In this article, I provide a description and analysis of the morphemes čiť ‘do to’, hta ‘do towards’ and čin ‘do for’ in the Southern Wakashan language Nuuchahnulth (nuučaan̓uit). I argue that these morphemes are verbal applicatives that add a non-core argument to the thematic structure of a verb. Verbal applicatives in Nuuchahnulth are interesting to investigate because they exhibit typologically unique behaviour that has never been studied before. Applicatives are traditionally considered functional elements whose only purpose is to add an indirect object to the argument structure of the verb (Pylkkanen 2002: 17). Nuuchahnulth is the only known language that productively uses independent verbs for this purpose. Nuuchahnulth is an indigenous language of Canada spoken in the province of British Columbia. It consists of 14 major dialects, most of which have never been studied. All of these dialects are now highly endangered and urgently need to be documented.

We are the Nuu-chah-nulth-aht. We continue to follow our ancestors’ true self-determination and real self-sufficiency when they lived and thrived on the lands and waters on the West Coast of Vancouver Island.

(The Nuuchahnulth Tribal Council)

* I would like to express my gratitude and appreciation to the language consultants of Nuuchahnulth Mary Jane Dick, Sarah Webster and Katherine Fraser. This article is dedicated to the people of Nuuchahnulth. The article is based on my General’s paper at the University of British Columbia, Canada, defended in partial fulfillment of the requirements for the degree of Doctor of Philosophy. This research has not been published before.
1 Introduction

The main objective of this work is twofold: First, to provide a detailed description of the morphemes čit ‘do to’, ñta ‘do towards’ and čhin ‘do for’ in Nuuchahnulth (nuučaan̓ut), an endangered indigenous language of British Columbia. Second, to propose a syntactic analysis of these morphemes.

Different languages employ different strategies for introducing a new discourse participant (Pylkkanen 2002). For example, English uses so-called double object constructions: (a) John melted some ice. (b) John melted Mary some ice (Mary is a new participant). The Bantu language Venda uses the special suffix -el: Mukasa o-nok-is-el-a Katonga mahada ‘Mukasa melted Katonga the snow’ (Katonga is a new participant). By contrast, Nuuchahnulth productively uses verbs to introduce discourse referents. In this respect, Nuuchahnulth is an unusual language, as it is the only language known to exploit such a strategy (Rose 1981). While it has been noted before that Nuuchahnulth has many typologically unique characteristics (Davidson 2002; Nakayama 2001; Stonham 1999), this way of introducing a new discourse participant has received very little attention in linguistic research (Klokeid 1978).

The data used in the article were collected by the author (unless specified otherwise) through fieldwork with three native speakers of the Ahousaht (ʕaʔuusʔaʔ) dialect of Nuuchahnulth. The speakers are literate females of 55-65 years of age. They are bilingual (with English as second language). The data were elicited using the research method of collecting native speakers’ introspective judgments, which is a standard method in linguistic research. This method involves asking native speakers to judge constructed sentences for their well-formedness. The sessions were transcribed and tape-recorded. The collected data were first checked with the speakers, and then entered into a computer database. The field-notes and the database are accessible to other researchers, as well as to educational institutions interested in the data. The research was carried out in Vancouver and on Vancouver Island, British Columbia, Canada.

The article is organized as follows: Section 1 provides a short overview of the language. Section 2 describes the morphemes čit ‘do to’, ñta ‘do towards’ and čhin ‘do for’ in Nuuchahnulth. Section 3 outlines previous analyses of the morpheme čit ‘do to’. Section 4 presents the proposal. Section 5 is devoted to the syntax of applicatives in Nuuchahnulth. Section 6 presents the conclusions. The article also contains an Appendix with a list of verbs used with the morphemes čit, ñta and čhin.
2 Nuuchahnulth

Aboriginal British Columbia is renowned for its linguistic diversity. In Canada, there are between 50 and 73 Aboriginal languages representing 11 language families (Ignace 1998). In British Columbia alone, there are between 27 and 34 Aboriginal languages, representing eight distinct language families. All of these languages have experienced a tremendous decline during the past century, and most are currently in danger of extinction (Kinkade 1991).

Nuuchahnulth is among these highly endangered languages. There are 14 traditionally unwritten dialects of Nuuchahnulth, out of which, only four have been described (Ahousaht, Ditidaht, Kyuquot, and Tseshaht). It is very important to document the language, because the number of native speakers is rapidly declining. Most community members below the age of 60 do not speak or understand Nuuchahnulth at all, which makes the revival of the language very difficult (Nakayama 2001).

Nuuchahnulth (NCN) is spoken along the west coast of Vancouver Island from Cape Cook to Pachena Point. It belongs to the Southern Wakashan branch of the Wakashan language family, along with two other languages: Ditidaht and Makah. Ditidaht is spoken on the southern coast of Vancouver Island. Makah is spoken on the Olympic Peninsula in Washington State, USA.

The clausal structure of the language is characterized by predicate-initial word order with subject inflection (person/number/mood) on the predicate (Wojdak 2002: 1). There is no object inflection on the predicate with the exception of imperatives.

(1) a. makuk^w^-mit-siš maḥṭii
   buy-PAST-3SG.IND house
   ‘I bought a house.’

   b. * makuk^w^-mit-ʔiš maḥṭii
     buy-PAST-3SG.IND house
     ‘I/He/She bought a house.’
There are two distinct verb classes in NCN: incorporating verbs (\(?u\)-verbs) and non-incorporating verbs (independent verbs) (Woo & Wojdak 2001). Incorporating verbs appear either suffixed to the morpheme \(?u\), or to an incorporated object. \(?u\) is an “empty” pleonastic morpheme glossed as \(\emptyset\) (“empty”).

(2) a. \(?u\)-?ap-mit-?i\(\dot{s}\) čakup ma\(\dot{h}\)\(\dot{t}\)i
\(\emptyset\)-buy-PAST-3SG.IND man house
‘A man bought a house.’

b. ma\(\dot{h}\)\(\dot{t}\)i-?ap-mit-?i\(\dot{s}\) čakup
house-buy-PAST-3SG.IND man
‘A man bought a house.’

c. * ?ap-mit-?i\(\dot{s}\) čakup ma\(\dot{h}\)\(\dot{t}\)i
buy-PAST-3SG.IND man house
‘A man bought a house.’ (Woo & Wojdak 2001: 1)

Non-incorporating verbs never occur with \(?u\) or an incorporated object.

(3) a. makuk\(^w\)-mit-?i\(\dot{s}\) čakup ma\(\dot{h}\)\(\dot{t}\)i
buy-PAST-3SG.IND man house
‘A man bought a house.’

b. * ?u-makuk\(^w\)-mit-?i\(\dot{s}\) čakup ma\(\dot{h}\)\(\dot{t}\)i
\(\emptyset\)-buy-PAST-3SG.IND man house
‘A man bought a house.’

c. * ma\(\dot{h}\)\(\dot{t}\)i-makuk\(^w\)-mit-?i\(\dot{s}\) čakup
house-buy-PAST-3SG.IND man
‘A man bought a house.’ (Woo & Wojdak 2001: 1)

Neither verbal type can appear suffixed to a subject.

