

# Constraints on Source/Goal Co-Occurrence In Carrier

William J. Poser  
University of Pennsylvania  
and University of British Columbia

[To appear in *The Nature of the Word: Essays in Honor of Paul Kiparsky*, edited by Kristin Hanson and Sharon Inkelas, MIT Press.

## 1. Introduction

This paper addresses a puzzling restriction on the combination of goal and source motion in Carrier verbs, offering a solution in terms of argument structure.

### 1.1. Restrictions on Source/Goal Combinations

In most languages it is possible to express the source and goal of motion in the same clause, as in the English “I walked from home to school”. In Carrier,<sup>1</sup> an Athabaskan language of the Central Interior of British Columbia, this is not the case; two clauses are required. They may be joined by the complementizer *hoh* “while”,<sup>2</sup> as in (1)-(2), or by the conjunction *ʔinkʼez* “and”, as in (4)-(7).<sup>3</sup>

- (1) Tače tsʼi hasya hoh Binče tsʼi ʔadʌsya.  
Tachie PP I.walked.from COMP Pinchie PP I.arrived.walking  
I walked from Tachie to Pinchie.

---

<sup>1</sup> The data in this paper are in the *SaikʼΔz* (Stoney Creek) dialect, a member of the Fraser-Nechako subgroup of the Southern branch of Carrier. Although I have not checked every detail, the facts do not appear to be materially different in the *NakʼalbΔn/DzinʔAbΔn* (Stuart/Trembleur Lake) dialect to which most of the literature on Carrier is devoted. I am grateful to Dr. Mary John, Sr., OAC for the bulk of the data, and to the late Veronica George for example (20). The transcription used is phonemic North American IPA. Underscores distinguish lamino-dental fricatives and affricates from apico-alveolars.

<sup>2</sup> The gloss “while” is only approximate. This complementizer is used in a broad range of situations in which the events of the two clauses overlap in time.

<sup>3</sup> In several of the following examples the word *tsʼi* is glossed “PP”. Although most often it can be glossed “to”, this is an underspecified directional postposition and when the verb calls for it may translate English “from”. Other abbreviations are: COMP = complementizer, 2 = 2nd person.

- (2) Lək<sup>w</sup> bətγaγAtnabayoh tinAskai hoh  
fish kitchen I.carried.containerful.from COMP  
ʔadaibayoh ts'i x<sup>w</sup>eskai.  
dining room PP I.carried.containerful  
I carried the fish from the kitchen to the dining room.
- (3) Škehhodəlʔeh nələhne nat Šaik'Az ʔet x<sup>w</sup>edig<sup>w</sup>As  
school bus twice Šaik'Az there he.sets.out.driving  
hoh nts'an k'anadag<sup>w</sup>As dzen totsak  
COMP downstream he.drives.back.and.forth day each  
The school bus goes back and forth between Stoney Creek and town  
twice a day.
- (4) Yak'Az x<sup>w</sup>aladetnak ʔink'ez ndi yAn k'einya.  
heaven he.left and this world he.came.onto  
He came to earth from heaven.
- (5) Yoh tilgai ʔink'ez bank'At ʔet talgai.  
house he.ran.from and lake there he.ran.into.water  
He ran out of the house into the lake.
- (6) Škehhodəlʔeh nələhne nat nts'an k'anadag<sup>w</sup>As  
school bus twice downstream he.drives.back.and.forth  
dzen totsak ʔink'ez Šaik'Az ʔet x<sup>w</sup>edig<sup>w</sup>As  
day each and Šaik'Az there he.sets.out.driving  
The school bus goes back and forth between Stoney Creek and town  
twice a day.
- (7) Yašk'At nakes ʔi be dAni tintoh ts'i hayangAz  
snowmobile it by moose bush PP he.dragged.it.out  
ʔink'ez ti k'eyangAz.  
and road he.dragged.it.onto  
He dragged a moose out of the bush to the road with a snowmobile.

It is not necessary for the source and goal to be overt. The same phenomenon is observed in verbs in which one directional argument is expressed by means of an adverbial prefix. In (8) the goal is expressed by the prefix *ta* “into liquid”. The same verb may instead have a source argument, as in (9), but as (10) shows source and goal may not co-occur.

- (8) DAt'aiya talts'At.  
little.bird it.fell.into.liquid  
The little bird fell into the water.

- (9) D $\Delta$ t'aiya d $\Delta$ t'o behalts' $\Delta$ t.  
 little.bird its.own.nest it.fell.out.of  
 The little bird fell out of its nest.
- (10) \*D $\Delta$ t'aiya d $\Delta$ t'o behatalts' $\Delta$ t.  
 little.bird its.own.nest it.fell.out.of.into.water  
 The little bird fell out of its nest into the water.

