

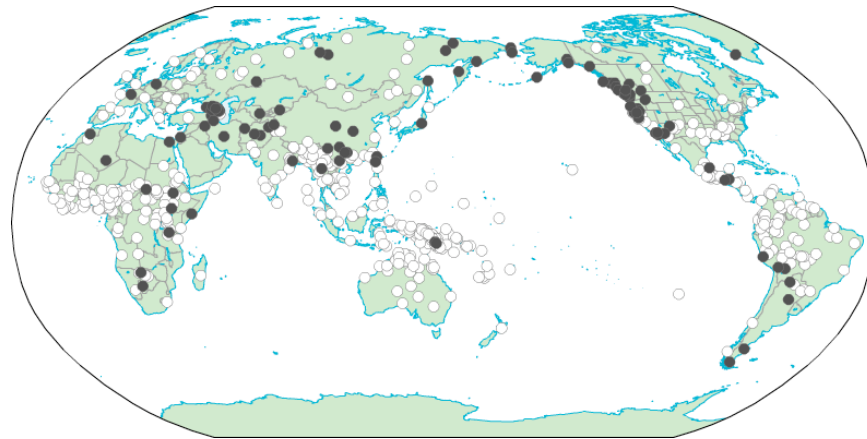
	bilabial	dental	palatal	velar	uvular	glottal
stop	p	t		k	q	ʔ
ejective stop	p̰	t̰		k̰	q̰	
affricate		tʃ				
ejective affricate		tʃ̰				
fricative		s			x	h
lateral fricative		ɬ				
nasal	m	n				
glottalized nasal	m̰	n̰				
glide	w		y			

Table 1: Kutenai consonant phonemes

short		long	
i	u	i·	u·
a		a·	

Table 2: Kutenai vowel phonemes

The first map we will examine is one showing the distribution of uvular consonants, based on Maddieson (2005a). In Map 1, the dark dots represent languages with uvular consonants, the white dots languages lacking uvular consonants.



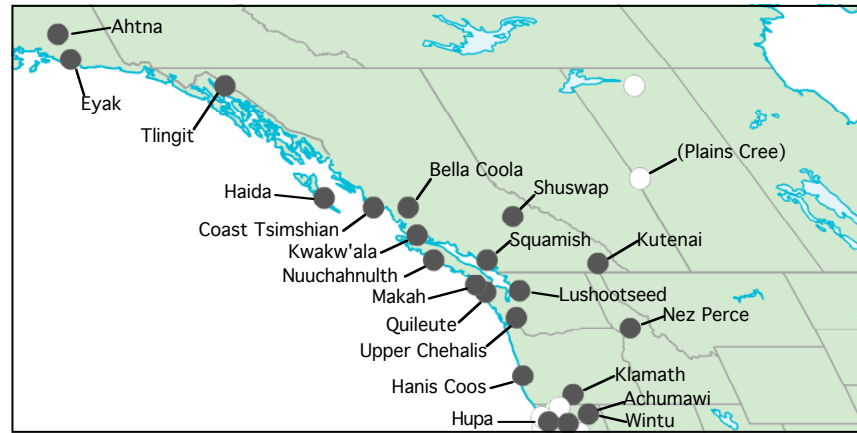
- Has uvular consonants
- Does not have uvular consonants

Map 1: Uvular consonants

Map 1 shows that uvular consonants are found in at least some languages in most areas of the world, though they are somewhat more common in Eurasia and North America. But within North America, they are considerably more common among the languages in the Pacific Northwest, and in fact impressionistically, the Pacific Northwest is the largest area in the world with a dense concentration of languages of this sort. Map 2 zooms in on an area encompassing the Pacific Northwest, showing the individual symbols more clearly, and identifying most of the languages in the Pacific Northwest that are contained in Maddieson's sample.¹³ Maddieson's sample contains three Algonquian languages which it will be important for the reader to locate on Map 1 and the subsequent maps. These three languages are Plains Cree, shown on Map 2 on the Alberta-Saskatchewan border (in parentheses, since it does not belong to the Pacific Northwest), Eastern Ojibwa, located on the world maps in Ontario east of Lake Huron, and Malecite-Passamaquoddy, located on the Maine-New Brunswick border, on the coast.¹⁴

¹³ Throughout this paper, I will assume that the data on the various maps from Haspelmath et al (2005) is accurate. But given the nature of the crosslinguistic studies that are the basis of these maps, there are undoubtedly some errors. Since publication of Haspelmath et al (2005), I have found a number of errors on my own maps.

¹⁴ Throughout this section of the paper, my comments about Algonquian languages are based on the particular set of Algonquian languages shown on each



- Has uvular consonants
- Does not have uvular consonants

Map 2: Uvular consonants: Pacific Northwest

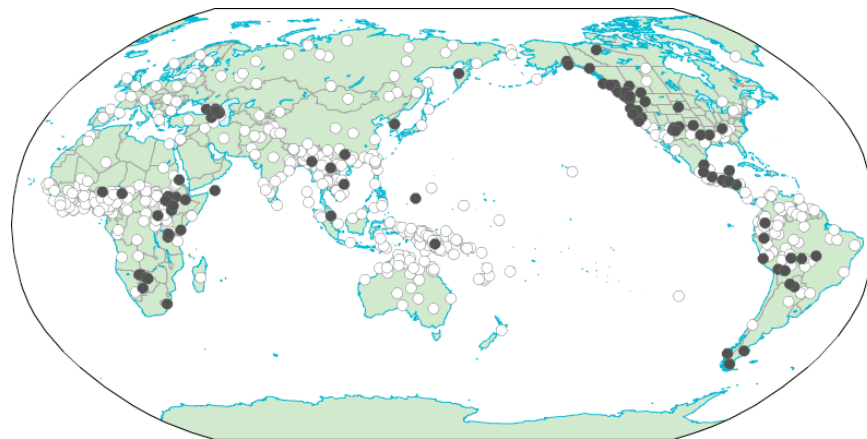
Maps 3 to 7 below are based on approximately the same sample of languages. Map 2 shows clearly how Kutenai resembles languages in the Pacific Northwest in having uvular consonants in contrast to the three Algonquian languages, which lack uvular consonants. Of five other Algonquian languages I examined myself, one, namely Micmac (DeBlois 1996), does have uvular stops, while the other four (Delaware, Arapaho, Cheyenne, and Blackfoot) lack uvular consonants. Map 2 shows that the presence of uvular consonants in the Pacific Northwest extends northward and around the south coast of Alaska and extends southward into northern California, though there are also a number of languages in northern California that lack uvular consonants.

It should be emphasized that it would be a mistake to assume that all of these languages possess uvular consonants due to contact or diffusion, or that the

map. Some of the maps will have fewer than the three Algonquian languages on Map 2, and some will have more. One should not infer from the fact that all of the Algonquian languages on a given map are of a particular sort that there are not other Algonquian languages not represented which are different from those shown. When I refer to Algonquian languages, this should be understood as referring to the set of Algonquian languages in the sample under discussion.

full extent of uvular stops represents a linguistic area. Languages that are close to each other geographically can share features coincidentally and evidence for a linguistic area requires converging evidence from many features, not just one. The pattern shown on each map really shows nothing other than geographical patterns that are partly due to contact and partly coincidental. The number of maps in this section showing a resemblance between Kutenai and other languages in the Pacific Northwest does suggest that these resemblances are not coincidental.

Map 3, based on Maddieson (2005b), shows the distribution of languages with ejective consonants or glottalized resonants (or both), based on Maddieson (2005b), with the dark dots again showing the presence of such sounds, the white dots their absence.



