THE CATEGORIES VERB-NOi\N AND TRANSITIVE-INTRANSITIVE
IN ENGLISH AND SQUAMISH
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1. AIMS

In this paper an attempt is made to compare a Salish language (Squamish) and an Indo-European language (English) from the point of view of two pairs of linguistic categories as they have been developed in traditional grammar: (1) verb and noun, and (2) intransitive and transitive.

2. ENGLISH

2.1 In English the distinction verb-noun is morphological-paradigmatic and syntactic. By morphological-paradigmatic is meant that, though not all members of either class are marked by overt verbal(izing) resp. nominal(izing) affixes, the set of word-forms constituting the verbal paradigm differs from that constituting the nominal paradigm, cf. chew, chews, chewed (preterit.), chewed (past part.), chewing on the one hand, and arm, arms, arm's or young, younger, youngest on the other hand. - The distinction between intrans. and trans. verbs is syntactic only (morphologically, intrans. verbs have the same set of forms as trans. ones, cf. the trans. verb chew just quoted and fall, falls, fell, fallen, falling): trans. verbs have an additional "slot" in comparison with intrans. ones: he slept all night versus he read books all night.

2.2 The English categories verb-noun and trans.-intrans. intercross. A noun, like a verb, may allow an extra slot as compared to another noun, cf. John's fear of bears versus John's luck, and John's examination by a specialist versus John's newspaper. Furthermore, verbs have nominal forms, cf. (to stimulate) John's breathing [fresh air], (I insist on) his coming. Substantives and adjectives (and the corresponding pronouns) do not have verbal forms in English; their "verbalization" is achieved syntactically, viz. by combination with forms of the verb to be, cf. the predicative forms of fall, man, big in John falls, is a man, is big, also it's me, that's all, etc.
2.3 We are not concerned here with anything else but the notions of
verbality, nominality, intransitiveness and transitiveness; that is to
say that such expressions as his perforating it, his perforation of it,
the perforation (hole) in it, his being human, a human being are equivalent
from the point of view of the nominality of the elements "perforate/ per-
foration" and "be(ing)". In the same way, the expressions the bear is eat-
ing honey, the bear's eating honey, a bear (to) eat honey, etc., are equi-
herent from the point of view of the transitivity of the element "eat/eating".

2.4 Most English trans. verbs can be used intransitively. We call an
English verb transitive if it can be used transitively otherwise than with
an interior object (see 4.1) or in special expressions. We consider an
English trans. verb to be used intransitively when only one member of a
possible pair subject-object is explicitly referred to (deictically, nomin-
ally or otherwise). Both subject and object are referred to in she sings
Irish ballads for a living and in she sings them well; only the trans. sub-
ject is referred to in she sings for a living, where sings is semantically
comparable to plays the piano in she plays the piano for a living, in that
the songs are no more referred to than, say, the sonatas ("play" in the
musical sense is a three-participant phenomenon in the sense of section
4.1). Only the trans. object is referred to in this book reads easily, his
poems don't translate well, the car drives comfortably, the stains won't
mop off, etc. (in these sentences we consider book, poems, etc., the sub-
jects of the intransitively used verbs).

2.5 In general, the relation between trans. verbs used transitively and
intransitively can be of three kinds: (1) the intrans. subject is also the
trans. subject (e.g. eat, sing, please), cf. the child doesn't eat spinach
and the child doesn't eat, (2) the intrans. subject is the trans object
(e.g. move, break, show), cf. the wind moves the leaves and the leaves
move, (3) both possibilities 1 and 2 obtain, cf. this strap hurts my shoul-
der, this strap hurts, my shoulder hurts me, my shoulder hurts, I am hurt-
ing. We are not concerned here with the complex details of the relation be-
tween trans. and intrans. uses (trans. interpretable as causative, intrans.
as reflexive, etc.) but only with the phenomenon of "slot-choice".
3. SQUAMISH

3.1 The Squamish language lacks a morphological distinction between two word-classes which would parallel that between verbs and nouns in English. It is true, many Squamish words translating into English as nouns are provided with the "nominalizing" prefix /s-/ e.g. /s-taq0/ 'water' (cf. /taq0/ 'to drink'). But a large number of words translating as nouns lack this prefix e.g. /man/ 'father', /puš/ 'cat'. On the other hand, certain "nominalized" forms do not normally translate as nouns, e.g. /s-λi?/, s-taq0/ in /n-s-λi?/ k0i n-s-taq0/ 'I want to drink', lit. 'my-nominalizer-desire (is) my-nom.-drinking'. The "literal" translation just given suggests two "nominal" elements, and the possessive prefix /('?)n-/ is also found in a combination such as /n-pu's/ 'my cat'. But the labeling of this prefix as "possessive" is itself inexact: as is well-known, a better definition of the meaning of an English pronoun like my is 'having a relation to the speaker'. This relation can be that of subject, object, possessor, author, destinee, etc., cf. my thinking so, to my thinking, my punishment (= the punishment I inflict or receive), my being human, my human being, my picture (= the picture that I made or that was made of me, or that I possess, discuss, etc.), my present (= the present I give or that is given to me), etc.

