by

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## ABSTRACTI

This dissertation is a study of certain clause-level constructions: in the Okanagan language and an exploration of the adequacy of Relational Grammar for describing these constructions. Four major issues are addressed: (i) the nature of transitivity in Okanagan; (iii) the identity of the grammatical relations which are necessary to the syntactic analysis of Okanagan; (iii) the occurrence of re-evaluations of these grammatical relations in this language; and (iv) the nature of the Middle voice in this language.

Arguments and language data are brought to bear on these issues, providing evidence to support (i) the characterizationoof transitivity as a property of strata or level rather than of clause or of verb; (ii) the necessity in Relational Grammar of the grammatical relations: Subject, Direct Object, Indirect Object, Dative, Instrumental, Locative, Topic, and Chômeur for the syntactic analysis of the länguage; and (iii) the occurrence of the following re-evaluations: $2 \rightarrow$ I Advancement and $I \rightarrow \hat{I}$ Demotion in Passive constructions; Phantom Advancement of a non-nuclear object, non-distinct with the initial subject; Unaccusative Advancement; Dative, Locative, Relational and Instrumental Advancements, with concomitant Demotions of the nominal previously bearing the target relation; and Possessor Ascension; and (iv) a Phantom Arc solution for the syntactic analysis of the Midale voice construction in this language.

It is concluded (a) that the analyses presented contribute in an explanatory way to the study of Salishan linguistics; (b) that these analyses attest to the productivity of the theoretical model, Relational

Grammar, with respect to certain clause-level constructions of Okanagan; (c) that some rules referring to transitivity require reference to nondistinctiveness as well as to $l$ and to 2 ; (d) that one of the principles of Relational Grammar, the l-Advancement Exclusiveness Law, must be modified to allow language-particular condtiions on its applicability; and (e) that the theory of Relational Grammar needs further elaboration to deal with the mapping of thematic relations onto grammatical relations.

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## CHAPTER ONE

## INTRODUCTION

## Okanagan is an Interior Salishan language spoken in Interior

British Columbia and Washington State. The following tree structure shows the proposed genetic relationship of Okanagan to the other languages in the Salishan language family:

1


Okanagan is spoken in Nicola Valley at the end of Lake Nicola, in Okanagan Valley in an area extending south of Kamloops, all in British Columbia, and in Washington State on the Colville Reservation as far south as Incheleum. Two dialects may be distinguished: Northern and Southern. Colville-Okanagan (Mattina 1973) falls within the southern dialect and (Nicola Lake) Okanagan falls within the northern dialect.

The bulk of the data presented herein is from Joseph Albert Michel of Quilchena, in Nicola Valley, British Columbia. Some syntactic phenomena have been contributed by other speakers; these are noted in footnotes. (See also Appendix I: Consultants.) Variations in languages, including Okanagan, due to individual differences such as age, sex or schooling, due to geographical differences, or due to language obsolescence, may lead to different data and different interpretations.

Other major works on this language are doctoral dissertations by Mattina (1973) and Watkins (1970), a masters thesis by Pattilson (1978), as well as papers by Thompson (1979), Mattina (1982), and Hébert (1982a,b). Okanagan is an obsolescing language (Miller 1972). Its most fluent speakers are elders in their seventies and eighties, and most of these are fluently bilingual English-Okanagan. Very few children are learning the language at home in its natural context. According to data compiled by Levine (1981), Okanagan has approximately 200 speakers, with a minimum age of 40-50 years. ${ }^{\text {I }}$ Language retention programs are presently being initiated by speakers in their twenties thru early sixties in an effort to maintain the language in its present-day form.

Some of the major challenges facing àstudent of Salishan languages are phonological in nature, such as stress placement, schwa epenthesis, syllabicity, and for the Interior Salishan languages, pharyngealization and retraction. The orthography described below is used as a practical measure and should not be taken as a starting point for phonological analysis.

In the orthography used here, word stress is indicated by means of ' as primary stress marker and ' as secondary stress marker. Epenthetic schwas are generally excluded from the orthography. Exceptions to this practice are few, but when they occur, forms with and without an epenthetic schwa are given. For example, the agentive prefix is sə $x^{w}-/ s x^{w}$ - . The former is used when the preceeding article is fi, i.e., is vowel-final; the latter is used when the preceeding article is $t$, i.e., is consonant-final, in which case an epenthetic schwa occurs between the article and the first consonant of the prefix. The net result is a different assignment of syllabicity. Epenthetic vowels do not take stress and are generally audible as light, passing vowels. For a statement of the conditioned schwa variation, see Mattina (1973).

To account for the pharyngealization and retraction, ${ }^{2}$ two abstract segments are used in this orthography: $\varphi$ and $\varphi$. Both of these indicate that the following segment is retracted and is the locus of the pharyngealization which also generally spreads to the immediately neighbouring segments from the loci of the retraction. The symbol also indicates that the following segment, always a vowel, is glottalized. This accounts for the twelve phonetic vowels with primary stress charted
below, where indicates tongue root retraction. The ${ }^{V_{P}} V_{\text {notation }}$ represents a glottalized vowe̊l. These are characterizable for Okanagan: (i) as receiving one stress;
(ii) as having two energy peaks, clearly interrupted by a glottal stop; (iii) as functioning as one unit with respect to vowel reduction to schwa; (iv) as occurring only as retracted, pharyngealized vowels; and (v) as having low, falling pitch.

2a phonetic b orthographic

| i | i | $\stackrel{i}{3}^{\text {P }}$ | i | ¢i |
| :---: | :---: | :---: | :---: | :---: |
| $\varepsilon$ | æ | $\mathfrak{æ}_{\mathfrak{?}}$ | $ə$ | ¢ə |
| a | a | $a_{3}{ }_{\underline{a}}$ | a | Sa |
| u | $\bigcirc$ | ${ }^{\circ} ?$ | u | ¢u |

In terms of graphemes, the dual symbols of the two right-most columns of 2 b may be termed digraphs, as are the th, sh symbols of the English orthography. For this dialect, no phonetic sequences of 9 and $V$ are found. The gammas of (Nicola Lake) Okanagan are considred here to be phonetic since they are the only voiced fricatives in the system, since they function as resonants, for example, with respect to Diminuative Glottalization, and since they always occur pharyngealized, with some of them retracted as well. The orthography makes use of the digraph Sr and $\mathrm{r}^{\uparrow}$ for $[Y]$ and $[Y$ ] respectively. There is no other known instance of a single r occurring retracted or pharyngealized.

Although limited in distribution, the h's of Okanagan are 'heavy' and have a similar effect on the following segments as do the abstract segments: h. precedes only retracted vowels and heprecedes only retracted glottalized vowels.

The inventory of orthographic symbols or graphemes used here for (Nicola Lake) Okanagan is.given in 3 below. The c is an alveopalatal affricate, ' \#indicates a glottalized segment, $\ngtr>$ is a glottalized lateral affricate, and $\check{\mathrm{X}}$ is a uvalar fricative.

3 Consonant graphemes:

| p | t | c |  | k | $\mathrm{k}^{\mathbf{w}}$ | q | $q^{\text {w }}$ | $?$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| p | $t^{\prime}$ | $\mathrm{t}^{\prime}$ | $\chi^{3}$ | k' | $\mathrm{k}^{\mathbf{W}}$ | q' | $q^{\text {m }}$ |  |  |
|  | S |  | $\ddagger$ | x | $\mathrm{x}^{\mathbf{w}}$ | x | $\breve{x}^{\text {w }}$ |  |  |
| m | n | y | 1 | r | w |  |  | h | $\uparrow$ |
| $\mathrm{m}^{\text { }}$ | n' | y | $1^{\prime}$ | $\mathrm{r}^{2}$ | W |  |  | $h^{\prime}$ | $\varphi$ |

Vowel graphemes:
i u
ə a
(Mi.chel and Hébert 19.79:1).
2. Posing the Problem

This dissertation is a study of certain clause-level constructions
in Okanagan. It attempts to determine the syntactic constructions in which the verbal affixes listed in 4 below occur. In the listing below, the traditional terms used in Salishan linguistics are contrasted with those used herein: ${ }^{3}$

| 4. AFFIX | TRADITIONAL TERM | TERM USED HEREIN |
| :--- | :--- | :--- |
| -t | 1. Transitive -t | -t marking |
|  | 2. Stative -t |  |
|  | Passive ending | Passive ending |


| -p | Non-control | Unaccusative ending, for naturally |
| :---: | :---: | :---: |
|  |  | occurring states: |
| -cût | Reflexive | Agentive Reflexive |
| -myst | Reflexive | Unaccusative Reflexive |
| -ám/-m | Middle | Middıe |
| -x | Benefactive | Benefactive $\}$ Dative |
| - 7 | Indirective | Indirective J |
| -mí | Relational | Relational |
| -(i) na | (Unidentified) | Locative |
| -nú | Limited Control | Limited Control |
|  | Success |  |

In order to focus this study of the syntax of the Okanagan language, four major questions were formulated:
(1) What is the nature of transitivity in Okanagan?

This questions subsumes more than : one point:
(i) the definition of transitivity as a characteristic of verbs, clauses, or of something else;
(ii) the relationship of transitivity to distinctiveness of subject and direct object nominals, as illustrated in this transitive reflexive, with 'intransitive' morphology: (See Chapter 2, section 1.1, on wor: order.) 5 Si ttwỉt tr'q - n - cút - $\emptyset$.
the boy kick-PFTV-REFI-S3 ${ }_{\text {INTR }}$
The boy kicked himself.
(iii) the accurate statement of a veneralization for morphological markers, for example, of the 'transitive' $-t$, present in 6(a) below but absent' in

6b :below; and
(iv) types of intransitive clauses such as Middle voice constructions as well as stative and non-stative intransitives.
(2) What gramatical relations are necessamy to the syntactic analysis of Okanagan?
Traditionally, the Salishan languages have been analyzed as having subjects, direct objects, and oblique objects but not indirect objects.
(3) What re-evaluations of these grommatical relations may occur in this Zanguage?

More specifically, what advancements, demotions and ascensions may occur at the clause level of this language?
(4). What is the nature of the Midale voice of Okanagan?

Also, what is its relationship, if any, to its counterpart active voice? The sentences in $b$ illustrate counterpart constructions: ACTIVE

the girl sew-PFTV-t-S3 TRANS the mocassin
The girl sewed the mocassins.
MIDDLE


The difficulty in approaching these questions is that they are not independent of one another. Okanagan syntax is complex and multidimensional. One thread cannot be unraveled without being aware of the weave of the entire fabric. Cross-referencing is the device used most frequently to facilitate the task.

This study is organized around the major question of transitivity. Chapter Two provides basic facts about Okanagan as necessary background information on the language. Chapter Three examines clause-level constructions which are finally intransitive: the Passive, Unaccusative and Middle constructions. Chapter Four examines clause-level constructions which are finally transitive: the Dative, Relational, Locative, and Possessor Ascension constructions. Chapter Five discusses the relevance of the analysis for Salishan linguistics and for Relational Grammar, the theoretical framework in which the analyses are cast.
4...Theoretical Framework.

This study is an exploration of the adequacy of Relational Grammar for describing the clause-level syntax of Okanagan. Only those parts of Relational Grammar of general importance are discussed in this section; other concepts are introduced throughout as they are needed, The theory of Relational Grammar is discussed in Perlmutter and Postal (1274, 1278à), Johnson (1974) and in other works cited.
4.1 Some Principles of Relational Grammar.

The central claim of Relational Grammar is that the syntactic processes of human languages are best expressed by rules referring to grammatical relations rather than by rules referring to strings of ordered elements, to cases, or to constituent-structure trees. Grammatical relations: are considered to be the most appropriate basis for stating syntactic generalizations, both for universal rulëetypes and principles, and for language-particular data. To exemplify, the following sentences may be considered:

7 a Grannie gave a basket to the girl.
b Grannie gave the girl a basket.
The underlined nominal in the a sentence is considered an indirect object in English, and may also be referred to as a Dative object, or in Relational Grammar, as a 3. In the approach taken here, the difference between $\underline{a}$ and $\underline{b}$ in 7 above is best expressed universally as a rule that promotes an indirect object to direct objecthood, termed $3 \rightarrow 2$ Advancement, rather than assa? rule of Dative Movement permuting the second NP after the verb to immediate post-verbal position. See Perlmutter and Postal (1277) for a discussion of this central claim vis à vis Passivization.

Another fundamental principle of this theory is that the structure of a clause is the set of grommatical relations obtaining between the elements of a clause. The predicate bears the Predicate relation to its clause. The chart below illustrates the types of nominal-to-clause relations. Of these, the ones that figure the most in this work are: i). the term vs:non-term relations,
ii) the oblique relations,
iii) the retirement relation of chômeur, and
iv) the nuclear relations.

8 Classification of nominal-to-clause relations (adapted from Perlmutter and Postal 1278):


Predicates and nominals are said to be dependents of the clause to which they bear grammatical relations. The Predicate relation, Term relations and Oblique relations are held to be undefined primitives of the theory; retirement relations are defined by the theory. The grammatical relations which elements bear to the clause are illustrated here, informally, for English:

## 9 The girl tanned the hide for her grandmother.

The girl bears the Subject relation to the clause, and". is labelled l; tanned bears the Predicate relation to the clause and is labelled P; the hide $\quad$ bears the Direct Object relation to the clause and is labelled 2 ; for her grandmother bears one of the Oblique relations, the Benefactive one, to the clause and is labelled BENE. More formally, the grammatical relations which elements bear to the clause are represented notationally in relational networks. In the diagram 10 below, the primitive linguisitic element $\underline{b}$ bears the relation whose name is $G R_{x}$ to the primitive linguistic element a: 10


If, for example, $G R{ }_{x}$ is labelled l, the name of the Subject relation, then $\underline{b}$ bears the Subject relation to a, the clause node 4' If, for example, $G R_{X}$ is: labelled 2, the name of the Direct Object relation, then bears: the Direct Object relation to $\underline{a}$, the clause node. The formal arcs for the English example in 2 are:

11


The diagram in 10 is however incomplete. To represent the notion of linguistic levels notationally, sequences of numbersccalled coordinates are associated with the incomplete arc in 10 to yiéld arces, as diagrammed in 12 :

12


In 12 above, the element $\underline{b}$ bears the Subject relation to the clausal node a at both the first and second levels of $\underline{a}$. Thus it is possible for $\underline{b}$ to bear the Subject relation at one level, $c_{i}$, while a distinct element c might be the Subject of a at the $c_{i i}$ level:

13


This is illustrated for English with a Passive which may be analyzed as consisting of two levels of clausal structure:

14a The boy was kissed by the grandmother.
b

was kissed
by the grandmother

One further observation may be made about how the coordinates on arcs permit a characterization of level for a fixed node. This is done by defining the notion stratum. The $c_{\mathbb{K}}$ thistratum of a node $b$ is the set of all arcs with tail a which have the coordinate $c_{k}$. In 10 and 11 above, all of the arcs are in a single stratum. In other cases, there is more than one stratum. . Whis: may be represented for the English example l4a in relational network as in $14 b$ or interms of a stratal diagram as in 14c: $14 c$


This may be represented for an Okanagan example in a relational network as in 15 b below or in terms of a stratal diagram as in 15 c below:

the boy kiss-PFTV-PASS INSTR grandmother

The boy was kissed by the grandmother.
b

c


Pairs like $14 b$ and $14 \mathrm{c}, 15 \mathrm{~b}$ and 15 c , are entirely equivalent notations for the same linguistic object, i.e., a graphic representation of the structure of $14 a$ and $15 a$ respectively.

Transitivity is characterized in Relational Grammar as a
property, not of clauses or of verbs, but of strata:
16 Transitivity in Relational Grommar
A stratum is considered transitive if it has a 1 and a 2;
otherwise it is intransitive.

FOOTNOTES - CHAPTER ONE

1 Sharon Lindley, née Michel, of the Upper Nicola Band, estimates that the number of fluent speakers of Okanagan is more than 200 and feels that an examination of the band lists is necessary to accurately establish the number of remaining fluent speakers and their ages.

2 The orthographic conventions used throughout this work reflect the phonological speech system of the primary language consultant. The retracted segments, are all clearly audible intherspeech of the main language consultant and have been verified by him. He is respected in his community as a particularly knowledgeable speaker with very clear articulation and with an ability to describe to others how to articulate the sounds. Retraction and pharyngealization is also clearly audible in the speech. of the oldest members of the community. Some of the other elders have. also been able to confirm the existence and frequency of these sounds. 3 The traditional terms are generally from Mattina (1973). 4 This may also be written in another type of notation: $\left[G R_{x}(b, a) c_{i}\right]$ which is read as the primitive linguistic element buears the relation $G R_{x}$ to the primitive linguistic element a in coordinate ${\underset{c}{i}}$.

## CHAPTER TWO

## BASIC FACTS ABOUT OKANAGAN

This chapter, in which necessary preliminaries about the Okanagan language are presented, is organized as: follows. Section 1 gives basic data, section 2 gives tests for grammatical relations; with tests for final grammatical relations in 2.1 and tests for non-final grammatical relations in 2.2 .

Data on word order (1.1), the form of nominals (1.2), the form of predicates (1.3), complementizers and determiners (1.4), an animacy hierarchy (1.5), case-marking prepositions: (1.6), aspect and transitivity marking (1.7) are presented in this: section, in the order indicated.
1.1 Word Order

The basic word order of Okanagan is VSO, i.e., the language is verb-initial. In the basic order, the verb is followed by the subject (I) and in turn by 2s and oblique objects. However, subject and object markers, whether clitics or affixes, are not usually included in statements of basic word order since it is: well known that clitics and affixes have different linear order than other elements. Sentences la-e illustrate the basic word order.
 chew-IMPF-t-S3 TRANS the boy the fish The boy is: chewing the fish.
 UNR-CONT- fry-INCEP the my-grandmother a galette to S3 My grandmother is going to start to fry some bread for herself.
c $\mathrm{kn} \quad \mathrm{c}^{\mathrm{x}} \mathrm{w}^{\mathrm{m}}$ - ám t lkৎápi 1 lplp̣út.
$S_{\text {IIVTR }}$ pour-MIDDLE some coffee LOC cups
I poured some coffee in the cups.
 UNR-work-MIDDLE-S $3_{\text {IRR }}$ the blackbear the tail-his a hook-his The blackbear was going to use his tail as his hook.

$\operatorname{boil}_{\substack{\text { INIP }}}$ some water some own-tea-our
Boil some water for our tea:
In Relational Grammar, word order of individual languages is accounted for by means of the Linear Precedence relations. Languageparticular LP rules, formulated in terms of grammatical relations, state which elements bear this relation with respect to which other elements, and at which level. For Okanagan, the basic unmarked word order would be expressed as

2 BASIC WORD ORDER: $\begin{aligned} & 1 \\ & 1\end{aligned} 23$ Obl, at the surface stratum.

### 1.2 Form of Nominals

Nominals in Okanagan may be charted in their fullest expansion as:

3 directional.Preposition Demonstrative Determiner
$1 \quad 2 \quad 3$
case-marking.Preposition Adjective Determiner Head.Noun.

This is exemplified below:
4 wîk $(-n-t)-n$
see-PFTV-t-Sl TRANS the dog underneath this invisible, proximate
$\underline{\varsigma_{i} \cdot 1 \text { sic } \varrho_{i} \text { cítxw. }}$
the LOC new the house.
I saw the dog underneath the new house.
Nominals are characterized by their ability to occur as logical arguments and by their ability to bear grammatical relations: Subject, Direct Object, Indirect Object, Oblique, Chômeur, and Topic. The head of a nominal
argument is distinguishable by its linear position, by its ability to take possessive affixes, to trigger plural agreement of the modifier and of certain classes of verbs.
1.3 Formsiof Predicates

Members of diverse lexical categories, such as Adjective, Verb, Adverb, Demonstrative, Noun, may bear the Predicate relation. The discussion here is: limited to clauses with Predicates that take the affixes under s.tudy.

### 1.3.1 Subject and Object Markers:

The verbal paradigms vary according to the person and number of thessubject and direct object. There are three sets of subject markers. These are charted and labelled below. wThe abbreviations Sly S2, and S3 refer to first, second and third person singular, and P1, P2 and P3 to first, second and thitrd person plural.


The direct object markers may be either affixes or clitics:
6 Direct Object Markers

| as Clitics |  |  | as suffixes: |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | in the -n paradigm | in the -s paradigm |
| SI. | $\mathrm{k}^{\text {w }}$ u |  |  |  |
| S2 |  |  | -s- | -m- |
| S3 |  |  | . |  |
| Pl | $\mathrm{k}^{\text {w }}$ u |  |  |  |
| P2 | p |  | - | - |
| P3 |  | $\ldots 1 \mathrm{x}$ |  |  |

In the two charts above, the lack of an entry findicates that there is no overt markers for that person, number and mood. For example, there is no marker for third person intransitive realis subject.

The irrealis subject markers: are similar to the possessiye markers: 7

Possessive Markers

| SI | 9in-.. | P1 | ...-tət |
| :---: | :---: | :---: | :---: |
| S2 | ¢ən-. | P2 | $\ldots$. . -mp |
| S3 | -s | P3 | ...-səlx |

### 1.3.2 Verbal Paradigms

Full conjugations are presented of two verbal roots:
txt'- 'look after' and s؟íw- 'ask', the former being a verbal root with which the suffixes are stressed and the latter being a verbal root which is stressed itself. Three paradigms are presented for each verb. These are conjugated in the $-n$ transitive realis paradigm, in the ks- 'Unrealized Action' paradigm and in the səc- 'Past Perfect' paradigm.

The parentheses (: ) enclose paradigmatic information which is absent in the surface manifestation of the particular example. The brackets [ ] enclose combinations which show Passive morphology; a discussion of these follow the charts.

The charts are to be read as follows. For example, the entry 'Subject Sl and Object S3' is read as
txt' - n - t - in "I look after him." in the -n 'Perfective' paradigm, as ؟i(n)-ks-txt'-ám "I'm going to look after him." in the ks- 'Unrealized Action' paradigm, and as
©i(n)-səc-txt'-ám "I've been looking after him." in the 'Past Perfect' paradign. The verb $\mathbf{s}^{〔} 1 \mathrm{i} w-$ 'ask' follows the charts of the verb txt'- 'look after'. It should be noted that when the subject and object markers are both suffixes, the object marker comes first.





In the preceding charts, there are certain gaps, i.e., certain combinations of affixes do not occur. These are summarized below:

S2 Subject and Pl Object: You $V$ us.
P2 Subject and Pl Object: You-guys $V$ us.
These were indicated in the charts with an asterisk.
In addition, the subject affixes are not mentioned in certain other combinations and, in the -n and ks - paradigms, Passive morphology -im/-əm is used. These are summarized below:

11

| S3 Subject and P3 Object: | He/She V them. |
| :--- | :--- |
| S3 Subject and P1 Object: | He/She VV rus, |
| P3 Subject and P3 Object: | They $V$ them. |
| P3 Subject and Pl Object: | They V rus. |
| P1 Subject and P3 Object: | We $V$ them, |
| P1 Subject and S3 Object: | We $V$ him/her. |

These were indicated on the charts with square brackets,
For Okanagan, two statements need to be formulated to account for the gaps in the verbal paradigms:
(i) a statement of which combinations of subject and object markings absolutely may not occur; and
(ii) a statement of which combinations of subject and object markings: prohibit mention of the subject's person and number. These statements follow.

## 12 Absolute Prohibition of Combination

P1 outranks 2.
This rule states that first person plural outranks second person singular or plural, i.e., that the combination of second person subject and first person plural object is: absolutely prohibited. The combination
$y_{s g,} p l \quad V \quad u s$ is outlawed and hence non-existent.
i3 Partial Prohibition of Mention of Subject Marker P1, P3 outrank 3 which outranks P1.

This rule states that first and third person plural outrank third person, either singular or plural, which outranks first person plural. In these combinations, we $V$ him/them and. he/they $V$ us/them, the subject marker is prohibited. This partial prohibition on certain combinations is circumvented by the use of 'intransitive' morphology with an object clitic, as follows: ${ }^{1}$
(i). In the realis transitive paradigm, either the $-n$ or $-s$ 'Perfective' or 'Imperfective' paradigms, and in the realis paradigm with prefix ks- 'Unrealized Action', a Passive with. -ím/-əm is: used.
(ii) In the soc- 'Past Perfect' paradigm, the subject is omitted and the intransitive $-m$ marker is used.
The Partial Prohibition does not outlaw mention of the direct object's person and number, and in each of these cases, an object clitic is used.

### 1.4 Complementizers and Determiners

The words $¢ i$ and $t$ occur as members of both lexical categories: Complementizer and Determiner. However these are distinguishable since the complementizers carry tense whereas the Determiners do not, as detailled below:

Complementizers
Okanagan has eight lexical items: which introduce subordinate clauses and which carry its temporal reference with respect to the matrix clause or to the speech event:

14a m؟i future;
b $k$ ¢i. non-future, present;
c k؟ə non-future, past;
d $\uparrow$ past;
e $¢ \boldsymbol{i}$ non-past, specific;
$f$ t non-past, non-specific;

h. s- untensed.

These eight lexical items can be categorized together as introducers of subordinate clauses and the lexical category is termed 'Complementizer', abbreviated as COMP.

Determiners
Two of these complementizers are also members of the category
'Determiner':
15a $\mathrm{Si}_{\mathrm{i}}$ and its predictable allomorph $\mathrm{C}_{\mathrm{\theta}}$ for 'Specific';
b. t 'Non-specific'.

Sentences l6a-i exemplify some of the lexical items which occur as Complementizers:

Sl INTR UNR-trap-INCEP $\quad$ COMP catch-PFTV-t-Sl ${ }_{\text {TRANS }}$ the mouse I'm going to start to set a trap to catch a mouse.
 suddenly COMP slide/s:lip ${ }^{P} 3_{\text {INTR }}$

All of a sudden, they slide/slip.
c

$$
\begin{aligned}
& \text { PF-wish - IMPF-t-you-S1 } \text { TRANS } \text { here COND S2 } \text { IRR }^{\text {-UNR-present }}
\end{aligned}
$$


COMP bloom-MIDDLE the flower
I wish you were here when the lilac was in full bloom.
 that the your-horse COMP steal-UNACCUS-LTDC-INDIR-t-you-S1 ${ }_{\text {TRANS }}$ That's your horse that I stole accidentally.
 s.tore-INDIR-t-S2 IMP them some salmon COMP UNR-PF-eat-PFTV-t-P3 ${ }_{\text {IRR }}$ 1. Pístlmi. TRANS

COND winter
Put away some salmon for them to eat this winter (i.e., just for them to eat):
 store-INDIR-t-S2 IMP them some salmon COMP UNR-PF-eat-PFTV-t-P3 ${ }_{\text {IRR }}$ z. Iístkmi. TRANS

COND winter
Put away some salmon for them to eat this: winter (i.e., them and anybody who's around to eat - the cultural norm).

why COMP COND go the boy to town
Why has the boy gone to townit. (could be awhile ago)
 why COMP COND go the boy to town
Why is the boy going to town?/Why did the boy go to town? (just recently).

NEG ${ }^{S l_{\text {IRR }}}$ - COMP-dipnet-MIDDLE some salmon
I'm not dipnetting some salmon.
Sentences l7a-c exemplify the lexical items which occur as Determiners:

very true the story
The story is very true.
b. tatázt ¢uníx $t$ smeinây.
very true some/a story
Some stories are very true./A story is very true.

the grandmother tell-S $3_{\text {INTR }}$ the chipmunk steal-S $3_{\text {INTR }}$ some saskatoon, berify The grandmother said (that) the chipmunks stole some saskatoons. As members of the category 'Determiner', these lexical i.tems do not carry tense. The allomorph. §oroccurs predictably before the possessive prefix Con- ' 'your' and before nouns or adjectives containing the sequence: $_{\text {n }}$ Resonant-Pharyngeal-Stressed Vowel, in that order or in the reverse (cf. Michel and Hebert, 1278, for examples..) A member of the lexical category 'Determiner' marks a nominal argument, preceding and marking both modifier and head, with the exception of a personal name or a full independent pronominal.
1.5 Animacy Hierarchy

Languages frequently recognize a hierarchy of animacy:
18 Animacy Hierarchy for Common Nominals
Animate, Human $>$ Animate, Non-human $>$ Inanimate.
On such a hierarchy, those nominals which are closer to the top are most
likely to serve as subject, whereas those nominal which are furthest from the top are least likely.

Okanagan permits animate beings, but not inanimate beings, as subject in clauses with transitive strata. The class of animate beings includes humans and animals, as in 19, acts of nature as in 20 , and cultural items that are marked as possessed by an animate being, as in 21-22.
 the woman hit-PFTV-t-S $3_{\text {TRANS }}$ the man INSTR rock The woman hit the man with a rock.
 the man hit-UNACCUS-S $3_{\text {INTR }}$ INSTR rock. The man was hit with the rock.
 the rock hit-PFTV-t-S $3_{\text {TRANS }}$ the man
 the owl bite-PFIV-t-S3 $3_{\text {TRANS }}$ the baby The owl bit the baby.
 the rain me wash-INDIR-t-S3 TRANS the my-car The rain washed me my car.
 throw-REL/2-PFTV-t-Sl TRANS the ball and
 hit-UNACCUS-ITDC-PFTV-t-SI ${ }_{\text {TRANS }}$ the boy I threw the ball and I unintentionally hit the boy.


* $\quad c q^{\prime}-q^{\prime}-n u ́(-n-t)-s \quad$ $i$ twi $t$. hit-UNACCUS-LTDC-PFTV-t-S3 TRANS the boy
* caa - n - this ?i ttwít. Hit-PFTV-t-S3 $3_{\text {TRANS }}$ the boy I threw the ball and it accidentally hit the boy. it hit the boy.

22a $\uparrow$ i the my-ball hit-PFIV-t-S3 TRANS the rock / the dog. My ball hit the rock / the dog.

The ball hit the rock.
 the your-mocassin hit-PFTV-t-S3 TRANS the rock Your mocassin hit the rock.

e łaq-ł-təm ai sklw - inca? - s
stretch-INDIR-PASS the beaver-skin-his INSTR man
His beaver pelt was stretched by the man.

The beaver pelt was stretched by the man.

His rock hit the dog.
h. * ai x*ưt cquntîs $¢$ i kkw? atp.

The rock hit the dog.

### 1.6 Prepositional Case-Marking

Non-term objects, i.e., oblịque objects, are marked by one of the set of case-marking prepositions:

| $23 a$ | tl' | from, source; |
| ---: | :--- | :--- |
| b | K1 | to, at, goal, recipient, dative; |
| c | K $^{\prime}$ | for, benefactive; |
| d | 1 | on, locative; |
| e | $n^{\text {¢əł }}$ | with, comitative; |
| f | §i t | with, by, instrumental. |

The prepositions listed in a-e may optionally be preceeded by a determiner, usually, 乌i, whereas the preposition given in f must occur in the form linsted, with no additional determiner.
1.7 Aspect and Transitivity Marking ${ }^{2}$

Rules are given for the occurrence of the markers:
-n 'Perfective',
-s 'Imperfective', and
-t 'Transitive'.
The $-n /-s$ are exemplified in sentences $25 c, e, 26 b-c, 28 b-c$, and $29 a \mathrm{a}-\mathrm{b}$.
The -t is exemplified in these examples as well as in $25 \mathrm{~b}-e, 32 \mathrm{~b}-\mathrm{c}, 33 \mathrm{~b}$, 34b, and 36-32.