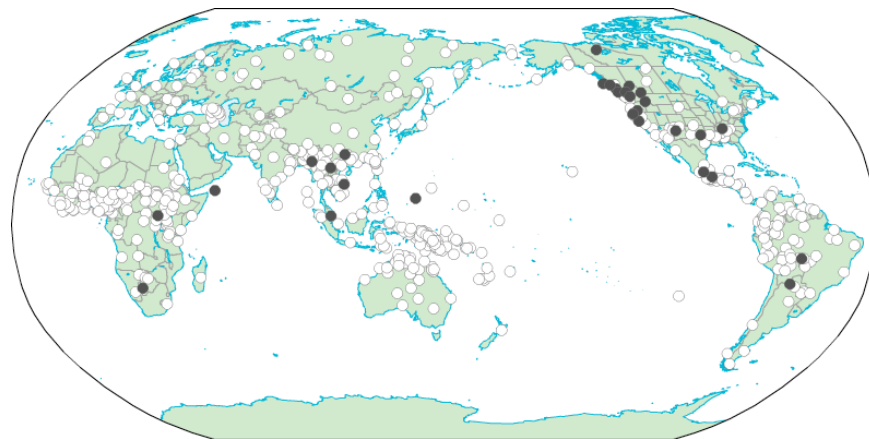
- Has ejective consonants and/or glottalized resonants
- Does not have ejective consonants or glottalized resonants

Map 3: Ejective consonants and glottalized resonants

As with uvular consonants, ejective consonants and glottalized resonants are found in languages in various parts of the world, but there is a clear concentration in North America, especially in the Pacific Northwest. While Map 3 shows various languages with these sounds in North America outside the Pacific Northwest, one again finds these sounds in Kutenai (the dark dot in the extreme southeast corner of British Columbia), but not in the three Algonquian languages

shown or in the five other Algonquian languages I examined (Blackfoot, Cheyenne, Arapaho, Delaware, and Micmac).

Map 4 (also based on Maddieson 2005b) is a variation on Map 3. On Map 4, the dark dots represent languages that specifically have glottalized resonants, excluding languages with just ejectives, while the white dots represent languages that lack glottalized resonants. Map 4 shows that languages with glottalized resonants are not common outside North America. In fact the majority of languages with glottalized resonants in Maddieson's sample (18 out of 29 languages) are in North America (including two languages in southern Mexico). Map 4 shows the concentration of languages of this sort in the Pacific Northwest quite clearly. Twelve of the 18 languages of this sort in North America are in an area stretching from British Columbia down to northern California.



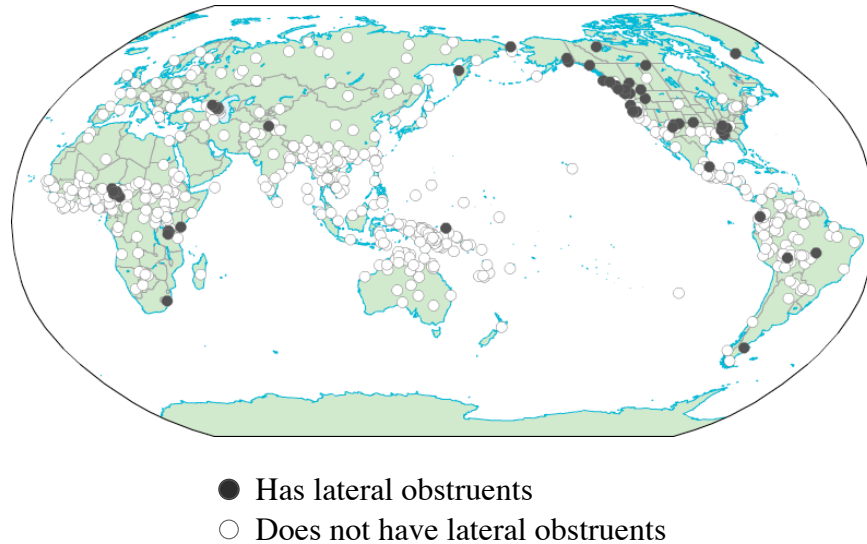
- Has glottalized resonants
- Does not have glottalized resonants

Map 4: Glottalized resonants

Kutenai is one of the languages with glottalized resonants, again contrasting with Algonquian.

Map 5, based on Maddieson (2005c), shows the distribution of languages with lateral obstruents, either lateral fricatives or lateral affricates. Map 5 shows that these sounds, like those on the previous maps, are more common in North

America than elsewhere in the world but are particularly common in the Pacific Northwest.



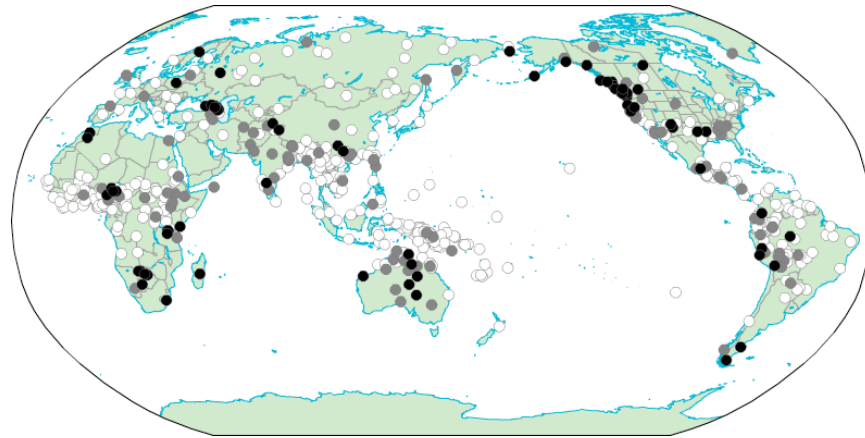
Map 5: Lateral obstruents

And once again, these are sounds which Kutenai has, but which the three Algonquian languages shown lack, as do the other five Algonquian languages I examined (Blackfoot, Cheyenne, Arapaho, Delaware, and Micmac).

Map 6, based on Maddieson (2005d), shows the ratio of consonants to vowels in phoneme inventories. Maddieson's map shows five types, but for reasons of readability, I have collapsed three of these types into one type. The black dots represent languages with a high consonant-to-vowel ratios, the grey dots represent languages with moderately high consonant-to-vowel ratios, and the white dots represent languages with average or lower than average consonant-to-vowel ratios.¹⁵

¹⁵ Maddieson (2005d) defines a language as having a high consonant-to-vowel ratio if the ratio is 6.5, as having a moderately high consonant-to-vowel ratio if the ratio is between 4.5 and 6.5, as having an average or lower than average consonant-to-vowel ratio if the ratio is less than 4.5.

In computing consonant-to-vowel ratios, Maddieson counts the number of vowel qualities, largely defined in terms of contrasting tongue positions. This



- High consonant-to-vowel ratio
- Moderately high consonant-to-vowel ratio
- Average or below average consonant-to-vowel ratio

Map 6: Consonant-to-vowel ratio

The largest dark area on the map, representing languages with high consonant-to-vowel ratios, is the Pacific Northwest.¹⁶ Again, Kutenai patterns with the Pacific

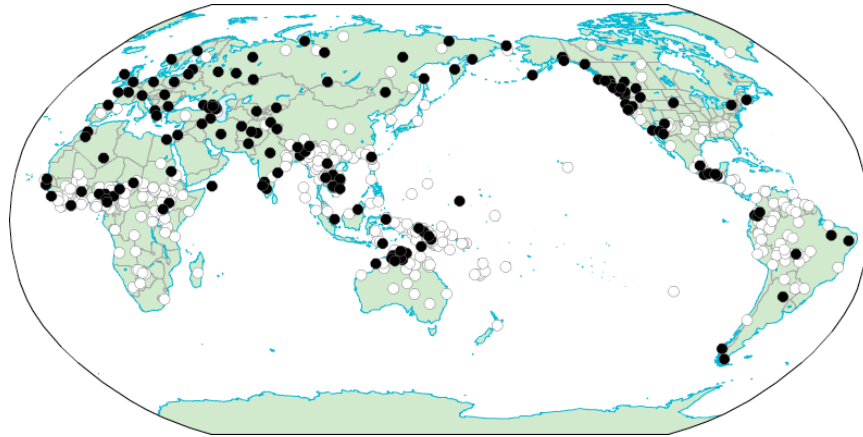
means that Kutenai is treated as having only three vowels for this purpose, since it has three vowel positions with an independent variable of length. As discussed below, the consonant inventory of Kutenai (21 consonants) is actually somewhat less than most other languages in the Pacific Northwest, but the small number of vowels does contribute to Kutenai's counting as having a high consonant-to-vowel ratio (21:3, i.e. 7). Nez Perce, for example, has a few more consonants than Kutenai (25), but has five vowels all in different positions, so its consonant-to-vowel ratio (25:5, i.e. 5) is smaller than Kutenai's and shows up on Map 6 as a dark grey circle, indicating moderately high consonant-to-vowel ratio.

