

Complex Motion Predicates in Hiaki

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LIST OF ABBREVIATIONS

1	first person
2	second person
3	third person
ACC	accusative
APPL	applicative
CAUS	causative
CONJ	conjunction
DECL	declarative
DET	determiner
FUT	future
IMPF	imperfective
INF	infinitival
L	linking vowel
LOC	locative
NEG	negative
NOM	nominative
PASS	passive
PCL	participle
PFV	perfective
PL	plural
PRES	present
PRF	perfect
PRT	particle
PPL	participle
PST	past
RED	reduplication
SG	singular
SREL	subject relative

ABSTRACT

This dissertation is an investigation into compound verbal structures in Hiaki in which a verb of motion is modified by an adjoined lexical verb or verb phrase. It provides the first in-depth documentation and analysis of this structure in Hiaki, an endangered language indigenous to North America, and it explores the extent to which complex predicates of motion may be said to form a discrete class crosslinguistically, either in structural or semantic terms, by comparing Hiaki with genetically and typologically distinct languages such as Korean and Warlpiri.

The study asks the following questions:

- 1) What is the underlying structure of a Hiaki compound verb? In particular, what is the structure when the head verb is intransitive and thus cannot take the second verb or verb phrase as its complement?
- 2) To what extent can complex motion predicates in different languages be said to map to identical underlying syntactic structures? That is, if we compare these constructions in Hiaki with those in languages with different surface morphosyntactic realizations, how do the allowable surface forms constrain the possible underlying structures?
- 3) Is there evidence to suggest a cline or typology of complex motion predicate constructions?

The overall goals of the dissertation project are the detailed documentation, description and theoretical analysis of complex motion constructions in Hiaki, the crosslinguistic comparison of these constructions, and the expansion of an existing database of transcribed and interlinearized Hiaki texts.

Chapter 1 Introduction

Hitasa empo biobtesisime? (What are you going around writing?)

1.1 Aims

This dissertation is an investigation into compound verbal structures in Hiaki in which a verb of motion is modified by an adjoined lexical verb or verb phrase. It provides the first in-depth documentation and analysis of this structure in Hiaki, an endangered language indigenous to North America, and it explores the extent to which complex predicates of motion may be said to form a discrete class crosslinguistically, either in structural or semantic terms, by comparing Hiaki with genetically and typologically distinct languages such as Korean and Warlpiri.

The study asks the following questions:

- 4) What is the underlying structure of a Hiaki compound verb? In particular, what is the structure when the head verb is intransitive and thus cannot take the second verb or verb phrase as its complement?

- 5) To what extent can complex motion predicates in different languages be said to map to identical underlying syntactic structures? That is, if we compare these constructions in Hiaki with those in languages with different surface morphosyntactic realizations, how do the allowable surface forms constrain the possible underlying structures?

- 6) Is there evidence to suggest a cline or typology of complex motion predicate constructions?

The overall goals of the dissertation project are the detailed documentation, description and theoretical analysis of complex motion constructions in Hiaki, the crosslinguistic comparison of these constructions, and the expansion of an existing database of transcribed and interlinearized Hiaki texts.

1.1.1 Roadmap

The dissertation is organized thus:

Chapter 1 provides essential background information on the Hiaki language (§1.2), on foundational thinking about the expression of motion in language (§1.3) and on how the term ‘complex predicate’ is understood and defined (§1.4).

Chapter 2 provides a detailed description of (non-complex) verbs of motion in Hiaki, with particular attention to the properties of the basic motion verb *siime* ‘go’, which is the verb that appears in the complex motion compounds.

Chapter 3 describes the properties of Hiaki compound verbs in general, and examines the differences and similarities between motion and non-motion compounds. In addition, it examines the properties of the ‘go’ verb *siime* when it appears in a compound, in contrast with its properties as an independent verb.

Chapter 4 surveys complex predicate types in languages from around the world, and the analyses that have been proposed for them. It compares the properties of these constructions with the Hiaki motion compounds, and considers whether a cline or typology of complex motion predicate types may be posited, and where Hiaki might fit in such a system. Ultimately, it is determined that the range of variation and overlapping properties found in complex motion predicates makes such a proposition untenably vague, and that Hiaki does not fit neatly into any of the previously described categories, although some languages are identified which do bear important similarities.

In Chapter 5, drawing on similarities with constructions in Korean and Warlpiri, as well as on language-specific properties, I propose a structural analysis of Hiaki complex motion predicates. In this analysis, the first verb in a motion compound is a vP constituent head-adjoined to the final motion verb, which is itself the head of a \sqrt{P} . I discuss the limitations and problems with this analysis, as well as other potential analyses, and the reasons for their rejection.

1.2 Hiaki

1.2.1 Background

Hiaki, more frequently named 'Yaqui' or 'Yoeme' in the literature, is a Uto-Aztecan language spoken in Sonora, Mexico, and more recently in Arizona. The Arizona Hiaki tribe currently exists in a state of increasingly precarious trilingualism between Hiaki, Spanish and English. English is dominant amongst young people, and Hiaki is now fluently spoken only by some 70 or 80 people, all of whom are over the age of fifty.

The word '*Hiaki*', and its usual orthographic representation as 'Yaqui', is itself an interesting example of the cultural and linguistic heritage of the Hiaki people, which blends significant Spanish influence with a strong sense of core independent identity. The spelling '*Hiaki*' reflects the pronunciation, and conforms to the written conventions, used by the Pascua Yaqui tribe today. '*Yaqui*' was the orthographic representation of the name given to them by the Spaniards when the two cultures first made contact in the mid sixteenth century. In Mexico, the spelling '*Jiaki*' is also used, in a Spanish-based orthographic system for the language. '*Yoeme*' is another alternative that is sometimes used (Castile 2002). I use '*Hiaki*' throughout, as it is the preferred spelling of my consultants; it conforms to the English-based spelling system for the language adopted by the Pascua Yaqui tribe, and is a more accurate representation of the pronunciation, [h^haki].

There is a relatively large amount of existing documentation and analysis of Hiaki, including substantial work on the verbal morphosyntax carried out at the University of Arizona by Heidi Harley's research group. There are Hiaki-English and Hiaki-Spanish dictionaries (Molina et al. 1999 and Fernandez et al. 2004, respectively). There is an extensive compendium of Hiaki grammatical structures (Dedrick and Casad 1999), which contains a wealth of empirical data. There have been four dissertations in English which focus on the language: Lindenfield 1973, Escalante 1990a, Guerrero 2005, Martinez Fabian 2006, as well as the dissertation of Hagberg 1993 on the phonology of the closely related language Mayo, and a few theses in Spanish from the Universidad de Sonora, e.g.

Castro Llamas 1988. Finally, several papers on aspects of the language have appeared in conference proceedings, volumes and journals, including, e.g., Escalante 1990b, Jelinek and Escalante 1988, Jelinek 1997, Demers, Escalante and Jelinek 1999, Guerrero and van Valin 2004, Guerrero 2005, Felix Armendáriz 2005, Martinez Fabian and Langendoen 1996, as well as the work of the University of Arizona research group, Haugen, Tubino-Blanco, Leyva, Sanchez, Trueman and Jung. However, the central focus of the present proposal, motion constructions, addresses a significant gap in previous work on the language.

1.2.2 Structure and constituents

Hiaki has a basic SOV order; postpositional phrases are also preverbal. Guerrero & Belloro (2010) describe the language as ‘syntactically rigid but pragmatically flexible’, like English, in which deviation from canonical word order is relatively limited, and information-structural status is prosodically indicated.

Broadly speaking, Hiaki clauses with lexical subjects conform to the following template:

(1)

Pre-subject (<i>sa</i> -marked <i>wh</i> -words, certain adverbs; discourse linkers)	Lexical subject	Middle field (objects, PPs, adverbs)	Verb-word (including particles, clitic object pronouns)	Postverbal elements: <i>usu</i> . ‘antitopics’
---	-----------------	--------------------------------------	---	--

(Harley Trueman & Leyva 2012:12)

As well as lexical subjects, clitic pronominal arguments are also possible; they occur in fixed positions with subject clitics generally following the first phrasal element, and object clitics always immediately preceding the verb.

Hiaki has a straightforward Nominative-Accusative case system, and agglutinative morphology, which is suffixal, except for reduplication. In the verbal domain in particular, this morphology is extremely productive, and Hiaki verbal structures can be quite complex. This rich system of verbal affixation includes derivational and argument-structure-changing affixes (such as causative, applicative, desiderative and passive), tense/aspect markers, and a complex set of reduplication patterns, as well as compounding and incorporation.

The template in (2) shows the range of possible elements in the Hiaki verb structure. Everything except the second V (underlined) is optional.

(2)

(dir/adv particle)	(obj.clitic)	=(incorp.N)	-(RED)-(V) - <u>V</u> -	(bound-stem suffixes)-	(PASS(+IRR))-	(free-stem suffixes)
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(Harley 2013:12)

1.2.3 (Morpho-)Phonology

1.2.3.1 *Suppletion*

Adding to the complexity discussed above, approximately 15 verbs display agreement-driven suppletion. The motion verb *siime* is one of a class of suppletive verbs that changes its form depending on tense/aspect, and on the plurality of its subject. The full paradigm is shown in (3).

(3)

Present, singular subject: <i>siime</i>	Past perfective, singular subject: <i>siika</i>
Present, plural subject: <i>saka</i>	Past perfective, plural subject: <i>sahak</i>

1.2.3.2 Stem forms

In addition to the suppletion, both the singular subject form *siime* and plural subject form *saka* have bound forms, which are triggered by particular affixes.

(4)

Bound, singular subject: <i>sim-</i>	Bound, plural subject: <i>saka'a-</i>
--------------------------------------	---------------------------------------

All Hiaki verbs have both a free stem and a bound stem form, illustrated for the verb *ye'e* 'dance' in (5)-(6) and there are several classes or sub-classes of verbs according to the type of stem alternation they exhibit, including an invariable class. Examples of these are displayed in the table in (7).

(5) Inepo **ye'e**

1sgNOM **dance**

"I am dancing."

(6) Inepo **yi'i-ne**

1sgNOM **dance-FUT**

"I will dance."

(Escalante 1990:38)

(7)

Class 1: Truncation			Class 2: Echo-vowel			Class 3: invariable		
Free	bound	Engl	Free	bound	Engl	Free	bound	Engl
<i>a. poona</i>	<i>pon-</i>	'pound'	<i>a. bwasa</i>	<i>bwasa'a-</i>	'cook'	<i>a. kivacha</i>	<i>kivacha-</i>	'bring(sg)'
<i>b. miika</i>	<i>mik-</i>	'give'	<i>b. kiima</i>	<i>kima'a-</i>	'bring(pl)'	<i>b. hamta</i>	<i>hamta-</i>	'break'
<i>c. bwase</i>	<i>bwas-</i>	'cook(intr)'	<i>c. yore</i>	<i>yore'e-</i>	'heal'	<i>c. koko</i>	<i>koko-</i>	'die(pl)'

(Harley 2013:7)

Some suffixes must attach to free stems – such as *-k* (past perfective), *-n* (past imperfective), and *-kan* (past perfect) – but the majority attach to bound stems. Bound stem suffixes include: *-wa* (impersonal/passive), *-ne* (future/irrealis), *-na* (future impersonal/passive), *-tua* (direct causative), *-tevo* (indirect causative), *-ria* (applicative) and many others. The affixal verbs that occur in complex verbs always attach to bound stems. In the (frequent) event of affix-stacking, free-stem suffixes always follow suffixes that take bound stem forms. (Harley 2013, Harley and Tubino Blanco 2012, Tubino Blanco and Harley 2010)

1.2.3.3 Vowel shortening

Hiaki has long and short vowels. In both verbal and nominal stems that have a long vowel, this may become shortened in particular morphological environments.

For example, long vowels in nouns shorten in the presence of the accusative suffix *-ta*.

(8) **miisi** → **miisi-ta**
cat.NOM cat-ACC

(9) **uusi** → **usi-ta**
child.NOM child-ACC

Long vowels in verbs shorten in the presence of reduplication, the participial suffix *-ka*, derivational suffixation, and a range of other morpho-phonological environments that have not been exhaustively documented at this time.

- (10) **siime** → si-sime
 go.SG RED-go.SG
- (11) **siime** → sime-ka
 go.SG go.SG-PCL

1.2.4 Range of Hiaki verb/event combining strategies

Hiaki has four main strategies for combining verbs or events within an utterance. Most of these are unambiguously multi-clausal structures in which each verb is inflected, either for tense/aspect, or with a participial/subordinating affix.

1.2.4.1 *Conjoined clauses*

The first type of multi-clause utterance involves the conjunction (12) or disjunction (13) of two clauses, each of which has a tense-inflected verb. Often, both verbs are inflected with the same tense/aspect properties, but they are otherwise complete and distinct clauses.

- (12) Hoan **tekipanoa-n**, Anavela intok kari-ta **tui-te-n**.
 Juan.NOM **work-PST** Anabel.NOM CONJ house-ACC **good-make-PST**
 "Juan was working and Anabel was cleaning the house"

- (13) empo **ye'e-ka**, taa aapo kaa **ye'e-ka**¹
 2s.NOM **dance-PFV**, but 3s.NOM NEG **dance-PFV**
 “You danced but he didn't dance.”

1.2.4.2 *Subordinate clauses*

Subordinated clauses, particularly those describing temporally simultaneous or otherwise connected actions performed by a single subject, are indicated by a participial suffix *-ka* on the subordinated verb. In these examples, either or both verb may have an associated argument or particle, which appears in its typical pre-verbal position and thus may intervene between the two verbs. In addition, there is typically a significant intonation break distinguishing the clauses.

- (14) Acheka yeu **weye-ka(-su)**, kafe-ta **woota-k**
 HK.NOM out **walk-PCL(-SUB)**, coffee-ACC **spill-PFV**
 "As HK was walking out, (she) spilled the coffee."

- (15) Acheka **sime-ka-su**, kafe-ta **woota-k**
 HK.NOM **go-PCL-SUB** coffee-ACC **spill-PFV**
 "As HK was leaving, (she) spilled the coffee."

Although I have here given it the gloss ‘SUB(ordinator)’, the suffix *-su*, which follows *-ka* in these examples, is sometimes optional (14) and sometimes not (15), and it is not

¹ *-ka* in this example is a allomorph of the usual perfective *-k*, occurs with a specific class of verbs, and

readily apparent what drives this optionality. Much more investigation into the precise function of this affix is warranted, particularly since it is homophonous with a completive affix.

1.2.4.3 Verbal modifier

The third, and least common form of multi-verb sentence involves two verbs that are immediately adjacent to each other, with no intervening material or significant intonational boundary. It can be clearly distinguished from the compound verbs in the next section because the first verb does not occur in its bound stem form. The relevant verbs in examples (16)-(17) are bolded, but it is that first verb (underlined) in each that is the curious one. In this case, the verb *siime* occurs in what appears to be its perfective form, albeit in (16) with a shortened vowel (*siika* -> *sika*), and in (17) with an added final vowel (*sahak* -> *sahaka*).

- (16) Acheka **sika** **we(y)e-ka-su**, kafe-ta woota-k
 HK.NOM **go.SG** **walk.SG-PCL-SUB** coffee-ACC spill-PFV

"As HK was leaving, (she) spilled the coffee." (Lit: As HK **left walking**, (she) spilled the coffee")

- (17) Ume veveme-m **sahaka** **kaate-ka-su**, kafe-ta woota-k
 DET.PL girl-PL **go.PL** **walk.PL-PCL-PRT** coffee-ACC spill-PFV

"As the young girls were leaving, they spilled the coffee"

In the closest English translation of this sentence, the verb ‘walk’ is a manner modifier of ‘go/leave’, however it is not clear that this is the appropriate analysis of the Hiaki structure. It is also possible that the form *sika* ‘go/leave’ is functioning as a direction modifier of *weye* ‘walk’, much as the particle *yeu* ‘out’ does in example (14). Directional particles also occur in the immediately preverbal position, and within the same intonation contour of the main verb in the clause.

1.2.4.4 *Compound verb*

The fourth and final kind of multi-verb strategy in Hiaki, and the focus of this dissertation, is verb compounding. In this construction two verbs are combined in such a way that nothing may intervene between them; not arguments, particles, nor any kind of inflectional morphology. The first verb appears as a bound stem, and the second verb is either bound or free, depending on whether it takes further suffixation of the relevant type. Even in its free form, the second verb may show phonological reductions, such as the shortening of long vowels. The properties of these compound verbs will be described in further detail in §1.2.5 and in Chapter 3.

(18) Chepa kari-po yeu **bwan-sime**

Chepa.NOM house-LOC out **cry-go**

"Chepa left the house crying." / "Chepa went crying out of the house."

1.2.5 Complex Motion in Hiaki

Hiaki has a rich and complex system of verbal affixation, which includes derivational and argument-structure-changing affixes (such as causative, applicative, desiderative and passive), tense/aspect markers, and a complex set of reduplication patterns, as well as compounding and incorporation. In addition, many verbs display agreement-driven suppletion. As noted above, the focus of this dissertation is compound structures in which a tensed verb of motion is compounded with another lexical verb, as exemplified below:

- (19) Uu hamut ili usi-ta **yu'u-siime**
the woman little child-ACC **push-go**

“That woman is pushing the child along.”

- (20) Haisa ne enchim nau eteho-u haisa ne aa= **hiohte-sim-ne**
Q 1sgNOM 2plACC together talk-to Q 1sgNOM 3sgACC=**write-go-IRR**

“When we are talking can I take notes?”

Constructions of this kind, although commonly occurring in Hiaki and other languages, are poorly understood and present an interesting puzzle for our understanding of argument structure. For instance, the head verb in the compound is an intransitive motion verb ‘go’, and as such does not take a direct object; however accusative marked objects may appear, as in (19), licensed by the non-head first verb. One question to be investigated, then, is the degree to which objects are integrated into the argument structure of the whole clause.

Hiaki has two major types of complex verbs, although the division between the two is a little muddy. The first of these, which we will call ‘complex verbs’ following Escalante (1990) involves a lexical verb with an affix (or affixes) which has some aspectual or ‘light’ verbal properties, and which for the most part does not have independent status. The second is ‘compound verbs’, in which two (or potentially more) verbs are combined, each of which has independent lexical verb status. Although complex verbal structures are quite common in the language, verbal compounds appear to be a reasonably restricted class, in the sense that there are relatively few verbs which commonly show up as the final or head verb in such a structure.

One of the most common of the independent lexical verbs to occur as the head verb, or V2, of a compound verb is the intransitive motion verb *siime* ‘go/come’.

- (21) Vempo nee vicha **saha-k**
 3plNOM 1sgACC toward go-PRF
 “They came towards me.”

In a compound, *siime* usually indicates an interpretation like, roughly, ‘go along V1-ing’, as examples (22)-(23) demonstrate.

- (22) Ume ili o’o-im pelota-m temu-**saka**
 DET.PL little boy-PL ball-PL kick-go
 “The little boys are going along kicking balls.”

(23) Uu hamut ili usi-ta yu'u-**sime**
 DET woman little child-ACC push-go

“The woman is pushing the little child along.”

Example (23) shows that the V1 (*yu'a* ‘push’ in this case) is occurring in its bound-stem form, and in this form no independent tense marking is possible. Since V1 is a transitive verb it has an object, which in this instance is clearly marked with accusative case, however both Vs share the same nominative subject. In fact, because V2 is always an intransitive verb of motion or stance, in these constructions both Vs always share a subject, and this makes diagnosing clause structure a little difficult.

The reason that this is relevant is because in most of the better understood complex and compound verb structures, such as causatives and desideratives, the V2 is typically transitive, and V1 takes an independent subject. Escalante (1990) goes to some trouble, using mostly binding facts, to show that sentences with compound verbs with a transitive V2 are multiclausal, despite containing only a single Tense node. Harley (2011) treats these as examples of “clause fusion by embedding a VP, not TP” which results in a single case domain. Regardless, in such examples it is possible to have a distinct subject of the embedded verb, which makes it possible to diagnose biclausality with binding.

In the structures under consideration here, however, the obligatory subject sharing complicates matters. The nominative subject can bind the reflexive object of an

embedded transitive verb, as in (24) and (25), which would seem to be an argument for monoclausality.

- (24) Uu chuu'u hiva **au** wok-si-sime
DET dog always 3sgREFL scratch-RED-go
“The dog is always going around scratching itself.”

- (25) Hunume ili o'oi-m hiva **emo** yu'u-sa-saka
DEM.DISTAL little boy-PL always 2plREFL push-RED-go
“Those little boys are always going around pushing each other.”

However, since there cannot be a subject of the V1 distinct from the nominative subject of V2, in fact the binding facts can tell us very little here; a multiclausal structure including a null PRO subject of V1 controlled by the matrix overt subject of V2 (or vice versa) would generate the same binding patterns as a monoclausal analysis. A better question is whether we can find evidence for a PRO subject of V1, controlled by the nominative subject, which would indicate a biclausal structure. If no evidence for PRO can be found, then we might conclude either that the structure is monoclausal, or that V2 *-sime* behaves as a raising predicate, and does not contribute an argument of its own. In Chapter 3 I examine raising and control compounds in Hiaki in more detail, and show that V-*sime* compounds do not fit either pattern. For example, a possible direction to look for such evidence involves the interaction of V2 *-sime* with the impersonal passive *-wa*, as in example (26) below.

- (26) Imi'i hiva pelo'ota-m temu-sa-saka-**wa**
Here always balls-PL kick-RED-go.PL-PASS
“There are always balls being kicked along here.”

In this example, the passive has been applied to the V2 *-sime* ‘go’, and the nominative subject has disappeared. The morpheme *-wa*, as it happens, cannot be applied to intransitive verbs that do not have an animate subject, and so this suggests that *-sime* may have a thematic subject to contribute to the argument structure of the compound. If *-sime* does not have a thematic subject, it could not be subject to deletion by *-wa*, and so this is evidence that whatever is going on here, raising isn’t it. However, see Jelinek and Harley (2014) and Harley (2014) for a contrary view.

Ultimately, I conclude that, unlike the majority of Hiaki verbal compounds, motion compounds are in fact monoclausal, in the sense that they have only a single subject position. However, this engenders further questions. Although it seems clear that in the transitive V2 structures the embedded VP1 is occurring as the complement of V2, the structural connection between VP1 and intransitive V2 is much more difficult to pin down.

Two broad hypotheses present themselves, and are taken up in following chapters. The first, following Zubizarreta & Oh’s (2004, 2007) work on Korean serial verbs of motion, which is one of the few scholarly works to touch on constructions of this nature, is that

VP1 is an adjunct to V2. This is a more feasible structure for a language like Hiaki than it is for one like English, for reasons that will be discussed in detail in Chapter 5.

The other hypothesis is that verbs like *-sime*, the ‘verb-affix hybrids’ in Harley, Tubino-Blanco and Haugen’s (2014) terminology, are undergoing grammaticalization into something like an aspectual auxiliary verb. This would seem to be in keeping with the presumed genesis of several of Hiaki’s obligatorily bound affixes, and with grammaticalization trends in basic motion verbs crosslinguistically. This possibility is investigated in more depth in Chapter 4 and Chapter 5.

I will argue that an adjunction analysis, in which VP1 is head-adjoined to a root node instantiating V2 *-sime*, most closely fits with the semantic and morphosyntactic properties of the V-*sime* construction in Hiaki, and explain in detail what this structure would look like in Chapter 5.

1.3 Motion

In a series of influential works, Talmy (1975; 1985; 1991; 2000) decomposed motion events into semantic sub-elements (Figure, Ground, Path and Manner) and proposed a two-way language typology based on how different languages incorporate the Path component into linguistic motion expressions (‘verb-framed’ vs ‘satellite-framed’). The simplicity of Talmy’s typology has come under criticism in recent years, with the recognition that many languages employ other strategies (such as symmetric, or double-framing, where *both* Path and Manner are encoded in the verb) and that within any given language, different strategies may be employed - “Talmy’s typological classification

applies to individual complex event types within a language, not to languages as a whole” (Croft et.al 2008:1). In particular, languages with serial verbs or other complex predicate types are likely to exhibit either a variety of framing strategies, or strategies that do not fit comfortably within Talmy's dichotomy (Slobin 2004; Son and Svenonious 2008).

Nevertheless, the majority of work on motion constructions in the literature remains focused on more-studied languages like Germanic and Romance, and on the lexicalization of either Path or Manner within a lexical verb (Beck & Snyder 2001; Folli & Harley 2006; Jackendoff 1992, 1997; Levin & Rappaport Hovav 1991, 1995; Mateu 2001, 2002). Zubizarreta & Oh (2004, 2007) broaden this field somewhat by examining not only Germanic and Romance, but also Korean, which is an interesting case because it overtly decomposes manner and directed motion in serial verb constructions. The Korean examples are particularly relevant because the language displays several morphosyntactic similarities with Hiaki, as well as some interesting differences. The Korean facts, and Zubizarreta & Oh's analysis will be reviewed in detail in Chapter 5.

1.4 Complex Predication

A wide array of phenomena, in various languages, has been lumped under the umbrella term ‘complex predicate’ (henceforth CPR). These include, but are not limited to: light verb constructions; coverb constructions; serial verb constructions; raising and restructuring predicates; incorporation phenomena, including noun incorporation, preposition incorporation, pseudo-incorporation and particle constructions; some types of verbal classifier systems; resultatives; and even, contentiously, control constructions and auxiliary verb constructions.

Further adding to the confusion, there is a great deal of mismatch in the interpretation of many of these terms; ‘light verb’ is applied particularly freely, as for instance in Rosen (1990) who argues that restructuring predicates are a type of light verb, thus collapsing two of the categories above. Similarly, although Amberber et al. (2010) appear to consider coverb constructions a distinct phenomenon, Bower (2008) places them decisively in the category of light verb constructions.

Complex predication involving motion is one of the most common types in the world, particularly with respect to multi-verb structures. For example, Durie (1997:310) claims to be unaware of any language with serial verb constructions that does not include a category of motion serialization. Aikhenvald (2006:48) goes even further, stating unequivocally that all serializing languages have, minimally, constructions involving verbs of motion, posture, orientation and stance. (27) is an example that illustrates what she labels an ‘asymmetric’ SVC, with the motion verb acting as a deictic or directional marker.

- (27) lei⁵ lo² di¹ saam¹ lai⁴
 you take PL clothing come
 ‘Bring some clothes’

Cantonese (Aikhenvald 2006:21)

Although complex motion constructions occur frequently, in many typologically distinct languages, they may be realized quite differently, by a number of different structural

variants. Outside of the realm of serial verbs, Rice (2010) reports on a class of activity incorporates in two Athabaskan languages, Ahtna and Koyukon. These differ from multi-verb constructions because they involve a motion or stance verb in combination with a nominal activity predicate, however they have very similar semantics to the Hiaki *V-sime* constructions.

(28) **Sel-he-ghe-d-o-l-del**

shout-3pl.s-qual-qual-prog-*l* voice/valence-go.pl

‘They are going along shouting.’ (Koyukon)

(29) **lu-sel-d-a-l-del**

around-**shout-qual-prog-*l* voice/valence-go.pl**

‘They (mosquitoes) are whining about.’ (Ahtna)

(Rice 2010:135-6)

Notably, in these constructions the motion/posture verb is the head of the construction, and is modified by the activity noun. This contrasts with many of the motion SVCs surveyed in Aikhenvald (2006) and Durie (1997), in which the motion/stance verb is considered a ‘minor²’ verb and highly susceptible to grammaticalization of various kinds.

² A ‘minor verb’ is one from a restricted class, such as motion or stance verbs, which serializes with an unrestricted ‘major verb’ - the major verb controls argument structure and may be considered the semantic and syntactic head of the construction. (Aikhenvald 2006:22)

In many languages of Central Australia, for example, ‘associated motion’ or ‘associated path’ can be considered a grammatical category, usually indicated on an auxiliary verb, and frequently forming a portmanteau with tense, aspect, and/or mood inflection (Wilkins 1991; Simpson 2002/4?; Nordlinger 2001, 2010, 2014).

(30) Ganga mirnd-**amany**

return 1dl.incl.S-**pst.twd**

“We came back.”

