

An Agent Hierarchy in Some Coast Salish Languages

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Dear Colleagues,

The following paper is an account of gaps (non-occurring sentences) in transitive and passive sentences in certain Coast Salish languages. The account makes reference to an agent hierarchy, a different form of which appears in the languages we considered (Lummi, Klallam, Halkomelem, Lushootseed, and Squamish). The question immediately arises, then, as to how pervasive this phenomenon may be in Salish in general. Since Nootka apparently has a similar feature ("Inverse person marking in Nootkan", Whistler (1980), ms.), there is a possibility that the agency hierarchy is an areal feature. Since we haven't yet been able to get a hold of Whistler's paper, we don't yet know how similar the Nootkan features may be to the Salish features. If the Interior Salish languages have similar agency properties, the source of the areal feature on the Coast may be Salish.

We would therefore be interested in hearing from you at the Salish Conference regarding the following facts concerning languages in which you have expertise:

- 1) Are there any gaps in the transitive and passive sentence paradigms? If so, what are they?
- 2) Are there any restrictions on the order of full noun phrases? That is, can inanimate nouns serve as subjects of sentences with animate or human objects? (e.g. The rock hit the man)

Thank you.

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0. Introduction
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0. Introduction. Studies of many of the Coast Salish languages have revealed certain classic problems in the analysis of active (transitive) sentences and their passive counterparts.¹ These problems stem from the fact that there are gaps in the transitive and passive verb paradigms, and suppletion between them. A question which has arisen is: can a sentence be termed "passive" if it has no transitive counterpart? In Squamish, for example, transitive sentences with a second person pronominal patient (the man helps you) are excluded, and a passive sentence (you are helped by the man) must be employed. Across languages, passive sentences have been described as constructions that make it possible to state that some patient has been affected by some action, without identifying the agent of that action. Yet in Lushootseed, for example, it is possible to specify a full noun agent (i.e., not a pronominal agent) only by employing a passive construction, if the patient is also a full noun. These problems in the analysis of a variety of Coast

Salish languages have been pointed out by Hess (1973), Thompson and Thompson (1971), Hukari (1976a), and Kuipers (1967) among others. All the Coast Salish languages apparently exclude certain transitive and passive sentence types, but it is of interest that the particular sentence types vary with each language. What is important here is that the paradigm gaps are not lexically determined; that is, they do not reflect verb classes or specific verbs that are excluded from either transitive or passive sentences, as is frequently the case in other language families. The excluded sentence types may be characterized syntactically, with reference to the argument types that can occur with the transitive or intransitive verb of the sentence.² Consider the following (main clause) transitive and passive paradigms from Lummi:

1) Lummi transitive sentences

a-1 x̄ci-t-oŋəs-sən	'I know you'	b-1 x̄ci-t-oŋəs-sx ^w	'You know me'
a-2 x̄ci-t-sən	'I know it'	b-2 x̄ci-t-sx ^w	'You know it'
a-3 x̄ci-t-sən cə swəy'qə?	'I know the man'	b-3 x̄ci-t-sx ^w cə swəy'qə?	'You know the man'
c-1 *	'He/she knows you/me'	d-1 *	'The man knows me/you'
c-2 x̄ci-t-s	'He/she knows it'	d-2 *	'The man knows him'
c-3 x̄ci-t-s cə swəy'qə?	'He/she knows the man'	d-3 x̄ci-t-s cə swəy'qə? cə swi'qo'əχ	'The man knows the boy'

2) Lummi passive sentences

a-1 *	'You are known by me'	b-1 *	'I am known by you'
a-2 *	'It is known by me'	b-2 *	'It is known by you'
a-3 *	'The man is known by me'	b-3 *	'The man is known by you'
c-1 x̄ci-t-ŋ-sən/ sx ^w	'I/you are known' (by someone)	d-1 x̄ci-t-ŋ-sən/ sx ^w ə cə swəy'qə?	'I/you are known by the man'
c-2 x̄ci-t-ŋ	'It is known' (by someone)	d-2 x̄ci-t-ŋ ə cə swəy'qə?	'It is known by the man'
c-3 x̄ci-t-ŋ cə swəy'qə?	'The man is known' (by someone)	d-3 x̄ci-t-ŋ cə swi'qo'əχ ə cə swəy'qə?	'The boy is known by the man'

In (1), -t is the transitivizing suffix. In (2), -ŋ is an intransitivizing suffix; sentences with -t and -ŋ have a passive interpretation. In (1a-1) and (1b-1), -oŋəs is an undifferentiated pronominal suffix for both first and second person singular accusative. In (1a) -sən marks first person nominative, and -sx^w (1b) marks second person nominative. Both nominative and accusative third person pronominal are not overtly marked; the -s suffix in (1c) and (1d) will be accounted for below. The underlined spaces in (1) and (2) show the excluded sentence types in the transitive and passive paradigms in Lummi. Note that the speaker can choose between an active sentence or its passive counterpart only when the transitive sentence has third person arguments. There is a question, then, as to whether the contrast between active versus passive sentences is relevant in sentences containing first and second person arguments. We will return to this question in section 5, below.