(4) a. * čakup-?ap-mit-?i\(\dot{s}\) ma\(\dot{h}\)\(\dot{t}\)i
man-buy-PAST-3SG.IND house
‘A man bought a house.’

b. * čakup-makuk\(^w\)-mit-?i\(\dot{s}\) ma\(\dot{h}\)\(\dot{t}\)i
man-buy-PAST-3SG.IND house
‘A man bought a house.’ (Woo & Wojdak 2001: 1)

3 The morphemes či\(\dot{t}\) ‘do to’, h\(\ddot{a}\) ‘do towards’ and či\(h\)in ‘do for’

According to the speakers’ judgments, all three morphemes denote an action done to an object. These three morphemes are the only ones in the language with this meaning. Following Rose (1981), Davis & Sawai (2001), Wojdak (2002) and Sawai (2002), I gloss the morpheme či\(\dot{t}\) as ‘do to’ and the morpheme
Olga Steriopoło

*chin* as ‘do for’. Rose also translates the morpheme *hta* as ‘do to’. However, according to the native speakers, this translation misses a difference in meaning between the morphemes *čit* and *hta*. The morpheme *čit* means ‘do (something) to an object’, while the morpheme *hta* means ‘do (something) with focus on an object’. To capture this difference in meaning, I suggest to translate *hta* as ‘do towards’ with the native speakers’ agreement.

The morphemes *čit* ‘do to’, *hta* ‘do towards’ and *chin* ‘do for’ can occur either clause-finally, or clause-initially. These morphemes can optionally incorporate certain types of complements (*wh*-words, quantifiers, and personal and reflexive pronouns). The different positions of the morphemes and optional incorporation are described below.

I. No Incorporation:
   a. [ pred¹ DO IO-čit/hta/chin ]
   b. [ IO-čit/hta/chin pred DO ]

II. Incorporation:
   a. [ DO-pred IO-čit/hta/chin ]
   b. [ IO-čit/hta/chin DO-pred ]

**The morpheme *čit* ‘do to’**

  ǝį-give-PAST-3SG.IND John flowers many-do.to
  ‘John gave flowers to many.’

b. ?aya-čit-mit-ʔiš John ?u-yii įiihciiip
  many-do.to-PAST-3SG.IND John ǝį-give flowers
  ‘John gave flowers to many.’

c. įiihciiip-yii-mit-ʔiš John ?aya-čit
  flowers-give-PAST-3SG.IND John many-do.to
  ‘John gave flowers to many.’

d. ?aya-čit-mit-ʔiš John įiihciiip-yii
  many-do.to-PAST-3SG.IND John flowers-give
  ‘John gave flowers to many.’

¹ pred = predicate
The morpheme ʰta ‘do towards’

(6)  
a. ʔu-yii-mit-ʔiś John ʰihičiiʔ ʔaya-ʰta ə-give-past-3sg.ind John flowers many-do.towards ‘John gave flowers to many.’
b. ʔaya-ʰta-mit-ʔiś John ʔu-yii ʰihičiiʔ many-do.towards-past-3sg.ind John ə-give flowers ‘John gave flowers to many.’
c. ʰihičiiʔ-yii-mit-ʔiś John ʔaya-ʰta flowers-give-past-3sg.ind John many-do.towards ‘John gave flowers to many.’
d. ʔaya-ʰta-mit-ʔiś John ʰihičiiʔ-yii many-do.towards-past-3sg.ind John flowers-give ‘John gave flowers to many.’

The morpheme chin ‘do for’

(7)  
a. ʔu-ʰčii-siś haʔum sut-chin ø-cook-1sg.ind food you-do.for ‘I cook food for you.’
b. sut-chin-siś ʔu-ʰčii haʔum you-do.for-1sg.ind ø-cook food ‘I cook food for you.’
c. haʔum-ʰčii-siś sut-chin food-cook-1sg.ind you-do.for ‘I cook food for you.’
d. sut-chin-siś haʔum-ʰčii you-do.for-1sg.ind food-cook ‘I cook food for you.’

The morphemes čit ‘do to’, ʰta ‘do towards’ and chin ‘do for’ obligatory suffix to the following objects: the reflexive pronoun ʔukʷa ‘self’, the personal pronouns sii ‘me’, sut ‘you-sg’, niïh ‘us’ and siih ‘you-pl’; and wh-words if these objects occur in the sentence. They optionally suffix to object-quantifies and to the pleonastic morpheme ʔu-. These morphemes never attach to a subject.

(8)  
b. ?u-čus-mit-?iš čakup ?ukwa-čit
   φ-make.fun-PAST-3SG.IND man self-do.to
   ‘A man made fun of himself.’

   φ-do.to-PAST-3SG.IND man self φ-make.fun
   ‘A man made fun of himself.’

   φ-do.to-PAST-3SG.IND man self-make.fun
   ‘A man made fun of himself.’

In (8a) and (8b), the morpheme čit ‘do to’ is suffixed to the reflexive pronoun ?ukwa ‘self’, and the sentences are correct. In (8c) and (8d), this morpheme is not suffixed to the reflexive, and the sentences are ungrammatical.

(9) a. sii-čit-mit-?iš čakup ?u-čus (with personal pron.)
   me-do.to-PAST-3SG.IND man φ-make.fun
   ‘A man made fun of me.’

b. ?u-čus-mit-?iš čakup sii-čit
   φ-make.fun-PAST-3SG.IND man me-do.to
   ‘A man made fun of me.’

   φ-do.to-PAST-3SG.IND man me φ-make.fun
   ‘A man made fun of me.’

d. * ?u-čit-mit-?iš čakup sii-čus
   φ-do.to-PAST-3SG.IND man me-make.fun
   ‘A man made fun of me.’

In (9a) and (9b), the morpheme čit ‘do to’ is suffixed to the personal pronoun sii ‘me’, and the sentences are grammatical. In (9c) and (9d), this morpheme is not suffixed to the same personal pronoun, and the sentences are incorrect.

(10) a. ?ača-čit-mit-?iš čakup ?u-čus (with wh-object)
    who-do.to-PAST-3SG.IND man φ-make.fun
    ‘Who(m) did a man make fun of?’

    φ-do.to-PAST-3SG.IND man who φ-make.fun
    ‘Who(m) did a man make fun of?’

    φ-do.to-PAST-3SG.IND man who-make.fun
    ‘Who(m) did a man make fun of?’
In (10a), the morpheme ċič ‘do to’ is suffixed to the wh-word ?ača ‘who’, which yields a grammatical sentence. In (10b) and (10c), however, this morpheme is not suffixed to the wh-word, and the sentence is incorrect.

(11)  

(a) hiš-čič-mit-?iš çakup ?u-čus (with quantifier)  
everybody-do.to-PAST-3SG.IND man ø-make.fun  
‘A man made fun of everybody.’

(b) ?u-čus-mit-?iš çakup hiš-čič  
ø-make.fun-PAST-3SG.IND man everybody-do.to  
‘A man made fun of everybody.’

(c) ?u-čič-mit-?iš çakup hiš-aata ?u-čus  
ø-do.to-PAST-3SG.IND man everybody-direction ø-make.fun  
‘A man made fun of everybody.’

In (11a) and (11b), the morpheme ċič ‘do to’ is suffixed to the quantifier hiš-‘everybody’. In (11c), this morpheme is not suffixed to the quantifier. All three sentences are grammatical, which illustrates that the morpheme ċič ‘do to’ can optionally suffix to quantifiers. The sentence (11c) also shows that ċič ‘do to’ can attach to the pleonastic morpheme ?u-.

In (12), the sentence can only be correct if the wh-word is an object. If the wh-word refers to the subject, the sentence becomes ungrammatical.