### 1.7.1 A Rule for Perfective and Imperfective Aspect

Perfective or Imperfective aspect is marked on the head of a predicate phrase of a clause, where 'head' is taken to be the verbal root: 24 optionally (1) if there is an initial 2-are which is a 1-are in the final stratum with no other nuclear term arcin the final stratum; or othemwise, obligatorily (2) if there is an initial or advancee 2-are which is a nuclear term are in the final stration;
(3) if there is no Dative or Phantom arc, i.e., if there is no register of an initial oblique object as in a Dative clause (the Indirective and Benefactive constructionsl or if the clause is a Middle construction under a Phantom analysis. The clauses which this rule statement encapsules are illustrated and exemplified below. However, the discussion and motivation of these particular relational networks is undertaken in Chapters Three and Four. Part (i) of the rule refers to the class of Unaccusative clauses ending in $-t$ where an aspectual marking is possible. Only the -s 'Imperfective' marker is attested in these clauses. Other classes of Unaccusative predicates end in - p for naturally occurring action, in a reduplicated consonant (the final one of the root), or show no distinctive ending. Inchoative clauses are also considered Unaccusative; these are marked either by glottalization of a resonant in second position or by the ending -wil'x. None of these other classes of Unaccusatives are attested with an aspectual marker of Perfective or Imperfective aspect. Unaccusative clauses are discussed in Chapter Three, section 2, Part (1) of the rule covers the following case:

25 in an Unaccusative clause, of the -t class:
a

$(-s)-t$
b kn $\quad q^{\text {wol }}-\mathrm{t}$.
$\mathrm{Sl}_{\text {INTR }}$ warm-t
I'm warm.
er kn $\quad q^{\text {wi vol }}$ - $s-t$.
Si INTR warm-IMPF-t
I'm warming (myself)./I'm keeping warm.
d crcár - t - $\emptyset$.
stretch-t-S3 ${ }_{\text {INTR }}$
It is stretched (like a beaver pelt) !
e $\mathrm{k}^{\mathrm{w}} \mathbf{u} \quad$ crcär $-\mathrm{s}-\mathrm{t}$.
$\mathrm{Pl}_{\text {INTR }}$ stretch-IMPF-t
We are stretching. Part (2) of the rule covers the following cases, where there an initial 2-arc and a final nuclear arc:

26 in an active clause with a transititive stratum:
a


the bee rigid-PFTV-t-S3 TrANS the my-male's.mom
The bee stung my mother.

yell.at - IMPF-t-S2 TRANS the man
You are yelling at the man.

27 in a passive clause with finally intransitive stratum:
a


the my-male's.mom rigid-PFIV-PASS INSTR bee
My mother was stung by a bee.
 the man yell.at-IMPF-PASS INSTR grandmother-his The man was yēlled at by his grandmother.

28 in a reflexive clause:
a


the boy slide-PFIV-REFL COMP PF-ball-MIDDIE
The boy slid himself while playing ball.
c Si ttwỉt x̌num - s-cút.
the boy hurt-IMPF-REFL
The boy ishurting himself.
22. in a reciprocal clause: ${ }^{3}$

$\mathrm{Pl}_{\text {INTR }}$ catch-PFTV-t-RECIP
We caught each other.

the children hurt-IMPF-t-RECIP ${ }^{\text {P3 }} 3_{\text {INIR }}$
The children are hurting each other
The following are correctly excluded by part (2) of the rule formulation:
30 in a MIDDLE voice clause: (The rule satisfies the first three possibilities for an analysis. Chapters Three and Four provide evidence in support of the fourth (iv), the Phantom Arc solution, )


the my-grandfather PF-smoke-MIDDLE some kinnick-link-plant long.ago My grandfather smokes kinnickkinnick long ago.

the my-grandfather tell.stories-MIDDLE long. ago
My grandfather tell stories long ago.

31 in an Unergative clause, i.e., a clause with an intransitive stratum with an initial l-arc:
a

b ؟i ttwỉt qícəlx.
the boy run
The boy runs.
Part (3) of the rule formulation excludes Middle clauses under a Phantom Arc solution, illustrated above in 30a, in which there is an advancee 2-arc non-distinct from the initial l-arc. It also excludes Dative clauses in which there is a morpheme registering 'Benefactive' or 'Indirective' object, regardless of any possible advancements to 3, 2, or 1 (cf., Chapter Four, section $I$ for discussion of these clauses):

32 in a: Dátive?clause:
a

-x or
-
 the my-father give-BENE-t-S3 TRANS the horse to boy My:father gave the horse to the boy.
 the boy put.out-INDIR-t-S3 ${ }_{T R}$ the light to man The boy put out the light on the man.

However, an advancee 2 in a"'Relational' or Locative clause triggers the aspectual marking, as stated in part (2) of the rule formulation: (cf., Chapter Four, section 2,3 respectively for discussion of these clauses): in a Relational clause with obligatory advancement, where NN refers: to a Non-nuclear term:
a


$$
-n \text { or }-s
$$

 the man DIR-tighten.cinch-REL/2-IMPF-t-S. $3_{T R}$ the horse-his The man tighten the cinch of his horse.

34 in a Locative clause with advancee to 2 in $\underline{a}, \underline{b}$, but not with. advancee LOC to $l$ in $c$, :
a

b $k-d^{w}$ - ina? - $n-t-x^{w} \quad t$ §əltî? S¢úpi?. Dist-pour-LOC/2-PFTV-t-S2 TRANS some tea Sophie You spill some tea on Sophie.
c

d kn k - $\mathrm{mq}^{\text {qu }} q^{\text {w }}$ - in na?
$\mathrm{Sl}_{\text {INTR }}$ Dist-snow-LOC/l

It snowed on me./ I was snowed on.
1.7 .2

Rule for -t Marking
The following rule is proposed to account for the -t marking on predicates:

35 -t marking:
The morpheme -t marks the presence of an initial or advances 2 in some stratum $S_{i}$ which remains a distinct nuclear term in the same and in successive final strata, including the final stratum, $S_{i+1}$. Where $S_{i}$ is intransitive, the marking is: limited to Unaccusative Class B predicates. Moreover, in the subclass of Unaccusative Class B predicates, when two nominals meet the conditions above, two -ts are possible (see section 2.1, Chapter Four, Class B vs Class A3 Relational verbs:).

This rule covers the following cases:
36
a finally transitive, active clause, with or without an initial
oblique object, with final 1 and 2:
a a Regular Transitive clause:
i

ii wick - $n-t-x^{w}$ ai $x^{w} x^{w}$ tm.
see-PFITV-t-S2 ${ }_{\text {TRANS }}$ the girl
You see the girl.
b a Dative construction (cf. Chapter Four, section l):
i

 the man give-BENE-t-S3 TRANS some salmon the woman The man give some salmon to the woman.
 the boy put.out-INDIR-t-S3 ${ }_{T R}$ the light the girl The boy put out the light on the girl.
c a Relational construction (cf. Chapter Four, section 2):
i


Uncle PF-Dist-think-REL/2-IMPF-t-S3 TRANS the language
Uncle is thinking/pondering about the language.
iii.

iv x̌as - t - mí - $\mathrm{n}-\mathrm{t}-\mathrm{x}^{\mathrm{w}} \oint_{\partial} \oint_{\partial}(\mathrm{n})-\mathrm{c}-\mathrm{Pi} \neq n$.
like/good-t-REL/2-t-S2 TRANS the your-PF-eat
You like your food.
37. a finally intransitive, passive clause:
a

 the boy ask-PFTV-t-PASS INSTR woman

The boy was asked by the woman.
38
in one sub-class of Unaccusative clauses, initially and finally intransitive (see Chapter Three, Unaccusative Class B, section 3.2):
a.

b Si sqəltmíx $^{w}$ tə¥ - t.
the man straight-t
The man is straight, trustable, true.
39
in a reciprocal clause (see footnote 3 ):

the PL-girl tell-PFITV-t-RECIP ${ }^{P} 3_{\text {INTR }}$ UNR-hurry.up-P3 ${ }_{\text {IRR }}$
The girls told each other to hurry up.

This rule formulation correctly excludes the following cases:
40a a finally intransitive Middle clause (cf. Chapter Three, section 3"and Chapter Four, section 4.4):
i

-(á)m
*
-t
 the old.woman work-MIDDLE some PL-basket

The old woman makes baskets.
b an Unergative clause, initially and finally intransitive:
i

ii §i $^{\text {i }}$ sppliña? qícəlx.
the rabbit run
The rabbit runs.
c a Reflexive clause, transititye but with non-dìstinct final 1 and final 2: 4, 5


the PL-girl see-PFIV-REFL P3 $3_{\text {INTR }}$
The girls see themselves.
The discussion and motivation of these particular relational networks follow in sections 2-4 of Chapter Three and in sections l-3 of Chapter Four.

## 2 Tests for Grammatical Relations

These are presented here in two sub-sections: first, the tests for final grammatical relations and secondly, the tests for non-final grammatical relations. These tests are included here for organizational convenience and are utilized in the analyses presented in Chapters Three and Four.

### 2.1 Tests for Final Grammatical Relations ...

2.1.1 Subject Marking

The realis subject person and number markers are distinguished according to final transitivity and distinctiveness. The 'Transitive' set, as traditionally termed in Salishan linguistics, are used in realis clauses, where the final lsand 2 are distinct from one another. The 'Intransitive' set is used elsewhere.

41
INTRANSITIVE
TRANSITIVE

| S1 | kn | -(í)n |
| :--- | :--- | :--- |
| S2 | $\mathrm{k}^{\mathrm{w}}$ | $-(\overline{1}) \mathrm{x}^{\mathrm{w}}$ |
| S3 | $\emptyset$ | - (í)s |
| P1 | $\mathrm{k}^{\mathrm{w} u}$ | $-(\overline{1}) \mathrm{t}$ |
| P2 | p |  |
| P3 |  | $1 x$ |

These are exemplified below, for the first person singulan (SI):
42a kn qícəlx.
$\mathrm{Sl}_{\text {INTR }}$ run
I run.
 put - PFTV-t-SI TRANS the rope right.behind the house I put the rope right behind the house. Combinations of subject and object markers in surface transitive clauses are subject to the Absolute and Partial Prohibitions, already discussed in section l.3.2, of this: Chapter.

### 2.1.2 Question Formation

Question Formation with swit distinguishes between final oblique and nuclear terms. When an initial oblique, non-chomeur object is being questioned, this interrogative is preceded by a case-marking preposition as in $\underline{c}$, e below. If a nuclear term is being questioned, no case-marking preposition appears, as in $\underline{a}$, $\underline{b}$ below. If the nominal being questioned is not the subject in the final stratum, the nominal subject of the lower clause is raised into the upper clause, as in b, $\underline{c}$, e below.
 who COMP UNR-scrape-face-INCEP again Who's gonna shave next?
b swît §i stəmtîma? ¢i şîw ( $-\mathrm{n}-\mathrm{t}$ ) - s ?
who the grandmother COMP ask-PFrV-t-S3 ${ }_{\text {TRANS }}$

Who did the grandmother ask?

to who the boy COMP run
To who did the boy run?
d * swît ii ttwît $\mathrm{i}_{\mathrm{i}}$ qî́cəlx (K1)?
e tl' swít $9 i$ ttw’̉̉t kৎi yəlt?
from who the boy COMP run, away
From who did the boy run away?
f $*$ swít $¢ \mathrm{i}$ ttwít kৎi yəlt ( tl )?

### 2.1.3 Relativization ânà Cleft Constructions

Relative clauses: ịn Okanagan may be characterized at least superficially as follows:
(i) the complementizer §i is usually used, although the otherocomplementizers

(ii) the complementizer 9 i may be optionally deleted;
(iii) a head nominal is present and precedes the relative clause;
(iv) relative clauses may be distinguished from other clauses by the presence of a head nominal;
(v) a subject marker is obligatorily present on the predicate of the downstairs clause and, if transitive, a direct object marker as well; i.e., no deletion of subject or object marking occurs; (vi) a nonpronominal NP referring to the head is absent within the clause.

Okanagan permits relative clauses to be constructed on a downstairs final 1 or 2, but not on an oblique object:

On a downstairs 1:
 PF-know-IMPF-t-SI $I_{\text {TRANS }}$ the boy COMP eat-PFTV-t-S3 TRANS

all the egg
I know the boy who ate all the eggs.

On a downstairs 2:
45

| $c-m \rho y-s-t-i n$ | ¢i. sqə ${ }^{\prime}$ tmix ${ }^{\text {w }}$ |  | (ii) Si Silmỉx ${ }^{\text {w }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| PF-know-IMPF-t-SI ${ }_{\text {TRANS }}$ | the | man | COMP | the chief |
| wîk $(-n-t)-s$. |  |  |  |  |
| see-PFIV-t-S3 ${ }_{\text {TRANS }}$ |  |  |  |  |

I know the man that the chief saw.
Not on a downstairs oblique object:

the boy see -PFTV-t-S3 TRANS the knife COMP the man

kill- IMPF-t-S3 ${ }_{\text {TRANS }}$ the crow INSTR
The boy saw the knife that the man killed the crow with.
 that the table COMP put/place-PFTV-t-S1 ${ }_{\text {TRANS }}$ the book
$\because$ That's the table that I put the book on.
 PF-know-IMPF-t-S1 ${ }_{\text {IRANS }}$ the man COMP the boy run I know the man that the boy run to/towards/from.

Cleft constructions on a downstairs nominal/pronominal are similarly
restricted to final 1 s and 2 s (see section 2.3, Chapter Three):
 that you COMP Cont-weigh-PFIV-t-S2 ${ }_{\text {TRANS }}$ the potatoes That's you who weighed the potatoes.
 that I, me . COMP me PF-kick-IMPF-t-S3 TRANS the policeman That's me that the policeman is kicking.

that he/she COMP the boy run
That's him that the boy run to/towards/from.

that a man COMP the boy run
That's the man that the b.oy run to/towards/from.

Only a final I may be topicalized in Okanagan: In the examples below, the final lis underlined.

trap-MIDDLE the people some kokanee
The people trap some kokanee.

The people trap some kokanee.
$c * t$ kǨnỉ? $\because$ tm@úsm 〔i sqỉlxw. some kokance trap the people
 Cont-boil-PFTV-t-S3 TRANS the woman the meat The woman boiled the meat.

The woman boiled the meat.
 the meat boiled the woman
 Cont-boil-PFTV-PASS the meat INSTR woman The meat was boiled by the woman.

The meat was boiled by the woman.

INSTR" woman "wás:boilled the meat

runaway the boy from man
The boy ran away from the man.

The boy ran away from the man.
c * tl' sqəl'tmîx ${ }^{w}$ yəlt $\frac{\text { ci twist. }}{}$
from man run. away the boy

hide-PFTV-t-Sl $l_{\text {TRANS }}$ the ball
I hid the ball.
b * ai. p ${ }^{2} u^{w}{ }^{w} l a ?$ wick $(-n-t)-n$. the ball hide-PFTV-t-S1 TRANS
2.1. 5 Quantifier Float

The quantifier $y$ foyf̧? $t$ 'all' is permitted to float to pre-predicate position from a final 1 or a 2 and not from an oblique object. This fact is exemplified below:

From a final 1:

all the children asleep ${ }_{P L}$
All the children are asleep.
 The children all are asleep.

From a final 2:

hide-PFTV-t-S2 ${\underset{\text { TRANS }}{ } \text { all } \text { the egg }}^{\text {IMP }}$
Hide all the eggs:

Hide all the eggs:
Not fromoañobriqué:object:

the boy run all to Pl-girl
The boy runs to all the girls.

the boy alle run to Pl-girl

Sl ${ }_{\text {INTR }}$ ITER -pour-MIDDLE some coffee all LOC PL-cup
I pour coffee in all the cups.

all $\quad S l_{\text {INTR }}$ ITER-pour-MIDDLE some cöffee LOC PL-cup

It should be noted with respect to Quantifier Float that,
in the case of a plural subject and a plural object, a floated quantifier
is preferentially interpreted as having come off the subject. This is predicted by the Relational Hierarchy (Perlmutter and Postal 1978a) which. ranks Subject as the highest position.

the children a.ll hide-PFIV-t-P3 ${ }_{\text {TRANS }}$ the egg.
The children all hid the eggs.
i.e., All the children hid the eggs./ * The children hid all the eggs.

### 2.2 Tests for Non-final Gramatical Relations

:A. ]
2.2.1 Moving Glottalization ${ }^{6}$

Okanagan shows a glottalization pattern on the predicate phrase to indicate that the object moves or varies as a result of having undergone. an action. For example, if a ball is kicked and it goes bouncing or flying, then the glottalization pattern appears. If a person hides: himself and stays put, there is no glottalization, but if the person goes from hiding place to hiding place, then there iss glottalization.

60 MOVING GLOTTALIZATION:
If the initial 2 of a clause moves or varies in response to the action or event, the resonants are glottalicized as follows: a. in the 1st or 2nd person subject, the final resonant of the predicative phrase;
b. in the 3rd person subject, all the resonants of the verbal root and suffixes of the predicative phrase.

This is: illustrated below, first with a physical object that moves, then with words that vary:

61a trantín
trañtỉx ${ }^{w}$
trantís
traqntīm
trqñtîp
trantís $1 x$
trantîn
tranntị̂ $x^{w}$
tranntî́s

I kick something solid.
You ${ }_{\text {sg }}$ kick something solid.
He kicks something solid.
We kick something solid.
You ${ }_{p l}$ kick something solid.
They kick something solid.
I kick something that moves.
You sg kick something that moves.
He kicks something that moves.

 the dog COMP ITER-back\&forth-kick-PFTV-t $\subseteq P 3_{\text {TRANS }}$ It's the dog that they kicked repeatedly back and forth.

Initial ls do not trigger this glottalization pattern, as exemplified below in an Unergative clause:

63a qícə1x 1x.
run $\quad$ P3 ${ }_{\text {INTR }}$
They run.
b : qîcəl’x l'x.
They run here and there.
(See Chapter Three section 2 for characterization of Unergative clauses.) This phenomenon of Moving Glottalization was discovered very late in the process: of fieldwork and is utilized in only one analysis, to show that the final l of certain classes of Unaccusatives is: a 2 in a non-final stratum, i.e., in the initial stratum since only two strata are posited (cf., Chapter Three, section 2.2.1). ${ }^{7}$
2.2.2 Clefts with Sinca?/ Einca? ${ }^{\text {Rn }}{ }^{8}$

In cleft constructions with first person pronominals, the choice of the form, either ؟inca? or Sinca? kn , is: sensitive to the relation borne by this pronominal in the downstairs clause. (See section 2.1.3, this chapter, for a more general discussion of clefts and relative clauses.) The form ?inca? is selected if the pronominal bears the l-relation downstairs:
64. §ixỉ? $\left\{\begin{array}{c}\text { Sinca? } \\ * \text { §inca?kn }\end{array}\right\}$ ؟i kn qícə1x k1. sint؟umystn.
that me, I $C O M P S l_{I N T R}$ run to store
That's me who runs to the store.

The form Sinca?kn is selected if the first person pronominal bears the 2-relation downstairs:
 that $\quad$ me, $I \quad$ COMP me PF-kick-IMPF-t-S3 TRANS the policeman That's me that the policeman is: kicking.

In a Passive where the pronominal bears the 2-relation initially and the l-relation finally, either form may be selected:

that mes COMP kick-PFIV-PASS INSTR horse
That's me who was kicked by the horse.
Thus, inca?/ inca? kn is a test for 2 -hood at some stratum $S_{i}$, not necessarily the initial or final stratum. •

FOOTNOTES - CHAPTER TWO
1 It should be noted that no claim is being made here that the clausal structure itself is intransitive, only that certain morphological markers are used under certain well-defined conditions on a clause with transitive final stratum. For example, 'we look after them' as in (i), represented graphically as in (ii), (i) $\operatorname{txt}$ - n - tím 1 x
look.after-PFTV-PASS P3 ${ }_{\text {obj }}$
Wea look after them.
(ii)

will be realized with the object clitic 1 x and with the verbal morphology -tím without necessarily ëlaiming that this is indeed a true Passive. 2 Other analyses for $\mathbf{- n / - s}$ are proposed by L. C. Thompson (1979) for the Thompson language and by A. Mattina (1973, 1978) for Colville-Okanagan. Thompson suggests that -n-t marks a control transitive, implying control by the subject, agent or implied agent, whereas the -s-t marks a causative. Mattina suggests that -st predicates always imply either purposeful or customary involvement on the part of the actor whereas -nt lacks this implication. Hébert (1982) discusses the applicability of these hypotheses to (NL) Okanagan, and proposes and defends the aspect hypothes:is given in the text.

3 Reciprocals are like reflexives in that the sets containing subject and object are non-distinct. Reciprocals are unlike reflexives with respect to the direction of the action of members of the set. In reflexives, members of the set act upon themselves whereas in reciprocals the action takes place between members: of the set.

Relational networks such as these two could be suggested for recipprocals on semantic grounds:
a.

b.

.

The relational network in a violates the Chomeur Condition as originally proposed, but satisfies the weakened Chomeur Condition (Perlmutter and Postal, 1978a, section 8) which allows a chomeur only under certain conditions but does not require that the nominal in question necessarily bear the Chomeur relation. The antecedent conditions under which a chômeur may arise are satisfiable in three known ways: when terms arise in strata via (i) re-evaluations (advancement and demotions), (ii) ascensions, and (iii) the existence of dummy nominals.

The relational network in $\underline{\underline{b}}$ violates the Stratal Uniqueness Law which claims that no stratum can contain more than one l-arc, one 2-arc, or one 3-arc (Perlmutter and Postal 1978a). To firmly establish a relational network for reciprocals would require syntactic evidence which is presently unavailable.

4 The suffix -cút is not being analyzed as -t-sút or -t-cút since there is no independent synchronic evidence or known test to support such a segmentation. Hale (external examiner's report, August 1982) notes that making this segmentation would result in the simplification of the rule statements for aspect and for -t marking, thus reducing the role of
argumental distinctiveness in the grammar of Okanagan. However, I do not consider rule simplification to be sufficient basis for morphological segmentation without other corroborating independent evidence, so I choose not to segment -cút further at this time.

5 For the Reflexive and Reciprocal constructions, the morphemes -cút and-wíx ${ }^{w}$ respectively are being treated as verbal morphology that shows up under the appropriate conditions rather than as dependents of the clause.

6 This phenomenon of Moving Glottalization was first noticed in my field notes as an unexpected glottal stop in [-mist/-mi?st]. Mattina had also noticed this in his notes (personal conversation, August 1979). The hint that this might be more extensive and meaningful came from examples provided by Dave Parker, native speaker and language instructor, during an interview in Kelowna, July ll, 1981. One of his examples is presented as 57b, p. 84. It was in subsequent fine and detailed work wi.th the main language consultant, Joseph A. Michel, that this phenominon was elucidated. It would not be surprising if speakers of lesser age or of other dialects did not have exactly the same phenomenon.

7 Data are unavailable at the time of writing to show whether advancee 2s, 2-chômeurs, obliques and putative 3s: could also trigger this glottalization pattern. It is clear however that a nominal that is a 2 at some level may trigger Moving Glottalization where felicitous.:

8 This difficult pattern was obtained from the main language consultant and confirmed by slipping examples for judgment into other elicitation patterns. See also p. 82. As in English, clefts beginning with "It's me who/that..." are used infrequently.

## CHAPTER THREE

INIRANSITIVE CLAUSES IN (NL) OKANAGAN

## 0 <br> Introduction

This: chapter discusses basic clauses which are finally intransitive in (NL) Okanagan. Chapter Four discusses basic clauses which are finally transitive in this language. Both chapters address three questions with respect to possible re-evaluations of grammatical relations of nominals:
i) What advancements, if any, are possible in Okanagan?
ii) What demotions, if any, are possible in Okanagan?
iii) What ascensions, if any, are possible in Okanagan?

These questions presume the existence of a Relational Hierarchy, with: some grammatical relations ranked higher than others, Perlmutter and Postal (1278a) have proposed such a hierarchy, which ranks the grammatical relations borne by nominals:
$1 \quad$ Subject (1) $>$ Direct Object (2) $>$ Indirect Object (3) $>$ Non-terms. This hierarchy ranks the Subject relation as the highest. 'In the case of certain syntactic phenomena, languages draw a line at some point along the hierarchy, permitting these syntactic phenomena, such as Relativization, to interact with the grammatical relations above that line and not those below it.

It is: proposed that Okanagan permits: a number of advancements, demotions and ascensions along this hierarchy. This chapter discusses
advancements and demotions which result in clauses that are finally intransitive. Chapter Four discusses advancements and ascensions: which result in clauses that are finally transitive.

This chapter proposes and argues for the following re-evaluations:
2a Passive clauses, with $2 \rightarrow 1$ Advancement and $1 \rightarrow \hat{I}$ Demotion and with -(î)m as a marker of final intransitivity:

b Unaccusative clauses, with $2 \rightarrow 1$ Unaccusative Advancement:

a and a sub-class of Reflexive Unaccusatives, marked by -mýst

c Middle voice clauses, with Phantom Advancement to 2 to 1 , and $2 \rightarrow \hat{2}$ Demotion, where $\mathbb{N N}$ abbreviates Non-Nuclear term, and with. -(á)m


The evidence for these re-evaluations is: taken from Morphological Markings, Word Order, Relative Clause Formation, Logical Structure, Animacy and Relational Hierarchies, Question Formation, Choice of form ؟inca?/ ؟inca?kn, Moving Glottalization, Lexical Incorporation and Quantifier Ban.

This chapter is organized as follows. Section 1 deals with Passive clauses, arguing for a bi-stratal analysis of the Okanagan passive. In section 2, six sub-classes of Unaccusative clauses are distinguished and some supporting evidence for these is presented. In section 3, foure analyses for Middle voice clauses are examined, arguing for ä:Phantom arc to deal with a serious problem.

Two universals of passivization have been claimed to be characteristic of passivization in every language manifesting this phenomenon (Perlmutter and Postal 1977). ${ }^{1}$ These are
i) $A$ direct object of an active clause is the (superficial) subject of the 'corresponding' pässive.
ii) The subject of an active clause is neither the (superficial) subject nor the (superficial) direct: object of the 'corresponding' passive. Taken together, these have the following consequence:
iii) In the absence of another mule permitting some further nominal to be direct öbject of the clause, a passive clause is a (superficially) intransitive clause.

Examples of a passive and the 'corresponding' active in
Okanagan are:

the horse kick-PFIV-t-S3 TRANS the man
The horse kicked the man.

the man kick-PFTV-t-PASS INSTR horse
The man was kicked by the horse.

the baby kiss- PFTV-t-S3 TRANS the girl
The baby kissed the girl.

the girl kiss-PFr'V-t-PASS INSTR baby
The girl was kissed by the baby.

The claim made by the universal characterization of passixization is that a passive construction is finally intransitive. Two analyses of a passive construction are consistent with this claim: a monostratal analysis and a bistratal analysis, as diagrammed below:

5 a MONOSTRATAL ANALYSIS


B BISTRATAL ANALYSIS


Evidence is given first to the effect that a passive construction in Okanagan is finally intransitive and secondly that it is: bistratal and initially transitive.

### 1.1 Person and Number Marking

Person and number marking show final l-hood. If the Okanagan Passive is finally intransitive, then this predicts that the Intransitive . set of subject markers would be used to mark person and number of the final subject. The third person singular marker is $\emptyset$ but the third person plural is $1 x$. The sentences below demonstrate that this prediction is borne out:
 the PL-boy bite-PFTV-t-PASS P3 INTR INSTR dog The boys were bitten by the dog.
b the agentive-PF-policeman kick-PFTV-t-PASS $\quad{ }^{P} 3_{\text {INIR }}$ The policeman were kicked.
1.2 Word Order

Only the final subject can be topicalized in Okanagan, as was shown in section 2.1.4, Chapter Two. This fact provides an additional means of identification of the final subject in a Passive construction:


The salmon was caught by the man.

The salmon was caught by the man.

These facts of word order provide exidence that the direct object of the 'corresponding' active is the final 1 in the Okanagan Passive and the subject of the 'corresponding' active is not the final subject in the Passive.
1.3 Relatiye Clause Formation

In Okanagan, relative clauses may only be formed on downstairs: 1s: and 2s, as was shown in section 2.1.3, Chapter Two. This fact provides evidence that a Passive construction is superficially intransitive, with the agentive nominal bearing neither a l-relation nor a 2-relation in the final stratum:

see-PFIV-t-Sl ${ }_{\text {TRANS }}$ the salmon COMP: catch-PFIV-t-PASS
Si $t$ sqəl'tmíxw.
INSTR man :
I saw the salmon that was caught by the man.

I saw the man that the salmon was caught by .
 that a dog COMP Kick-PFTV-t-PASS INSTR boy That's a dog that was kicked by the boy.
 That's the boy that the dog was kicked by,
 That's by the boy that the dog was kicked by.
1.4 Instrumental Case Marking: A Job is Lost

The agentive nominal in a Passive in Okanagan is marked with.
the instrumental case preposition: $i$ i $t$ It is not unusual for a language to select this case to mark the agentive nominal in a Passive. Russian, for example, does so:

10 Etot zavod byl postroen inostrannymi rabocimi.
this factory was PFTV-build foreigh workers INSTRUMENTAL
This factory was built by foreign workers.

## okanagan:


the woman ask-PFTV-t-S3 TRANS the boy
The woman asked the boy.

the boy ask-PFTV-t-PASS INSTR woman
The boy was asked by the woman.
That the agentive nominal is marked with one of the oblique cases is consistent with the universal characterization of the Passive, in which the initial 1 is demoted to non-term and is: neither a 1 nor a 2 in the
final stratum. This nominal is termed a chômeur. Stated formally, 12 The Chomeur Condition: (Perlmutter andipostal 1977) ${ }^{2}$ If some nominal $N_{a}$ bears a given term relation in a given stratum $S_{i}$ and some other nominal $N_{b}$ bears the same term relation in the following stratum $S_{i+1}$, then' $N_{\alpha}$ bears the Chomeur relation in $S_{i+1}$.