3.2 The arbitrariness of the definition of the Squamish prefix /s-/ as a "nominalizer" may be demonstrated as follows. Of the two groups of English expressions of the types my father, his cat, etc., on the one hand, and my being a father, its being a cat (or that I am a father, that it is a cat) on the other hand, it is the second (i.e. the more "verbal") group that always corresponds to expressions with /s-/ in Squamish, cf. /n-ma'n/ 'my father', /puš-s/ 'his cat' versus /λq'i'ostas k0i s-pu's-s/ 'he knows that it is a cat'. In general:

(i) /n-N, N-s/ 'my N, his N'
(ii) /n-s-N, s-N-s/ 'my being (an) N, his being (an) N' (or 'that I am an N', etc.)

A difference like that between /puš-s/ 'his cat' and /s-puš-s/ 'its being a cat' is found only when the unit N is not itself provided with the prefix /s-/ i.e. in such cases as /man/ 'father', /puš/ 'cat'. In the very large category of cases like /s-taq0/ 'water', /s-wi'qas/ 'man', (i) and (ii) coincide:
(iii) /ʔn-s-wiʔqa, s-wiʔqaʔs/ 1. 'my, his man', 2. 'my, his being a man'.
Examples: /taʔn-s-wiʔqa/ 'my man' (/ta/ def. article), /λʔiʔstas k̓iʔn-s-wiʔqa/ 'he knows that I am a man' (/k̓iʔ/ indef. article).

In the author's The Squamish Language p. 91 the cases of type (iii) are described as morphophonemically containing the nominalizer /s-/ twice, the two being merged by a phonetic rule (1.c. section 41). However, if from the outset no distinction noun-verb is made in the description of Squamish, only one prefix /s-/ need be posited in the cases (iii).

3.3 In Squamish the distinction intrans.-trans. is morphological: any trans. stem is provided with a transitivizing suffix. In most cases there is a corresponding form without suffix, which is intransitive. Squamish and English intrans. and trans. verbs parallel each other as follows:

<table>
<thead>
<tr>
<th>Intrans.</th>
<th>Trans.</th>
</tr>
</thead>
<tbody>
<tr>
<td>/c-n ʔaʔq̓o/</td>
<td>'I drink' ('manifest-I drink')</td>
</tr>
<tr>
<td>/c-n ʔaʔq̓oʔ-an/</td>
<td>I drink it! ('manifest-I drink-trans.')</td>
</tr>
<tr>
<td>/c-n ʔaʔq̓oʔ-an taʔs-ʔaʔq̓o/</td>
<td>'I drink (the) water' ('manifest-I drink-trans. def. &quot;nominalizer&quot;-drink').</td>
</tr>
</tbody>
</table>

4. NUMBER OF RELATA

4.1 The phenomena for which languages may have separate expressions (roots, stems) may be ordered into classes of increasing complexity according to the number of the participating entities (subject, object, destinee, etc.) they necessarily imply.

Such phenomena as "sit", "sleep", "die", "hesitate", "red", "foot", etc., imply but a single participant: an entity which sits, sleeps, dies, hesitates, is red, is a foot. Such phenomena as "kill", "forget", "like", "carry", "exceed" imply at least two participants: a killer and a killed one, etc. Such phenomena as "give", "envy", "club", "tie" imply three participants: besides the initiator or subject there is the gift and the destinee, the envied one and that which he is envied for, the clubbed one and the club, the tied one and the rope. Four participants are implied, e.g. by "protect": protector, protected, protection (shield, blanket, darkness, etc.) and that which one is protected from or against (arrows, cold, observation, etc.).

As to the one-participant class, we just point out the possibility of expressions with an "interior object" such as live a good life; these
are special cases where languages having one- and two-participant classes employ, within narrow limits, elements of the first class in a way that is characteristic of the second. More important is the fact that the phenomena which imply but a single participant may allow or even suggest others. "Sit" may suggest a participant "that on which one is sitting". It is up to each individual language, what degree of complexity is packed into a particular root or stem. A language might well have a trans. unit 'sit on', 'occupy in a sitting posture' while lacking an itr. unit 'be in a sitting posture', this notion having to be expressed by a phrase.

As to the phenomena of the two-participant class, the units expressing these need not all be transitive in a language which distinguishes an intrans. and a trans. class. The phenomenon "know" may in one language be referred to with a trans. verb know, in another with an intrans. verb be acquainted (requiring, say, not an accusative but a prepositional phrase for the expression of the other participant: be acquainted with something). Nevertheless, in all languages with intrans. and trans. classes the intrans. class is likely to encompass many notions of the one-participant class of phenomena, and the trans. class many of the pluri-participant ones.

As to the phenomena of the three-and-more-participant class, it is up to each particular language, which of the participants other than the subject is the direct object (DO) and which the indirect, prepositional, etc., object. In English, one beats a victim (DO) with a club, in Georgian one applies a club (DO) to a victim; in English and Russian one gives a present (DO) to a destinee, in Squamish one presents a destinee (DO) with a gift.