(12) ?ača-čič-mit-?iš hiš-aata ?u-čus (with subject)  
who-do.to-PAST-3SG.IND everybody-direction ø-make.fun  
* ‘Who made fun of everybody?’ (wh-word = subject)  
‘Who(m) did everybody make fun of?’ (wh-word = object)

The discussed above is summarized in the Table 1 below.

Table 1: The use of čič ‘do to’, ĥta ‘do towards’ and čin ‘do for’ in Nuuchahnulth

<table>
<thead>
<tr>
<th>Category</th>
<th>čič/ĥta/čin</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objects</strong></td>
<td></td>
</tr>
<tr>
<td>Reflexive pronoun</td>
<td>√ (obligatory)</td>
</tr>
<tr>
<td>?ukʷa ‘self’</td>
<td></td>
</tr>
<tr>
<td>Personal pronouns</td>
<td>√ (obligatory)</td>
</tr>
<tr>
<td>sii ‘me’, sut ‘you-sg’, niih ‘us’, siih ‘you-pl’</td>
<td></td>
</tr>
<tr>
<td>Wh-words</td>
<td>√ (obligatory)</td>
</tr>
<tr>
<td>Quantifiers</td>
<td>√ (optional)</td>
</tr>
<tr>
<td>Pleonastic morpheme</td>
<td>√ (optional)</td>
</tr>
<tr>
<td>?u-</td>
<td></td>
</tr>
<tr>
<td><strong>Subjects</strong></td>
<td>*</td>
</tr>
</tbody>
</table>
4 Previous analyses of the morpheme čiť ‘do to’

There has been no research done explicitly on the morphemes hta ‘do towards’ and chin ‘do for’. However, two syntactic analyses of the morpheme čiť ‘do to’ have been proposed. Both analyses focus on the interaction of čiť ‘do to’ with wh-words.

According to one analysis (Davis & Sawai 2001), čiť is an object auxiliary generated above the VP. According to the other analysis (Sawai 2002), čiť is a focus particle generated above the IP. It has also been suggested by Wojdak (2002) that čiť could be analyzed as an accusative case marker. I discuss all three proposals in turn below.

4.1 čiť ‘do.to’ is an object auxiliary (Davis & Sawai 2001)

According to Davis & Sawai, čiť is an incorporating object auxiliary projected above the VP. Wh-words attach to čiť ‘do.to’ when used with a non-incorporating verb. The wh-verb complex then undergoes head-movement to Mood, and after that to C (13b).

To account for the fact that a wh-word cannot incorporate into a non-incorporating verb, Davis & Sawai adopt a “relativized” version of Relativized Minimality² (Rizzi 1995). They propose that only potentially incorporating predicate can count as an intervening head for purposes of incorporation. Therefore, in (13b) above, the wh-word ṭačaq ‘who’ incorporates into the auxiliary čiť ‘do.to’ without a minimality violation.

A fatal problem with Davis & Sawai’s analysis was pointed out by Wojdak (2002). According to Wojdak, if extended to account for the reflexive pronoun ṭukʷa ‘self’, the analysis violates Relativized Minimality. Thus, in (14b), the movement a should be blocked, because the auxiliary čiť ‘do.to’ intervenes between I and V. The sentence (14b) is predicted to be ungrammatical. However, it is attested in NCN (see below).

(13) a. ṭaača-čiť-h kaapap John who-do.to-3sg.int like John ‘Who does John like?’

² Relativized Minimality: X x-governs Y if there is no Z such that (i) Z is a typical potential x-governor for Y; (ii) Z c-commands Y and Z does not c-command X.
Verbal applicatives in Nuuchahnulth

b. MoodP
   Mood
       h
   3SG.INT
   AUXP
      AUX
         čit
      do.to
      VP
         John
         V'
         V
         WH
         kaapap
         like
         ?ačaq
         who

(Davis & Sawai 2001: 128)

(14) a. ŋaatsičik-s ŋukwa-čit
    see-1SG.IND self-do.to
    ‘I saw myself.’

b. IP
   I
       s
   1SG.IND
   AUXP
      AUX
         čit
      do.to
      VP
         DP
         pro
         V
         ReflP
         Refl
         ŋaatsičik
         see
         ŋukwa
         self

(Wojdak 2002: 12)
4.2 čil ‘do.to’ is a focus particle (Sawai 2002)

According to Sawai (2002), čil ‘do to’ is a focus particle generated above the IP in the head of FocP. The wh-phrase moves into Spec,FocP to check the strong [focus] feature of the head.

This analysis predicts that čil ‘do to’ should always appear before the main predicate, because it is generated above the main predicate in a syntactic tree. However, this does not account for the correct sentences where čil ‘do to’ is used clause-finally after the main predicate (see 15 below).

(15) What did you do to yourself?
   a. ?u-čus-mit-siš ?ukʷa-čil
      ø-make.fun-PAST.1SG.IND self-do.to
      ‘I MADE FUN of myself.’
   b. mačił-mit-siš ?ukʷa-čil
      bite-PAST.1SG.IND self-do.to
      ‘I BIT myself.’

This analysis also predicts that in (15), the reflexive pronoun ?ukʷa ‘self’ should be focused, because it attaches to the focus particle čil. However, as the data above indicate, it is not the case in the language. In (15a), only the verbs čus ‘make fun’ is focused and in (15b), only the verb mačił ‘bite’ is focused.

4.3 čil ‘do.to’ is a structural accusative case marker

If the morpheme čil ‘do to’ were a structural ACC case marker, it would predict that this morpheme cannot be sensitive to theta roles of the verb’s arguments. Thus, in both (16) and (17) below, čil ‘do to’ should attach to ?aya ‘many’ because ?aya is a complement of the verb.

(16) a. ?u-ľaałuk-mit-ʔiš čakup ?aya-čil
    ø-take.care-PAST-3SG.IND man many-do.to
    ‘A man took care of many.’
    ø-take.care-PAST-3SG.IND man many
    ‘A man took care of many.’

---

3 This example as well as all correct examples below are grammatical data in Nuuchahnulth volunteered by native speakers. The examples do not miss information, compared with their English translations, where the word something is missing.
c.  
\[ \text{VP} \]
\[ \text{V} \quad \text{DP (GOAL) [ACC]} \]
\[ \text{?aałuk} \quad \text{?aya-čít} \]
\[ \text{take.care} \quad \text{many-do.to} \]

(17)  
\[ \text{ö-kill-PAST-3SG.IND man many} \]
\[ \text{‘A man killed many.’} \]

b. ?u-suup-mit-?iš čakup ?aya  
\[ \text{ö-kill-PAST-3SG.IND man many} \]
\[ \text{‘A man killed many.’} \]

c.  
\[ \text{VP} \]
\[ \text{V} \quad \text{DP (THEME) [ACC]} \]
\[ \text{suup} \quad *\text{?aya-čít} \]
\[ \text{kill} \quad \text{many-do.to} \]

However, as the data above indicate, it is not the case in the language. The NCN sentences show that this morpheme is sensitive to theta roles of the verb’s complements. In (16), ?aya ‘many’ is a goal argument of the verb. The morpheme čít ‘do to’ attaches to this argument, and the sentence is correct. In (17), ?aya ‘many’ is a theme argument. The morpheme čít ‘do to’ attaches to it, and the sentence is ungrammatical. This sensitivity with regard to theta-roles is not predicted by the analysis of čít ‘do to’ as an ACC case marker.