Stated informally, the chômeur has lost his job and may not hold a position as a term in any successive stratum.
1.5 Aspect and Transitivity Marking

The head of the predicate phrase in an Okanagan Passive is marked by a -t, preceded by either an -n for Perfective aspect or less frequently an -s for Imperfective aspect. These markings provide an additional argument based on simplicity for a bistratal structure for the Passive construction. These markings are exemplified below:
 take-PFTV-t-PASS the salmon INSTR my-male's.dad The salmon was taken by my father.

play - IMPF-t-PASS the $\because$ baby INSTR girl
The baby was being played with by the girl.
If the Passive is taken to be monostratal, there is: no 2-arc present in the relational network and the rule statements for both---t marking and -n/ -s aspectual marking are complicated considerably. Under a bistratal analysis, the rule of $-t$ is as follows. (see section 1.7.2, Chapter Two, p. 38 for conditions on this rule):

The morpheme -t marks the presence of an initial or advancee 2 in some stratum $S_{i}$ which remains a distinct nuclear term in the some and in successive final stratum $S_{i+1}$.

Under a monostratall analysiss,a statement suchas asthecfollowing one must be added to the above rule:
14.. The morpheme -t is also present in a passive construction. However, if the Passive is taken to be bistratal, no additional statement needs to be added to thés rule for the -t marking.

Under a bistratal analysis, the rule for the obligatory
marking of $-\mathrm{n} /-\mathrm{s}$ is as follows: (from section 1.7.1, Chapter Two, page 31): 15 Perfective or Imperfective marking:

The morpheme -n 'Perfective' or -s 'Imperfective' is marked on the head of a predicate phrase of a clause, where 'headr: isctaken to be the verbal root:
optionally (i) if there is an initial 2-are which is a 1-are in the final stratum with no other nuclear term are; or otherwise obligatomily (ii) if there is an initial or advancee 2-are which is a nuclear term are in the final stratum; and
(iii) if there is no Dative or Phantom are. i.e. Under à "mónostratal analysis, a statement such as the following one must be added to the above rule:

15' Perfective or Imperfective aspect is obligatomily marked on the head of a predicate phrase in a Passive constmuction, if there is no register of an initial Dative object.

However, if the Passive is taken to be bistratal, no additional statement
needs to be added to thissrulelstatementieither. Thus, these markings and their rule statements provide support for a bistratal analysis for the Passive in Okanagan.

### 1.6 Thematic ReIations:

Both. bistratal and monostratal analyses require a rule for the assigment of thematic roles. Consider aneactive transitive sentence below:

$$
\begin{align*}
& \text { chew-PFTV-t-S } 3_{\text {TRANS }} \text { the boy the fish. }  \tag{16}\\
& \text { The boy chewed the fish. }
\end{align*}
$$

In the interpretation of 16 , the boy must be interpreted as the chewer and the fish as the chewed. In the corresponding Passive below, the roles: of the boy and the fish remain the same. In general, the participant roles (thematic relations) of the subject of the Active and the oblique in the Passive are the same, and so are the participantroises (thematic relations: ) of the direct object of the Active and the subject of the Passive.

chew-PFrTV-t--.PASS the fish. INSTR boy
The fish. was chewed by the boy.
If thematic roles are assigned with the initial stratum, then a bistratal analysis for the Passive, with an initial transitive stratum, identical to the initial stratum of the corresponding active transitive stratum, adequately captures the interpretation facts, with only one assignment of thematic relations in the initial stratum. This avoids assigning the 'patient' role to the subject and the 'agent' role to the OBL of the Passive which would be necessary under a monostratal analysis:.

18
a ACTIVE TRANSITIVE CLAUSE $(=16)$

b. PASSIVE CLAUSE

$$
(=17)
$$


ttwît
§i. qqwə1x

### 1.7 Posting the Bans

The Animacy Hierarchy (see section 1.5, Chapter Two)
provides evidence that the Passive
of Okanagan is a bistratal construction, initially transitive.
The Animacy Hierarchy ranks: common nouns; placing a limitation on what can bear the subject relation inaa clause with a transitive stratum: 19 Human $>$ Animate $>$ Inanimate. Okanagan draws: a line between Animate and Inanimate, prohibiting inanịimate subjects and permitting only animate ones in clauses with a transitive stratum. However, inanimate subjects are permitted in clauses with only intransitive strata:

20a Si proukwla sol't.
The ball is/was lost.
b


The rock/is/was hit.


The Animacy Hierarchy provides an additional argument for preferring a bistratal analysis over a monostratal analysis. A monostratal analysis with only an intransitive stratum predicts that an inanimate subject is permissible in a Passive construction since a Passive wंould be intransitive throughout, whereas a bistratal analysis with an initial transitive stratum predicts that an inanimate final subject is not permissible in a Passive construction. This latter prediction is borne out, as illustrated below where a Passive with inanimate final subject in an intransitive final stratum is ungrammatical.

the boy kick-PFTV-t-S3 TRANS the girl
The boy kicked the girl.

the girl kick-PFTV-t-PASS INSTR boy
The girl was kicked by the boy.

The boy kicked the dog.

The dog was kicked by the boy.

The boy kicked the ball.

The ball was kicked by the boy.

hit-PFTV-t-SI ${ }_{\text {TRANS }}$ the rock
I hit the rock.

the rock hit-PFTV-t-PASS
The rock wasihit.
This provides evidence that the Passive is bistratal, with an initial transitive stratum, as represented below in the relational network of 24 b :

26


It can be pointed out that 19 b (of Chapter Two, p. 29) when contrasted motivates
with 25a-b above treating the Chômeur and an Instrumental
differently even though the case marking is the same.
Although not apparently germane to the argument, Passives in Okanagan cannot occur with a first or second person chômeur.
 play - IMPF - t - PASS the baby INSTR girl The baby was played with by the girl.
b


The baby was played with by you.

The baby was played with by me.
 The baby was played with by him/her.
$e$ * ?ৎíck( $n$ )stəm Sinca? $\sum_{i} t$ Sənwî?. I was played with by you.

You were played with by me.
This additional restriction does not seem to have $\therefore$ bearing on the argument that the Passive is bistratal.
1.8 Question Formation

Question Formation with swít distinguishes between final oblique and nuclear terms. When an oblique, non-chômeur object is being questioned, this interrogative is preceded by a case-marking preposition as in $\underline{c}$, $e^{e}$ below. If a nuclear term is being questioned, no case-marking preposition appears, as in $\underline{a}, \underline{b}$ below. If the nominal being questioned is not the subject in the final stratum, the nominal subject of the lower clause is raised into the upper clause, as in $\underline{b}$, $c$, e below. ${ }^{3}$

who COMP UNR-scrape-face-INCEP again
Who's going to shave next?
b. swỉt 乌i stomtîma? ¢i s@íw ( $-\mathrm{n}-\mathrm{t}$ ) - s?
who the grandmother COMP ask-PFTV-t-S $3_{\text {TRANS }}$
Who did the granmother ask?
c
 to who the boy COMP run To whom did the boy run?
d * swít $£ i$ ttwỉit $\uparrow i$ qỉcəlx (k'1) ?

from who the boy COMP run.away
From whom did the boy run away?

In a Passive, an interrogative with swít provides evidence
that the passive agent is not an oblique object since it is not questioned with a case-marking preposition: This shows that a Chômeur is not treated like an Instrumental, a fact explained by the bistratal analysis, but requiring an arbitrary statement in the monostratal analysis.

who COMP call-PFIV-t-PASS INSTR my-grandmother
Who was invited by my grandmother?

who COMP kiss-PFIV-t-PASS INSTR baby
Who was kissed by the baby?

who the baby: COMP kiss:-PFTV-t-PASS
Who was the baby kissed by?


who the my-grandmother COMP call-PFTV-t-PASS
Who was my grandmother invited by?
$f$ * $\varsigma_{i} t$ swít $\varsigma_{i} \varsigma_{i}(n)$ - stəmtîma? $k \varsigma_{i}$ x̆alítntəm ?

It may be concluded from the evidence based on Person and Number Marking, Word Order, Relative Clause Formation, Instrumental Case . Marking, Aspect añ Transitivity Marking, Thematic Relations, Animacy Hierarchy, and Question Formation with swit that the Passive in Okanagan is bistratal, initially transitive and finally intransitive.

## 2 Unaccusative Clauses

2.1 The Basic Claim

The basic claim of the Unaccusative Hypothesis (Perlmutter
1978) is that:

30 Certain intransitive clauses have an initial 2 but no initial 1. This can be exemplified for English:

31a Sasquatch exists.
b


The Final 1 Law (Perlmutter and Postal 1978a) predicts that clauses with final Unaccusative strata are not well-formed in any language and requires advancement to 1 . The relational network 3Ib above is diagrammed in accordance with the Final 1 Law.

Unaccusative clauses differ from Passive clauses in that the stratum containing the 2-arc in the Passive also contains a l-arc, although advancement-to-l occurs in both types of clauses. 32a The berries were eaten by Sasquatch. b

were eaten

Initially Unaccusative clauses contrast with initially Unergative clauses, which have an initial 1 but no initial 2: 33a Sasquatch plays at night.


At least three degrees of strength of the Unaccusative Hypothesis can be distinguished (Perlmutter 1978):

34a that initial Unaccusativity vs Unergativity varies unpredictably from Zanguage to Zanguage;
b that there exist principles which predict initial Unaccusativity vs Unergativity for certain classes of initially intransitive clauses in all languages and that there exist another è lass of such clauses which vary unpredictably;
c that there exist universal principles which predict initial Unaccusativity vs Unergativity for all initially intransitive clauses in all languages, without variation.

The basic idea is that predicates with equivalent meaning to those cited in English below will behave the same way with respect to initial Unaccusativity vs Unergativity. The following is a tentative classification of intransitive predicates with respect to initial Unergativity vs Unaccusativity in English (Perlmutter 1978): 4

35 Initial Unergatives:
a. willed or volitional acts, ex., work, play, smile, frown, think, meditate, walk, skip, run, hammer, pray;

$$
\begin{aligned}
& \text { manner-of-speaking verbs, i.e., whisper, shout, grumble, blurt out, } \\
& \text { sounds made by animals, i.e., roar, bark, neigh; }
\end{aligned}
$$

b. in voluntary bodily processes: cough, sneeze, burp, vomit, cry, sleep.

Initial Unaccusatives:
a. Predicate adjectives;
b. Predicates whose initial nuclear term is semantically a Patient: ex., burn, fall, float, slide, trip, hang, dangle, shake, etc.;
inchoatives: melt, freeze, rot, germinate, choke, blush, burst, dry up, vanish, etc.;
č. Predicates of existing and happening: exist, happen, transpire, occur, take place, arise, show up, disappear, end up, etc.;
d. Non-voluntary stimuli on the senses: shine, glow, snap, crackle, smell, stink, etc.;
e. Aspectual predicates: beginn, start, stop, cease, continue, etc.;
f. Duratives: last, remain, stay, survive, etc.

### 2.2 The Proposal for Okanagan

The purpose of the discussion here is: to establish a class of predicates determining initial Unaccusative strata in Okanagan. Although. not at issue here, it can be noted from the many examples of Okanagan throughout this work, that membership in the two broad classes: of initial Unaccusatives vs Unergatives is not identical in English and Okanagan and thus the strongest form of the Unaccusative Hypothesis cannot be supported.

At least six sub-classes of Unaccusatives may be distinguished at least tentatively in Okanagan, These classes with respect to initial Unaccusativity are based mostly on morphological grounds, with additional semantic divisions and, where known, syntactic patterning with respect to the Rëlational construction; otherwise, these classes are distinguished on semantic grounds.

Initially Unaccusative Predicates in Okanagan
A: the Final Consonant Reduplication class, which includes predicates whose initial nuclear term is semantically a Patient:

| incilixux | fried, frying | x̌alîtt | called, invited |
| :---: | :---: | :---: | :---: |
| $n a q^{\text {w }} q^{\text {q }}$ w | stolen |  | be spilt |
| kipp | pinched | p¢1a¢1 | grow (plants) |
| $c q^{*}{ }^{\text {w }} q^{\text {w }}$ | $\mathrm{cry}_{\text {SG }}$ | $\chi^{〔} ¢ 12 ¢ 1$ | dead |
| c'waw | pour/gush out | ¢nsk'pip | cracked (eggs) |
| ¢nx̌waw | go dry, dry up | ml'al' | bleed, bleeding |
| Enswaw | evaporate | cikk | burnt, fire |
| cqaqu' | be hit | ckak | count, counted |
| $\mathrm{q}^{\text {w¢ }}$ aypp | pants slipping | $\mathrm{x}^{\mathrm{w}}$ ¢ $12 ¢ 1$ | come to life, born, recover |
| $B$ : the | ckass, which | des predi | ates having stative meaning, |
| includin | incrementals: |  |  |

B1

| x̆ast | good | xastwíl'x get better |
| :---: | :---: | :---: |
| x̌ǔâsat | beautiful |  |
| qaṣt | bad | q'stwill'x get worse, more spoilt |
| q'qạasat | ugly |  |
| pypáyt | happy, lively | pypytwïl'x get livelier |
|  | strong, hard (ànimate) | $k^{w} c q^{\prime w}$ ¢ ${ }^{\text {ctwíl'x }}$ ( get stronger, harder (anim) |
| xac't stro | astrong (inanim) | xac'twil'x get stronger, harder (inanim) |
| $\chi^{3} \mathrm{a}$ ¢̆t | fast |  |
| $q^{\text {wr }}$ ¢ $1 c^{\prime} t$ | full | $q^{\text {w}}$ ¢ $C^{\prime}$ twîlıx get fuller |
| pax̌paxt | smart | pxypuxtwîl'x get smarter |
|  |  | sysytwillx get better (at sport or game) |

B2: those which occur as Relational Class A3; see Chapter Four.
sol't lost (around where the geography is known)
$y^{\text {fox }} \mathrm{t}$ fall off
snyfox ${ }^{w} t$ fall in
təłt trustable, straight, true
t'i¢I't ripped
B3: those which occur as Relational Class B; see Chapter Four..

| 1 Simt | glad | yolt | away |
| :---: | :---: | :---: | :---: |
| mil't | visit | krkw¢isst | be jealous |
|  | talkative | Saymt | be mad |
| łipt | forget |  |  |

B4: those for which occurrence in a transitive construction or : Relational constmetion is unknown.

cれəx ${ }^{w} \gtrsim^{2} a x^{w} t$ paralyzed (human) tntənt taut, tight

| mia?t | broken | crcert | stretched (human) |
| :---: | :---: | :---: | :---: |
| Sayt | tired (from inactivity) | qwizt | back-packed |
| Sayx ${ }^{\text {ct }}$ | tired (from activity) | $\mathrm{x}^{w}$ อ $1 \mathrm{x}^{w}$ ¹t | alive |
| su?1t | frozen (anim) | Suxt | frozen (inánị̀m). |
| qiilt | sick | Kint | afraid, worried |
|  | aching | Ki̋nkənt | dangerous |
| xSorxSrt | wasting time | $\therefore q^{\prime \prime} u y^{\prime} q^{\text {wis }}{ }^{\prime} y^{\prime t}$ | càlm, no wind |
| 7¢əq't | wide | qalt | green, fresh, unripe |
| níx ${ }^{\text {w }}$ t | deep | płeれt | thick |
| nwîst | high. |  | $t$ shallow |
|  | steep |  | wt tidy; in order |
| $\mathrm{x}^{\mathrm{w}} \mathrm{c}_{\text {it }}$ | lots, many | t'axt | sweet |


| žnumt | hurt | $t^{\prime} t^{\prime}{ }^{\text {wimint }}$ | $\mathrm{cry}_{\text {PL }}$ |
| :---: | :---: | :---: | :---: |
| snzomt | coughed |  | fight |
| $q^{w} q^{\text {w? }}$ int | burped |  | awful |
| Fract | bruised up |  | pitiful |
| ح¢ilx ${ }^{\text {w }}$ t | hungry | $q^{\prime} \mathrm{x}^{\text {w }}$ qax $^{\text {a }} \mathrm{t}$ | show off |

B6 Predicates which permit semantic extension, to notions 'to begin to' and 'around/back \& forth'.


〔əm؟út begin to sit
$q^{\text {wa }} \uparrow 1 q^{w}{ }^{w} \uparrow 1$ át begin to be talkative
C: Predicate adjectives, including inchoatives and colours, with some overlap with the -t class.

C1

| Snctozt | cold (weather) | Snctoz | getting cold (weather) |
| :---: | :---: | :---: | :---: |
| Kiyt | cold (human) | Kiy't | getting cold (human) |
| $q^{\text {w }}$ uqw ${ }^{\text {w¢ }}$ ( ${ }^{\text {c }}$ | warm (weather) | $\mathrm{q}^{\text {w¢ }}$ ¢ | getting warm (weather) |
|  |  |  | get warmer |
| qw ${ }^{\text {w }}$ uct | fat | $\mathrm{q}^{\text {w }}$ ¢ $u c$ | getting fat |
|  |  |  | get fatter |
| $c ¢ w c ¢ a w^{2} t$ | clean | çaw | turning clean |
| n¢əq' | rotten | n ${ }^{\circ}$ ว q' $^{\text {a }}$ | getting rotten |
| w¢ik | shiny - | w¢ik | turning shiny |
| $q^{\text {w }}$ ¢ ${ }^{\text {il }}$, | wilt | $q^{\text {w }}$ ¢ $i 1{ }^{\text {c }}$ | wilting. |
| $\mathrm{k}^{\mathrm{w}} \mathrm{E} \mathrm{l}^{\prime} \mathrm{t}$ | warm (house, human) |  | getting warm (house, human) |
| kw¢əl'st | be warming | y ${ }^{\text {at }}$ | falling apart |


|  | brioight | $\mathrm{p}^{\text {¢ }}$ ¢ $\mathrm{x}^{\text {w }}$ | dawning, getting light |
| :---: | :---: | :---: | :---: |
| $\mathrm{c}^{2}$ ¢ Pq t | sour | c ${ }^{\text {¢ }}$ - | turning sour |
| ¢̌¢ə1 | clear (weather, glass) | $\breve{\mathrm{x}}{ }^{9} \mathrm{P}$ | clearing up |
| piq | white |  | turn white from the sun, sun-bleached |
| pia | grey | p ${ }^{9}$ a | faded |
| $q^{2}$ ¢ $a^{\text {a }}$ | binue | $q^{\text {w¢ }}$ ay | turning biủe |
| c¢ax̆ | red | c¢̣ă | turning red |
| cuy' | dark | $\mathrm{x}^{\mathrm{w}} \mathrm{m}^{1}$ | be in a hurry |
| $k^{\text {wrin }}$ ? | yellow | Kヶว? | get stuck |
| $p^{\text {s }}$ um | brown | Kık? | get crowded out |
| $q^{\prime} q^{\prime}$ 'ay | multi-coloured |  |  |
| $k^{w ¢}{ }^{\text {i }} 1$ | orange |  |  |
| $q^{\text {ws }}$ in | green |  |  |
| C2: Predi | icates without known | inchoative | form. |
| t'iq $^{\text {w }} 1 q^{\text {w }}$ | tall | piyaq ${ }^{\text {a }}$ | ripe |
| nx̌í | scared | tiz | straight (linear) |
| torik | young | wísxn | long |
| tit'timux | lazy | xoxi? mix | mixed up |
|  |  |  |  |
| Iplptúz forgetful |  |  |  |
|  |  |  |  |
| czax̌ ${ }^{\text {w }}$ | holey ${ }_{\text {SG }}$ |  | $\mathrm{holey}_{\text {PL }}$ |
| yayá?kw¢ə? | stingy | p¢wp ${ }^{\text {cwalx }}$ drumming, banging |  |
| q'iwlx | old | s¢ys¢y?alx | noisy |
| nir | smooth (surface) | nírnərt | compact |
| pil | flat | milk ${ }^{2}$ | round, spherical |
| yir | ring, round |  |  |

D: the $\vdots p$ class, which includes predicates of naturally occurring states:

| t'sap | harden (by itself). | $\lambda^{2} \times \mathrm{zap}$ | grown up (human) |
| :---: | :---: | :---: | :---: |
| tirrap | untangled | ¢əcáp | caught |
| h'rap | soaked | c - tirap | running (water) |
| $\mathrm{K}^{\text {w }}$ ¢ nap | grabbed | ttir'ap | trickle (water) |
| $\mathrm{k}^{\mathrm{w}}$ ว 1 p | lose a game | tc¢ap | shake, jar |
| qw¢aláp | moldy | $q^{\text {w¢ }}$ ayp | pants way down |
| ctnap | get tight | $t^{s} l^{\prime} \mathrm{ip}$ | ripped |
| x'w $^{\text {w }}$ cap | broken (arrow) | solp | twisted |
| SnmSap | broken (eggss \& other delicate things:) | $r t^{\prime}$ ¢ $\partial \mathrm{p}$ | dirty |
| Snsl'iplost | iost (where geography is unknown). | $\mathrm{t}^{\text {¢ }}$ ¢p | getting dirty |
| ¢əmáp | melt | $q^{w ¢}$ ¢p | slip |
| ¥tap | bounce $u^{\text {u }}$ SG | $\mathrm{q}^{\mathrm{w}}{ }^{\text {¢ }}$ ¢ ${ }^{\text {p }}$ | slipping, sliding <br> (involuntary) |
| ¥it'pt | bounce $\mathrm{up}_{\text {PL }}$ |  | bounce off |
| れ ²atáap $^{\text {a }}$ | bounce $\operatorname{Up}_{\text {ITER, }}$, $S G$ | $2^{2}$ 1 1 р | stop. |
| zazittpt | bounce $\mathrm{up}_{\text {ITER }}$, PL |  |  |

E: Aspectual and durative predicates.
tłaz start I¢uwín left behind

F: Reflexive Unacusatives, a class with Reflexive meaning, ending in /-myst/ [mist], listed with English and French translations. ${ }^{5}$

Kamyst
kamysst
tfumyst
$x^{w}$ ûymyst/ $x^{w}$ ymíst take oneself;
s'engager qqn.
s'être engager
s'acheter
s' !emener

| hewhowinyst | loosen oneself up; | se dégager, s:'étirer |
| :---: | :---: | :---: |
| w¢ikwmyst | hide oneself; | se cacher |
| w'ows ${ }^{\text {che }}$ wnty'st | hide oneself around; | se cacher ici et lá |
| 1 ¢rmist | : ffaintet, rígid oneself; | se raider |
| ? akwmyst | take, check oneself in; | s'entrer, s'enrégistrer |
| tzmist | stràighten oneself; | se redresser |
| s¢âymyst | noisy (anim., like coyot | es, kids yapping) |

## 2. 3 Supporting Evidence

Evidence for final subjecthood is: available from Person/Number Marking and from Topicalization. The correct person/number marking consists of the set of intinansitive subject markers:

Only a final subject may be topicalized (cf. section 2.1.4, Chapter Two).

b $\underline{\text { ¢i snk'lỉp }}$ şáymyst.

b $\quad$ i $p^{9} u^{w} 1 a ? ~ ¥ t^{2}$ zatàp.
45a t'íqw $1 q^{w}$ 〔i xíxwtm. Thè girl is tall.
b $\quad \underline{i} x^{i} x^{w} t m^{\prime} t^{2} 1 q^{w} 1 q^{w}$.
$47 \mathrm{a} \quad q^{\text {ww }}$ ucwill'x ij ttwît. The boy got fatter.
b $\quad$ ¢i ttwitt $q^{\text {qw }}$ ucwíl ${ }^{\prime} x$.

b $\quad$ i slaxt -s $\quad$ s ill ${ }^{w} t$.
49a pax̆pax̆t 〔i sqī1xw. The Indian/person/man is smart.


Limited evidence for initial 2-hood forathènominal in the $B, D$, and $F$ sub-classes tentatively proposed above is available from two phenomena: the choice of first person singular pronoun as head nominal in a cleft construction and Moving Glottalization.
2.3.1 Choice of Sinca? / inca? kn

Cleft constructions in Okanagan may be characterized at least superficially as follows:
i) a cleft begins with a member of the set of demonstratives, frequently

Sixi? 'that' [visible, non-proximate], followed by the focus followed by the complementizer and downstairs clause;
ii) the complementizer $\oint i$ is used and may optionally be deleted; 个ə occurs in sentence 56 ; the other complementizers are unattested;
iii) like the relative clauses, Okanagan permits cleft constructions on a downstairs final 1 or 2, but not on a downstairs oblique object; iv) in a cleft, the upstairs nominal bearing the predicate relation is restricted to the $t$ 'non-specific' determiner, except for pronominals and properinames which do not take a determiner and for a possessed nominal which requires the specific determiner.
(See also section 2.1.3, Chapter Two.).)

In a cleft construction involving the first person singular as head nominal, with certain predicates downstairs, either form of Sinca? or Sinca?kn may be chosen. However, in constructions: with certain
other predicates: downstairs, only one of these may be chosen.
It should be noted that native speaker judgments involved in this phenomenon are difficult to make and easily confusing and that data are sufficient but sparse.

First of all, the choice is restricted to Sinca? in regular transitive constructions, with an agentive nominal bearing the final l-relation in the downstairs clause:

that me COMP Cont-wèigh $\leftrightarrows P F T V-t-S I_{\text {TRANS }}$ the potato
That's me who weighs the potatoes.

COMP kick-PFTV-t-SI ${ }_{\text {TRANS }}$ the ball
That's me who kicked the ball.
 COMP hit-PFTV-t-Sl ${ }_{\text {TRANS }}$ the rock INSTR rock. That's me who hit the rock with a rock.
d

$$
\begin{aligned}
& \text { COMP. Connt-fry-PFTV-t-S1 } 1_{\text {TRANS }} \text { the egg }
\end{aligned}
$$

That's me who fried the eggs.
The choice is: also restricted to Sinca? in a putative intransitive Unergative clause, which has an initial 1 but no 2:
 COMP $\mathrm{Sl}_{\text {INTR }}$ run to store

That's me who runs to the store.
The choice is restricted to $\{i n c a ? k n$ if the cleft construction
relativizes upon a first person nominal bearing the 2-relation in the downstairs clause:

COMP me s-PF-kick-TMPF-t-S3 TRANS the policeman
That's me that the policeman is kicking me.
A choice of either inca? or Sinca?kn can be made if the cleft
construction relativizes upon a first person nominal bearing an initial 2-relation and a final l-relation in the downstairs Passive clause:

That's me that was kicked by the policeman.
Given this distribution, it is predicted that in the putative Unaccusatives, a choice of either $\left\{\right.$ inca? or inca? $^{2} \mathrm{kn}$ could be made, reflecting both grammatical relations borne by the relativized nominal, a 2 in the initial stratum and a 1 in the final stratum:

CLASS B
54a Sixí? $\left\{\begin{array}{l}\text { inca? } \\ \text { sinca?kn }\end{array}\right\}$ si kn sol't.
That's me who's lost (around here).
b Sixï? $\left\{\begin{array}{l}\text { inca? } \\ \text { Sinca?kn }\end{array}\right\}$ ai kn Saymt.
That's me who's mad.

That's me who's full of fish.
CLASS' D
55 Sixî? $\left\{\begin{array}{l}\text { sinca? } \\ \text { sinca? } k n\end{array}\right\}$ 个i kn slìp.
That's me who's lost (up high in the timber).
CLASS F


That's me who hide myself.
This prediction is borne out, providing support for both the 2 -hood and the l-hood of the relativized nominal of the downstairs clauses in the putative Unaccusatives.
*. That the nominal is: a final 1 is supported by the presence of a subject marker ( kn , first person singular, intransitive) and not an object marker; hence the nominal is a 2 in the previous and initial stratum.
2.3.2 Moỹing Glottalization

In Chapter Two, section 2.2.1, a rule of Moving Glottalization ${ }^{6}$ was stated and fully exemplified, as glottalizing the verbal root and suffixes if the initial 2 of the clause moved or varied. In the third person, all the resonants of the verbal root and suffixes are glottalized. In the first and second person, only the final resonant is glottalized.

Data are available from only two classes of putative
Unaccusatives, with respect to Moving Glottalization:

CLASS D
57a.kn
$\mathrm{Sl}_{\text {INIR }}$
街解
I bounce.
b. $\mathrm{kn} \quad \underline{\text { te }}$ ºp $-\mathrm{m}^{\prime}-\mathrm{n}^{\prime}-$ cút. ${ }^{7}$
$\mathrm{SI}_{\text {INTR }}$ bounce-REL/2-PFTV-REFL

CLASS F
$58 \mathrm{a} \mathrm{k}^{w} \mathbf{u}$ həwhow' - myst. We loosen ourselves up. $\mathrm{Pl}_{\text {INTR }}$ loosen. up-UNACCUS REFL
b həwhəw - mi'st 1'x
loosen. up-UNACCUS REFL. $^{P} 3_{\text {INTR }}$
59a kn winikw $^{w}$ - myst. I hide myself (and stay put).
${ }^{S 1}$ INTR hide-UNACCUS ${ }_{\text {REFL }}$

REDUP-hide-UNACCUS ${ }_{\text {REFL }}$ P3 INTR here and there.
Thus, Moving Glottalization also provides evidence for initial
2-hood and final l-hood in the intransitive putative Unaccusative clauses.
2.4 Representation of Unaccusative Clauses:

The structure of the Plain Unaccusatives (Classes A thru E). is: represented in the stratal diagram a below and in the equivalent relational network $a^{\prime}$. The structure of the Reflexive Unaccusative (Class $F$ ) is represented in $\underline{b}$, with the equivalent relational network 'b'. For ease of comparison, the agentive Reflexive network diagram is repeated below as $c$ and $c^{\prime}$.
a

$\ddot{a}^{\prime}$


REFLEXIVE UNACCUSATIVE (CLASS $F$ )
b.



AGENTIVE REFLEXIVE

> c

$c^{\prime}$


In Okanagan, the construction, known as the 'Middle voice' in Salishan linguistics, is logically and initially transitivè but finally intransitive, morphologically and syntactically, as exemplified below: 6la kn kwúl' - m t yámx wa?
$\mathrm{Sl}_{\text {INTR }}$ work-MIDDLE a basket
I fịx, mâke a basket.

S1 INTTR Cont-fry-MIDDLE some egg
I fry some eggs.

$\mathrm{Sl}_{\text {INTR }}$ look.after-MIDDIE some PI-elder
I look: after elders.
Morphologically, these are intransitive in the choice of subject marker. Syntactically, these are analyzed here as initially transitịve since the nominals of the Middle voice bear the same initial thematic relations as do their counterpart counstructions in the active voice, the initial 1 and initial $2:^{8}$

62a k'wul' ( $-\mathrm{n}-\mathrm{t}$ ) - n ¢i yámxwa?
make-PFTV-t-SI ${ }_{\text {TRANS }}$ the basket
I made the basket.

Cont-fry-PFTV-t-Sl ${ }_{\text {TRANS }}$ the egg
I fried the eggs.

look.after-PFTV-t-S1 $1_{\text {TRANS }}$ the PL-elder
I looked after the elders.

However, unlike their active counterparts, the initial 2 of the Middle voice construction is not available for Passivization which promotes a 2 to a 1 , for Relativization which permits a relative clause only upon a downstairs
 'all' to float off of a 1 or a 2.