In this article we will survey transitive and passive verb paradigms in some Salish languages, and offer an explanation for the paradigm gaps and the suppletion between them in terms of a grammatical feature shared by these languages: the agent hierarchy. An agent hierarchy in a language defines the rank of various elements that may serve as agents in transitive sentences; these rules require that the element of highest rank in the agent hierarchy in a sentence be the subject of that sentence. In a transitive sentence, the agent is subject; in a passive sentence, the single non-oblique argument is subject. Any transitive or passive sentence where the subject is not the element of highest rank in the sentence is excluded. We will show that the agent hierarchy accounts also for another often-noted attribute shared by these languages: the fact that in transitive sentences with a single full noun argument, that full noun is always interpreted as patient. Finally, we will show the connection between the agent hierarchy and another grammatical feature common to these languages: ergativity.

1. The Agent Hierarchy and Ergativity. We may define ergativity briefly as follows: Transitive verbs are two-place predicates; they have an agent and a patient argument. Intransitive verbs (a class which includes passives) are one-place predicates; they have a single non-oblique argument, the subject. In nominative/accusative case marking systems, the agent argument of a transitive verb and the subject argument of an intransitive verb receive the same case marking (nominative), while the patient argument of a transitive verb receives a different case marking (accusative). In ergative/absolutive case marking systems, the

patient argument of a transitive verb and the subject of an intransitive verb receive the same case marking (absolutive), while the agent argument of a transitive verb receives a different case marking (ergative), as shown in Figure 1:

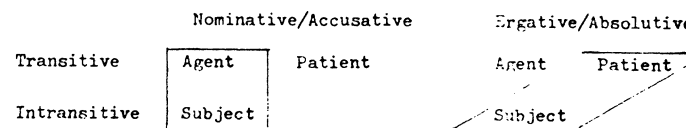


Figure 1

Some languages do not mark case, but have ergative marking on verbs; this is the situation in some of the Salish languages discussed here. In order to discuss this ergative marking on verbs, we will need first to make reference to the notion of an ergative split. Dixon (1979) emphasizes that languages termed ergative invariably show some nominative/accusative features as well as ergative/absolutive features, either in case-marking or in verbal inflection. For example, in Dyirbal, pronouns show nominative/accusative marking, while nouns show ergative/absolutive marking; this kind of ergative split is typical of ergative languages. Silverstein (1976) proposed a functional (or semantic) explanation of such ergative splits; he showed that it is possible to specify certain semantic features by means of which various terms that may function as verbal arguments may be ranked according to the likelihood of their serving as agents in transitive clauses. In conversation, the speaker and hearer are respectively first and second person. They are animate beings who see themselves as possessed of a will and at

least to some extent in control over their actions; therefore, the probability of first or second person appearing as agent in a sentence is very high. In discourse, reference is made to third persons, beings, and objects some of which are inanimate and non-volitional, and therefore not likely to be agents in a transitive sentence. We may thus recognize a 'potentiality of agency' scale which is represented diagrammatically as follows: (Dixon 1979:85-86)

3) Demonstratives

1st person pronoun	2nd person pronoun	3rd person pronouns	Proper nouns	Human	Animate	Inanimate
				Common nouns		
likelihood of functioning as transitive agent						

". . . the hierarchy given here roughly indicates the overall 'agency potential' of any given NP. . . . it is plainly most economical to 'mark' a participant when it is in the unaccustomed role. . . . a number of languages have 'split' case marking exactly on this principle: an 'ergative' case is used with NPs from the right-hand end up to some point in the middle of the hierarchy and an 'accusative' case from that point on, over to the extreme left of the hierarchy. . . ."

Dixon observes that first and second persons are frequently of equivalent rank in the hierarchy; as we will show, this is the case in Salish.