¹⁶ Maddieson (2005f) provides a map showing size of consonant inventories, which is similar to Map 6, although the Pacific Northwest stands out more clearly on Map 6 since these languages not only have large consonant inventories but they have small vowel inventories, while some languages in other parts of the world with large consonant inventories also have large vowel inventories. One reason I have not produced a version of this map here is that I do not understand why Maddieson classifies Kutenai the way he does on this map. Namely, he

Northwest in having a high consonant-to-vowel ratio, represented by a black dot. All three Algonquian languages shown have average or lower than average consonant-to-vowel ratios. In the finer typology on Maddieson's map in Haspelmath et al (2005), Eastern Ojibwa and Malecite-Passamaquoddy are shown as having average ratios and Plains Cree is shown as having a lower-than-average consonant-to-vowel ratio. Of the other five Algonquian languages I examined myself, Micmac has a lower-than-average consonant-to-vowel ratio by Maddieson's criteria, while Blackfoot, Cheyenne, Arapaho, and Delaware have average ratios. In this respect, Algonquian languages contrast to some extent with the rest of North America; the majority of languages in Maddieson's sample in North America show high or moderately high consonant-to-vowel ratios.

Map 7, based on Maddieson (2005e), shows complexity of syllable structure. The black dots represent languages with complex syllable structure and the white dots collapse two of Maddieson's types, namely languages with simple syllable structure and languages with moderately complex syllable structure. Again, the largest concentration of black dots is found in the Pacific Northwest, although there are many such languages elsewhere in the world, particularly in Europe and Asia.

classifies Kutenai as a language with a moderately higher than average sized consonant inventory, which he defines as having 26 to 33 consonants. However, on my count, Kutenai has only 21 consonants. Morgan (1991) does attribute to Kutenai two marginal phonemes /ɣ/ and /w̃/, but even if we include these, we still have only 23 consonants, not 26 or more. There are four other consonants used in English words in Kutenai discourse, but I would not expect Maddieson to include these. See discussion of Table 3 below about the size of Kutenai's consonant inventory.



- Complex syllable structure
- Moderately complex or simple syllable structure

Map 7: Syllable structure

Kutenai again conforms to this Pacific Northwest feature, although one of the two Algonquian languages shown, Malecite-Passamaquoddy, is also shown as having complex syllable structure.

I suspect that if one were to do a finer gradation among the languages that Maddieson codes as having complex syllable structure, the distinctiveness of complex syllable structure in the Pacific Northwest would emerge more clearly. Map 7 shows most of the languages of Europe as also have complex syllable structure, and while this may be true relative to languages in the world as a whole, it is clear that many languages in the Pacific Northwest, especially Salish languages, have considerably more complex syllable structure than most European languages. Thompson and Kinkade (1990: 46) list as one of the features of the Northwest Coast the existence of word-medial or word-final consonant clusters consisting of four consonants, and Kinkade et al (1998) do likewise for features found in languages of the Plateau. While Kutenai appears to employ less complex syllable structure than some Salish languages, it nevertheless also has more complex syllable structure than most European languages. The examples in (57) to (60) illustrate complex consonant clusters in Kutenai, all involving four consonants, although the most complex clusters generally involve clitic clusters. The first word in (57) involves the initial cluster /ks̥t̥q/, the second word in (58) the initial cluster /k̥t̥x/, and the second word in

(59) the word-final cluster /skstʃ/. Note that all four of these clusters involve entirely voiceless obstruents.

- (57) **k=sʃ=qatʃwiy-s** **k=ʃ=kʃatʃtiy-matʃ** ʔi-s
 SUBORD=DUR=want-OBV.SUBJ SUBORD=FUT=trade-COMIT that-OBV
 xma=k=sʃ kʃatʃtiy-matʃ.
 should=SUBORD=DUR trade-COMIT
 ‘Since he wanted to do the trading that’s what he should trade.’
- (58) **qatʃwiy-ni** **k=ʃ=ʃxatʃ** mitxa-ʃ.
 think-INDIC SUBORD=IRREALIS=FUT shoot-PASSIVE
 ‘He thought he would be shot.’
- (59) **k=ʃ=inam=ʃ** **xa-s=k=sʃ** qaqatʃ ʔukqapi.
 SUBORD=go=and then-OBV=SUBORD=DUR that.way-PRVB be.left.alone
 ‘He went on, he was the only one left.’

I should note, however, that as far as I know, there are no verb stems or noun stems beginning with more than two consonants. On the other hand, the example in (60) illustrates a stem-internal cluster of four consonants /qʃʃm/.

- (60) ʔ**aqʃʃmaknik**
 ‘person’

Kinkade et al (1998: 65) code Kutenai as lacking the feature of allowing clusters of four or more consonants word-initially, word-medially and word-finally, but the examples in (57) to (60) show that this is not really correct, although word-initial and word-final clusters with four or more consonants seem to only arise due to clitic clusters, as in (57) to (59), and word-medial clusters with four or more consonants like that in (60) are not common in the language.

While we have seen that Kutenai resembles other languages in the Pacific Northwest phonologically, it should be noted that the consonant inventory of Kutenai, while a bit larger than average, is smaller than that found in most if not all other Pacific Northwest languages. Table 3 gives the number of consonant phonemes in a number of languages.¹⁷ Table 3 groups the languages into four

¹⁷ Defining the size of inventories is fraught with various factors that can lead different linguists to different conclusions. First, there are problems of competing analyses. For example, Garvin (1948a) does not treat the ejectives in Kutenai as unit phonemes but as sequences of stop (or affricate) plus glottal stop, an analysis

sets. First is Kutenai, second are various languages from the Pacific Northwest, roughly organized from south to north, third is a selection of Algonquian languages, and the last is a miscellaneous set of other languages to give some perspective outside the languages discussed in this paper. The last two languages, Rotokas and !Xóǀ, represent the languages in Maddieson's sample with the smallest and largest consonant inventories respectively.

which leads to fewer consonant phonemes in Kutenai. There are also differences among dialects and problems of whether to include marginal phonemes.

<i>Language</i>	<i>Family</i>	<i># Consonants</i>	<i>Source</i>
Kutenai	isolate	21	
<i>Pacific Northwest</i>			
Klamath	isolate?	33	Beck (2000)
Hanis	Coos	35	Whereat (1996)
Nez Perce	Sahaptian	25	Maddieson (1984)
Quileute	Chimakuan	32	Beck (2000)
Squamish	Salish	30	Maddieson (1984)
Musqueam	Salish	28+5	Suttles (2004) ¹⁸
Coeur d'Alene	(Interior) Salish	42	Doak (1997)
Kalispel	(Interior) Salish	28	Vogt (1940)
Thompson	(Interior) Salish	43	Thompson, Thompson, and Egesdal (1996)
Shuswap	(Interior) Salish	32	Kuipers (1974)
Nuuchahnulth	Wakashan	37	Maddieson (1984)
Kwakw'ala	Wakashan	43	Beck (2000)
Bella Coola	Salish	32	Beck (2000)
Nisgha	Tsimshian	30	Tarpen (1987)
Haida	isolate	46	Maddieson (1984)
Tlingit	isolate?	45	Beck (2000)
<i>Algonquian</i>			
Blackfoot	Algonquian	10	Frantz (1991)
Cheyenne	Algonquian	11	Frantz (1972)
Arapaho	Algonquian	12	Salzmann (1956)
Plains Cree	Algonquian	10	Wolfart (1973)
Ojibwa	Algonquian	16	Maddieson (1984)
Delaware	Algonquian	22	Maddieson (1984)
Passamaquoddy	Algonquian	12	LeSourd (1993)
Micmac	Algonquian	13	DeBlois (1996)
<i>Other languages</i>			
Navajo	Athapaskan	32	Maddieson (1984)
Seneca	Iroquoian	11	Maddieson (1984)
Dakota	Siouan	26	Maddieson (1984)

¹⁸ The notation '28 + 5' means that there are 28 clear instances of consonant phonemes plus five marginal ones, which are either very infrequent or only occur in loan words.