4.2 It is characteristic of trans. expressions in general that the direction of the relation initiator-goal is given: in John kills Bill word-order indicates that John is the killer and Bill the killed one. I know of no language which expresses two-participant phenomena by conveying that "a killing-relation holds between John and Bill", without expressing at the same time which is the subject and which the object (including the case where they kill each other). To a certain extent it is once more up to each individual language, which of the two directions is implied in a certain verb, especially so where mental reactions are involved, cf. I like the picture, the picture pleases me.
4.3 The English examples used so far to demonstrate the expression of one- and multi-participant phenomena have been verbs. It is important to realize that the same phenomena may be referred to nominally, cf. you sleep deeply and your sleep is deep, I greatly fear him and my fear of him is great. In order to avoid the categorization forced upon us by English, we shall use, where necessary, words which can be nouns and verbs such as fear, need or alternative expressions like (be) red, remove/removal, explain/explanation, etc. — Furthermore, three types of distinctions must be kept apart carefully: (a) ono- and pluri-participant phenomena, (b) intrans. and trans. word-classes in a particular language, which will to a large extent — though by no means fully — correspond to the distinction (a), and (c) the trans. and intrans. use of words of the trans. class in a language which, like English, does not distinguish the two morphologically.

5. FORMALIZATION

5.1 Let \( R \) be the name (N) of any relation, and \( X, Y \) (in this order) those of subject and object, then the general expression for a simple transitive sentence is \( R(X, Y) \), and that for an intransitive sentence \( R(X) \), where \( X \) may correspond to either \( X \) or \( Y \) of a correlative sentence \( R(X, Y) \). For formalizing particular sentences (or rather, groups of sentences, tense, number, (in)definiteness, etc. being irrelevant for our purpose) we shall use roman capitals corresponding to the initial letters of the words involved; where this is impossible because several words begin with the same letter we assign a roman capital to each word. For personal pronouns of 1st and 2nd person we use "1", "2", for pers. pronouns of the 3rd pers. and for demonstratives we write "3". Examples:

\[
R(X): \text{the man slept } S(M), \text{ John is big } B(J), \text{ I am old } O(1), \text{ it is a house } H(3), \text{ John sings } S(J), \text{ the merchandise sells } S(M).
\]

\[
R(X, Y): \text{the man killed the bear } K(M, B), \text{ I sang a ballad } S(1, B), \text{ you sold the merchandise } S(2, M).
\]

Where necessary, indices "\( x \)" , "\( y \)" are used in order to indicate whether \( X \) in \( R(X) \) is correlative to \( X \) or \( Y \) in the corresponding sentence \( R(X, Y) \):

\[
R(X^x) \text{ in John drinks } D(J^x), \text{ cf. John drinks water } D(J, W),
\]

\[
R(X^y) \text{ in the merchandise sells } S(M^y), \text{ cf. John sells the merchandise } S(J, M).
\]
Given three trans. expressions, e.g. fear, need, remove/removal, six sentences \( R(X,Y) \) can be formed with each of these in any of the three positions: fear needs removal \( N(F,R) \), fear removes need \( R(F,N) \), need removes fear \( R(N,F) \), etc.

Similarly, in intrans. sentences the subject- and predicate-notions can change place: John is big, the big one is John, birds fly, the flying ones are birds, etc. There is no need for having two word-classes - it suffices to have one position for the relator and others for the relata. In our symbolic representation the element to the left stands for the relator.\(^4\)

5.2 Any of the elements \( R, X, Y \) may itself be a complex \( \{ R'(X') \} \) or \( \{ R'(X',Y') \} \), e.g. that John fell astonishes me \( \{ F(J) \} \), he expected John to kill Peter (or John's killing Peter) \( \{ J, K(J,P) \} \), the difficulty is that John hates Peter \( \{ H(J,P) \} \).

In these examples an expression of a fact "\( R(X) \)" , "\( R(X,Y) \)" figures as an element in a sentence \( R(X,Y) \); such complex expressions taking the place of \( R, X \) or \( Y \) (for which in English a phrase with "the fact that ..." is usually possible) we shall call fact-centered. The formulae \( R(X) \) and \( R(X,Y) \) will stand for sentences, the formulae \( \{ R(X) \} \), \( \{ R(X,Y) \} \) for fact-centered expressions which enter as elements into sentences.

5.3 Besides fact-centered expressions we have complexes which are subject- or object-centered, cf. fact-centered John's killing Peter or that John killed Peter and he or one who killed Peter (subject-cent.), he or one whom John killed (object-cent.). These will be symbolized with a lower case letter for the subject or object: \( \{ R(X,Y) \} \) and \( \{ R(X,Y) \} \). In the formulae for particular (groups of) expressions, "\( \overline{X} \)" and "\( \overline{Y} \)" remain as in the general formulae:

\[
\begin{align*}
\{ R(x,y) \} : & \quad \text{((the) one) who killed Peter} \quad \{ K(x,p) \} \\
\{ R(x,y) \} : & \quad \text{((the) one) whom John killed} \quad \{ K(j,y) \} \\
\{ R(x) \} : & \quad \text{((the) one) which is good or the/a good one} \quad \{ G(x) \} ; \quad \text{((the) one) who slept or sang} \quad \{ S(x) \}.
\end{align*}
\]