PASSIVIZATION
63a *. ai kw̛áp kwụl -m ai $t$ sqəl'tmíxw.
the horse work-MIDDLE INSTR man
The horse was worked by the man.

the horse work-PFTV-t-PASS INSTR man
The horse was worked by the man.

the horse work-MIDDLE-PFTV-t-PASS ....
d Si sqəl’tníxw k'úul - n ( -t ) - s $\mathrm{S}_{\mathrm{i}}$ kw iâp.
the man work-PFrTV-t-S3 TRANS the horse
The man worked the horse.
RELATIVIZATION
 the boy eat - PFTV-t-S3 TRANS the egg COMP $S l_{\text {INTR }}$ fry-MIDDLE
! The boy ate the eggs that I fried.
QUANTIFIER FLOAT


the woman
all look.after-MIDDLE some PL-elder The woman looks after all the elders.

### 3.1 Four Possible Analyses

Four analyses are possible for the structure of these clauses: a) the Antipassive, first proposed by Postal (1976) as a clausal structure existing in many languages;
b) $2 \rightarrow 3$ Retreat;
c) Spontaneous Chômage; or
d) $\bar{a}$ Phantom Arc solution.

These are diagrammed below:

66
a ANTIPASSIVE

c SPONTANEOUS CHOMAGE

b
$2 \rightarrow 3$ RETREAT
d PHANTOM ARC

-


All four possible structures are initially transitive and finally intransitive. The $2 \rightarrow 3$ Retreat proposal claims that the initial direct object is finally an indirect object whereas the other two claim that this nominal is a 2-chômeur. The Antipassive proposal claims that the initial and final 1 is: also a 2 in an intervening stratum. The Phantom Arc solution claims that a non-nuclear term advances to 2 and finally to 1 with which it is non-distinct.

Three arguments are presented in support of the Antipassive proposal: Selection of inca?/§inca?kn in section 3.2, Lexical Incorporation in section 3.3, Quantifier Float in section 3.4. Section 3.5 points out a serious problem and proposes a Phantom Arc solution.
3.2 Selection of Sinca?/ Sinca? kn

This test provides evidence that the final liss a 2 in some. stratum. In section 2.2.2, Chapter Two and section 2.3.1, Chapter Three, it was shown that in a cleft construction, the selection of either Sinca? or $\oint$ inca?kn as head nominal was restricted as follows: (a) to Sinca? in the case of a relativized downstairs nominal which is a lin all strata;
(b) to Sincalkn in the case of a relativized downstairs nominal which is: a 2 but is never a 1 ; and
(c) to either $\oint$ inca? or ©inca? kn in the case of a relativized downstairs nominal which is both a 1 and a 2.

This predicts that if the final subject in a Middle voice clause is both a 2 and a l, as claimed by the Antipassive proposal, either Sinca? or §inca?kn would be suitable in a cleft with a downstairs Middle voice clause.
 that me $\quad$ COMP SI $_{\text {INTR }}$ scream-MIDDLE That's me who screamed.
 That's me who weighed some potatoes.
 COMP $\mathrm{Sl}_{\text {INTR }}$ hit-MIDDLE INSTR rock

That!s me who was hit with a rock.
 COMP $\mathrm{SI}_{\text {INTR }}$ Cont-pour-MIDDLE some coffee That's me who poured some coffee.

That's me who fried some eggs.
This supports the Antipassive proposal with respect to the final subject being a 2 at an intermediate level.

The Chômeur Condition, cited in footnotec2, Chapter Two, page
54, predicts that the object nominal is finally a 2-chômeur; however, no syntactic evidence is available to support this prediction.

### 3.3 Quantifier Ban

The quantifier ban proposed below shows that the putative intial 2 is not a final 2 or a final 3. Both $2 s$ and $3 s$ may be modified by the quantifier y؟əy؟̧?t 'all'. The a, c sentences exemplify ä..quantified 2-nominal, the $\underline{b}$ sentence a quantified 3 -nominal. (See Chapter Four, section 1.3 for evidence that the quantified nominal in $\underline{b}$ bears the 3-relation.)
 give-INDIR-t-S3 $3_{T R}$ all the beaver the woman He give all the money (to) the woman.

work-BENE-t-SI TRANS the broth all the children
I fix the broth (for) all the children.

I fix all the children the broth.
However, in the Middle voice clause, the object nominal may not be quantified at all. This provides evidence that this nominal is: no longer a 2 nor is it a 3:

$\mathrm{SI}_{\text {INTR }}$ Cont-fry-MIDDLE all the/some egg
I fry all the eggs.

I fry some eggs.
 I lookaafter all the elders.

I look after some elders./ I look after elders.

The facts with respect to Quantifiers show that this is not a case of $2 \rightarrow 3$ Retreat. The facts with respect to Cleft Construction with choice of inca? $/$ inca? kn show that the Middle voice construction involves a 1 which is a 2 at some point, thus arguing against Spontaneous Chômage and $2 \rightarrow 3$ Retreat.
a


the my－grandmother work－MIDDLE some PL－basket
My grandmother worked some baskets／makes：baskets／fixes baskets．
The phenomenon of Quantifier Ban on 2－chộmeurs is in fact
broader．Data from Passives shows that l－chômeurs may not take the quantifier yโəy〔る？t＇all＇：

The baby was played with by the girls：．
b

The baby was played with by all the girls．

The baby was played with by the children．

The baby was playyed with by all the children．
However 2－chômeurs in a Dative clause may take the quantifier y ${ }^{〔} \partial y$ §§？$t$ ＇all＇which points to a distinction between the Dative and Middle clause types：

I fry the children all the eggs.
This distinction will be useful later in evaluating the proposed
Phantom Arc solution.
The relevant generalization with respect to Quantifier Ban in Okanagan is:

75 Quantifier Ban
The quantifier y؟əys?? 'aZl' is not permitted with a 2-chômeur nominal in thie Midale vörice or a 1-chômeur. 2
3.4 Lexical Incorporation

Lexical incorporation also provides evidence that the putative initial 2 is neither a final 2 nor a final 3. In a Locative construction, a nominal bearing a Locative relation in the initial stratum may advance to 3 (cf. Chapter 4, section 3.3 for evidence). The basic pattern is exemplified below:

the boy kick-PFTV-t-S3 TRANS the girl the LOC foot The boy kicked the girl on the foot.
 the boy kick-INDIR-t-S3 TRANS the girl the foot-his/her The boy kicked thegirirl on her foot/the girl's foot.

A small set of nouns may incorporate into the verb, although. the lexical suffix that incorporates need not have the same form as the independent word. In Chapter Three, section 3.3, it is shown that a nominal bearing the Locative relation in the initial stratum may optionally incorporate into the verb while bearing a 3 relation, and moreover may not
advance to 2. This optional incorporation is exemplified in the Passives below which guarantee that the initial Locative has not gone on to advance to 2 since a Passive is finally intransitive:
 the girl kick-INDIR-t-PASS the foot-his/her INSTR boy The girl was kicked on her foot by the boy.
 the girl kick-foot-PFTV-t-PASS INSTR boy The girl was kicked in the foot by the boy.
 the boy slap-INDIR-t-PASS the head-his INSTR man The boy was slapped on his head by the man.

the boy slap-head-PFTV-t-PASS INSTR man
The boy was slapped on the head by the man.
This optional incorporation of a nominal bearing al 3 relation contrasts with the facts for a Middle voice clause, where the incorporation is obligatory if a lexical suffix is available:

the boy Dist-curry-horse-MIDDLE always:
The boy curries horses all the time.

the boy Dist-curry-MIDDLE some horse

the woman Dist-comb-hair-MIDDLE
The woman combs her hair.
b) * Si tkłmilx $k$ - tx - abm t qpqîntn - s. the woman Dist-comb-MIDDLE some hair-her
 the girl Dist-curl-top.of.head-MIDDLE The girl curled her own hair.
 the girl Dist-curl-MIDDLE some hair-her/ some head-her

$\mathrm{Sl}_{\text {INTR }}$ stretch-skin-MIDDLE
I'm stretching out my (beaver) pelt.

$\mathrm{Sl}_{\text {INTR }}$ stretch-MIDDLE some my-beaver-skin

It should be noted that in the examples above that the object nominals are not modified by an adjective. If the object nominal is modified by an adjective, the lexical incorporation must still occur; however, the equivalent indèpendent words are also retained.
 the man work-house-MIDDLE a big a house for chief The man built a big house for the chief.
 the man work-MIDDLE a big a house for chief

Sentence 83a above also illustrates the fact that lexical incorporation is not lexically determined solely by the predicate as do the sentences below:
 the woman Dist-comb-INDIR-t-S3 ${ }_{T R}$ the hair-her The woman combs her hair.
b $\quad$ i $c^{?}$ 〇ə
the head-her Dist-curl-INDIR-t-PASS INSTR girl
Her head was curled by the girl.
The evidence from lexical incorporation, optional with a nominal bearing a 3 relation, demonstrates that the object nominal in a Middle voice clause does not bear this relation since incorporation is obligatory. ${ }^{10}$ This provides an additional argument against an analysis of these clauses as $2 \rightarrow 3$ Retreat. This argument is based on simplicity. If Middles involve $2 \rightarrow 3$ Retreat, 3 s resulting from this rule would act differently from advancee 3 s with respect to incorporation, requiring an extra statement.

Although not germane to the argument, this distinction between obligatory and optional lexical incorporation may cast some light on the role of putative 3 s . Certain verbs: which determine initial Unaccusative strata take an object nominal which is clearly non-nuclear and probably not an oblique either. Which grammatical relation is borne by such a nominal is unclear. These verbs are exemplified below with tiumyst 'buy', a member of Unaccusative Class F (Reflexive Unaccusatives L, and $\lambda^{\prime} x^{w}$ úp 'win, beat out', a member of Unaccusative Class D (the -p class):

$\mathrm{Sl}_{\text {INTR }}$ ITER-buy-UNACCUS REFL some horse
I bought several horses.
b


$\mathrm{Sl}_{\text {INTR }}$ win © a horse
I won/beat out a horse (as in a horse race against another horse).
b


First, the object nominal in question does not take a case-marking preposition, hence it does not bear an Oblique relation in the final stratum.

Second, no Passive clause and no Relative clause may be formed with the object nominal in question, so it is not a 2 :

The horses were bought by the chief.

The horse was won/beat out by the chief.

the man see-PFIV-t-S3 $3_{\text {TRANS }}$ the horse COMP
kn tiwt个úmyst.
$\mathrm{Sl}_{\text {INTR }}$ ITER-buy-UNACCUS REFL
The man saw the horses that I bought.
 The man saw the horse that I won/beat out.

Third, the morphological markings provide evidence that thits: is not a 2. The person and number markings in 85 and 86 are those for subject of intransitive clauses and there is no plural marker for direct object in a transitive clause. (See charts of verbal conjugations with. transitive person marking in Chapter Two, pp. 21-24.) Fourth, the object nominal in question accepts a quantifier, as is permissible for a 3, variably for a 2 -chômeur (see section 3.3 on Quantifier Ban):

I bought all the horses.

I won/beat out all the horses (as in a race against more than one horse with the speaker beating them all).

Fifth, lexical incorporation is optional, as it iss for the 3 nominal in the Locative clauses (see above and Chapter Four, section 3.3):

I bought several horses:
b. kn tift ${ }^{\omega} \mathrm{w}$ - sqáxa?.

I bought several horses.

I won/beat out a horse.
b kn $x^{\text {x }} \mathrm{x}^{w}$ z̀p - sqáxa?
I won/beat out a horse.
Thus: the underlined nominals in the a sentences above may bear a 3 relation in the initial stratum.

### 3.5 A Phantom to the Rescue

There is a serious problem with the Antipassive analysis for the Middle voice clauses of Okanagan. Many Middle voice clauses do not have an initial direct object:

22a kn c〔əc〔รур - m.
$\mathrm{Sl}_{\text {INTR }}$ s.cream-MIDDLE
I scream.
b. $\mathrm{kn} \quad \mathrm{K}^{\mathrm{w}} \mathrm{u} \mathrm{Tl}^{3}$-m.

Sl INTR W०rk-MIDDLE
I work.
c kn $\mathrm{x}^{\mathrm{w}} \boldsymbol{z}^{\mathrm{s}}$. - âm.
$\mathrm{Sl}_{\text {INTR }} \quad$ whittle-MIDDLE
I whittle.
a kn ck - ám.
$S_{\text {INTR }}$ count-MIDDLE
I count.
According to Postal's original proposal (1277) for an Antipassiye, the initial 1 demotes to 2 in order to place the initial 2 en chômage, thus providing an explanation for the final intransitivity of such clauses. Consequently, in the Okanagan clauses a-d above, the initial 1 would demote for no good reason.

One obviious solution is simply to list this as an irregular fact of Middle voice clauses in Okanagan. However, another possible solution is to posit a covert nominal, non-distinct from the subject in the final stratum, to account for the Middle voice clauses. Allen, Frantz and Gardiner (1981) propose such a solution, positing a covert nominal, referred to as the 'phantom arc analysis' to account for certain
apparently irregular verbs of Southern Tiwa. Their proposal is supported with evidence from advancements:, pronominal agreement, possessor ascenstion and.impersonal passives.

Evidence for a Phantom arc is difficult to discover; however, three arguments may be advanced in support of a 'phantom arc solution' for the Middle voice clauses of Okanagan, one from the semantic interpretation of these clauses, the other from advancement, and a third from Possessor Ascension.
(1) In the Middle voice, in Okanagan, the subject is interpreted as acting upon itself, for its own benefit, or as having some particular skill at the act. For example, in a below, I have the particular skịll of whittling well. In $\underline{\mathrm{b}}$ below, I am able to count, i.e., to calculate. In $\underline{c}$, it is my job to look after the elders. In $\alpha$, the boy enjoys: his: work and does it well.

23a kn $x^{w}$ et ạm. I whittle.
b kn ckâm.

I count.

The boy horse-curries all the time.
By comparison, the counterpart active voice clauses do not carry this additional semantic interpretation.
(2a) The semantics of the Middle voice clauses of Okanagan are similar to the traditional characterization of the Middle voice in Homeric Greek:

Homeric Greek:
24 1067. The midale voice denotes the subject as acting reflexively 1) upon itself, 2) for itself, 3) upon something belonging to
itself, or in which it has a special interest. 1068. It is often difficult to distinguish in translation between the active and the middle, but the action of the middle always has some reference, either direct or indirect, to the subject, and the subject has an interest in, or is affected by the action.
(Pharr 1959:328)
To posit a phantom nominal, initially a non-nuclear term, advancing to 2 then to l, with which it is non-distinct, would be to provide the semantics of the Middle voice with a syntactic structure and motivation. (2b) This proposal of a Phantom arc is also supported by a difference in interpretation between Middes and Actives in a Benefactive construction. (seesthe treatment of Benefactives in this work under the cover term Datives in Chapter Three section 1.) In a Benefactive construction with a third person pronominal oblique, there are two possible readings for the reference of the pronominal. In a Middle voice construction, the reference of the pronominal is restricted to only one reading, i.e., as having the same referent as the subject. The examples below show that the distinction may not be accounted for by some condition requiring co-reference, stated on the initial grammatical relations.


the girl sew-MIDDLE some mocassin for S3
in) * The girl ${ }_{j}$ sew some mocassins for him/her ${ }_{k}$.
iii) The girl ${ }_{j}$ sew some mocassins for herself ${ }_{j}$.

A statement is necessary to account for the restricted reference in 26 , with an anaphoric link between the final $l$ and $k$ l. cnîłc. Such a link can be guaranteed by aneanalysis in which the Dative iss a copy of the Phantom arc. The following relational network might be suggested for 26, with an anaphoric link between the 1 and the final DAT, where Dative could serve as a cover term for other oblique relations including a 'phantom' nominal of the Middale:

27


However, there are four problems with this suggested network:
(i) It appears to be a violation of the Oblique Law, not in its intent, but in its wording:

## Oblique Law (PerImutter and Postal 1978)

A nominal that bears a term relation in a given clause may or may not bear that relation inthe initial stratum in that clause. A nominal that bears an oblique relation in a clause, on the other hand, bears that relation in the initial stratum.

This: suggested network ( 97 above) is not introducing a new oblique but
one with an anaphoric link connecting it with the initial oblique arc.
(ii) The semantics of the Middle voice interpretation are left unaccounted for. There is a difference in meaning between the restricted readings of 95 and 96. The Benefactive in 25 lacks theinterpretation of the Middle in 96 where the girl is consịdered as having some special skill in sewing.
(iiii) In Midde voice clauses of Okanagan, no advancements to 2 , where 2 is distinct from the 1 , are permitted. This is quite unlike the counterpart transitive constructions in the active voice, which, permit several adyancements to 2: Dative (Benefactive/Indirective) Advancement, Relational Advancement, Locative Advancement, Instrumental Advancement and Limited Control Advancement (see Chapter Four for details).
(iv) The distinction between Dative and Middle clauses with respect to Quantifier Ban (section 3.3) also argues against the applicability of DAT as: a cover term.

Thus, an analysis with Dative as cover term for Phantom cannot be maintained for all cases, hence the cover term NN for Non-Nuclear iss used:

## 99a

INITIALLY INTRANSITIVE MIDDIE CLAUSES

-(á)m
b
INITIALLY TRANSITIVE
MIDDLE CLAUUSES


A third argument iss available from Possessor Ascension in support of the Phantom arc solution overthe Antipassive. This follows from the analystis: of Possessor Ascension in Chapter Four. The third argument is: given in section 4.4 of Chapter Four.

The Phantom Arc solution accounts for all the known facts of the Mirddle voice clauses of Okanagan:
i) initially transitive, as exemplified in 6la-c;
iii) initially intransitive, as exemplified in 22a-d;
iii) no Passivization, Relativization or Quantifier Float permitted from the initial 2, which is therefore not a final 2;
iv) obligatory lexical incorporation of the initial 2 nominal, if there exists a lexical suffixal form, showing that the initial 2 is not a.final 3;
v) Quantifier banned from the initial 2 nominal which is therefore neither a final 2 nor a final 3, but a chômeur;
vi) additional semantic interpretation of subject as affected by the action.
3.6. Consequences for the $-m$ Morphology

The -m occurs on two types of clauses: discussed in this work:

1) The -(a)m of the Middle voice marks: a finally intransitive clause.
2) Additionally, the verbal morphology of the Passive construction ends
in the same consonant: -tom/-tîm, but not in the same stressed vowel.
The -m consonant may now be isolated as a marker of intransitivity in the final stratum.

FOOTNOTES - CHAPTER THREE
1 The issue of how the passive is related to the active has been widely discussed in linguistic theories (see for example, Chomsky 1957) Bresnan 1978, Freidin 1975). In Relational Grammar, this issue is cast as a discussion of a monostratal vs a bistratal analysis for the Passive.

2 See Footnote 3, Chapter Two, page 54.
3 See section 2.6 , Chapter 4, on swít with animate and inanimate instrumentals.

4 If one assumes that there is a constant relationship between thematic and grammatical relations and that thematic relations are determined with the initial assignment of grammatical relations, then the Unaccusative Hypothesis raises an interesting issue: whether a particular verb or class of verbs could receive more than one assignment of grammatical and thematic relations. In Canadian-French, a number of intransitive verbs may take either avöir or ềtre as auxiliary verb (Canale, Mougeon, Bélanger 1978):

```
a. Je suis tombé. I fell accidentally.
b. J'ai tombé. I fell on purpose.
```

This verb tomber is a candidate for receiving two assignments of thematic/ grammatical relations, one as determining Unaccusative stratum, as in a above, and the other as determining Unergative stratum, as in b above. The different assignments correlate with the semantic differences in purposiveness, agency or control or whatever else this should be termed. The advantage of this assignment lies in the simplification of rule statement for the presence of etre: in a bistratal Passive construction and in Unaccusative construction, both of which are characterized.by an initial 2-nominal advancing to 1 . In Okanagan, it appears that a verb may determine both Unaccusative s.tratum and an active transitive
stratum. See examples of this in section 3.2, Chapter Four, and in section 2.3, Chapter Five.

5 It should be noted that the -myst class of reflexive verbs appears to have only one thematic relation, that of patient or theme, unlike the agentive reflexives with. -cút which clearly have two: agent and patient or theme. Compare 'I slap mysèlf' (an agentive reflexive in Okanagan) with 'I hide mysë̉f' (an Unaccusative reflexive in Okanagan). In the former, the self which has undergone the action is separable from the self which has performed the action. In the latter, it is difficult to separate these out.

Ifithe rule of Moving Glottalization proves with further fieldwork to refer to advancee 2 s as well as initial 2 s , example 57 b would no longer suffice to establish initial 2-hood of the Unaccusatives in question. The stratal diagram for 576 is

6. The morpheme /-myst/ [-mist] may appear similar to the -mí of the Relational construction (cf. section 2, Chapter Three), however it is Moving Glottalization that provides the evidence that these are dissimilar. The vocalized $y$ in /-myst/ [-mist] undergoes glottalization like a resonant, so it's a consonant not a vowel. Moreover, thits morpheme patterns differently syntactically than does the Relational morpheme.

7 The reflexive morphemes: -cút and -myst may not be taken as alternative forms because -cút and $-\mathrm{n} /-\mathrm{s}$ Perfective/Imperfective marking whereas -myst does not.

8 Note that this argument, appealing to constant thematicurelationships, is not inconsistent with the Unaccusative analysis (cf. footnote 4 above), where differences in control and agency are involved.

2 The ungramaticality of 65 follows from Quantifier Ban, independently from Quantifier Float.

10 An additional argument, that the nominal in question is not a final 2, may also:be based on lexical incorporation since lexical incorporation is not permissible on a final 2. See Chapter Three, section 4.3, for the rule statement of Lexical Incorporation.

11 The ks- and səc- prefixes, for 'Unrealized action' and 'Past Perfect' respectively, also take the -m morphology, as illustrated in the verbal paradigms in Chapter Two, section 1.3. If one considers and argues for these two prefixes as upper predicates, then the generalization that $-m$ marks intransitivity is retained.

## TRANSITIVE CLAUSES IN OKANAGAN

 IntroductionThis chapter discusses basic clauses which are finally
transitive in Okanagan. As in Chapter Three, three questions are addressed with respect to possible re-evaluations of grammatical relations of nominals:

1) what advancements, if any, are possible in Okanagan?
2) what demotions, if any, are possible in Okanagan?
3) what ascensions, if any, are possible in Okanagan?

It is proposed that Okanagan permits the following advancements and ascensions:
i) DATIVE $\rightarrow 3 \rightarrow 2$ Advancement, where the $-x$ and $-\mathbb{Z}$ morphemes register the presence of an initial Dative object, with Benefactive or Indirective meaning respectively:

ii) LOCATIVE $\rightarrow 3 \rightarrow 2$ Advancement, where -(i)na? marks: an advancement from an initial Locative object:

iii) RELATIONAL $\rightarrow 22$ Advancement, where $-m(\hat{1})$ marks an advancement of a non-nuclear object (NN), i.e., 3s or certain obliques, excluding Datives and Locatives, directly to 2, wi.th three classes of verbs determining clausal type $A, B$, or $C$ :

A


B

iv) POSSESSOR ASCENSION, where $N$ is a relation borne by a nominal:


The evidence for these proposed advancements and ascensions. comes from Morphological Markings, Question Formation, Quantifier Float, Relative Clause Formation, Passivization, Relativization, and Lexical. Incorporation.

This chapter is organized as follows. Section 1 deals with Dative clauses, arguing that the Benefactive and Indirective constructions are syntactically the same with respect to grammatical relations and possible re-evaluations, but different morphologically and semantically. Section 2 deals with three classes of Relational clauses. For the third class, $C$, three analyses are proposed: two involving bistratal causative constructions and one involving Instrumental Advancement. Arguments are advanced in support of the latter: Instrumental Advancement. Section 3 examines Locative clauses, arguing for advancement. The consequences of these analyses of Relational and Locative clauses with. respect to Limited Control are examined. It is argued that Limited Control clauses involve obligatory re-evaluation from a non-nuclear term to direct object. Section 4 examines Possessor Ascension, arguing that a Possessor may ascend to bear the grammatical relation of its nominal, from a 2 only if the Poss may advance to a $l$ and from $a$ non-nuclear terms
only if the Possessor advances to 2.

1 Dative Advancement: Benefactive and Indirective Constructions

Two constructions of Okanagan are discussed in this section. These are known as the 'Benefactive' and the 'Indirective'. In the Benefactive construction, the verbal root of the predicate is marked with -x(1) whereas in the Indirective construction, the verbal root is marked by - . They occur with obligatory Topicalization regardless of whether or not Advancement takes place. ${ }^{1}$ These constructions are exemplified below:
 the elder give-BENE-t-S3 ${ }_{T R}$ some present to old.woman The old man give a present for/to the old lady.

The old man give a present (to) the old lady.
 COMP UNR-PF-store-S3 ${ }_{\text {IRR }}$

The old man give the old lady a present (to put away).

the elder give-INDIR-t-S3 TRANS the money to old.woman
The old man give the money to the old lady.
 UNR-look. after-PFIV-t-S3 ${ }_{\text {TR }}$

The old man give the money (to) the old lady (to look after).

The old man give the old lady the money.

The difference between these two constructions is: two-fold; morphological with the $-x(i)$ for the 'Benefactive' and the $-\neq$ for the 'Indirective', and semantic as the parenthetical purposive clauses demonstrate. The $-x(i)$ constructions generally mean that the action is performed 'for the benefit of someone' and the -7 constrüctions generally mean that the action is performed 'to/on someone'. The former is labelled the benefactive case and the latter the unmarked case, including malefactive, recipient, etc. Syntactically, they manifest similar structure and they will be considered together here. Similar phenomena in other, non-Salishan languages are commonly known as Dative constructions. Dative is used here as a cover term for both the Benefactive and Indirective constructions.

Two proposals are being made with respect to these two
constructions in Okanagan. I) It is proposed that $-x(i)$ and $-\not{ }^{\prime}$, register the presence of the relevant oblique object in the initial strata. 2) It is proposed that these two constructions have the following structure, with possible advancements to 3 and to 2 :

3


More specifically, it is proposed that the a sentences of examples $I$ and 2 have the structure represented by the $c_{i}$ stratum, the $\underline{b}$ sentences the structure of $c_{i}$ plus $c_{i i}$, and the $\underline{c}$ sentences the structure of $c_{i}, c_{i i}$, and $c_{\text {iii: }}$ stratum.

Evidence to support this analysis comes from Case-Marking, Quantifier Float, Relative Clause Formation, Passive Formation, and Question Formation. Evidence to support the initial stratum is given first; next, evidence to support advancement to 2 , and then evidence to support advancement to 3 .

### 1.1 Case-Marking

The evidence that these two constructions have an initial stratum with an oblique object comes from the presence of a case-marking preposition: Kl 'to, goal, recipient'. These are exemplified below:


$$
\emptyset
$$

k'1 swít.
the my-male's.mom me sew-BENE-t-S3 TRANS some mocassins to me to somebody

My mother sew some mocassins for mé/for somebody.

Cont-fry-BENE-t-S1 TRANS all the egg to children
I fry all the eggs for the children.
$c$ tł - $m-x-t$ - în $t$ pintkm ki ttwoit. straight-REL/2-BENE-t-SI TR some nail to boy
I straightened several nails for the boy.
 the woman UNR-work-BENE-t-S3 TRANS some basket the to girl The woman itis going to make a basket for the girl.

the man give-BENE-t-S3 $3_{T R}$ some salmon the to grandfather-his The man give some salmon to his: grandfather.
 the girl patch-INDIR-t-S3 RRANS the mocassin-his to older.brother-her The girl patched up his mocassins for her older brother.
b

the boy put.out-INDIR-t-S3 $3_{T R}$ the light to man
The boy put out the light on the man.

straight-REL/2-INDIR-t-S1 ${ }_{T R}$ the nail to boy
I straighten the nail for the boy.
The presence of a case-marking preposition is taken as evidence of an initial oblique object. ${ }^{2}$ Given the close paraphrase relation between sentences: with and without a visible case-marking preposition, such as $1 \mathrm{a}, 2 \mathrm{a}$ and $\mathrm{lb} \mathrm{b} \mathrm{c}, 2 \mathrm{~b}, \mathrm{c}$ respectively, it is: assumed that the $\underline{b}, \mathrm{c}$ sentences also have the same initial stratum. This assumption also simplifies: the statement for the distribution of $-x(i)$ and $-i$ which may be taken as obligatory registers of this initial oblique object since one or the other, and never both, ${ }^{3}$ appear with this initial Dative object.

The Indirective is also used with the Locative case-marking preposition: 1:
 the baby Dist-pinch-INDIR-t-S $3_{\text {TR }}$ the cat the LOC tail The child pinched the cat on the tail.

the boy kick-INDIR-t-S3 TRANS the girl the LOC leg
The boy kicked the girl on the leg.
This use of the Indirective in possessor ascension constructions and in
locative body part constructions is discussed in sections 3.3 'Locative Advancement with Body Parts'; 4.4 'A Statement of Lexical Incorporation'; and 4.6 'A Statement of Possessor Ascension.'

## 1. 2 Question Formation

In question formation with swít 'who', the interrogative takes: the case-marking of the grammatical relation being questioned, as illustrated below with the Sourceve case-marking preposition:

the boy run the sfrome man
The boy ran from the man.

from who the boy COMP run
From whom did the boy run?
It should be noted that in question formation with interrogatives, if the subject is not questioned, the subject nominal is: raised to the upper clause and may be topicalized as exemplified in 7 b above.

As shown previously in Chapter Two, section 2.1.2, and exemplifed below, the presence of a case-marking preposition in a swít construction marks the final grammatical relation borne by the nominal in question. The Passive below shows that a 2 putative Dative nominal, advanced to subject, does: not receive the case-marking preposition of the initial oblique relation borne:
 to who COMP give-BENE-t-PASS some salmon INSTR man To whom was: given some salmon by the man?

This example shows: that interrogatives with switt are not sensitive to the
non-final grammatical relations.
With the Indirective/Benefactive constructions, the casemarking of the nominal being questioned shows up on the interrogative:
 $* \emptyset \quad$ the boy put.out-INDIR-t-S3 ${ }_{T R}$ the light-their To who did the boy put out their light?


* $\varnothing$ the my-male's.mom sew-BENE-t-S3 ${ }_{T R}$ some mocassin For whom did my mother sew some mocassins?


To whom did the man give some salmon?
 $* \emptyset \quad$ the woman UNR-work-BENE-t-S3 ${ }_{\text {TRANS }}$ a basket

Forowhom is the woman going to make a basket?
Moreover, as: shown above, the case-marking preposition must be present. Under the proposed analysis, this can be dealt with by a restriction barring Dative Advancement of interrogative swift. ${ }^{4}$ If the initial stratum of the construction exemplified in $1 \mathrm{~b}, \mathrm{c} 2 \mathrm{~b}, \mathrm{c}$ did not involve an initial oblique, then a more complex rule would be needed to block the ungrammatical sentences. If this were assumed, swift should be able to occur in the direct object position in constructions parallel to le, ec and some special rule would then be required. to block question formation with swit, when swift is registered on the verb with either $-x(\hat{1})$ or -7.