Ergativity has been reported previously in Coast Salish languages. Kuipers (1967) notes ergativity in Squamish. Hukari (1976) points out ergative characteristics in Halkomelem, and Gerdtz (1980) documents ergativity and ergative splits in that language. We will show here

that certain constructions in Lummi and Lushootseed have ergative properties. In all these languages, an ergative split with respect to person appears. We will look at the Lummi case first.

2. Lummi. The paradigms given in (1) and (2) above show that in Lummi there are first and second person nominative and accusative pronominal elements. Nouns have only one non-oblique case; there is no nominative/accusative marking on nouns, as shown in (1d-3). When an intransitive predicate has neither a first nor second person marker (nom.), it is interpreted as having a third person pronominal subject; when a transitive verb has neither first nor second person markers (nom. and acc.), it is interpreted as having third person pronominal agent and patient arguments. The following example sentences will show that the -s suffix that appears in (1c) and (1d) is not a third person pronominal enclitic:

- 4) a-1 swəyʔqəʔ-sən 'I am a man' b-1 yeʔ-sən 'I go'
 a-2 swəyʔqəʔ-sx^w 'You are a man' b-2 yeʔ-sx^w 'You go'
 a-3 swəyʔqəʔ 'He is a man' b-3 yeʔ 'He goes'
 c-1 x̣ci-t-sən 'I know it'
 c-2 x̣ci-t-sw^x 'You know it'
 c-3 x̣ci-t-s 'He knows it'
 d-1 x̣ci-t-sən cə swəyʔ-qəʔ 'I know the man'
 d-2 x̣ci-t-sx^w cə swəyʔqəʔ 'You know the man'
 d-3 x̣ci-t-s cə swəyʔqəʔ 'He knows the man'

The -s suffix that appears in (1c) and (1d) above does not appear in (4 a-3) and (4 b-3); therefore, the -s is not a third person pronominal

enclitic.³ As (1d), (4c-3) and (4d-3) show, -s appears on transitive verbs with a third person pronominal or full noun agent. Another possibility would be that the -s is a transitivity suffix; however, the -t that is common to all the sentences in (4c) and (4d) is the transitivity suffix. Hukari (1976b) designates the -s in Halkomelem a third person transitive subject marker. This is correct; but since the crucial feature of ergative systems is that they distinguish between transitive subjects (agents) and intransitive subjects, it seems preferable to recognize the -s as an ergative marker. Only third person forms in Lummi show ergativity.

The ergative suffix on the verb marks sentences with third person pronominal and full noun agents as the atypical constructions: sentences where an argument of low rank is agent. First and second persons, who are more likely to be agents, show nominative/accusative contrasts in the pronominal elements. The ergative split found in Lummi is therefore consistent with the ranking of arguments as potential agents according to the agent hierarchy.

The present analysis in which -s is viewed as an ergative marker (and not a pronoun) is supported by the fact that the first person singular and plural pronominal enclitics, (-sən) and (-ʔ), and the second person pronominal enclitic (-sx^w) have distributional properties that are distinct from those of the proposed ergative marker. The pronominal enclitics always appear to the right of the yes/no question morpheme -ə-, whereas the question marker appears to the right of the ergative marker. These distributional facts are illustrated in (5):

- 5) $\check{x}ci-t-ə-sən$ cə swəyʔqəʔ 'Do I know the man?'
 $\check{x}ci-t-ə-sx^w$ cə swəyʔqəʔ 'Do you know the man?'
 $\check{x}ci-t-ə-ʔ$ cə swəyʔqəʔ 'Do we know the man?'
 $\check{x}ci-t-s-ə$ cə swəyʔqəʔ 'Does he/she know the man?'

In sum, the paradigms in (1) show that Lummi has the following restrictions on transitive sentence types:

- 6) Transitive sentences with a first or second person/pronominal patient are excluded, (cases (1c-1) and (1d-1)), unless first or second person is also the agent. (cases (1a-1) and (1b-1))
- 7) Transitive sentences with a nominal agent and a third person pronominal patient are excluded. (case (1d-2))

A consequence of (6) is that first and second pronominal arguments may not be outranked, and are equivalent in rank. Their equivalent rank as potential patients is consistent with the fact that first and second person patients are marked by the same ambiguous accusative suffix, as shown in (1a-1) and (1b-1).