5.4 Any particular instance of use of a word \( \overline{N} \) implies a judgement on the part of the user that the entity referred to comes under the heading of (= can be called) "\( \overline{N} \)". The expressions this red one and this one which is red are logically equivalent\(^5\) in that they contain a deictic-identifying part and a name. Linguistically the two expressions are not equivalent: the former implies that the addressee knows or can observe the redness of the object referred to, whereas the latter does not (I might be handing someone an
object in the dark). In the same way, the expressions a house and one which
is a house are logically equivalent, but the former implies no previous
knowledge on the part of the hearer, whereas the latter implies that a group
of possible referents is already before his mind. It is typical of such ex-
pressions as which is red, which is a house and also of adjectives such as
red that in general they are "deictically dependent" — they are used in
combination with other expressions which can be provided with deictic and
identifying elements: a/the house which is red, a/the red house, (the) one
which is red, a/the red one. It is expressions of this "deictically dependent"
kind that are rendered by our formula \( N(x) \), whereas \( N \) stands for deictically
autonomous expressions. We have therefore

\[
R(X) \quad \text{in the man is (the/a) strong (one)} \quad S(M),
\]

\[
\{R(X)\} \quad \text{in I know that the man is (the/a) strong (one)} \quad K[1, \{S(M)\}],
\]

\[
\{R(X)\} \quad \text{in I know the/a strong man or the man who is (the/a) strong (one)} \quad K[1, \{S(X)\}].
\]

We shall simplify the formal notation by omitting the parentheses and braces
in \( \{R(X)\}N \) which then becomes \( (R \times N) \) e.g. (the/a) strong man \( (S \times M) \), I
know the/a strong man \( K[1, (S \times M)] \). Parentheses and braces are retained when the
"wh-phrase" contains other elements than a subject, e.g. \( \{R(X,Y)N\} \) in the man
who killed Peter \( K(X,P)M \), the man whom John killed \( K(J,Y)M \).

5.5 Let us expand the formula "\( R(X,Y) \)" to "\( R(X,Y,Z) \)", where \( Z \) stands for
any participant (relatum) other than subject or direct object, e.g. for the
man in I gave the man a book \( G(1,B,M) \), for about the plan in I informed you
about the plan \( I(1,2,P) \).

(for with an ax in the man killed the bear with an ax \( K(M,B,A) \). (The precise
nature of the relation \( R-Z \) is irrelevant for our purpose). We have a "\( z-
centered" expression \( \{R(X,Y,Z)\} \) in (the (one)) with which the man killed
the bear \( K(M,B,Z) \), cf. the ax with which the man killed the bear was
sharp \( S\{K(M,B,Z)\} \). The element \( Y \) may of course be absent in an expression
containing \( Z \) (cf. above about intrans. sentences containing trans. verbs);
e.g. the ax with which John killed \( K(J,Z)A \) ("performed his killings") \{K(J,Z)A\}.

In formulae for particular (groups of) sentences we shall provide a roman
capital in position \( Z \) with an index "\( z \)" when no \( Y \) is expressed, e.g. John
killed with an ax \( K(J,A^z) \) versus John broke an ax \( B(J,A) \) and John killed
Peter with an ax \( K(J,P,A) \); we shall also use this index in the case of in-
trans. verbs, e.g. John sat on a bench \( S(J,B^z) \).
Parallel to the good book = the book which is good (G\times B) we have the man's book = the book which is of the man (\text{i}^{2}\times B), the book (which is) on the table (T^{2}\times B), etc. Note particularly my book = the book which is mine (1^{2}\times B), etc.

6. SLOT-CHOICE

6.1 When a trans-verb is used intransitively, the relatum that is present may fill the slot of subject or object; we call this phenomenon paradigmatic slot-choice. The three possibilities which obtain in English were stated in section 2.5. In principle, the same possibilities exist in Squamish, but their relative frequency is quite different from that in English. In the overwhelming majority of cases, the Squamish trans. object is the intrans. subject, e.g. /\text{\textacuten}'c'/ 'be cut', /\text{\textacuten}'\text{\textacuten} 'cut-trans.', /\text{\textacuten} 'eh'/ 'be hit', /\text{\textacuten} 'eh-n'/ 'hit-trans.' The cases where the trans. and intrans. subject coincide are exceptional, e.g. /\text{\textacuten}a\'q/ 'drink' (intrans.), /\text{\textacuten}a\'q\text{-an}/ 'drink-trans'. Both possibilities obtain in a case like /\text{\textacuten}\text{\textacuten}'tx/ 'exhibit carving' (person is carving, house is decorated with carving), but no trans. derivative was recorded. The case R(X,Y): R(X Y ) is the norm in Squamish, and the language has a special active-intrans. derivative in /-im?/ for the expression of R(X X ), so that there often are triplets of the type /\text{\textacuten} 'eh/ 'be hit', /\text{\textacuten} 'eh-n/ 'hit-trans.', /\text{\textacuten} 'eh-im?/ 'hit-intrans.' (with actor as subject).