In these two constructions：the case－marking preposition preceding the nominal bearing the oblique relation in the initial stratum may be deleted，in which case the nominal may be positioned after the direct object（2），as in a below or immediately after the predicate， as in $\underline{b}$ below：
 Cont－fry－BENE－t－SI TRANS all the egg the children

I fry all the eggs（for）the children．

I fry the children all the eggs．
 give－INDIR－t－S3 ${ }_{T R}$ all the money the woman
He gives all the money（to）the woman．

He gives the woman all the money．
It is proposed here that in the $\underline{b}$ sentences the nominal in question bears the direct object relation and that in the a sentences：the nominal in question bears the indirect object relation．Quantifier Float， Passive Formation，Relative Clause Formation and ：Question Formation provide evidence to support this analysis．These are discussed in sections： 1.3 and 1.6 respectively．

A quantifier yโəy〔ว̄？t＇all＇may float to pre－predicate position from a final lor 2 ，i．e．，from a final subject or a final direct object，and may not float from an oblique object．${ }^{5}$ With the Benefactive／Indirective constructions，the quantifier y〔əy〔ə？t＇all＇
may float from the nominal immediately following the predicate, i.e., from the initial direct object:

Cont-fry-BENE-t-S1 $I_{T R}$ all the egg the children
I fry all the eggs (for) the children.

I fry all the eggs for the children. (All I fry theoeggs... )

give-INDIR-t-S3 TRANS all the money the woman
He give all the money (tol the woman.

He give all the money to the woman . (All he give the money... )
It may be concluded that the underlined nominal above, in immediate postpredicate position, i.e., the initial direct object, is still the direct object and that the initial oblique object no longer bears the oblique relation since it is lacking the necessary case-marking preposition. It is assumed at this: point that this second object nominal is a 3 since it is neither a 2 nor an oblique. A quantifier may not float from this putative 3 nominal:

work-BENE-t-SI TRANS the broth all the children
I fix the broth (for) all the children.
b. * yৎəyৎə?t kwulxtn Si stxítqw Si sccmála?.

the man give-INDIR-t-S3 $3_{\text {TRANS }}$ some salmon all the PL-old.woman
The man give some salmon (to) all the old ladies.
 If the initial oblique nominal, advanced to a 3, is permuted to the immediate post-predicate position, it functions like a 2 with respect to quantifier float:
 work-BENE-t-S1 $I_{T R}$ all the children the broth I fixed all the children the broth.

I fixed all the children the broth. (All I fixed the children tol

give-INDIR-t-S $3_{T R}$ all the PL-old.woman some salmon
He gives all the old ladies some sālmon.

He gives all the old ladies some salmon. (All he gives the old ladies...) It may be concluded that the advancee 3 has advanced to bear the 2 relation. The former 2 no longer functions like a 2 with respect to Quantifier Float and is, according to the Chômeur Condition (see Chapter Three, section
1.4 for a statement of this condition), a 2-chômeur:
 fry-BENE-t-S1 ${ }_{\text {TRANS }}$ the children all the egg
I fry the children all the eggs.


* I fry the children all the eggs.
ok. I fry all the children the eggs.

give-INDIR-t-S3 $3_{\text {TRANS }}$ the woman all the money
He gave the woman all the money.

He gave the woman all the money. (All he gave the woman the money. 1 In conclusion, it has been seen

1) that there is an initiàl oblique object, termed Dative, case-marked with a preposition and registered on the verb with $-x(i ́)$ or -7 for ${ }^{\text {EBenefactive' }}$ or 'Indirective' respectively;
2) that this initial Dative object may advance to 3 , losing its: casemarking preposition; and
3) that this advancee 3 may advance to 2 , placing the initial:2 en chômage, as was shown by Quantifier Float.

This is represented in the relational network below:
20a DATIVE ADVANCEMENT:

b The old man give all the old ladies the money.

Additional evidence that a Dative object, ini:a Benefactive/ Indirective construction, may advance to 3 and to 2 is provided by Relativization. In Okanagan, a relative clause or a cleft construction may be formed only on a downstairs 1 or 2 and not on a downstairs oblique object, as was shown in Chapter Two, section 2.1.3.

When sentences containing relative clauses formed on a downstairs oblique are presented to speakers, patterns of grammaticality differcdepending on the surrounding context. The analysis presented here allows us to explāin these different patterns. When sentences with. Benefactive and Indirective constructions are presented first to speakers, only the 1 and the 2 may be relativized, as expected:
 that a boy COMP give-BENE-t-S $3_{R R}$ some money the brother-his That's the boy who gives some money (to) his brother.
 That's the money that the boy gives (to) his brother.


* That's the/his brother that the boy gives his money (to).

QU yes/no PF-know-IMPF-t-S2 TRANS the boy COMP put.out-INDIR-t-S3 ${ }_{\text {TR }}$
Si čiq ${ }^{\text {w }} \mathrm{Sxn}^{\prime}$ k' sqəl'tmíx ${ }^{w}$.
the light to man
Do you know the boy who put out the light on the man?

Did you see the light that the boy put out on the man?


* Do you know the man that the bey put out the light on? This provides evidence that the initial Dative nominal, without its case-marking preposition, is not a 2 and is thus an advancee 3 . If the two object nominals are permuted and presented to speakers prior to sentences of the form of 21c and 22c, the initial Dative and advancee 3 is available for relativization, as: in $23 b$ and 24 b , and thus bears the 2 relation, with the initialu2 plāéednen chômage:and unavailable for relativization, as in $23 c$ and $24 c$.
 the grandmother weave-BENE-t-S3 ${ }_{\text {TR }}$ the girl a basket The grandmother weaves the girl a basket.
 That's: the girl that the grandmother weaves a basket (for).

* That's the basket that the grandmother weaves the girl.

the boy: put.out-INDIR-t- $\$ 3_{T R}$ the man the light
The boy put out (on) the man the light.

Do you know the man that the boy put out the light (on)?

* Did you see the light that the boy put out (on) the man?

It is: concluded that, in a Benefactive/Indirective construction, the advancee 3, an initial Dative, may advance to 2 at which point it is: awailable for Relativization.
1.5 Passivization

In section 1, Chapter Three, it was: argued and supported that the Passive construction advances a 2 in the $S_{i}$ stratum to a 1 in the $S_{i+1}$ stratum. This interacts with the Benefactive/Indirective construction to provide evidence for advancement to 2.

The initial Dative nominal may be passivized from an immediate post-predicate position. It is possible to establish this from patterns of judgments of grammaticality. When sentences containing passives of the form 25b-22b are presented to speakers: patterns of gramaticality differ depending on the surrounding context. If these $\underline{b}$ passives follow the $\underline{a}$ sentences with the initial Dative nominal an advancee to 2 in immediate post-predicate position, then the b sentences are judged grammatical. If the bassives follow sentences in which the Dative nominal has not advanced to 2 , then the $b$ passives are judged as ungrammatical.
 The boy give his brother some money.
 the brother-his give-BENE-t-PASS some money INSTR boy His brother was given some money by the boy. ؟i stəmtîma? q'ćxíc si xíxwtm $t$ yámxwa?. The grandmother weaves the girl a basket.
 the girl weave-BENE-t-PASS a basket INSTR grandmother-her The girl was woven a basket by her grandmother.
 The man caught the old lady some salmon.
 the old.woman catch-BENE-t-PASS some salmon INSTR man The old lady was caught a salmon by the man.

The girl put out the boy's light/the 2 boy this light.

The boy was put out his light by the girl.

The boy wears his brother's coat/his brother his coat.

the brother-his ${ }_{i}$ wear-INDIR-t-PASS the coat-his ${ }_{j}$ INSTR boy ${ }_{i}$
His $_{i}$ brother $_{j}$ was worn his ${ }_{j}$ coat by the boy $_{i}$.
These examples provide evidence that the underlined nominal,
initially a Dative bearing an Oblique relation, has advancedto 2 in the a sentences where it is accessible to passivization as in the bentences. The structure of the $\underline{\underline{b}}$ sentences is represented in the relational network below:

30


An argument showing that the initial 2 is not a final 2 may be based on Quantifier Float. A quantifier may float from a lor a 2 , as shown in section 1.3. However, in a passivized Dative construction, wherecthe initial oblique nominal has advanced to 1 , a quantifier may not float from the initial 2 :

the girl all weave-BENE-t-PASS the PL-basket
§i $t$ stamtíma? - s.
INSTR grandmother-her
*ie The girl was woven all the baskets by her grandmother. This shows that the initial oblique nominal had advanced to 2, placing the initial 2 en chômage.

Given the analysis proposed, the fact that the initial 2 of a Benefactive/Indirective construction is accessible to passivization if the initial oblique nominal nas not advanced to bear the 2-relation does not detract from this argument:

the salmon catch-BENE-PASS the old.woman INSTR man
The salmon was caught for the old lady by the man.

the deer shoot-BENE-t-PASS the woman INSTR man
The deer was shot for the woman by the man.
The structure of sentences 32 and 33 above is represented in the relational network below:

34


Thus, Passivization has provided evidence that an initiàlyy oblique nominal in a Benefactive/Indirective construction of Okanagan may advance to bear the 2-relation, at which point it is accessible for promotion to 1 by means of Passivization.

It may be concluded 1) that the Benefactive/Indirective construction has a nominal bearing an oblique relation in the initial stratum; 2) that this fact is registered by one of the morphemes, $-x(1)$ or -7 respectively, on the verbal root of the predicate; 3) that this nominal may advance to bear the 3-relation, mand again to bear the 2-relation. Evidence from Case-Marking and Question Formation was brought to bear to support the identification of the initial oblique, evidence from Quantifier Float, Relativization and Passivization was used for support of this nominal as an advancee 3 and final 2.

Certain clauses in Okanagan occur with a -m(i) morpheme following the verbal root of the predicate. These are morphologically transitive. It proposed:
1). : that these clauses involve an obligatory advancement of a non-nuclear (NN) object, i.e., 3 s and obliques, to 2 , without intervening status as: a 3 in the case: of the obliques; and
2) that the $-m(\hat{i})$ morpheme is a marker of this adyancement. The abbreviation NN i.s used as a cover term for non-nuclear terms, i.e., 3s and obliques, where obliques may be Goal, Source, Instrumental, Benefactive, etc.

### 2.1 Three Classes

Three classes of verbs can be identified as occurring in a Relational type clause. Verbs in two classes; A and B, may not occur in regular transitive constructions or in Middle voice clauses, CLASS A: Verbs whose initial stratum īs intransitive, consisting of an agentive 1 and no 2.

35: Class A Relational Clause:


This class sub-divides into three groups:

Class A1: Verbs that are members of this sub-class have independent word status, for instance:

36a kņíya?
b naqu.
c qty's
d nîxəl'
e n¢unxwina?
f Sayncút
g qîcolx
h. qiwix
i papasílx
j susuwíl'x
listen (to)
steal (of)
dream (of)
hear (of)
believe (in)
laugh
run (to).
climb (on)
ponder/think (on)
whisper

Pairs of sentences below exemplify these as unergative intransitives in a and as Relational clauses in $\underline{\underline{b}}$.

b $\mathrm{k}^{\mathrm{w}} \mathrm{u}$
c - kṇíya - mos - t - s . He is listening to me.
me PF-listen-REL/2-IMPF-t-S3 TRANS

$\mathrm{Sl}_{\text {INTR }}$ steal a one a horse
I steal one horse.

steal-REL/2-PFTV-t-S1 TRANS the horse
I stole the horse.

39a kn qoy's $t$ skmxíst ckklaw'.
$\mathrm{SI}_{\text {INTR }}$ dream a blackbear last.night
I dreamed about a blackbear last night.
b qəy's $-\mathrm{m}-\mathrm{n}-\mathrm{t}-\mathrm{s}-\mathrm{n}$ Sənwî?.
dream-REL/2-PFTV-t-you-SI ${ }_{T R}$ you
I dreamed akout you.
40a kn níxəl'.
$\mathrm{Sl}_{\text {INTR }}$ hear
I hear.
b.
 hear-REL/2-PFTV-t-SI TRANS someone COMP PL-whisper to one-house I hear somebody whispering in the next house.
 the my-grandmother believe COMP UNR-good-Developmental-P2 IRR My grandmother believes that you-guys are getting better.
b $\quad$ nfunxwina? $-m-n-t-s-n$.
believe-REL/2-PFTV-t-you-S1 TRANS
I believe in you.

the children always ITER-laugh.
The children always laugh.
b Si scomála? $k-$ Sayncút $-m(-n-t)-s i x$ Si twờt. the children Dist-laugh-REL/2-PFTV-t-P3 TRANS the boy The children laugh at the boy

$\mathrm{Sl}_{\text {INTR }}$ run all to children
I run to all the children,
 Dist-run-REL/2-PFTV-t-S. TRANS $_{\text {all }}$ all the children I run to all the children.
 the beaver Dist-climb LOD PF-upright The beaver climbs on the tree.
 the baby Dist-climb-REL/2-PFTV-t-S3 $]_{\text {TRANS }}$ Smile (Joe Pete) The baby climbed up on Joe Pete.

the elder PF-ponder/think always
The old man is thinking/pondering all the time.

uncle PF-Dist-ponder-REL/2 - IMPF-t-S3 TRANS the language
Uncle is thinking/pondering about the language.
46a ai pptwîna? ${ }^{\text {P }}$ wusuwílx ... na?îp. the old.woman whisper always The old lady is whispering all the time.
 the old.woman PF-Dist-whisper-REL/2-TMPF-t-S3 ${ }_{\text {TRANS }}$ the elder The old lady is whispering about the old man.

The case marking prepositions on the initial oblique nominal in sentences $43 a$ and $44 a$ provide evidence to support the initial stratum of the A verb class.

Class A2: Verbs that are members of this sub-class do not have independent word status. They obligatorily occur in a Relational construction with the Relational morpheme. Members of this class include: . 6


The sentences 48-51 illustrate these members:
 spill-REL/2-PFTV-t-Sl ${ }_{\text {TRANS }}$ the grease/fat the LOC table I spilled the grease on the table.

the woman scold-REL/2-PFTV-t-S3 TRANS the children reason

break-PFTV-t-P3 TRANS the chair
The woman scolded the children for breaking the chair.
b Si tk<super>zmílx nà?íp soc - Sayp - mi - n - m.
the woman always PPF-scold-REL/2-PFIV-INTR.
The woman always scolds.
50: $\quad k^{w} \varsigma_{\partial} ?-m i-n-t-s-n$.
get.used.to-REL/2-PFTV-t-you-S1 ${ }_{\text {TRANS }}$
I'm getting used to you.

think-REL/2-PFTV-t-you-S1 ${ }_{\text {TRANS }}$
I think about you.

Class A3: Verbs that are members of this class also do not have independent word-status. However, they differ from members of the $A 2$ sub-class, in that they may also occur with $a-t$ or $-p$ suffix as Unaccusatives, i.e., in an initially intransitive stratum with a 2 and no 1, having stative meaning. ${ }^{7}$

Members of this sub-class, having agentive meaning in a Relational construction, include:

| 52a | səl'-, | slıı | lost |
| :---: | :---: | :---: | :---: |
| b | tîz- |  | straight (linear) |
| c | tex- |  | straight, true, trustable |
| d | $y^{〔} \chi^{\text {w }}$ - |  | drop |
| e | $\mathrm{k}^{\text {w }}$ ¢ ${ }^{\text {n- }}$ |  | pity |

These are exemplified below:
$53 a \mathrm{kn}$ sal' - t Səlá?.
Sl ${ }_{\text {INTR }}$ lost-t here $_{\text {[invisible, proximate] }}$
I'was lost around here.
$\mathrm{b} \quad \mathrm{kn} \quad$ slỉ $-\mathrm{p} \quad \mathrm{k} 1$ wíst.
$\mathrm{SI}_{\text {INTR }}$ lost-p to high
I was lost up in the mountains.

$S l_{\text {INTR }}$ lost-p the LOC my-dream
I was lost in my dreams.
d
sol’ - mí $(-n-t)-n$
Si $\quad \bar{p}^{\gamma} \uparrow \mathrm{uk}^{\mathrm{w}} 1 \mathrm{a}$ ? .
lost-REL/2-PFTV-t-SI TRANS
the ball
I lost the ball.

the children lost-REL/2-PFTV-t-P3 ${ }_{\text {TRANS }}$ the dog
The children lost the dog.
f Sn $_{n}-\underline{\text { sol }}-\mathrm{p}-\mathrm{n}-\mathrm{cút}-\mathrm{m}-\mathrm{n}-\mathrm{t}-\mathrm{x}^{\mathrm{w}}$.
Cont-lost-p-PFTV- REFL -REL/2-PFTV-t-S2 ${ }_{\text {TRANS }}$
English: You lost something and can't remember where you put it. i.e., You lost yourself of something.

French: Tu tees perdu de quai.
54a tox - $t-x$ $t$ sqəl'tmíx $x^{w}$.
straight-t-IMP a man S2 INTR

Be a straight and true man:
ty - tola - t - x
t $\quad$ sqəl'tmíx ${ }^{\omega}$.
ITER-strầight-t-IMP
a man
Sa INTR

Be a very straight and true man:

$\mathrm{SI}_{\text {INTR }}$ OWn-NOM-ITER-straight-t COND $S I_{\text {TR }}$-UNR-go - hunt - INTR
I got rights to go hunting.

the man ITER-straight-t
The man is straight, true, trustable.

good watch ${ }^{2 P F T V-t-I M P ~} \quad$ straight-REL/2-IMPF-t-you-S1 TRANS
Better watch out; I'll straighten you out:

the nail EMPH straight/ PL-straight
The nail is straight./ The nails are straight.
 straight-REL/2-INDIR-t-S1 ${ }_{T R}$ the nail the boy I straighten the nail for the boy.
 straight-REL/2-BENE-t-S1 ${ }_{T R}$ some nail the boy I straighten several nails for the boy.

$S 1_{\text {INTR }}$ fall-t from my-saddle.horse
I fall off from my horse.
b $\mathrm{kn} \quad \rho_{n}-\underline{y \varsigma \partial x^{w}}-\mathrm{t}$
$\mathrm{SI}_{\text {INTR }}$ Cont-fall-t
I fall in.
 the woman fall-REL/2-PFIV-t-S3 TRANS the cup the LOC floor The woman dropped the cup on the floor.

T fall-REL/2-PFTV-REFL to chair
Teresa got herself up off of the chair.

the baby Dist-fall-REL/2-PFTV-REFL to male's.mom-his
The baby got himself up off of his mother.

the elder pitiful
The old man is pitiful.
b
$\mathrm{S}_{\mathrm{n}}-\mathrm{k}^{\mathrm{w} \subseteq \mathrm{n}^{\prime}}-\mathrm{mí}-\mathrm{n}-\mathrm{t}-\mathrm{s}-\mathrm{n}$.
Cont-pity-REL/2-PFTV-t-you-SI TRANS

I pity you.
CLASS B: Verbs whose initial stratum is intransitive, consisting of a 2 and no 1. It is proposed that verbs of this clāss have the following structure in a Relational construction: ${ }^{8}$

58


Verbs of this class have indëpendent word status and are members of the $-t$ class of Unaccusatives, i.e., intransitivie with a 2 and no l, having statirve meaning. They retain the -t in a Relational clause, providing evidence for the initial stratum proposed above.

Members of this class include:

59a x̌ast
b yəlt
c mil't
d ¥ipt
e kłkwsisst
f Saymt
g $\quad q^{w} ə \varsigma 1 q^{w i} \subseteq 1 t$
h. 1 §imt
good, like
run away from
visit
forget
jealous
mad
talkative
glad

Like Class A, members of Class B do not occur in the Middle voice clauses or in regular transitive clauses. Members of Class B listed above are exemplified below, showing the roots in Unaccusative constructions and in Relational constructions:

60a fast si twist.
good the boy
The boy is good.

like-REL/2-PFIV-t-S2 TRANS the your-PF-eat
You like your food.
c $\underline{\text { x̌ast }}-\mathrm{mí}-\mathrm{n}-\mathrm{t}-\mathrm{s}-\mathrm{n}$.
like-REL/2-PFTV-t-you-S1 ${ }_{\text {TRANS }}$
I sorta like you./ I'm beginning to like you.
6lả Pique $\mathrm{k}^{w} u$ ks - $y 1-y 1 t-m i ́ x-a ? x$ ?
QU yes/no ${ }^{P l_{\text {INTR }}}$ UNR-PL-run. away-PROG-INCEP
Shall we run away?

the boy runaway from elder
The boy runs away from the old man.

the boy run.away-REL/2-PFTV-t-S $3_{T R}$ the elder
The boy ran away from the old man.
62a ii $_{1}$ i( $n$ ) - stəmtíma? míl’t.
the my-grandmother visit
My grandmother visits.
 good the my-heart reason Dist-visit-REL/2-PFTV-t-you-SI ${ }_{\text {TRANS }}$ My heart is glad to visit you.

63a kn liímt.
Sl INTR glad
I'm glad.
b $\quad 1 \varsigma i ́ m-1 \varsigma m t$, $k^{w} \quad \varsigma i(n)-s l^{\prime} a x ̆ t \quad!^{9}$
ITER-glad, $\quad \mathrm{S} 2_{\text {INTR }} \quad$ my-friend
Greetings, my friend ! i.e., Greetings (to) you (who) are my friend!
c lisimt-m-n-t-s-n.
glad-REL/2-PFTV-t-you-SI TRANS
I feel happy for you.
 very COMP glad-REL/2-PFTV-t-you-S1 TRANS

I'm very proud of you.

glad-REL/2-PFTV-t-S2 TRANS the your-ancestors
You're proud of your ancestors.
$64 \mathrm{a} k n \quad$ in - łípt.
$\mathrm{Sl}_{\text {INTR }}$ Cont-forget
I forget.
b kn $\mathrm{zp}-\mathrm{zpt}$ - qz .
$\mathrm{Sl}_{\text {INTR }}$ ITER-forget-?
I'm forgetful.
$\mathrm{c} \quad \mathrm{S}_{\mathrm{n}}-\underline{\text { int }} \mathrm{p}-\mathrm{m}(-\mathrm{n}-\mathrm{t})-\mathrm{n}$.
Cont-forget-REL/2-PFIV-t-SI TRANS
I forgot it.

65a Ci sqəl’tmíx ${ }^{w}$ k'kwৎisst.
the man jealous
The man is jealous.
b
the man jealous - REL/2-PFTV-t-S3 TRANS the brother-his The man is jealous over his brother.

66a kn 乌áymt.
$\mathrm{Sl}_{\text {INTR }} \quad \operatorname{mad}$
I'm mad.
b Susáp Sàymt - m-n-cút.
Joseph mad-REL/2-PFTV-REFL
Joseph is mad at himself.

the PL-b.oy mad-REL/2-PFTV-t-S3 TRANS the PL-girl
The boys are mad at the girls.

the boy talkative much.
the boy talks too much.

the baby begin.to.be.talkative
The baby is beginning to talk.

talkative-IMP a Cont-nation-mouth ${ }^{\text {S } 2}$ INTR

Speak Okanagan! /. Speak of the language of the nation!

hear-REL/2-PFTV-t-S1 ${ }_{T R}$ the man PF-talkative
I hear the man talk.

```
e \(\quad q^{\omega}{ }^{\omega} \uparrow 1 q^{\omega} 191-s-t-m-n\).
speak/talk - IMPF-t-you-SI ITRANS
I'm talking to you.
f \(\quad t-q^{w} \partial \int q^{w} i S l t-m-n-t-s-n\).
Dist-talkative-REL/2-PFTV-t-you-SI \({ }_{\text {TRANS }}\)
I talked about you.
```



```
the chief Dist-talkative-REL/2-PFTV-t-S3 TRANS the business-his
na?īp.
always
The chief talked about his business all the time.
```



```
who the chief COMP Dist-talkative-REL/2-PFrIV-t-S3 \(3_{\text {TRANS }}\)
Who did the chief talk about?
CLASS C: Verbs which occur in regular transitive constmetions, but which may receive a weak causative interpretation in a Relational construction. Constructions with this class are restricted to Imperfective aspect. Members of this class include:
```

68a ?aั̌ ${ }^{*-}$
sweep
b P个íln-
eat
c k'wul'-
work, fix

```
These verbs may occur in a Middle voice construction or not:
```



```
Sl \({ }_{\text {INTR }}\) Work-MIDDLE here a lot / many - year
I work here a lot./ many years.
```

70 kn 2؟iłn.
$\mathrm{Sl}_{\text {INTR }}$ eat
I eat.
What is significant is that these verbs occur in both a regular transitive construction and a Relational construction:

the man work-PFIV-t-S3 TRANS the land
The man worked the land.

the man work-REL/2-IMPF-t-S3 $3_{T R}$ the PL-boy

the LOC land LOC Mönday
The man had the hired hands working on the land on Monday.

the girl eat- PFTV-t-S3 TRANS the potato and salmon
The girl ate the potatoes and salmon.

the girl eat_REL/2-IMPF-t-S3 TRANS the old.woman the potato and salmon
The girl is: feeding the old lady the potatoes and salmon.
i.e., the girl had the old lady eat...
(context: the old woman is cripped and the girl fed her)
73a kn ky - ? $\mathrm{ax}^{\mathrm{w}}-1 \mathrm{p}-\mathrm{m}$.
$\mathrm{Sl}_{\text {INTR }}$. atop-sweep-slats-MIDDLE
I'm sweeping the floor.

under-sweep-PFTV-t-S1 ${ }_{\text {INTR }}$ the my-bed
I swept under my bed.
$c \quad \varsigma i \quad \varsigma i(n)-s t ə m t i ́ m a ? ~ k w u \quad k z-? a x^{w}-1 p-m i n-s-t-s$
the my-grandmother me atop-sweep-slat-REI/2-IMPF-t-S3 ${ }_{\text {TRANS }}$ ( Si $_{\text {s }}$ lílp.)
the floor
My grandmother had me sweeping (the:floor))

The discussion of the clausal structure of verbs of Class $C$ is delayed until after the discussion of Clàsses $A$ and $B$, i.e., to section 2.6.

### 2.2 Evidence for Initial Intransitivity

Evidence for the initial stratum of Class Al and A3, and Class $B$ verbs as intransitive comes: from
a) the case-marking prepositions markingininitialsoblique objects, as exemplified in sentences such as $43 \mathrm{a}, 44 \mathrm{a}, 53 \mathrm{~b}, 53 \mathrm{c}, 56 \mathrm{a}, 56 \mathrm{~d}$ and 61b;
b) the absence of object in $37 a, 40 a, 41 a, 42 a, 45 a, 46 a$, and $53 a$; and
c) the non-specific article, obligatory on non-case-marked objects in examples sucheas $37 a, 39 a$ and $54 a, b$. These objects may be initial 3s: since they do not appear to be either 2 s or obliques:
d) Moreover, for Class: B verbs, additional evidence comes from the retention of the Unaccusative $-t /-p$ morphemes, marking a 2 in the $S_{i}$ stratum occurring as a nuclear term in the $S_{i+1}$ or final stratum (see section 2, Chapter Three). These morphemes are exemplified in $60 \mathrm{~b}, \mathrm{c}$, $61 c, 62 b, c, 63 c-e, 64 c-d, 65 a, 66 b-c$, and $67 \mathrm{f}-\mathrm{h}$.

Syntactic evidence for intransitivity isavailable from tests with Passivization, Quantifier Float, and Relativization. All of these are possible from 2s. However, when verbs of Relational Class $A$ and $B$ occur without $-m(\hat{1})$ in paraphrase constructions, as in the a sentences below, these tests result in ungrammaticality, as shown in the $\underline{b}$ sentences:

## Class A


the elder steal a horse
The elder stole a horse
 the/: ha: steal-PFTV-t-PASS INSTR elder

75a $\mathrm{i}_{\mathrm{i}}$ ttw̌ỉt qty's $t$ skmxíst.
the boy dream a blackbear
The boy dreamed about a blackbear.
 the/ a blackbeard dream-PFTV-t-PASS INSTR boy

Class B

the girl runaway from old.inoman
The girl ran away from the old lady.
 the old.woman run.away-PFTV-t-PASS INSTR girl
$\underline{\text { QUANTIFIER FLOAT }}^{11}$
 the elder steal all the horse

The old man stole all the horses.

the elder all steal the /a horse

the girl run all to children
The girl ran to all the children.

the girl all run to children
 the old.woman hear all the children

The old lady hear all the children.
 the old.woman all hear the children

## RELATIVIZATION


$\mathrm{Sl}_{\mathrm{IN} N T R^{\text {cis. steal }}}$ a horse
I stole a horse.
 the chief see-PFTV-t-S3 $3_{\text {TRANS }}$ the horse . COMP $\mathrm{Sl}_{\text {INTR }}$ steal
Bia kn qty's t sknixíst.
$S l_{\text {INTR }}$ dream a blackbear
I dream about a blackbear.
b * wîk $(\ddot{\mathrm{n}}-\mathrm{t})-\mathrm{n}$ ai sknixist $\mathrm{Ci}_{\mathrm{i}} \mathrm{kn}$ qəy’s. see - PFIV-t-SI ${ }_{\text {TRANS }}$ the blackbear $C O M P \operatorname{Sl}_{\text {INTR }}$ dream
 the girl runaway from old.woman

The girl ran away from the old lady.
 see-PFIV-t-SI ${ }_{\text {TRANS }}$ the old.woman COMP the girl runaway
83a 9 i xíxwtmi "ícolx kl ct witt:
the girl run to boy
The girl run to the boy.
 see-PFTV-t-SI TRANS the boy COMP the girl run Evidence from these tests shows that the nominals in question are not initial 2s, and hence bear a non-nuclear relation.

### 2.3 Evidence for Final Transitivity

Morphological evidence that Relational clauses are finally transitive comes from
a) the -t transitive marker, of an initial or advancee 2 occurring as a nuclear term in the final stratum;
b) the choice of the transitive set of realis subject markers, indicating surface transitivity, i.e., a 1 and a 2 in the final stratum;
c) the obligatory aspect marking, Imperfective or Perfective, required if there is an initial or advancee 2-arc which is a nuclear term arc in the final stratum. (see section 1.7 , Chapter Two for the relevant rules statement and diagrams.) 12

Syntactic evidence is available from Passivization, Relativization,
$\therefore$.and Quantifier Float to show that these Relational clauses are transitive. As: discussed earlier, all the phenomena affect 2s. Passivization promotes a 2 to a l; Relativization on a downstairs clause and Quantifier Float are both limited to $1 s$ and 2s. Should the post-predicate nominal in a Relational construction function as a 2 with respect to these phenomena, this will establish the 2-hood of the nominal in question.
2.3.1. Passivization

The sentences below, formed with verbs of class: A and B, show that a Relational clause may passivize:

CLASS A:
 the man Dist-run-REL/2-PFIV-t-PASS INSTR boy The man was run to by the boy.
 the man listen-REL/2-PFTV-t-PASS INSTR boy The man is listened to by the boy.

