Phonologically Driven Allomorphy of Nivkh Transitive Verbs  
- With Implications for the Nature of Prefix i- 

Hidetoshi SHIRAISHI  
University of Groningen  
(toshi_shiraishi@hotmail.com)

1. Introduction  
This paper concerns the nature of a verbal prefix i- that attaches to a subset of Nivkh transitive verbs. Although this prefix has often been categorized in the literature as forming a group with other pronominal elements (pronominal clitics, reciprocal prefix, etc.), in fact it exhibits a remarkable divergence from them. Most notably, in certain contexts it is allowed to co-occur with the complement of the verb, whereas this is never the case with other pronominal elements. In other words, while genuine pronominal elements are in complementary distribution with the complement of the verb, this is not always the case with i-. In this paper, I will argue that the exceptional behavior of i- is motivated phonologically; it comes into play when a genuine selection of allomorphs contradicts phonological markedness constraints. This analysis is in concordance with the view that i- of contemporary Nivkh has lost its pronominal nature but has been reinterpreted as a prothetic vowel, as argued by Jakobson (1957). My attempt is therefore to develop this Jakobsonian approach to i- within an Optimality-Theoretic framework. Next, I will introduce data which nevertheless point to the pronominal nature of i- and will discuss its syntactic/semantic status. Finally, the Jakobsonian approach will be revised so as to take the pronominal nature of i- into account.

2. The problem  
A subset of Nivkh transitive verbs exhibits special allomorphy that cannot be deduced from the general phonological rules of the language. These verbs initiate either with i-, j-, or e- when used in isolation, i.e., in their citation form. In what follows I will term these verbs i-transitive verbs, partially following Hattori 1955 (his j-tadooshi), and i- as a cover term to refer to i- and its phonological cognates j-
and e-. With the presence of an overt complement, however, the i-drops and the base of the verb alternates into a bound form allomorph. I will term the i-attached forms i-allomorphs to contrast with such bound form allomorphs.^

(1) i-allomorph (citation form) complement + bound form allomorph
a. i'- 'to kill ~' ivx k'\u{-u} 'to kill a person' man kill
b. jamxta- 'to praise ~' p\textsuperscript{h}-\u{y}la amxta- 'to praise one's own child' REF-child praise
c. ezmu- 'to like ~' p\textsuperscript{h}-\u{y}la smo- 'to like one's own child' REF-child like
d. esp- 'to stab~' Galik sev- 'to stab Galik' per.name stab

In the simplest case, the complement replaces i-, as shown in example (1b). However, the rest of the examples show that allomorphy can be more complicated. In (1a) the bound form allomorph has an additional vowel u and in (1c) it has changed its vowel from u to o. Although the phonological shape of i-allomorph and bound form allomorph tell that they are phonologically related to each other, there is no general phonological process that accounts for this alternation. In short, these allomorphs should be stored in the lexicon, their exact shape being unpredictable. This is in fact the way Nivkh dictionaries are edited (e.g. Savel'eva

^1 Not all transitive verbs beginning with i, j, or e are i-transitive verbs. For instance, the j- of jeski- 'to sell ~' is preserved in any context. We cannot predict the distribution of i-transitive verbs from the phonological shape alone. In addition, the distribution of i- and e- is also unpredictable since the vowel harmony process, which was responsible for the alternation, is no longer transparent.

^2 In some verbs h, which was suppressed by the i- in the i-allomorph, surfaces initially: je- 'to boil ~', p\textsuperscript{h}x he- 'to make soup'

^3 Inter-morphemic hyphens bind bound morphemes. Hyphen before a verb denotes that the verb is a bound form allomorph. Hyphen after the verb substitutes for verbal morphology omitted here.

^4 The alternation of voicing and continuancy of the obstruents does not serve as evidence for the special allomorphy, these being derivable from general phonological alternations of the language (cf. Jakobson 1957 and Shiraishi 2000ab).
and Taksami 1970).

With the presence of a complement the verb is always in the bound form allomorph. The combination complement + i-allomorph is unacceptable, a judgment which most of my informants share.  

(2) *əkiz njivx hə njivx i-ɣ-
   bad man this man i-kill

'A bad man killed this man.'

Instead, the complement subcategorizes for the bound form allomorph, as the example below shows.