6.2 Different possibilities of slot-choice are observed not only on the paradigmatic axis but also on the syntagmatic axis. In he loves his daughter L\{(3, (3\times D)\}, he and his may refer to the same or to different entities (and e.g. Latin distinguishes amat filiam suam from amat filiam ejus). In cases of this kind we speak of syntagmatic slot-choice. This identity or non-identity of referents, recognized as a major feature of syntactic structure by Ebeling (who speaks of "parallel" and "divergent" references), has not received sufficient attention in syntactic investigations. To demonstrate its importance, we start once more from a sentence with three trans. elements: require/requirement, fear, remove/removal, symbolized A, B and C. In the sentence fear requires removal A(B,C), the elements B and C themselves each imply two participants (subject and object). Let (D, E) be the ordered participants of B, and (F, G) those of C, and let D, E, F, G stand for (be) man, (be) fire, (be) company and (be) gasoline respectively, then a sentence
A\{B(D,E),C(F,G)\}
is exemplified by the man's fear of fire requires the removal of the gasoline by the company, or the fact that the man fears a fire requires that the company remove the gasoline, or, with nominal expressions (including a nominal predicate), the company's removal of the gasoline is a requirement of the man's fear of fire.

A major way in which less explicit sentences may be ambiguous concerns the identity or non-identity of the entities referred to by the words entering into them. For instance, in the sentence fear requires removal the subject of fear may be the object of removal (in the above formula, D = G), cf. the patient's fear of suffocation required his removal [to an oxygen-tent] by the doctor, or the fear itself may be the object of removal (A = G), cf. his fear of difficulties requires removal by assurances [on your part], or the object of fear may be identical with that of removal (E = G), cf. the man's fear of the watchdog required its removal by the owner, or the object of fear may be identical with the subject of removal (E = F) the man's fear of the stranger required the latter to remove his mask, etc. These different possibilities of "parallelism" (in Ebeling's terms) are handled by the speakers without difficulty in structures much more complex than the above. For instance, in the occupant's fear of fire required the removal of the gasoline by the owner the formula given above is further expanded because D and F are now represented by the two-participant phenomena occupy/occupation (implying occupant H and occupied L) and own (implying owner K and owned L):

A\{B(D,H,I),E\},C(F(K,L),G)\}

In the sentence quoted the element I (say, the house) is not mentioned explicitly; nevertheless the sentence will be effortlessly understood either so that I = L (the house's occupant ... the owner of the house) or so that G = L (... the owner of the gasoline).

6.2 Practically all of Chomsky's well-known examples of outwardly identical or similar syntagms with different "transformational histories" amount to differences in parallelism of references, often of the elementary type where an element P may fill the subject- or the object-slot of a trans. element Q (the shooting of the hunters, flying planes, visiting relatives, John is easy/eager to please, etc.). Slot-choice of a more complex kind is involved in Chomsky's examples in Aspects p. 22 f. I persuaded John to leave and
I expected John to leave. One cannot agree with Chomsky that "even fairly careful thought may fail to show [the hearer] that his internalized grammar assigns very different syntactic descriptions to these sentences", for the simple substitution of a pronoun for the objects in these sentences reveals the fundamental difference: "I persuaded him" versus "I expected it". The second sentence has a fact-centered expression as object (see 5.2), in a formula: \( E[1, J(J^X)] \); it can be rendered I expected (the fact of) John's leaving. The first sentence cannot be rendered as *I persuaded John's leaving; John is the object of persuade and the subject of leave; for such "telescoped" expressions our formalized notation provides only in the general and undifferentiated way of having room for a third relatum besides \( X \) and \( Y \), and the first sentence can be written \( P[1, J, \{L(3)\}] \) where \( J = 3 \). The main point is that expect in the above example has a "factual" object, whereas persuade has not. Chomsky therefore confuses the issue by his statement "we can have "I persuaded John that (of the fact that) Sentence" but not "I expected John that (of the fact that) Sentence" (p.23) — for this difference has nothing to do with the question under discussion: the sentence I compelled John to leave is from the point of view of slot-choice isomorphic to I persuaded John to leave, though we cannot have "I compelled John that (of the fact that) Sentence". The difference between Chomsky's two sentences is better demonstrated by pointing out that we have "I expected (the fact) that ..." but not "I persuaded (the fact) that ...". The special status of persuade versus compel consists in the fact that it is a "quotational" or statement-verb, cf. also "I convinced, informed John that (of the fact that) Sentence".

7. THE SQUAMISH PARADIGMS

7.0 We now turn to the Squamish paradigms, first those of intrans. words (corresponding to English intrans. verbs, intransitively used trans. verbs, adjectives and substantives).

7.1 Five intrans. examples are quoted; these constitute three morphological classes in Squamish (a - c). Of each class, forms of the Hypothetical, Finite, Nominal and Factual paradigms, and in addition a form of the Possessive paradigm, are quoted (see The Squamish Language, sections 128-134). The Hypothetical, Possessive and Factual forms are given with 3rd pers.
subject /-as/ resp. possessor /-s/. The subdivisions of the English chart reflect the distinctions present in Squamish. The meanings of each group of forms are given in symbolic representation.