CLASS B:

the PI-girl mad.at-REL/2-PFTV-t-PASS P3 ${ }_{\text {INTR }}$ INSTR PFI-boy
The girls are mad at by the boys.

the elder run.away-REL/2-PFTV-t-PASS INSTR boy
The elder is: run away from by the boy.
From these examples, it may be concluded that the inominal serving as final subject bears the $2-r e l a t i o n ~ i n ~ t h e ~ p r e v i o u s ~ s t r a t u m . ~$

### 2.3.2 Quantifier Float

The data available for Class $A$ and $B$ verbs with respect to Quantifier Float also protides support for the 2-hood of the postpredicate nominal:

CLASS A:
86 yโəyโ̧?t $t-q i ̉ c ə 1 x-m(-n-t)-n \quad$ ¢i scơmála?.
all Dist-run-REL/2-PFIV-t-SI $I_{\text {TRANS }}$ the children
I run to all the children. /(All I run to the children. )

all Dist-whisper-REL/2-IMPF-t-S2 TRANS the PL-elder
You whisper about all the old men. / (All you whisper about the old man.)
 all spill-REL/2-PFIV-t-S1 ${ }_{\text {TRANS }}$ the coffee LOC floor I spilled all the coffee on the floor./ (All I spilled the coffee on ....) CLASS B:

all run. away-REL/2-PFTV-t-SI ${ }_{\text {TRANS }}$ the children
I run away from all the children./ (All I run away from the children.)

all Disst-visit-REL/2-PFTTV-t-S2 TRANS the PL-old.woman
You visit all the old ladies. / (All you visit the old ladies. L
2.3.3 Relativization

Similarly, evidence is available from Relativization which demonstrates that the nominal relativized upon is either a 1 or a 2 downstairs. Since the downstairs clauses exemplified below have a nominal bearing the l-relation in the final stratum, it may be concluded that the nominal relativized upon is a downstairs 2 .

CIASS A:
 that me COMP the boy me PF-listen-REI/2-IMPF-t-S3 TRANS That's me that the boy is listening to.

 Show me the horse that I stole.

23
 PF-remember-IMPF-t-SI $I_{T R}$ that a story COMP PF-hear-REL/2-IMPF-t-SI $T R$ I remember the story that I heard.

## CLASS B:

 the elder COMP PF-run.away-REL/2-IMPF-t-PASS INSTR boy It's the old man who has been run away from by the boy.
 PF-know-IMPF-t-SI TRANS the man COMP the PL-girl $\mathrm{t}-\mathrm{q}^{\mathrm{w}} \mathrm{D}^{〔} 1 \mathrm{q}^{\mathrm{w}} \uparrow 1 \mathrm{t}-\mathrm{m}-\mathrm{s}-\mathrm{t}-\mathrm{s} \quad 1 \mathrm{x}$.

Dist-talkative-REL/2-TMPF-t-P3 ${ }_{\text {TRANS }}$
I know the man that the girls are talking about.
It may be concluded that the post-predicate nominal in a Relational clause bears: the 2-xelation in the second stratum, i.e., the initial plus one stratum, based on evidence from Passivization, Quantifier Float, and Relativization.
2.4 Evidence for Obligatory Advancement

Syntactic evidence is: available from Question Formation to show that, in a $-m(i)$ construction, the advancement of the initially oblique object is: obligatory. As shown in section 1.2, Chapter Three and section 1.8 , Chapter Two, the interrogative swit 'who' takes case-marking when questioning a nominal which bears a\%final oblique relation in the downstairs clause. With a Relational clause with the Relational morpheme on the verb, no case-marking appears:
 who the chief COMP Dist-talkative-REL/2-PFIV-t-S3 $3_{\text {TRANS }}$ Who did the chief talk about?
b swit $\mathrm{b}_{\mathrm{i}}$ ttwīt $\mathrm{s}_{\mathrm{i}} \mathrm{t}-\mathrm{qi} \mathrm{c} \partial \mathrm{lx}-\mathrm{m}(-\mathrm{n}-\mathrm{t})-\mathrm{s}$ ? who the boy COMP Dist-run-REL/2-PFTV-t-S3 TRANS Who did the boy run to?

to who the boy COMP run
To who did the boy run?

This fact that the oblique nominal may not be questioned as an oblique nominal as in $\underline{a}, \underline{b}$, and $\underline{d}$ above, leads one to conclude that the Relational advancement is obligatory. That is, $-m(1)$ occurs only when the initially oblique object has advanced to 2 . This contrasts with the occurrence of $-x$ and -7 which register the presence of the relevant oblique.

### 2.5 The Class C Verbs

The structure of the Class: C Relational verbs is still at issue. Such :constructions may receive a weak causative interpretation, as illustrated in sentences 7l-73. This: section will examine three proposals for the structure of these clauses and choose between them.

### 2.5.1 Three Proposals

Three proposals may be made for the structure of these clauses:
(1) a True Causative proposal, claiming that these are true causative constructions with a biclausal source, subject to obligatory Clause Union (Aissen and Perlmutter 1976). Under Clause Union, involving a downstairs transitive clause, the downstairs $2 \rightarrow$ upstairs 2 and the downstairs $1 \rightarrow$ upstairs: 3, as diagrāmède below:
 the girl eat-REL/2-IMPF-t-S3 ${ }_{T R}$ the old.woman

the potato and salmon
The girl had the old lady eat the potatoes and salmon. /
The girl feed the old lady the potatoes and sälmon.

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Since the unmarked surface word order of Okanagan is $P$ llllll $120 B L$, it would appear that in 97 the putative union 3 has: advanced to 2 in the next stratum, demoting the putative union 2 to $\hat{2}$.
(2) an Inheritance Causative proposal, claiming that these Relational clauses: Class C, are biclausal causative constructions, subject to a different type of Clause Union, as proposed by Gibson (1980) for Chamorro, whereby the downstairs $1 \rightarrow$ the upstairs 2, the downstairs 2 $\rightarrow$ the upstairs $\hat{2}$, and the downstairs $3 \rightarrow$ the upstairs 3:

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or
(3) an Advancement proposal, claiming that these clauses are like the other two classes of Relational constructions, involving an obligatory advancement of an initial oblique object to direct object in the next stratum:

100


All of these proposals are compatible with the facts with
respect to Passivization:
 the old.woman eat-REL/2-PFTV-t-PASS some potato and salmon ¢i $t$ xíxwtm.

INSTR girl
The old lady was had to eat some potatoes and salmon by the girl.

the PL-boy-his work-REL/2-PFriv-t-PASS LOC land
si $t$ sin - kik ${ }^{2} w_{w a ?}$.
INSTR my-grandfather
His hired hands were had to work on the land by my grandfather.

These are two major differences between the two Causative proposals and the Advancement proposal. The former claim that these constructions are biclausal in structure. The latter claims that these constructions are monoclausal and non-causative, i.e., neither biclausal nor causative.

According to Shibatani (1976), two conditions characterize a causative situation. Their statement is reduced to the essentials below: 102 Condition 1: the speaker believes that the occurrence of the caused event has been realized at $t_{2}$, which is after $t_{1}$, the time of the causing event. Condition 2: the speaker believes that the occurrence of the caused event is wholly dependent in the occurrence of the causing event, provided that all else remained constant.

A causative situation may be realized either as a two-event or a one-event causative. First, it is argued that these constructions are nottwo-event causatives, based on evidence from temporal adverbials, and are not biclausal, based on lack of evidence for 3-hood for a downstairs I. : Secondly, four arguments are presented showing that these constructions are not one-event causatives either.

Whether or not these Class: C Relationals involve two events can be tested with the presence of temporal adverbials. If a construction: consists of two events, it isspossible to qualify the time of each event with an adverbial, as argued in Fodor (1970) and Shibatani (1976), and as illustrated below:
 yesterday tell-PFTV-t-SI TRANS $\quad V \quad$ UNR-haircut-INCEP $\quad$ today Yesterday I told Vincent to cut his hair today.
 a.little.while.ago the my-grandfather hire a man
 UNR-work-PFTV-t-S3 ${ }_{\text {IRE }}$ the land tomorrow

A little while ago my grandfather hired a man to work the land tomorrow.
Both of the verbs in the lower clauses in the two examples above are members of the Class C Relational verbs:

104a $\mathrm{K}^{\mathrm{K}}$ ayilsxn - m - s - t - n'
haircut-REL/2-IMPF-t-S1 TRANS , movable
I had him cut his hair.
 the my-grandfather work-REL/2-IMPF-t-S3 ${ }_{\text {TR }}$ the man LOC land My grandfather had the man work on the land.

If these Class C Relationals involve two events, it should be possible to qualify each event with a temporal adverbial. However this is not possible and the result is ungrammatical:

yesterday haircut-REL/2-IMPF-t-Sl ${ }_{T R}$, movable today

a.little.whìle.ago the my-grandpa work-REL/2́IMPF-t-S3 $3_{\text {TRANS }}$
ai. sqəl’tmíxw 1 tmxwúla? ${ }^{\text {Pw }}$ w x̌láp.
the man LOC land tomorrow
This provides evidence that these constructions are not two $=$ event constructions and do not satisfy Shibatani's characterization of causative situations.

A further argument, specifically ruling out the True Causative proposal. ${ }^{\text {, }}$ with 3-to-2 Advancement is the lack of evidence from linear position
to support 3-hood, for the downstairs l, as there was in the case of the Dative (Indirective/Benefactive) construction, which permitted Advancement to 3:
 the girl eat-REL/2-TMPF-t-S3 TRANS the potato and salmon Si pptwina? $x^{w}$.
the old.woman

* The girl had eat the potatoes and salmon (to) the old lady. Thus, the True Causative proposal: would require making 3-to-2 Advancement obligatory, thus causing complications.

There remains the weak causative interpretation of these constructions to be accounted for and with it, the possibility that these may be one-event causatives nevertheless. Three arguments are presented below to argue against the putative causativity of these Class C Relational constructions.
i) First of all, these sentences do not always receive a dcausative' interpretation:
 T. scrape-face-REL/2-TMPF-t-S3 ${ }_{T R}$ the husband the mustache-his Tiqm asked her husband to shave off his mustache.

Tiqm had her husband shave off his mustache.

the my-grandmother me atop-sweep-slats-REL/2-TMPF-t-S3 $3_{\text {TRANS }}$
¢i sx̌lílp.
the floor.
My grandmother asked me to sweep the floor./
My grandmother had me sweep the floor.
ii) Secondly, such a construction, when subordinated to a directive, loses the force of the 'causative' interpretation (cf. 104a):
$108 \mathrm{cu}(\mathrm{t})-\mathrm{n}(-\mathrm{t})-\mathrm{n}$ Vincent $\oint \mathrm{i} \mathrm{K}^{\ell}$ ayilsxn-m-s-t-n. tell-PFTV-t-S1 TRANS $\quad \mathrm{V} \quad$ COMP haircut-REL/2-IMPF-t-SI ${ }_{T R}$ I told Vincent to cut his own hair.

* I told V. that I make him cut...
iii) Thirdly, the 'caused event' need not have occurred, i.e., have been caused, thus involving a contradiction in violation of the condition that the caused event is believed to be wholly dependent upon the causing event (Shibatani 1976):

the grandmother atop-sweep-slats-REL/2-IMPF-t-S3 $3_{T R}$ the boy
¢i sx̌lịlp ?¢ư lut $s-x ? i ̂ n a ?-s$.
the floor :and NEG s-obey-S $3_{\text {IRR }}$
Grannie had the boy sweep the floor but he didn't obey.
Three arguments have been advanced that the Class C Relationals
are not:causative:
i) that the constructions do not involve two-events;
ii) that there is no evidence for a downstairs 1 advancing to be an upstairs 3 ; and
iii) that there is no consistent causative interpretation.

It may be concluded that the Class C Relational éonstructions are not causative, of either the two-event or one-event type. Therefore, the third possibility, the Instrumental: Advancement proposal, is selected as the appropriate structure for the Clāss C Relational constructions.

Evidence to support this selection as the appropriate one comes
from Instrumental constructions:

the man work-PFTV-t-S3 TRANS the land
¢i t tel 1 -ula? $x^{w}-\mathrm{tn}$.
INSTR rip-land-Instr
The man worked the land with a plough.

the girl eat-PFTV-t-S3 TRANS the potato and salmon
§i t zưnn.
INSTR spoon
The girl ate the potatoes and salmon with a spoon.
In such. Instrumental constructions, the initial Instrumental nominal may advance to direct object, triggering the Relational morpheme on the verb:

the man work-REL/2-PFTV-t-S3 ${ }_{\text {TRANS }}$ the plough

the land
The man worked the plough (on) the land./
The man worked-with the plough the land./
The man used the plough on the land.
 the girl eat-REL/2-PFTV-t-S3 TrRANS the spoon the potato and salmon The girl used the spoon to eat the potatoes and salmon./ The girl eat-with the spoon the potatoes and salmon.

For such Instrumental constructions, both the initial
Instrumental nominal and the advancee-to-direct object nominal maybe questioned. With the Relational morpheme present on the verb, only the advancee nominal may be questioned, without the case-marking preposition, as: was seen in section $2: 4$ of this chapter:
 INSTR what the man COMP work-PFTV-t-S3 TRANS the land With. what the man worked the land?

 what the man COMP work-REL/2-PFTV-t-S3 $3_{\text {TRANS }}$ the LOC land What the man worked-with on the land?

 INSTR the girl COMP eat-PFTV-t-S3 $3_{\text {TRANS }}$

the potato and salmon
With what did the girl eat the potatoes and salmon?

 what the girl COMP eat-REL/2-PFIV-t-S3 TRANS the potato and salmon What did the girl use to eat the potatoes and salmon?


With an animate Instrumental nominal, the nominal must advance and the nominal may be questioned only when advanced:
 * The man worked the land with the hired hand.

the mani work-REL/2-IMPF-t-S3 TR the boy the land
The man has the hired hand working the land./
The man use the hired hand to work the land.
 who the mani: COMP PF-work-REL/2-IMPF-t-S3 $3_{T R}$ a strong Who does the man have working hard?


the girl eat - PFIV-t-S3 ${ }_{T R}$ the potato and salmon
si $t$ stomtíma? - $s$ ?
INSTR grandmother-her

* The girl ate the potatoes and salmon with/by means: of her grandmother.
 the girl eat-REL/2-IMPF-t-S3 ${ }^{\text {IR }}$ the grandmother-her the potato \& salmon The girl has her grandmother eating the potatoes and salmon.
 who the girl COMP PF-eat-REL/2-IMPF-t-S3 $3_{T R}$ the potato and salmon Who the girl has eating the potatoes and salmon?


Moreover, it may be noted that only one Instrumental nominal is: permitted in these constructions.. The Okanagan equivalent for 'The girl fed her grandmother the potatoes and salmon with a spoon' is not permitted.

The distinction between an Instrumental construction with an inanimate Instrumental nominal and one with an animate Instrumental nominal is that with the latter,
i) Advancement-to-2 is obligatory, and
ii) Imperfective aspect is required.

It may be concluded that the Class C Relational constructions aiso involve an advancement to 2, obligatory for animate Instrumental nominals, as represented in the relational network below:

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This analysis permits the following three statements:
(i) It allows for the statement of a linguistic generalization with respect to the structure of all three classes of Relational verbs:

117 that all three classes of Relational verbs involve advancement of an initial non-nuclear nominal to direct object, triggering the $-\mathrm{m}(1)$ morpheme on the verb as a marker of the advancement. (ii) It accounts for the vagaries of the "weak causative" interpretation which does not withstand close examination.
(iii) It accounts for the parallelism between the inanimate and animate Instrumental constructions.

## 3 Locative Clauses

Two types: of locative clauses are discussed: ${ }^{14}$

1) Locative Advancement: the basic pattern; and
2) Locative Advancement with Lexical Incorporation of body parts.

It is proposed
(i) that initial Locative nominals may, like other oblique objects;, advance up the Relational Hierarchy (Perlmutter and Postal 1978):

Subj (1) $>$ Dir. Obj. (2) $>$ Indir. Obj. (3) > Oblique Obj. (OBL)
(iii) that the verbal morpheme -(í)na? marks this advancement; and
(iii) that, when the Locative nominal is a body part, the verbal morpheme \#7 'Indirective' registers the presence of an initial oblique object.
3.1 The Basic Pattern

Locative clauses, with the -(î)na? verbal morpheme, are exemplified below:

118a $k^{w u} \quad t \quad-q^{\prime} t-i n a ?$.
$\mathrm{Pl}_{\text {INTR }}$ Dist-rain-LOC
We were rained on, i.e., It rained on us.

the boy climb-MIDDLE to mountain and Dist-rain-LOC
t. ksk'la? $x^{w}$ 。
a day
The boy climb to the mountain and he was rained on all day.

the man $s-P F$ - hunt-PROG a day and Dist-snowing-LOC
The man was hunting all day and he was snowed on.
d kn $\quad \rho_{n}-m \oint y-p-i ́ n a ?$.
$\mathrm{Sl}_{\text {INTR }} \begin{gathered}\text { Cont-know-UNACCUS-LOC } \\ \text {-find.out }\end{gathered}$
I understand.

$\mathrm{Sl}_{\text {INTR }}$ Cont-recognize-LOC
I understand.

Sl INTR $^{\text {Dist-spill-LOC-PFITV-REFL a tea }}$
I spilled tea on myself.
In the intransitive examples above, the putative Advancement is obligatory and the initial locative with case-marking preposition cannot be recovered. However, that is not the case with transitive locative constructions:

atop-spill-REL/2-PFIV-t-SI ${ }_{\text {TRANS }}$ the coffee the LOC floor
I spilled the coffee on the floor.

Dist-spill-REL/2-PFTV-t-SI ${ }_{T R}$ a liquid the LOC puppies
I spilled some water on the puppies.

Dist-spill-LOC-PFTV-t-SI $T R$ a liquid the puppies
I spilled some water (on) the puppies:
 Dist-spill-LOC-PFIV-t-SI ${ }_{T R}$ the puppies a liquid
I spilled (on) the puppies some water.

The proposed structure for $120 c$ can be represented graphically in the stratal diagram below:

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with the initial assignment of grammatical relations in the $c_{i}$ stratum, with $N N \rightarrow 2$ advancement in the $c_{i i}$ stratum, marked by $-m(i)$ which is replaced by the -ná marking $L O C \rightarrow 3$ advancement in the $c_{i i i}$ stratum, and with optional $3 \rightarrow 2$ advancement in the $c_{i v}$ stratum. Morphological evidence is available to support Locative Advancement. That the underlined nominals above bear the Locative relation in the initial stratum as in 119 and 120a is shown by the Locative casemarking preposition. That it does not bear the Locative relation in the next stratum, as in $\ddot{i} 20 \mathrm{~b}$, is shown by the absence of the case-marking preposition. It should be noted that l20b demonstrates thet-(i) na? morpheme on the verb. This morpheme replaces the -m(í) Relational marker of Advancement-to-2, thus providing evidence that -(í)na? also marks an Advancement (see also section 3.2, page 163). Syntactic evidence for Locative Advancement-to-2 is available from Quantifier Float, Passivization and Relativization. Evidence for intervening status as a 3 , as exemplified in 120 b , is given further below.

I spilled (on) all the puppies some water. (All I spilled (on) the puppies...)

## PASSIVIZATION:

 the puppies Dist-spill-LOC-PFrV-t-PASS some liquid INSTR boy The puppies were spilled water on by the boy.

## RELATIVIZATION:

 that a puppies COMP Dist-spill-LOC-PFTV-t-SI ${ }_{T R}$ a liquid That's: the puppies that I spilled water (on). An additional argument rests on Unaccusatives, which involve an intransitive initial stratum with a 2 and no l, and a final stratum in which the 2 advances to 1 , to serve as final subject. One class (A) of Unaccusatives is recognizable from the Second Consonant Reduplication (see Chapter Three). This is exemplified below with a topicalized final sübject:
 the puppies Dist-spill-UNACCUS-LOC a liquid

The puppies were spilled water on

the liquid Dist-spill-UNACCUS=IOC the puppies
The water spill on the puppies.

the coffee Dist-spill-UNACCUS-LOC female.name
The coffee spilled on Tíqmtìnak.

Sentences 122-124, 125a show that the initial Locative nominal advanced to 2, wi.th further advancement to 1 in 125 a , whereas in sentences $125 \mathrm{~b}, \mathrm{c}$, the initial Locative has advanced to 3 in a finally intransitive clause, as will be shown below.

Syntactic evidence is: also available to show that the initially Locative nominal advances to 3 in an intervening stratum, from Quantifier Float and from Relativization (but not from Passivization because of the effects: of the Animacy Hierarchy).

QUANTIFIER FLOAT:

I spilled all the coifee ( ton ) Tiqm./ (All I spilled the coffee....)

I spilled Cthe water ( O ) all the puppies. /(All I spilled ...the puppies.)
The examples above with Quantifier Float show that the initial Locative nominal cannot be a final 2 , since it cannot be modified by a floating quantifier, as in the $\underline{b}$ examples, whereas a final 2 , as in the $\underline{a}$ example, can float a quantifier.

RELATIVIZATION:

It's: all the coffee that I spilled on Tiqm.

smell-LTDC-PFIV-t-SI ${ }_{\text {TRANS }}$ the coffee COMP
I smell the coffee that I spilled (on) the puppies.
The examples above show that the initial Locative nominal cannot be a final 2 since only downstairs $1 s$ and 2 s can be relativized upon. In the sentences above, the coffee is relativized upon, as a final 2, thus the Locative is a 3 by default.
3.2 Consequences of Relational and Locative Advancement for LimiteadiControl

The morpheme -nú marks Limited Control. In such a construction, the agent is not fully in control of the action. Ther action may have occurred accidentally or unintentionally, as in l3ld, or the action may have occurred with complete volition but without full control, as in 13le. It is proposed here that -nú has a grammatical function as well as a semantic one, and marks advancement-to-2. ${ }^{15}$

Sentences a-c below exemplify intransitive constructions with qəy'x ${ }^{\text {w }}$ 'smell, have an odour', an Unaccusative verb, Class C. (This verb constrasts with the verb sum- ito smell something deliberately, to pick up something and smell it!.)
 the puppies CoMP s-smell-S3 ${ }_{I R R}$ like some coffee It's: the puppies that smell like coffee.
b $k^{w} \quad q ə y^{\prime} x^{w}$.
 You smell/stink.
 the NOM-smell-our good We smell good./ Oiur smell is good.

By comparison, the sentences below exemplify the transitive use of this verb, with obligatory -nú marking. It has already been shown that Unaccusative verbs involve advancement to 2 of an initially non-nuclear nominal in a transitive clause (see section 2 on Relational verbs Class B and Chapter Thieegesection 2 on Unaccusative clauses).

smell-LTDC-PFIV-t-S1 ${ }_{\text {TRANS }}$ the something
I smell something.

smell-ITDC-PFTV-t-SI TRANS the toast burn
I smell the toast burning.
The Limited Control morpheme replaces the $-m(\hat{1})$ Relational in (NL) Okanagan,
morpheme as does the Locative morpheme, thus providing additional evidence
that -nú marks an Advancement of a non-nuclear term to 2:

s.teal-REL/2-INDIR-t-you-S1 ${ }_{T R}$ the your-horse

I stole your saddlehorse.

steal-UNACCUS-LIDC-INDIR-t-you-S1 ${ }_{T R}$ the your-horse
I accidentally stole your saddlehorse.
$c \quad \sum_{i}$ in - $1 k a p o$ ? naq ${ }^{w}-q^{w}$.
the my-coat steal-UNACCUS
My coat was stolen.

$\mathrm{Sl}_{\text {INTR }}$ steal a horse
I steal a horse.

Sl $1_{\text {IRR }}$ - UNR-straight-REL/2-IMPF-t-INTR the my-back
I'm going to straighten my back.
b $\mathrm{cm}^{\prime}$ tiz - m-s-t-9úm-n.
will straight-REL/2-IMPF-t-you-SI TRANS
I'll s.traighten you out.
c $\varsigma_{i}$ pilitk $^{w_{m} m}$ tłtíí.
the nail straight UNACCUS
The nail is straight.
 straight-UNACCUS-LTDC-PFTV:t-SI ${ }_{T R}$ the nail

I sträightened the nail, accidentally/unintentionally.

s.traight-LTDC-PETV-t-S1 ${ }_{T R}$ the nail

I finally managed to straighten the nail.
The distinction between sentences $\underline{d}$ and $\underline{e}$ above are represented
in the relational networks below, which diagram the two types of Limited Control constructions possible:

132a TYPE A ( = a ) Accidental Reading, which requires initial Unaccusative


TYPE B ( $=$ e) Finally Managed To Reading:


Predicates which occur in transitive constructions, withean agentive subject, as in 133a below, require, for an accidental/unintentional reading, that an Unaccusative form of the root, usually of Class A wi.th. Second Consosnant Reduplication, be used, as in l33b below:

133a t'q ${ }^{w}-\mathrm{n}-\mathrm{t}-\mathrm{s}$ - în.
slap-PFIV-t-you-S1 ${ }_{\text {TR }}$
I silapped you.
b. $t^{\prime} q^{w}-q^{w}-n u ́(-n-t)-n$.
slap-UNACCUS-LTDC-PFTV-t-S $I_{\text {TRRANS }}$
I sliapped you accidentally.
c * t'q. ${ }^{w}-n u ́(-n-t)-n$.

* I slapped you accidentally.

the boy $\operatorname{slap}_{\text {UNACCUS }}$
The boy was: slapped.
Some yerbs require the Unaccusative form of another class, as does for example the verb $m$ ( $y$-'know', requiring the Class $D$ form with the $-p$ morpheme:
 PF-know-TMPF-t-SI ${ }_{\text {TRANS }}$ the man

I know the man.

know-UNACCUS-LTDC-PFTV-t-S1 TRANS the myth.
I found out about the old myths.
Sentences l29a,b, wi.th the verb qoy'x. 'smell, have an odour', utilize a verb of Class: C Unaccusatives.

Syntactic evidence that -nu constructions involye 2-hood is available from Relativization and Passivization. PASSIVIZATION:
 the baby steal-REL/2-PFTV-t-PASS INSTR man The baby was stolen by the man.
 the horse steal-UNACC-LTDC-PFTV-t-PASS INSTR man The horse was accidentally stolen by the man.
 the puppies: smell-ITDC-PFTV-t-PASS INSTR boy. The puppies were smelled by the boy.

RELATIVIZATION:
 that the your-horse s.teal-UNACCUS-LTDC-INDIR-t-you-S1 ${ }_{\text {TRANS }}$ That's your saddlehorse (that) I stole accidentally.
 lose-REL/2-PFTV-t-S3 $3_{\text {TRANS }}$ the nail COMP straight-LTDC-PPTV-t-SI $I_{\text {TRANS }}$ He lost the nail that I finally straightened.

As with the Relational constructions, no evidence is available for advancement to an intervening status: as: a 3 .

Both the Locative Advancement marker - (i)na? and the Limited Control marker -nú replace the Relational advancement marker -m(i). . In the case of a Locative Advancement construction involving an unintentional action, both the Limited Control and Locative Advancement markers appear:
 atop-spill-REL/2-PFTV-t-SI TRANS the coffee the LOC floor I spilled the coffee on the floor.
b $\quad \mathrm{k}-\mathrm{C} \mathrm{x}^{\mathrm{w}}-\mathrm{x}^{\mathrm{w}}-\underline{n a}-\underline{n u}-\mathrm{n}-\mathrm{t}-\mathrm{s}-\mathrm{n}$.
Dist-spill-UNACC-LOC-LTDC-PFTV-t-ÿou-S1 TRANS
I spilled on you accidentally.
On the basis of the preceding discussion, it can be noted that the -na in 137 b marks you, as having advanced from Locative-to-3, and that -nu specifies the advancement to 2 . The later advancement marker does not replace the éarliermarker, as it did with -m(i) . This can easily be explained: -mí is solely a grammatical marker of advancement-to-2, without semantic content, however -nú has semantic content which would be lost if this marker were deleted. The structure of $\underline{b}$ is represented graphically in the relational network below:

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with the Second Consonant Reduplication marking the $c_{i}$ stratum, the -na marking the advancement in the $c_{i i}$ stratum, and -nu marking the advancement in the $c_{i v}$ stratum.

### 3.3 Locative Advancement with Body Parts

Locative clauses involving body parts require the - $-\mathfrak{z}$
'Indirective' morpheme which registers the presence of an oblique object, as discussed in sections 1 and 3 of this chapter. Sentences
a - d below illustrate the constructions with body parts:
 the man slap-INDIR-t-S3 TRANS the boy the LOC head The man slapped the boy on the: head.
 the boy kick-INDIR-t-S3 TRANS the girl the LOC foot The boy kicked the girl on the foot.
 the baby Dist-pinch-INDIR-t-S3 $3_{T R}$ the cat the LOC tail The child pininched the cat on the tail.
 the woman pinch-UNACCUS-INDIR-t-S3 $3_{T R}$ the cat the LOC tail §i. 1 k ${ }^{2}$ §nkmíp. the LOC door The woman accidentally pinched the cat on the tail in the door. It is proposed that nominals referring to body parts of the 2-nominal, bearing the Locative relation in the initial stratum:
(1) may advance to 3 ,
(2) may optionally incorporate into the verb while bearing a 3 relation; and (3) may not advance to 2 .

Evidence that a locative body part may advance to 3 is available from the interaction of case-marking and Passivization:
 the boy kick-INDIR-t-S3 TR the girl the foot-her The boy kicked the girl (on) her foot.
 the girl. kick-INDIR-t-PASS the foot-her INSTR boy The girl was: kicked (on) her foot by the boy.
 the man slap-INDIR-t-S3 ${ }_{T R}$ the boy the head-his The man silapped the boy (on) hilis head.
 the boy slap-INDIR-t-PASS the head-his INSTR man The boy was slapped (on) his head by the man. Advancement of the underlined nominal from initial Locative is indicated by the absence of the case-marking preposition 1. The Passive constructions: demonstrate that this is: not advancement to 2. The proposed analysis: allows an account of the distinction; so by default, it is: advancement of the underlined nominals: to a 3. It should also be noted that when the underlined nominals bear the final Locative relation, these may not take a possessive affix, as in 1139a-d above. When the nominals in question bear the putative 3-relation, these may take a possessive affix as in 140-141 above. This fact provides additional evidence of a distinction and hence indirectly supports an analysis with adyancement.

Evidence that a Locative body part may incorporate into the verb while a putative 3 is also ayailable from Passivization. It should be noted that the lexical suffixes which incorporate are not necessarily
identical to the corresponding independent word.
 the boy kick-foot-PFTV-t-S3 TRANS the girl The boy kicked the girl (on) the foot.
 the girl kick-foot-PFTV-t-PASS INSTR boy The girl was kicked (o nl the foot by the boy.
 the man slap-head-PFTTV-t-S3 TRANS $\quad$ the boy The man slapped the boy (on) the head.
 the boy slap-head - PFTV-t-PASS INSTR man The boy was slapped (on) the head by the man. The nominal bearing a 3-relation may incorporate into the verb, with the loss: of the Indirective morpheme. See the sentences above as well as: those below: 17

144a k'̛̣̣̂ap - x ; to ${ }^{\text {w }}$ - sús $-\mathrm{n}-\mathrm{t}-\mathrm{s}-\mathrm{n}$.