(Other orderings of the prefixes, viz. *tabehalts' $\Delta$ t* and *betahalts' $\Delta$ t*, do not improve this example.)

## 1.2. Specificity to Source/Goal Combinations

The constraint is specifically on the combination of source and goal. Other thematic roles are freely combined, as in (11)-(19).

source/instrumental/theme

- (11) Y $\Delta$ sk' $\Delta$ t nakes  $\text{?i}$  be d $\Delta$ ni tinto $\text{h}$  ts'i hayang $\Delta$ z.  
 snowmobile it by moose bush PP he.dragged.it.out  
 He dragged a moose out of the bush with a snowmobile.

goal/instrumental

- (12) D $\Delta$ ts'i be  $\check{\text{C}}\Delta$ nlak ts'i teke $\Delta$ .  
 his.own.canoe by Chunlac PP he.will.go.by.boat  
 He is going to go to Chunlac in his canoe.

comitative/benefactive

- (13) S $\Delta$ ts $\Delta$ s sa $\Delta$   $\text{?}\Delta$ tai ba  $\text{?id}\Delta$ 'en.  
 my.sister with.me uncle for we.2.are.working  
 My sister is working with me for our uncle.

comitative/locative

- (14) Fabian  $\text{?ink'ez}$  Ernie ba $\Delta$   $\text{?}\Delta$ t'enbayoh  
 Fabian and Ernie with.him shed  
 $\text{?et}$   $\text{?}\Delta$ h $\Delta$ t'en.  
 there they.are.working  
 Fabian is working with Ernie in the shed.

comitative/testamentary

- (15) Fabian  $\text{?ink'ez}$  Ernie ba $\Delta$  nahna $\Delta$   $\text{?}\Delta$ h $\Delta$ t'en.  
 Fabian and Ernie with.him before.us.2 they.are.working  
 Fabian is working with Ernie in our presence.

comitative/instrumental

- (16) DΛgΛsbeyatΛk be bΛt yastΛk.  
 telephone by with.him I.spoke  
 I spoke to him on the telephone.

theme/benefactive/instrumental

- (17) BenenΛdΛka be sba nΛnainezΛkai.  
 sewing.machine by for.me he.sewed.it  
 She sewed it (torn shirt) for me with a sewing machine.

instrumental/testamentary/theme

- (18) NenΛt skΛidΛne beʔΛlʔΛz be dadentʔaz yayanyΛz.  
 before.us boy hammer by window he.broke.it  
 The boy broke the window with a hammer in our presence.

adversative/benefactive

- (19) John sčʔa hΛba yatetΛk.  
 John against.me for.them he.will.speak  
 John will speak against me, for them.

The impossibility of combining source and goal is reminiscent of the restrictions on the expression of motion and path and motion and manner pointed out by Talmy (1985).

## 2. A Possible Morphological Account

Since many of the verbs involved contain adverbial prefixes that specify a source or goal, a plausible hypothesis is that the constraint is morphological in nature. Specifically, we might suppose that the constraint is simply the result of the inability of more than one adverbial prefix to occupy the same slot.

Such a proposal would be problematic since there is actually more than one position available for adverbial prefixes. This is illustrated by such examples as (9), where there are two adverbial prefixes, *be-* “inside” and *ha* “out”. In any case, the constraint is observed even in examples in which adverbial prefixes are not involved. Consider (20), which has no mono-clausal equivalent.

- (20) DΛbez                   ike           yilčut           ʔinkʔez yatezΛz  
 her.mother.in.law her.feet he.took.it and he.began.to.drag.it  
 hoh nyΛk hΛxʔΛtʔi ʔet ni:ningΛz.  
 COMP over.there they.reside there he.dragged.it.to.a.terminus  
 She took her mother-in-law’s feet and dragged her over there  
 to where they were staying.

(20) comes from a story about a prophet named Boba. While camped with her son, daughter, and daughter-in-law, Boba died. Her body was wrapped up

in preparation for cremation and put across the fire from their camp. One day, after she had been dead for a week, her daughter-in-law noticed her body moving, brought the body back to their camp, and revived her. Later, they took her back to *Nadleh* (Nautley) village where she remained alive for a month and made many prophecies. Some are interpreted as predicting the coming of horses, trains, white people, noodles, and old age pensions.

Whereas *ni:ning*<sub>ΔZ</sub> contains the adverbial prefix *ni-* “to a terminus”, *yΔtezzg*<sub>ΔZ</sub> contains no adverbial prefix. Its components are: *y(Δ)-* “3s disjoint object”,<sup>4</sup> *t-* “inceptive”, *ež* “perfective” and *g*<sub>ΔZ</sub> “drag”. The source in the situation results from the interaction of the meaning of the verb “drag” and the inceptive. The constraint is therefore not on morphological structure.