A consequence of (7) is that third person pronominal arguments outrank full noun arguments. A verb with a transitivity suffix alone (as in (1c-2)), means $\check{3} v \check{3}$, ("He/she knows it"). When a single full noun argument appears with a transitive verb, as in (1c-3), the full noun argument is interpreted as patient, since $\check{3}$ outranks N and $\check{3}$ therefore must be agent. The agent hierarchy, then, accounts for the fact that single full nouns are always absolutive: the subject of an intransitive verb or the object of a transitive verb. This interpretation

of transitive sentences with a single nominal argument is apparently shared by all the Coast Salish languages. The only instance in which a non-oblique noun in Lummi can represent an agent is when the patient is also represented by a noun; that is, a full noun argument may outrank only another full noun argument. Put another way, transitive sentences where a noun represents the agent are excluded, unless the patient is also represented by a noun.

The restriction on passive sentences in Lummi is:

- 8) Passive sentences with a first or second person pronominal agent (by me, by you) are excluded.

As the examples in (2c) show, passive sentences with an unspecified third person pronominal agent are permitted. If only one first or second person pronominal argument appears in a sentence, it must be the subject, since these arguments outrank third person pronominal and full noun arguments. Nominal agents in passive sentences may be marked obliquely by prepositional phrases with the preposition ə, as shown in the examples in (2d). It is possible to identify first and second person agents emphatically in Lummi passive sentences by use of oblique noun phrases that refer to first or second person:

- 9) a. xci-t-ŋ cə sway'qə' ə ti'ə 'əs 'The man is known
 know-passive the man by DET myself by me myself.'
 b. xci-t-ŋ cə sway'qə' ə ti'ə nek' 'The man is known
 know-passive the man by DET yourself by you yourself.'

But these noun phrases that refer to first and second person are not pronouns. They differ from pronouns in that they occur with determiners and may occur in the focus position in the sentence, whereas pronouns may not occur in this position.

We conclude that Lummi has the following agent hierarchy:

- 10) Lummi Agent Hierarchy: 1 and 2 > 3 > N

This ranking has the syntactic correlate that the argument of highest rank must be subject of the sentence. First and second persons are of equal rank. If neither of these corresponds to the agent referred to in a sentence, then some third person pronominal is more likely to be agent than some full noun, which may be an inanimate, nonvolitional 'object'. The sentences where first or second person is not the agent are the marked cases; indicated either by the ergative marking on the verb in transitive sentences, or by a passive construction when the patient outranks the agent.

3. Squamish. Data given in Kuipers (1967) shows that Squamish exhibits hierarchical ranking of agents, but that this ranking differs somewhat from that of Lummi. Table 1 shows that Squamish, unlike Lummi, does not exclude transitive sentences with a first person patient. The corresponding translations of Table 1 are given in Table 2. But Squamish (like Lummi) has the following restriction on transitive sentences:

- 11) Transitive sentences with a second person pronominal patient are excluded, unless the agent is first person pronominal.

Kuipers (1967:89) observes that "For the expression of 'he, they help(s) thee, you, Squamish has recourse to the passive forms. . . ." The passive sentences that fill in the gaps in the transitive paradigm given in Table 1 are in braces. From Table 1 we see that the first person accusative suffix is -c, which is distinct from the second person

accusative suffix -umi. Squamish -m (passive) is cognate with Lummi -ŋ; Squamish -umi may be in part cognate with lummi -oŋəs (me/you: accusative). The fact that Squamish has separate suffixes (-c) and (-umi) for first and second person accusative can be correlated with the fact that first and second person are of equivalent rank only in sentences that contain only first and second person arguments.

With regard to sentences with third person pronominal and nominal arguments in Squamish, Kuipers states the following:

- 12) ". . . a combination of a 3rd pers. trans. verb with a noun in the absolutive case ($V_t N_a$), when produced in isolation, represents $V_t O$ and not $V_t S$. For example, /na_č'ə'm?t-as ta_sq^o ma'i[?]/ is understood as 'he bit the dog' and not as 'the dog bit him', even though /na_čə'mi'tas/ by itself means 'he bit him' and S and O are both in the absolutive case. In isolation, 'the dog bit him' is rendered by a passive construction $V_{P1} R_1$: /na_č'ə'm?t-m t-ta_sq^o ma'i[?]/, lit. 'he was bitten by the dog' (cf. the sentence $V_p S$ / na_č'ə' m? -t-m ta_sq^o ma'i[?]/ 'the dog was bitten')." (p. 172)

This passage shows that Squamish, like Lummi, ranks third person pronominal arguments over full noun arguments, and that (7) above applies.