<table>
<thead>
<tr>
<th></th>
<th>a1.</th>
<th>a2.</th>
<th>a3.</th>
<th>b.</th>
<th>c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyp.</td>
<td>R(3)</td>
<td>(if) he/it arrives</td>
<td>is white</td>
<td>drinks</td>
<td>is water</td>
</tr>
<tr>
<td>Fin.</td>
<td>(he/it) arrive(s)</td>
<td>(is) white</td>
<td>drink(s)</td>
<td>(is) water</td>
<td>(is) a cat</td>
</tr>
<tr>
<td>Nom.</td>
<td>{R(x)}</td>
<td>who/which arrives</td>
<td>is white</td>
<td>drinks</td>
<td>is water</td>
</tr>
<tr>
<td>Poss.</td>
<td>(3xN)</td>
<td>his/its</td>
<td>——</td>
<td>——</td>
<td>water</td>
</tr>
<tr>
<td>Fact.</td>
<td>{R(3)}</td>
<td>his/its arriving being white</td>
<td>drinking</td>
<td>being water</td>
<td>being a cat</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>a1.</th>
<th>a2.</th>
<th>a3.</th>
<th>b.</th>
<th>c.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyp.</td>
<td>R(3)</td>
<td>λ'iq-as</td>
<td>p'eq'-as</td>
<td>ta'q⁰-as</td>
<td>s-taq⁰-as</td>
</tr>
<tr>
<td>Fin.</td>
<td>(he/it) arrive(s)</td>
<td>(is) λ'iq</td>
<td>(is) p'eq'</td>
<td>(is) taq⁰</td>
<td>(is) s-taq⁰</td>
</tr>
<tr>
<td>Nom.</td>
<td>{R(x)}</td>
<td>λ'iq</td>
<td>p'eq'</td>
<td>taq⁰</td>
<td>s-taq⁰</td>
</tr>
<tr>
<td>Poss.</td>
<td>(3xN)</td>
<td>——</td>
<td>——</td>
<td>——</td>
<td>——</td>
</tr>
<tr>
<td>Fact.</td>
<td>{R(3)}</td>
<td>s-λ'iq-s</td>
<td>s-p'eq'-s</td>
<td>s-taq⁰-s</td>
<td>s-taq⁰-s</td>
</tr>
</tbody>
</table>

**Section 7.1: Intransitive Paradigms**

7.1.1 The intrans. finite and nominal paradigms are identical. The 1st and 2nd persons of the finite paradigm are expressed by the subj.-suffixes sing. /-n, -x⁰/ plur. /-t, -ap/ (cf. the corresponding subj.-suffixes of the hypothetical paradigm /-an, -ax⁰, -at, -a(ya)p/), the 3rd pers. finite has no overt indicator, while the 3rd pers. hypothetical has /-as/ plur. /-as-pit/; the finite forms /λ'iq, taq⁰/, etc., are therefore the same in all persons.

Hence it is possible to interpret /λ'iq (ta'y⁰)/ 'arrives (that one)' as '(that one) is who/which arrives' (where the relator is is expressed by the position of the word /λ'iq/ at the head of the sentence), and /(ta_)s-taq⁰/ as 'the [entity] which is water'.

7.1.2 Squamish does not distinguish two word-classes corresponding to the types house and red in English (see 5.4); this means that there is no occasion to distinguish N and R(x). A nominal form like /s-taq⁰/ means 'water' as well as 'which is water' (the possessive formula (3xN) is equivalent to (3xN)R(x)). As we saw in 5.4, in English the difference is one of status with regard to the system of deixis. In Squamish there is no such difference, one can say /taλ'iq/ 'the one who arrives' as well as /ta s-taq⁰/ 'the (one which is) water', while /λ'iq/ 'it arrives' parallels /s-taq⁰/ 'it is water'.

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7.1.3 The translations 'who/which arrives' and 'which is water' suggest the distinction of noun and verb which is absent in Squamish; translations which would be more neutral in this respect would be 'arrival-manifestation' and 'water-manifestation'. In this conception, the coinciding of the poss. form 'his X-manifestation' and the factual form 'his being an X-manifestation' with a considerable part of the lexicon (all words with the "nominalizer" /s-/ ) can be explained as a matter of slot-choice: the person referred to can be either the subject or a "Z-relatum" of manifest/manifestation: the one who manifests or the one whom the manifestation concerns in another "possessive" way (see for this term 3.1), cf. in English my story: 1. the story which is that of my life, the story which I live (subject-relation), 2. the story (about someone else) which I tell, or got the publishing rights of, etc. ("possessive" relation).

7.2 Of the trans. paradigm again corresponding English and Squamish charts are given. The cases given in parentheses: R(1,3) I help him and R(2,3) you help him and their plural correlate can be expressed /c'a'w-at-an, -ax°, -at, -a(ya)p/, but they are usually expressed by the clitics /c-n, c-x°, c-t, c-ap/ followed by /c'a'w-at/ (cf. the itr. paradigm). The cases given in square brackets can in Squamish only be rendered with forms which fall outside the trans. paradigm in a morphological sense: R(2,1) you help me can only be expressed /c-x°c'a'w-at-c/, R(1,2) I help you only /c-n c'a'w-at-umij; the cases R(3,2) he helps you and R(3,2) his helping you are rendered with passive forms: /c-x°c'a'w-at-m, c'a'w-at-m-ax°, 'a-s- -c'a'w-at-m/, lit. 'you are helped', etc.