Shut up! I slap you on the forehead:
 atop-slap-forehead-PFTV-t-you-SI TRANS

I slap you on the forehead.
c $\quad \mathrm{n}-\mathrm{t}^{\prime} \mathrm{q}^{w}-\operatorname{awsq}{ }^{2}(-\mathrm{n})-\mathrm{t}-\mathrm{s}-\mathrm{n}$.
Cont-slap-top.of.head-PFTV-t-you-S1 $1_{\text {TRANS }}$
I slap you on top of the head.

That a Locative body part may not advance to 2 is shown by the ungrammaticality of a Passive, and the lack of a corresponding active: These examples show that it is the initial possessor, not the Locative, that is a 2 as far as: Passive is: concerned.

the foot-her kick-INDIR-t-PASS the girl INSTR boy

* Her foot was: kicked on the girl by the boy.
 the boy kick-INDIR-t-S3 TR the foot-her the girl
* The boy kicked (on) her foot the girl.
 the head- his slap-INDIR-t-PASS the boy INSTR man
* His head was slapped on the boy by the man.

the man slap-INDIR-t-S3 ${ }_{T R}$ the head-his the boy
* The man slapped (on) his head the boy.
3.4 Dative Advancement with Pronominals

Dative clauses involving pronominals require the - - 'Indirective'
or -xí 'Benefactive' morpheme which registers the presence of an oblique nominal, as discussed in section $l$ of this chapter. The
sentences below illustrate the constructions with pronominals: 18

see-INDIR-t-you-SI ${ }_{T R}$ the your-house to you
I see you your house to you. / I see your house.
 the woman me sew-BENE-t-S3 $\frac{T R}{}$ some my-own-mocassin
k1 Sinca?.
to me
The woman sewed me my mocassins for me.

stretch-INDIR-t-S1 ${ }_{T R}$ the beaver.pelt to him
I stretched his beaver pelt for him.
The third person object marker is $\varnothing$ and does not appear in example 149. (See Chapter Two, section 1.3 for a chart of the object markers.)

It is proposed that a pronominal bearing the Dative relation
in the initial stratum: 19
(i) obligatorily advances to 2, in a clause with a transitive final stratum, placing the initial 2-nominal en chômage,
(ii) optionally leaves a copy of itself in the sentence, and (iii) requires agreement of a possessive marker on the $\hat{\hat{c}}$ - nominal, a possessor which may be deleted if the Dative copy is present. The relational network below illustrates the proposed analysis:

150


Morphological and syntactic evidence support an analysitis of a Dative pronominal obligatorily advancing to 2 in a clause with transitiye final stratum. First, an object marker is obligatorily present:

see-INDIR-t-you-SI ${ }_{T R}$ the your-houses to you

I see you your house to you. / I see your house.


the woman me sew-BENE-t-S3 TRANS some my-own-mocassin (K1 Sinca?).
to me
The woman sewed me my mocassins for me.
 Second, a Passive is ungrammatical with the initial 2-nominal as final 1, a fact which is explained under this analysis since the initial 2 is: now a 2 -chomeur due to Dative Advancement-to-2:
 the your-house see-INDIR-t-you-PASS to you INSTR woman
 the my-own-mocassin me sew-BENE-t-PASS to me Si $t$ tk ${ }^{2}$ mílx ${ }^{w}$.

INSTR woman
The following sentences, togèther with 152a, demonstrate that the possessive'marker of agreement on the initial 2-nominàl may be optionally deleted if the Dative copy is present:
 the woman me sew-BENE some my-own-mocassin to me The woman sewed me some of my mocassins for me.
 the woman me sew-BENE-t-S3 TR some mocassin to me The woman sewed me some mocassins for me.
 the woman me sew - BENE-t-S3 ${ }_{T R}$ some mocassin

It should be recalled that, although the Dative pronominal itself need not appear on the surface, $-x /-\neq$ as registers of an initial oblique, show that it must be present.

Restricting the obligatory Advancement-of-Dative-pronominals-to2 to clauses with transitive final stratum is necessary to account for the following Passives, which show only the agreement possessive marker on the initial 2-nominal:
 the my-own-mocassin sew-BENE-t-PASS to me
si $t$ tkinílxw.
INSTR woman
My own mocassins were sewn (for me) by the woman.
 stretch-INDIR-t-PASS the beaver.skin-his to him INSTR man His beaver pelt was stretched (for him) by the man.
 the your-house see-INDIR-t-PASS to you INSTR woman Your house was seen (to you) by the woman.

The similarity between this analysis for obligatory advancement of Dative pronominals to 2 and the analysis for advancement of Locative body parts to 3 should be noted. In all the examples of Locative body parts, sentences 132-1.47 of the previous section, the body part is part of the person referred to by the initial direct object. To permit a locative body part to advance beyond 3 would be to permit a portion of a human being to outrank an entire human being. Hence it is prohibited and the grammar permits incorporation into the verb, and effectively places the body part out of play. Somewhat similarly, for the Dative pronominals, to permit a pronominal to remain as an oblique would be to permit an inanimate 2 without human reference (whether contextual ror linguistically marked) to outrank a human being. Hence advancement is obligatory in a clause with transitive final stratum, assuring that the pronominal is a final 2, and in a Passive, the copy possessive marker on the initial 2 assures that the human reference is part of the final 1 .

4 Possessor Ascension
A rule of Possessior Ascension is needed in the grammar of Okanagan. Such a rule allows a Possessor of a nominal to ascend and bear the grammatical relation of that nominal, placing that nominal en chômage. Such a rule (generalized from Bell, 1976) can be stated as: 158 POSSESSOR ASCENSION

If $\underline{a}$ is a Possessor in nominal $\underline{b}$ and $\underline{b}$ bears the grammatical relation $N$ to clause $c$, then a may bear the gramatical relation $\underline{N}$ to $\underline{C}$ and $\underline{b}$ bears the chomeur relation.
i) Under certain conditions, the chomeur nominal may incorporate,
if there exists a lexical suffixal form.
ii) If it does not incorporate, a pronominal copy bearing the Possessor relation to nominal. $\bar{b}$ remains behind.

This is diagrammed in the relational network below:
159.


It is proposed for Okanagan that Possessor Ascension is permitted from a 2 only if the Possessor may advance to a l. A case where Possessor Ascension is possible is an Unaccusative clause. Two structures are possible:

## 160a Ascension from a 2

in an Unaccusative clause
b Ascension from a final 1 in an Unaccusative clause


There is some evidence supporting 160a as the correct structure:
(a) a difference in meaning with unergative clauses suggests that

Possessor Ascension from final ls is barred, and
(b) data from transitives confirms this:
4.1. Ascension in Intransitive Clauses

A Possessor may ascend from a nominal bearing the 2-relation in an Unaccusative clause, placing that 2-nominal en chômage, with obligatory incorporation:

161a x̌ast $\rho_{i} \rho_{i(n)-s p 9 u s . ~}^{n}$
good the my-heart
My heart is ginad.
b. kn x̆asptius.
$\mathrm{Sl}_{\text {INTR }}$ good.heart
I'm glad at heart.
$162 a$ x̌ast §i $_{1}$ in $-k w^{〔}$ áp.
good the my-saddle.horse
My horse is good.
b. kn x̆asqáxa?
$\mathrm{Sl}_{\text {INTR }}$ good.horse
I"got a good horse.

the my-offspring ITER-lost
My kids are lost.
b. kn 'sl' - sl' - ilt.
$\mathrm{Sl}_{\text {INTR }}$ ITER-Iost-child
I got lost chilldren.
c Si sqəl'tmîx ${ }^{w}$ i squ@əsíya? - s sl' - səl't.
the man the offspring - his ITER-lost
The man's. children are lost.
 the man ITER-lost-child

The man got lost children.
 the my -offspring good

My kids are good.
b kn x̌s - ilt.
$\mathrm{Sl}_{\text {INTR }}$ good-child
I got good kids.
 the my - offspring many - child

My kids are many.
b kn $\quad t-x^{w}-x^{w}-$ ilt.
$\mathrm{Sl}_{\text {INTR }}$ Dist-ITER-many-child
I got lots of kids.

the my-baby cry ${ }_{\text {UNACCUS }}$.
My baby is crying.
b kn $\quad$ ćq $^{w} q^{w}$ - int.
$\mathrm{SI}_{\text {INTR }}{ }^{\text {cry }}{ }_{\text {UNACCUS }}{ }^{-c h i l l d}$
I got a crying baby.

the small.calf born
The small calf is born
b kn $\quad k^{w} ¢ 11-k^{w} \varsigma 11-\underline{11 t}$.
$\mathrm{Sl}_{\text {INTR }} \quad$ ITER-born-child
I have borne children (twins).
c $\mathrm{kn} \quad \mathrm{k}^{\mathrm{w}} 911$ - 11 t .
$\mathrm{Sl}_{\text {INTR }}$ born-childa
I am borne a child.
That the Possessor has ascended and bears the final l-relation in examples: $\underline{b}$ and $\underline{c}$ in 161-167 above is shown by the use of the appropriate subject marker: kn 'first person, singulär, intransitive, realis.' Evidence from Unergatives suggests that Possessor Ascension from final ls as: diagrammed in 260 b is barred. The examples below involve Unergatives paired with. Unaccusatives. With Unergative :verbs in the a sentences, the final subject is agentive, whereas in the b sentences, the final subject is a stative Possessor:

168a $\uparrow$ i $\uparrow i(n)$ - kwfíp qqîcəl’x.
the my-saddle.horse trot (Diminuative form of run)
My horse is trotting.
b kn qqcl' - sqâxa?
$\mathrm{Sl}_{\text {INTR }}$ trot-horse
I got a trotting horse.

the my-daughter run
My daughter runs (like out in a field).
b: kn qcolx - ill.
${ }^{S 1}{ }_{\text {INTR }} \quad$ run-child
I got a child who runs around (like with her boyfriends or his girlfriends).

the my - offspring play - PL.REDUP
My kids are playing (not me though).
b kn $\quad$ 个甲əckn - ill．
$\mathrm{Sl}_{\text {INTR }}$ play－child
I got to playing with the kids（me included．）．
The fact that the $\underline{\mathrm{b}}$ sentences cannot receive an Unergative，agentive interpretation supports not having Possessor Ascension from a 1. This evidence supports the structure diagrammed in 160a as correct．

## 4．2 Ascension in Transitive Clauses：

Additional evidence from a Regular Transitive construction
shows that Possessor Ascension is：not permitted from a nominal bearing the l－relation：

the my－daughter count＝PFIV－t－S3 $3_{\text {TRANS }}$ the horses
My daughter counted the horses．
 the my－daughter count－PFTV－t－S1 TR the horses
 count－child－PFTV－t－S1 ${ }_{T R}$ the horses
$\mathrm{d} * \mathrm{kn}$ ck－int $\uparrow \mathrm{i} / \mathrm{t}$ s〔nkłc〔ə̀sqâxa？
$\mathrm{Sl}_{\text {INTR }}$ count－child the／some horses

$S 1_{\text {INTR }}$ count－MIDDLE Jas my－daughter the／some horses
＂び，
Sentences $\underline{b}-\underline{e}$ illustrate $a l l$ the possibilities for ascending a
Possessor from a 1 in a Regular Transitive construction．In sentence $\underline{b}$ ， the verb has：first person，transitive marking with the initial 1 nominal with．Possessor Copy retaining independent word status．In sentence $\underline{c}$ ，
the verb also shows first person, transitiye marking with the initial 1. incorporated into the verb, with its lexical suffixal form -ilt
'child'. In sentences $\underline{d}$ and $\underline{e}$, the verb shows first persion intransitive marking, with lexical incorporation in $\underline{d}$ and without in e. All possibilities: are ungrammatical. This supports the evidence presented in section 4.1 that Possessor Ascension from an Unergative clause is ungrammatical.

Moreover, it may be shown that a Possessor may not ascend from a 2 to bear the 2-relation in a Regular Transitive construction:
 see-PFIV-t-SI TR the your-house I saw your house.
 see--PFIV-t-you-SI IRR $^{\text {the }}$ your-house
 see-house-PFIV-t-you-S1 ${ }_{\text {TRANS }}$

However, a Possessor may ascend from a nominal bearing the 2-relation in a transitive clause, placing that 2-nominal en chômage, with obligatory incorporation, only if the Possessor may advance to $l$. A case where this is possible is in a Passive clause, as illustrated below: ${ }^{20}$
 the woman see-PFTV-t-S3 TRANS the your-house The woman saw your house.
 you see-house-PFTV-t-PASS INSTR woman You were house-seen by the woman.
 you see-PFTV-t-PASS the your-house INSTR woman
 you see-PFTV-t-PASS INSTR woman the your-house
 the your-daughter count-PFTV-t-S $3_{\text {TRANS }}$ the my-PL-saddeehorse Your daughter counted my horses.
 I. I count-horse-PFIV-t-PASS INSTR your-daughter I was horse-counted by your daughter.

I count-PFTV-t-PASS the my-PL-sadalehorse INSTR daughter

I count-PASS INSTR your-daughter the my-PI-saddlehorse

the man count-PFTV-t-S $3_{\text {TRANS }}$ the daughter $-S 3_{\text {POSS }}$ The $\operatorname{man}_{i}$ counted his ${ }_{i, j} /$ her daughters.
 S. $3 . /$ ecount-child-PFIV-t-PASS INSTR man $\mathrm{He}_{\mathrm{j}} /$ She was child-counted by the man.
 S3 count-PFrV-t-PASS the daughter -S3 ${ }_{\text {POSS }}$ INSTR man
 S3 count-PFIV-t-PASS INSTR man the daughter-S3 ${ }_{\text {POSS }}$

This supports: ansanalysis permitting Possessor Ascension from a 2-nominal, with obligatory incorporation, only if the Possessor advances to a 1 .

Four characteristics may now be noted with respect to Possessor Ascension in Okanagan:
i) Possessor Ascension is permitted from a 2 only if the Possessor may advance to a $I$;
iii) These are finally intransitive clauses;
iii) Possessor Ascension occurs only if there exists a lexical suffixal form of the head nominal, whichobligatorily incorporates:
 the my-.- cows many My cows are many.
b * kn t - $\mathrm{X}^{\mathrm{w}} \mathrm{X}^{\mathrm{w}}-\ldots$. * I got many cows.
iv) The pairs of sentences $161-167$ and $173 a, b-175 a, b$ show now change in meaning: the final subject is stative in the $\underline{a}$ sentences and a stative Possessor in the $\underline{b}$ and $\underline{c}$ examples.

A generalization with respect to Possessor Ascens:ion in Okanagan may now be formulated. Based on the data and constructions examined herein, the relevant generalization is:

## 177 Possessor Ascension in Okanagan

is permissible only from a 2 in some stratum $S_{i}$, only if the Possessor may advance to 1 in stratum $S_{i+1}$, with the 2-chomeur obligatorily incorporating.

### 4.3 A Statement of Lexical Incorporation

Evidence that a 2-chomeur may not incorporate into the verb in a finally transitive clause iss available:

count-INDIR-t-you-SI $I_{T R}$ the your-offspring
I count you your kids.
b * ck -i1t-t-s in count-child-t-you - $\mathrm{SI}_{\mathrm{TR}}$

A 1 inting of cases , withrespect to Lexicala Incorporation is now possible:
179. LEXICAL INCORPORA安ON IS PERMISSİBLE:
i). obligatorily from a 2-chomeur in an Unaccusative clause, finally intransitive (the case in section 4, Chapter Foura); ii) obligatorily from a 2-chomeur in a Middle voice clause, finally intransitive (the case in section:3, Chapter Threel; iiii) optionally from an initial 3 in a Reflexive Unaccusative clause (the case in section 3.4, Chapter Three); iv) optionally from an advancee 3 in a Locative Advancement clause, finally transitive (the case in section 3.3, Chapter Three). LEXICAL INCORPORATION IS NOT PERMISSIBLE:
i) from a 2 or a 1 (the case in sections 4.1 and 4.2, Chapter Four). The relevant generalization with respect to Lexical Incorporation in Okanagan for nominals having a lexical suffixal form is: ${ }^{2 l}$

## 180 LEXICAL INCORPORATION IN OKANAGAN

is restricted to non-nuclear terms and chomeurs as follows:
i) optionally from a 3;
ii) obligatorily from a 2-chomeur in a monoctausal, finally intransitive construction.

### 4.4 Ascension in Middle Clauses:

A Middle voice clause does not permit a Possessor as: part of the initial direct object nominal phrase:

$\mathrm{Sl}_{\text {INTR }}$ count-MIDDLE some your-offspring

${ }^{P} 1_{\text {INTR }}$ break - MIDDLE some your-PL-cup
Moreover, in a construction with Lexical Incorporation, obligatory with a 2-chomeur in a Middle clause, the 2-chomeur is not necessarily interpreted as being possessed by the subject, i.e., possessive reference is unspecified.

182a kn ck - ilt - m.
$S_{\text {INTR }}$ count-child-MIDDLE
I count anybody's: kids./my kìds.
b. kn ck - sqáxa? - m.
$\mathrm{Sl}_{\text {INTR }}$ count-horse-MIDDLE
I count anybody's horses/my horses.
$c$ si ttwỉt $k$ - txilixw - sqáxa? - m.
the boy Dist-curry-horse-MIDDLE
The boy curries anybody's: horses/his horses.
These two facts: of 2-chomeurs in Middle clauses: serve to
distinguish them from 2 s resulting from Possessor Ascension:
183 DEMOTION $\hat{2}$ s (Middale voice clauses) ASCENDEE $\hat{2}$ s (From Possessor Ascension)

1. Pronominal marking of initial 2 is ungrammatical;
2. Pronominal marking of initial 2 is obligatorẏ;
$a$.

# 2. Reference of the possessor <br> is unspecified and <br> 2. Reference of the possessor of the $\hat{2}$ is specified. unrestricted. 

As already pointed out, lexical incorporation of $\hat{2}$ s may only occur in finally intransitive clauses.

These facts have a bearing on the correct analysis: of the Middle voice clauses. In Chapter Three, section 3, two analyses of Mìddle clrảuses were discussed:

184a ANTIPASSIVE

b
The PHANTOM ARC Solution


The Phantom Arc Solution accounted for all the facts presented as well as resolving a serious problem with the Antipassive analysis.

The facts from Posses:sor Ascension provide a thirìd argument for the Phantom Arc Solution. In an Unaccusative clause, Possessor Ascension may occur from the nominal bearing the 2-relation in the initial stratum:


Both the Antipassive analysis: and the Unaccusatiye inyolye Unaccusatiye 2-to-1 Adyancement, from the penultimate intransitive stratum with a 2 but no l, to 1 in the ultimate stratum. This predicts that Possessor Ascension from the yo-yo-ed $1 \rightarrow 2 \rightarrow 1$ nominal in the Middle voice clause cum Antipassive should be possible. However this prediction is not borne out:

the my - offspring work-MIDDLE My Kids work.
b. * kn $\mathrm{k}^{\mathrm{N}} \mathrm{u} \mathrm{l}^{\prime}-\underline{i} 1 \mathrm{t}-\mathrm{m}$.
$\mathrm{SI}_{\text {INTR }}$ work-child-MIDDLE
This provides an additional argument in support of the Phantom Arc Solution which does not involve Unaccusative advancement of the initial 1 nominal.

It may be noted that Possessor Aseension does not oecur from a 2 in a transitive stwatum where the 2-are and the l-arc multi-attach and where the 2 and the 1 are non-distinct, i.e., in Reflexive and in :the Middle voice under a Phantom Arcsolution. Further work on this: language and on others is desirable to determine whether multiattachment or non-distinctiveness is incompatible with Possessor Ascension.

FOOTNOTES - CHAPTER FOUR

1 It appears that Okanagan permits only two NPs or PPs following the verb. When a third is present, Topicalization is obligatory.

2 By virtue of the Oblique Law, a nominal that bears an oblique relation finally bears that relation initially:

The Oblique Law (PerImutter and Postal 1978)
A nominal that bears a term relation in a given clause may or may not bear that relation in the initial stratum in that clause. A nominal that bears an oblique relation inna erause, on the other hand, bears that relation in the initial stratum.

Thus, the nominals in question there bear the oblique relation in the initial stratum.

3 It does not appear to be possible to say 'The priest wrote a letter for me to the agent' With double Dative nominals. It is: possibie to say one or the other.

4 Interrogativesswít can advance in other constructions, such as a Relational; see section 2.4 this chapter.

5 A competing hypothesis for Quantifier Float is: possible: that a floating quantifier must modify the NP closest to the $V$. However, in a $N P V$ NP construction, the NPs are equally close to the V. Thewexample below is such a construction and shows that a floated quantifier is preferentially interpreted as having come off the subject:

the children all hide-PFTV-t-P3 TRANS the eggs:
The children all hid the eggs.
i.e., All the children hid the eggs.

* The children hid all the eggs.

When the nominal subject is singular and the nominal object is plural, a sentence with a floated quantifier is awkward but the quantifier is: unambiguously interpreted as having floated off the direct object:
 the man all give-INDIR the salmon the old.woman The man give all the salmon to the old lady.

A revised alternative hypothesis is possible: that a floating quantifier must modify the NP immediately following the $V$ and that this. precedes Topicalization. However this cannot be maintained as shown by the following example:

all eat TRANS the man the salmon
The man ate all the salmon.
A further argument against word order as the basis for quantifier float rests: on the interaction of Passive, $3 \rightarrow 2$ Advancement and Quantifier Float. A floated quantifier cannot modify the initial 2 in a Passive where the initial 3 is final l:
 the girl ail weave-BENE-t-PASS the PL-basket

Si $t$ stəmtíma? - s.
INSTR grandmother - her
Additional evidence against the hypothesis that word order restricts: Quantifier Float is available, The following examples (from p. 143) show ; that it cannot be said that a quantifier floats from a nominal directly after the verb:
 the elder steal all the horse The old man stole all the horses.

the elder all steal the horse
Thus an account of Quantifier Float in terms of linear order cannot be supported and reference must be made to grammatical relations. 6 It should be noted that the verb $\mathbf{c x}^{w}$ - 'spill' differs from the verb 'pour' which may occur in the Middle voice and in a regular transitive construction without the Relational suffix:

Sl INTR pour-MIDDLE a coffee LOC my-cup
I pour some coffee in my cup.

Cont-ITER-pour-PFTV-t-S1 TRANS all the coffee
I poured all the coffee.
It should also be noted that $\mathrm{k}^{\mathrm{w} ؟}$ ? ? . 'get used to' may occur in the irrealis mood, with the upper predicate ks- 'Unrealized action' which requires Subject Raising, as either a transitive or intransitive clause, exemplified in $\underline{c}$ and $\underline{d}$ below. However, in the Realis mood, the Relational construction, exemplified above in 48, is obligatory.

easy UNR-get.used.to-INTR-S3 IRR a people
It's easy to get used to the people.
d. $\quad k^{w} \quad \varphi_{i}(n)-k s-k^{w} \varrho_{\partial} ?-m i ́-n-m$.
you $\mathrm{Sl}_{\text {IRR }}$-UNR-get. used.to-REL/2-PFTV-INTR
I'm going to get used to yout.
7 See footnote 4, Chapter Three, p. 106, and footnote 12 following, discussing the assignment of thematic relations.

8 It is not clear whether the stratal diagram for Class: B Relational verbs is a or b :
a.

b.


The question of whether two advancements may occur in the same stratum as in a above has not been discussed in Relational Grammar nor is any evidence available to choose between $\underline{a}$ and $\underline{b}$ here.

9 This is an idiomatic use of the root lfímt 'glad'.

10 This predicate is a member of Unaccusative Class B6, p. 75. See also 'talkative' in Class B3, p. 74.

11 :In examples 77 a and 79 a , it should be noted that the quantifier
 than the non-specific $t$.

1212 It should be noted here that the argument that Relational clauses are initially intransitive and finally transitive utilizes the cover term Non-Nuclear Object and need not claim for example that fo Slpút 'cup.' in 56 c bears the same initial grammatical relation as t'l Sinkwৎáp 'from my horse' in 56a, although it is quite likely that in examples 61b,c, the word $\lambda^{2} x^{2 x}$ áp 'elder' bears the same initial grammatical relation.

Moreover, for predicates of Class A3 which also determine Unaccusative statum, taking -t marking; it should be noted that as Relational Class A3 predicates, these take a different assignment of initial grammatical relations [1, Non-nuclear] than as Unaccusative Class B2 [2, Non-nuclearj̣.

13 Readers familiar with Thompson (1272) may wish to consider the -s morpheme in the Class C Relationals as instances of a "causative $-s$ ". In addition to the reasons given in Hebert (1982) against. the -s analyzed as 'Imperfective', herein, the arguments presented in section 2.5.2 of this chapter argue against taking the $-s$ in the Class $C$ Relationals as a causative marker. These arguments show that:
a) the constructions do not involve two-events;
b) there is no evidence for a downstairs I advancing to be an upstairs 3; and
c) there is no consistent causative interpretation.

14 It is not possible, at the time of writing, to indicate whether almost
all stems or some or just a few permit $L O C \rightarrow 3$.
15 It is not know, at the time of writing, whether -nu occurs on few or many roots.

I6 The data would also be compatible with an analysis of incorporation directly from Locative. However as well be seen in section 4.3, the rule statement for Lexical Incorporation is simpler if 3 s are incorporated. 17 In some languages, an incorporated nominal is a chômeur. It would be interesting to investigate if this nominal is a 3-chômeur in Okanagan. 18 This should not be confused with Dative constructions involving nominals as in examples: 4 b and 5 a , this chapter.
19. Three other analyses: may be considered for these Dative pronominals:
i) Possessor Ascension to Dative;
ii) Possessor Ascension to 2, obligatory in a clause with final transitive stratum, or
iii) Ascension from Copied Dative.

The first of these, Possessor Ascension to Dative, proposes that the Possessive marker on the initial 2-nominal, ascends to bear the Dative
relation. This analysis has four problems: one, the Indirective or Benefactive morphemes register the presence of an initial Oblique nominal, as argued in section $I$ of this chapter; two, this is prohibited by the Oblique Law: (Perlmutter and Postal 1978) which. requires that

OBLIQUE LAW: Ac nominal that bears a term relation in a given clause may or may not bear that relation in the initial stratum in that clause. A nominal that bears an oblique relation in a clause, on the other hand, bears that relation in the initial stratum.
three, the analysis is more complex, since a rule of Possessor Ascension to Dative; is added to the grammar, while retaining all the other rules needed under the proposed analysis; and .
four, it makes the rule of Possessor Ascension (section 4) subject to different conditions.

The second of these possible analyses, Possessor Ascension to 2, obligatory in a clause with final transitive stratum, proposes:
i) that an optional copy iis left on the $\hat{2}$,
ii) that a Dative is obligatorily present, as shown by the presence of $-\mathbb{y},-x(i)$, registers of an initial Dative on the verb; and iii) that there is an agreement rule between this Dative and the Possessor. A possible relational network is given as:


This analysis also has problems: one, the restriction to a clause with final transitive stratum, and two, the arbitrariness of the agreement rule, These two problems are also shared with the analysis of Obligatory-Advancement -of-Dative-to-2 adopted above, however without allowing for the similarity with the advancement of the Locative body parts, as discussed at the end of this section, 3.4.

The third of these is the most elegant of the four analyses considered: Ascension from Copied Dative, which proposes
i) that the initial Dative is copied onto the 2-nominal, from which
iii) either the $2 \rightarrow 1$ in a Passive construction, or
iiii) the Possessor Copy ascends to 2, placing the initial 2-nominal en chômage. A possible relational network for the finally transitive case is given:


However, this analysis raises three problems:
one, it proposes a new type of rule for Relational Grammar, that of allowing an Oblique to be copied onto a Term nominal, making a strong claim for the theory and for other languages;
two, itt loses a similarity with the. Locative body parts: phenomenon; and three, it makes the rule of Possessor Ascension (discussed in the following section, 4 , of this chapter) subject to different conditions.

Basically, that rule state that Possessor Ascension is possible from a 2 only if it can advance to all whereas this Dative rule of Possessor Copy Ascension would be possible to a 2, without advancing to 1 . 20 This pattern of Possessor Ascension in Passive constructions was obtained from Sharon Lindley of Quilchena. See also Appendix I: Consultants.

21 That. Lexical Incorporation is: restricted to non-nuclear terms: (i.e., 3s and obliques) and chômeurs may be supported from a possible analysis of the prefix ks-'Unrealized Action' as an upper predicate, requiring Subject Raising. In a ks- construction, involving Pronominal Dative Advancement to 2 , and a downstairs clause that is initially transitive and finally intransitive, Lexical Incorporation is permissible for a 2-chômeur:

you $S_{I R R}$-UNR-count-INDIR-t-PASS the your-PL-horse
I'm going to count your saddle horses.
b. $\quad k^{w} \quad \sum_{i}(n)-k s-c k-s q a ̄ x a^{?}-m$.
you $\mathrm{SI}_{\text {IRR }}$ - UNR - count - horse - INTR
I'm going to count your horses.
The relational network representing the structure in a, babove is diagrammed below:


The grammatical relation borne by the downstairs clause to the upstairs clause, whether it is a 1 or a 2, has been left unspecified, as $\mathbb{N}$, since it issimmaterrial to the analysis here -- the head of the initial 2 nominal is a $\hat{2}$ in either case.

The two sentences $\underline{a}, \underline{b}$ also show that Lexical Incorporation is sensitive to monostratal vs putative bistratal structure, since the Lexical Incorporation is optional from a 2-chomeur in a bistratal structure but obligatory from a monostratal structure.

## RELEVANCE OF ANALYSES

This chapter discusses the relevance of the preceding analyses for Salishan linguistics in section 1 , and for the theory of Relational Grammar in section 2.

I Relevance to Salishan Linguistics
The analyses presented in Chapters Three and Four contribute to the study of Salishan linguistics. Each of the following topics will be reviewed in turn: the Benefactive and Indirective constructions (1.1), the Relational construction (1.2), the Locative construction (1.3), the existence of indirect objects (1.4), the 'Transitive -t' (1.5) and the characterization of the Midale voice (1.6).