To rule out a possibility that the verb suup ‘kill’ in (17) is “special”, such that it does not assign ACC case to its complement, I illustrate below more examples where čít ‘do to’ is ungrammatical on the theme argument of the verb (18-20).

(18)  
\[ \text{ö-eat-PAST-3SG.IND man many-do.to} \]
\[ \text{‘A man ate a lot.’} \]

b. ?u-?iic-mit-?iš čakup ?aya  
\[ \text{ö-eat-PAST-3SG.IND man many} \]
\[ \text{‘A man ate a lot.’} \]

In (18) above, čít ‘do to’ is ungrammatical on the theme argument ?aya ‘many’ of the verb ?iic ‘eat’. 
In (19) above, čišt ‘do to’ is ungrammatical on the Theme argument ?aya ‘many’ of the verb kwišt ‘make’.

In (20), čišt ‘do to’ is ungrammatical on the Theme argument ?aya ‘many’ of the verb yii ‘give’. However, it is grammatical with the Goal argument of this verb. Thus, in (20a), ?aya ‘many’ is a Goal argument of the verb yii ‘give’. The morpheme čišt ‘do to’ attaches to this argument, and the sentence is correct. In (20b), ?aya ‘many’ is a Theme argument of the same verb yii ‘give’, and the grammatical sentence occurs without čišt ‘do to’.

Another argument that shows that čišt ‘do to’ is not a structural ACC case marker concerns passive constructions in NCN. If this morpheme were a structural ACC case marker, we would expect it not to appear on the Theme which has been promoted to subject in passive constructions (see Kim 2001 on object promotion in passive constructions). However, as the example (21b) below indicates, čišt ‘do to’ is grammatical on the promoted object in a passive clause (compare with 21a).

As (21) shows, the morpheme čišt ‘do to’ is used in both active and passive clauses, which is not predicted by this analysis.
Another piece of evidence that čiť ‘do to’ is not a case marker comes from its position in a clause. If čiť ‘do to’ were a case marker, we would expect it to appear attached to the argument and act as a constituent with the argument. However, as the examples below indicate, čiť ‘do to’ can occur either on the argument, or separated from it (as in 22b, compare with 22a), which is unexpected if analyzing čiť ‘do to’ as a case marker.

(22)  a.  ?aya-čiť-mit-ʔiš čakup ?u-ćus (on the argument)  
    many-do.to-past-3sg.ind man ø-make.fun  
    ‘A man made fun of many.’

    b.  ?u-čiť-mit-ʔiš čakup ?aya ?u-ćus (separated)  
        ø-do.to-past-3sg.ind man many ø-make.fun  
    ‘A man made fun of many.’

5 The proposal

I propose that the morphemes čiť ‘do to’, hta ‘do towards’ and chin ‘do for’ are verbal applicatives that add a non-core (additional) argument to the thematic structure of a verb. In 5.1, I show that these morphemes are verbs. In 5.2, I argue that these morphemes serve to introduce a non-core argument.

5.1 The morphemes čiť ‘do to’, hta ‘do towards’ and chin ‘do for’ are verbs

One argument in favor of the verbal status of the morphemes čiť ‘do to’, hta ‘do towards’ and chin ‘do for’ is that they appear independently as verbs meaning ‘do to’, ‘do towards’ and ‘do for’.

The morpheme čiť ‘do to’

(23)  a.  ?u-čiť-mit-ʔiš John ?umʔiíq (as a verb in a statement)  
    ø-do.to-pAST-3SG.IND John mother  
    ‘John did (something) to mother.’

    b.  ?ača-čiť-mit-ʰ John (as a verb in a question)  
        who-do.to-pAST-3SG.INT John  
    ‘Who(m) did John do (something) to?’
The morpheme ḥta ‘do towards’

    ṧ-do.towards-PAST-3SG.IND John mother
    ‘John did (something) to mother.’

    b. ?ača-ḥta-mit-ḥ John (as a verb in a question)
    who-do.towards-PAST-3SG.INT John
    ‘Who(m) did John do (something) to?’

The morpheme čhin ‘do for’

    ṧ-do.for-PAST-3SG.IND John mother
    ‘John did (something) for mother.’

    b. ?ača-čhin-mit-ḥ John (as a verb in a question)
    who-do.for-PAST-3SG.INT John
    ‘Who(m) did John do (something) to?’

These morphemes can have the same arguments as other verbs in NCN: they can be used with common nouns, proper names, inanimate nouns, reflexive pronouns, personal pronouns and quantifiers.

(26) a. ?u-čit-mit-ʔiš John ?um?iiq (as a verb in a statement)
    ṧ-do.to-PAST-3SG.IND John mother
    ‘John did (something) to mother.’

    b. ?u-čus-mit-ʔiš John ?um?iiq (as a verb in a question)
    ṧ-make.fun-PAST-3SG.IND John mother
    ‘John made fun of mother.’

In (26a) above, the morpheme čit ‘do to’ is used with the common noun ?um?iiq ‘mother’. In (26b), the verb čus ‘make fun’ is used with the same common noun.

(27) a. ?u-čit-mit-ʔiš Mary John (as a verb in a statement)
    ṧ-do.to-PAST-3SG.IND Mary John
    ‘Mary did (something) to John.’

    b. ?u-čus-mit-ʔiš Mary John (as a verb in a question)
    ṧ-make.fun-PAST-3SG.IND Mary John
    ‘Mary made fun of John.’

In (27a), the morpheme čit ‘do to’ is used with the proper name John. In (27b), the verb čus ‘make fun’ is used with the same proper name.
Verbal applicatives in Nuuchahnulth

(28) a. \(\texttt{?u-} \textit{čit-mit-}?i\text{š} \) John huupuk\textsuperscript{w} as-uk Bill
\(\texttt{Ø-do.to-PAST-3SG.IND} \) John car-possessive Bill
\textit{‘John did (something) to Bill’s car.’}

b. \(\texttt{?u-} \textit{čus-mit-}?i\text{š} \) John huupuk\textsuperscript{w} as-uk Bill
\(\texttt{Ø-make.fun-PAST-3SG.IND} \) John car-possessive Bill
\textit{‘John made fun of Bill’s car.’}

In (28a), the morpheme \textit{čit ‘do to’} is used with the inanimate noun \textit{huupuk\textsuperscript{w}as ‘car’}. In (28b), the verb \textit{čus ‘make fun’} is used with the same inanimate noun.

(29) a. \(\texttt{?uk\textsuperscript{w}a-} \textit{čit-mit-}?i\text{š} \) John
\texttt{self-do.to-PAST-3SG.IND} John
\textit{‘John did (something) to himself.’}

b. \(\texttt{?uk\textsuperscript{w}a-} \textit{čus-mit-}?i\text{š} \) John
\texttt{self-make.fun-PAST-3SG.IND} John
\textit{‘John made fun of himself.’}

In (29a), the morpheme \textit{čit ‘do to’} is used with the reflexive pronoun \textit{?uk\textsuperscript{w}a ‘self’}. In (29b), the verb \textit{čus ‘make fun’} is used with the same reflexive pronoun.