(3) əkiz njivx hə njivx kʰu-
   bad man this man kill (bound form)

The same principle of allomorphy holds when the complement consists of a pronoun. The only difference with the non-pronominal complement is that the pronoun itself in such a case should appear in bound form, i.e. a clitic.

(4) Inventory of Nivkh pronouns (partial)  

<table>
<thead>
<tr>
<th></th>
<th>free form</th>
<th>clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg</td>
<td>n̓i</td>
<td>n̓</td>
</tr>
<tr>
<td>2sg</td>
<td>cʰi</td>
<td>cʰ</td>
</tr>
<tr>
<td>3sg</td>
<td>i̓</td>
<td>i̓</td>
</tr>
<tr>
<td>reflexive</td>
<td>pʰi</td>
<td>pʰ</td>
</tr>
</tbody>
</table>

5 Various terminology (presupposing diverse ideas) has been proposed in the literature to label complement + (transitive) verb constituent of Nivkh: (noun) incorporation (Krejnovich 1937, Gruzdeva 1998), polysynthesis (Mattissen 1999). I will use the term combination in this paper without further theoretical implications (but see Mattissen 1999 for why the Nivkh complement + verb complex cannot be a (genuine) case of noun incorporation).

6 Examples without credits are all from my fieldnotes, collected in the city of Okha, Nogliki and the village of Nekrasovka (all located in North Sakhalin), during a linguistic expedition held in 2000-2001. The data were collected from a total of seven informants, all female and born in the west coast of North Sakhalin. Six of them identified themselves as speakers of the Amur dialect. Throughout the paper, I will also list examples from the literature whenever there is a corresponding one.

7 Plural pronouns do not have clitics.

8 n denotes a floating nasal.
Cliticization of the pronoun is obligatory whenever a pronoun is the complement of
the verb, no matter whether the verb is an i-transitive verb or not (cf. Krejnovich
1998: 17). Most of my informants rejected sentences in which the pronominal
complement appears in the free form, as in (6) below. They told me that such a
sentence is ambiguous between a reading in which the pronoun is a complement and
a reading in which it is an external argument, there being no additional case-markers
to account for the semantic difference in the language.

(6) ?? ȝdoll[-amxta-
father 3SG (free form) praise
?? 'Father praised him/He praised father.'

It should therefore be concluded that cliticization is obligatory if the pronoun is the
complement of the verb.

The following table illustrates the possible and impossible combinations of the
complement-type and verb-type discussed so far.

<table>
<thead>
<tr>
<th>verb-type</th>
<th>i-transitive V</th>
<th>non-i-transitive V</th>
</tr>
</thead>
<tbody>
<tr>
<td>complement-type</td>
<td>i-allomorph</td>
<td>bound form</td>
</tr>
<tr>
<td>non-pronoun</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td>free pronoun</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>clitic pronoun</td>
<td>not yet discussed</td>
<td>yes</td>
</tr>
</tbody>
</table>

Having considered the general pattern of complement + verb allomorph
combinations, we may now discuss the combination possibility not yet introduced,
namely, the combination clitic pronoun + i-allomorph of the verb. At first glance,
this combination seems to be disallowed.

(8) a. *p^n-j-amxta-REF-i-praise

b. *i-j-amxta-3SG-i-praise

The examples above indicate that clitic pronouns, like non-pronominal complements, cannot combine with i-allomorph. In fact, however, it is not difficult to find examples in which a pronominal clitic is combined with the i-allomorph.

(9) a. n'i c^n-i-γ-1SG 2SG-i-kill

b. p^n-i-γ-REF-i-kill

(Panfilov 1965: 52)

c. n'i c^n-e-sp-1SG 2SG-i-stab

d. p^n-e-zmu-REF-i-love

(Panfilov 1965: 52)

e. qan-ŋeŋ p^n-i-γα-REF-i-be with someone

dog-one (bound form $k^h_\gamma\sigma$-

'to be with the dog by oneself'

(Krejnovich 1933: 9)

f. c^h i-ŋ-xe-γir γη-ra ni maŋoŋut c^h o c^h-i-my-

2SG 1SG-net-INS catch-ENU 1SG many fish 2SG-i-give

(bound form $k^h_\im$-

You caught fish with my net, I gave you many fish.'