Squamish, like Lummi, treats (non-oblique) nouns as absolutive except under specified conditions. We have shown that in Lummi, only nouns may outrank nouns. In Squamish, nouns may outrank nouns and first person as well, since first person does not share the rank of second

person, aside from the condition that first and second persons are of equivalent rank in sentences that contain only first and second person arguments.

Kuipers gives no passive paradigms and no information on what passive sentence types are excluded. But his outstanding study of Squamish includes no examples of first and second person pronominal forms appearing as oblique arguments in passive sentences. We venture to predict that Squamish excludes passive sentences with oblique first and second person pronominal agents, and that (8) above applies.

We conclude that Squamish has an agent hierarchy with the following two conditions:

13) Squamish Agent Hierarchy:

- a. First and second person are of equal rank in sentences that contain only first and second person arguments; otherwise, first person shares the rank of N:
- b. 2 > 3 > N

The ergative split in Squamish is the same as in Lummi: transitive sentences with a third person pronominal or full noun agent have an ergative suffix on the verb (see Table 1).

4. Lushootseed. Hess (1973) draws attention to the gaps in the transitive and passive paradigms in several Salish languages. According to the data given by Hess (and Hukari 1976b), Lushootseed shows no hierarchical ranking among pronominal arguments in transitive sentences. There are two pieces of evidence to this effect: 1) there are separate

first and second person accusative suffixes as in Squamish; 2) there are no restrictions on the argument type which may be agent in transitive sentences with first and second person patients -- the agent may be any pronoun or a full noun. The following examples are taken from Hess (1973:90-93):

- 14) ¹učax^w a-t-s ti čačas 'The boy clubbed me.'
clubbed- the boy
transitive-me
- 15) ¹učax^w a-t-sid ti čačas 'The boy clubbed you.'
clubbed- the boy
transitive-you

Recall that Lummi excludes sentences of the types represented in (14) and (15); and Squamish excludes the type shown in (15). Lushootseed lacks the ergative marking that appears on the verb in third person transitive sentences in Lummi and Squamish. Lushootseed excludes the following sentence type:

- 16) Transitive sentences with two (non-oblique) full noun arguments are excluded.

This remarkable feature of the grammar of Lushootseed is accounted for here with reference to the agent hierarchy. Lushootseed permits transitive sentences to have only one full noun argument, and that noun is interpreted as absolutive -- unless there is an accusative pronoun in the clause. The exclusion of transitive sentences with two full noun arguments follows from the ergative split in Lushootseed; pronouns show nominative/accusative marking while full nouns show no case marking but most often receive an absolutive interpretation. Nouns are interpreted as absolutive except in sentences where a pronominal element is marked

as patient and therefore the full noun may be interpreted as ergative. No full noun may be interpreted as ergative while another full noun is absolutive in a transitive sentence. There are no transitive sentences where one full noun outranks another; full nouns are assigned the absolute lowest rank in the hierarchy, unless the presence of an accusative pronoun provides for an ergative interpretation.

Full noun agents may be specified in Lushootseed only by employing a passive sentence. In these intransitive sentences, the single non-oblique argument is absolutive, and the agent is specified in an oblique noun phrase: ⁶

- 17) ¹uxad-t-b ə tə x^w's stubš tə čačas
push-trans-passive by the fat man the boy
'The fat man pushed the boy.'

Lushootseed -b is cognate with Lummi -ŋ and Squamish -m. Another way to state the restriction given in (16) is:

- 16') Transitive sentences without a pronominal argument (agent or patient) are excluded.

The following sentence has a single full noun argument (Hess 1973:90):

- 18) ¹učax^w a-t ti čačas
'He clubbed the boy'

The absolutive interpretation of this single full noun argument depends upon two features that we have seen to be common to these languages:

- 1) the third person pronominal agent has no overt marking; and 2) third person pronominal outranks a full noun argument. Therefore, in Lushootseed, as in Lummi and Squamish, (7) above applies.

From other data given by Hess and Hukari, we surmise that Lushootseed shares the restriction stated above in (8) on passive sentences in the other Salish languages surveyed here.