### 3. Level of Representation

The evidence we have so far considered does not specify the level of representation to which the constraint applies. In particular, it leaves open the question of whether it applies to a true semantic representation or to argument structure. There is evidence that the latter is the case.

The constraint applies only to thematic roles that are syntactically visible. Sources that are incorporated into the verb do not count for the purpose of this constraint. Some body parts may be incorporated into the verb. Such incorporated nouns may not be modified and are otherwise not available to the syntax. In (21) *nak'e* “eye socket” is incorporated into the verb “to flow”. An additional piece of evidence that it is incorporated is that the form used in contexts other than such incorporations is *nak'et*.<sup>5</sup>

- (21) X<sub>ΔZ</sub> snak'ehaindli.  
 pus it.eye.socket.flows.out.of.me  
 Pus is flowing out of my eyes.

An example in which such an incorporated source co-occurs with an explicit goal is (22).

- (22) Y<sub>Δn</sub> s<sub>Δ</sub>bal k'Δt uzek<sup>w</sup> uzahayandli.  
 carpet onto his.saliva it.mouth.flows.out.him  
 He is drooling onto the carpet.

The expression “he is drooling” literally means “his saliva is flowing out of his mouth”. The verb is “to flow”, with the incorporated postposition *ha* “from, out”,

---

<sup>4</sup> The /Δ/ is epenthetic and so, not properly speaking part of the prefix.

<sup>5</sup> Since body parts are inalienably possessed one cannot really speak of a free form. However, “eye socket” actually does have a free form of sorts since it also means “lenticel on birch bark”, which is not inalienably possessed.

and the incorporated noun *za* “mouth”. In this case the object marker is the third person singular *u*. One piece of evidence that “mouth” is incorporated is that *za* is not the normal form of mouth. Except in such incorporations, “mouth” is *-zek*. The reason that the goal may be mentioned in (22) is that the source is not syntactically visible, just as in English, a source “mouth” is implicit in “to drool” but is neither overtly nor syntactically present.

Notice that in (20) we had to appeal to an implicit source, which appears to contradict the claim just made about (22). My suggestion is that there is a difference between “drag” and “drool”. In “drag”, although the source may not be explicitly expressed, it is part of the argument structure of the verb. That is, there is an agent that does the dragging, a theme that is dragged, a source from which it is dragged, and a goal to which it is dragged. In contrast, “drool” has no source role at the appropriate level of representation.

#### 4. The Thematic Structure of Carrier Motion Verbs

I suggest that the restriction on co-occurrence of source and goal in Carrier verbs is not arbitrary but is the result of a general property of the thematic structure of Carrier motion verbs. My proposal is that Carrier motion verbs are never neutral; they always describe motion with respect to some reference point. By default, this is a goal. Morphology may further specify this goal or may change it into a source, but it may not add reference points.

Evidence for this proposal may be found by examining the simplest, most neutral possible Carrier motion verbs, namely verbs with no meaningful thematic prefixes in the progressive aspect. Such progressive forms are used to describe what at first glance appears to be pure motion with no reference point. For example, if you call someone on your cell phone from a boat and he or she asks you how you are travelling, you would say: *ʌsket* “I am going by boat”. This consists of the progressive aspect stem *ket* and the first person singular subject prefix *s*; the *ʌ* is epenthetic.<sup>6</sup>

Nonetheless, even such verbs have an intrinsic orientation to a destination. Thus, (23), in which the verb is combined with a destination, is grammatical, but (24), with an origin rather than a destination, is ungrammatical.

(23) Taće    ts’i    hekeł.  
       Tachie   PP    they.are.going.by.boat  
       They are en route to Tachie by boat.

(24) \*Taće    x<sup>w</sup>ʌts’ʌn    hekeł.  
       Tachie   from        they.are.going.by.boat  
       They are en route from Tachie by boat.

---

<sup>6</sup> In this form the progressive aspect is marked only by the stem. The progressive aspect prefix *e* seen below in the third person plural form *heket* is realized only when preceded by a prefix belonging to the class known to Athabaskanists as conjunct prefixes.

A similar observation may be made regarding the “handling verbs”. The handling verbs are a set of verbs used to describe handling of objects of various types. They form the basis for one of the several systems of noun classification in Carrier. Handling verb roots merely indicate the type of object handled. The precise way in which the object is handled is determined by the prefixes added to this root. In (25) we have a number of examples of verbs for handling two-dimensional flexible objects. In each case, comparable verbs exist for handling other classes of objects.