(31) Ganga mirnd-**any**

return 1dl.incl.S-**pst.awy**

“We went back.”

(32) Ganga mirnd-**a**

return 1dl.incl.S-**pst**

“We returned.”

Wambaya (Nordlinger 2010:237)

So, not only are complex motion constructions similar to Hiaki motion compounds common occurrences in a wide variety of languages, they also are instantiated by a range of different structural types. The motion verb may represent the head of a complex verb, a modifying element, or even grammatical category – each of these functions necessitates a distinct structural representation, despite the apparent semantic similarities.

1.5 A note on theory and framework

My goal in undertaking this project is to provide an analysis that best models the data, with no particular theoretical agenda, and which may work within a number of frameworks. However, like anyone, I am subject to the biases of my own training and preferences. Thus, my analysis inevitably betrays the influences of modern formal approaches, in particular, Distributed Morphology, the Minimalist Program, and to some extent, Bare Phrase Structure, without explicitly endorsing the tenets of any of these.

Chapter 2 Independent motion verbs in Hiaki

Haiseakai Alebandra si chuunti weye? (Why is Alex walking so fast?)

This chapter is primarily concerned with independent verbs of motion. §2.1 describes the properties of the basic motion verb *sime/saka* ‘go’ when it functions as a main verb, including its semantics, argument structure and interactions with various morphological processes. §2.2 discusses the behavior of other motion verbs, including those that lexicalize manner or path, and attempt to situate Hiaki motion constructions with respect to Talmy’s (1975; 1985; 1991; 2000) typology of motion events.

2.1 Basic Motion: *siime*

Recall from §1.2.3 that many Hiaki verbs display suppletion, and that *siime* is one of this class, exhibiting variation in form based on tense/aspect and on the plurality of its subject.

(33)

Present, singular subject: <i>siime</i>	Past perfective, singular subject: <i>siika</i>
Present, plural subject: <i>saka</i>	Past perfective, plural subject: <i>saha</i>

In addition, both the singular subject *siime* and plural subject *saka* have a bound form, which occurs in particular contexts, such as with specific classes of affixes³.

(34)

Bound, singular subject: <i>sim-</i>	Bound, plural subject: <i>saka’a-</i>
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³ More detail is provided in §1.2.3

The suppletive properties of *siime*, with respect to number features of the subject, have important implications for argument structure, which will be discussed in §2.1.1.2.

Additionally, since the example sentences will necessarily exhibit a range of forms, some familiarity with the possible forms of *siime* will be useful for the reader.

2.1.1 Formal and featural properties of *siime*

2.1.1.1 *Semantics and deixis*

Siime is usually translated as ‘to go’; it implies motion along a path, but neither (necessarily) specifies the direction of that path nor the manner of motion. It is an intransitive verb, requiring only a subject argument, although Hiaki seems to disprefer simple two word sentences, so further information of some type is usually added. Frequently, this comes in the form of a postpositional phrase indicating the path or direction of motion.

When no path PP is present, the default interpretation of *siime* is ‘leave’ or ‘go from here’, as in example (35). This is also true of the English verb *go*, however, unlike English, Hiaki does not have a straightforward counterpart such as *come*. It is one of a handful of typologically and genetically diverse languages that counter the prevailing tendency of languages to possess a ‘class⁴’ of basic motion verbs, consisting minimally of a pair of deictic verbs encoding ‘motion-towards-speaker’ (*come*) and ‘motion-not-towards-speaker’ (*go*). However, even in languages that do have a clear oppositional pair

⁴ While motion verbs form a class according to notional definitions, cf Talmy (1975 et. seq.), there is some dispute about whether they can be considered so on morphosyntactic grounds. (Wilkins & Hill 1995; Levin & Rappoport 1992)

such as this, it is common for the ‘go’ verb to have a more generalized and non-deictic use. Certainly in Hiaki, the apparent deictic interpretation of *siime* as ‘motion-not-towards-speaker’ can be subverted with the use of an appropriate Path PP, as in example (36) where *siime* is translated as ‘come’. This indicates that the deictic interpretation of *siime* in examples such as (35) is a pragmatic implication rather than a featural specification. (Wilkins & Hill 1995)

(35) Vempo nau saha-k
 3plNOM together go.pl-PFV
 “‘They left together.’”

(36) Vempo ne-u vicha saha-k
 3plNOM 1sgACC-to towards go.pl-PFV
 “‘They came towards me.’”

There is another verb, *yaha/yepsa*, which is sometimes translated as ‘come’, but more usually ‘arrive’. It may not, for instance be used in the context of (36)—the sentence in (37) is not acceptable.

(37) *Aapo ne-u vicha yepsa-k
 3sgNOM 1sgACC-to towards arrive.sg-PFV
 “‘S/he came/arrived towards me.’”

2.1.1.2 *Siime is unaccusative*

Distinguishing unaccusative intransitives from unergatives in Hiaki is not as straightforward a proposition as one might wish.

Jelinek & Escalante (2000) argue that the passive/impersonal suffix *-wa* targets Agent/Causer subjects, and thus can be used to diagnose unergative verbs. As in English, in Hiaki passive sentences the semantic subject is absent, and the object of a transitive verb gets promoted to the nominative subject position. However, in Hiaki you can also passivize intransitive verbs, resulting in subjectless sentences – this is demonstrated by the alternation in examples (38)-(39).

(38) Peo bwiika
Pete sing.PRES
“Pete is singing.”

(39) Bwik-wa
sing-PASS
“Singing is happening.”

It is impossible to add agents in a ‘by’ phrase in Hiaki. Whenever *-wa* appears the interpreted subject is generic, third person, plural and human – ‘people’. This also means you can’t passivize sentences with a non-human subject (40)-(41).

(40) Uu puato hamte-k
DET dish shatter-PFV
“The dish shattered.”

(41) *Hamti-wa-k
shatter-PASS-PFV
Intended: “Shattering happened.”

You can passivize *siime* (42), which lead Jelinek and Escalante to conclude that *siime* must be agentive, and thus unergative.

(42) Aman saka'a-wa
There go.PL-PASS
“(People) are going over there.”

However, *-wa* can also occur with the verb *muuke/koko* ‘to die’, which is interpreted with an Experiencer subject.

(43) Sawaria-ta-mak koko-wa-n
Yellow(fever)-ACC-with die.PL-PASS-PST
“(People) were dying from yellow fever.”

Harley, Tubino Blanco and Haugen (2009) argue that *muuke/koko* is inherently unaccusative, and disqualify *-wa* as a tool for diagnosing unergatives. They claim that the applicative morpheme, *-ria*, may instead be used to identify unaccusative intransitives. The applicative adds an accusative benefactive argument to the clause. It is productive with all manner of agentive verbs, but doesn't occur with non-agentive or suppletive intransitive verbs, even when there's no semantic/pragmatic conflict, as the examples in (44)-(45) show. They take this to indicate that the suppletive intransitive verbs are inherently non-agentive, as would be expected if they were unaccusative.

(44) Santos Maria-ta vetchi'ivo San Xavierle-u weye

Santos Maria-ACC for San Xavier-to walk

“Santos is going/walking to San Xavier for Maria.”

(45) *Santos Maria-ta San Xavierle-u weye-**ria**

Santos Maria-ACC San Xanvier-to walk-APPL

“Santos is going/walking to San Xavier for Maria.”

(Harley, Tubino Blanco and Haugen 2009:48)

The ungrammaticality of the applicative with suppletive intransitive verbs (including *siime*) taken together with the fact that suppletive *transitive* verbs' form is conditioned by their internal, not their external argument, leads Harley, Tubino Blanco and Haugen to argue that verb suppletion is always triggered by internal arguments. This is consistent with Bobaljik's (2012) claim that suppletion can only be conditioned in a strictly local

relationship, within the same maximal projection – ie, sisterhood. The consequence of this locality constraint is that all suppletive intransitive verbs, including *siime*, must be unaccusative.

2.1.2 Interactions

2.1.2.1 Tense/aspect

Tense and aspect marking in Hiaki are often difficult to distinguish clearly. It is not clear in all cases whether a given morpheme marks tense or aspect or a combination of both. I will simply describe most of these morphemes in terms of both the tense and aspectual information they typically indicate.

i. Future

The future/irrealis suffix *-ne* is the only one of the tense/aspect suffixes that is classed as ‘stem-changing’. (Dedrick & Casad 1999, Harley & Tubino Blanco 2010) That is, it requires the bound form of the stem shown back in (34). The future inflected forms of *siime* are hence *sim-ne* (singular subject) and *saka’a-ne* (plural subject).

(46) Yooko=ne Potam-meu sim-ne
tomorrow=1SG.NOM Potam-to go.SG -FUT
“I am going to Potam tomorrow.” (Dedrick & Casad 1999:293)

(47) Yooko=te Potam-eu saka’a-ne
tomorrow=1PL.NOM Potam-to go.PL -FUT
“We are going to Potam tomorrow.”

ii. *Present imperfective*

Morphologically unmarked verbs indicate present tense, and imperfective (or continuative) aspect. (Note that I gloss this form simply as ‘PRES’ for simplicity’s sake.)

- (48) Aapo ne-u vicha siime
3SG.NOM 1sg.ACC-to towards go.SG.PRES
“S/he is coming towards me.”

- (49) Vempo ne-u vicha saka
3PL.NOM 1sg.ACC-to towards go.PL.PRES
“They are coming towards me.”

iii. *(Past) perfective*

The suffix *-k* is the usual marker of perfective aspect in Hiaki, but *siime* suppletes to the forms *siika* and *sahak* instead. Perfective is translated as simple past in English, and is the most common form used to describe past events, although Dedrick and Casad (1999:318) argue that it does not indicate tense, per se, but that perfective (completed) actions are considered ‘past’ by default.

- (50) Aapo ne-u vicha siika
3SG.NOM 1sg.ACC-to towards go.SG.PFV
“S/he came towards me.”

- (51) Vempo ne-u vicha sahak
3PL.NOM 1sg.ACC-to towards go.PL.PFV

“They came towards me.”

iv. *Past (imperfective)*

Dedrick and Casad consider that the suffix *-n* “may be the only genuine tense marker in [Hiaki]” (1999:318). Affixed to the free, citation (present perfective) form of a verb, it typically maintains imperfective aspect and adds past tense.

- (52) Aapo ne-u vicha siime-n...
3SG.NOM 1sg.ACC-to towards go.SG-PST

“S/he was (going to be) coming towards me...”

- (53) Vempo ne-u vicha saka-n...
3PL.NOM 1sg.ACC-to towards go.PL-PST

“They were (going to be) coming towards me...”

This is not the whole of the story, however. In both (52) and (53), the implication is that the intention to come was there, but that the event itself was prevented from happening for some reason – these sentences are judged to be incomplete, and speakers suggest adding an explanatory ‘but’ clause. This is consistent with an aspectual contrast often seen in perfective/imperfective languages – perfective forms are used for narrative advancement, while imperfectives are used for

backgrounding effects. Thus, the use of the imperfective in the examples above, creates a sense of incompleteness – if an event is presented as background, there must be another, foreground event to be described. (Sebastián & Slobin 1994:253-254)

v. *Past perfect*⁵

The suffix *-kan* is, in the usual case, translated as something like past tense perfect aspect, as in the example with *hi'ibwa* ‘eat’ below.

- (54) Alleh kaa hi'ibwa-k bwetuk ketwo hi'ibwa-kan
 Alex NEG eat-PFV because morning eat-PRF
 “Alex didn’t eat because (she) had eaten earlier.”

Because *siime* is a suppletive verb, we don’t get a form *siime-kan* or *saka-kan*. What we do get is *siika-n* and *sahaka-n* – which looks like the perfective form suffixed with past tense *-n*. This is interesting on the one hand because it suggests that *-kan* may be historically derived from *-k(a)*⁶ + *-n*. More interesting, however is that these forms do not receive the translation that we would expect to see if these verbs fit with the usual *V+kan* pattern.

⁵ Although I am labeling the *-kan* suffix ‘past perfect’ for lack of a better alternative, that description is almost certainly wrong, given that a perfective/imperfective language with a perfect category is highly unlikely. More work certainly needs to be done to tease out the details of the aspectual system in Hiaki, but such work is regrettably outside of the scope of the current project.

⁶ Note that this is not necessarily the past perfective *-k(a)*. Hiaki also has a participial suffix *-ka*, which will be discussed in §2.1.2.4.

(55) Aapo nee-u vicha siika-n...
3SG.NOM 1sg.ACC-to towards go.SG.PRF-PST
“S/he was coming towards me...”
Not “S/he had come towards me.”

(56) Vempo nee-u vicha sahak-an...
3PL.NOM 1sg.ACC-to towards go.PL.PRF-PST
“They were coming towards me...”
Not “They had come towards me.”

In (55) and (56) the interpretation is past imperfective, which was expected in (52) and (53). In those examples, the assumption is that the subjects never embarked on their intended path of motion. In these cases, in contrast, the subjects are assumed to have embarked, and the expected next clause would describe some event that happened along the way.

Given these data, it is natural to assume that perhaps the analysis of these forms is incorrect and that these are not examples of *siime* + *-kan* at all. If that is the case, then there is no obvious way to inflect *siime* with *-kan*; the forms **siime-kan* or even **sim-kan* are impossible.

vi. *Other aspectual categories*

Hiaki has a number of other affixes that supply information of an aspectual nature, such as *-taite* (inceptive), *-yaate* (cessative), *-su* (completive), *-pea* (desiderative), and *-vae* (prospective). However these affixes behave differently to those above. Dedrick & Casad (1999) consider them variably aspectual or adverbial. Escalante (1990) classes them as bound verbs, elements in complex verb constructions, as do Tubino-Blanco, Harley & Haugen (2009). These affixes, unlike all other tense/aspect suffixes except *-ne*, suffix to bound forms of their verbal stems. Further, this class of affixes co-occurs with the tense/aspect affixes above, and always takes the inner position.

2.1.2.2 *Reduplication*

The most common interpretation of reduplication of Hiaki verbs is habitual aspect. Other readings, such as plural subject, ongoing or progressive action, or intensification are also possible in certain circumstances (Harley & Amarillas 2002). *Sime* is typical in this regard; its reduplicated form is usually used as an indicator of habitual action (58).

(57) Chepa kari-po yeu siime
Chepa house-LOC out go.SG.PRES
“Chepa is leaving the house.”

(58) Chepa kari-po yeu si-sime
Chepa house-LOC out RED-go.SG.PRES
“Chepa leaves the house (regularly).”

However, in the appropriate context the reduplicated form can also be interpreted as indicating an immediate and ongoing action (59).

- (59) Aapo ne-u vicha si-sime
3SG.NOM 1PL-to toward RED-go.SG.PRES
“S/he is coming towards me (right now).”

Whether the reduplicated form is interpreted as habitual or ongoing, it is incompatible with the perfective stem *siika* (61), as is typical of such reduplication in the language.

- (60) Chepa kari-po yeu siika.
Chepa house-LOC out go.SG.PFV
“Chepa left the house.”

- (61) **Chepa kari-po yeu si-sika
Chepa house-LOC out RED-go.SG.PFV
Intended: “Chepa left the house (regularly).”

It combines with the past imperfective to give a past habitual or ‘used to’ interpretation (62).

- (62) Uu kamion wovusanim-po si-sime-n
 The bus seven-LOC RED-go-PST
 “The bus used to leave at seven.”

2.1.2.3 *Passive/Impersonal*

As noted in §2.1.1.2, when applied to transitive sentences, the suffix *-wa* behaves like a typical passive morpheme – the expected subject argument is absent and the object (or highest accusative argument) is obligatorily promoted to subject position and assigned nominative case (63)-(64).

- (63) Vahi o’ow-im uka maso-ta mea-k
 Three man-PL DET.ACC deer-ACC kill.PL-PFV
 “Three men killed the deer.”

- (64) Uu maaso me’e-wa-k
 DET.NOM deer kill.PL-PASS-PFV
 “The deer was killed.”

(Escalante 1990b:290)

In addition *-wa* can be applied to intransitive verbs, and in these cases it results in a subjectless clause, as in (38)-(39), reproduced here as (65)-(66). The unexpressed subject is treated as an understood non-specific indefinite, glossable as ‘people’ or ‘they’; in this regard it is an impersonal construction.

(65) Peo bwiika
Pete sing.PRES
“Pete is singing.”

(66) Bwik-wa
sing-PASS
“(People/They) are singing.”

Like the future marker *-ne*, *-wa* is a stem-changing suffix. Furthermore, when it attaches to a verb that suppletes for subject number, that verb will be in its plural subject form⁷. This means that when *siime* is marked with the passive/impersonal, it is always in its plural bound stem form *saka 'a-*.

(67) Aman saka 'a-wa
There go.PL-PASS
“(People) are going over there.”

Regardless of whether *-wa* is affixed to a transitive or intransitive verb stem, it is impossible to include the understood subject in the clause (such as in an oblique ‘by’ phrase, as in English passives⁸). However, the understood subject **must** be human, and this is the only apparent restriction on the formation of *-wa* constructions; *-wa* can attach

⁷ Harley (2014) argues that this does not entail that the unexpressed subject must be interpreted as plural, although it is in the default case. Even when the context indicates that the subject is likely singular, the verb must still show plural agreement. I show this in examples (177)-(178) in Chapter 3.

⁸ Although Escalante (1990b) points out that oblique instrumentals may be included.

to any verb, so long as the subject that is suppressed is human (and not to any verb whose suppressed subject is nonhuman). Thus, *-wa* can be shown to occur with unaccusative and other non-agentive verbs. (Harley, Tubino Blanco and Haugen 2009; Harley 2014)

2.1.2.4 Subordination

In subordinate adjunct clauses of the ‘while’ type, the semantics of *siime* are exactly what we would expect from it in a main clause; in the absence of a specified path *siime* is interpreted as ‘leave’, otherwise, as undirected motion. Subordinated *siime* appears in one of two forms: *sime-ka* (68), which seems unambiguously to be an untensed participle, and *sika* (69) which occurs in more limited contexts, and the analysis of which is somewhat more mysterious.

Note that both of these forms have shortened vowels. In §1.2.3.3, I demonstrated that long vowels are often shortened in the environment of particular suffixes.

(68) Acheka sime-ka(-su), kafe-ta woota-k
HK go-PCL-PRT coffee-ACC spill-PFV
“As she was leaving, HK spilled the coffee.”

(69) Acheka sika wee-ka(-su), kafe-ta woota-k
HK go.SG walk-PCL-PRT coffee-ACC spill-PFV
“As she was leaving, HK spilled the coffee.”

(70) Ume veveme sahaka, kaate-ka-su, kafe-ta woota-k
DET.PL girl.SREL go.PL walk-PCL-PRT coffee-ACC spill-PFV

“The young girls who were leaving, while walking, spilled the coffee”

In (69) *sika* appears in concert with the participial form of the verb *weye* ‘walk’, so this sentence can perhaps be more fully translated: “As she left walking, HK spilled the coffee”⁹. It is not entirely clear what the status of *sika* is in this construction - more data and exploration is required to make a convincing analysis. It is possible that this is simply an alternative participial form, and its range of use simply needs to be clarified with further examples.

2.2 Other Verbs of Motion

In a series of influential works, Talmy (1975; 1985; 1991; 2000) decomposed motion events into sub-elements (Figure, Ground, Path and Manner) and proposed a two-way language typology based on how different languages incorporate these elements. Talmy focused on how languages expressed Path in particular; hence in ‘verb-framed’ languages path is expressed on the main verb of the clause, whilst in ‘satellite-framed’ languages, it is expressed outside of the verb, by means of a particle or phrase (Slobin 2004).

The simplicity of Talmy’s typology has come under criticism with the recognition that many languages employ other strategies (such as symmetric, or double-framing, where the path is expressed both as part of the verb and in an accompanying satellite) and that within any given language, different strategies may be employed. “Talmy’s typological

⁹ I note, however, that my consultants find this translation awkward and unnecessarily detailed.

classification applies to individual complex event types within a language, not to languages as a whole” (Croft et.al 2008:1).

2.2.1 Path of Motion

Hiaki has quite a small sample of verbs that lexicalize path, and there is a certain lack of symmetry regarding which paths are encoded this way. For example, there is ‘fall’ but not ‘rise’, ‘arrive’ and ‘enter’ but not ‘depart’ or ‘exit’. (As mentioned earlier, *siime* can be used to mean ‘depart’ in some circumstances, but usually an additional particle – *yeu* ‘out’ – is required if one wishes to be explicit on that point.)

(71)

Intransitive verbs	Singular subject	Plural subject
Arrive	<i>yepsa</i>	<i>Yaha</i>
Fall	<i>weche</i>	<i>Watte</i>
Enter	<i>kivake</i>	<i>Kiimu</i>
Fall/drop (as of rain, fur)	<i>Yohte</i>	
Return	<i>Note</i>	

(72)

Transitive verbs	Singular object	Plural object
Bring/insert	<i>kivacha</i>	<i>Kiima</i>
Take	<i>toha</i>	<i>Weiya</i>
Drop	<i>Tatave</i>	

(Molina, Valenzuela & Shaul, 1999)

2.2.2 Manner of Motion

Satellite-framed languages, which do not lexicalize Path of motion in the main verb, commonly express Manner of motion in the verb instead (Slobin 2004). The verbs in (73)-(74) do not need to form a compound with *-sime* in order to acquire a motion interpretation. Although Hiaki does have more simple verbs that lexicalize manner than it

does verbs that lexicalize path, still these appear to be a far smaller percentage than in a language such as English.

(73)

Intransitive verbs	Singular subject	Plural subject
Walk	<i>weye</i>	<i>Kaate</i>
Run	<i>vuite</i>	<i>Tenne</i>
Wander	<i>weama</i>	<i>Rehte</i>
Fly	<i>ne'e</i>	
Float	<i>cha'aka</i>	
Swim	<i>Vahume</i>	
Jump/hop/step	<i>Chepte</i>	
Climb	<i>ha'amu</i>	
Dance	<i>ye'e</i>	
Roll over	<i>Viakte</i>	
Roll	<i>Roakte</i>	
Slide	<i>Suulu</i>	
Slip	<i>Chitohte</i>	
Pace	<i>Nahkuakte</i>	
Bounce	<i>Tohakte</i>	
Dive	<i>Piiki</i>	
Crawl	<i>waka'ate / waka'aname / sunsunte</i>	

(74)

Transitive Verbs	
Carry	<i>pu'ate</i>
Carry on head	<i>a'ate</i>
Chase	<i>Hahase</i>
Drive (herd)	<i>Naama</i>
Jump over	<i>Chepta</i>
Pull	<i>Wiike</i>
Push	<i>yu'a</i>
Roll	<i>Roakta</i>
Shove (in)	<i>Suuta</i>
Step over	<i>wa'akta</i>
Throw	<i>himma, hissa</i>

(Molina, Valenzuela & Shaul, 1999)

Most of the simple manner-of-motion verbs that I was able to find in the Hiaki dictionary are relatively basic. Many more detailed or explicit manners are created by the use of complex expressions. These include compound verbs, of the sort that are the focus of this dissertation, as well as modification by non-verbal elements such as adjectives and noun-incorporation.

It seems clear that, based on these data, Hiaki would be classified in Talmy's typology as a satellite-framing language, given the propensity for the Path component of the event to be expressed in satellite expressions, such as particles, rather than by the main verb. This classification becomes a little more complicated when we enter the territory of complex and compound verbs, since it is no longer entirely clear exactly where the line between 'verb' and 'satellite' lies (Talmy 2000; Croft et.al 2008). These issues will be explored further in Chapter 3, which investigates Hiaki complex verbs in detail.

2.3 Summary

The motion verb *siime* is a complicated beast, with multiple suppletive forms. It may imply, but does not stipulate, path or manner of motion – where these interpretations exist they are presumed to be a product of pragmatics, rather than featurally specified. *Siime* is unaccusative, and though it can occur with a Path or Goal PP, it need not. Other simple motion verbs that do specify manner of motion are also capable of licensing the presence of a Path or Goal phrase.

Chapter 3 Complex Motion in Hiaki

Acheke ha vivu atsisime (HIK is always going about laughing.)

In Chapter 1 I gave a brief overview of some interesting features and puzzles in the study of both motion expressions and complex predication, and in Chapter 2, I discussed Hiaki simple motion constructions, focusing on the behavior of the basic motion verb *siime/saka* ‘to go’. In Chapter 3, I delve into Hiaki complex verbal structures, and begin to explore the convergence of motion and complex predication.

This chapter has four subsections. The first, §3.1, is an overview of the types and properties of Hiaki complex verbal structures based on clausal and argument structure. I claim that most Hiaki complex predicates are biclausal structures that fall into one of three types: ECM, Raising or Subject control. In §3.2, I consider complex verbs of motion, formed with *-sime/-saka*, and discuss how they compare to other complex verbs in the language, again examining clause and argument structure as well as the role and characteristics of the VP1. I argue that *V-sime* constructions do not clearly pattern with any of the biclausal structures discussed in the previous section, but has properties that fit with a monoclausal analysis. In §3.3 I compare the behavior of *-sime/-saka* in its role as a participant in a complex structure with its behavior in a simple predicate clause, assessing interactions with tense/aspect and other morphological operations. §3.4 summarizes the main findings and conclusions thus far.

3.1 Overview of Hiaki Complex Verb Structures

This section is aimed at detailing as precisely as possible the range of structures involved in Hiaki complex verbs, in order to then determine where the *V-sime* constructions fit amongst them, or if they represent a different type altogether. Additionally, this laying out of properties is a crucial step towards establishing how to fit Hiaki complex verbs in a wider, crosslinguistic typology of complex verbal structures. This is not a trivial task, since “One person’s complex predicate or compound verb is another person’s serial verb, composite predicate, auxiliary construction, or even a control construction.” (Butt 2003:2)

To that end, §3.1.1 will include a brief sketch of previous descriptions and analyses of Hiaki complex verb types, some of my assumptions regarding clausal and argument structure, and some background information about verbal morphology and stem types.

3.1.1 Types of Complex Verbs in Hiaki

The division of complex verbs into ‘types’ or classes has different uses depending upon the criteria used in the division. In §3.1.1.1, for instance, I provide a brief rundown of the division provided by Escalante (1990) which is based upon the ability of the V2 in the compound to occur as a free lexical verb or not, briefly described in Chapter 1 above. I will show, following Harley & Haugen (2010) that this division is not highly significant to the question of clausal structure, since both bound and free V2s can demonstrate the same range of clausal types.

In §3.1.1.2 I lay out some assumptions regarding clausal structure and its definition, and in §3.1.1.3 provide some relevant background on the forms that Hiaki verb stems take in particular morphosyntactic environments.

3.1.1.1 *Free vs. Bound*

Hiaki has been described as having two broad classes of complex verbs. This division is based on the status of the V2 element as either bound or (potentially) free, rather than on clausal or argument structure. The first of these, called ‘complex verbs’ by Escalante (1990) involves a lexical V1 with a bound V2 affix (or affixes) which has some aspectual or other verbal properties, and which cannot function as an independent verb. These obligatorily bound items have functions such as: direct causative *-tua*, indirect causative *-tevo*, applicative *-ria*, desiderative *-pea*, inceptive *-taite*, and more.

- (75) Inepo apo'ik bwik-**tua**-ne
 lsgNOM 3sgACC sing-CAUS-IRR
 “I will make him/her sing.” (Escalante 1990:40)

The second type described by Escalante is ‘compound verbs’, in which two (or potentially more) verbs are combined, each of which has independent lexical verb status. Although complex verbal structures are very common in the language, verbal compounds appear to be a reasonably restrictive class, in the sense that there are relatively few verbs which commonly show up as the final or head verb in such a structure. Independent verbs that can occur in V2 position in compounds include: *mahta* ‘teach’, *naate* ‘start’, *vicha* ‘see’ and of course *siime* ‘go’.

- (76) Aapo enchi yi'i-**mahta**-k
3sgNOM 2sgACC dance-teach-pfv
“He taught you to dance.”