(ibid. 35)

In the examples above, the pronominal clitic attaches to the i-allomorph of the i-transitive verb, in contrast with examples in (3) or (5) where the verb appears in the bound form consistently. While non-pronominal complement combines only with
the bound form allomorph of the verb, the examples above suggest that certain verbs allow pronominal clitics to combine with the i-allomorph.\footnote{It is disputable whether the leftmost vowel of the i-transitive verbs (e.g., the \(i\) of \(c^h\cdot i\cdot \gamma\cdot\)) is part of the verb (prefix \(i\cdot\)), or part of the pronoun. The latter view assumes that the initial vowel of the verb has dropped, and that the pronoun is in the full form. Proponents of this view are Krejnovich (1958, 1966), Austerlitz (1959) and Panfilov (1965). The present paper assumes that the initial vowel is part of the verb, along with authors as Krejnovich (1934), Hattori (1962a, 1988) and Gruzdeva (1998). See Shiraishi (2001, in preparation) for discussion.}

In addition, it is not always the case that a certain clitic + verb combination type excludes the possibility of the other combination type. In a recent fieldwork, I heard from a total of four informants that both clitic + i-allomorph and clitic + bound form are well-formed in their dialect (the Amur dialect).

(10) clitic + free form clitic + bound form

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>(\text{i}_1) (c^h\cdot i\cdot \gamma\cdot)</td>
</tr>
<tr>
<td></td>
<td>1SG 2SG-i-kill</td>
</tr>
<tr>
<td>b.</td>
<td>(\text{i}_1) (c^h\cdot \text{e-sp}\cdot)</td>
</tr>
<tr>
<td></td>
<td>1SG 2SG-i-stab</td>
</tr>
</tbody>
</table>

Two questions arise at this point: 1) why does the clitic attach to the i-allomorph of the verb, a combination which is otherwise disallowed in the language? 2) why is this combination allowed only to a limited set of verbs? These problems will be discussed in the next section.

3. Clitic + i-allomorph as phonologically driven allomorphy

There is one feature which the verbs that allow cliticization to their i-allomorph have in common. The bound form allomorphs of these verbs all begin with a consonant while the i-allomorphs begin with a vowel (the prefix \(i\cdot\)).

(11) i-allomorph bound form allomorph

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>(i\cdot \gamma\cdot)</td>
</tr>
<tr>
<td>b.</td>
<td>(e\cdot \text{sp}\cdot)</td>
</tr>
</tbody>
</table>

For clitics consisting of a single consonant (\(n\cdot\), \(p^h\cdot\), \(c^h\cdot\)), cliticization to the bound
form allomorph inevitably results in consonant cluster at the beginning of a word.

(12) a. \( c^h \)-xu-  
    2SG-kill

      'to kill you'

b. \( c^h \)-sev-  
    2SG-stab

      'to stab you'

These consonant clusters can be avoided if the i-allomorph serves as the host since they begin with a vowel.

(13) a. \( c^h \)-i-\( G^03 \)-  
    2SG-i-kill

      'to kill you'

b. \( c^h \)-e-sp-  
    2SG-i-stab

      'to stab you'

On the other hand, consonant clusters do not arise with verbs whose bound forms begin with a vowel.

(14) free form       bound form       'to praise'
    a. jamxta-        amxta-       

    b. \( p^h \)-amxta-  
    REF-praise

      'to praise oneself'

Obviously, there is no phonological gain by attaching clitics to the i-allomorph in these verbs. To make the matters worse, such a combination would create consonant clusters (e.g., \( p^h \)-j-amxta-). The i-allomorph thus serves as the host only when it feeds phonologically preferable forms. These observations tell that when cliticization is obligatory, the allomorphy of i-transitive verbs is phonologically driven.

Phonologically driven allomorphy can be accounted for in a straightforward fashion in Optimality Theory. The output candidates that GEN generates is a logically possible combinations of affix-plus-allomorph (Kager 1996, Rubach and
Booij 2001). Subsequently, phonological markedness constraint (against consonant clusters in the case under discussion) selects the optimal combination as the output.