Thus, Lushootseed requires transitive sentences to have some pronominal argument, agent or patient, and requires passive sentences to have unspecified or oblique full noun agents. The excluded sentence types show that the agent hierarchy in Lushootseed differs more from the Lummi case than does Squamish. Since there is less complementarity between transitive and passive sentence types in Lushootseed, it will be necessary to state a separate agent hierarchy for the two sentence types:

19) Lushootseed Agent Hierarchy

a. Passive sentences: 1 2 > 3 N

b. Transitive sentences: 3 > N
N } N

5. Conclusions. We have been concerned here to demonstrate the presence of an agent hierarchy in certain Coast Salish languages, to relate this agent hierarchy to certain ergative phenomena, and to show how certain transitive and passive sentence types excluded in these languages can be understood in terms of this hierarchy. Table 3 displays the excluded sentence types for each language. Excluded sentence types in each language are starred and underlined. Note that in Lummi, wherever transitive sentences are excluded, passive ones are permitted, and vice versa, except in the 3 (and N) forms where both sentence types are permitted. It can be seen that the Squamish case

corresponds to the Lummi one except that Squamish does not exclude certain transitive sentences with a first person patient. The Lushootseed case presents a still further reduction of the Lummi one since no transitive sentences with first and second person patients are excluded. Furthermore, transitive sentences with two noun arguments are excluded.

While Lummi excludes transitive sentences with 1 and 2 person patients and full noun agents, Lushootseed does not; and these are the only transitive sentence types where full nouns may be agents in Lushootseed. Though the agent hierarchy takes quite different forms in Lummi and Lushootseed, the crucial feature that the two languages share is that there are restrictions on transitive sentences with full noun agents, since according to the agent hierarchy, full nouns are the argument type least likely to be agent, and most likely to be patient.

According to data given in Thompson and Thompson (1971) Clallam corresponds to Lummi in excluded sentence types and in the agent hierarchy. According to data given in Hess (1973) and Gerdts (1980) Halkomelem corresponds to Squamish in the features we are concerned with here, and has the same agent hierarchy. Table 4 summarizes these features in the languages surveyed. Each language places full noun arguments at the bottom of the agent hierarchy. All of the languages treat full nouns as absolute in transitive sentences except under narrowly specified conditions, as follows: In Lushootseed, a (non-oblique) noun may be ergative (that is, the agent argument of a transitive sentence) if and only if the patient argument is a first or second person accusative pronominal. In Squamish and Halkomelem, a noun may be ergative if and only if the patient argument is first

person accusative or a noun. In Lummi and Clallam, a noun may be ergative if and only if the patient is also a noun.

In his pioneering article on agent in Coast Salish, Hess called attention to the widespread presence of a patient interpretation of full nouns in these languages and suggested that this feature, along with the paradigm gaps, held implications for the historical development of Salish.

The data reviewed here suggest that Proto Coast Salish may have had ergativity, with a split between first and second person pronominals vs. third person pronominals/nouns, as in the languages surveyed here except Lushootseed. There is evidence in favor of reconstructing the exclusion of passive sentences with first and second person pronominal agents. There is evidence in support of an agent hierarchy in Proto Coast Salish, but the exact nature of this hierarchy cannot be reconstructed on the basis of the data surveyed here. It is tempting to speculate that the agent hierarchy in Proto Coast Salish resembled that seen in Lummi and Clallam, since it is easier to interpret the agent hierarchies in the other languages as reductions of the Lummi-Clallam system than it is to account for the other agent hierarchies independently. None of the languages surveyed here excludes transitive sentences with two full noun arguments except Lushootseed; however, these sentences are extremely rare in the other languages and it has been suggested that they are an innovation that has occurred after contact. The most conservative agent hierarchy, then, might resemble the Lummi-Clallam system with the added exclusion of N over N in transitive sentences, as in Lushootseed.⁷

Historical reconstructions in the Northwest Coast area are always made more problematical because of the presence of numerous features that seem to be areal rather than genetic. There is evidence for an agent hierarchy in Nootka (Whistler 1980). Confirmation of the extent to which diffusion is responsible for the presence of these features in Salish, and from which direction the features spread, awaits further research.⁸

The system of "inverse" marking described by Hockett (1966) for Algonquian shows a close parallel with the Salish agent hierarchy.⁹

"Inverse" marking appears on the verb in Algonquian when the patient outranks the agent. However, Salish differs from Algonquian in that Salish lacks obviative forms.

While the contrast between active and passive constructions may not be relevant in Algonquian, this contrast apparently is present in Salish. In the introduction to this paper, the question was raised as to whether a sentence may be termed passive if it has no transitive counterpart. We tentatively identify Lummi sentences with -t (transitivizer) and -n (intransitivizer) as passives for the following reasons: there are sentence types in each of the languages surveyed here where both transitive and passive constructions are permitted. For example, Lummi permits the speaker to choose between a transitive sentence with two full noun arguments or its passive counterpart. Lushootseed speakers may choose between transitive sentences with a third person agent and a first or second person patient and their passive analogues. Where a choice between transitive and passive constructions is allowed, there is a semantic contrast between the transitive and passive forms that corresponds to the contrast seen between these constructions across languages.