Escalante (1990) points to the fact that several of the obligatorily bound V2 affixes may have derived from historically independent verbs, so the line between these two classes is inherently blurry. Harley and Haugen (2010:14) go so far as to refer to those independent verbs that can occur in V2 as ‘verb-affix hybrids’, noting that when they occur in compounds they behave identically to affixal verbs with respect to binding and the assignment of case in embedded clauses – this is demonstrated in §3.1.2, §3.1.3 and §3.1.4, in which both bound and free V2s are used to exemplify three distinct clausal structures that can be identified amongst Hiaki complex verbs.

3.1.1.2 *Defining clausality*

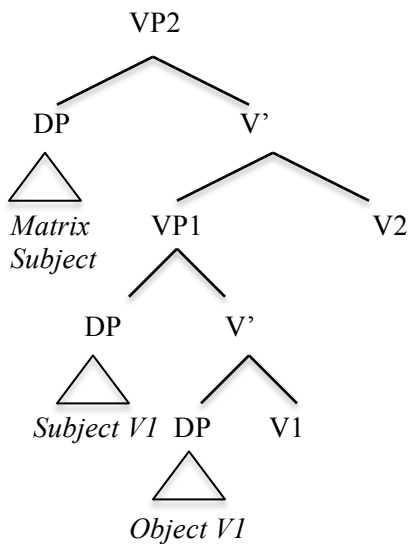
One of the defining characteristics of a *complex predicate* as understood by scholars like Butt (2003 et seq.) is monoclausality. In a monoclausal complex predicate, two elements predicate as a single unit with a united argument structure. In a biclausal structure, however, two predicates maintain individual syntactic domains with arguments shared across them. (Butt 2003)

Biclausals may vary according to the size of the embedded structure. Larger embedded structures such as CP or TP can be identified by the presence of an embedded topic or embedded case/tense/agreement respectively. Embedded argument structure, defined by

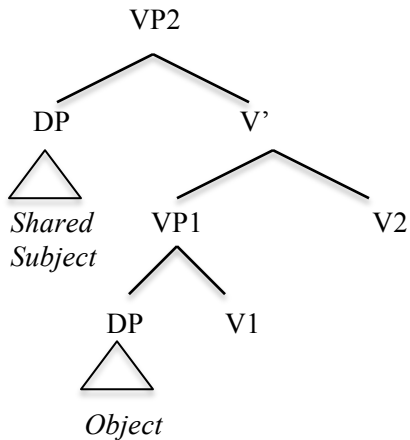
the existence of binding domains, indicates a VP or vP sized constituent. (Butt 2003, Harley 2008, Wurmbrand 2001)

Verbs that take a bare VP complement may be restructuring predicates, and result in ‘clause unification’. This terminology is indicative of the somewhat fuzzy position that these structures inhabit between more clear-cut examples of monoclausal and biclausal structures; the argument about whether a VP complement structure is considered mono- or biclausal comes down to whether or not there is an embedded subject position available. In a unified or monoclausal structure there is no embedded subject of the lower VP, but semantic ‘sharing’ of the subject of the higher verb. (Wurmbrand 2001, Cable 2004) These distinctions are roughly sketched in (77)-(78), and will be examined in more detail in Chapter 4 and Chapter 5.

(77)



(78)



Escalante (1990) goes to some trouble to show that sentences with both complex and compound verbs (with a transitive V2) are biclausal with respect to binding domains. They may not, however, embed Tense or even Negation, which indicates that the embedded clause is limited to a VP or vP sized constituent. Tubino Blanco & Harley (2012) argue that the relevant constituent is in fact VoiceP¹⁰.

Within a biclausal structure of this type, there are multiple methods of reconciling the argument structure needs of both predicational elements. Arguments of the inner VP1 may be shared with¹¹, or embedded under, the higher V2. Objects of V1s are always assigned accusative case by their verb; it is the subjects of V1 that are treated differently depending upon the properties of the V2. V2s can be grouped into one of these three types:

¹⁰ They argue for a 3-layered VP structure, which is illustrated in §5.3.1.

¹¹ As in the case of subject raising.

1. ECM predicates, in which the subject of the lower VP is overt and accusative;
2. Raising predicates, which do not themselves contribute a thematic subject, and so the subject of the lower clause raises to occupy the higher subject position;
3. (Subject) Control predicates, in which the subject of V1 is a phonologically null element (PRO) that is bound by the coreferent subject of V2.

In § 3.1.2- § 3.1.4 I provide examples of affixal and lexical V2s that have each of the properties described above. First, however, I take a small detour in the next section in order to clarify how different classes of affixes affect the form of Hiaki verbal stems.

3.1.1.3 Verb Stems

Hiaki verbs have both a free stem and a bound stem form as illustrated in (79)-(80):

(79) Inepo **ye'e**
 1sgNOM **dance**
 “I am dancing.”

(80) Inepo **yi'i-ne**
 1sgNOM **dance-FUT**
 “I will dance.”

(Escalante 1990:38)

There are several classes or sub-classes of verbs based on stem alternation, including an invariable class, however, I will not discuss these classes in detail¹². The more salient point that I wish to make here is that some suffixes must attach to free stems – such as *-k* (past perfective), *-n* (past imperfective), and *-kan* (past perfect) – but that the majority attach to bound stems. Bound stem suffixes include: *-wa* (impersonal/passive), *-ne* (future/irrealis), *-na* (future impersonal/passive), *-tua* (direct causative), *-tevo* (indirect causative), *-ria* (applicative) and many others. The class of affixal verbs that occur in complex verbs always attach to bound stems.

In verbal compounds, the first verb (V1) always appears in its bound form. The form of the second verb (V2) varies depending upon the nature of any subsequent affixation. In example (81) below, the inner VP ‘you dance’ is the complement of the V2 *-mahta* ‘teach’. The V1 *ye’e* ‘dance’ is in its bound form *yi’i-* (compare with (80) above) while the form of V2 is free.

- | | | | | |
|------|---------------------------|--------|---------------------|---------------------|
| (81) | Aapo | enchi | yi’i-mahta-k | |
| | 3sgNOM | 2sgACC | dance-teach-PFV | |
| | “He taught you to dance.” | | | (Escalante 1990:38) |

As a loose generalization, we might say that free-stem affixes are inflectional, and bound-stem affixes are typically derivational/compounding. Note, however, that this generalization has clear *prima facie* exceptions: the future/irrealis *-ne*, and the

¹² The full set of verb stem classes and their properties are outlined in Tubino Blanco & Harley (2010).

passive/impersonal *-wa* are bound-stem affixes. A more hard-and-fast rule is that, in the event of affix-stacking, free-stem suffixes must always follow suffixes that take bound stem forms. For example, the verb *vuite* ‘run.sg’ has a bound form *vuiti-*. The past perfect* suffix *-kan* is a free stem suffix, in (82) we can see that the verb appears as *vuite*. However, when combined with the completive *-su*, which is a bound stem suffix, *-su* precedes *-kan*, and the verb stem is realized as *vuiti-* (83). (Escalante 1990, Harley 2011, Harley and Tubino Blanco 2012, Tubino Blanco and Harley 2010)

(82) Aapo vuite-kan
 3sgNOM run.sg-PRF
 “He/she had run.”

(83) Aapo vuiti-su-kan
 3sgNOM run.sg-COMPL-PRF
 “He/she used to run.”

3.1.2 ECM V2s

What I am calling ‘ECM’ V2s are verbs that select for a subject and a propositional complement (VP1). The subject of V2 receives the sole Nominative case marking available; the second DP, which is always the semantic subject of V1, appears in the accusative. The mechanics of how accusative case marking is received – by checking, movement, feature valuation or some other technology – is not critical to my purpose

here. The important thing to note is that an ECM construction contains distinct – and overt – subject arguments for each verb.

3.1.2.1 *Affixal ECM: Direct Causative (-tua)*

The direct causative suffix in Hiaki adds an external Causer argument, which takes Nominative case; the embedded subject of the lexical verb is marked Accusative.

(84) Aapo bwik-ne
3sgNOM sing-FUT
“He/she will sing.”

(85) Inepo apo'ik bwik-tua-ne
1sgNOM 3sgACC sing-CAUS-FUT
“I will make him/her sing.” (Escalante 1990:40)

When the lexical verb is transitive, both of the embedded arguments are marked Accusative.

(86) Maria hitevi-ta uusi-ta hitto-tua-k
Maria doctor-ACC child-ACC treat-CAUS-PFV
“Maria made the doctor treat the child.” (Harley 2011 (h5))

With *-tua*, the Causee argument – ‘the doctor’ in these examples – cannot be omitted, as shown in (87) and this is also the argument that is promoted if passivization is applied to the direct causative structure, as in (88).

(87) *Maria uusi-ta hitto-tua-k
 Maria child-ACC treat-CAUS-PFV
 Intended: “Maria made (someone) treat the child.”

(88) Uu hitevi uusi-ta hitto-tua-wa-k
 DET doctor child-ACC treat-CAUS-PASS-PFV
 “The doctor was made to treat the child.¹³” (Harley 2011 (h5))

When the Causer and the Causee are coreferent, the Causee is realized as a reflexive (89).

(89) Inepo **ino** bwiik-tua-vae-n, taa=ne kaa aa bwiika-k
 lsgNOM lsgREFL sing-CAUS-PROPS-IMPF, but=1sgNOM NEG able sing-PFV
 “I wanted to make myself sing, but I wasn't able to sing.”
 (Escalante 1990:40)

If the Causer is co-referent with the embedded Theme, however, a pronoun must be used, as in (90), and example (91) shows that an anaphoric object of V1 cannot be controlled

¹³ Passive/impersonal *-wa* does not permit the Causer argument to be added in a *by* phrase.

by the matrix subject. Since anaphors must be controlled within their binding domain¹⁴, and pronouns must be free¹⁵, this is evidence that the VP embedded under the causative is a distinct domain for binding. (Escalante 1990)

- (90) Nee Art-ta **nee** sua-tua
 1sgNOM Art-ACC 1sgACC care.for-CAUS
 “I make Art take care of me.”

- (91) *Nee Art-ta **ino** sua-tua
 1sgNOM Art-ACC 1sgREFL care.for-CAUS
 Intended: “I make Art take care of myself.” (Harley 2011)

This is further supported by the examples in (92)-(93), which also show that the Causee argument can bind a reflexive object, but as in (91) the upstairs Causer cannot.

- (92) Aapo Peo-ta **au** vekta-tua-ne
 3sgNOM PeteACC 3sgREFL shave-CAUS-FUT
 “He_i will make Pete_j shave himself_{j/*i}.”

- (93) Aapo Peo-ta **aa**=vekta-tua-ne
 3sgNOM PeteACC 3sgACC=shave-CAUS-FUT
 “He_i will make Pete_j shave him_{i/k}.”

¹⁴ Principle A

¹⁵ Principle B

3.1.2.2 Lexical ECM: 'to teach' (-mahta)

Example (94) shows the verb *mahta* as an independent verb; in (95) it is occurring in its role as V2 of a compound.

- (94) Aapo enchi uka lio(s)-nok-ta **mahta-k**
3sgNOM 2sgACC DET.ACC god-talk-ACC teach-pfv
“He taught you the prayer.”

- (95) Aapo enchi yi'i-**mahta-k**
3sgNOM 2sgACC dance-teach-pfv
“He taught you to dance.”

The compound structure in (95) has the inner VP ‘you dance’ serving as the complement of *mahta* ‘teach’ – *ye'e* ‘dance’ occurs in its bound stem form (*yi'i*), without any tense marking of its own, making it clearly distinct from coordination structures such as (96) and (97).

- (96) Empo bwiika-k, aapo into **ye'e-ka**
2sgNOM sing-pfv, 3sgNOM and dance-pfv
“You sang and he danced.”

- (97) Empo ye'e-ka, taa aapo kaa ye'e-ka
 2sgNOM dance-pfv, but 3sgNOM NEG dance-pfv

“You danced but he didn't dance.”

The embedded subject of ‘dance’ in (96) is accusative, and not nominative as we see in the conjoined structures. Because the complement of *mahta* is a VP, not a TP, there is only one case domain, and therefore only a single argument, the highest, can receive nominative case.

The accusative phrase must nevertheless be a subject because it can control an anaphor, which is a property of subjects (Escalante 1990). At the same time, the nominative subject of V2 *-mahta* cannot bind a reflexive in the object position of the embedded VP.

- (98) Heidi Art-ta **au** sua-mahta
 Heidi_i Art_j-ACC 3sgREFL_j/_{*i} care.for-teach

“Heidi teaches Art to take care of himself/*her.”

- (99) Heidi Art-ta **aa=** sua-mahta
 Heidi_i Art_j-ACC 3sgACC_i/_{*j} care.for-teach

“Heidi teaches Art to take care of her/*himself.”

The embedded VP thus behaves as a distinct domain for binding, indicating a biclausal structure. In all these properties, lexical V2 *-mahta* is directly comparable with the causative affixal V2 *-tua*.

3.1.3 Raising V2s

A raising construction contains only a single subject argument, and it is the thematic argument of the V1. The V2 selects only for a propositional complement, thus the subject of V1 is raised to the matrix clause and assigned nominative case marking.

The distinction between a biclausal raising construction and a monoclausal construction lies in the availability of two distinct subject *positions*; crucially, the subject argument must be selected for by the V1, and thus base-generated within the lower VP1 before raising to the higher position.

3.1.3.1 Affixal Raising: Inception (*-taite*)

Although the inceptive suffix *-taite* is probably diachronically derived from a lexical verb, synchronically it exists purely as a bound element.

- (100) *Uu karo taite-k
DET car.NOM begin-PFV
Intended: “The car started.”

Unlike causative *-tua*, *-taite* does not add any arguments to the argument structure of the clause.

(101) Ili uusi bwaana
little child.NOM cry

“The child is crying.”

(102) Ili uusi bwan-**taite**-k
little child.NOM cry-INCEP-PFV

“The child started crying.”

It appears freely with intransitive (102) or transitive (103) main verbs, and has no impact on case assignment.

(103) Hunume'e vaha nee mahta-**taite**-k
That.PL already 1SG.ACC teach-INCEPT-PVF

“Those ones had already begun to teach me.”

The inceptive also has no restrictions with respect to subject properties such as animacy – example (104) shows an inanimate subject – which would indicate a selectional relationship between *taite-* and the subject argument.

(104) Uu karo nasontu-**taite**-k
DET car.NOM break.down-INCEP-PFV

“The car is starting to break down.”

Example (105) demonstrates that *-taite* can also occur with a weather verb, which is entirely subjectless. If *-taite* had an argument to contribute, it is in these conditions that one would expect it to be overtly expressed; since no such argument appears, *-taite* is classed as a raising predicate.

(105) Yuk-taite

Rain-INCEP

“It is starting to rain”

3.1.3.2 Lexical Raising: ‘to seem’ –*machi*

Although it is relatively rare for an intransitive lexical verb, other than *siime*, to occupy the V2 position in a compound, one that does is *maachi* ‘seem/look/appear, be light’, and it has several interesting properties.

In its main verb use, it has two meanings or interpretations. Typically, it is used to talk about outward appearance, as in (106).

(106) Uu mesa si haiti **maachi**

DET table very dirty looks

“The table looks very dirty.”

(107) Puatom si haiti **ma-machi**

Plates very dirty RED-looks

“The plates look very dirty.”

Its other use has to do with being or becoming light (as of the sky).

(108) Pa'akun haivu maachi

Outside already be(come).light

“Outside, it is already dawning/becoming light.”

Maachi also interacts atypically with reduplication – it reduplicates only in agreement with plural subjects, as in (107) above; with a singular subject, as in (109) reduplication is simply ungrammatical. The usual habitual reading of reduplication does not occur.

(109) *Uu mesa si haiti ma-machi

DET table very dirty RED-appear

Intended: “The table regularly looks very dirty.”

When it appears in V2 position, *-ma(a)chi* is similarly complex. V2 *-ma(a)chi* also has two different meanings or uses: the first is ‘seem/appear’, similar to its lexical use. This is shown in examples (110), which also demonstrate that reduplication is restricted to plural subjects, just as with main verb *maachi*.

(110) Vempo si kuhti-maachi

3PL.NOM very angry-appear

“They seem really hateful.”

(111) Aapo si kuhti-maachi
3Sg.NOM very angry-appear

“S/he seems really hateful.”

(112) Vempo si kuhti-ma-machi
3PL.NOM very angry-RED-appear

“They all seem really hateful.”

(113) *Aapo si kuhti-ma-machi
3SG.NOM very angry-RED-appear

Intended: “S/he usually seems really hateful.”

In other compounds, however, *-ma(a)chi* creates a modal interpretation, translated as ‘should’.

(114) Ili uusi bwan-machi
Little child.NOM cry-appear

“That child should cry.”

(115) Merehilda Lioh-nok-machi
Merehilda god-talk-appear

“Merehilda should pray.”

It is interesting to note that in the ‘should’ examples (114) and (115), *-machi* is realized with a short vowel; in the previous ‘seem’ examples, unreduplicated *-maachi* is realized with a long vowel, like the independent verb.¹⁶ Since phonological reduction is a common indicator of grammaticalization of a lexical item into a more functional role, this distinction could potentially highlight either an in-progress shift, or two distinct paths of grammaticalization from independent verb to raising verb in one case, and to a modal auxiliary in the other.¹⁷

Like the inceptive affixal verb *-taite*, *-ma(a)chi* does not appear to add to the clausal argument structure, and it can embed the subjectless weather verb *yuuku*, shown in (116). It is perhaps significant that *-ma(a)chi* gets a modal interpretation in this construction; any attempt to create a ‘seem’ reading requires a different construction altogether (117).

(116) Si yuk-machi
 Very rain-appear
 “It should really rain.”

(117) Yuke-m-ta vena
 Rain-S.REL-ACC resemble
 “It looks like rain.”

¹⁶ See §1.2.3.3 for discussion on vowel-shortening contexts in Hiaki.

¹⁷ Cf. Bower’s (2008) discussion of distinct paths of grammaticalization for light verbs and auxiliaries – I expand on this in §4.2.

From the data collected here, it appears that the ‘seem/appear’ interpretation is restricted to complements that can be interpreted statively, similar to its main verb use with adjectival predicates. With dynamic complements, the modal interpretation holds.

3.1.4 Control V2s

A (subject) control structure has two available subject positions, and both V2 and V1 select for subject DPs. However, only the higher DP may be overtly pronounced and receive (nominative) case. The embedded subject is controlled by (coreferent with) the matrix subject. Control constructions are distinguished from raising constructions by the relationship between the subject argument and the V2. As we saw in the discussion of raising predicates, raising V2s do not contribute a thematic subject – control V2s do.

3.1.4.1 Affixal Control: Inclination (-pea)¹⁸

The suffix *-pea* requires control of the embedded subject – it is not possible to have a non-coreferential argument in this position, as shown in (119).

(118) Inepo bwik-**pea**
 1sgNOM sing-INCL
 ‘‘I feel like singing.’’

(119) *Inepo Maria-ta bwiik-pea
 1sgNOM Maria-ACC sing-INCL
 ‘‘I’d like Maria to sing.’’

¹⁸ This suffix is glossed ‘inclination’, in order to keep it distinct from the (ECM) desiderative -‘i’aa.

It is in fact not possible to have any overt argument in the embedded subject position, even one which is coreferential with the higher subject.

(120) *Inepo ino bwik-pea

1SG.NOM 1SG.REFL sing-INCL

Intended: “I want myself to sing.”

(121) *Inepo nee bwik-pea

1SG.NOM 1SG.ACC sing-INCL

Intended: “I want me to sing.”

Because *-pea* expresses inclination and attitude, its subjects are pragmatically restricted to animate humans. For instance, the sentence in (122), while not rejected as strictly ungrammatical, is nevertheless met with skepticism on the grounds that a chicken’s feelings and desires are not particularly knowable.

(122) ??Uu toto’i voa yohti-pea

DET chicken.NOM feathers drop-INCL

“The chicken feels like dancing” (Idiomatic)

“The chicken feels like dropping feathers” (Literal)

Unlike raising predicates, such as inceptive *-taite*, *-pea* is disallowed with subjectless weather predicates such as *yuuke* ‘rain’, shown in (123). Here, the judgment is

unambiguously ungrammatical. It is only possible to use *-pea* with *yuuke* if it is previously compounded with a predicate like causative *-tua*, which brings an appropriate subject argument along with it (124).

(123) *Yuk-pea

Rain-INCL

Intended “It feels like raining”

(124) Si =ne yuk-tua-pea

Very 1SG.NOM rain-CAUS-INCL

“I wish it would rain!” (Lit: “I feel like making it rain!”)

3.1.4.2 Lexical Control: ?

Since there are relatively few intransitive lexical verbs that may take the V2 position in a verbal compound, there is unfortunately no obvious example to fill this slot in the paradigm I have sketched out here.

There is, a transitive verb - *eiya/-eiya*, glossed roughly as ‘feel’ – which intuitively seems to be a candidate for subject control treatment, although further work would need to be done to confirm this. Evidence of subject control properties, would be similar to that shown for *-pea*; subject restrictions, inability to appear with weather predicates, etc.

(125) Nee si enchi eiya
1SG.NOM very 2SG.ACC feel

“I have feelings for you.”

(126) Nee bwik-ame eiya
1SG.NOM sing-SUBJ.REL feel

“I like the singers.”

(127) Nee uka vakotta sum-eiya-k
1SGNOM DET.ACC snake-ACC fear-feel-PFV

“I was frightened of the snake.”

(128) Acheka taa temai bwetuk aapo si'imeta hune'-eiya
HK but ask because 3SGNOM all think-feel

“Ask HK, she always knows everything.”

3.2 Motion Compounds

Having looked in detail at the range of complex verb structures seen in Hiaki, the task in this section is examine the properties of V-*sime* compounds in order to determine which of the above three classes it most resembles, or alternatively, if V-*sime* compounds comprise another type entirely.

Since *-sime* constructions always have only a single overt subject argument, they clearly cannot be of the ECM type, which leaves the following possibilities:

1. Raising predicate
2. (Subject) Control predicate
3. Monoclausal predicate (of some kind)

Distinguishing monoclausals generally from the biclausal structures discussed above lies in identifying whether VP1 contains an internal subject position. Recall that in §3.1.1.2 a unified or monoclausal structure was defined as having no embedded subject of the lower VP, but semantic ‘sharing’ of the subject of the higher verb. (Wurmbrand 2001, Cable 2004) Of course, monoclausal constructions themselves may fall into different categories such as auxiliary constructions, light verb constructions, serial verb constructions or restructuring constructions. This range of options will be explained and explored in detail in Chapter 4.

More immediately, §3.2.1 examines the types of evidence for clausal/argument structure that were used to elucidate the structure of the other complex verbs, in order to look for commonalities between *V-sime* and these other structures, and shows that the evidence is somewhat mixed in this regard. §3.2.2 examines the properties of the V1s that compound with *-sime*, and shows both that *-sime* is quite promiscuous in the type of V1 it can accommodate, and that it does not appear to impact the syntactic properties of that V1.

3.2.1 Clausal/Argument Structure

In motion compounds, the nominative subject can bind the reflexive object of an embedded transitive verb, as in (129) and (130), which at first glance would seem to be a solid argument for monoclausality.

- (129) Uu chuu'u hiva au wok-si-sime
DET dog always 3sgREFL scratch-RED-go
“The dog is always going along scratching itself.”

- (130) -Hunume ili o'oi-m hiva emo yu'u-sa-saka
DEM.DISTAL little boy-PL always 2plREFL push-RED-go
“Those little boys are always going around pushing each other.”

However, since there cannot be a subject of the V1 distinct from the nominative subject of V2, the binding facts can tell us very little here, because a null argument such as PRO, controlled by the nominative subject, could occupy the subject of V1 position and license the binding of reflexives within a lower clause. This would indicate a biclausal control structure like that discussed in §3.1.4. If no evidence for PRO can be found, then we might conclude either that V2 *sime* behaves as a raising predicate, and does not contribute an argument of its own, as in §3.1.3, or that the structure is monoclausal and contains no embedded subject.

One direction to look for evidence of an embedded subject position involves the interaction of V2 *siime* with the impersonal/passive *-wa*, as in example (131) below.

- (131) Imi'i hiva pelo'ota-m temu-sa-saka-wa
DEM.PROX always balls-PL kick-RED-go.PL-PASS
“There are always balls being kicked along here.”

When *-wa* occurs with a *V-sime* compound, the nominative subject phrase is deleted and the object of V1 - when V1 is transitive - is promoted to subject. Furthermore, as can be seen in examples (132)-(133) below, the motion verb must now occur in its plural form, *-saka*. Although in context the understood agent in (133) is *uu hamut* ‘the woman’ and singular, because *-wa* is an impersonal, the verb to which it is applied is typically said to have an understood 3rd person plural subject ‘people/they’. The fact that the verb here is showing plural number agreement suggests that there could be a syntactically relevant null subject present that can trigger the suppletion of the verb.

- (132) Uu hamut ili usi-ta yu'u-sime
DET woman little child-ACC push-go
“The woman is pushing the little child along.”

- (133) Uu ili uusi wam vicha yu'u-saka-wa
DET little child there toward push-go.PL-PASS
“The little child is being pushed along to there.”

In addition, consider the examples in (134)-(135) below. Example (134) shows that the subject of a *V-sime* predicate may be inanimate and non-agentive. However we can also add a Causer of the ball’s motion, as in (135) by using a transitive form of the V1 *roakti/a* ‘roll’

(134) Ume pelo’ota-m vo’o-t lula roakti-sime
 DET.PL ball-PL road-LOC straight roll.INTR-go
 “The ball is rolling along the road”

(135) Rufino pelo’ota-m vo’o-t lula roakta-sime
 Rufino ball-PL road-LOC straight roll.TR-go
 “Rufino is rolling the ball down the road “ (*accompanied motion*)

The *V-sime* construction necessitates an accompanied motion reading of this sentence. That is, Rufino must also be in motion, as well as being the Causer of the ball’s motion. In order to express caused motion without accompaniment, the *V-sime* construction must be dropped, as in (136).

(136) Rufino Simon-ta-u lula bwe’u pelotam roakta-k.
 Rufino Simon-ACC-to straight big ball-PL roll.TR-PFV
 “Rufino rolled the big ball straight to Simon” (*unaccompanied motion*)

This requirement is evidence that *-sime* contributes a thematic subject to the construction.

Taken together, the passive and accompanied motion facts are suggestive of a subject control structure. There is also, however, evidence against this conclusion. In §3.1, it was argued that V2 *-taite* and *-ma(a)chi* do not contribute arguments, based on their ability to compound with the subjectless weather verb *yuuku* ‘rain’. In fact, *-sime* is also able to occur with *yuuku*. Example (138) shows *yuk-sime* operating, like *yuuke*, without an overt subject. In examples (139) an overt subject is inserted, and the sentence is ungrammatical (just as it would be with *yuuke* standing alone as the only verb in the sentence).

(137) (Si) yuuke

very rain

“It is (really) raining.”

(138) Avo vicha yuk-sime

This.way toward rain-go

“The rain is heading this way.”

(139) *Naamu si yuuke

Cloud very rain

Intended: “That cloud is really raining.”

(140) *Naamu yuk-sime

Cloud rain-go

Intended: “The cloud is raining as it moves.”

There are a couple of possible ways to interpret these facts.

1. *Yuuke* does not have a thematic subject, and *-sime* does not provide one, which would mean that *-sime* is a raising predicate like *-taite*.
2. *Yuuke* does have a thematic subject, but of a very particular type. It must be phonologically null, but with features such as 3sg, general and inanimate¹⁹.

Option 2 brings back the possibility that *-sime* could be a control verb. However, if it is a control verb, it clearly differs from *-pea* in that it can accommodate this kind of peculiar thematic subject²⁰. In fact, as we have seen, *-sime* can co-exist with all manner of inanimate and non-intentional subjects, while *-pea* cannot.

The other option to be entertained is that V-*sime* is a monoclausal structure. In this scenario, there would be a single subject position available, and the subject would be the thematic argument of the V2, *-sime*. The embedded VP1 would consist only of the V1 and any complements it might have – the nominative DP would be interpreted as the semantic subject of both verbs, since no other options are available.