(30) a. \(\texttt{sut-} \textit{čit-mit-}?i\text{š} \) John
\texttt{you-do.to-PAST-3SG.IND} John
\textit{‘John did (something) to you.’}

b. \(\texttt{sut-} \textit{čus-mit-}?i\text{š} \) John
\texttt{you-make.fun-PAST-3SG.IND} John
\textit{‘John made fun of you.’}

In (30a), the morpheme \textit{čit ‘do to’} is used with the personal pronoun \textit{sut ‘you’}. In (30b), the verb \textit{čus ‘make fun’} is used with the same personal pronoun.

(31) a. \(\texttt{?u-} \textit{čit-mit-}?i\text{š} \) John hiš-aata
\texttt{Ø-do.to-PAST-3SG.IND} John everybody-direction
\textit{‘John did (something) to everybody.’}

b. \(\texttt{?u-} \textit{čus-mit-}?i\text{š} \) John hiš-aata
\texttt{Ø-make.fun-PAST-3SG.IND} John everybody-direction
\textit{‘John made fun of everybody.’}

In (31a), the morpheme \textit{čit ‘do to’} is used with the quantifier \textit{hiš ‘everybody’}. In (31b), the verb \textit{čus ‘make fun’} is used with the same quantifier.

Another piece of evidence that \textit{čit ‘do to’}, \textit{hta ‘do towards’} and \textit{chin ‘do for’} are verbs comes from examples where these morphemes can occur with the passive suffix \textit{-?at}, just like other verbs in NCN.
(32) a. \(\text{?u-čit-\-}?)\text{-at-mit-\-}?)\text{iš} \quad \text{?um?iiq} \\
\text{Ø-do.to-PASSIVE-PAST-3SG.IND mother} \\
‘It was done to mother.’

b. \(\text{?u-čus-\-}?)\text{-at-mit-\-}?)\text{iš} \quad \text{?um?iiq} \\
\text{Ø-make.fun-PASSIVE-PAST-3SG.IND mother} \\
‘Mother was made fun of.’

In (32a), the morpheme čit ‘do to’ appears with the passive suffix -?at. In (32b), the verb čus ‘make fun’ is used with the same passive suffix.

In NCN, only incorporating predicates can occur with the expletive morpheme ?u- (Woo & Wojdak 2001). As the data below show, the morphemes čit ‘do to’, řta ‘do towards’ and chin ‘do for’ can also occur with the expletive ?u- (see also Section 2.2).

(33) a. \(\text{?u-čit-\-}?)\text{-mit-\-})\text{iš} \quad \text{John ?um?iiq} \\
\text{Ø-do.to-PAST-3SG.IND John mother} \\
‘John did (something) to mother.’

b. \(\text{?u-čus-mit-\-}?)\text{iš} \quad \text{John ?um?iiq} \\
\text{Ø-make.fun-PAST-3SG.IND John mother} \\
‘John made fun of mother.’

In (33a), the morpheme čit ‘do to’ appears with the expletive morpheme ?u-. In (33b), the verb čus ‘make fun’ is used with the expletive ?u-.

Another similarity with incorporating verbs is that čit ‘do to’, řta ‘do towards’ and chin ‘do for’ can suffix to a wh-word.

(34) a. \(\text{?ača-čit-\-})\text{-mit-\-})\text{iš} \quad \text{John} \\
\text{who-do.to-PAST-3SG.IND John} \\
‘Who(m) did John do (something) to?’

b. \(\text{?ača-suup-})\text{-ač} \quad \text{John} \\
\text{who-kill-3SG.INT-CONFIRM John} \\
‘Who did John kill?’

In (34a), the morpheme čit ‘do to’ appears suffixed to the wh-word ?ača ‘who’. In (34b), the verb čus ‘make fun’ is also suffixed to the same wh-word.

I have shown above that the morphemes čit ‘do to’, řta ‘do towards’ and chin ‘do for’ and incorporating verbs behave very similarly in NCN. The question arises: are there any differences? The only difference found is that unlike other incorporating verbs, čit ‘do to’, řta ‘do towards’ and chin ‘do for’ cannot suffix to a noun or another verb.
Verbal applicatives in Nuuchahnulth

(35)  a. * ?a-ʔiič-čit-mit-ʔiš
     PL-old.person-do.to-PAST-3SG.IND John
     ‘John did (something) to old people.’

    b. ?a-ʔiič-ʔaałuk-mit-ʔiš
     PL-old.person-take.care-PAST-3SG.IND John
     ‘John took care of old people.’

In (35a), the morpheme čit ‘do to’ is ungrammatical when suffixed to the noun ?aʔiič ‘old people’. In (35b), the verb ʔaałuk ‘take care’ appears suffixed to the noun ?aʔiič ‘old people’.

(36)  a. * ʔiix-čit-mit-ʔiš
     laugh-do.to-PAST-3SG.IND John mother
     ‘John did (something) laughing at mother.’

    b. ʔiix-čus-mit-ʔiš
     laugh-make.fun-PAST-3SG.IND John mother
     ‘John made fun laughing at mother.’

In (36a), the morpheme čit ‘do to’ is ungrammatical when suffixed to the verb ʔiix ‘laugh’. In (36b), the verb čus ‘make fun’ is suffixed to the verb ʔiix ‘laugh’.

I attempt to explain this difference between čit, ʔhta and chın and other incorporating verbs in NCN in the Section 6.3.

The discussed above is summarized in the Table 2.

Table 2: The morphemes čit ‘do to’, ʔhta ‘do towards’, chın ‘do for’ are verbs

<table>
<thead>
<tr>
<th>Properties</th>
<th>čit/ʔhta/chın</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occur as verbs in sentence</td>
<td>✓</td>
</tr>
<tr>
<td>Used with: common/proper,</td>
<td></td>
</tr>
<tr>
<td>animate/inanimate nouns, pronouns,</td>
<td>✓</td>
</tr>
<tr>
<td>quantifiers</td>
<td></td>
</tr>
<tr>
<td>Appear with passive -ʔat</td>
<td>✓</td>
</tr>
<tr>
<td>Occur with expletive ʔu-</td>
<td>✓</td>
</tr>
<tr>
<td>Suffix to wh-words, pronouns,</td>
<td>✓</td>
</tr>
<tr>
<td>quantifiers</td>
<td></td>
</tr>
<tr>
<td>Suffix to nouns, verbs</td>
<td>✓</td>
</tr>
</tbody>
</table>
5.2 The morphemes čiļ ‘do to’, hta ‘do towards’ and chin ‘do for’ are applicatives

Many languages have a means of adding an indirect object to the argument structure of a verb (Pylkkanen 2002). This is widely attested in the Bantu languages amongst many others (Bresnan & Moshi 1993). Such additional arguments are called applied arguments. The term applicatives is used to refer to elements that serve to add an applied argument to the argument structure of a verb. I argue that the morphemes čiļ ‘do to’, hta ‘do towards’ and chin ‘do for’ are applicatives, because they are used to introduce such additional (non-core) arguments.

In the following example (37a), the intransitive stative verb hiixwat ‘be angry’ has the core argument agent ‘I’. In (37b) and (37c), the non-core argument ?aya ‘many’ is added, in which case the morphemes čiļ ‘do to’ or hta ‘do towards’ appear in the sentence.

(37) a. hiixwat-hi-siš
   be.angry-state-1sg.ind
   ‘I am angry.’

   b. hiixwat-hi-siš     ?aya-čiļ
   be.angry-state-1sg.ind many-do.to
   ‘I am angry at many.’

   c. hiixwat-hi-siš     ?aya-hta
   be.angry-state-1sg.ind many-do.towards
   ‘I am angry at many.’