(15) Phonological markedness constraint: *COMPLEX: No consonant clusters

(16)

<table>
<thead>
<tr>
<th>input: 2SG + -sev-esp-</th>
<th>*COMPLEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>c\textsuperscript{h}-sev-</td>
<td>*!</td>
</tr>
<tr>
<td>c\textsuperscript{h}-esp-</td>
<td></td>
</tr>
</tbody>
</table>

(17)

<table>
<thead>
<tr>
<th>input: REF + amxta-jamxta-</th>
<th>*COMPLEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>c\textsuperscript{h}-amxta-</td>
<td>*!</td>
</tr>
<tr>
<td>p\textsuperscript{h}-jamxta-</td>
<td></td>
</tr>
</tbody>
</table>

What needs to be considered further is the cost of selecting the i-allomorph as the host and not the bound form allomorph. If this selection were to be costless, the phonologically marked form c\textsuperscript{h}-sev- would never appear on the surface. But as mentioned above, this is not true; both c\textsuperscript{h}-sev- and c\textsuperscript{h}-e-sp- are possible outputs, at least for some speakers. As the i-allomorphs of these verbs all include i-, its interpretation would be the key to the problem. What this i- actually is, however, has been a controversial topic among the Nivkhologists. The problem will be discussed in the next section, after a brief sketch of previous descriptions.

4. The prefix i-: pronominal prefix, or a prothetic vowel?

No general consensus exists in the literature about the syntactic/semantic nature of i-. Most researchers agree that it is pronominal in nature but its precise content varies from indefinite person to third person singular (cf. Sternberg 1900, Krejnovich 1937, 1958 Hattori 1944, 1962b, Austerlitz 1959, Panfilov 1962, 1965, Watanabe 1993, Mattissen and Drossard 1998, Gruzdeva 1998, Mattissen 1999, 2003). Descriptively, both interpretations are correct; the i-allomorph can be used either to refer to third person singular object (he/she/it) or an unspecified object
(someone/something) depending on the context.

(18)  걯 걯 i-verbs
    1SG i-kill

'I killed him/her/it/someone.'

What is problematic about this view is that it misses the point that the distribution of
i- is restricted. Unlike other pronouns, it only appears in a subset of transitive verbs
(i-transitive verbs). This means that we cannot identify it as an allomorph of the
third person singular pronoun if or its clitic counterpart ˚i-, contrary to some
descriptions (e.g. Mattissen and Drossard 1998). In contrast with i-, the pronominal
if and ˚i- are fully productive and combines with any transitive verb. Obviously, if
is a pronoun (and ˚i- its clitic counterpart) whereas i- is a prefix with a strict
subcategorization frame.

There is another aspect in which i- and ˚i- differ. When the third person
singular pronoun cliticizes to a transitive verb (of any type), the generic reading (DO
+ someone/ something) is impossible.¹⁰

(19)  걯 걯 i-dou-
    1SG 3SG-teach

'I teach him/her/*someone.'

For these verbs, the generic reading should be accomplished by the free form
(citation form).

(20)  걯 걯 rau-
    1SG teach

'I teach someone.'

So the syncretism of third person singular and indefinite person happens only with
the i-allomorph of i-transitive verbs. In all other verbs, the two should be expressed
by separate forms; third person by the combination pronominal clitic + bound form
allomorph and indefinite person by the citation form.

In 1957, Jakobson submitted an alternative view on the interpretation of i-.
According to Jakobson, i- is a prothetic vowel required to remedy the emergence of a
phonologically marked structure (1957: 88-89). He assumed that i- was once
indeed an indefinite person prefix, and its presence obligatory for all transitive verbs

¹⁰ In this example the floating nasal caused the following plosive to become voiced.
in the absence of an overt complement. Later, *i-* was deleted by a phonological process except before verbs in which the loss of *i-* would lead to phonologically marked structure, as consonant cluster (*smo-*) or onsetless syllable (*amxta-*). Far from being compulsory, Jakobson insisted that *i-* in contemporary Nivkh does not contain pronominal content but rather has been reinterpreted as a prothetic vowel.

A support for this Jakobsonian view can be found in the so-called 'pleonastic' use of *i-*. The pleonastic usage of *i-* was first reported by Sternberg (1900) and discussed by Krejnovich (1937) in detail. With sentences containing an i-transitive verb, the verb appears in the i-allomorph when the complement does not appear *immediately to the left* of the verb. In (21) below, the complement is preposed and a postpositional phrase (21a) or an adverb (21b,c) intervenes between the complement and the verb.

(21) a. [NPt xons] [PPh-xooperativ-tox] [vj-urkugu-] this freight REF-cooperation-ALL i-bring

'(They) brought this freight to their own cooperation.'

(Krejnovich 1933: 28)

b. [NPb oylagu] [ADVmangur] [vj-ar-] children much i-feed

'To feed the children with a lots of (foods).' 