English	Indo-European	24	
Japanese	isolate	27	Maddieson (1984)
Mandarin	Sino-Tibetan	25	Maddieson (1984)
Hawaiian	Austronesian	8	Maddieson (1984)
Rotokas	West Bougainville	6	Maddieson (1984)
!Xóǀ	Khoisan	122	Maddieson (1984)

Table 3: Size of consonant inventories for various languages

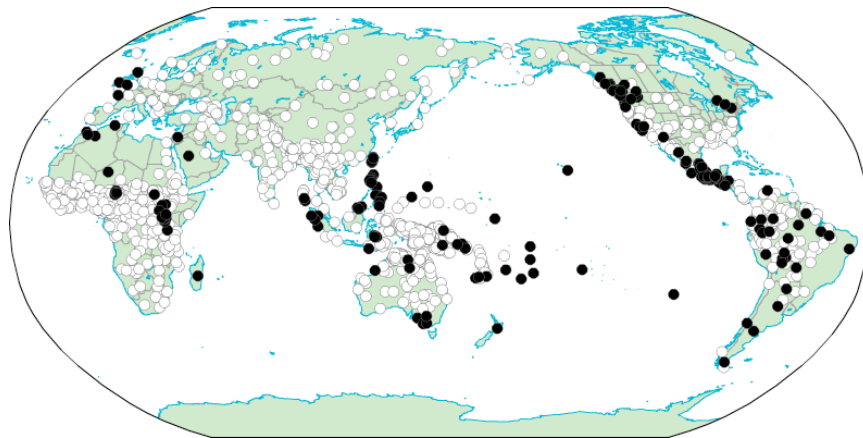
Kutenai has 21 consonants, as shown in Table 1 above. If we compare this to the size of inventories given in Table 3 for the other languages in the Pacific Northwest, given in the second block in Table 3, we see that all have larger inventories. The next smallest is Nez Perce, which, like Kutenai is in a family that does not reach the Pacific coast. Otherwise, the languages shown generally have over thirty consonant phonemes. Significantly, the two Salish languages in Table 3 that are closest geographically to Kutenai, namely Shuswap and Coeur d'Alene, conform to the Pacific Northwest tendency to have large consonant inventories, especially Coeur d'Alene, which has 42 consonants, the second largest number of consonants among the Salish languages in this table (Thompson, also an Interior Salish language, has 43). Conversely, except for Delaware with 22, all of the Algonquian languages not only have fewer phonemes than Kutenai, but many have considerably fewer, with only 10 in Blackfoot and Plains Cree. In short, as far as size of consonant inventory is concerned, Kutenai is intermediate between the Pacific Northwest and Algonquian.

A final informal comment about Kutenai phonology is that when I have heard Salish languages spoken, they sound impressionistically similar to Kutenai, while this is not true for the Algonquian languages I have heard. The basis of this impression appears to be a combination of the features discussed above, namely the lateral obstruents, the uvular consonants, the ejective consonants and the complex consonant clusters.

Let me turn now to morphosyntactic features. I will discuss fewer of these features than the number of phonological features I have discussed for three reasons. First, many of the morphological and syntactic maps in Haspelmath et al (2005) are based on a smaller number of languages than those on which the phonological maps of Maddieson are based, and there are too few languages in North America on these maps to draw meaningful conclusions. Second, it may be that to some extent, the phonological patterns that characterize the Pacific Northwest seem stronger than the morphological and syntactic ones. And third,

the set of phonological features that Maddieson chose to show on maps happened, I assume coincidentally, to include the major features of the languages of the Pacific Northwest, while some of the morphological and syntactic features discussed by Thompson and Kinkade (1990), Kinkade et al (1998) and Beck (2000) are ones that might have had maps in an atlas like Haspelmath et al (2005), but by chance were not features chosen. In fact, most of the maps I will discuss below do not show patterns associated with the Pacific Northwest as clearly as a number of the phonological maps. Note that the set of languages shown on the maps below is different from the set shown on the maps based on Maddieson's maps.

Map 8, based on Dryer (2005a), shows the order of nominal subject and verb among the languages of the world. There are three types of dots. The black dots represent VS languages, languages in which the subject more commonly follows the verb; the white dots represent SV languages, languages in which the subject more commonly precedes the verb. Map 8 leaves out a third type shown on the map in Dryer (2005a), namely languages lacking a dominant order of subject and verb. This type is particularly common in North America, but is excluded from Map 8 because it obscures the pattern among the two types shown. I classify a language into one of the first two types if one order is at least twice as common as the other in texts.



- Verb-subject word order
- Subject-verb word order

Map 8: Order of subject and verb

Map 8 shows clearly the extent to which VS order is more common among languages in the Pacific Northwest; this area is one of the two largest areas with a concentration of VS languages (the other being Meso-America). Again Kutenai is an instance of this type, as illustrated in examples (4), (5), (10), (12), and (16) among others above. There are six Algonquian languages on the version of Map 8 in Dryer (2005a), and five of them are shown as lacking a dominant order of subject and verb. The sixth, Ojibwa, I code as more commonly VS, based on my own text counts of a set of texts in Nichols (1988), though SV order is not uncommon in these texts.¹⁹

Being VS is largely equivalent to being verb-initial (the latter implying both VS and VO, i.e. verb preceding object), since OVS languages are quite rare, as are languages which are VS and in which both OV and VO are common. Hence describing VS as a Pacific Northwest trait could equally well be formulated in terms of verb-initial word order being a Pacific Northwest trait. In fact, Beck (2000) more specifically describes VSO order as a Pacific Northwest trait. Languages which are verb-initial may be VSO, VOS or VSO/VOS (meaning that they allow both VSO and VOS with comparable frequency), though crosslinguistically, the majority of verb-initial languages are VSO. It is true that by and large the languages within the core of the Pacific Northwest (Coast Salish, Wakashan, and Chimakuan) are VSO. However, Thompson and Kinkade (1990: 49) report that VOS is common as a preferred order in a number of languages in Oregon, including Chinookan languages, according to them, Alsea, Siuslaw, and Hanis Coos²⁰. Furthermore, a number of languages in this area do allow VOS as

¹⁹ The other five Algonquian languages shown are Blackfoot, Plains Cree, Menomini, Malecite-Passamaquoddy, and Massachusett.

²⁰ The claim that VOS is the preferred order in Hanis Coos is not supported by my own extensive text counts of texts in Frachtenberg (1913). A count of a set of texts reported by Dryer (1983) showed 6 SVO clauses, 4 VOS, 3 VSO, and 3 OVS. On the other hand, a count of clauses with a nominal subject but no nominal object found 98 VS and 30 SV, justifying saying that the preferred order of subject and verb is VS. Word order in Coos is largely governed by definiteness: definite noun phrases follow the verb while indefinite noun phrases precede the verb. The preference for VS order in Coos is thus not grammatical but simply reflects the frequency with which subjects are definite. The claim that Siuslaw is preferably VOS is also doubtful; my own less extensive (and less reliable) counts found only two instances of apparent VOS order out of ten text examples with a nominal subject and a nominal object, the other eight being SVO, VSO, or OVS. Paul Kroeber (personal communication) says that the order in

an alternate order, including Squamish (Kuipers 1967: 169), Nuuchahnulth (Davidson 2002: 109), and the Interior Salish languages Shuswap (Kuipers 1974: 77), Lillooet (Van Eijk 1997: 228) and Kalispel (Vogt 1940: 78). Crucially, Kutenai is VSO/VOS; in fact VOS outnumbers VSO order in my texts by a ratio of about three to two.²¹ So to that extent Kutenai differs from the majority of other languages in the Pacific Northwest.²² However, these differences between VSO, VOS and more flexible VSO/VOS should be considered minor differences; the crucial point is that verb-initial order is found throughout the area.

None of the remaining maps show patterns as clearly as most of those shown above. The next two sets of maps involve the position of inflectional affixes on nouns. Map 9, based on Dryer (2005b), shows the position of possessive affixes, pronominal affixes on nouns which code the person and/or number, and occasionally gender, of the possessor, like the third person possessive suffix *-ʔis* in the Kutenai example in (61).