Further support for the view that the intransitivizer -n marks a voice contrast in Lummi is that there are derived intransitives with -n (and without a transitivizer) that seem to mark a middle voice, or less control on the part of the subject of the sentence.¹⁰

- 20) a. hes-ŋ-sən "I sneeze"
 b. čən-ŋ-sən "I shiver"

The intransitivizer -b in Halkomelem and -m in Squamish have parallel middle voice functions.

The variation in types of agent hierarchy that we have identified in these Salish languages has a more general theoretical consequence as well. Silverstein (1976) makes the point that his "hierarchy of (semantic) features," and the resultant scale of potentiality of agency leaves open to the grammar of a particular language the question of where along the scale a language will opt for an ergative split; but, by the nature of the scale, all terms above and below the split must match in ergativity. That is, if third person is nominative/accusative, then second person must be also, and if second person is nominative/accusative, then first person must be as well. Some 'middle' terms are said to show nominative/accusative and ergative/absolutive features; that is, in some languages, there is an overlap. The Salish ergative splits confirm to this convention, as seen in many other languages (Dixon 1979). However, the ranking of terms in an agent hierarchy, as shown by the transitive and passive paradigms and the suppletion between them, does not. We conclude that languages may differ in the agent hierarchy, that is, in the ranking of terms as agents, and not necessarily differ in the point on the potentiality of agency scale at which the ergative split appears in a language, as shown in Table 3. We have also demonstrated that the agent hierarchy may show non-scalar irregularities in particular languages that may perhaps be attributed to historical change in the language family.

TABLE 1

Transitive Verb Paradigm (Finite)
(after Kuipers 1967, p. 90)

	me	thou	him
I		č-n č'a'u-at-umi	č-n č'a'u-at
we		č-t č'a'u-at-umi	č-t č'a'u-at
thou	č-x ^o č'a'u-at-c		č-x ^o č'a'u-at
you	č-ap č'a'u-at-c		č-ap č'a'u-at
he	na č'a'u-at-c-as	{č-x ^o č'a'u-at-m}	na č'a'u-at-as
they	na č'a'u-at-c-as-uit	{č-x ^o č'a'u-at-m(-uit)}	na č'a'u-at-as-uit

	us	you	them
I		č-n č'a'u-at-umi-ap	č-n č'a'u-at(-uit)
we		č-t č'a'u-at-umi-ap	č-t č'a'u-at(-uit)
thou	č-x ^o č'a'u-at-umuλ		č-x ^o č'a'u-at(-uit)
you	č-ap č'a'u-at-umuλ		č-ap č'a'u-at(-uit)
he	na č'a'u-at-umuλ-as	{č-ap č'a'u-at-m}	na č'a'u-at-as(-uit)
they	na č'a'u-at-umuλ-as-uit	{č-ap č'a'u-at-m(-uit)}	na č'a'u-at-as-uit

The root verb is -č'ay- "help". To the left of the verb the following morphemes are present: č- indicates that the action of the verb is manifest; -n-, first person singular subject; t- first person plural subject; -x^o-, second person singular subject; -ap- second person plural subject; na- is a deictic which usually appears in sentences with third person subjects; third person subject is not marked. To the right of the verb the following morphemes are present: -at-, a transitive suffix; -c- is the first person object; -as- is the ergative marker; -uit- marks plurality for third person subjects; -umuλ- is the first person plural object; -umi- is the second person singular object; -ap- indicates that the second person is plural; -m- is an intransitivizer that renders the sentence passive. The forms in braces are suppletive forms; the parenthesized (-uit) is optional.