¹⁹ This follows Chomsky's (1981:323-325) argument for weather 'it', that it is not a true expletive, but more of a 'quasi-argument' that has some semantic and referential content. (Chomsky 1981, Svenonius 2002) It also matches the requirements on 3sg inanimate subject pronouns that were reported and documented in Harley & Trueman (2012) – if *yuuke* had to have a weather-pronoun for a subject, this is the properties we would expect it to have.

²⁰ I think it is not entirely crazy to posit that 'go' might be able to select for the same kind of general subject as a weather verb might. Consider, for example, the use of 'it' in expressions such as "How's it going?" where 'it' refers to some general, unspecified event or state.

As mentioned earlier, the binding facts in (129)-(130) work well with the idea of a monoclausal structure, although they are far from definitive. The accompanied motion facts, in (134)-(136), also align with a monoclausal analysis, since they show that the subject DP is a thematic argument of *-sime*. The ability of *-sime* to appear in apparently subjectless weather clauses (137)-(139) fits only if we assume that these constructions are not truly subjectless, but that they have a particular type of null subject, with which both *yuuke* and *-sime* are compatible.

Another possible challenge to a monoclausal analysis of V-*sime* presented here are the facts in (131)-(133), which show that in a passive/impersonal construction *-sime* always appears in its plural form, even when the deleted agent is interpreted contextually as singular. I suggested that the plural agreement is suggestive of a syntactically relevant null argument. However, the promotion of the embedded object to matrix subject should not be possible if in fact an intervening embedded subject is available. This argument is discussed in some detail in Chapter 4 and Chapter 5, so I will not elaborate on it here. It does leave the question of obligatory plural agreement in the passive/impersonal open, however.

In sum, V-*sime* cannot, based on the mixed evidence in this section, be shown clearly to be either a raising or a subject control biclausal construction, but appears to display properties associated with both. Neither can the case for a monoclausal construction be solidly made on this evidence alone, although I claim that this analysis is the best fit overall. In Chapter 4 I examine analyses of monoclausal motion compounds in a range of

languages and compare how their properties line up with those of *V-sime*, in order to make the argument that *V-sime* is best understood as a monoclausal construction.

3.2.2 Effects of V1

Understanding the contributions of *-sime* to a compound requires some understanding of what else is contributing arguments and predicational information. In this section I will discuss the range and type of V1s that occur in *-sime* compounds, and show that the appearance of *-sime* is not restricted to any particular V1, nor does *-sime* have any obvious impact on the syntactic properties of the V1, such as argument structure and case assignment. Any restrictions on the V1 in a *-sime* construction appear to be based on semantic/aspectual properties only.

3.2.2.1 Transitivity

Hiaki verbs are described in the existing literature as coming in three types: transitive, intransitive, or ‘variable’ (meaning that some verbs can be either transitive or intransitive). Many, though not all, of the verbs that are described as variable show change in form depending on transitivity:

(141) *bwasa* ‘be cooking it’ *bwase* ‘be cooking’

(142) *chepta* ‘jump/step over’ *chepte* ‘jump/step’

Both intransitive and transitive forms of verbs are compatible with *-sime* (assuming the appropriate semantic context) with no change in argument structure, as shown in (143)-(144) below.

(143) Ume pelo'ota-m vo'o-t lula roakti-sime
 DET.PL ball-PL²¹ road-LOC straight roll.INTR-go
 “The ball is rolling along the road”

(144) Rufino pelo'ota-m vo'o-t lula roakta-sime
 Rufino ball-PL road-LOC straight roll.TR-go
 “Rufino is rolling the ball down the road “

When the V1 is transitive, its object argument receives accusative case marking, as it would in a simple-verb context.

(145) Uu hamut ili usi-ta yu'u-sime
 DET woman little child-ACC push-go
 “The woman is pushing the little child along.”

V1 can also be ditransitive, in which case both its direct and indirect objects are accusative; this is consistent with their appearance in single-verb clauses.

(146) Aapo avai sova-im am=mi-mik-si-sime
 3SG ear.of.corn roast-PL²² 3PL=RED-give-RED-go
 “S/he is going along giving roasted ears of corn to them.”

²¹ ‘Ball’ is one of a number of nouns in Hiaki that are obligatorily marked plural (‘plurality tantum’), even when a singular interpretation is intended – these are frequently, but not exclusively, loanwords.

²² Overt accusative case marking is usurped by the presence of the plural in determiners, adjectives and nouns.

3.2.2.2 *Unaccusativity*

The previous section showed that V1 may be transitive, and therefore have an agentive external argument role to contribute. Unergative V1s are also possible, as shown in (147).

- (147) Paola kia haisa e-t nok-si-siime
Paola just really 2SG-on talk-RED-go.SG

“Paola’s going around talking about you.”

The obvious next question, then, is whether unaccusatives may also take the V1 position, and this question is a little more difficult to answer in Hiaki, because of controversies in establishing a clear test for the unaccusative/unergative divide, as briefly discussed in Chapter 2 above.

Jelinek & Escalante (2000) argue that the passive/impersonal suffix *-wa* targets Agent/Causer subjects, and thus can be used to diagnose unergative verbs. However, this position is not without controversy since *-wa* can be applied to the verb *muuke/koko* ‘to die’, which seems to be interpreted with an Experiencer subject.

- (148) Sawaria-ta-mak koko-wa-n
Yellow(fever)-ACC-with die.PL-PASS-PST

“People were dying from yellow fever.”

In contrast, Harley, Tubino Blanco and Haugen (2009) argue that *muuke/koko* is inherently unaccusative, which therefore disqualifies *-wa* as a tool for diagnosing unergatives. They claim that the applicative morpheme *-ria* may instead be used to identify unaccusative intransitives, arguing that these verbs cannot co-occur with the applicative.

(149) *Uu tasa Maria-ta hamte-ria-k

DET cup Maria-ACC break-APPL-PFV

“The cup broke for/on Maria.”

Harley, Tubino Blanco and Haugen (2009:44)

Neither of these claims is without its controversial examples. However, the examples in (150)-(151) show that *-sime* can take a stative verb derived from an adjective, such as *alee* ‘be happy’ and *sioke* ‘be sad’, as its V1, and (152) has the unaccusative verb *hamte* ‘break(intr)’ as its V1, all of which is good evidence that lacking an external agent role²³ is not a barrier to the V1 position.

(150) Uu yoeme yu’in tomi yo’o-kai si alee-sime-ka weye.

DET man a.lot money win-PCL very happy-go-PCL walk

“The man, having won a lot of money, is walking along very happily.”

²³ I assume that predicates of this type have an Experiencer subject that is generated in an internal, rather than an external argument position.

- (151) Uu yoeme si'ime tomi-ta aman koove-k kialikun si-siok-sime-ka weye
 DET man all money there lose-PFV that.is.why RED-sad-go-PCL walk
 “The man lost all the money there; that is why he is walking along very sadly.”
- (152) Ume tasa-m mura karopo hamti-saka
 DET.PL cup-PL mule kart-LOC break-go.PL
 “The cups were breaking as they went along in the mule cart.”

3.2.2.3 *Manner of motion verbs*

Manner of motion verbs are the most likely to occur in a V-*sime* structure, and the most flexible with regard to the appearance of reduplication. The manner verb *vuite* ‘run’ is the clearest example of this: *vuiti-* may occur with *-sime* with neither verb reduplicated (153), with both reduplicated (154), with only *vuiti-* reduplicated²⁴ (155) or with only *-sime* reduplicated (156).

- (153) Chepa aman **vuiti-sime**
 Chepa there run-go
 “Chepa is running along over there”

²⁴ Note that V1-only reduplication is the least common and most context dependent option in V-*sime* constructions. In (155) for instance, there is an implication that Chepa is crazy, or frenzied.

(154) Chepa vui-vuiti-si-sime

Chepa RED-run-RED-go

“Chepa is going running.”

(habitually, seriously, for fitness)

(155) ?Chepa kari-po yeu **vui-vuiti-sime**

Chepa house-LOC out RED-run-go

“Chepa is repeatedly running out of the house.”

(156) Chepa (toto’i aso’ola-met cha’a-ka) **vuiti-si-sime**

Chepa chicken baby-after chase-PCL run-RED-go

“Chepa is running about (chasing after baby chicks).”

The semantic effects of the various reduplicated forms will be discussed in more detail in §3.3.1.4 below.

3.2.2.4 *Stance/posture verbs V2*

One of the unexpected and interesting classes of V1s that participate in this construction are stance/posture verbs. The unreduplicated combination of a verb such as *kikte/hapte* ‘stand’ or *yehte/hote* ‘sit’ retain the usual semantics of V-*sime* ‘go along V-ing’ with the assumption of some kind of vehicle being involved, as in (157)-(158) below.

(157) Ume o’ow-im kamion-po **hap-saka**

DET.PL man-PL bus-LOC stand.PL-go.PL

“The men are standing in the (moving) bus.”(Lit: going along standing)

(158) Heidi intok Aleh kawai-im-met **hoo-saka**

Heidi CONJ Alex horse-PL-on sit.PL-go.PL

“Heidi and Alex are riding on horses” (Lit: going along sitting)

Reduplication options are more restricted with stance V1s than with manner-of-motion V1, as seen in the previous section. The only attested reduplication patterns for stance V-*sime* have *-sime* alone able to be reduplicated, as in (159)-(160).²⁵

(159) Ume o’ow-im kamion-po hap-sa-saka

DET.PL man-PL bus-LOC stand.PL-RED-go.PL

“The men are standing/milling about on the bus.”

(The bus is no longer necessarily moving)

(160) Hunum haamuch-im kia vaha hunum hoo-sa-saka

DEM.PL woman-PL just already there sit.PL-RED-go.PL

“Those women are just sitting around there.”

²⁵ Interestingly, in these examples, the ‘motion’ semantics of the construction is no longer apparent. The implications of this are discussed in detail in §3.3.1.4.

Any reduplication on the stance verb itself, regardless of whether *-sime* reduplicates, is impossible (161)-(162) although, stance verbs are, on their own, usually quite amenable to reduplication (163).

(161) *Ho-hoo-saka

(162) *Ho-hoo-sa-saka

(163) Santos intok inepo, kupteo=te human ho-hooye
Santos CONJ 1SG.NOM, evening=1PL.NOM there RED-sit.PL
“Santos and I, we sit there in the evening (habitually)”

3.3 Contrasting V2 -sime with independent siime/saka

This section compares the properties of affixal *-sime* with those of independent *siime* that we saw in the last chapter, in order to establish whether they should be considered distinct lexical items with distinct functions and behaviors. In particular, I question whether *-sime* retains the full lexical semantics of *siime*, or if it acts more like a functional, grammatical element.

Before delving into an examination of how *-sime* interacts with particular classes of morphology, the first step must be to look for examples of V-*sime* constructions in which the lexical meaning of *-sime* as literal motion is not apparent, or ‘bleached’. To that end, I have collected the sentences in (164)-(166).

(164) Itom nau eteho-u, haisa=ne tuisi (aa=)hiohte-sim-ne?
1PL.NOM together talk-while, Q=1SG good (3SG.ACC) write-go-FUT
“While we are talking, is it ok if I take notes?”

(165) Wari-ta-naat aa=kima’a-sime
Basket-ACC-close 3SG.ACC=insert-go
“(He or she) is weaving a basket.”

(166) Inepo ili hu’unee-sime
1SG.NOM little know-go
“I’m beginning to understand a little bit.”

(Dedrick & Casad 1999:294(7))

This rather small sample consists of the only sentences I have been able to find in which the expected ‘motion’ semantic contribution of *-sime* is obscured or not present.

Furthermore, whatever semantic contributions *-sime* is making in these cases are not obviously consistent, so it would be difficult to make a case that affixal *-sime* is grammaticalizing into a functional morpheme based on this evidence. These examples appear to be simply idiomatic. It is not possible, for instance, to extend the interpretation in (164) to a different V-*sime* combination; the example in (167) can only be interpretable if the proposed singing is occurring along a path of literal motion.

- (167) #Enchi hippona-u haisa=ne tuisi e-u bwik-sim-ne
 2SG.NOM play-while Q=1SG good 2SG-to sing-go-FUT
 Intended: “While you play, can I sing along with you?”
 Achieved: “While you play, can I go along singing with you?”

Therefore, given these limitations, I turn to the interactions of V-*sime* with other morphological processes.

3.3.1 Interactions with Morphological Processes

3.3.1.1 Tense/Aspect

Affixal *-sime* interacts somewhat differently with certain tense/aspect categories than does independent *siime*.

i. Future

Although *-sime* is compatible with future *-ne*, speakers judge that the sentence in (168) feels incomplete, and requires some further context, which is unnecessary when *siime* is the only verb.

- (168) Chepa kari-po yeu bwan-sim-ne...
 Chepa house-LOC out cry-go-FUT
 “Chepa will leave the house crying...”

ii. Present Imperfective

Present imperfective interacts with *-sime* just as it does with *siime*. The sentence in (169) is grammatical, complete, and has the expected interpretation.

(169) Chepa kari-po yeu bwan-sime.

Chepa house-LOC out cry-go

“Chepa is leaving the house crying.”

iii. (Past) Perfective

Affixal *-sime* is entirely incompatible with perfective aspect. This is not entirely shocking, since the usual interpretation of *V-sime*, ‘go along V-ing’ has a distinctly progressive flavor, which is quite at odds with the perfective. However, this does represent a clear difference between independent *siime* and affixal *-sime*.

(170) *Chepa karipo yeu bwan-sika

Chepa house-LOC out cry-go.PFV

Intended: “Chepa left the house crying.”

iv. Past Imperfective

Past imperfective is perfectly compatible with *-sime*, just as we saw with the present perfective, however in this case, as with the future, the sentence is incomplete and requires more information to be added. In this case, there is a strong feeling that something else must have happened while the events of (171) were ongoing.

Additionally, recall that in Chapter 2 we saw that the form *siime-n* had an unexpected reading wherein the ‘going’ was prevented before it could begin. That stipulation does not seem to feature here.

(171) Chepa karipo yeu bwan-sime-n...

Chepa house-LOC out cry-go-PST

“Chepa was leaving the house crying...”

v. Past Perfect²⁶

The form *-sikan* – whose independent counterpart *siikan* was problematic for the independent verb in that it obtained an ongoing or past imperfective reading, rather than the expected past perfect – is completely impermissible in the compound construction. Sentences with this form are judged to be **extremely** bad, regardless of the intended aspectual interpretation.

(172) **Chepa karipo yeu bwan-sika-n

Chepa house-LOC out cry-go.PFV-PST

Intended: “Chepa had left the house crying...”

OR: “Chepa was leaving the house crying...”

²⁶ As mentioned previously, this terminology is almost certainly incorrect, and is being used only for lack of a more appropriate term.

3.3.1.2 *Verb stacking*

V-sime compounds can be further modified by adding subsequent verbs, both affixal, as in (173)-(175), and independent (176). The properties of the final verb then control interactions with tense/aspect, as evidenced by the appearance of perfective *-k* in example (173).

(173) Ruffino pelo'ot-am vo'ot luula roakta-sim-taite-k
Ruffino ball-PL road straight roll-go-INCEP-PFV
"Ruffino started to roll the ball down the road"

(174) Ruffino pelo'ot-am vo'ot luula roakta-sim-vae
Ruffino ball-PL road straight roll-go-PROSP
"Ruffino is going to roll the ball down the road"

(175) Ruffino pelo'ot-am vo'ot luula roakta-sim-pea
Ruffino ball-PL road straight roll-go-INCL
"Ruffino feels like rolling the ball down the road"

(176) Ruffino uka usi-ta pelo'ot-am vo'ot luula roakta-sim-mahta
Ruffino DET child-ACC ball-PL road straight roll-go-teach
"Ruffino is teaching the child to roll the ball down the road."

3.3.1.3 The Impersonal Passive (-wa)

Hiaki impersonal/passive affix *-wa*, previously discussed in §2.1.2.3 and §3.2.1, has the effect of removing the subject argument from a clause; if the clause is transitive, the object will be promoted to subject. The demoted subject must be animate - *-wa* cannot occur with an inanimate subject.

When *-wa* is applied to a *V-sime* compound, the process looks very similar. I showed in §3.2.1 that the nominative subject phrase is deleted, and any accusative-marked object of V1 will be promoted to subject. And, because *-wa* is an impersonal, the verb to which it is applied has an understood 3rd person plural subject ‘people/they’. This process always requires plural suppletion from *-sime* to *-saka*, possibly suggesting the presence of a syntactically relevant null subject, of some kind, which can trigger the suppletion of the verb²⁷.

(177) Uu hamut ili usi-ta yu’u-**sime**
DET woman little child-ACC push-go
“The woman is pushing the little child along.”

(178) Uu ili uusi wam vicha yu’u-**saka**-wa
DET little child there toward push-go.PL-PASS
“The little child is being pushed along to there.”

²⁷ Although, see discussion in §3.2.1 regarding difficulty for this idea, since the null subject doesn’t behave as if it’s syntactically present in terms of occupying the subject position.

3.3.1.4 Verbal Reduplication

As discussed in Chapter 2, Hiaki has syllabic verbal reduplication, which manifests as a verbal prefix, and may indicate habitual aspect, progressive aspect, or in some instances emphasis, as exemplified in (179)-(181) below.

(179) Habitual

Itepo hunum ke-ke'ewe
1plNOM there RED-gather.firewood
'We gather firewood there.'

(180) Progressive/continuative

Uu hamut totoi kava-m bwa-bwata
DET woman chicken egg-PL RED-stir
'The woman is mixing the eggs.'

(181) Emphatic (often in Imperative examples)

Kat=ee uka soto'i-ta hunum ma-mana
NEG.IMP=2sgNOM DET.ACC pot-ACC there RED-put
'Don't put that pot there.'

(Harley & Leyva 2009: 253)

When reduplication is applied to a complex verb, it is most commonly the outer element, V2, which reduplicates (182) but in fact it can target either the first element in a compound (183) or both (184).

(182) Paola kia haisa e-t nok-**si**-sime
 Paola just really 2sg-on talk-RED-go.sg
 “Paola’s going around talking about you.”

(183) Vempo si **kuh**-kuhti-machi
 3plNOM very RED-angry-seem
 “They seem like really hateful people.”

(184) Vempo si **kuh**-kuhti-**ma**-machi
 3plNOM very RED-angry-RED-seem
 “They really seem like really hateful people.”

Most of the bound V2 affixes reduplicate, and when they do, the reduplication scopes over the whole complex verb. In these cases, if only the V1 reduplicates, then the reduplicant does not scope over the V2. However certain of the bound suffixes do not undergo reduplication (notably causative *-tua* and applicative *-ria*) - in these cases only the V1 stem may reduplicate, and the interpretation is usually holistic. (Haugen and Harley 2010)

In less common occasions when a complex verb has more than two parts, reduplication can also target the central element.

- (185) Yooko Alehandra into Heidi kava'a-im-met hoo-**sa**-saka-vae
Tomorrow Alexandra and Heidi horse-PL-with sit.PL-**RED-go**.PL-PROSP
“Tomorrow Alex and Heidi are going to go around on horses.”

Although either or both verbs of a compound may in theory be reduplicated, not every compound is compatible with all of the reduplication options. The *vuiti-sime* compound is a significant example for this reason, because it can help to illustrate the effects of each variable. Examples (153)-(156) from §3.2.2.3 are repeated here as (186)-(189) for this purpose.

- (186) Chepa aman **vuiti-sime**
Chepa there run-go
“Chepa is **running along** over there”

- (187) Chepa vui-vuiti-si-sime
Chepa RED-run-RED-go
“Chepa is **going running**.”
(purposefully, for fitness)

(188) ?Chepa kari-po yeu **vui-vuiti-sime**

Chepa house-LOC out RED-run-go

“Chepa is **repeatedly running** out of the house.”

(189) Chepa (toto’i aso’ola-met cha’a-ka) **vuiti-si-sime**

Chepa chicken baby-after chase-PCL run-RED-go

“Chepa is **running about** (chasing after baby chicks).”

The examples above show that the different reduplication patterns available in *V-sime* compounds create distinct patterns of interpretation. By changing the V1 from a manner-of-motion verb to a stance verb, we can shed further light on the function of *-sime* in these constructions. Even though stance verbs don’t show the full range of reduplicative patterns, there is an important difference in interpretation between an unreduplicated $V_{\text{stance}}\text{-sime}$ construction (190) and one in which *-sime* is reduplicated (191).

(190) Ume o’ow-im kamion-po **hap-saka**

DET.PL man-PL bus-LOC stand-go.PL

“The men are standing in the (moving) bus.”

(191) Ume o’ow-im kamion-po **hap-sa-saka**

DET.PL man-PL bus-LOC stand-RED-go.PL

“The men are standing/milling about on the bus.”

(bus no longer nec. moving)

In (191) we can see that the reduplication of *-sime* has the effect of negating the literal interpretation of movement along a path, which is the defining semantics of almost every *V-sime* construction. To emphasize this point, I include example (192) in which there is no possibility of the men being carried along by a moving vehicle.

(192) Ume o'owim kari-po **hap-sa-saka**

DET.PL man-PL house-LOC stand-RED-go.PL

“The men are milling about in the house.”

So what is happening here? There are a few significant points to notice. First, even though all the verbs in these examples (stance and manner-of-motion verbs, as well as *siime*) when used independently become habitual with reduplication, the reduplicated compounds are not habitual, with the possible exception of (187). When reduplication applies to the compounds, things get a little more complex. In these data, we can identify the following patterns:

1. **Unreduplicated** compound: Action of V1 is occurring along a path of motion (V1 along).
2. Compound with **V2 reduplicated**: Action of V1 is occurring either while moving along multiple paths, or with several changes of direction. In the case of stance verbs there is a sense of shifting positions multiple times (V1 about).

3. Compound with **V1 and V2 reduplicated**: multiple instances of V1 occurring on multiple paths.

4. Compound with **V1 reduplication**: With a specified path, it may be interpreted as multiple instances of V1 occurring along a single path of motion. This configuration is the least common, and tends to be pragmatically odd ((188) implies that Chepa is a crazy person).

From this I conclude that Hiaki verbal reduplication does not scope over both verbs in the V-sime compound, and that the interpretation of the reduplicant is context dependent, but can be broadly classed as ‘pluractional’. (Harley and Leyva 2009) More significantly for the current purpose, I conclude that V2 *-sime* does not encode *literal* motion, but something more like grammatical Path – in the sense of Talmy’s (1975; 1985; 1991; 2000) decomposition of motion events, described in the previous chapters – a subtle, but important distinction.

3.4 Summary

In §3.1, I gave an overview of the basic properties Hiaki complex verbal structures, which have previously been described in terms of two classes distinguished by whether the V2 was an obligatorily bound element or was form-identical with an independent verb. By comparing the clause and argument structure of a selection of both affixal and independent V2s, we saw that this division is not significant at a structural level. Both classes show evidence of being biclausal with respect to binding, though only a single Tense node is available, which indicates that the embedded clause is VP or vP sized. (The

relevant boundary is VoiceP, according to Tubino Blanco & Harley (2012), although I do not investigate this claim in detail here.) V2s in both groups can be classed as either ECM, Raising or subject control predicates.

§3.2 examined complex verbs of motion formed with *-sime/-saka*, and compared them to the complex verb types outlined in §3.1. Affixal *-sime/-saka*, however, resists straightforward identification with any of the 3 previously identified V2 types. While ECM can be easily ruled out, properties consistent with both and neither of the raising and control predicates can be identified. It is possible, but not certain, that *-sime/-saka* is of another type entirely, such as a restructuring predicate perhaps. There appears to be no particular restriction upon the type of V1 that may compound with *-sime/-saka*, and it has no obvious effect on the syntactic properties of its V1.

§3.3 contrasts the behavior of *-sime/-saka* in its role as a participant in a complex structure with its behavior in a simple predicate clause, assessing interactions with tense/aspect and other morphological operations. Affixal *-sime/-saka* has some restrictions on aspectual categories with which it is compatible that its independent counterpart does not; the affixal form is not compatible with perfective aspect, while independent *siime/saka* is. However, the most significant issue in this section is highlighted by the interaction of specific elements. These are the combination of affixal *-sime/-saka* with a stance V1 and verbal reduplication, which show a consistent and replicable non-literal interpretation of *-sime/-saka*. This effect suggests that V2 *-sime* has functional, as well as lexical, properties and is perhaps indicative of incipient

grammaticalization. A crucial question in determining the structure of a construction like *V-sime* is how to situate the V2 within the structure of the clause. Since functional items occupy positions higher in the structure than lexical items, determining whether *-sime* exhibits primarily lexical or functional properties is critical.

In Chapter 4, we will look at crosslinguistic examples of complex motion constructions of other syntactic types –auxiliary verb constructions, light verb constructions, serial verb constructions, and restructuring predicates – to ascertain if the *V-sime/-saka* constructions align more closely with any of these. In some of these constructions the V2 is clearly a functional item (auxiliaries) and in some a lexical item (serial verbs).

Chapter 4 Complex Motion Crosslinguistically

Itepo ame venachi nonooka. (We talk like them.)

In the previous chapter I attempted to compare the characteristics of V-*sime* constructions to *siime*'s behavior as an independent verb (Chapter 2) and to other V-V constructions in Hiaki (Chapter 3). I showed that although affixal -*sime* retains the bulk of the semantic weight of independent *siime* (literal motion), it does take on a more bleached or functional character in a predictable and productive way in a specific context (i.e. when reduplicated with a stance V1). I also showed that although some more well-understood compound verb structures in Hiaki, such as causatives, have distinct binding domains and a structural subject position available in the lower VP, the evidence regarding the structural properties of V-*sime* is considerably less clear-cut.

Sentences with an intransitive V2 have a single overt subject DP and an interpretive dependency between this DP and the unpronounced subject of V1. Since there can be no overt lower subject in these constructions, we must look for other evidence to determine whether both Vs are contributing distinct thematic subjects. We have seen, for instance, that some V2 elements such as -*pea* 'inclination', impose strict selectional restrictions, whilst others, such as -*taitte* 'inception' have no such restrictions, so we can argue that -*pea* does contribute a thematic subject which obligatorily binds the unpronounced subject of the V1, whilst -*taitte* does not contribute a thematic subject, and the subject of V1 is raised to the nominative case position in the matrix clause. (Polinsky 2013)

Like *-taite*, V2 *-sime* does not impose any selectional restrictions on its subject – it even occurs with weather predicates in clauses which entirely lack an overt subject – however other evidence exists which suggest that *-sime* does contribute a thematic subject. When V2 *-sime* is affixed by the passive morpheme *-wa*, which targets animate subjects, it obligatorily suppletes for plural subject agreement, regardless of the number features of the nominal argument. Since *-sime* fails to agree with the (singular) derived subject, this suggests that it is not in a structural relationship with that subject. This raises the possibility of a covert argument, with either plural or undetermined number features.

(Harley 2014)

(193) Uu hamut ili usi-ta yu'u-sime
 DET woman little child-ACC push-go.sg

“The woman is pushing the little child along.”

(194) Uu ili uusi wam vicha yu'u-saka-wa
 DET little child there toward push-go.pl-PASS

“The little child is being pushed along to there.”

Further, constructions such as (195)-(196) show that the presence of *-sime* requires an accompanied motion interpretation, which also suggests that it does have a thematic subject to contribute. If the nominative DP below was base generated as the external argument of the V1 in (195) we would not expect it to also behave as the internal argument of V2 (Haugen & Harley (2013) and Jung (2014) show independently that

sime is unaccusative.). That is, *-sime* introduces motion entailments for the external argument of V1, which it should not be able to contribute if it was simply a propositional operator like a normal raising verb. Example (196) shows that when the subject DP is not in motion, the V-*sime* construction is not used.

- (195) Ruffino pelo'ota-m vo'o-t lula roakta-sime
 Ruffino ball-pl road-LOC straight roll.tr-go
 "Ruffino is rolling the ball down the road" (*accompanied motion*)

- (196) Ruffino Simon-ta-u lula bwe'u pelotam roakta-k.
 Ruffino Simon-ACC-to straight big ball-pl roll.tr-pfv
 "Ruffino rolled the big ball straight to Simon" (*unaccompanied motion*)

In this chapter I investigate the typology of V-V structures crosslinguistically, and describe the analyses that have been put forward to account for them. In §4.1 I introduce and define the notion of complex predication broadly, and identify the reasons for including Hiaki compounds generally, and V-*sime* specifically, amongst this set. In §4.2 I attempt to define and exemplify four recognized types of multi-verb complex predicates, describe the kind of structural analyses that have been put forward for each, and show which attributes of V-*sime* align with a given construction type.