(25) Some Handling Verbs

behanaitelčAS	he is going to take it out
daidalatelčAS	he is going to hold it up
dΛγaidatelčAS	he is going to hang it up
huk <sup>w</sup> eitalčAS	he is going to put it on (the table)
huk <sup>w</sup> enayitalčAS	he is going to put it back on (the table)
hanaitelčAS	he is going to bring it back
sγaitelčAS	he is going to give it to me
nΛyitelčAS	he is going to carry it around
ʔatelčAS	he is going to bury
tatelčAS	he is going to submerge
natelčAS	he is going to put on the ground
yaiyatelčAS	he is going to bring it ashore

When a handling verb root is used with no thematic prefixes, it means “carry object to”, as exemplified in (26).

- (26) Tsetse tsΛzbayoh ts'i yeʔal.  
 axe woodshed PP he.is.bringing.it  
 He is bringing the axe to the woodshed.

Here the verb *yeʔal* is the progressive aspect of the verb for handling single default objects. It contains two overt prefixes. One is the singular disjoint reference third person object marker *y*. The other is the progressive aspect marker *e*. The third person singular subject marker is merely a requirement that there be a vowel in a certain position; this requirement is satisfied by the progressive aspect marker. The verb contains no prefixes that indicate the direction of motion, and as we have seen, the postposition *ts'i* is directionally neutral. The fact that the motion is to the woodshed must therefore be the result of the default thematic role.

Further evidence for a default directional role comes from the system of directional prefixes. Carrier has a number of prefixes that are usually translated as specifying motion in a certain direction. These include the following:

(27) Directional Prefixes

Prefix	Meaning	Example	Translation
ʔa	into a hole	ʔalts'at	he fell into a hole
be	inside (container)	beinlis	pee into it
da	inside (via portal)	daninya	he entered
na	to the ground	nalts'at	he fell down
ta	into liquid	talts'at	he fell into the water
t'	into a pocket	t'ʔʌčuz	I pocketed (2-D flexible)
ts	into fire	tsadanla	he put (plural) into fire
tsa	into mouth	tsanaʔdat'aih	he is snacking
ya	ashore	yaʂlat	it floated ashore

A striking fact is that there are no comparable prefixes with opposite meanings, such as “out of a hole”, “out of liquid”, “away from the ground”. Instead, these meanings are expressed by combining one of the “into” prefixes with the prefix *ha* “from, out of”. This is exemplified by (28)-(33).

- (28) t'ʔdesdʌtan  
I put (long rigid object) into my pocket
- (29) t'ʔhadesdʌtan  
I took (long rigid object) out of my pocket
- (30) tayantan  
he put it (long rigid object) into liquid
- (31) tahayantan  
he took it (long rigid object) out of liquid
- (32) dadelge  
he inserted his finger
- (33) dahadelge  
he withdrew his finger

This suggests that there is no inherent directionality to these prefixes. The appearance thereof results rather from the fact that the direction argument of motion verbs defaults to a goal. The prefix *ha*, which explicitly marks the argument a source, may be used to over-ride and reverse the default.

Further evidence of the lack of intrinsic directionality is provided by (34)-(36), all of which refer to wearing clothing on the torso, such as pants, shirts, dresses and skirts.

- (34) čaimantl'ʂʂʂ beʂʂda  
jeans I.am.wearing  
I am wearing jeans.

- (35) čaimantl'ašas benasja  
jeans I.put.on  
I put on jeans.
- (36) čaimantl'ašas behanasja  
jeans I.took.off  
I took off jeans.

(34) literally means “I am sitting within” and contains the postposition *be*, the incorporated counterpart of the independent postposition *bet*. Here it clearly has no directionality to it. (35) literally means “I walked within”. It consists of the same incorporated postposition with the underlying verb the verb *ya* “for one person to walk on one pair of limbs”. *be* is now associated with a goal argument. (36) literally means “I walked out of”. It has the same components as (35) with the addition of the prefix *ha*, which has the effect of converting the goal argument into a source. These examples show that *be* has no intrinsic directionality. When part of a stative verb it has no associated directionality. When part of a motion verb it becomes associated with a goal unless the default is over-ridden by the use of *ha*, in which case the goal is replaced by a source. The other clothing verbs, the dual and plural verbs for wearing clothing on the torso and the verbs for wearing clothing on the hands, the feet, and the head, all have the same structure and make the same point about the semantics of *be*.

## 5. Conclusion

In Carrier, it is impossible for the source and goal of motion to be specified in the same clause. This constraint applies at the level of argument structure. This results from the fact that Carrier motion verbs have a single directional argument position. This is a goal by default, but may be changed into a source by suitable morphology.

## References

- Talmy, Leonard (1985) “Lexicalization Patterns and Semantic Structure in Lexical Forms,” in T. Shopen (ed.) *Typology and Syntactic Description: Vol. 3. Grammatical Categories and the Lexicon*. Cambridge: Cambridge University Press. pp. 57-149.