TABLE 2

	me	thee	him
I		I help you (sg)	I help him
we		we help you (sg)	we help him
thou	you (sg) help me		you (sg) help him
you	you (pl) help me		you (pl) help him
he	he helps me	{you (sg) are helped by someone (sg)}	he helps someone
they	they help me	{you (sg) are helped by some people}	he helps some people

	us	you (pl)	them
I		I help you (pl)	I help them
we		we help you (pl)	we help them
thou	you (sg) help us		you (sg) help them
you	you (pl) help us		you (pl) help them
he	he helps us	{you (pl) are helped by someone}	he helps them
they	they help us	{you (pl) are helped by some people}	they help them

TABLE 3

Lummi		Squamish		Lushootseed	
Trans.	Pass.	Trans.	Pass.	Trans.	Pass.
1 V 2	*2 is V by 1	1 V 2	*2 is V by 1	1 V 2	*2 is V by 1
1 V 3	*3 is V by 1	1 V 3	*3 is V by 1	1 V 3	*3 is V by 1
1 V N	*N is V by 1	1 V N	*N is V by 1	1 V N	*N is V by 1
2 V 1	*1 is V by 2	2 V 1	*1 is V by 2	2 V 1	*1 is V by 2
2 V 3	*3 is V by 2	2 V 3	*3 is V by 2	2 V 3	*3 is V by 2
2 V N	*N is V by 2	2 V N	*N is V by 2	2 V N	*N is V by 2
*3 V 1	1 is V by 3	3 V 1	1 is V by 3	3 V 1	1 is V by 3
*3 V 2	2 is V by 3	*3 V 2	2 is V by 3	3 V 2	2 is V by 3
3 V 3	3 is V by 3	3 V 3	3 is V by 3	3 V 3	3 is V by 3
3 V N	N is V by 3	3 V N	N is V by 3	3 V N	N is V by 3
*N V 1	1 is V by N	N V 1	1 is V by N	N V 1	1 is V by N
*N V 2	2 is V by N	*N V 2	2 is V by N	N V 2	2 is V by N
*N V 3	3 is V by N	*N V 3	3 is V by N	*N V 3	3 is V by N
N V N	N is V by N	N V N	N is V by N	*N V N	N is V by N

TABLE 4

Language	Excluded Trans. Sentence Types	Agent Hierarchy	Ergative Split
Lummi, Clallam	3 V 1; N V 1 3 V 2; N V 2 N V 3	1 & 2 > 3 > N	1 2 / 3 N
Squamish, Halkomelem	3 V 2; N V 2 N V 3	a) 1 & 2 of same rank in 1 & 2 domain b) 2 > 3 > N	1 2 / 3 N
Lushootseed	N V 3 N V N	a) Passive sentences: 1 2 > 3 N b) Transitive sentences: 3 > N N > N	1 2 3 / N

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²We assume a noun/verb distinction in Lummi, but will not present evidence on this question since it is outside the scope of this article. The agent hierarchy proposed here in no way depends on such a distinction in any case. We refer the reader to the section on Lummi in Steele et al (in press).

³In embedded sentences an -s siffix optionally appears on intransitive verbs with third person subjects. A distinction in either case marking or verbal inflection between main and subordinate clauses is another type of ergative split found in ergative languages. See Gerdtz (1980) who shows this same kind of split in Halkomelem and Dixon (1979) who discusses clause splits elsewhere.

⁴The glosses given in (9a) and (9b) employ the emphatic rather than the reflexive use of the English word -self.

⁵Squamish has nouns that may be used to specify emphatic oblique first and second person arguments, as in Lummi. See Kuipers (1967: 143-144).

⁶This sentence is from Mrs. Louise George and is from Demers' 1973 Skagit Fieldnotes.

⁷Kinkade (19) proposes that the appearance of two full noun phrases in Coast Salish dialects may have been due to the influence of European languages.

⁸There are transitive/passive paradigm gaps in the Salish language family outside of Coast Salish; this suggests that Proto Salish may have had an agent hierarchy. According to Newman (1969) Bella Coola "kx-ct may be interpreted as he sees you sg, they see you sg, or you are seen: kx-tap, as he sees you pl, they see you pl, or you pl are seen." It is suggestive that in Shuswap (Kuipers (1974)), Thompson (Thompson and Thompson, undated ms), and Kalispel (Speck (1980)) there is homonymy between active and passive forms with a first person plural agent. The syntax of these forms is, however, in some cases distinct.

⁹Ken Hale (personal communication) reports the presence of an agent hierarchy in the Tanoan languages. Witherspoon (1980) has proposed a connection between the exclusion of certain transitive sentence types in Navajo and a hierarchy of control in the Navajo world view.

¹⁰We should mention that the Coast Salish languages share another grammatical feature, not discussed here, which also demonstrates the emphasis placed on agency in these languages. Each language shows contrasts in the derivational/inflectional morphology of the verb, viz. in the transitive suffixes that mark differences in degree of control on the part of the agent. This feature of the grammar has been described by Hess (1973) and Thompson (1976).

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