Finally, in §4.3 I situate Hiaki motion V-Vs within this typology of complex predicates, arguing that they best fit the description of verb serialization (SVCs) and summarize the problems associated with identifying a structural model for V-*sime* constructions.

4.1 Complex Predicates

A wide array of phenomena, in various languages, has been lumped under the umbrella term ‘complex predicate’ (henceforth CPr). These include, but are not limited to: light verb constructions; coverb constructions; serial verb constructions; raising and restructuring predicates; incorporation phenomena, including noun incorporation, preposition incorporation, pseudo-incorporation and particle constructions; some types of verbal classifier systems; resultatives; and even, contentiously, control constructions and auxiliary verb constructions.

Further adding to the confusion, there is a great deal of mismatch in the interpretation of many of these terms. ‘Light verb’ is applied particularly freely, as for instance in Rosen (1990) who argues that restructuring predicates are a type of light verb, thus collapsing two of the categories above. Similarly, although Amberber et al. (2010) appear to consider coverb constructions a distinct phenomenon, Bowerman (2008) places them decisively in the category of light verb constructions.

Here I am concerned with multi-verb constructions only. In particular, I focus on: serial verb constructions (SVCs); restructuring predicates (RPs); light verb constructions (LVCs); and auxiliary verb constructions (AVCs). Each of these construction types consists of two verbal elements, one of which is fully lexical; the other verbal element varies between constructions, from a fully lexical item at one end of the spectrum (SVCs) to an entirely, or almost entirely, grammatical item at the other (AVCs).

4.1.1 Definitions of CPr

Definitions and diagnostics for complex predication vary widely between scholars, dependent largely upon the characteristics of the particular language/s with which they are most familiar, as well as upon the theoretical model they advocate. Several attempts have been made to survey the literature and tease apart common characteristics of the range of structures which have been labeled ‘complex predicates’; these attempts have lead to consensus on little more than that the world’s languages exhibit a dizzying array of variable complex structures, and almost as extensive a range of descriptive terminology. (Bowern 2008; Butt 2003, 2010; Seiss 2009)

Alsina, Bresnan and Sells, introducing their (1997) collection of papers describing a wide range of complex predicate constructions in a variety of frameworks, provide one frequently cited definition: “Complex predicates can be defined as predicates which are multi-headed; they are composed of more than one grammatical element (either morphemes or words), each of which contributes part of the information ordinarily associated with a head” (Alsina et al 1997:1). Butt’s (2010) definition focuses less on the complex nature of the predicate head, and more on the clausal and argument structure implications: “...the term **complex predicate** designates a construction that involves two or more predicational elements (e.g., nouns, verbs and adjectives) which predicate as a single unit, i.e., their arguments map onto a monoclausal syntactic structure” (Butt 2010:49).

A less precise, but perhaps more accurate, summation of the current thinking around complex predication is put forth by Sells:

“The usual understanding of the term ‘complex predicate’ is a semantic one: a complex predicate consists in the argument structures of two separate predicates being brought together somehow or other, and further, typically, the argument structure of one of those predicates in isolation is taken to be incomplete, ‘light’, or ‘bleached’. Within this basically semantic idea of a complex predicate, we can find different structural manifestations” (Sells 1998:1).

Notably, Sells’ description avoids any mention of monoclausality, although it is a central concept in many of the definitions surveyed here, in particular Butt’s. (2010:49)

At the other end of the conceptual spectrum, Hale & Keyser (1997) argue that simplex verbs are themselves internally complex, so complex predication is in that sense the normal state of affairs rather than a special circumstance and should be constrained by normal processes of syntactic combination.

With all that vagueness and variation in mind, the properties of CPRs that are most commonly agreed upon are: two predicators must be included under a single tense/aspect node; they must share polarity (no negating of one element without the other); and they should have a single intonation contour (ie, no intervening pause, as at a clause boundary), all of which are criteria that Hiaki V-V compounds uncontestably meet.

However, this is a less strict definition of monoclausality than some (most notably Butt) argue for. (Bowern 2008; Butt 2003, 2010; Seiss 2009)

Butt (2003 et seq.) argues that to qualify as a complex predicate, there must be no evidence of distinct syntactic domains or unmerged argument structures. This criterion would disallow control and raising constructions, which permit non-matching polarity, and also constructions such as the Hiaki direct causative, which has distinct binding domains. However, note that while Butt and others insist that argument sharing is a requirement of CPrs, others include structures with no argument sharing – for example, Aikhenvald describes a construction she labels ‘Event argument Serial Verb Constructions’, in which “The event or state denoted by one component is predicated on the entire situation referred to by an SVC. Event-argument SVCs provide the manner, temporal order or locational specification for the other component” (2006:18). This description also corresponds well with the semantics of *V-sime*, at least informally.

Finally, one of the stickiest areas of controversy in the complex predicate literature is that of event structure. While some (Durie 1997; Aikhenvald 2006) claim that a CPr must always have a single event structure, others (Baker & Harvey 2010) argue for at least a limited range of combined or complex event structures. The disagreement largely seems to be definitional. Durie and Aikhenvald use 'event' to describe a conceptual category that is culturally specific; that is, an event may be complex, as long as it is conceived as a singular act by the speakers of the language. Thus, the reasoning goes, in the following examples from Alamblak, climbing a tree in search of insects is seen as a normal complex event, but climbing a tree to look at the stars is not an inherently connected

sequence, because one can see the stars perfectly well from the ground²⁸.

(197) miyt ritm muh-hambray-an-m

tree insects climb-search.for-1sg-3pl

"I climbed the tree looking for insects."

(198) *miyt guñm muh-hëti-an-m

tree stars climb-see-1sg-3pl

"I climbed the tree and saw the stars."

Alamblak (Durie 1997:329)

Baker and Harvey (2010) on the other hand, conceive of 'event' in terms of Jackendoff's theory of Lexical Conceptual Structures (LCS) and use that to restrict what may be conceived of as a single 'event'. From this they distinguish two distinct classes of complex predicates. The first they call 'merger', assuming that two predicates with similar LCSs may merge, resulting in a single, albeit complex event with shared arguments. They associate this class with light verb constructions of the kind commonly found in Australian languages. The second class they call coindexation structures, in which the LCSs of the two predicates may be of different types and are related by argument coindexation. The result is multiple events, albeit within a single clause; this class is associated with serial verb constructions.

²⁸ By this reasoning, the verb form in (198) should be logically possible, given the appropriate context in which something could be seen only by means of climbing a tree.

Foley (2010), in the same volume as Baker and Harvey, shows that there is significant crosslinguistic variation in how events are encoded; the same event that is expressed with a monomorphemic root in one language may be necessarily expressed in structures of a range of morphological and syntactic complexity in others. He asserts that complex predicates express a diverse array of event structures, some simple and some extremely complex.

In sum, while definitions of complex predicates abound, there is very little in the way of consensus to be found, either for defining the class as a whole or for distinguishing relevant sub-classes. We proceed, therefore, with the understanding that there is likely to be no category in which to situate the Hiaki *V-sime* construction definitively.

4.1.2 Grammaticalization/Diachrony

Although this dissertation is concerned with developing a synchronic analysis of the Hiaki language, and I do not have historical data readily available, diachronic forces cannot be entirely ignored, particularly when dealing with constructions of this kind. Grammaticalization processes and shifting categories add to the complicated landscape of complex predicate types. For SVCs in particular “there is a very strong diachronic tendency to lexicalization and grammaticalization of the meaning of serial complexes: this can involve treating the whole serial complex as a single lexical(ized) item, or ‘demotion’ of the meaning and grammatical status of one of the verbs to that of a modifier or case marker” (Durie 1997:291).

Bowern (2008) surveys the theories and data regarding the diachronic development of

complex predicates. She cites, among others, Givón's (2008) symposium presentation, in which he puts forward a grammaticalization cline, represented in (199) below.

(199) (a) parataxis > (b) hypotaxis > (c) serialisation > (d) light verb > (e) auxiliary > (f)
univerbated affix

This type of model assumes a clear, unidirectional path of grammaticalization from distinct conjoined clauses, to hierarchically related clauses, through various types of clause union, and finally, towards a single verb with bound grammatical affixes.

However, Butt (2003, 2010) disputes this model; in particular, she claims that light verbs and auxiliary verbs do not belong on a single cline as above, but that they represent distinct paths of grammaticalization, since the same verb form may occur as both an auxiliary and a light verb in different constructions in the same language. She further asserts that light verb constructions are historically highly stable and not subject to the same forces of grammaticalization as other, more volatile structures. Bowerman (2008), while agreeing that Givón's cline is too simplistic, provides evidence disputing the purported stability of LVCs. Her conclusion is that the diachrony of complex predicates is as tangled and diverse as their synchronic manifestations: "They appear to have no single common historical source and few if any common paths of diachronic development" (Bowerman 2008:168).

Lord (1993) looks in depth at the changes that serial verbs may undergo, describing a variety of patterns. For instance, transitive serial verbs, particularly those used to license

an additional argument, may eventually become adpositions, while intransitive serial verbs are more likely to develop into adverbs or auxiliaries. This, too, disputes the simplicity of Givón's model, suggesting at least that a more nuanced model, allowing for multiple directions of development, is required.

Hiaki has a pertinent example of how the same verb may take different paths of grammaticalization within a language. There is a 'purposive' verbal affix, *-se/-vo*, which is a particularly interesting case, because the singular form, *-se* appears to be historically derived from the singular motion verb *siime*²⁹. (The plural form, *-vo*, may be derived from *vo'o*, 'road'.) It is also the only verbal affix which suppletes for number.

(Dedrick&Casad 1990:295-6)

I have glossed *-se/-vo* as *purposive*, but more precisely it indicates *motion* towards some purpose and is translated as "go (in order) to V".

(200) Han=te, aman=te hi'ibwa-**vo**-k

let=1PL, there=1PL eat-PURP.PL-K

"Let's go, we're going over there to eat."

Curiously, *-se/-vo* also displays an unexpected interaction with the suffix *-k*, which harkens back to a puzzle with the tense/aspect interactions of *siime/saka* seen in

²⁹ Dedrick and Casad (1990) make this claim, presumably on the basis that *-se* is a plausible phonological reduction of *siime*, and shares its suppletive character, as well as a 'go' meaning.

§2.1.2.1³⁰. When *-se* occurs without a following suffix *-k*, it expresses intention. When *-k* appears, the interpretation is that the movement towards a purpose is underway. This is demonstrated in (201) below.

(201) Aman=ne aa=vit-**se**

There=1SG 3SG=see-PURP.SG

“I will be going there to see him/her.” (I intend to go, but haven’t yet left)

(202) Aman=ne aa=vit-**se-k**

There=1SG 3SG=see-PURP.SG-k

“I am on my way there to see him/her.”

Even more curiously, when the plural subject form *-vo* is used, it is considered more natural to include *-k* in either of these contexts.

(203) Aman=tea a=vit-**vo-k**

There=1PL 3SG=see-PURP.PL-k

“We are going there to see him.”

(Either ‘We will be going OR ‘we are on our way’.)

In the imperative, however, neither the singular nor plural form may be inflected with *-k*.

³⁰ Hiaki has more than one suffix with the form *-k*. The most common is the perfective aspect morpheme discussed in Chapter 2, but there is also an adjectival *-k* and a possessive predicational *-k*. See Jelinek and Escalante (1988) for discussion.

(204) Aleh, Heidi-ta aman vit-se(*-k)!

Alex, Heidi-ACC there see-PURP.SG-k

“Alex, go there to see Heidi!”

(205) Aleh intok Acheka, Heidi-ta aman vit-vo(*-k)!

Alex CONJ HK, Heidi-ACC there see-PURP.PL-k

“Alex and HK, go there to see Heidi!”

The presence of the prospective motion affix *-se/-vo*, in contrast with the associated motion/path reading of V2 *-sime/-saka*, demonstrates that grammaticalization of a lexical verb may occur along more than one semantic/functional path, even within the same language. Although *-sime/-saka* retains a great many of its lexical properties, *-se/-vo* demonstrates a form which is much more reduced and restricted, and exhibits many more functional attributes, while still retaining some element of its motion semantics.

4.2 Construction types and analyses

Although I have described the broad categories of complex predicate above, my discussion from this point on is restricted to multi-verb constructions; here, I discuss four commonly described types. The first of these, the auxiliary verb construction (AVC), is generally understood not to be an example of a complex predicate, however it does involve more than one verb word, and since motion and posture verbs are a common source of auxiliaries, it seems an important category to include (Seiss 2009). The other constructions that I discuss here, which are more commonly understood as examples of

complex predication, are light verb constructions or LVCs, in §4.2.2, restructuring verb constructions (RVCs) in §4.2.3, and finally serial verb constructions (SVCs) in §4.2.4.

As noted in §4.1.1, the label 'complex predicate' is applied to a wide range of constructions with many different properties, and if it is difficult to define the class as a whole, then clearly distinguishing sub-classes is a whole new can of worms. We will see in what follows that there is some considerable overlap between the construction types described here, and that *V-sime* has some property or properties in common with each of them.

4.2.1 Auxiliary Verbs

Auxiliary verbs, many of which have a lexical counterpart, have a functional role in a clause. They are used to express grammatical categories, and must necessarily accompany a lexical verb. However, Anderson (2006) has a somewhat broader view than most. His definition allows for lexical contributions from auxiliaries – effectively, it is expansive enough that for him ‘auxiliary’ covers territory normally attributed to light verbs; these two categories are effectively collapsed in his treatment.

“‘Auxiliary verb’ is here considered to be an item on the lexical verb – functional affix continuum, which tends to be at least somewhat semantically bleached, and grammaticalized to express one or more of a range of salient verbal categories, most typically aspectual and modal categories, but also not infrequently temporal, negative polarity, or voice categories” (Anderson 2006:4-5).

This definition positions AVCs, for Anderson at least, within the category of complex predicates. He breaks auxiliary constructions down along lines of headedness, distinguishing semantic and syntactic construction heads. It is the examples wherein the auxiliary verb functions as the phrasal or syntactic head of the construction – while the lexical verb is the semantic head – that describes the class of more widely agreed upon AVCs.

Although auxiliaries are most commonly associated with TAM categories, and perhaps polarity, they may also be the locus for expressing direction and orientation, as in the Australian associated motion examples discussed in §1.4. A similar function can be seen in the Turkic language Tofa:

(206) onson vjertaljo:t-tar uhⁱ-up kel-gen
 then helicopter-PL fly-CV CLOC-PST
 ‘then the helicopters flew in’

(207) men pan-a ver-gen men
 1 return-GER TLOC/INCH-PST 1
 ‘I set off for home’

Tofa (Anderson 2006:36)

The properties that *V-sime* has in common with these AVCs are the expression of path/orientation. In constructions such as (208) below, the V1 could certainly be analyzed

as the semantic head – since the interpretation of the whole utterance has to do with sitting and not with going – with the V2 acting as a functional modifier.

(208) Hunume hamuch-im kia hoo-sa-saka

DET.PL woman-PL just sit-RED-go.PL

“Those women are just sitting about.”

Although auxiliaries have a primarily functional contribution to the clause, some languages’ auxiliaries do show some verbal behavior; they may still carry some of their original meaning in particular contexts, and this is particularly true of auxiliaries derived from motion and posture verbs. The English 'going to' future construction is a good example of this. In (20) the a) sentence is unambiguously a motion construction and c) is clearly futurate, but the b) example is ambiguous between a grammatical (futate) or a verbal (motion) reading. (Seiss 2009; Heine 1993)

(209) a. He is going to town

b. *He is going to work*

c. *He is going to come*

An even more ambiguous example is found in the Australian language Jingulu which has highly suppletive 'auxiliaries' which typically co-occur with a non-inflecting predicative coverb. In addition to hosting agreement prefixes and instantiating the usual TAM categories, the Jingulu auxiliary also indicates a 3-way associated motion distinction:

motion towards the speaker, motion away from the speaker, and motion neutral.

However, unlike most auxiliaries, these are able to stand alone without a predicating coverb, in which case they get the interpretations 'come', 'go' and 'do', respectively, leading Pensalfini (1997) to argue that they are better understood as light verbs than auxiliaries. The examples below show 'come' and 'go' both in complex constructions (210)-(212) and in simple ones (211)-(213).

(210) Laja-ngardu kijurlurlu

Carry-1SG-go stone

“I’m carrying a stone.”

(211) Mindi-rruku jalyangku-ma Warranganku-ngka

1DL.INCL-went today-EMPH Beetaloo-ALL

“Today we went to Beetaloo.”

(212) Ngini-rni jundurru duwa-jiyimi

DEM(N)-FOC dust rise-come

“Dust is rising.”

(213) Wilinja ya-jiyimi jamaniki-rni

Countryman 3SG-come this(M)-FOC

“Our countryman is coming.”

Attempts to clearly distinguish auxiliaries from light verbs describe several defining characteristics of auxiliaries. Although they may initially be form-identical with a main verb, they need not retain this status (contrasting with Butt's (2003 et seq.) requirement for light verbs) and are in fact highly prone to reduction. Auxiliaries may display defective paradigms, unlike light verbs, and they may be restricted in their appearance with particular tense and aspect forms. Light verbs may show combinatorial or selectional restrictions, while auxiliaries do not, and light verbs can also affect case and theta-role assignment but auxiliaries can't. (Butt, 2010; Butt and Lahiri, 2002; Seiss 2009)

Here we can identify more properties that might lead one towards an analysis of *-sime/-saka* as an auxiliary. It appears to have no selectional restrictions, arguably displays a defective paradigm and is restricted with respect to perfective aspect.

However, I have argued that *-sime/-saka* does affect theta-role assignment (in that it has a thematic subject to contribute) and it still retains far too considerable a degree of lexical weight for me to be comfortable labeling it a fully – or even primarily – functional element in these constructions. This is particularly evident in the ability of affixal *-sime* to reduplicate in these constructions³¹. It contrasts, for example, with more functional verbal affixes such as the causative *-tua* – or indeed the fully grammaticalized prospective motion affix *-se/-vo* – which may not be reduplicated.

³¹ Butt & Ramchand (2005) also points to reduplication as a feature of light verbs but not auxiliaries in Urdu, although this is not a criterion that is necessarily applicable crosslinguistically.

4.2.1.1 Summary

Properties of V-*sime* that seem to correlate with those of AVCs, are as follows:

- No selectional restrictions
- Defective paradigm (arguable)
 - This is arguable – in V2 position *-sime* could be said to be lacking a perfective form, but that feature is also covered by aspectual restriction below.
- Aspectual restriction
 - V2 *-sime* is aspectually restricted relative to main verb *siime*, in the sense that the may not occur with perfective aspect, whilst the latter may do so.

Properties of V-*sime* that do not correlate with AVCs:

- Contributes a thematic argument
- Unbleached semantics
- Participates in reduplication, which is otherwise restricted to primarily lexical categories

4.2.2 Light Verbs

LVCs are the most promiscuous of the complex predicate types listed here, at least in terms of their analysis; the term ‘light verb’ was originally coined by Jespersen (1965) to refer to constructions such as the English “take a bath”; ‘take’ in this example cannot be said to be interpreted fully, or literally, and is therefore considered semantically 'light'.

Light verbs require another predicator in order to function. In 'take a bath' this is a DP,

however light verbs are attested in constructions with a wide variety of joint predicators worldwide, including gerunds, nouns, adjectives, preposition phrases, coverbs³², and other verbs.

Although usually described as semantically bleached (Jespersen 1965, Mohanen 2005, Wittenberg et.al. 2014, and many others) light verbs are often argued to be, instead, structurally impaired in some way, e.g having a deficiency of argument structure or theta assignment (Grimshaw & Mester 1988, Rosen 1990, Sells 1998, Butt 2003, 2010, Bowerman 2008). Languages vary with respect to the size of their light verb inventory, however they are typically high-frequency verbs with broad or general semantics (Butt 2010).

In languages with an inventory of more than half a dozen or so light verbs, they may be used to categorize the predicate "for various aspect, event structure and trajectory distinctions" (Bowerman 2008:163). In the Uzbek examples (214)-(215) below, for example, the light verb provides information about the structure of the event that is described by the main predicator/s.

(214) Qush uchip ketib qoldi.

bird fly-IB come-IB remain-3.PST

“The bird flew away [unexpectedly].”

³² 'Coverb' is the term used to describe a distinct uninflecting word class in many Australian languages that cannot be used independently but must co-occur with an inflecting verb.

(215) Bu kitobni o'qib borar ekanman, khayolim boshqa joyda edi
this book-ACC read-IB go-PART sow-ISG, mind-ISG.POSS'R other place-LOC be-3PST

“I was reading this book, but my mind was somewhere else.”

Uzbek (Bowerman 2008:164)

Butt's (2003) attempt to pin down a precise, measurable and crosslinguistically accurate definition of light verbs, together with its revised and updated (2010) redux, is the seminal work in this area. She tries, in particular, to draw a very clear distinction between LVCs and AVCs, counter to Anderson's (2006) assumptions.

Butt attributes the following properties to light verbs:

1. They are always part of a complex predicate (for which, as mentioned in §4.1.1, she also has a strict definition),
2. They are always form identical with a main verb
3. They have a 'semi-lexical' status that distinguishes them syntactically from both auxiliaries and main verbs
4. They structure or modulate the event described by main predicator in way that is different from auxiliaries, modals or other main verbs

(Butt 2003, 2010)

Butt's insistence on form-identity between light verbs and some main verbs is linked to her observations about the general semantics of light verbs; she considers light verbs as not a distinct set of verbs, but the same items as their main verb counterpart, whose

interpretation may be either light or heavy depending upon the construction in which they are used. This correlates somewhat with Cardinaletti & Giusti's (2001) proposal that the 'semi-lexical' properties of motion and other verbs in some constructions is the result of merging a lexical item into a functional head, the specific resulting properties being the result of the height of the functional node in question. That is, the same lexical element will be interpreted with increasingly bleached semantics but with greater functional properties at progressively higher positions above VP.

The syntactic and semantic differences Butt alludes to are left deliberately vague; she describes them as variable between languages, leaving the identification of light verbs in any given language to be diagnosed using language-specific tests (2003). In Butt and Ramchand (2005) the syntactic distinctions between light verbs and auxiliaries in Urdu are described, and I include them below as an example of the distinctions that motivate Butt's claims.

- Auxiliaries do not have an effect on the Case marking of the subject, light verbs do.
- Light verbs may be reduplicated, just like main verbs; auxiliaries may not.
- The main verb may be topicalized away from a light verb, but not from an auxiliary verb.

(B&R 2005:8)

Even when clearly distinguished from auxiliaries, LVCs are still not a homogenous class in Urdu. Butt & Ramchand (2005) distinguish three separate constructions involving light

verbs, distinguished by the form of the main lexical verb (V1), by the semantics of the construction, and by their syntactic behavior. Of these, Type 1 is primarily of interest here, since it most resembles, at least superficially, the kind of V-V structures found in Hiaki.

In Urdu Type 3 constructions, the V1 occurs in infinitive or gerund form and bears a nominal case marker. These are, like Hiaki causatives, biclausal with regard to binding, although dominated by a single Tense node, and are not complex predicates by Butt's definition³³.

- (216) anjum=nee saddaf=koo [xat **lik^h-nee]=koo kah-aa**
 Anjum.F=ERG Saddam.F=DAT letter.M=NOM write-INF.OBL=ACC say-PERF.M.SG
 'Anjum told Saddam to write the letter'

In Type 2 constructions, V1 is in an oblique form of the infinitive. These constructions have semantics of inception or permission, and are monoclausal by Butt's definition. In Butt & Ramchand's analysis, the V2 in Type 2 constructions instantiates (little) 'v'.

- (217) vo ro-nee lag-ii
 PRON.NOM cry-INF.OBL be.attached-PERF.F.SG
 'She began to cry'

³³ Butt still refers to the V2 in these constructions as a light verb, despite her assertion that a light verb can only occur in a complex predicate.

Type 1 constructions consist of the V1 in its stem form, along with the inflecting light verb. The semantics of this type are more variable; they include notions such as inception, completion, benefaction, suddenness and force, which Butt groups under a general category of 'boundedness'.

- (218) naadyaa=nee xat **lk^h li-yaa**
 Nadya.F=ERG letter.M.NOM write take-PERF.M.SG
 'Nadya wrote a letter (completely).'

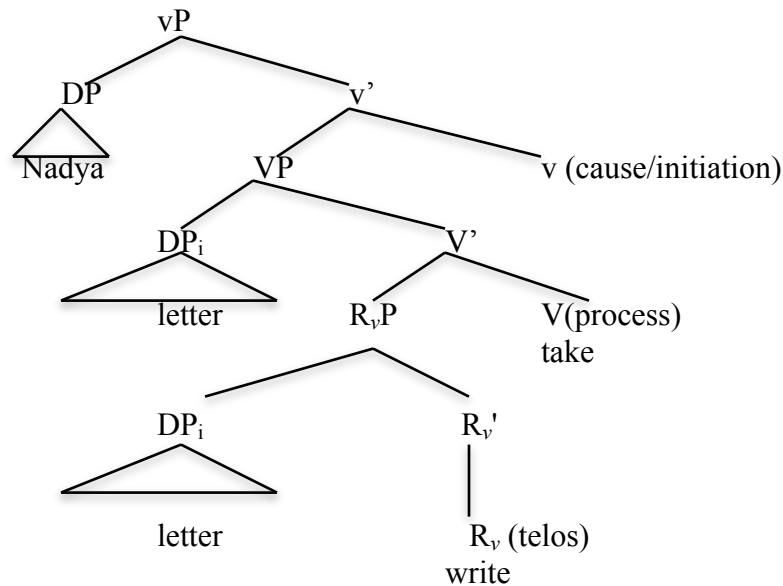
- (219) naadyaa **gir ga-yii**
 nadya.F=ERG fall go- PERF.F.SG
 'Nadya fell (down)'

Urdu (B&R 2005:23)

In the Type 1 examples, Butt argues, the light verb contributes to the Aktionsart of the event described by the main predicate by rendering it telic, which motivates her claims that "the function of light verbs is to modulate (sub)evental semantics" (2003:24). In both her (2003) paper, and (2005) collaboration with Ramchand, Butt claims that this effect can be mapped syntactically by decomposing the predicate structure into three layers representing Cause/Initiation, Process/Change and Result/Telos. "Crucial to our proposal is that idea that verbal predication decomposes (maximally) into these three distinct heads with very specific semantic and argument structure connections" (2005:26) This analysis is rooted in Ramchand's (1997, 2006) theory of argument structure, which is an explicit

attempt to demonstrate how phrase structure reflects event structure and aspectual relationships.

(220)



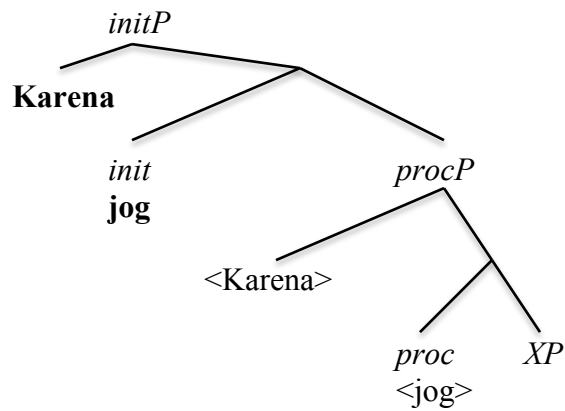
Tree for example (218) (Butt & Ramchand 2005:26)

Somewhat unintuitively, the light verb in this analysis does not itself occupy the telos head, despite its proposed connection to boundedness, but instantiates process (or, potentially, cause) instead - it is the V1 that represents the result state.