### 1.1 Benefactive and Indirective Constructions

The -x(î), - $\boldsymbol{Z}$ morphemes of the Dative clauses, termed 'Benefactive' and 'Indirective' respectively, are the Okanagan tokens of a class of morphemes which Kinkade (1980) terms 'Redirective' for "Suffixes in Interior Salishan languages which are used when two goals are implied for transitive stems." Three important papers discuss: these morphemes. The Southern Interior:Salishan Ianguages have multiple members in this class whereas the Northern Interior Salishan languages have reduced the set of members to one. For Columbian, Kinkade (1980) reports; three or more members, -xí, -Z, -tưł with possibly - C’ał, -c, -s and -xíx, -xáx. The phenomena appear to be similar syntactically to the Okanagan data, with advancements from Oblique to 3 to 2 , as
exemplified below, as shown by case-marking and linear position: COLUMBIAN:

| la | ( $=$ MDK 13) | ?ac - yâẏn sttámitam k1 Mary |
| :---: | :---: | :---: |
|  |  | I'm weaving a bag for Mary. |
| b | ( $=$ MDK 14) | q'ǐy'ta? qiomíns Mary. |
|  |  | Write a letter for Mary: |
| c | ( $=$ MDK lıl | ?ac - kałxtn sttámıan Mary. |
|  |  | I gave Mary a bag. |
| a | $(=\mathrm{MDK} \mathrm{I})$ ) | ?ac - yáyxtn Mary sttâm'tań. |
|  |  | I made a bag for Mary. |

The case-marking distinctions between the multiple members: of the Columbian redirectives is not reported, and the semantic distinctions: need further clarification. Columbian is reported as permitting redirectives in intransitive clauses, with either -xix or -xáx, as in $\mathfrak{a}, \underline{b}$ below. These intransitive clauses are reported as occurring transitively in Relational clauses, as in $\subseteq$ below:
$2 \mathrm{a} \quad(=\mathrm{MDK} 43) \quad$ xəsmxíx.
he lost something for/of someone.
b $\quad(=$ MDK 44) $\quad$ xəsmxáx.
he lost something belonging to someone else.
c $\quad(=$ MDK 42) $\quad$ xəsxíxmən.
I lost it for them (not deliberately).
For Spokane (a dialect of the Kalispel language), Carlson (1980)
reports -ši and - $\ddagger$, which he terms 'benefactive/substitutive' and 'relative', respectively, with -7 also occurring in possessive constructions. The case-markings indicate that different oblique grammatical relations may be involved initially:

SPOKANE-KALISPEL:

I made a basket for Agnes.

I gave a basket to Agnes.
Moreover, after putative advancement of the initial oblique nominal to 2 , the initial 2, now a 2-chomeur according to Relational Grammar, takes obliquescase-marking:

I made Agnes a basket. OBL

I gave Agnes a basket. OBL
For Thompson, a Northern Interior Salishan language, Thompson and Thompson (1980) report one morpheme, -xí with benefactive, malefactive, indirective or possessive meaning. Again, these seem to involve an initial oblique object:

5a (= T\&T 4I) má9xtxw e smúzec to szélts.
break-BEN-t-S2 ${ }_{T R}$ dish. OBL woman
You smashed the woman's dish.

For Shuswap, Kuipers (1974) also reports only one morpheme. -xî, usually 'benefactive'.

Based on the facts as reported in the sources reviewed and the analysis of the (NL) Okanagan, a hypothesis can be made with respect to language change in the Interior Salishan languages:
that originally, these "redirective" clauses involved different oblique gramatical relations, which merged, with a subsequent Zoss of membership in the class of morphemes which register the presence of that initial oblique nominal;
and that this language change occurred first in the Northern Branch and is incomplete in the Southern branch.

An alternative hypothesis is:
7 that originally, these "redirective" clauses involved a general oblique grammatical relation which split with a subsequent increase of membership in the class of morphemes which register the presence of an initial obrique nominal
and that this language change occurred first in the Southern Branch and is incomplete in the Northern Branch.

To verify either hypothesis, further work is needed, in both Coast and Interior languages, synchronically with respect to case-marking and putative advancements from Oblique to 3 to 2 , supported by syntactic evidence.

### 1.2 Relational Constructions

Relational clauses are also reported as occurring in other Interior Salishan languages (Shuswap, Thompson, Columbian, and Colville-Okanagan), with the -mí morpheme having a transitivizing function. The (Nicola Lake) Okanagan analysis contributes to Salịshan linguistics by identifying three classes of Relational clauses, by examining the clausal structure of each of these classes; by deciphering the 'weak causative' meaning of one of these classes and by specifying
the -mí morpheme, in Relational Grammar terminology, as a marker of advancement of a non-nuclear nominal to 2. Similar constructions to the Okanagan RelationalClass C, with weak causative interpretation, have been reported for the Thompson language:

8 (= LCT 16) a séxw - m - s - c. 'she makes him bathe'
b 火色q $q^{w}-m-s-t-x^{w}$. 'you make him do the nailing' c $\mathrm{k}^{\mathrm{w}} \mathrm{m}_{\mathrm{n}}$ - m-s - t-és. 'she made him take hold'

According to L.C. Thompson's (1979) analysis, these are assumed to be causativized middle forms. Further work on the syntax of this language may reveal whether these are true causatives involving biclausal structure with Middle voice clauses or Instrumental Advancement like the (NL) Okanagan constructions.

## 1. 3 Locative Constructions

The identification of the Locative clauses wi.th a morpheme -ína? marking advancement is new, as is the analysis with respect to Possessor Ascension. Possessive constructions occurring with a Redirective morpheme have been exemplified and/or noted in other Interior Salishan languages, with - $\mathfrak{Z}$ in Columbian and Spokane-Kalispel, and with--xí in Thompson, although the analysis here for Okanagan as obligatory Pronominal Dative Advancement to 2 with optional copy and agreement is: new.

### 1.4. The Existence of Indirect Objects

Anotheropröblemlin.Salỉhenninguistics is the existenceadoindirect objects, i.e., 3s. The traditional view is that Salishan languages have only subjects, direct objects and oblique objects, but no indirect objects. As a consequence of the analyses presented in Chapter Three, an initial 3
has been proposed by default. This falls out of the identification of two classes of Unaccusatives, the Reflexive Unaccusatives and the -p class. Lexical incorporation and Quantifier Ban serve to distinguish between this putative 3 and the grammatical relation borne by the initial $2 /$ final $\hat{2}$ of the Middle voice clauses. In Chapter Four, three more instances :of 3 s are discussed: an advancee 3 in Indirective/Benefactive clauses, an initial 3 with some members of Class A, B Relational clauses; and an advancee 3 in Locative clauses. Thes clearest cases of 3 s are:
i) an advancee 3 in Dative (Benefactive/Indirective) clauses
(cf. Section 1, Chapter 3);
ii) an advancee 3 in Locative clauses (cf. section 3, Chapter 3); and iii) a 3 with Lexical Incorporation (cf. sections 3.3, 4.3, Chapter 3). The following cases of 3 s are not as clear, but are possible:
iv) an initial 3 in Reflexive Unaccusative clauses (cf. section 4.4, Chapter 3);
v) an initial 3 with some Class: A, B Relational verbs: (cf., sections 2, 2.2, Chapter 4).

Further work will be required to demonstrate clearly that a nominal may bear a 3-relation in an initial stratum.
1.5 Transitive -t

The -t marking is: a morpheme appearing in:all Salishan languages and is commonly known as Transitive $t$. In Okanagan, as in the other Salishan languages, this: morpheme appears in regular transitive clauses:
 the owl bite-PFTV-t-S3 $3_{\text {TRANS }}$ the baby The owl bit the baby.

However, this morpheme is not restricted to finally transitive clauses, appearing in the finally intransitive passive:

the baby bite- PFTV-t-PASS INSTR owl
The baby was bitten by the owl.
That the - $t$ morpheme is not a marker of transitivity in the initial stratum is demonstrated by this benefactive construction, which is logically intransitive in the initial stratum:

DIM-smile-REDUP-face-BENE-t-IMP
both.sides
S2 TRANS the PL-elder

Smine for the elders:
Details of an analysis, positing $-x$ as a marker of an initially oblique object, permitting advancement to 3 and to 2, are given in section 1 of Chapter Four.

The problem is then that the Transitive $t$ marks neither initial transitivity nor final transitivity. The rule given in section 1.7 of Chapter Two for -t marking in Okanagan identifies the -t as marking the presence of an initial or advancee 2, in stratum $S_{i}$, which remains a distinct nuclear term in a successive, final stratum $S_{i+1}$. (See the conditions on this rule, p. 38!). Besides capturing the facts exemplified above, the rule statement has two advantages:
(1) of ruling out the $-t$ marker from Middle voice clauses; and
(2) of including the 'stative $-t$ ' of the Unaccusative Class $B$, within the same statement, thus simplifying the grammar.
1.6 The Middle Voice

The characterization of Middle clauses is another Salishan thorn. More broadly, distinguishing between active and middle voice has remained a problem historically, from Homeric Greek to modern-day Okanagan. Gerdts (1980) has characterized the Middle voice in Halkomelem, a:Coast Salishan language, as involving Spontaneous Chômage, i.e., demotion of the initial 2 to $\hat{2}$, lacking evidence for the yo-yo action of the Antipassive with respect to the initial 1 demoting to 2 then advancing to l. For Okanagan, the available data provided support for an Antipassive analysis, subsequently modified with a Phantom arc. The Phantom Arc solution, provides a characterization of the syntactic structure of Middle voice clauses, which does not countermand the traditional semantic characterization.

## 2. Relevance to Relational Grammar

The analyses of Okanagan clause-level constructions presented in this study attest to the productivity of the theoretical model Relational Grammar with respect to clausal structure. However these analyses: also address two principles of Relational Grammar and point to an area of the grammatical theory in need of elaboration. The definition of transitivity (2.1), the 1-Advancement Exclusiveness Law (2.2), and the mapping of thematic and grammatical relations (2.3) are discussed in turn.
2.1 The Definition of Transitivity

Transitivity is: defined in Relational Grammar as a characteristic of stratum, not of clauses or of verbs, as: follows:

Transitivity in ReZational Grommar
A stratrm is considered transitive if it has a 1 and a 2; otherwise it is intransitive.

However, Okanagan may provide evidence that this definition is insufficient in and of itself, because of the necessity of referring to distinctiveness of 1 and of 2 with respect to Agentive Reflexives and to Middles. The Agentive Reflexives are transitive according to definition but unlike other transitives, as far as morphological marking is concerned, reflexives in Okanagan are treated as intransitive, i.e., do not take -t and do take: Intransitive Subject Marking. The Middles contain at least one transitive stratum, again with the 1 and the 2 resulting from advancement of the Phantom nominal, being non-distinct. These are treated as intransitive vis à vis -t marking, -n/-s Perfective/Imperfective aspect marking, and Person/Number subject marking. Thus, for at least some languages, rules referring to transitivity require reference to distinctiveness as well as to 1 and 2.
2.2. The Relational Class $B$ verbs and the IAEX

The Class B Relational clauses may be of considerable relevance to the l-Advancement Exclusiveness Law (Perlmutter and Postal 1978). This Law can be stated formally:

13 The 1- Advancement Exclusiveness Law
Let $A$ and $B$ be distinct neighboring 1-ares. Then, if $A$ is an advancee are, $B$ is not an advancee arc, where two ares $A$, B are neighbors if andonty if they have the some tait node; and where an are is an advancee are if the Relational-sign of the are has re-evaluated up the Relational hierarchy.

The claim made by the lAEX can be stated informally:
14

## Claim of IAEX

The set of advancements to 1 in a single clause contains at most one member.

The proponents of this claim identify two of the possible relational networks ruled out by the lAEX:
$15 a$

b


The lAEX predicts that a Passivized Relational clause with. an Unaccusative Clasis $B$ predicate would be ungrammatical since this would involve two advancements to $I$ in the same clause:

16


However, this prediction is not borne out since Passives occur with Class B Relational verbs for which it was shown that the final 1 is an initial 2 (section 2.3, Chapter Four):

17a $\quad 2 \rightarrow 1$

$$
G R_{x} \rightarrow 2
$$

 the PL-boy mad-REL/2-PFTV-t-P3 $3_{\text {TRANS }}$ the PL-girls The boys are made at the girls.
b $\quad \mathrm{GR}_{\mathrm{x}} \rightarrow 2 \rightarrow 1$
$2 \rightarrow I \rightarrow \hat{I}$
Si xxíxwxwtmi Saymt-m-n-t-əm $1 x$ ai $t$ twtw'ít. the PL-girl mad-REL/2-PFTV-t-PASS P3 INTR INSTR PL-boy The girls are mad at by the boys.

18a

$$
2 \rightarrow 1
$$

$$
\mathrm{GR}_{\mathrm{x}} \rightarrow-2
$$


the boy run.away-REL/2-PFIV-t-S3 $3_{\text {TRANS }}$ the elder
The boy run away from the old man.
b $\mathrm{GR}_{\mathrm{x}} \rightarrow 2 \rightarrow 1$
$2 \rightarrow 1 \rightarrow \hat{l}$

the elder run.away-REL/2-PFTV-t-PASS INSTR boy
The elder is run away from by the boy.
The Okanagan data, from the Class B Relational verbs, constitutes a counter-example to the l-Advancement Exclusiveness Law, a law proposed as a possible universal. Halkomelem has also been reported as constituting a counter-example to the LAEX. Gerdts (1980) discusses the me? constructions of Halkomelem, arguing

1) that the approximately 30 verbs, psychological predicates, which can occur with this suffix, determine initial Unaccusative strata;
2) that the me? constructions are best analyzed as involving Unaccusative Advancement to $I$ and 'causal' (her term for the initial oblique nominal of these constructions) to 2 Advancement; and
3) that passivized me? constructions constitute a counter-example to the LAEX.

Hence Salishan languages provide two counter-examples to the lAEX: Okanagan, an Interior Salishan language, and Halkomelem, a Coast Salishan language, both involving identical structure (see the Relational network given in 16 above). It may be concluded that the lAEX should be modified so that language particular conditions must be allowed on its applicability.

### 2.3. The Mapping of Thematic and Grammatical Relations

These analyses of Okanagan clauses point to a potential problem for Relational Grammar: the mapping of thematic relations onto grammatical relations. If it is assumed that this mapping occurs in the initial stratum, then the fact that some Okanagan verbs may have an assignment of different initial grammatical relations in different clause-types is of interest. For example, some verbal roots can determine both.

Unaccusative stratum and active or middle voice stratum:
19a m「á?t, ¢nmfáp 'broken'; Unaccusatives with an initial 2 but no 1 ; m个ám 'break'; Middle, with an initial $I$ and a Phantom NN term; b myp 'know'; Unaccusative, with an initial 2 but no 1 , also in Limited Control, with initial 2 and a NN term;
m@y- 'know'; initially transitive, with an initial 1 and 2;
c t'qw- 'slap'; with an initial laand 2; or with initial 1 and a NN term in a Limited Control construction, wi.th Managed-To reading;
tqºw ${ }^{\text {w }} q^{w}$ - 'slap'; as: Unaccusative in a Limited Control construction, with Accidental/Unintentional reading;
d tił -
'straight', with an initial 1 and a NN term in a
Relational construction;
tił-ł - 'straight'; as an Unaccusative with initial 2 but no 1
in a Limited Control construction, with
Accidental/Unintentional reading.
Similarly, some verbs can determine both Unaccusative and Unergative stratum:
qícəlx
'run'; Unergative, with an initial l but no 2; qcolx- 'run'; Unaccusative, with an initial 2 but nol, in a Possessor Ascension clause.

One pair of these verbs is exemplified below, with stratal diagrams:
 know-UNACCUS-LTDC-PFTV-t-SI $I_{\text {TRANS }}$ the myth

I found out the old story.
b

m¢y-...
S1

$$
\varsigma_{i} \text { c } ؟ ə p t i ́ q w \not \approx
$$

22a
c - miy - s - t - in
PF-know-IMPF-t-S1 ${ }_{\text {TRANS }}$
the chieèf

I know the chief.
b,


These Okanagan facts demonstrate that the theory of Relational Grammar requires further elaboration to deal with multiple assignment of initial grammatical and thematic relations in certain types of clauses.

## APPENDIX I: CONSULTANTS

This is a list of native speakers consulted during the field work period, spanning from Summer 1277 thru Spring 1982. The bulk of the data presented herein is from Joseph Albert Michel, the primary language consultant. Some syntactic phenomena reported on here have been contributed by other speakers; these arennoted in the footnotes. Other native speakers listed below have been helpful in many ways, although their words and stories may not have been included. The data presented on the preceeding pages is only a portion of the material collected. Joseph. Albert Michel is respected in his community as a particularly knowledgeable speaker and patient teacher of his mother tongue. He excels and delights in figuring out his own language.
l. Uncle, i.e., Joseph Albert Mi.chel, was born on June 30, 1908 and was raised on Quilchena Reserve, Nicola Valley, B.C. He remained a constant resident of Nicola Valley. His native and first language is Okanagan which he learned from his mother. Later, he learned some Shuswap and some Chinook Jargon from his father, as well as some Thompson (the other Salishan language spoken in the valley). He learned English from his father who taught him to read and to write, and spoke English to his boss on the ranch, especially the Abbott ranch where he cowboyed for over thirteen years.

His parents, Fred Michèloóf Kamloops and Josephine Chillihitza Michel of Quilchena, had fifteen children. Three of the older children all died in residential school. This formed part of the reason for keeping Uncle back from school. A bout with rheumatic fever also played a role here. Although he considers his lack of formal schooling as a sorrow of life,
this time at home provided the opportunity for close and intensive training in the language and culture, enabling him to be a very valuable bearer and transmitter of the traditions:

Throughout the work, he has been conscious of recording hiss language, and so contributing to the knowledge and memory about his people. This work. forms part of his legacy to his people.
2. Sharon Lindley (1953 - ), née Michel, is also of the Quilchena Reserve, a daughter of Francis and Amelia Michel. Her grannie, Josephine Chillihitza Michel, and her uncle, Joseph Albert Michel, were instrumental in her life and are her main teachers of the language. She introduced me to Okanagan, to her Uncle, and to Nicola Valley. At the time of writing, she is completing her teacher training at UBC. I am fortunate to consider her as my friend.
3. Nellie Quiterrez (1892-1980) was a respected and admired elder. Born in Hedley, between Princeton and Keremeos, of Eddie John Fall Allison and Emily (née Tom), she spent her young years in Shulus in Nicola Valley. She received her schooling in Mission and has lived at Douglas Lake since 1908, the home area of her maternal grandfather, Narcissis Tom, known as. 'Chinook Tom' because he knew Chinook Jargon. Nellie grew up speaking Thompson, Okanagan, Chinook, and English. Nellie had three children with her first husband, Baptiste Tom; these are Michel (1909), Lily (1911), and Charlie (1913). After his death, she worked as a cook for the Douglas Lake ranch for many years. Her second husband, Alfred Quiterrez, died in the war. A grand old lady, she could start the proceedings at Elders Day with a solemn prayer in Okanagan, then contribute a traditional song, and end with an enthusiastic 'yahoo!'
4. Louisa Roper, (1896-1981), the last near-monolingual speaker of Okanagan in Nicola Valley, was: born Christmas Eve, 1896 , of Mr. and Mrs. Williams Jack. Her only surviving offspring are Louis and Isaac Lindley. Although bed-ridden, she generously permitted an interview in August 1979.
5. Rosie Tom (1912- ) of Douglas Lake Reserve assisted in the language work with her neighbour Louisa Roper.
6. Johnny Archachan (1913- ), elderly story-teller, of Quilchena, willingly recorded his stories to be put in the museum so his children's children could hear them.
7. Joe Pete Saddleman (1924- ), also of Quilchena Reserve, trained as a language instructor at the University of Victoria. He spent eight. years at the residential school in Kamloops. He is well-known for his practical jokes and his ever"ready smile.
8. Clara Jack (1928- ) of Penticton also graduated from University of Victoria's native language program as instructor. She returned home to teach her language: and produced some lessons on Okanagan. Although her activities are now severely restricted by the crippling effects of rheumatoid arthritis;; she rises to the challenge and continues to work on a dictionary of her language. She is also assisting A. Mattina with. work on a reference grammar and texts of her dialect.
2. Adam Eneas (1242- L of both Penticton and Vancouver, was chief of the Penticton band until 1975. This was the last year that he actively used the language in public and formal situations (sit-ins, roadblocks, meetings, etc.) He learned hiss language at home from his
parents, Angeline (nee Françis) and Gidéon Eneas. He spoke no English until he went to school. He completed grade 12 and one year of university. He has lived in Vancouver for four years.
10. Teresa Terbasket (1933- ) of Keremeos attended University of Viectoria for training both as a language instructor and as a teacher. While in Victoria, she assisted in some fine detailed language work.
11. Tillie George of Colville, Washington State, is approximately 55 years of age. She spoke two languages at home: Okanagan to her mother and Columbian to her father. She received eight years of schooling, five years of public school and three years of residential school. She also graduated as a language instructor from University of Victoria's NILDP. She has taught her language to the young people and children on the Colville reservation.
12. Robert W. Sterling (1937- ) is director of Indian Education for Nicola Valley Indian Administration and chairman of the Advisory Councill for the University of British Columbia's Native Indian Teacher Education Program. He is a native speaker of Thompson and a member of the Lower Nicola Indian Band. He holds a BA in Social Psychology from UBC. We collaborated on a joint paper which attempted to link the language, the culture of Nicola Valley and Indian Education. His insights into his people and hiss view of Indian Education have benefitted me as a linguist and as: a person.
13. Mary Coutlee (1915- Lof Merritt, also a graduate of Univeristy of Victoria's NILDP, speaks, reads, and writes Thompson fluently. Her hospitality and our many discussions of both her language and of Okanagan
have been very encouraging and helpful to me. She cheerfully continues her work on her language and has recently taught her language to adults in Nicola Valley thru Cariboo College. (Winter 1981-82).
14. Jim Toodlican (1949- ) of Shackan Reserve is also a graduate of University of Victoria's NILD.P. He has taught Thompson to the children of Nicola Valley. My meager efforts to assist him to transeribe a small collection of Thompson stories one summer helped me far more than they helped him. He is the youngest of the consultants and language instructors may his life be productive.
15. Dave Parker, an elder from Westbank, now lives in Kelowna. He has devised his own orthography for Okanagan; it is an English-based system. He taught his language and his system at Mt. Bushery Secondary School, in Kelowna, during the 1980-91 school year. Each of his lessons was typed and read onto tape cassettes. The same format was used for each iesson: first, sentences were presented, then a breakdown of words followed, and as conclusion, a text of all the sentences in that particular lesson. Dave works independently and is proud of his: work.

## APPENDIX II: ABBREVIATIONS

The following abbreviations are used in the sub-linear glosses: for verbal markers of time:

| PF | Perfect | c- |
| :--- | :--- | :--- |
| PPF | Past Perfect | səc- |
| PFTV:' | Perfective | $-n$ |
| IMPF | Imperfective | $-s$ |
| PROG | Progressive | $-\mathrm{x} /-\mathrm{míx}$ |
| INCEP | Inceptive | -aP x |
| UNR | Unrealized action | $\mathrm{ks}-$ |

for markers: of number:
S Singular, as: in Sl: first person singular
$P \quad$ Plural, as in P3: third person plural
PL Plural Reduplication
for verbal prefixes, i.e., lexical formatives:
Cont Contained in-
Dist Distributed k-/ t
Dir Directional: atop kz-
Dir Directional: under kz-
for verbal morphology:

| MIDDLE | Middle voice | -(â)m |
| :--- | :--- | :--- |
| LOC/2, /1 | Locative-to-2 or to-l Advancement | -(í)na? |
| REL/2 | Relational-to-2 Advancement | -m(í) |
| UNACCUS | Unaccusative |  |
| LTDC | Limited Control | -nú |



## APPENDIX III

THE MIDDIE AND RELATIONAL CONSTRUCTIONS REVISITED

Hale (external examiner's report, August 1981) suggested alternative analyses for the Middle and Relational constructions, in terms of the initial assignment of thematic relations to grammatical relations. Each of these will be considered in turn.

THE MIDDLE CONSTRUCTION
Under the suggested alternative, it is proposed that these verbs assign the thematic relations exgatively (cf., Marantz 1981), so that the patient is assigned thersübject relation (1), while the agent is assigned the object ręation (2). The middle construction, then, is simply a version of the Passive - promoting the initial 2 (agent) to 1 , thereby forcing the initial l (patient) to go en chômage. Hale suggests that such an analysis is entirely consistent with a maximally constrained theory of relational grammar and moreover fits in with a highly promising theory of the ergativity parameter, i.e., that developed by Marantz.

Under this proposal, tme is simply the mark of the passive $(2 \rightarrow 1),-t$ (of the passives and transitive in general) can be seen as: a mark of initial accusative linking (agent = 1, patient = 2), while the -a of the Middle can be seen as a mark of initial ergative linking (patient = l, agent = 2). This proposal is represented below in stratal diagram la, us:ing a superscript for the initial assignment of thematic relations. It is placed next to the stratal diagram of the Passive
(cf., Chapter III, sectionII) and of the Phantom analysis of the Middes (cf., Chapter III, section 3; Chapter V, section 4.4).
la Alternative Analysis for Míddles

b. Passive Analysis

c
Phantom Analysis for Middles:


These proposals for the Midde voice construction differ on
three points discussed below:
(i) According to the Alternative Analysis (AA), the object nominal in the final stratum is a I-chômeur, however it does not take the l-chômeur marking of the Passive: in t .

the grandmother kiss-PFIV-t-PASS INSTR boy
The grandmother was kissed by the boy.
b $\quad$ i stömtíma? k'wúl' -m the grandmother work-MIDDLE $\left\{\begin{array}{l}t \text { ym- yámxwa? } \\ a / \text { some PL-basket } \\ * \text { si t ym-yâmxwa? } \\ \text { INSTR PL-basket }\end{array}\right.$
This: fact is not problematic for the Phantom analysis of Middles because under this: analysis, the patient nominal is an initial 2 which demotes to a 2-chômeur and hence does not take l-chômeur marking.
(ii) The second and most persuasive argument against AA lies with its prediction for the phenomenonoPossessor Ascension. This is permitted only from a 2 in some stratum $S_{i}$, only if the Possessor may advance to $I$ in the $S_{i+1}$ stratum, with the 2-chômeur obligatorily incorporating, i.e., in Passive and Unaccusative constructions (see Chapter IV, section 4).

The structure proposed for Middles under AA predicts that
Possessor Ascension should be possible for the initial 2 (agent), however Possessor Ascension is not permitted from the agent in Middle clauses:

the my-offspring work-MIDDLE
My kids work.
b $\quad$ * $\mathrm{kn} \cdot \mathrm{k}^{\text {wun }}{ }^{\prime}$ - ilt -m . $\mathrm{SI}_{\text {INTR }}$.Work-child-MIDDLE

This fact is correctly accounted for under a Phantom Arc analysis: whereby the agent nominal bears the 1 relation in the initial and subsequent strata. Thus the facts from Possessor Ascension argue against Hale's Alternative Analysis: (AA).
(iii) A further argument against the AA for Middles is presented
below, in light of Hale's analysiss for Relationalls. . Under Hale's: proposal for Middles; the -a of the Middle is: a mark of initial ergative linking (patient $=1$, agent $=2 \mathcal{L}$ and the $-t$ is a mark of initial accusative linking (agent $=1$, patient $=2$ ). However these assignments of linkage cannot be maintained for Hale's proposal for Relationails, as shown in (i) below.

A further test of these two alternative proposals could be based on the phenomenon of Moving Glottalization however such data is not available (see footnote 6, Chapter II, page 56).

Thus, the Alternative Analysis for the Middle voice construction is rejected and the Phantom Arc solution retained.

THE RELATIONAL CONSTRUCTION
Hale suggests that the -m(i) element signals, not an advancement as proposed in this dissertation, but rather an initial assignment of an "oblique" thematic relation (say "instrument" or "means") to the 2 grammatical relation. The paraphrase relation between ordinary inanimate instrumentals would lie in the sharing of the same thematic relational structure and not of the same initial grammatical relational structure. The advantage to this analysis is that Relationals: of Class B would not violate the lAEX when passivized. Okanagan would not counter-exemplify it and a proposed law of the theory of Relational Grammar would be saved.

The one-stratal analysis (OA) proposed by Hale is diagrammed below as is: the bistratal analysis: (BA) proposed herein where NN stands for a non-nuclear term, i.e., a 3 or an oblique.
$4 a \quad$ One-stratal Analysis (GA)
CLASS A

$$
-m(\mathbf{i}) \therefore
$$



CLASS C

b. Bistratal Analysis (BA)

## CLASS A



These proposals for the Relational construction differ on three points discussed below:
(i) Hale's proposal, that -t marks the linkage between thematic and grammatical relations (agent $=1$, patient $=2$ ), is problematic for
for the one-stratal analysis of Relationals (OA). In each of the three classes, a 2 is assigned a thematic relation other than patient, i.e., 2 oblique in Classes $A$ and $B$, and 2 instrument in Class $C$ This problem is doubled for the Class B Relationals which retain Unaccusative morphology, including the $-t$. Here the 1 would be linked to a thematic relation súch as patient or experiencer. Hale's two proposals for Middles and Relationals are incompatible with respect to -t marking.
(ii) Under the OA, the initial 2 gramatical relation is assigned to the oblique thematic relation, eqg., instrumental. This raises the question of the initial grammatical relation assigned to the patient. Assigning two $2^{\prime}$ s in Class C Relationals, i.e., a $2^{\text {instr }}$ and a $2^{\text {pat }}$, faces both theoretical and empirical difficulties. At the level of theory, this: violates the Stratal Uniqueness Law: (Perlmutter and Postal 1978a) which claims that no stratum can contain more than one 1-arc, one 2-arc, or one 3-arc. Furthermore, the analysis is disconfirmed at the empirical level, since only the $2^{\text {instr }}$ acts like a 2 with respect to Passivization. (see examples lola,b, section 2.5.1) Chapter IV). Efforts could be made to resolve this difficulty, by assigning 3-hood to the patient nominal: $3^{\text {pat }}$; however, teaming these two together, i.e., 3-hood with patienthood, appears to be unmotivated. An assignment of $3^{\text {pat }}$ is especially problematic for Okanagan since, as has already been noted (cf., Chapter V, section 1.3), further work is needed to demonstrate clearly that a nominal may bear a 3-relation in an initial stratum.
(iii) A biclausal analysis of Class C Relationals would eliminate the problems noted in (ii) ab̄ove, however, a biclausal analysis runs into the problems: discussed earlier under the Causative proposals. (cf., sections 2.5.1-2.5.2, Chapter IV). Moreover, two additional difficulties present themselves: for a biclausal anālysis, diagrammed below:

(a) The assignment of an oblique thematic function to the downstairs 2 is an ad:hoc assignment, simply to preserve the generalization proposed for $-m(i)$ under the OA.
(b) The prediction for which nominal would function like a 2 with respect to Passivization is still incorrect. The analysis diagrammed above predicts incorrectly that the downstairs/upstairs 2 would act like a:2 in a Passive, however the downstairs I/upstairs 3 acts like a 2 in a Passive. (see examples 101a,b, section 2.5.1, Chapter IV).

Additional tests to choose between these two proposals could be based on Moving Glottalization, $\uparrow$ inca?/§inca?kn, and Possessor Ascension, however such data is not available.

Thus, in spite of the initial attractiveness of Hale's alternative analyses for the Middles and Relationals, these are set aside and the analyses proposed in this dissertation are retained.

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