čiļ ‘do to’ and hta ‘do towards’ are also used in questions when an additional argument occurs in the sentence (38a and 38b below).

(38) a. ?aća-čiļ-k      hiixwat-hi
   who-do.to-2sg.int be.angry-state
   ‘Who are you angry at?’

   b. ?aća-hta-k      hiixwat-hi
   who-do.towards-2sg-int be.angry-state
   ‘Who(m) are you angry at?’

In (38a) and (38b), the non-core argument ‘who’ is added. As a result, the morphemes čiļ ‘do to’ or hta ‘do towards’ appear in the sentence.

(39) a. kamatq-siš-?aća-šiš
   run-perf-future-1sg.ind
   ‘I will run (e.g. to the store).’
Verbal applicatives in Nuuchahnulth

b. kamatq-šič-ʔaq̓-siš ʔaya ʔin ...
run-perf-future-1sg.ind many-do.for
‘I will run for many (on behalf of many).’

In (39a), the intransitive unergative verb kamatq ‘run’ has the core argument agent ‘I’. In (39b), the non-core argument ‘many’ is added, which causes the morpheme ʔin ‘do for’ to appear in the sentence.

(40) ʔača-ʔin-ʔaq̓-k kamatq-šič
who-do.fut-future-2sg.int run-perf
‘For who(m) will you run?’

In (40), the non-core argument ‘who’ is added, and the morpheme ʔin ‘do for’ is used in the sentence.

(41) a. qaacii-ʔap-mit-ʔiš ʔohn suuhaa
give.food-bring-past-3sg.ind John salmon
‘John brought a salmon.’

b. qaacii-ʔap-mit-ʔiš ʔohn suuhaa ?aya-ʔiʔ

give.food-bring-past-3sg.ind John salmon many-do.to
‘John brought a salmon to many.’

c. qaacii-ʔap-mit-ʔiš ʔohn suuhaa ?aya-ʔta

give.food-bring-past-3sg.ind John salmon many-do.towards
‘John brought a salmon to many.’

In (41a), the transitive verb qaacii ‘bring’ has two core arguments: the agent ‘John’ and the theme ‘salmon’. When the non-core argument ‘many’ is added, the morphemes ʔiʔ ‘do to’ or ʔta ‘do towards’ are used in the sentence (41b), (41c).

(42) a. ?ača-ʔiʔ-mit-ʔh ʔohn qaacii-ʔap suuhaa
who-do.to-past-2sg.int John give.food-bring salmon
‘Who(m) did John bring a salmon to?’

b. ?ača-ʔta-mit-ʔh ʔohn qaacii-ʔap suuhaa
who-do.towards-past-2sg.int John give.food-bring salmon
‘Who(m) did John bring a salmon to?’

In (42a) and (42b), the non-core argument ‘who’ is added. As a result, the morphemes ʔiʔ ‘do to’ or ʔta ‘do towards’ appear in the sentence.

(43) a. haʔum-hčii-siš
food-cook-1sg.ind
‘I cook food.’
b. haʔum-hčii-siš ʔaya-chin
   food-cook-1sg.ind many-do.for
   ‘I cook food for many.’

In (43a), the transitive verb hčii ‘cook’ has two core arguments, the agent ‘I’ and
the theme ‘food’. When the non-core argument ‘many’ is added, the morpheme
chin ‘do for’ appears in the sentence (43b).

(44) ?ača-chin-k haʔum-hčii
    who-do.for-2sg.int food-cook
    ‘Who(m) do you cook food for?’

In (44), the non-core argument ‘who’ is added, and the morpheme chin ‘do for’
is used in the sentence.

I have shown above that the morphemes čiɨ ‘do to’, hta ‘do towards’ and
chin ‘do for’ occur with additional arguments in NCN. If these morphemes are
applicatives, i.e. they serve to add a non-core argument to the thematic structure
of a verb, we would expect that additional arguments cannot be added without
these morphemes. This prediction is shown to be correct in the examples below.

(45) a. * qaacii-týap-mit-ʔiš John suuhaa ʔaya
give.food-bring-past-3sg.ind John salmon many
   ‘John brought a salmon to many.’

b. qaacii-týap-mit-ʔiš John suuhaa ʔaya-čiɨ
give.food-bring-past-3sg.ind John salmon many-do.to
   ‘John brought a salmon to many.’

c. qaacii-týap-mit-ʔiš John suuhaa ʔaya-hta
give.food-bring-past-3sg.ind John salmon many-do.towards
   ‘John brought a salmon to many.’

(46) a. * haʔum-hčii-siš ʔaya
    food-cook-1sg.ind many
    ‘I cook food for many.’

b. haʔum-hčii-siš ʔaya-chin
    food-cook-1sg.ind many-do.for
    ‘I cook food for many.’

The current theory predicts that the applicative morphemes čiɨ ‘do to’, hta ‘do
towards’ and chin ‘do for’ cannot be used with a core argument of the verb.
Below I show that this prediction is borne out, as these morphemes are ungram-
matical with a core theme argument of the verb.
Verbal applicatives in Nuuchahnulth

(47) a. haʔum-hčii-siʔ ʔaya
   food-cook-1sg.ind many
   ‘I cook lots of food.’

b. ?u-ʔčii-siʔ [ʔaya haʔum]
   ø-cook-1sg.ind many food
   ‘I cook lots of food.’

c. * ?u-ʔčii-siʔ
   ø-cook-1sg.ind
   ‘I cook.’

d. * haʔum-ʔčii-siʔ ʔaya-čit
   food-cook-1sg.ind many-do.to
   ‘I cook lots of food.’

e. * ?u-ʔčii-siʔ [ʔaya-čit haʔum]
   ø-cook-1sg.ind many-do.to food
   ‘I cook lots of food.’

In (47d) and (47e), the applicative is attached to the core theme argument, and the sentences are ungrammatical.

6  A syntactic structure for the NCN applicatives

Pylkkanen (2002) argues that cross-linguistically there are two different types of applicatives: high applicatives and low applicatives. High applicatives denote a relation between an event and an individual and attach above the verb (48). Low applicatives denote a relation between two individuals and attach below the verb (50). The two constructions are similar in that in both, the applied (additional) argument asymmetrically c-commands the direct object.

(48) VoiceP
    Subj       Voice’
    Voice       ApplP
    DP1         Appl’
    Appl       VP
    V          DP2

(Pylkkanen 2002: 19)
In (48), the applicative adds another participant to the event described by the verb. An example with a high applicative is shown in (49).

(49) High applicative: Luganda (Pylkkanen 2002: 25)

Mukasa ya-tambu-le-dde    Katonga
Mukasa PAST-walk-APPL-PAST Katonga
‘Mukasa walked for Katonga.’
(Katonga is an additional participant added to the event of walking.)

In (50), the applied argument bears no semantic relation to the verb, it only bears a transfer of possession relation to the direct object. This is illustrated in English sentences below.

(50) Low applicative: English (Pylkkanen 2002: 19)

a. I wrote John a letter.
   (I wrote a letter and the letter was to the possession of John.)

b. I baked my friend a cake.
   (I baked a cake and the cake was to the possession of my friend.)

c. I bought John a new VCR.
   (I bought a new VCR and the VCR was to the possession of John.)