- (61) waʔunak-ʔis
 tongue-3.POSS
 ‘its tongue’

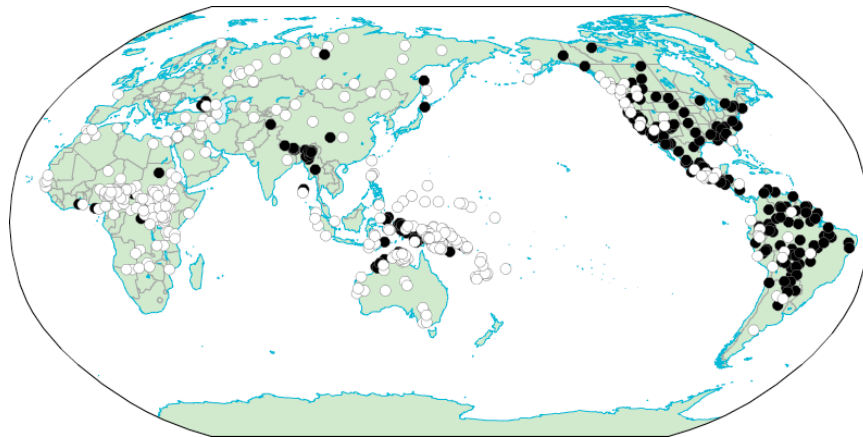
Again, for reasons of readability, I have suppressed one type shown on the map in Dryer (2005b), namely languages without possessive affixes (like English), and I have collapsed two of the other types. The black dots on Map 9 represent languages with possessive prefixes, while the white dots collapse two types of

Alsea is also flexible so that is also probably misleading to say that VOS is preferred in Alsea.

²¹ It is not clear from Kuiper’s description (1974: 77) that VSO is preferred over VOS in Shuswap, so it too may be VSO/VOS, which is significant since Shuswap is immediately to the north of Kutenai (and the Shuswap and Kutenai now share a reserve).

²² Kinkade et al (1998) code Kutenai as lacking predicate-initial word order. This is only correct if we treat preverbs and grammatical particles that precede the verbal complex as meaning that the predicate is not initial. However, I suspect that if we were to use that definition, many other languages of the Pacific Northwest would be excluded as well. For example, while negative morphemes are arguably predicates in many languages in the Pacific Northwest, this is not the case in some languages, such as Coast Tsimshian (Dunn 1979: 73), Lower Chinook (Boas 1911), or Northern Sahaptin (Jacobs 1931: 268). Similarly, polar question particles occur first in Shuswap (Kuipers 1974: 81) and Nez Perce (Aoki 1970: 140).

languages, those with possessive suffixes, and those with both prefixes and suffixes, with neither dominant. If a language has both prefixes and suffixes, but prefixes are dominant within the paradigm, then the language is coded as having possessive prefixes.



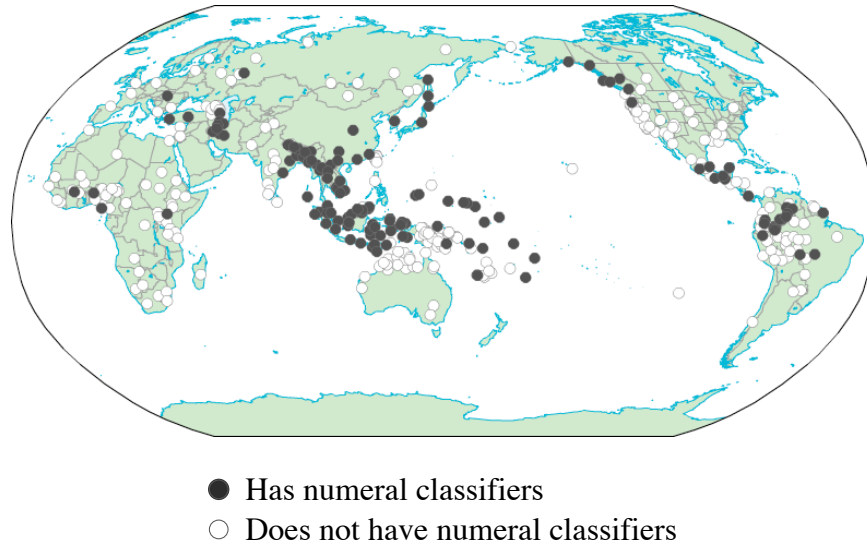
- Possessive prefixes
- Possessive suffixes or languages with both possessive prefixes and suffixes with neither dominant

Map 9: Position of possessive affixes

Map 9 shows a striking contrast between the Old World and the New World: in the Old World, languages with possessive suffixes (or both prefixes and suffixes with neither dominant) are far more common than languages with possessive prefixes, while in the New World, possessive prefixes are much more common, throughout most of North and South America. But the Pacific Northwest is an exception to this overall pattern. In other words, for this map, the Pacific Northwest contrasts with much of the rest of North America, but not with languages in the Old World. Kutenai is one of those languages which is primarily suffixing as far as possessive affixes are concerned, as illustrated in (61) above, contrasting not only with Algonquian, but also with the majority of languages in North America.

Map 10, based on Gil (2005), shows the distribution of languages with numeral classifiers. The majority of languages in the world with numeral classifiers are found in an area stretching from east Asia down into Indonesia and

stretching eastward into the Pacific in the large area in which Austronesian languages are spoken.



Map 10: Numeral classifiers

But there are a number of pockets in other parts of the world with numeral classifiers, and one of these is the Pacific Northwest. It appears from Map 10 that the centre of the distribution of numeral classifiers in the Pacific Northwest is to the north of the geographical centre for other traits associated with the Pacific Northwest.²³ However, Gil's map is somewhat misleading, since Thompson and Kinkade (1990: 46) report that numeral classifiers are very common among Salish and Wakashan languages, including the southernmost Salish language Tillamook, and extending further southward to include Alsea, and Kinkade et al (1998: 65) report similarly for the Plateau area, including Interior Salish, Sahaptian, and Klamath. Kutenai lacks numeral classifiers, and in this respect resembles Algonquian, in contrast to the Pacific Northwest.

²³ The seven languages shown in North America with numeral classifiers are Eyak, Tlingit, Haida, Carrier, Coast Tsimshian, Thompson, and Kalapuya. Thompson is the only Salish language in Gil's sample and his sample contains no Wakashan languages. A map containing a larger sample of languages from this area would probably show more languages with numeral classifiers in the centre of the Pacific Northwest area.

The software component of Haspelmath et al (2005) makes it possible to combine two or more maps. Since what makes a geographical region a linguistic area is the convergence of a number of features that otherwise do not occur frequently among the languages of the world, we will examine one map showing combinations of features above that illustrates the extent to which Kutenai shares combinations of features with languages of the Pacific Northwest.

Map 11 shows the set of languages in the world that share the three phonological features shown on Maps 1, 4, and 5, namely uvular consonants, glottalized resonants, and lateral obstruents



Map 11: Languages with uvular consonants, lateral obstruents, and glottalized resonants

Map 11 shows that all of the languages in Maddieson's sample with this combination of features are in the Pacific Northwest, Kutenai among them. There are a total of 9 such languages and significantly they fall into six different language families, making clear the areal nature of the combination of these features: Kutenai, Wakashan (Nuuchahnulth, Kwakw'ala), Salish (Squamish, Lushootseed, Shuswap), Sahaptian (Nez Perce), Tsimshian (Coast Tsimshian) and Haida. The fact that Kutenai is among these languages makes clear how strongly it belongs to the Pacific Northwest, given the absence of this combination of features elsewhere in the world.

Let me turn finally to an examination of language features not mentioned above that Thompson and Kinkade (1990) attribute to the Northwest Coast or that

Kinkade et al (1998) mention in their discussion of language features in the Plateau culture area. I will first discuss Thompson and Kinkade (1990). The first set of features are ones that they attribute to the entire area (p. 43). Among the features that Kutenai also possesses are (1) small numbers of vowels, with only three or four positions (Kutenai has only six vowels, long and short at three positions); (2) glottal stop is treated parallel to other stops; (3) absence of labial fricatives; (4) polysynthesis; and (5) existence of a passive construction. Features (1) and (2) here imply a high consonant-to-vowel ratio; Maps 13 and 14 above illustrate this property. Some of these features, such as polysynthesis, also hold of Algonquian, so that they are not all features that show Kutenai to be in a linguistic area that excludes Algonquian.