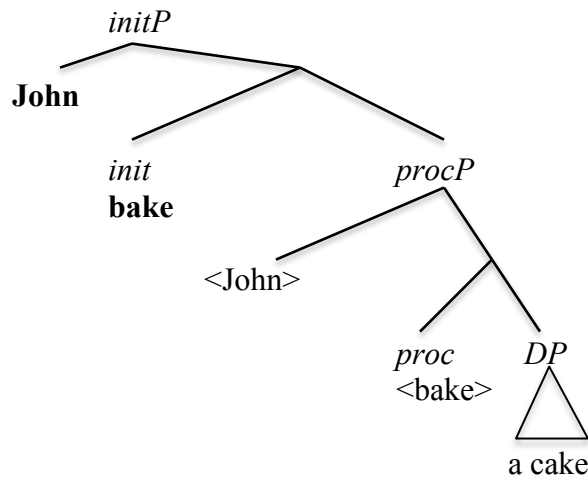
This analysis is interesting with respect to Hiaki *V-sime* constructions, which always have an atelic or progressive Aktionsart (and are hence incompatible with perfective aspect, as shown in §3.3.1.1). In Butt & Ramchand's (2005) analysis, it is the V1 that heads the Result phrase, while the light V2 instantiates either 'cause/initiation' or 'process'; since *V-sime* is always atelic, the V1 in this construction could not occur in the Result phrase, but presumably must occupy the higher Process phrase. This would

relegate V2 *-sime* to the remaining higher third of the structure, instantiating the initiation/causation position head. This would be a very peculiar result, because it would make V-*sime* structurally indistinguishable from a causative, which I am confident is quite outside the intent of Ramchand's theory.

(221) Ramchand's (2006) structure for a simplex intransitive motion verb.



(222) Ramchand's structure for a transitive process verb.



So, despite initially promising similarities between V-*sime* and Urdu Type 3 constructions, the analysis that Butt and Ramchand developed for the latter is not a good fit for Hiaki. Indeed, it may not be tenable for Urdu either: in her 2010 paper, Butt apparently abandoned this approach in favor of returning to an analysis in LFG (which was the framework she used in her 1995 dissertation). LFG utilizes linking theory, which opposes UTAH (Baker 1998) in embracing a lack of one-one correspondences between thematic roles and grammatical relations.

4.2.2.1 Summary

Properties of V-*sime* that seem to correlate with those of LVCs, are as follows:

- -*sime* has a basic or general semantics, which fits with the characterization of verbs which may be utilized in LVCs
- It has a heavy or independent counterpart, *siime*
- V2 -*sime* impacts the aktionsart of the clause

Properties of V-*sime* that do not correlate with LVCs as they are described here:

- -*sime* does not appear to be semantically bleached to the degree that light verbs are expected to be, and displays little to no metaphoric extension, for example.
- V-*sime* does not fit the structural model put forth by Butt and Ramchand,

4.2.3 Restructuring Verbs

'Restructuring' is the name given to a type of V-V_{inf} construction, found in Romance and in Germanic, that does not exhibit clausal behavior – it does not show boundary effects in the way that most infinitival clauses do, allowing effects such as clitic climbing and long object preposing in Romance, and long passive, long distance scrambling, and verb raising in Germanic. The label reflects the idea that a biclausal structure has been “re-structured” to create a monoclausal one. Some analyses assume restructuring involves the two verbs head-merging to form a complex verb (including Butt 1995 and Muller 2002 amongst others), however Rosen (1989; 1990) and Wurmbrand (2001 et seq) argue for VP complementation for Romance and Germanic verbs of this type respectively, albeit with somewhat different motivations. Restructuring constructions are explicitly differentiated from serial verb constructions by the presence of overt infinitival marking on the V2. (Rosen 1989, 1990; Wurmbrand 2001, 2003; Cable 2004; Seiss 2009; Crowley 2002)

As with light verbs, the class of restructuring verbs are typically 'basic' verbs such as *want, begin, try, must, go, and come*. (223) is an example of restructuring with a motion verb, from an Italian dialect. (224) shows the structure commonly assumed for most restructuring predicates (Rosen 1990; Wurmbrand 2001; Cable 2004).

Marsalese:

- (223) Vaju a pigghiari u pani
go.1SG to fetch.INF DET bread
"I go to fetch the bread."

(Cardinaletti & Giusti 2001:3)

- (224) [_{TP} SUBJ [_{VP} v [_{VP} V_{restructuring-verb} [_{VP} V_{head-of-restructured complement}]]]]]

Although the V1 in Hiaki complex verbs does not display overt infinitival marking, *V-sime* does have some properties that are reminiscent of restructuring constructions.

One of the diagnostics of restructuring in Italian is clitic climbing, shown in (225), where the accusative clitic *lo*, which is the object of *leggere*, 'climbs' to a position above the restructuring verb *vuole*.

- (225) Clitic climbing
- a. *Mario lo vuole leggere* (restructured)
- b. *Mario vuole leggerlo.* (non-restructured)
- "Mario wants to read it."

(Rosen 1990:478)

We can see a similar effect in Hiaki, between a compound verb and a subordinate clause structure.

(226) Jason ume koow-im **am**=su-sua-mahta"

Jason DET.PL pig-PL 3PL.ACC=RED-kill-teach

"Jason is teaching them to butcher the pigs."

(227) Jason haisa ume koow-im su-sua-wa-u **am**=mahta

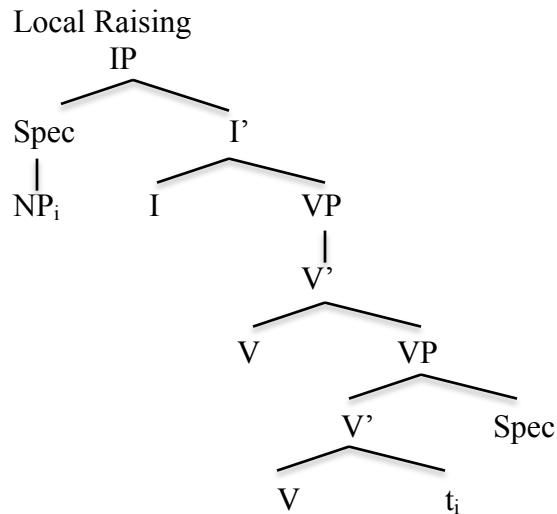
Jason what DET.PL pig.PL RED-kill-PASS-OBJ.REL 3PL.ACC=teach

"What Jason is teaching them is the killing of pigs."

As with the Italian example, (226) shows that a clitic argument of the second verb may (in fact must) precede the first verb. In the Hiaki example this clitic then also intervenes between the first verb *sua* 'kill' and its argument *ume koowim* 'the pigs'. (The similarities can only be pushed so far, however, because of the different ordering constraints in each language - ie, because Hiaki is head final.)

Rosen (1990) claims that restructuring predicates in Romance are in fact light verbs. In her analysis the restructuring verb lacks both arguments and an event specification, leaving it entirely deficient. It therefore must merge somehow with another predicate in order to acquire arguments. This happens at the level of Lexical Conceptual Structure. A restructuring construction is realized syntactically as in (228) below, where the higher VP represents the restructuring verb, which takes the lexical verb, and its arguments, as a complement.

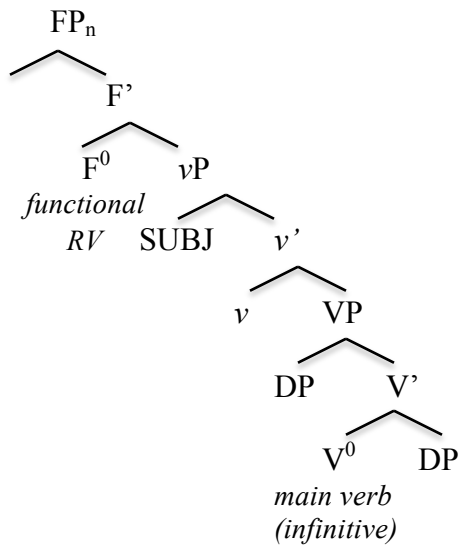
(228) Rosen 1990:488



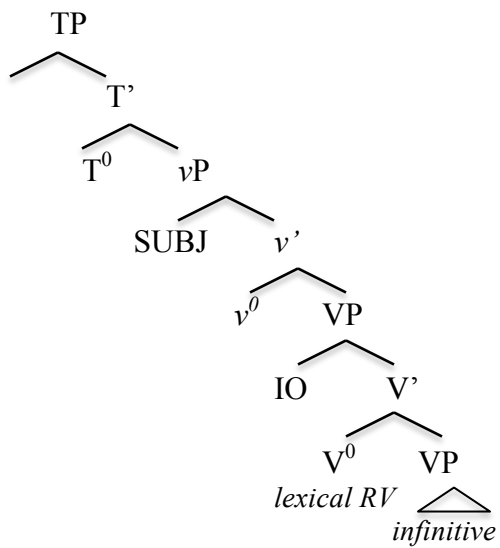
Cinque (2001), also working with Romance, has a different approach. He assumes that restructuring predicates are more like auxiliaries, in that they are generated in a functional position above the verb phrase. He assumes a complex and universal hierarchy of aspectual categories, each with its own position. The effects of the restructuring predicate then are determined by the precise position in which it is generated.

Wurmbrand (2003) however disputes Cinque's claim that all restructuring is necessarily functional in nature, and asserts that German restructuring facts can only be accounted for by assuming two types of restructuring, functional and lexical. She, in effect, incorporates both Cinque's and Rosen's structures, as shown in **Error! Reference source not found.** **Error! Reference source not found.** (although she differs from Rosen in that she assumes that it is the lower verb that is deficient in the **Error! Reference source not found.** structure, crucially lacking a subject).

(229) *Functional restructuring*



(230) *Lexical restructuring*



(Wurmbrand 2003:992)

Wurmbrand distinguishes functional restructuring from lexical restructuring by testing for lexical or thematic properties on the matrix verb, which are held to be projected only within the domain of VP, possibly as high as v' . Above this level is the non-thematic domain - heads in this portion of the clause do not assign theta roles to arguments, nor do they participate in creating special meaning (such as idiomaticity). Functional restructuring predicates thus group with modal and raising verbs, while lexical restructuring predicates group with ordinary lexical verbs with respect to a number of tests, outlined by Wurmbrand in (231).

(231) Thematic properties

	Raising predicates	Modals	Lexical restructuring verbs	Non-restructuring verbs
Weather- <i>it</i>	OK	OK	*	*
Inanimate subjects	OK	OK	*	*
Subject raising	OK	OK	*	*
Matrix passive	*	*	OK	OK

(Wurmbrand 2003:997)

As we saw in §3.2.1, *V-sime* is compatible with both weather predicates and inanimate subjects, like the German functional restructuring verbs. The matrix passive test asks whether the highest verb in the structure, V2 in Hiaki, can be passivized. That is, it asks if the internal argument of V2 that is targeted for A-movement. This test can't be applied to intransitive *-sime*³⁴, which lacks an internal DP argument, although it is possible with a transitive V2 such as *-mahta*.

³⁴ Matrix passive is to be distinguished from 'long passive', in which it is the argument of the embedded V1 that is targeted for A-movement, and which does apply to *V-sime*. See §5.3.

Cinque also claims that restructuring predicates cannot select for internal arguments.

Wurmbrand argues against this by showing that lexical restructuring predicates do select for internal (dative) arguments; she proves that these are restructuring constructions because they evidence long A-movement, which results in nominative case on the embedded object, which triggers agreement with the matrix verb.

With respect to *V-sime*, example (194), reproduced here as (232), shows that when the embedded object of V1 is A-moved in a (long) passive construction, it results in nominative case on the DP, but does not result in agreement (for number) with the V2, which is obligatorily plural in a passive construction.

- (232) Uu ili uusi wam vicha yu'u-saka-wa
 DET.NOM little child.NOM there toward push-go.pl-PASS
 “The little child is being pushed along to there.”

So, although *V-sime* has some apparent properties in common with restructuring constructions, the picture is not particularly convincing. The discussion surrounding restructuring predicate properties does, however, reinforce the conflict that emerges in trying to draw a hard line between 'functional' and 'lexical' items in complex predication, particularly in complex predicates where the notion of 'semi-lexical' items arises again and again. However, attempts to define a discrete class of semi-lexical items or properties have also met with limited success. (Cardinaletti & Giusti 2001)

4.2.3.1 Summary

Properties of V-*sime* that seem to correlate with those of RVCs, are as follows:

- Small (VP/vP) embedded structure)
- Some lack of clause boundary effects (eg 'long' passive, clitic placement)

Properties of V-*sime* that do not correlate with RVCs:

- Lack of agreement between long A-moved DP and V2
- Does not fit clearly into either lexical or functional restructuring categories as defined by Wurmbrand's tests

4.2.4 Serial Verbs

The definition of serial verb constructions (SVCs) has much in common with the definition of complex predicates generally. They are conceived of as verb sequences that together behave as a single predicate and are monoclausal. They share a single value for tense, aspect and polarity, and operate under a single intonation contour (ie, like a single verb clause), but may have different transitivity values. The verbs should have no overt markers of coordination, subordination or dependency, and they may share arguments - some scholars argue that they must share at least a subject.³⁵ Each of the verbs in the SVC should be able to stand alone as full lexical verbs in an independent context.

(Aikhenvald 2006; Durie 1997; Bowerman 2008; Johnson 2006; Seiss 2009; Lord 1993; Baker 1989; Foley 2010)

³⁵ Or an internal argument, for Baker (1989) - I discuss Baker's analysis as it pertains to motion verbs later in this section.

Together, it has been argued, the verbs should describe what can be conceptualized as a single event - although this criterion is a little more difficult to quantify, since 'conceptualized as a single event' seems to be understood in a culturally-specific sense, and relies on fuzzy determinants such as "is best translated by a mono-verbal clause in non-serializing languages" (Durie 1997:291). As discussed in §4.1.1 for complex predicates generally, this criterion is subject to some dispute, and Foley (2010) explicitly argues against it, on the grounds that it displays an inadequately precise description of both events and structure. He argues that the class of SVCs may describe situations that comprise either a single complex event or a group of loosely connected events.

SVCs are clearly not a uniform class, crosslinguistically, by almost any measure. They may consist of two or more verbs, and these may be realized as independent phonological words - (233), (234), (233) - or they may form a single word - (235), (236), (235). If they consist of separate words, those words may be contiguous (236) or separable (233).

Paamese:

(233) ire reheson vakili reheha

(iire rehe-**sooni** vakilii rehe-**haa**)

1PL.INCL 1PL.INCL-distant-**throw** canoe 1PL.INCL-distant-**go**

"We will go, putting (throwing) our canoe to sea."

White Hmong:

(234) nws **ntaus** tus dev **khiav** kiag
(s)he **hit** CLF dog **flee** completely
"S/he beat the dog off."

Da^ˆw

(235) yo :h **bə:-ha m-yow**
medicine **spill-go-happen.straight.away**
"The medicine spilt straight away."

(Durie 1997: 290)

Korean

(236) John-i kongwen-ey **kel-e ka-ss-ta**
John-NOM park-LOC **walk-L go-PST-DECL**
'John went to the park walking.'/ 'John walked to the park'

(Zubizarreta & Oh 2007:3)

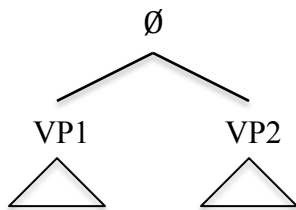
The functions and semantics of SVCs also vary across languages. Most definitions describe a prototypical SVC, although Aikhenvald (2006) points out that for any given language the SVCs should have most, but not necessarily all of the prototypical properties. She describes SVCs as inhabiting a continuum based on the expression of properties such as structural symmetry, contiguity, and marking of grammatical categories on serialized verbs; constructions may vary in their position on this continuum both between and within individual languages.

Seiss (2009) considers this degree of diversity an indication that the range of constructions labeled 'serial verbs' does not constitute a coherent, analyzable class. She raises the possibility that putative SVCs may include auxiliary and/or light verbs. "As serial verbs are a very diverse syntactic class, no claim can be made that all serial verbs are light verbs or auxiliaries on the one hand, on the other hand it cannot be claimed that no serial verb is a light verb or auxiliary either" (2009:510).

It will come as no surprise, therefore, that the range of structural analyses that have been put forward for SVCs is similarly varied. Larson (1991) considers serialization to be parallel to secondary predication. He considers a range of possible structural relations between the two verb phrases - coordination, adjunction, or complementation - and settles on the last of these. Johnson (2006) argues that the evidence for SVCs in Krio also supports a complementation structure, and provides some tests to distinguish between the three possibilities.

1. *Coordination* (Johnson 2006:42)

(237)

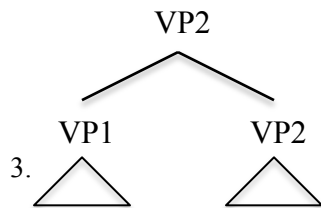


An advantage Johnson claims for coordination analyses is that coordinated events must reflect the temporal order in which they occur, and this lines up with the temporal iconicity which is often observed in SVCs. This is, however, actually a disadvantage for languages like Hiaki, as well as Japanese, which are head final, as noted in Nishiyama (1998) and Tomioka (2004).

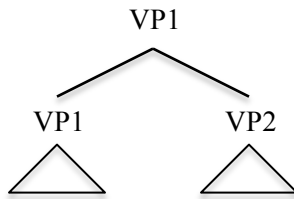
More interestingly, Johnson observes that SVCs in many languages do not show island effects as other coordinated structures do, and which are formalized in the Coordinate Structure Constraint, attributed to Ross (1967). This constraint states that a conjunct may not be moved out of a coordinated structure, as in: "Which book did you read Harry Potter and?" (2006:43). Baker (1989) makes a similar arguments involving extraction of an argument from a coordinated VP. "...if the NP argument of a verb in an SVC can be extracted by WhMovement, it follows that the structure cannot be a coordination (by the Coordinate Structure Constraint)" (1989:514).

2. (*Phrasal*) *Adjunction* (Johnson 2006:43)

(238) Adjunction of V1 to V2



(239) Adjunction of V2 to V1



Adjunction is more difficult to dismiss out of hand than is coordination. Adjunction structures are expected to show effects of asymmetrical c-command, but of course complementation would show the same. Johnson argues specifically against the V' adjunction proposed by Law & Veenstra (1992) and Veenstra (1993), which analysis he claims to be insufficiently motivated by the evidence. In particular, he argues that Law and Veenstra failed to demonstrate clearly that an adjunction analysis is preferable to a complementation analysis³⁶.

If we understand one of the VPs to be an adjunct then we might expect to see island effects, such as restrictions on wh-extraction from the adjunct VP. We do not see this effect in Hiaki *V-sime* constructions - objects of V1 are able to undergo wh-extraction, as shown in (240).

(240) Hita-sa eme'e temu-sa-saka?

What-Q 2PL.NOM kick-RED-go.PL

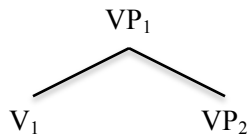
"What are you going around kicking?"

³⁶ Veenstra's (1993) argument is primarily for an asymmetrical phrasal relationship contra Baker (1989).

However, Truswell (2007) shows that A'-extraction is permitted from some untensed verbal adjuncts in English, specifically from two kinds of secondary predicates, depictive and causal³⁷, so a lack of island effects here does not necessarily eliminate the possibility that VP1 is an adjunct.

4. *Complementation* (Johnson 2006:44)

(241) Subordination of V2 to V1



For Johnson, the distinguishing feature between an adjunction structure and a complementation structure comes down to the issue of wh-extraction - however, he concedes that this is only a viable diagnostic for languages which a) are not wh-in situ and b) show ECP effects.

As (240) shows, wh-extraction is possible in *V-sime* constructions, however as mentioned, this is not definitive evidence against an adjunction analysis. Furthermore, the question of ECP effects in Hiaki has not been satisfactorily answered at this time (Harley p.c.).

³⁷ The examples that Truswell gives include: *What did John arrive [whistling t]?* and *What did John drive Mary crazy [trying to fix t]?* (2007:1356)

5. *Some other proposed structures*

Baker

Baker's (1989) analysis cannot be omitted from a discussion of serial verbs; although Baker's primary concern is in dealing with object sharing in trans-trans verb sequences, his proposal has consequences which are relevant to motion constructions. For the sentence in (242), Baker proposes the structure in (243), in which the verb phrase is doubly-headed, with the second verb projecting only a V', and no empty categories are permitted.

Sranan

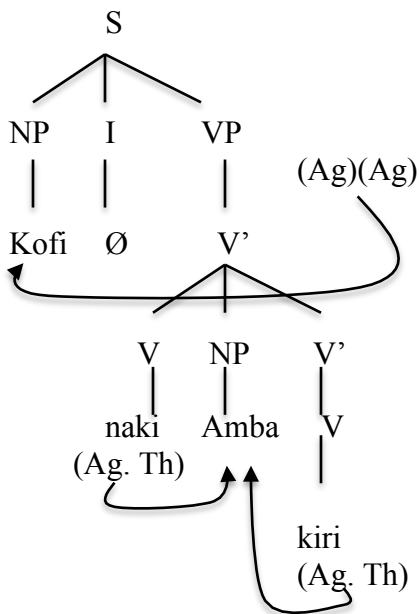
(242) kofi **naki** amba **kiri**

Kofi hit Amba kill

"Kofi killed Amba."

(Baker 1989 from Sebba 1987)

(243) (Baker 1989:520)



In this structure, both the verb *naki* 'hit', which precedes the object, and *kiri* 'kill', which follows it, assign theta roles to the object *Amba*. Since *Amba* is within a V' projection of both verbs, it can only take the internal argument theta role of both. The first verb, which is the structural sister of *Amba*, directly theta marks it, while the second verb indirectly theta marks it, because *Amba* is the sister of one of its projections. However, in an SOV language like Hiaki, *Amba* would not be the sister of the second verb's projection, so it is uncertain how it would receive indirect theta marking in this situation.

Durie (1997) points out a specific problem with Baker's analysis related to motion serializations, such as the one in (244)

(244) wan man **go luka** wan dansi
a man go look a dance
"A man went to watch a dance."

(Durie 1997 from Baker 1989)

In this example, much like the Hiaki V-*sime* constructions, the internal argument of the unaccusative motion verb is also the agent or external argument of the second verb. Durie points out that if this construction is an example of serialization, then Baker's model is not able to account for it. Indeed, Baker treats this as a form of complementation, determining that in this case, 'go' must subcategorize for an infinitival clausal complement with a controlled PRO subject, and thus places the construction outside of the realm of serialization as he defines it.

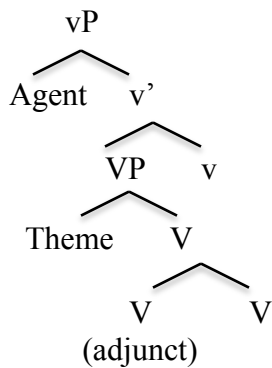
Tomioka

Tomioka (2004; 2006) invokes a head-adjunction analysis for Japanese V-V compounds, in order to account for transitive-transitive structures in a head-final language.

- (245) Jiro-ga Ichiro-o shime-koroshi-ta
Jiro-NOM Ichiro-ACC strangle-kill-PST
"Jiro killed Ichiro by strangling (him)."

(Tomioka 2004:9)

- (246) (Tomioka 2004:8)



In the structure she proposes, the first verb is head-adjoined to the second. It does not participate in argument structure (evidenced by differences in the case pattern of selected objects of the two verbs) and behaves as a manner modifier to the V2. Tomioka proposes this structure contra Nishiyama's (1998) analysis, which analyzes the Japanese V-V compounds as resultative serial constructions comparable to those found in Ewe, Yoruba and Sranan. However, Tomioka shows that Japanese does not have resultative structures in the usual sense, using evidence from directed motion constructions.

In Japanese, a manner-of-motion verb cannot take a Path PP, as shown in (247) - in order to obtain the intended semantics, a V-V compound consisting of a manner verb and a directed motion verb is employed, as in (248).

(247) *Taro-ga gakko-ni arui-ta
Taro-NOM school-LOC walk-PST
"Taro walked to school."

(248) Risu-ga ki-kara korogari-ochi-ta
squirrel-NOM tree-from roll-fall-PST
"A squirrel rolled down a tree."

Tomioka concludes that Path is then an argument of the directed motion V2, and the V1 is a manner adjunct, which does not contribute to argument structure. This pattern is very similar to one proposed for Korean serial verbs of motion by Zubizarreta and Oh (2004; 2007), which I discuss in the next section.

Zubizarreta & Oh, Lim & Zubizarreta

In Korean, like Japanese, manner-of-motion verbs do not express directed motion, and so the PP in (249)-(250) cannot be used to signify a goal:

(249) *John-I kongwen-ey talli-ess-ta
John-NOM park-LOC run-PST-DECL

“John ran to the park.”

(250) Cf. John-I kongwen-eyse talli-ess-ta
John-NOM park-LOC run-PST-DECL

“John ran at the park”

(Zubizarreta & Oh 2007:84)

To unambiguously denote directed manner-of-motion, and license the presence of a goal PP, a manner-of-motion verb must enter into a SVC with a basic motion verb such as *ka-*‘go’.

(251) John-i kongwen-ey talli-e -ka-ss-ta
John-Nom park-Loc run-L-go-Past-Decl

“John ran to the park.”

(252) John-i kongwen-ey kel-e ka-ss-ta
John-Nom park-Loc walk-L go-Past-Decl

“John walked to the park.”

(Zubizarreta & Oh 2007:86)

Zubizarreta and Oh assume that the basic motion verb *ka-* ‘go’ and its counterpart *o-* ‘come’, are not really contentful lexical items in the usual sense, but a morphological reflex used to spell out a V head in a particular configuration that signals directed-motion, that is, when “V takes a directional path complement and a specifier, of which the path is predicated” (Zubizarreta & Oh 2007:78).

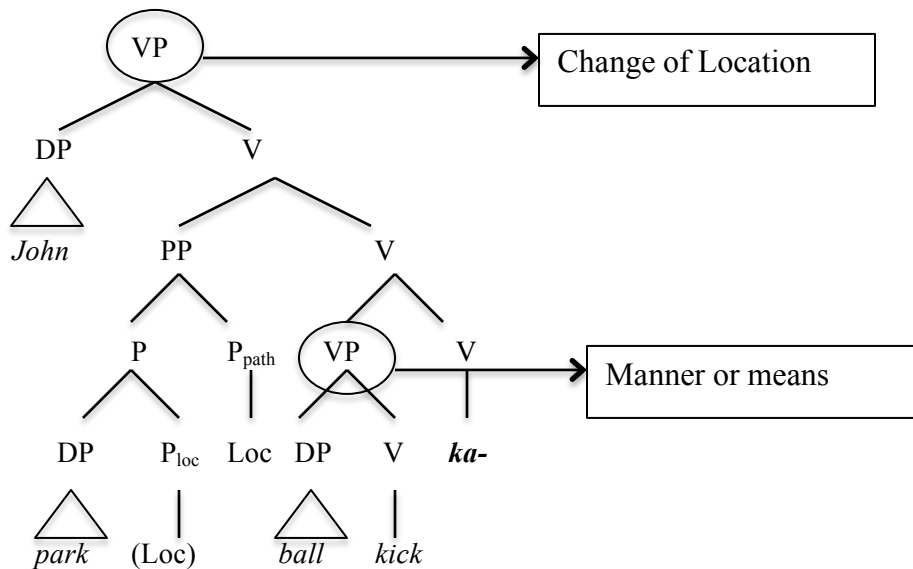
Importantly, for comparison with similar structures in Hiaki, Korean can also incorporate transitive manner-of-motion verbs into a directed motion SVC, as in (253).

- (253) John-i kesil-ey chayksang-ul mil-e tul-i-e ka-ss-ta.
John-NOM living.room-LOC desk-ACC push-L move.into-CAUS-L go-pst-decl
“John went into the living room, pushing the desk.”

(Zubizarreta & Oh 2007:106)

Like Tomioka, Zubizarreta and Oh (and subsequently Lim & Zubizarreta (2013)) argue for an adjunction analysis, but the fact that the V1 in Korean can be transitive, and appear with an attendant object argument, necessitates a slightly different formulation. In their case, the entire VP1 adjoins to the V2 head. This structure is shown in (254).