7.2.1 With certain verbs the Squamish factual forms can in addition express the meaning \{R(X,Y,Z2)\}, where X and Y are referred to deictically (pronominal-ly). Such verbs are in the first place /na-n/ 'call-trans' (by a name), /'a's'-a'-t/ 'present-trans.' (with an object). Examples /s-na'-nt-c-as/ 'by which he called me', /'n-s-?'a's'-a'-t-umi/ 'with which I presented you'. These cases concern three-participant phenomena which in other languages too may call for special constructions, cf. the preposition-less expression of "Z" in English: I call him John, I give him a book. In the second place, here belong such verbs as /cu-n/ 'tell, order-trans.' (to do something), /'a's'-un7/ 'show, instruct-trans.' ((how) to do something). Examples /'n-s-cu'- -nt-umi/ 'which I told you to', /'e-s-'u's-un7-t-c-ax°/ 'which you instructed me to'. These cases concern verbs of the type 'tell, order, instruct, persuade'
<table>
<thead>
<tr>
<th>Nominal</th>
<th>Finite</th>
<th>Hypothetical</th>
<th>Factual</th>
</tr>
</thead>
<tbody>
<tr>
<td>{R(x, 3)} who helps him</td>
<td>{R(3, 3)} he helps him (if) he helps him</td>
<td>{R(3, 3)} his helping him</td>
<td></td>
</tr>
<tr>
<td>{R(3, x)} whom he helps</td>
<td>{R(3, 3)} his helping him</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(3, 3)} (I help him) (if) I help him</td>
<td>{R(1, 3)} my helping him</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(1, x)} whom I help</td>
<td>{R(1, 3)} my helping him</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(2, 3)} (you help him) (if) you help him</td>
<td>{R(2, 3)} your helping him</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(2, x)} whom you help</td>
<td>{R(2, 3)} your helping him</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(1, 2)} [I help you] (if) I help you</td>
<td>{R(1, 2)} my helping you</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nominal</th>
<th>Finite</th>
<th>Hypothetical</th>
<th>Factual</th>
</tr>
</thead>
<tbody>
<tr>
<td>{R(x, 3)} č'a'w-at</td>
<td>{R(3, 3)} č'a'w-at-(-)as</td>
<td>{R(3, 3)} s-č'a'w-at-(-)as(-s)</td>
<td></td>
</tr>
<tr>
<td>{R(3, x)} č'a'w-at-(-)as</td>
<td>{R(3, 3)} s-č'a'w-at-(-)as(-s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(3, 3)} č'a'w-at-an</td>
<td>{R(1, 3)} n-s-č'a'w-at-an</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(1, x)} č'a'w-at-an</td>
<td>{R(1, 3)} n-s-č'a'w-at-an</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(2, 3)} č'a'w-at-(-)ax</td>
<td>{R(2, 3)} ø-s-č'a'w-at-(-)ax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(2, x)} č'a'w-at-(-)ax</td>
<td>{R(2, 3)} ø-s-č'a'w-at-(-)ax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(x, 1)} č'a'w-at-c</td>
<td>{R(1, 3)} č'a'w-at-c-(-)as</td>
<td>{R(1, 3)} s-č'a'w-at-c-(-)as(-s)</td>
<td></td>
</tr>
<tr>
<td>{R(3, 1)} č'a'w-at-c-(-)as</td>
<td>{R(1, 3)} s-č'a'w-at-c-(-)as(-s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(3, x)} č'a'w-at-c-(-)as</td>
<td>{R(1, 3)} s-č'a'w-at-c-(-)as(-s)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(2, 1)} č'a'w-at-c-(-)ax</td>
<td>{R(2, 1)} ø-s-č'a'w-at-c-(-)ax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(3, 2)} č'a'w-at-c-(-)ax</td>
<td>{R(2, 1)} ø-s-č'a'w-at-c-(-)ax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(x, 2)} č'a'w-at-umi</td>
<td>{R(1, 2)} ø-n-s-č'a'w-at-(-)umi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(1, 2)} č'a'w-at-umi-(-)an</td>
<td>{R(1, 2)} ø-n-s-č'a'w-at-(-)umi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>{R(1, 2)} č'a'w-at-umi</td>
<td>{R(X, Y, Z)} see 7.2.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 7.2: Transitive Paradigms
which allow the "telescoped" English construction discussed in section 6.3.
The rough parallelism between Squamish and English results with the first

group of verbs from the fact that phenomena implying three participants (the

relations between these participants being fixed in each particular case),
as it were, suggest a special type of expression; with the second group of

verbs it results from the special status of *verba sentiendi et declarandi*

(reference not to facts but to references to facts) and of verbs of causing
(reference not to facts observed or imagined but to facts (to be) called into

existence), cf. the different possible transformations of I knew John to be

present, I caused John to be present, I persuaded John to be present (I knew

it versus I caused, persuaded him; I persuaded John that .... but not *I

caused John that ....)