Features that Thompson and Kinkade attribute to the entire Northwest Coast which Kutenai lacks include (1) labialized consonants; (2) extensive voiceless fricatives (Kutenai has only /s/, /ç/ (represented by <x> in the orthography used here), and the voiceless lateral fricative /ʃ/; (3) both alveolar and palatal affricates; (4) more than one lateral; (5) morphophonemic adjustments are quite complex (Kutenai is, in contrast, fairly agglutinative); (6) widespread use of reduplication; (7) aspectual distinctions are basic; and (8) negative regularly appears as first element in clause.

With respect to the last feature just mentioned, that of the negative regularly appearing as the first element in the clause, this is not true of Kutenai; the negative in Kutenai is a preverb, which like other preverbs, can occur as the first element in the clause, as in (63), but more often does not, as in (64) to (66) below.

- (63) qa ʔuʎa-ni xaʎiʔ-nis.
 NEG be.the.one.who.does-INDIC son-2SG.POSS
 'It was not your son who did it.'

First and second person subject clitics will always precede the negative preverbs (as they precede all preverbs), as in (64).

- (64) hu qa ʔupx-ni ʎ=qaqa.
 1SUBJ NEG know-INDIC IRREAL-be.true
 'I don't know if it's true.'

In addition, the negative preverb can be preceded by other preverbs, as in (65), where *ç* 'future', *ʎi-tʃaʎ* 'never', and *ʎa* 'reversative' are all preverbs preceding the negative preverb *qa*.

- (65) hu=ɕ ɦi·t̚q̚a-ɦ ɦa qa ʔiɦa-ni.
 1SUBJ=FUT never-PRVB REVERS NEG cry-INDIC
 ‘I will never stop crying.’

There are also various particles, like the habitual particle *ʔat*, which always precede both preverbs and the clitics that precede preverbs, so these always precede the negative preverb, as in (66).

- (66) ʔat qa ta-ɦ ɦa ɦunmitxuʔ-ni.
 HABIT NEG able-PRVB REVERS knock.off-INDIC
 ‘He couldn't knock it off.’

A final Northwest Coast feature noted by Thompson and Kinkade is that languages in this area often have fewer labial sounds than sounds at other places of articulation. Strictly speaking, this is not true for Kutenai, since it has four labial consonants other than /w/ (which Thompson and Kinkade exclude as labial), namely /p/, /p̚/, /m/, and /m̚/, which is more than any other place of articulation other than dental. However, this is somewhat misleading since /p̚/ is quite rare in Kutenai; I am aware of only four lexemes in Kutenai containing this phoneme, plus a number of verbs that contain an initial root *t'ap̚* ‘attached’. The phoneme /p̚/ does also arise morphophonemically in that when a noun stem ending in /p/ takes the third person possessive suffix *-ʔis*, the /p/ and the /ʔ/ coalesce to /p̚/, e.g., *ʔa·kukp* ‘fingernail’, *ʔa·kukp̚is* ‘her fingernail’. The phoneme /m̚/ is also of lower frequency. However, the low frequency of /p̚/ and /m̚/ is more likely due to universal factors that lead to a low frequency of ejective and glottalized labials (Greenberg 1970) rather than a manifestation of an areal pattern that leads to fewer labial sounds.

Thompson and Kinkade systematically exclude languages inland from the coast, since their paper deals specifically with the Northwest Coast. However, I examined a number of languages for the following seven phonological features, which are easier to identify: (1) large number of consonants; (2) small number of vowels (no more than four vowel positions); (3) absence of labial fricatives; (4) labialized consonants; (5) extensive voiceless fricatives; (6) both alveolar and palatal affricates; and (7) more than one lateral. Of these seven features, the Interior Salish languages Shuswap (Kuipers 1974), Kalispel (Vogt 1940), and Coeur d'Alene (Doak 1997) possess all of these features, except for having no more than four vowel positions (all three languages have at least five vowel positions). Nez Perce possesses four of these seven features: large number of consonants, absence of labial fricatives, extensive voiceless fricatives, and more

than one lateral (Aoki 1970). Kutenai, in contrast, has only two of these seven features, and thus contrast sharply with the Interior Salish languages, and contrasts somewhat even with Nez Perce, since Nez Perce possesses four of these features. For purposes of comparison, it is worth noting that seven of the eight Algonquian languages I examined possess one of these seven features: Micmac (DeBlois 1996) and Malecite-Passamaquoddy (Lesourd 1993) have labialized consonants; while Blackfoot (Franz 1991), Cheyenne (Frantz 1972), Arapaho (Salzmann 1956), Plains Cree (Wolfart 1972), and Ojibwa (Maddieson 1984) have fewer than five vowel positions. Delaware (Maddieson 1984) has none of these seven features. Interestingly, the vowel systems of Kutenai and Blackfoot are identical: /i, a, u, i:, a:, u:/.

The next set of features discussed by Thompson and Kinkade (1990) are ones that they more specifically associate with a large area from the Nass River to the Columbia River. Since this is essentially the centre of the Pacific Northwest, one might expect to find many of these features inland, in Interior Salish and Kutenai. Among the features of this area that are already discussed above and that are shared by Kutenai are (1) glottalized resonants; (2) two stop series, one ejective, one plain; (3) consonant clusters of four consonants; and (4) predicate before subject (and object). One feature discussed above which Thompson and Kinkade mention but which Kutenai lacks is numeral classifiers.

Other features discussed above that Thompson and Kinkade list for this area from the Nass River to the Columbia River that Kutenai possesses include (1) a contrast between long and short vowels; (2) vowels may be drawn out for emphasis; and (3) tense is not a basic grammatical category. Features that Thompson and Kinkade list for this area that Kutenai lacks include (1) a contrast between alveolar and palatal positions for affricates and fricatives (Kutenai lacks (alveo)palatal affricates and fricatives); (2) concepts of space and time occur within the same deictic particle; (3) visible and nonvisible contrast in the deictic system; (4) possessive constructions may be used as main predicate; and (5) a noun-verb distinction is irrelevant in predicate position. Three other features that Thompson and Kinkade associate with this area but which are found in only about half of the languages in this region and which Kutenai lacks are (6) there are no prefixes in the language (see Map 22 above showing plural prefix in Kutenai); (7) two primary aspectual categories are distinguished; and (8) tense is marked by suffixes. These last three features seem in fact to be more strongly associated

with languages to the north; the more southern Salish languages (e.g. Lushootseed, Upper Chehalis, Tillamook) apparently lack these three features.²⁴

Feature (5) in the preceding paragraph involves the lack of a noun-verb distinction in predicate position. Kutenai more clearly distinguishes nouns and verbs, both morphologically and syntactically. Perhaps the clearest reflection of this at the syntactic level is that nouns as predicates require a copula verb, as in the examples in (67).

- (67) a. n²in-s-i ɕuɕaɕqatuna-s ʔi-s k=waʔkin.
 INDIC=be-OBV.SUBJ-INDIC yarrow-OBV that-OBV SUBORD=bring
 ‘What he brought is a yarrow plant.’
- b. hu=ɕ ʔin-aʔaʔ-ni swu-tmu.
 1SUBJ=FUT be-1PL-INDIC friend-NOM.RECIP
 ‘Let us be friends’

Thompson and Kinkade (1990: 48) list a further set of features that they associate with an area that they call ‘Greater Salishan’. The languages in this area include all of Salish (at least all of Salish that they consider, since they do not discuss most of Interior Salish), plus Tsimshian and Alsea. We might expect that if the point of contact for Kutenai is Salish, then Kutenai might exhibit many of these features. In fact, however, none of these features are ones that Kutenai possesses. These features are (1) ejective lateral affricate; (2) frequent use of metathesis (Kutenai does have some metathesis but it is not frequent); (3) two tense categories are marked (Kutenai lacks tense completely, except for a future preverb); (4) feminine vs. nonfeminine gender (Kutenai lacks gender); (5) verbs mark plural of the subject when intransitive, the object when transitive (Kutenai does not distinguish third person singular from third person plural in verbal morphology); and (6) a negative is often followed by a subordinate construction.