(254) (Lim & Zubizarreta 2013:16)



The Japanese and Korean examples are very interesting with respect to Hiaki, which is also head final and agglutinating. However, beyond the surface, there are some pertinent differences to keep in mind. First, the Hiaki motion verb *siime* is not a directed motion verb per se; although it does, when used in isolation, imply movement away from the speaker, it is able to accommodate a PP directing movement towards the speaker as well, as discussed in §2.1.1. Second, Hiaki manner of motion verbs are perfectly able to occur with a goal or path PP without the necessity of adding a V2 such as *-siime*, as shown in (255).

(255) Ume ili uusi o'o-im wahi-wa vicha tenne-k

DET.PL little child male-PL inside-to toward run.PL.PFV

“The little boys ran inside.”

Finally, in both Japanese and Korean the semantics of the adjoined phrase are identified explicitly as manner modification, and it is not clear that this is the case in Hiaki.

4.2.4.1 *Summary*

Properties of V-*sime* that seem to correlate with those of SVCs, are as follows:

- Both V1 and V2 have independent counterparts
- Both verbs are (mostly) fully interpreted
- Both verbs share a single value for tense/aspect/polarity
- Both verbs come under a single intonation contour
- There are no overt markers of either subordination or coordination

Properties of V-*sime* that do not correlate with SVCs:

- No possibility of object sharing (if you're Baker)
- Lack of literal motion interpretation in the StanceV+RED-*sime* construction

4.3 *Summary*

In this chapter I showed that multi-verb motion constructions similar to V-*sime* exist in many languages worldwide and in many forms, each of which requires its own structural representation. I compared the properties of V-*sime* to motion in auxiliary verb constructions, light verb constructions, restructuring constructions, and serial verb constructions, and noted that the criteria for distinguishing these complex predicate subtypes is far from clear cut, and that there are plenty of grey areas and a considerable degree of overlap.

For each of the construction types above, *V-sime* shares some number of the properties associated with it, and fails to exhibit others. Of the four major sub types of complex predicate discussed here, *V-sime* seems to have the most in common with SVCs, although as noted, SVCs themselves constitute an extremely large and varied class.

I also discussed a number of structural analyses for the different types of complex predicates, including a range of proposals for SVCs in various languages. While none of these proposals seems to fit the Hiaki *V-sime* attributes perfectly, they represent a fairly thorough range of possibilities and issues to be considered.

In Chapter 5, I will demonstrate that the properties of *V-sime* necessitate a structure similar to that proposed by Zubizarreta & Oh (2004; 2007) and Lim & Zubizarreta (2013) for analogous phenomena in Korean, although this structure is not without its challenges. I will also consider the range of Hiaki strategies for combining verbs or events, as well as evidence for a range of structural types within Hiaki V-V compounds. Although I have shown in Chapter 3 that there is no major distinction between compounds with free or bound V2s, I will argue that there is nevertheless a cline of complex V types, and consider the structural ramifications for this.

Chapter 5 Struggles with Structure

Empo kia haana huni'i hita chatcha! (You just hang things any old way!)

5.1 Questions regarding the structure of *V-sime*

In Chapter 4, I surveyed a range of motion complex predicate types across a broad variety of languages, as well as the kinds of analyses that they have engendered, and I compared the properties of *V-sime* to the properties of these structures. Although *V-sime* has commonalities with all of them, the greatest degree of similarity was shown to be with (asymmetric) serial verb constructions. In particular, motion SVCs in Korean and Warlpiri look a great deal like Hiaki *V-sime* constructions, both in terms of their semantics and their morphosyntactic forms.

In Chapter 5, I address three questions with respect to the structure of *V-sime*:

1. What position does affixal *-sime* occupy in the phrase structure? Can it be best classified as a functional or a lexical item?
2. What size and type of constituent is VP1?
3. What is the structural relationship between VP1 and V2-*sime*?

To answer question 1, in §5.2, I draw more explicit parallels between Korean, Warlpiri and Hiaki and show that *-sime* must be regarded as a lexical item rather than a functional one. In §5.3, based on the properties that have been laid out thus far, and drawing from previously discussed analyses of related constructions, I answer questions 2 and 3, showing that VP1 itself must be as large as, but no larger than vP, excluding VoiceP.

I also propose that the structure of *V-sime* constructions must be one of adjunction, with VP1 head-adjoined to the root *-sime*.

In §5.4 I summarize the range of complex verbal types in Hiaki, and show how Hiaki may be situated in the wider crosslinguistic typology of complex predicate types. In §5.5 I conclude with a number of outstanding questions and issues, with directions for future research.

5.2 Close comparisons - Korean and Warlpiri

In this section I show that affixal *-sime* is a lexical item by close comparison of *V-sime* with similar constructions in Korean and Warlpiri.

5.2.1 Korean

In many languages' motion expressions, the manner of motion and directed motion components are decomposed such that each must be expressed by a distinct verb, and, as shown in the previous chapter, Korean is one such language. In example (256), the verb *kel-* 'walk' provides the manner of motion, while the directed motion verb *-ka* 'go' allows the interpretation of motion along a path.

(256) John-i kongwen-ey **kel-e-ka-ss-ta**

John-NOM park-LOC **walk-L-go-PST-DECL**

'John went to the park walking.' / 'John walked to the park'

(Zubizarreta & Oh 2007:3)

The precise path of motion can be expressed by a PP, realized by the locative goal in (257), or by a bound path verb as in example (258), which can occur with or without a PP goal. The path verb cannot, however, occur without a tensed verb of motion as host.

(257) John-i **pang-ey** ka-ss-ta
John-NOM **room-LOC** go-PST-DECL
'John went to the room'

(Zubizarreta & Oh 2007:81)

(258) John-i (pang-ey) **tul-e** *(-ka)-ss-ta
John- NOM room- LOC **move.into-** L-go- PST-DECL
'John went in(to the room)

(Zubizarreta & Oh 2007:82)

As noted in Chapter 4, manner-of-motion verbs do not express directed motion in and of themselves, and so the locative PP in (259)-(260) cannot be used to signify a goal.

(259) *John-i kongwen-ey talli-ess-ta
John-NOM park-LOC run-PST-DECL
Intended: "John ran to the park."

(260) Cf. John-i kongwen-eyse³⁸ talli-ess-ta
John-NOM park-LOC run-PST-DECL

“John ran at the park”

(Zubizarreta & Oh 2007:84)

To unambiguously denote directed manner-of-motion, and license the presence of a goal PP, a manner-of-motion verb must enter into a SVC with a basic directed motion verb such as *-ka-* ‘go’.

(261) John-i kongwen-ey **talli-e -ka-ss-ta**
John-NOM park-LOC **run-L-go-PAST-DECL**

“John ran to the park.”

(262) John-i kongwen-ey **kel-e-ka-ss-ta**
John-NOM park-LOC **walk-L-go-PAST-DECL**

“John walked to the park.”

(Zubizarreta & Oh 2007:86)

Recall Zubizarreta and Oh’s claim that the basic motion verb *ka-* ‘go’ and its counterpart *o-* ‘come’, are not really contentful lexical items, but simply used to spell out a V head in a particular configuration that signals directed-motion. That is, when “V takes a directional path complement and a specifier, of which the path is predicated” (Zubizarreta

³⁸ Although both *-ey* and *-eyse* are glossed 'locative' in Z&O, the former is goal-oriented ('to') while the latter is not ('at'). In some of these constructions, native speaker consultants preferred *-ulo* ('towards').

& Oh 2007:78). Importantly, Korean can also incorporate transitive manner-of-motion verbs into a directed motion SVC, as in (263) (previously shown as (253) in §4.2.4).

(263) John-i kesil-ey chayksang-ul mil-e tul-i-e ka-ss-ta.
John-NOM living.room-LOC desk-ACC push-L move.into-CAUS-L go-PST-DECL
“John went into the living room, pushing the desk.”

(Zubizarreta & Oh 2007:106)

Korean is an interesting case to compare the Hiaki constructions with because, on the surface, the two languages share many similarities such as persistent head finality and SOV word order, agglutinating morphology, and nominative-accusative case systems. With respect to the complex motion constructions, both languages have a basic motion verb in final position, inflecting for tense, and may have a transitive verb and its object appearing in the VP1 position. Furthermore, in both languages, the complex motion construction is required in order to denote an accompanied motion reading, in which the subject of a transitive motion V1 moves, in addition to the object, as in example (263). Removing the motion V2 in both cases results in an obligatory reading where the subject remains stationary, and only the object of the V1 moves (264)-(265).

(264) Rufino Simon-ta-u lula bwe’u pelotam roakta-k. (Hiaki)
Rufino Simon-ACC-to straight big ball-PL roll.TR-PFV
“Rufino rolled the big ball straight to Simon” (The ball moves; Rufino does not)

- (265) Rufino-ka Simon-eykey kong-ul sethwulukey kwu-li-ess-ta. (Korean)
 Rufino-NOM Simon-DAT ball-ACC clumsily roll-LEX.CAUS-PST-DECL
 “Rufino clumsily rolled the ball to Simon.” (The ball moves; Rufino in-situ)

There are some important points of distinction that must be acknowledged, however. The first is that Korean basic motion verbs have a distal deictic component that Hiaki *-sime* lacks; Korean *-ka* 'go' has a counterpart *-o* 'come'. Hiaki has no such distinction. The second, related difference is that Hiaki intransitive manner of motion verbs are perfectly capable of being independently combined with a goal PP; examples (266)-(267) demonstrate that affixal *-sime* is not required to license the presence of a goal PP, as *-ka* is in Korean.

- (266) Marselo Suichi-u vicha si chuumti weye (Hiaki)
 Marselo Swichi-TO toward very quickly walk.IMPFV
 “Marselo is walking very quickly toward Swichi.”

- (267) *John-i kongwen-ulo kel-ess-ta (Korean)
 John-NOM park-TOWARD walk-PST-DECL
 Intended: “John walked toward the park.”

Since Hiaki manner of motion verbs *can* license goal PPs then the *V-sime* structure cannot be motivated in the same way as Zubizaretta & Oh propose for the Korean

constructions; that is, *-sime* cannot be analyzed as a reflexive spellout of a functional head licensing a directed motion construction.

Finally, it is significant that although Korean *-ka*, like *-sime*, has a primary semantics of spatial motion/path, it may also be extended into metaphorical or aspectual uses. In each of the examples below, the 'path' that *-ka* contributes is metaphorical rather than literal, and the aspectual properties of the V1 have been modified. In each case, the V1 is an achievement verb; the use of *-ka* makes possible a durative interpretation, allowing for modification by temporal adverbs such as 'gradually'.

(268) John-i (cemcem) cwuk-e ka-ss-ta.

John-NOM (gradually) die-L go-PST-DECL

'John was on the path to death.'

(269) John-i (cemcem) salaci-e ka-ss-ta.

John- NOM (gradually) disappear-L go-PST-DECL

'John was on the path to disappearance.'

(270) Yenkuk-i (cemcem) ttuthna ka-ss-ta.

performance-NOM (gradually) end go-PST-DECL

'The performance approached the end.'

(Zubizarreta & Oh 2004:45-46)

As shown in §(271)-(272), the Hiaki *V-sime* construction resists metaphorical extensions of this nature, even within the spatial realm.

(271) Hunume huyam vo'o-u tahti ha'abwek.

Those trees road-to all.the.way stand
“Those trees go all the way to the road.”

(272) *Hunume huya-m kora bwikola yo'outu-saka

Those tree-PL fence around grow-go.PL
Intended: “Those trees grow along the fence.”³⁹

V-sime is incompatible with perfective aspect, which suggests that it may contribute a durative semantics, but it never serves a purely aspectual function without also entailing physical motion. This resistance to semantic bleaching of the lexical content of *-sime*

³⁹Admittedly, in the direct Korean equivalent to this example (below), *-ka-* ‘go’ does not imply growth along a spatial path either – the ‘along the fence’ phrase can be omitted. Rather, *-ka-* modifies *grow*, suggesting that the trees are growing over time – their location is incidental. This is actually an even more abstract metaphor, but regardless, neither interpretation is possible in Hiaki. (Choi & Jung, pers. comm.)

Ce namwu-nun (tamcang-ul ttala) cala-ka-n-ta.

that tree-TOP (fence-ACC along) grow-go-PRES-DECL
“{Those trees/that tree} grow(s) along the fence.”

leads me to conclude that Hiaki *-sime* is less semantically 'light' than the Korean *-ka* and has more characteristics of a lexical element than a functional one.

5.2.2 Warlpiri

The Australian language Warlpiri also has a type of serial construction with significant similarities (and some differences) to Hiaki *V-sime*. The construction known as 'associated motion' or 'associated path' in Warlpiri consists of an infinitival verb⁴⁰ – which may be transitive or intransitive, simplex or complex, motion-denoting or not – bound to a tensed verb of motion, usually the basic motion *ya-ni* 'go'. Although Warlpiri is a non-configurational language with extremely free word order and ergative-absolutive case marking, it has agglutinating morphology and strict ordering of morphemes within word boundaries. The associated motion verb is always the final, tense-bearing element, like *V-sime*.

(273) *pata-karri-nja-ya-ni*

down-stand-INF-go-NPST

'fall while going along' / 'be falling'

⁴⁰ This element is labeled *VINF* in these examples, in accordance with the glossing practices of my sources, but should be considered basically equivalent to those items labeled *V1* elsewhere.

(274) Nya-nja=rni =lpa **ya-nu**⁴¹
Look-INF=hither =IMPF go-PST

‘He would go along looking’

(Laughren 2010:187)

Like *-sime*, *-ya-ni* is also a non-deictic motion verb, with no 'come' counterpart. In Warlpiri, direction of motion is typically indicated by the inclusion of one of a series of directional enclitics (275), or by oblique case marking on a noun, or some other periphrastic means.

(275) Winpirli-nja-ya-nu=**rra**

Whistle-INF-go-PST=**thither**

‘(He) went whistling all the way there.’

(Simpson 1991: 310)

Laughren argues that the tensed motion verbs in these constructions “do not express argument-taking predicates; they serve to modify mainly spatio-temporal properties of the situation or event denoted by the thematic core of the verbal constituent they are part of” (2010:174). She considers them a type of aspectual auxiliary, along with the inceptive. Regarding argument structure, certainly motion verbs are typically intransitive, with an absolutive subject. In the example below, however, the VINF is transitive, and the

⁴¹ This example shows a directional enclitic and a 2nd position auxiliary clitic intervening between the VINF and the tensed motion verb, which reflects the nonconfigurational properties of Warlpiri syntax, however the generalizations about ordering and hierarchy within the verbal domain stands, scrambled elements notwithstanding.

clausal arguments reflect that, with ergative case marking on the subject, showing that the motion verb does not dictate the case frame of the whole clause.

- (276) Kapi=li panu-kari-rli yunjumu-rlu **panti-rninja-ya-ni=rni**
FUT=3plS many-other-ERG other.way-ERG spear-INF-go-NP=hither
'many others will come along spearing (them) the other way'

(Simpson 1991:112)

And, like the Korean constructions discussed in §5.2, the Warlpiri motion verb's uses extend into the metaphorical and aspectual realm - the examples below show a similar type of metaphorical path to a change of state, not dissimilar to the use of Korean *-ka*.

- (277) Kurdu waku rdilyki-**ya-nu**.

child arm broken-go-PST

'The child broke (his) arm.' = 'The child's arm broke.'

- (278) Wati =ka ngurrju-jarri-nja-**ya-ni**.

man =PRES good-become-INF-go-NP

'The man is getting better/becoming good.'

- (279) Mangarri-rli =ka wati ngurrju-ma-ninja-**ya-ni**.

food-ERG =PRES man good-cause-INF-go-NP

'Food is making the man better.'

(Laughren 2010:205)

In example (280) we can even see the 'go' verb occurring twice in the same complex - the first instantiation expresses the literal motion, the second serves to affect the spatio-temporal aspect of the event, indicating durativity or continuation.

(280) **Ya-ni.nja-ya-ni** ka=lu.
go-INF -go-NP PRES=3plS
'They are going along.'

Once again, there are some key similarities and differences between the Warlpiri and the Hiaki constructions. Both have a non-deictic motion verb which lends a general 'path' reading, but without the directional component of the motion verbs in a language like Korean with its 'come/go' alternation. Like Hiaki, the Warlpiri *-ya-ni* construction is not required to license a goal of motion, as was the case in Korean. However, both Warlpiri and Korean show productive metaphorical extension into the realm of abstract paths, while Hiaki resists non-literal readings in all but a very few specific cases, namely, those which involve both reduplication of *-sime* and stance V1s, illustrated in examples (191)-(192), in §3.2.2.

5.2.3Q1: V2 *-sime* is lexical

By contrasting the finer details of the V-*sime* construction with some very similar constructions in other languages, we are able to draw some important conclusions for understanding the underlying structure, and to answer the first of the three structural

questions posed at the beginning of this chapter: What position does V2-*sime* occupy in the phrase structure? Can it be best classified as a functional or a lexical item?

Because the V-*sime* construction is not required to license a goal PP with a manner of motion verb, we cannot motivate the presence of V2-*sime* as a way to express directed manner of motion, as Zubizarreta & Oh suggest for Korean. Additionally, despite similar surface realizations and comparable semantics, Hiaki -*sime* does not exhibit productive metaphorical or aspectual uses like those seen in Warlpiri and Korean. Although -*sime* does impact the aspectual properties of the clause, being incompatible with perfective aspect, it doesn't perform primarily aspectual functions. Therefore, although Korean -*ka* and Warlpiri -*ya-ni* can be analyzed as functional elements - either as a light verb or an auxiliary respectively - Hiaki -*sime* must be regarded as lexical rather than functional, and therefore heads a root phrase (\sqrt{P}) rather than a higher category such as vP.

5.3 Modeling Structure

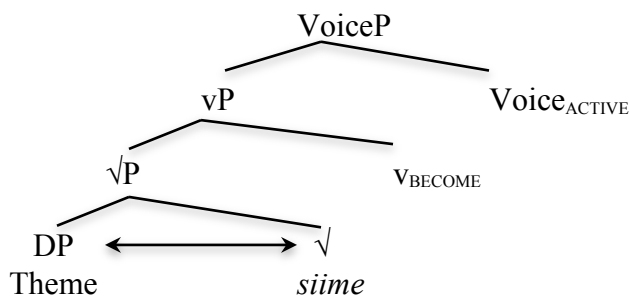
In §5.3.1, I address question 2 ('What size and type of constituent is VP1?') by drawing on Wurmbrand's (2001, 2004, 2007, 2013) analyses for German restructuring predicates with similar properties, such as long passive, as well as properties of Hiaki complex verbal morphology discussed in Chapter 3 and argue that VP1 must be a vP, crucially excluding a VoiceP layer.

Subsequently, in §5.3.2, I address question 3 (‘What is the structural relationship between VP1 and V2 *-sime?*’) by summarizing relevant argument structure properties of *siime/ -sime* as described in Chapter 2 and Chapter 3, and, following Zubizarreta and Oh’s (2004; 2007) analysis of Korean motion SVCs, propose that VP1 is head-adjoined to V2. I demonstrate how this structure might look, and discuss shortcomings of the analysis, as well as alternative structures.

5.3.1 Q2 - Size of V1 is vP, excludes VoiceP

The second question regarding the structure of V-*sime* involves the size of the VP1 element. Following Jung (2014) and Harley (2013) I assume a three-layered structure for Hiaki verb phrases⁴² consisting of a VoiceP, which introduces external arguments and licenses accusative case, a vP which introduces verbalizing elements such as *-tua* ‘cause’ and *-te* ‘become’, and a root phrase. The structure for a basic unaccusative verb like *siime* is shown in (281).

(281)



⁴² I use V(P) as a shorthand reference for the layered verbal domain, since it is useful to occasionally refer to the verbal domain without committing to its size in every case (eg vP vs. VoiceP).

The example in (282) shows that the adjunct must be able to be at least as large as vP because it is possible for a direct causative to serve as V1 - the causative morpheme *-tua* can be shown to instantiate v^0 . (Tubino Blanco 2010; Harley 2013)

(282) Simon intok Hoan Rufino-ta bwik-tua-saka

Simon CONJ Juan Rufino-ACC sing-CAUS-go.PL

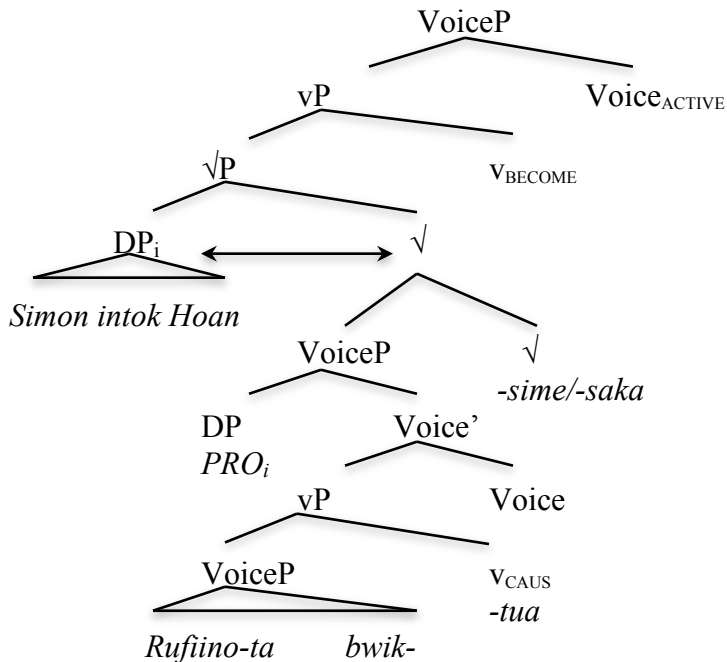
"Simon and Juan are going along making Rufino sing."

Note that in this example *-sime* takes the plural form *-saka*, in agreement with the conjoined subject 'Simon and Juan'. This means that the DP *Simon intok Hoan* is base-generated as the internal Theme argument of the motion verb⁴³. Obligatorily, Simon and Juan are also the joint Causers of the embedded VP 'make Rufino sing'.

There are a couple of possible explanations for this state of affairs. The first is that VP1 includes an external subject position (introduced by Voice), which is inhabited by PRO, and controlled by the nominative subject. This option is represented in (283).

⁴³ See §2.1.1.2 for justification of the analysis of *sime* as an unaccusative.

(283)



However this analysis runs into some problems with passivized examples such as (284).

- (284) Imi'i hiva pelo'ota-m temu-sa-saka-wa
Here always balls-PL kick-RED-go.PL-PASS
"There are always balls being kicked along here."

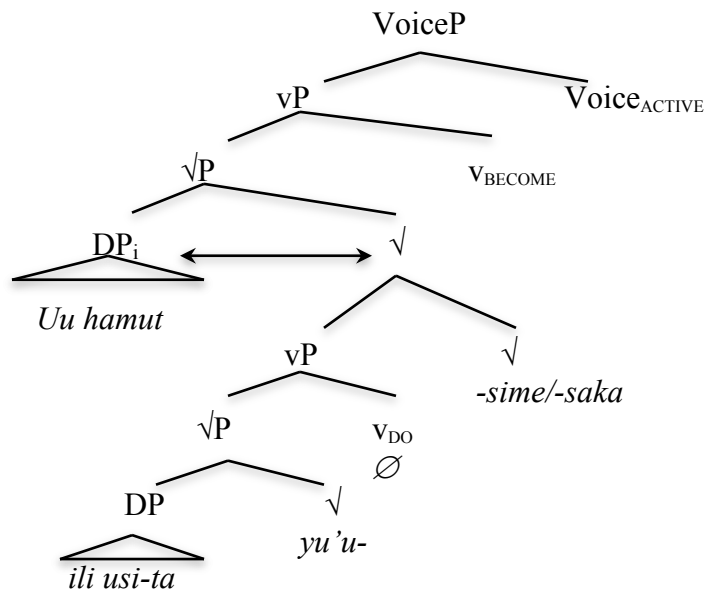
In this example the embedded object has been promoted to subject and received nominative case, in a construction very like the 'long passive' that Wurmbrand (2013) describes for German restructuring, as discussed in §4.2.3. Wurmbrand points out that any analysis that involves an embedded PRO subject must, in order to account for the long passive facts, assume first that the embedded accusative case feature can be somehow eliminated or made inactive, and second that PRO can be circumvented in

some way in order to promote the embedded object over it to the matrix subject position (2013:2).

The other possibility, following Wurmbrand, is that VP1 includes vP but crucially excludes VoiceP, and thus the external argument position⁴⁴, which would host the problematic PRO. The tree in (286) shows the proposed structure for a clause with an embedded transitive vP1 such as (285).

(285) . Uu hamut ili usi-ta yu'u-sime
 det woman little child-acc push-go.sg
 “The woman is pushing the little child along.”

(286)



⁴⁴ Tubino Blanco and Harley (2011) also argue for the separability of v and Voice, using evidence from the Hiaki indirect causative *-tevo*, bolstering the feasibility of proposing this structure for Hiaki.

The tree above is very similar to the previous tree (283), but it eliminates the VoiceP layer of the embedded verb phrase. It maintains the v^0 head, which is required for hosting verbalizing affixes, but strips away Voice, which would introduce an external argument position. This structure accounts for the long passive facts; without Voice to introduce it, there is no longer a PRO argument to circumvent, and the embedded object is dependent upon the functional domain of the matrix verb for case assignment (presumably the matrix VoiceP). Furthermore, Wurmbrand (2002) makes the claim that an obligatory control interpretation is a mark of semantic control (derived through strict locality and other conditions) and that syntactic control (ie, PRO) gives a non-obligatory control interpretation. Since *V-sime* constructions have an obligatory control interpretation⁴⁵, this suggests that semantic control, and not PRO, is responsible.

5.3.2Q3 - VP1 is an adjunct

In Germanic languages such as Dutch (and English), manner-of-motion verbs can equally well express an activity (atelic) or an accomplishment (telic); in the former case the verb is syntactically unergative, in the latter, unaccusative. The difference in Dutch can be seen by the use of different auxiliary verbs.

(287) dat Jan naar Groningen twee uur lang **heeft** gewandeld

That Jan to Groningen two hours long has walked

‘... Jan walked in the direction of Groningen for two hours.’

⁴⁵ That is, the matrix subject is obligatorily interpreted as in motion – see §3.2.1 for the relevant examples.

(288) dat Jan in twee uur naar Groningen **is** gewandeld

that Jan in two hours to Groningen is walked

‘... Jan walked to Groningen in two hours.’

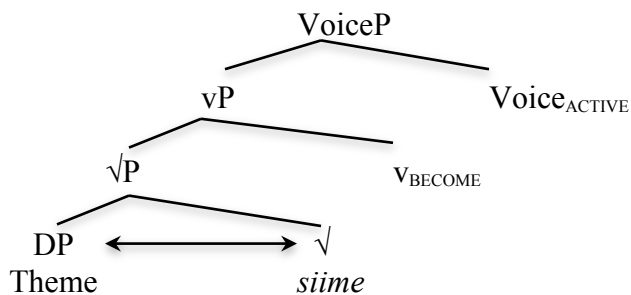
(Zubizarreta & Oh 2007:2)

In Hiaki, although manner of motion verbs can take goal phrases, it is not clear that they are variable between unaccusative and unergative in the same manner as in Germanic. Some manner of motion verbs in Hiaki, aside from the basic 'go' verb *siime/saka*, show suppletion conditioned by the number of the subject, notably *vuiti/tenne* (run.sg and run.pl) and *weye/kaate* (walk.sg and walk.pl). As discussed in §2.1.1.2, Harley, Tubino Blanco & Haugen (2009) show that in Hiaki, verbal suppletion is triggered by internal arguments. They claim that factors affecting the spell-out of root nodes must be in a local relationship with the root, as is also proposed by Bobaljik (2012) and bolstered further in Bobaljik and Harley (2012)⁴⁶. This entails that all suppletive intransitive verbs in Hiaki are unaccusative.