6.1 Semantic diagnostics (Pylkkanen 2002)

I order to distinguish between high and low applicatives, Pylkkanen applies two semantic diagnostics:

(52) Semantic diagnostics for high and low applicatives

a. Diagnostic 1: transitivity restrictions
   “Since a low applicative denotes a relation between the direct and
indirect object, it cannot appear in a structure that lacks a direct object. Therefore, only high applicatives should be able to combine with unergative verbs” (23).

b. **Diagnostic 2: verb semantics**

“Since low applicatives imply a transfer of possession, they make no sense with verbs that are completely static: for example, an event of holding a bag does not plausibly result in the bag ending up in somebody’s possession. High applicatives, on the other hand, should have no problem combining with verbs such as hold: it is perfectly plausible that somebody would benefit from a bag-holding event” (23).

Pylkkanen also mentions that low applicatives are productive with unaccusative verbs (38).

Applying these diagnostics to the NCN applicatives, I show that they behave like *high* applicatives.

(53) a. sut-\textit{chin}-\textit{?aq\-si\-š} kamatq-\textit{ši\-š} ...
\hspace{1cm} you-do.for-\textit{future}-1sg.ind run-perf
\hspace{1cm} ‘I will run for you (e.g. to the store).’

b. kamatq-\textit{ši\-š}-\textit{?aq\-si\-š} sut-\textit{chin} ...
\hspace{1cm} run-perf-\textit{future}-1sg.ind you-do.for
\hspace{1cm} ‘I will run for you (e.g. to the store).’

In (53), the applicative \textit{chin} ‘do for’ is used with the unergative verb \textit{kamatq} ‘run’, which is only possible with high applicatives according to Pylkkanen’s **Diagnostic 1**.

(54) a. sut-\textit{chin}-\textit{mit-si\-š} suu \textit{ki\-q\-yak} 
\hspace{1cm} you-do.for-\textit{past}-1sg.ind hold key
\hspace{1cm} ‘I held a key for you.’

b. suu-\textit{mit-si\-š} \textit{ki\-q\-yak} sut-\textit{chin} 
\hspace{1cm} hold-past-1sg.ind key you-do.for
\hspace{1cm} ‘I held a key for you.’

In (54), the applicative \textit{chin} ‘do for’ is used with the static verb \textit{suu} ‘hold’, which is only possible with high applicatives according to Pylkkanen’s **Diagnostic 2**.

(55) a. * sut-\textit{chin}-\textit{?aq\-si\-š} hinin 
\hspace{1cm} you-do.for-\textit{future}-1sg.ind arrive
\hspace{1cm} ‘I will arrive for you (e.g. to the airport).’
b. * hinin-ʔaqš-siš  sut-čin
   arrive-FUTURE-1SG.IND you-do.for
   ‘I will arrive for you (e.g. to the airport).’

In (55), the applicative čin ‘do for’ is ungrammatical when used with the non-incorporating unaccusative verb hinin ‘arrive’, which is predicted for high applicatives.

(56) a. * sut-čin-ʔaqš-siš  ?u-ňii
    you-do.for-FUTURE-1SG.IND arrive
    ‘I will arrive for you (e.g. to the airport).’

b. * ?u-ňii-ʔaqš-siš  sut-chin
   arrive-FUTURE-1SG.IND you-do.for
   ‘I will arrive for you (e.g. to the airport).’

In (56), the applicative čin ‘do for’ is ungrammatical with the incorporating unaccusative verb nii ‘arrive’.

The results are summarized in Table 3.

Table 3: The morphemes čit ‘do to’, ḫta ‘do towards’ and čin ‘do for’ are high applicatives

<table>
<thead>
<tr>
<th>Combine with ...</th>
<th>High applicatives</th>
<th>Low applicatives</th>
<th>čit/ẖta/čin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unergative verbs</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Static verbs</td>
<td>✓</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Unaccusative verbs</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
</tbody>
</table>

6.2 Syntactic predictions

The two structures in (48) and (50) also make different syntactic predictions, namely predictions about incorporation. Thus, the structure for high applicatives predicts that the direct object should be able to incorporate into the verb, and it cannot incorporate into the applicative (see 57).

The structure for low applicatives in (58) predicts that the direct object should be able to incorporate into the applicative, and it cannot incorporate directly into the verb.
The NCN data show that the direct object can in fact incorporate into the verb, and it can never incorporate into the applicative, which is evidence in favor of the high applicative structure in NCN.

(59) a. \(\text{'u-či\-t-mit-?iš um'iiq ?aya-yii} \)
\(\text{Ø-do.to-\textsc{past}-3sg.ind mother many-give} \)
\(\text{‘He/She gave lots to mother.’} \)

b. * \(\text{'u-yii-mit-?iš um'iiq ?aya-či\studio} \)
\(\text{Ø-give-\textsc{past}-3sg.ind mother many-do.to} \)
\(\text{‘He/She gave lots to mother.’} \)
The structure for high applicatives in (60) predicts that the direct object ?aya ‘many’ should be able to incorporate into the verb yii ‘give’. It also predicts that the direct object should not be able to incorporate into the applicative čit ‘do to’. These predictions are borne out in the sentence (59a) above.

(61)*

The structure for high applicatives in (60) predicts that the direct object ?aya ‘many’ should be able to incorporate into the verb yii ‘give’. It also predicts that the direct object should not be able to incorporate into the applicative čit ‘do to’. These predictions are borne out in the sentence (59a) above.
The structure for low applicatives in (61) predicts that the direct object ?aya ‘many’ should be able to incorporate into the applicative ˇci ‘do to’. It also predicts that the direct object should not be able to incorporate into the verb yii ‘give’. However, these predictions are incorrect (see the sentence 59b above).

Thus, only the structure for high applicatives makes the correct predictions about incorporation in NCN.

To summarize, according to Pylkkanen’s semantic diagnostics (2002), the morphemes ˇci ‘do to’, ˘hta ‘do towards’ and ˘chin ‘do for’ are high applicatives. Syntactic predictions also show that these morphemes are high applicatives.

6.3 ˇci, ˘hta and ˘chin as incorporators of functional elements

In the Section 5.1, I showed that the morphemes ˇci ‘do to’, ˘hta ‘do towards’ and ˘chin ‘do for’ behave very similarly to incorporating verbs in NCN. They can incorporate personal and reflexive pronouns, quantifiers and wh-words. However, they cannot incorporate nouns and other verbs. Here, I propose that the reason for this is that ˇci, ˘hta and ˘chin are functional heads that can only incorporate functional elements, like the ones listed above. Thus, in the structure (62) below, personal and reflexive pronouns, quantifiers and wh-words are generated in D and can get incorporated into the applicatives. Nouns and verbs are lexical elements, and therefore, they cannot be incorporated into the applicatives.