Let us now turn to Kinkade et al’s (1998) discussion of language features in the Plateau area, to which Kutenai belongs. Unfortunately, they code Kutenai incorrectly for a number of features, which it is useful to list. First, as mentioned above, they incorrectly code Kutenai as not having consonant clusters with four or more consonants; see examples (57) to (60) above. Second, they list Kutenai as having three or more primary aspectual categories; while there are a number of

²⁴ Other features that Thompson and Kinkade list are either ones where the characterization by Thompson and Kinkade is not sufficient for me to ascertain whether Kutenai possesses the feature or ones for which I lack data for Kutenai.

particles and preverbs that code aspect, these are not primary in the sense that most clauses have no coding of aspect. Third, they code Kutenai as lacking deictic particles that resemble definite articles; but the deictic particles *na* ‘this’ and *ʔin* ‘that’ do somewhat resemble the definite article *niʔ* in form and they occur in complementary distribution in the same position at the beginning of the noun phrase. Fourth, they code Kutenai as having the feature of marking ‘past’ and ‘future’ by prefixes or proclitics; but there is no marking of ‘past’ in Kutenai and ‘future’ is expressed by a preverb, which admittedly both Boas (1918) and Garvin (1948b) represent as a prefix, though Morgan (1991) correctly represents it as a separate phonological word. Fifth, they code Kutenai as lacking the property of predicate-initial word order; but as discussed above, Kutenai is normally predicate-initial. Sixth, they list Kutenai as allowing all words other than particles to occur as the “heart of clause predicates”; but nominal predicates require a copula verb, as illustrated above in (67). Seventh, they incorrectly list Kutenai as lacking a copula verb like English *be*. Eighth, they incorrectly list Kutenai as lacking a contrast between long and short vowels. And ninth, they incorrectly list Kutenai as making an inclusive-exclusive distinction in nonsingular first person forms. In counting features below, my numbers will be based on a corrected list of features, rather than those that Kinkade et al (1998) attribute to Kutenai. I should emphasize that errors of the sort made by Kinkade et al (1998) are inevitable in any study based on superficial examination of a large number of languages; I myself in this paper, and probably some of the authors of the chapters cited from Haspelmath et al (2005), have undoubtedly made similar errors.

Kinkade et al discuss features shared by languages in the Plateau area as a whole, features found primarily in Salish, features shared by Kutenai and Salish, and features shared by Kutenai with non-Salish languages in the area. Curiously, Kutenai appears to conform less closely to features found in this area than to features associated with the Pacific Northwest as a whole. It possesses only nine of the eighteen features that Kinkade et al attribute to the Plateau area as a whole, in contrast to Nez Perce, which has seventeen of these features, and Klamath, which has twelve. It does possess three of the six features primarily associated with Salish, though so does Klamath. It has only two of the twelve features that Kinkade et al associate with Salish and Kutenai (three by their count), which seems odd; how can a feature be associated with Salish and Kutenai if it is not found in Kutenai? And it possesses only three of eleven features associated with non-Salish languages of the area. Among the features shared by Kutenai with other languages in the area not mentioned above are (1) vowels may be drawn out for emphasis; (2) marking of plurality is largely optional; and (3) tense is not a basic grammatical category. Two other features shared with other languages in

the Plateau area but which contrast with some languages in the Northwest Coast area are (1) an ejective lateral affricate is lacking; and (2) labialized velars are lacking. Among features that are particularly common in this area that Kutenai lacks are (1) presence of numeral classifiers; (2) the language is at least partly ergative; (3) possessive constructions may be used as main predicates with at least a few roots; and (4) different roots are used for singular and plural of various concepts.

3. Summary

I have provided evidence that Kutenai resembles both Algonquian languages and languages in the Pacific Northwest. However, the resemblances are of a very different sort. The resemblances to Algonquian involve what one might call quirky features, very specific features that are shared by few other languages in the world, while the resemblances to languages in the Pacific Northwest involve general typological features. It is no surprise that there are no maps in Haspelmath et al (2005) showing the distribution of languages with obviation systems (narrowly defined) or preverbs (also narrowly defined) since these maps would probably show Kutenai and Algonquian of one type and all or most of the rest of the languages of the world of the other type, lacking the feature in question.

Both types of resemblances are ones that seem most likely to be due to contact. These two different types of resemblances might reflect two different sorts of contact. But what sort of contact results in the type of resemblance that we find between Kutenai and Algonquian but not the type of resemblance that we find between Kutenai and languages of the Pacific Northwest? And conversely, what sort of contact results in the type of resemblance we find between Kutenai and the languages of the Pacific Northwest? One might suggest that the very specific resemblances we find between Kutenai and Algonquian represent a stronger contact situation, one where there is more profound influence of one language on the other. But why would that sort of contact not also result in the type of resemblances we find between Kutenai and languages of the Pacific Northwest?

But although I have argued that the resemblances to Algonquian are quite unlikely to be due to common genetic inheritance, it is less clear that this is true for the resemblances between Kutenai and the Pacific Northwest. There are two considerations that would seem to argue against a genetic explanation for the similarities between Kutenai and languages in the Pacific Northwest. One is the absence of convincing evidence of a genetic relationship between Kutenai and

other languages in the Pacific Northwest. Morgan (1980, 1991) presents evidence for a remote relationship between Kutenai and Salish that is suggestive, but less than convincing.²⁵ The second consideration apparently arguing against a genetic explanation is that the features Kutenai shares with Salish are also in general ones shared with Wakashan, Chimakuan, and various groups that are placed in a broad interpretation of Penutian (including Chinookan, Sahaptian, Tsimshian, Alesa, and Coos). If these features are shared across these different groups due to contact, why would one suggest that Kutenai might share them with Salish due to common genetic inheritance?

However, while these considerations might make a contact explanation more likely, they do not rule out the possibility of a genetic explanation. Typological features do not provide evidence of a genetic relationship because it is relatively easy for them to be borrowed. On the other hand, at least some typological features are also fairly conservative. In other words, as languages diverge through time and the evidence for a genetic relationship based on sound-meaning correspondences becomes more meagre, it is often the case that the languages will still share many typological features, and when they don't, this is usually because some but not all have been subject to contact influence from other languages. What this means is that it is likely that there are many instances of languages for which there is no convincing evidence of a genetic relationship but where they share typological features due to common genetic inheritance. In the case of Kutenai and Salish, this means that at least some of the typological similarities might be due to common genetic inheritance.

It is worth contrasting this with the resemblances between Kutenai and Algonquian. In this case, I have argued, the similarities between the two systems seem to be too similar to be due to common genetic inheritance after what would have to be a long period of time. If the similarities between the Kutenai and Algonquian obviation systems had been much weaker, a genetic explanation would become more plausible.

It is a mistake, however, to assume that typological similarities must be due either to common genetic inheritance or to contact; they can be due to both. It is natural for typological features that they are a common genetic inheritance to be maintained due to contact. Genetically-related languages that are spoken in same area tend to more similar typologically than genetically-related languages

²⁵ Not being a Salishanist, I don't feel qualified to evaluate Morgan's evidence. My impression from a conversation I once had with Dale Kinkade is that he did not find Morgan's evidence convincing.

that are geographically separated. In other words, continued contact tends to maintain typological similarities that are shared with a common ancestor. After a long enough period of time, it may make sense to say that the shared features are shared more due to continuous contact than to genetic factors, even when they are a common genetic inheritance. This is certainly possible in the case of the similarities between Kutenai and Salish. But it is even possible in the case of the similarities between Kutenai and Algonquian. However, this only reflects the fact that in the absence of any good argument or evidence for particular explanations for the similarities, there will be many possible explanations.

REFERENCES

Aoki, Haruo

1970 *Nez Perce grammar*. Berkeley: University of California Press.

1975 The East Plateau linguistic diffusion area. *International Journal of American Linguistics* 41: 183-199.

Beck, David

2000 Grammatical convergence and the genesis of diversity in the Northwest Coast *Sprachbund*. *Anthropological Linguistics* 42: 147-213.

Bloomfield, Leonard

1958 *Eastern Ojibwa*. Ann Arbor: University of Michigan Press.

Boas, Franz

1911 Chinook. In *Handbook of American Indian Languages, Part 1*, Smithsonian Institution Bureau of American Ethnology Bulletin 40, ed. by Franz Boas, pp. 559-678. Washington, D.C.: Government Printing Office.