In the previous section, I analyzed Hiaki VPs as three-layered constituents, and claimed the structure in (281), repeated here as (289), as representative of a basic unaccusative verb, using suppletive main verb *siime* as an example. The single argument of the verb is base generated internal to the \sqrt{P} as the sister of the verb, and is thus in a sufficiently local relationship for its number features to trigger suppletion of the verb.

⁴⁶ The details of this analysis are presented within the framework of Distributed Morphology in which the root node is an abstract bundle of features that are later realized (spelled out) by the insertion of phonological content – it is this choice of phonological vocabulary item that must be determined by the local environment.

(289)



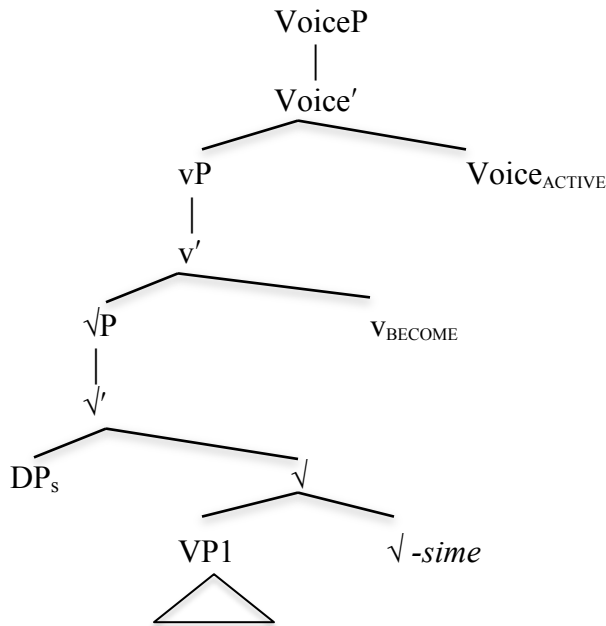
The relationship between suppletion and unaccusativity is important for us, because affixal V2 *-sime/-saka* also supplettes in agreement with subject number, and therefore must also be unaccusative. This has two salient consequences. First, this supports the earlier conclusion that *-sime* must be the head of a \sqrt{P} rather than instantiating v^0 (which position would be outside of a local relationship with a DP that could trigger suppletion). Second, since an unaccusative structure allows only a single (internal) argument position, it follows that the subject of *siime/-sime* must start out in that internal argument position. In the case of the V-*sime* compound, this leaves no obvious structural position (such as complement) for the VP1 to occupy.

Since no complement position is available, the only possible solution to the problem is that VP1 is an adjunct⁴⁷ of some sort. Furthermore in order to obtain the correct linearization, VP1 must be adjoined such that it intervenes between $\sqrt{-sime}$ and its internal argument - but without disrupting the sisterhood relationship. This means that

⁴⁷ Although it is possible to extract arguments from the VP1 (in the case of the ‘long passive’ constructions, discussed in §5.3.1), and extraction is normally not considered a property of adjuncts, Truswell (2005;2007; 2009) presents evidence that it is possible to extract arguments from adjuncts in some circumstances.

VP1 can only be head-adjoined to $\sqrt{-sime}$, resulting in a complex head, which is presumably not a barrier to the conditioning of the root by the number features of its sister DP.

(290)



Head-adjunction is a famously awkward problem in Bare Phrase Structure (see, for example, Matushansky 2006; Harley 2004 for details). Many of the problems noted in those works apply to head-*movement*, rather than adjunction of a previously unmerged element, and are not an issue here: for example, because this is external Merge, not internal Merge, there is no copy and remerge operation, and there is no difficulty associated with Chain Uniformity. Some issues persist, however.

If *-sime* is a head, which selects for a DP Theme complement, then the intervention of the adjunct VP1 between the head and its complement must have been accomplished by one

of two derivational sequences, both of which are problematic in some way. Option 1 is that *-sime* merges first with its complement DP, and the adjunction of VP1 subsequently targets the $\sqrt{0}$ rather than the edge of the \sqrt{P} , which is a violation of the Extension Condition (Chomsky 1995:190). Option 2 is that *-sime* merges first with the adjunct VP1 and only subsequently with its selected complement, which violates the principle of First Merge (Adger 2003:105), in which complements are defined by their status as the element which merges first with a head⁴⁸.

In Bare Phrase Structure theory, a head is defined as a terminal or minimal projection (a node that does not dominate a copy of itself) and a phrase is a maximal projection (is not dominated by a copy of itself). Minimal and maximal projections are all that are available to the computational system; intermediate (bar) levels are ‘invisible’ (Chomsky 1995:61). Although it is possible for an element to be both terminal and maximal (eg clitics (Chomsky 1995:68-69)) a difficulty with the ‘head+adjoined phrase’ constituent (in this case, *VP-sime*) is that it is *neither* terminal, nor maximal. Insofar as that constituent behaves like a head in selecting for a DP sister, and exhibiting suppletion conditioned by that sister, this could pose difficulties. These are not only difficulties for the structure I propose – it is equally problematic for any adjunction structure, including head-movement, and there have been a number of attempts to reconcile the conflict. Carnie (1995; 2000), arguing for phrasal heads in Irish copula constructions, suggests that the distinction between head and phrase is not a matter of primitives, but of behaviors, and so phrases may have head-like properties and vice-versa.

⁴⁸ Specifiers merge second, leaving adjuncts, in the usual case, to scramble for peripheral positions.

The structure in (290) is the only feasible structure, given the properties of Hiaki *V-sime* constructions described here, but it is not entirely novel. It owes a great deal to the structure that Zubizarreta and Oh provide for the Korean motion SVCs (described in §4.2.4) although their proposal involves adjunction of a manner-modifying phrase to a light verbal head, rather than to a lexical root.

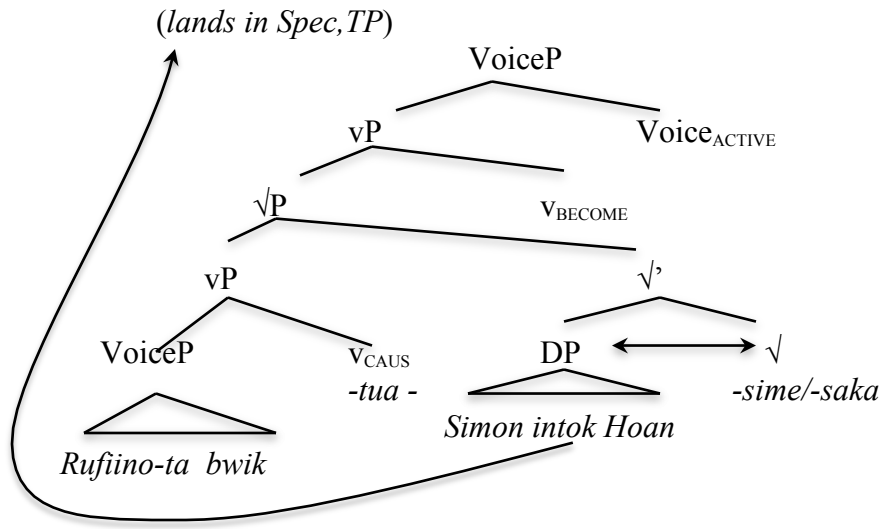
5.3.3 Structural Alternatives

Given that I have acknowledged some problematic aspects of the structure I proposed, are there no alternatives that might be advanced? In this section I discuss two alternative means of achieving the correct linearization, and discuss why they are even less satisfactory than the structure presented in (290) above.

5.3.3.1 Movement of the internal argument around the adjunct

The first and most obvious solution to the problem of an adjunct phrase apparently intervening between a head and its sister is to propose that in fact the adjunct is adjoined at the edge of the phrase like any normal adjunct, and that the DP argument of *-sime* then moves around it to a higher position in the clause. Thus, a structure such as (291) might be proposed, which allows for the correct linearization of elements, without the awkward necessity of positing adjunct intervention.

(291)



This structure has solved the difficulty associated with adjunct intervention, however it is not without its own issues. The most significant problem with this structure is that it reintroduces the problem of long passive, which was discussed in §5.3.1.

Recall that long passive involves the promotion of the embedded object of V1⁴⁹ to the subject of the higher clause, and that this is only feasible when there is no intervening argument position between that object and the matrix subject position. By requiring the DP argument of *-sime* to move around VP1, we are positing that it moves past a preceding argument position – that of the internal argument of V1⁵⁰. How then, can we account for the fact that this preceding argument is not targeted for raising in this

⁴⁹ Although I have used V1 and V2 throughout for simplicity's sake, note that in example which contains three verbal elements, the embedded accusative DP *Rufinota*, is both the semantic subject of the innermost verb *bwik*- 'sing', but the 'causee' of *-tua*- 'CAUS', which is directly embedded under *-sime/-saka*.

⁵⁰ If closeness is calculated in terms of m-command, then perhaps another solution is possible, since the argument of *-sime* will m-command the argument of *bwik-tua* without being m-commanded by it. However, m-command is not a simple relation to compute, and independent motivation for its exploitation in grammar is fairly sparse.

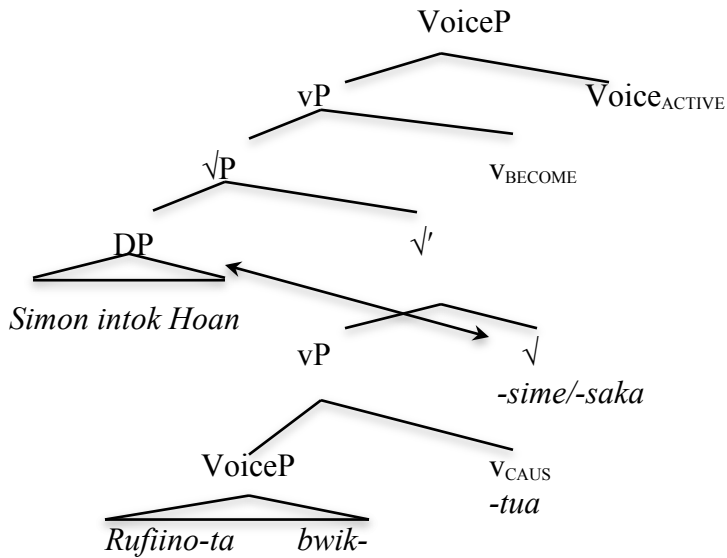
instance? We know that the adjunct status of VP1 is not, in this case, a barrier to extraction because embedded objects are subject to raising in the case of long passives.

5.3.3.2 *Suppletion triggered within the phrase instead of (only) by sisterhood*

Bobaljik (2012) proposes a strict locality constraint on the conditioning of suppletive arguments, such that suppletive vocabulary items can only be triggered by features within the same maximal projection. Bobaljik and Harley (2012) provide evidence to support this claim, arguing that intransitive verbs in Hiaki whose suppletion is triggered by the number features of the subject argument, such as *siime*, are unaccusative. This entails that the subject argument is base generated as the internal argument of the verb, and thus in a local sisterhood relation with the verb; hence, the suppletive verb form is licensed.

If ‘locality’ for the purpose of suppletion requires only that the triggering phrase be generated within the same maximal projection of the verb, rather than specifically as the sister of the verb, then it is feasible to suppose that the DP could be generated as a specifier, rather than a complement, and still be capable of triggering suppletion.

(292)



In this structure, the subject DP is generated in Spec of \sqrt{P} , leaving the complement position available for VP1, and suppletion is still triggered locally within the maximal projection of the verb.

It must be noted at this point that the notion of ‘argument of \sqrt{V} ’ is not a universally accepted one; in papers collected in a (2014) issue of *Theoretical Linguistics* devoted to the topic of roots, Alexiadou, Borer, De Belder and van Craenenbroek all argue, for various reasons, that a root is not a syntactic category, and therefore does not itself select for arguments. Their position has been argued against, convincingly I believe, by Harley (2014a) and Cuervo (2014), in the same volume, and by Bobaljik and Harley (2012); thus I have assumed that position throughout. However, I have not thus far attempted to distinguish whether a root may take more than one internal argument – that is, a specifier, as well as a complement. Cuervo (2014) in reply to Harley (2014a) explicitly addresses this question, pointing out that the arguments based on Hiaki suppletion data that Harley

(2014a) presents “provide evidence for the selection, combination and special relation of roots with *one* argument: a *complement*/sister of the root” (Cuervo 2014:376).

Cuervo raises the following questions:

“Are there truly inherently dyadic roots? Are there roots that take a complement but others take a specifier? How would a specifier of a root behave with respect to locally conditioned phenomena, such as root suppletion?” (Cuervo 2014:377).

Cuervo’s own (2003, 2010, 2014) position is a nuanced one that distinguishes between (at least two) types of unaccusative. Following Levin’s (1999) evidence regarding the syntactic and semantic properties of ‘non-core’ transitives - that is, transitive verbs whose objects have variable theta roles, not predictable from their status as direct objects.

Cuervo extends this discussion into unaccusative intransitives, and draws a similar distinction between change-of-state intransitives, and predicates of happening or movement (change-of-position in Harley’s (2014b) terms), whose arguments behave similarly to the objects of Levin’s non-core transitives. Cuervo proposes that the argument of a COS predicate is actually licensed as the specifier of stative vP. In contrast, the argument of a COP predicate is the complement of the root. This distinction fits well with the Hiaki data, since the set of suppletive intransitives are all verbs of motion or stance – COS predicates do not supplete. (Harley et al. 2009; Bobaljik & Harley 2012)

Incorporating the work of Levin, and others (Mateu & Acedo-Matellán 2012, e.g.)

Cuervo (2014:382) argues that a series of properties correlate with being the argument of a root: being a complement, not being obligatory and not having a predictable, structural

meaning. She concludes, based on Harley's evidence as well as the aforementioned works, that roots can take *only* a complement, and not a specifier argument. What results from this is the notion that the relation between a root and its complement, which is maximally local, does not exist between a root and any other phrase in the structure. Cuervo's conclusions fit neatly with the Hiaki data, in providing an explanation for why it is this particular set of verbs which show suppletion for number sensitivity, and not other verbs regardless of their status as unaccusative or not.

The upshot of this is that if roots can only take a single argument - a complement - then the tree in (292) cannot be correct. Both the Theme DP and VP1 cannot be internal arguments of the root, and since the DP must be internal to \sqrt{P} in order to license suppletion, then VP1 is necessarily left out in the cold. Thus, we are returned to our original dilemma regarding linearization of VP1 in a position intervening between the root and the DP which (must be) its sister.

5.4 Sorts and situations

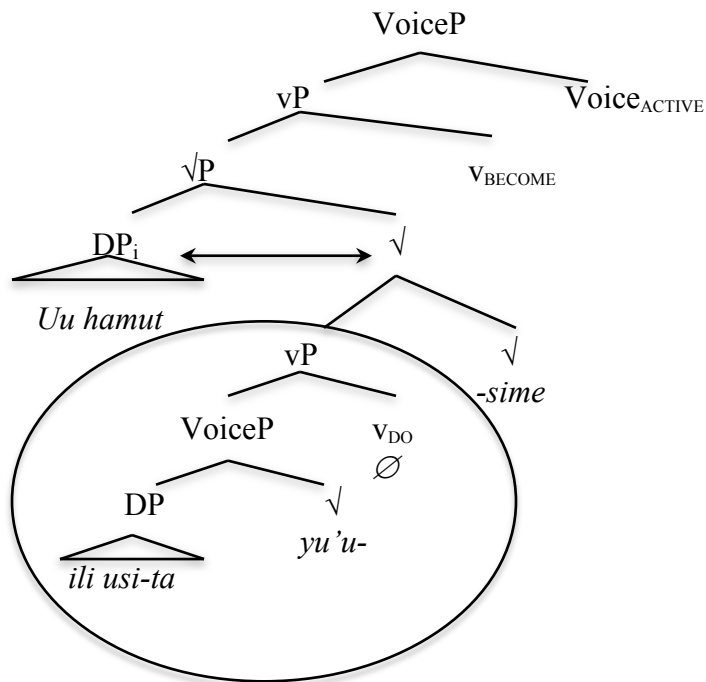
5.4.1 Situating *V-sime* amongst Hiaki complex Vs

The analysis of the structure of *V-sime* that I have presented in §5.1 has some clear differences from that of more well studied Hiaki complex Vs discussed in §3.1. Most significantly, the *V-sime* construction - (285)-(286), reproduced here as (293)-(294) - lacks a subject position in the embedded VP, whereas binding relations show that complex Vs with transitive V2s – such as (98), reproduced as (295) and with the tree structure provided in (296) - all have a lower subject position available, and therefore

must be VoiceP sized, rather than vP. In those structures, also, VP1 is the structural complement of V2, rather than an adjoined element.

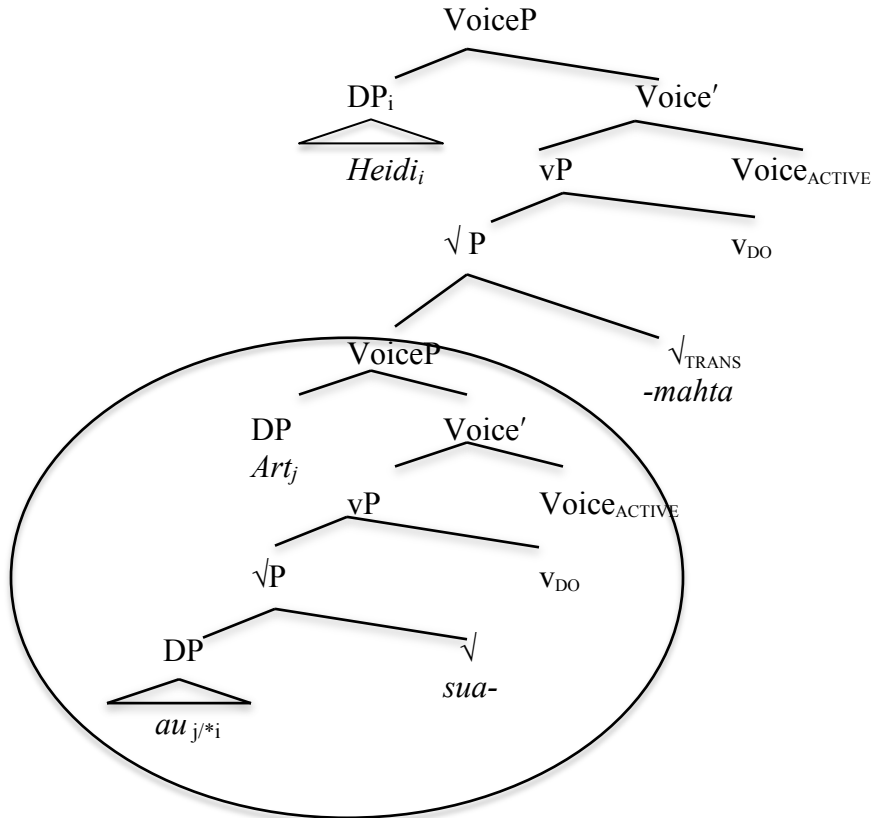
- (293) *Uu hamut ili usi-ta yu'u-sime*
 DET woman little child-ACC push-go.SG
 “The woman is pushing the little child along.”

(294)



(295) Heidi Art-ta au sua-mahta
 Heidi_i Art_j-ACC 3sgREFL_{j/*i} care.for-teach
 “Heidi teaches Art to take care of himself/*her.”

(296)



I do not claim, either, that the analysis presented here for *V-sime* constructions is necessarily applicable to all constructions with an intransitive V2 - as shown in §3.1.1 there are at least two classes of intransitive V2s with different syntactic properties. I have, rather, added to the range of understood structural configurations for Hiaki complex Vs.

It must be questioned, however, whether there is some principled way to understand some of the differences in complex V construction types. It has been shown, in Chapter 3 that there is no syntactically useful line to be drawn simply between complex Vs with bound V2s compared to those with free V2s. It is clear that a more nuanced approach is needed.

One distinction that has been important for the current study is that between functional and lexical items. Much of the literature on complex predication generally, and on motion CPRs particularly have made mention of the 'semi-lexical' nature of the morphemes in these kinds of constructions. For example, Cardinaletti and Guisti (2001) examined motion in verb sequences in several language families, and concluded that the range of properties are not consistent enough across languages to argue for a coherent class existing between the lexical and functional poles. Instead, they argue that distinctions can be understood by the insertion of lexical morphemes into functional nodes at different levels in the structure (with lexical properties becoming progressively bleached the higher the morpheme is inserted).

Butt (2010 etc) claims that light verbs, rather than being functional items distinct from their lexical 'heavy verb' counterparts, are the same lexical item, with the difference in interpretation being governed by the structural configuration - such as, for example instantiating a functional category such as v^0 - and this is the primary reason that she contends that light verbs must, by definition, have a heavy counterpart.

In Hiaki, although it is tempting to assume that bound V2s are functional whilst free V2s are lexical, there is clearly somewhat more to it than that. One determinant of a verbal morpheme's lexical status within Hiaki is its ability to be reduplicated (Haugen & Harley 2013). In the discussion in §3.2.2 I showed that some bound V2s, such as causative *-tua* are not reduplicable, whilst others, such as *-pea* ('inclination') are. Therefore we can begin to establish a sort of feature matrix for V2s, as in (297) below.

(297)

	+ bound	- bound
+ reduplication	<i>-pea</i>	<i>-sime</i>
- reduplication	<i>-tua</i>	

Thus, while non-reduplicating bound V2s are functional, and must inhabit functional nodes such as v^0 , lexical V2 may be either bound or free. This characterization runs counter to Butt's claim about the obligatoriness of heavy counterparts. If we consider inhabiting v^0 to be the defining feature of 'light verbs' then by Butt's reasoning *-tua* should have an independent verb counterpart, which it does not. However, if we consider being a lexical item (a root) to be a necessary quality for a light verb, then *-pea* should have an independent verb counterpart, which it does not. Either way, the stipulation that having an independent counterpart is a defining feature of some syntactically significant class is not upheld by the Hiaki data.

5.4.2 Situating Hiaki in the world of complex motion structures?

As was shown at length in Chapter 4 complex predicate structures inhabit a broad range of structures across a wide variety of languages and language types. Efforts to distinguish between CPr types have met with limited success - boundaries between construction types are fuzzy at best, with several points of overlap. It seems that complex predicate types may be better considered as a spectrum, rather than a clearly defined cline. As Seiss (2009) points out, categories like SVCs may even subsume others, such as LVCs and AVCs.

I have suggested that *V-sime* may be best labeled a Serial Verb Construction, largely because of the lexical nature of both Vs in the compound, however it must be acknowledged that this is a somewhat arbitrary distinction. For example, the directed motion constructions discussed for Korean in §5.2.1 are typically also labeled SVCs, although Zubizarreta and Oh (2004; 2007) analyze the V2 in these constructions as a primarily functional element.

Another issue with labeling *V-sime* constructions SVCs (instead of, for example, LVCs) particularly on the grounds that *-sime* is lexical, is that this means abandoning a single classification for Hiaki complex Vs, since causative constructions, for example, do not involve a lexical V2. Although it is, in principle, not inconceivable for a language to contain more than one type of CPr, it does obscure the commonalities that V-V compounds share that distinguish them from other kinds of multi-verb constructions in

the language, such as conjoined or subordinated clauses, and participial verbs used as modifiers.

5.5 Summary

In response to the three questions investigated in this chapter, I have drawn the following conclusions.

Question 1: V2-*sime* displays attributes best associated with a lexical, rather than a functional item, and occupies $\sqrt{0}$.

Question 2: The VP1 constituent in a V-*sime* construction must be a vP, but crucially cannot include a VoiceP layer (nor an external argument position)

Question 3: The structure of V-*sime* compounds involves adjunction of phrasal VP1 to the V2 head $\sqrt{-SIME}$.

The conclusion to this third question is, admittedly, a controversial claim, however I believe that it is the best representation of the morphological and semantic characteristics of the V-*sime* constructions.

5.6 Other remaining problems, issues, directions for future work

Several questions have arisen in the course of this study which I have been unable to answer satisfactorily within the scope of the current work, but which are deserving of further attention.

The first of these is the issue of reduplication and its position in the clausal structure.

Haugen & Harley (2013) analyze reduplication, in at least those cases where it results in a habitual reading, as occupying the head of AspP, above external argument introducing

VoiceP. However, the evidence in §3.2.2 supports an analysis of Hiaki verbal reduplication as broadly pluractional, with 'habitual aspect' merely one of a number of pragmatic interpretations of this pluractional feature. Furthermore, there is the fact that reduplication can apply to an embedded VP1 in a *V-sime* structure. Since these embedded VPs can be shown to be smaller than VoiceP, it is not feasible to assume that they include an AspP layer. Recall, also, that in §5.4.1 I pointed out that V2 elements such as causative *-tua*, which are functional – that is, inhabit v^0 – are not reduplicable. Reduplication only applies to lexical items; ie, it is roots, specifically, which can host the prefixal reduplicant.

Reduplication is a clearly productive inflectional process. In most cases, its interpretation (habitual, in progress, intensification, etc) can be fairly clearly linked to the lexical semantic properties of the verb root. The fact that a reduplicated verb, whose lexical semantics is compatible with a habitual interpretation in isolation, cannot get that interpretation when it appears in V1 position is a compelling puzzle. The first avenue of investigation into this issue might be to re-examine V1 reduplication in other types of V-V compounds that do not involve *V2-sime*. We know, for instance, that VP1 in other compounds has a larger structure, including at least a VoiceP layer, in addition to a different structural relationship with the V2 (complement instead of adjunct)⁵¹. If V1s in these types of structures can be interpreted habitually, this might tell us either something further about the domain of aspectual interpretation.

⁵¹ This structure is shown in (296).

Another issue of concern, particularly given the analysis presented here, is how to explain the non-literal motion interpretation of *-sime* in the specific instance when a stance V1 is compounded with a reduplicated *-sime* stem: V_{STANCE}-RED-*sime*. Compare the literal motion reading of (298) with its reduplicated counterpart in (299):

(298) Ume o'ow-im kamion-po **hap-saka**

DET.PL man-PL bus-LOC stand-go.PL

“The men are standing in the (moving) bus.”

(299) Ume o'ow-im kamion-po **hap-sa-saka**

DET.PL man-PL bus-LOC **stand-RED-go.PL**

“The men are standing/milling about on the bus.” (*bus no longer nec. moving*)

Since *-sime* resists non-literal interpretations in almost every other instance, even in the case of spatial paths or directions, it is curious to find this one very specific context for a non-literal reading. My analysis, as it currently stands, does not account for this behavior. It is, perhaps, conceivable that this behavior represents some early, nebulous step along the path towards grammaticalization into a functional item, although considerably more investigation into the stages of grammaticalization would be needed to determine if this is a feasible proposition.

Another issue that deserves more thorough explication involves the aspectual semantics of Hiaki and its interaction with the independent verb *siime* (and potentially other verbs

also). As I showed in §2.1.2 there are some interpretive idiosyncrasies which are currently unexplained and which are deserving of more focused attention than was possible within the confines of the current project. For example, the past imperfective form gets an unexpected interpretation of ‘it was intended, but didn’t actually occur’, as in (52), reproduced as (300).

(300) Aapo nee-u vicha siime-n...

3SG.NOM 1sg.ACC-to towards go.SG-PST

“S/he was (going to be) coming towards me...”

Not “S/he was (in the process of) coming towards me”

And, unlike most verb paradigms, *siime* does not obviously take the suffix *-kan*, which usually gets something like a past perfect reading. Instead, we get an idiosyncratic form, where the perfective stem takes a past tense suffix. It is this form that gets the interpretation, expected in the previous example, of ‘(event) was in progress’.

(301) Aapo nee-u vicha siika-n

3SG.NOM 1sg.ACC-to towards go.SG.PRF-PST

“S/he was (in the process of) coming towards me”

Not “S/he had been coming towards me”

All of these issues are at least potentially connected, dealing either with reduplication, aspect, or both. For example, clarifying the role of reduplication in different contexts

could provide insight into the unexpected non-literal interpretations of reduplicated *-sime* with stance V1s. The relationship between aspectual semantics and morphological processes like reduplication (and perhaps suppletion) should also be investigated. Future work, therefore, might focus on deeper understanding of Hiaki aspectual semantics in general, in order to provide the necessary background information to properly illuminate the questions raised here.

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