(62) 

To generate a sentence like the one in (63) below, the applicative first moves to the Voice head, at which stage a functional element (in this case a pronoun) gets incorporated into it. Then the applicative with the incorporated into it element moves past the subject to the Tense head, and finally to the Mood head (see the structure in 64).
In the sentence (65) below, the noun \( ?u?i?i?i?q \) ‘mother’ is a lexical element and therefore, it cannot get incorporated into the applicative \( \ddot{c}i?l- \). The noun remains in the position it was generated in, namely, in Spec of ApplP position. The applicative moves to the Mood head via the intermediate Voice and Tense heads, thus generating the correct word order (see the structure in 66).\(^4\)

\[
\begin{align*}
\text{(65) } & \quad ?u-\ddot{c}i?l-\text{-mit-?i?i} \quad \ddot{c}akup \quad ?u-\ddot{c}u\ddot{s} \quad (\text{repeated from 9a}) \\
& \quad \varnothing\text{-do.to-past-3sg.ind man mother } \varnothing\text{-make.fun} \\
& \quad \text{‘A man made fun of (the) mother.’}
\end{align*}
\]

\(^{4}\) I assume that the expletive morpheme \( ?u- \) is a morphological place holder, because it appears on the incorporating predicate only if no incorporation into this predicate takes place.
7 The conclusions

I have provided a detailed description and analysis of the morphemes čiłt ‘do to’, hta ‘do towards’ and chin ‘do for’ in the Ahousaht dialect of Nuuchahnulth. I have argued that these morphemes are verbal applicatives that add a non-core argument to the thematic structure of a verb and showed that čiłt ‘do to’, hta ‘do towards’ and chin ‘do for’ are high applicatives that attach above the main verb in a syntactic tree.

At the end, I would like to draw attention to the Nuuchahnulth community and the critical status of the language. The Nuuchahnulth community has a special position in the larger Canadian society. Their cultural traditions and language are in danger of being lost as a result of rapid English acculturation (Kinkade 1991). My language consultants recall being severely punished for speaking Nuuchahnulth in school, even as late as the 1950’s. As a result, many Nuuchahnulth parents did not teach their children to speak the language, hoping to spare them a similar humiliation. In spite of this emotional trauma, an increasing number of Nuuchahnulth people are now willing to relearn their language. For these reasons, the need for documentation and data analysis of the language becomes a pressing matter.
References


Verbal applicatives in Nuuchahnulth

Abbreviations and symbols

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ø</td>
<td>Pleonastic morpheme</td>
</tr>
<tr>
<td>1</td>
<td>First person</td>
</tr>
<tr>
<td>2</td>
<td>Second person</td>
</tr>
<tr>
<td>3</td>
<td>Third person</td>
</tr>
<tr>
<td>ACC</td>
<td>Accusative case</td>
</tr>
<tr>
<td>APPL</td>
<td>Applicative</td>
</tr>
<tr>
<td>CONFIRM</td>
<td>Confirmative</td>
</tr>
<tr>
<td>IND</td>
<td>Indicative</td>
</tr>
<tr>
<td>INT</td>
<td>Interrogative</td>
</tr>
<tr>
<td>NCN</td>
<td>Nuuchahnulth</td>
</tr>
<tr>
<td>PERF</td>
<td>Perfective</td>
</tr>
<tr>
<td>PL</td>
<td>Plural</td>
</tr>
<tr>
<td>SG</td>
<td>Singular</td>
</tr>
</tbody>
</table>

Appendix

Table 4: Nuuchanulth verbs used with čit/hta/chin

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Translation</th>
<th>-čit</th>
<th>-hta</th>
<th>-chin</th>
</tr>
</thead>
<tbody>
<tr>
<td>?uupwin</td>
<td>to owe</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?uuʔatsumhi</td>
<td>to yearn for, to be infatuated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>with ...</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>?uupaa</td>
<td>to dislike, to disapprove of</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?umaap</td>
<td>to pay attention to ..., to</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>listen to ...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>?uukš</td>
<td>to ask for ...</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>?uučus</td>
<td>to make fun of ..., to mock</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?uksaap</td>
<td>to coax into ..., to encourage</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?uqŷyuu</td>
<td>to be related to ...</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?uyii</td>
<td>to give</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?uuʔatuk</td>
<td>to take care of ...</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>?uuḥčii</td>
<td>to cook</td>
<td>X</td>
<td>X</td>
<td>✓</td>
</tr>
</tbody>
</table>

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Table 4: Nuuchanulth verbs used with čit/hta/chin (continued)

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Translation</th>
<th>-čit</th>
<th>-hta</th>
<th>-chin</th>
</tr>
</thead>
<tbody>
<tr>
<td>?u?aap</td>
<td>to buy</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?aata</td>
<td>to need</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?atu</td>
<td>to fall off, to come off, to spend</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?iip</td>
<td>to give to ...</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?in?aś</td>
<td>to take place of ...</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?in?hḵw?aʔap</td>
<td>to grind up</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?inʔ</td>
<td>to serve ... (e.g. in a feast or a birthday party)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?u?iiḥ</td>
<td>to hunt, to collect</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?uu?učiqa</td>
<td>to miss an object (e.g. socks)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?ukuk</td>
<td>to look like, to resemble</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?ukʷink</td>
<td>to talk with ...</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?umču</td>
<td>to feed (someone specific)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?umḥi</td>
<td>to be able to do</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?usum</td>
<td>to want</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?umahsa</td>
<td>to want</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?uukt</td>
<td>to obtain by ...</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?uukʷinkʰ</td>
<td>to tease</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?uusapi</td>
<td>to depend on ...</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?uwa</td>
<td>to complain</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?u?aʔst</td>
<td>to accomplish by ..., to be done by ...</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?uʔiʔk</td>
<td>to come upon ...</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?ucaʔap</td>
<td>to take (something from here to there)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?učas</td>
<td>to bet (in a gambling situation)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>?učpii</td>
<td>to be on top, higher leverage</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>
Table 4: Nuuchanulth verbs used with čit/hta/chin (continued)

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Translation</th>
<th>-čit</th>
<th>-hta</th>
<th>-chin</th>
</tr>
</thead>
<tbody>
<tr>
<td>ʔucuqšíx</td>
<td>to put something into one’s mouth</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔuḥaaayas</td>
<td>to go and buy</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔuḥsaa</td>
<td>to have a craving for certain food or sweets</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔuḥtaa</td>
<td>to do to ...</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔukčiq</td>
<td>to travel alongside another vessel</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔukčaas</td>
<td>to sit with someone outside on the ground</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔukčiił</td>
<td>to sit with somebody in a house/room/floor</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔukčiiis</td>
<td>to sit with somebody on a bench/couch</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔukčumyił</td>
<td>to accompany another person (e.g. in dance)</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔuktšíx</td>
<td>to shrink</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>ʔukʷiił</td>
<td>to make</td>
<td>✓</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>ʔumaʔin</td>
<td>to be stingy, not wanting to share person or object</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ʔunaak</td>
<td>to have, to be in possession of ...</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔunaq</td>
<td>to be fond of eating (something specific)</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>ʔupuuł</td>
<td>to get paid</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔuqłaap</td>
<td>to think</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ʔusiiik</td>
<td>to be made</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
<tr>
<td>ʔustaasip</td>
<td>to set down (something) on a table</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ʔutwiiʔił</td>
<td>to be the first in line</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>ʔuuʔapulta</td>
<td>to be underneath, defeated</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>ʔuuʔinṕi</td>
<td>to be waiting for ...</td>
<td>✓</td>
<td>✓</td>
<td>✗</td>
</tr>
</tbody>
</table>
Table 4: Nuuchanulth verbs used with čit/hta/chin (continued)

<table>
<thead>
<tr>
<th>Verbs</th>
<th>Translation</th>
<th>-čit</th>
<th>-hta</th>
<th>-chin</th>
</tr>
</thead>
<tbody>
<tr>
<td>?uuʔinqlʔ</td>
<td>to handle something specific, to dislike</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?uuʔiʔ</td>
<td>to go for, to take</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
<tr>
<td>?uuʔukči</td>
<td>to side with ...</td>
<td>✓</td>
<td>✓</td>
<td>X</td>
</tr>
</tbody>
</table>