1918 *Kutenai tales*. Bureau of American Ethnology Bulletin 59. Washington: Smithsonian Institution.

1920 The classification of American languages. *American Anthropologist* 22: 367-76.

- Dahlstrom, Amy
 1986 Plains Cree morphosyntax. University of California at Berkeley
 Ph.D. dissertation.
- Davidson, Matthew
 2002 Studies in Southern Wakashan (Nootkan) grammar. Unpublished
 University at Buffalo Ph.D. dissertation.
- DeBlois, Albert D.
 1996 Micmac dictionary. Ottawa: Canadian Museum of Civilization.
- Doak, Ivy Grace
 1997 Coeur d'Alene grammatical relations. Unpublished University of
 Texas Ph.D. dissertation.
- Dryer, Matthew S.
 1983 Coos word order. Paper delivered at the 1983 meeting of WECOL,
 Eugene, Oregon.
- 1991 Subject and inverse in Kutenai. In *Papers from the American Indian
 Languages Conferences, Held at the University of California, Santa
 Cruz, July and August 1991, Occasional Papers On Linguistics*
 16:183-202, ed. by James E. Redden. Carbondale, Illinois: Dept. of
 Linguistics.
- 1992 A comparison of the obviation systems of Kutenai and Algonquian.
Papers of the Twenty-Third Algonquian Conference, edited by
 William Cowan, pp. 119-163. Ottawa: Carleton University.
- 1999 A comparison of preverbs in Kutenai and Algonquian. *Proceedings
 of the Thirtieth Algonquian Conference*, edited by David Pentland,
 63-94. Winnipeg: University of Manitoba.
- 2005a Order of subject and verb. *World atlas of language structures*, ed.
 by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard
 Comrie, pp. 334-337. Oxford University Press.
- 2005b Position of pronominal possessive affixes. *World atlas of language
 structures*, edited by Martin Haspelmath, Matthew S. Dryer, David
 Gil, and Bernard Comrie, pp. 234-237. Oxford University Press.

- Dunn, John Asher
 1979 *A reference grammar for the Coast Tsimshian language*. Canadian Ethnology Service Paper 55. Ottawa: National Museum of Canada.
- Frachtenberg, Leo J.
 1913 *Coos texts*. Columbia University Contributions to Anthropology, Volume 1. New York: Columbia University Press.
- Franz, Donald
 1972 Cheyenne distinctive features and phonological rules. *International Journal of American Linguistics* 38: 6-13.
 1991 *Blackfoot grammar*. Toronto: University of Toronto Press.
- Garvin, Paul
 1948a Kutenai I: Phonemics. *International Journal of American Linguistics* 14: 37-42.
 1948b Kutenai III: Morpheme Distributions (Prefix, Theme, Suffix). *International Journal of American Linguistics* 14: 171-187.
- Gil, David
 2005 Numeral classifiers. *World atlas of language structures*, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 226-229. Oxford University Press.
- Grafstein, Ann
 1984 Argument structure and the syntax of a non-configurational language. PhD thesis, McGill University.
- Greenberg, Joseph H.
 1970 Some generalizations concerning glottalic consonants, especially implosives. *International Journal of American Linguistics* 36: 123-145.
 1987 *Language in the Americas*. Stanford: Stanford University Press.
- Haas, Mary
 1965 Is Kutenai Related to Algonquian? *Canadian Journal of Linguistics* 10:77-92.

- Haspelmath, Martin, Matthew S. Dryer, David Gil, and Bernard Comrie, eds.
2005 *World atlas of language structures*. Oxford University Press.
- Jacobs, Melville
1931 *A Sketch of Northern Sahaptin Grammar*. University of Washington Publications in Anthropology, Vol. 4, No. 2. Seattle: University of Washington Press.
- Kindade, M. Dale
1990 Sorting out third persons in Salishan discourse. *International Journal of American Linguistics* 56: 341-360.
- Kinkade, M. Dale, William W. Elmendorf, Bruce Rigsby, and Haruo Aoko.
1998 Languages. In *Plateau. Handbook of North American Indians, Volume 12*, ed. by Deward E. Walker, Jr., pp. 30-51. Washington: Smithsonian Institution.
- Kuipers, Aert H.
1967 *The Squamish Language*. The Hague: Mouton.

1974 *The Shuswap language*. The Hague: Mouton.
- Leavitt, Robert M.
1985 Passamaquoddy-Malecite preverbs. *Papers of the Sixteenth Algonquian Conference*, ed. by William Cowan, pp. 73 - 90. Ottawa: Carleton University.
- Leavitt, Robert M., and David A. Francis, eds.
1984 *Kolusuwakonol: Philip LeSourd's Passamaquoddy-Maliseet and English Dictionary*. Fredericton: Micmac-Maliseet Institute.
- Lesourd, Philip S.
1993 *Accent and syllable structure in Passamaquoddy*. New York: Garland.
- Maddieson, Ian.
1984 *Patterns of sounds*. Cambridge University Press.

- 2005a Uvular consonants. *World atlas of language structures*, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 30-33. Oxford University Press.
- 2005b Glottalized consonants. *World atlas of language structures*, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 34-37. Oxford University Press.
- 2005c Lateral consonants. *World atlas of language structures*, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 38-41. Oxford University Press.
- 2005d Consonant-vowel ratio. *World atlas of language structures*, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 18-21. Oxford University Press.
- 2005e Syllable structure. *World atlas of language structures*, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 54-57. Oxford University Press.
- 2005f Consonant inventories. *World atlas of language structures*, ed. by Martin Haspelmath, Matthew S. Dryer, David Gil, and Bernard Comrie, pp. 10-13. Oxford University Press.

Morgan, Lawrence

- 1980 Kootenay-Salishan linguistic comparison: a preliminary study. Masters thesis, University of British Columbia.
- 1991 A description of the Kutenai language. PhD thesis, University of California at Berkeley.

Nichols, John

- 1988 *An Ojibwe text anthology*. London: The Centre for Research and Teaching of Canadian Native Languages, University of Western Ontario.

Rhodes, Richard A.

- 1976 The morphosyntax of the Central Ojibwa verb. PhD thesis, University of Michigan.

- 1990 Obviation, Inversion, and Topic Rank in Ojibwa. Pp. 101-115 in *Berkeley Linguistics Society 16, Special Session on General Topics in American Indian Linguistics*.
- Salzmann, Zdeněk
 1956 Arapaho I: Phonology. *International Journal of American Linguistics* 22: 49-56.
- Sapir, Edward
 1929 Central and North American Languages. Pp. 128-140 in *Encyclopedia Britannica*, 14th Edition, Volume 5.
- Sherzer, Joel
 1976 An areal-typological study of American Indian languages north of Mexico. Amsterdam: North Holland.
- Suttles, Wayne
 2004 *Musqueam reference grammar*. Vancouver: University of British Columbia Press.
- Tarpenit, Marie-Lucie
 1987 A grammar of the Nisgha language. Unpublished University of Victoria Ph.D. dissertation.
- Thompson, Laurence C., and M. Dale Kinkade
 1990 Languages. *Northwest Coast. Handbook of North American Indians, Volume 7*, ed. by Wayne Suttles, pp. 30-51. Washington: Smithsonian Institution.
- Thompson, Laurence C., M. Terry Thompson, and Steven M. Egesdal
 1996 Sketch of Thompson, a Salishan language. *Languages. Handbook of North American Indians, Volume 17*, ed. by Ives Goddard, pp. 609-643. Washington: Smithsonian Institution.
- Van Eijk, Jan
 1997 *The Lillooet Language*. Vancouver: University of British Columbia Press.
- Vogt, Hans
 1940 *The Kalispel Language*. Oslo: I Kommissjon Hos Jacob Dybwad.

Whereat, Patricia Pauline

- 1996 Hanis verbal morphology: a guide to Frachtenberg's grammar.
Unpublished University of Oregon M.A. thesis.

Wolfart, H. C.

- 1973 *Plains Cree: A grammatical Study*. Transactions of the American
Philosophical Society, New Series, Vol. 63, Part 5. Philadelphia:
American Philosophical Society.