7.2.2 All the finite forms of the trans. paradigm which have a 3rd pers.

object can also be used nominally, i.e. we are dealing with forms which can

occupy both the positions R and X,Y. — I help her is expressed either

/c/-n/-aw- at/ 'I am (a manifestation of) who helps her' or (rarely) /c'/ a'w-

-at-an/ '(she is) whom I help'; he helps her is expressed /c'a'w-at-as/

'(she is) whom he helps'. (As was pointed out in The Squamish Language, sect.

254, this explains the fact that subject and object, if expressed by separate

words, appear in the same (absolutive) case: both are "subjects" to a "predic­

ate", as they are in the "literal" English translations just given.) The

only forms which are excluded from the positions X,Y are he helps me /c'a'w-

at-c-as/, (if) you help me /c'a'w-at-c-as/ and (if) I help you /c'a'w-at-

umi-an/, the latter two being limited to hypothetical use. The finite form

/c'a'w-at-c-as/ is partly comparable to /c'a'w-at-c/ 'who helps me' and partly
to /c'a'w-at-as/ 'she is whom he helps', but it cannot simply be regarded

as an expansion of either: it cannot be interpreted as 'he (is) who helps me',

for /c'a'w-at-as/ is not *he is who helps her', \{R(x,3)\} being expressed
/c'a'w-at/; nor can it be interpreted as '*I am whom he helps', for /c'a'w-

at-c/ is \{R(x,1)\} 'who helps me'. The form might have arisen on the basis

of the following analogy: /c'a'w-at/ who helps her : /c'a'w-at-as/ he helps

her = /c'a'w-at-c/ who helps me : x (where x will be /c'a'w-at-c-as/), but

this would presuppose that /c'a'w-at-c-as/ in the position of R has been dis-

associated from the same form in the position of X,Y, where it means 'whom

he helps'. In any case, the form /c'a'w-at-c-as/ 'he helps me' is the only

finite form which cannot also occur in the positions X,Y.

/ "verbs of verbal causation" which combine the special logical status of
8. CONCLUSIONS

8.1 One of the main characteristics of the verbal paradigms in Indo-European
languages, including English, is that they contain forms limited to the position \( R \)
(i.e. finite forms). If we employ this criterion, then in Squamish only the
transitive paradigm can be called verbal, and that only on the basis of one
single form with a first person pronominal object. All the other trans. forms
and all intrans. forms do not give occasion to distinguish noun and verb on this
basis: their "verbal" or "nominal" character depends entirely on their occur­
rence in the position \( R \) or \( X, Y \).

8.2 The intrans. paradigms are divided into three classes. Of the first of the­
se (paradigm \( a \) in the chart section 7.1) no possessive forms were recorded,
of the second (b) the possessive forms are identical with the factual ones,
the difference in meaning being interpretable as a matter of slot-choice (see
7.1.3). The columns (a3) and (b) together form a macro-paradigm. The third
class (c) is identical to the first (a) except for the added possibility of a
possessive form. The types (b) and (c) involve in most cases English translat­
ion with nouns, whereas (a) corresponds to English verbs, adjectives, adverbs
and prepositions. The possibility of combinations with possessive affixes was
used in The Squamish Language as the basis for a distinction of noun and verb
in Squamish. It is clear, however, that such labels not only fail to give any
information beyond the already-known facts on which the labeling is based, but
are even misleading as they suggest a far-reaching parallelism between lang­
uages which does not exist.

8.3 The distinction intrans.- trans., on the other hand, is fundamentally
the same in Squamish and in English, and that in spite of the considerable
differences in external realization (the Sq. distinction is morphological
and syntactic, the E. one syntactic only; in Sq. both the participants \( X \) and
\( Y \), if expressed separately, are in the absolutive case, in E. they are in the
direct and the oblique case respectively where these cases are distinguished;
Sq. has special active-intrans. derivatives, which do not exist in English;
Sq. has forms incorporating pronominal references, such forms do not exist in
English). This fundamental sameness undoubtedly results from the logical dis­
tinction between one- and two-participant phenomena: there is a term less in
the formula \"R(X)\" in comparison to \"R(X,Y)\". But the distinction between the
symbols \( R \), \( X \) and \( Y \) is unnecessary: given the definitions of the three pos­
tions, the formulae \"N(N)\" and \"N(N,N)\" suffice. It is only the addition
of a third relatum and the possibility of the absence of a separate expression for the first or second one that necessitates the use of a special index, say "N^z"; it is for this purpose that Squamish employs a special oblique ("relative") case-form.

* * * * * * *

FOOTNOTES

1) Not all the participants need be separate entities: one can protect someone by holding a shield before him or by standing in front of him. "Reflexivity" can in principle hold between any two participants.

2) As this example shows, the two possibilities may occur in one and the same language.

3) Two possibilities may obtain with one and the same root or stem, cf. English present someone with something, present something to someone.

4) The normal order of the elements in English is X-R-Y, in Squamish R-X-Y.


6) Note that (x) in N(x), easily interpretable as an adjectivizing affix, is really the deictically dependent subject which; hence N is represented by R.