(Savel'eva and Taksami 1970: 501)

c. [NPh-atak] [NPlis] [ADVequ] [vi-] 1SG-father wolf quickly i-kill

'My father killed the wolf quickly.'

In these contexts, i-allomorph is the only allomorph that may surface; the bound form allomorph is unacceptable, a judgment which most of my informants share.

(22) a. *phatak lIs equr kBu- 1SG-father wolf quickly kill

'My father killed the wolf quickly.'

b. *atak lIs endox kBu- grandfather father wolf very afraid

'Grandfather was afraid of the wolf.'
c. *θtθk lyθs tɔv-ux kʰu- 'Father killed the wolf in the house.'

father wolf house-LOC kill

Since the predicate verb appears in the i-allomorph in the acceptable sentences (21), it looks as if had two complements, the i- and the preposed NP. Admittedly, if the i- were indeed a pronominal prefix, and hence a case-absorber, the preposed NP remains caseless. Note that there is no demotion of the preposed NP to oblique case; there is no additional postposition added to the preposed NP. This refuses an antipassive analysis in which case the preposed NP is demoted to oblique case, and the i- functioning as an antipassive marker (like the Koryak prefix ivə-). So there is no doubt that the preposed NP awaits case from the predicate verb. In sum, the pronominal analysis of i- inevitably faces the problem of case-clash in every sentence where the complement NP is not left-adjacent to the predicate verb.

This problem was first reported by Sternberg (1900). He pointed to the pronominal nature of i- by comparing it with the pronominal clitics of Italian and French, but noted that the greatest difference was the 'pleonastic' nature of i- (1900: 417-418). Krejnovich tried to relate the pleonastic nature of i- with a similar case in Classical Nahuatl in which the appearance of third person singular pronoun is obligatory when the verbal complement immediately preceding the verb is absent. Although both Sternberg and Krejnovich clearly identify the i- as a pronominal prefix (местоименный показатель объекта), they were clearly aware of its redundant nature.

11 Krejnovich's source is Humboldt (1859 (=1836)). I owe the identification of the language and its original source to Johanna Mattissen.

12 Krejnovich's remark is of special interest since it pointed to similarity between pleonastic i- and clitic doubling constructions as in Spanish dialects.

(i) Le hablaron a ella 'They spoke to her.'

to her 3PL-spoke to her (Spanish, Suñer 1988: 394)

Clitic doubling yields to an analysis in which the doubled clitic is not a case-absorber, but a mere agreement marker, (Suñer 1988), or alternatively, the complement NP is not a case-absorber, but an adjunct (Aoun 1985). This latter analysis was suggested to me for the Nivkh case by Johanna Mattissen (p.c., February 23, 2000)). Under either analysis, case-clash can be avoided. However, there are some crucial differences between the pleonastic i- of Nivkh and clitic doubling constructions. First, the pleonastic i- is not a clitic; its distribution is restricted to a subset of verbs. Second, while in the case of Spanish the doubled clitic and the complement NP are coreferential and therefore exhibit agreement, i- does not exhibit agreement with the preposed NP, as shown in the example below (no agreement in number).

(ii) j-pstθk oxla-yu pʰˌtaux-ux j-amxta- 'My father praised the children in his house.'

1SG-father child-PL REF-house-LOC i-praise
In contrast to the pronominal view to *i-, where case-clash is inevitable, the Jakobsonian view is free from case problems. Since *i- is a prothetic vowel, it has no pronominal function and therefore case-clash does not occur. The *i- is a phonological extension of the verb, so it does not absorb case. The pronominal clitic is, therefore, free to select the i-allomorph as its host when phonological markedness constraints come into play (as *COMPLEX introduced in the previous section). The cost of selecting the i-allomorph over the bound form allomorph should now be obvious; since *i- is a prothetic vowel, its selection inevitably violates DEP, an anti-epenthesis constraint. Since both clitic + i-allomorph and clitic + bound form allomorph are possible outputs (see (10) above), the ranking of DEP with respect to *COMPLEX should be left undetermined.

(23)

<table>
<thead>
<tr>
<th></th>
<th>*COMPLEX</th>
<th>DEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textsuperscript{\textcircled{23}}e^{\text{h}}-se\textsuperscript{-v^-}</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>\textsuperscript{\textcircled{23}}e^{\text{h}}-e-sp^-</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

On the other hand, when there is no phonological gain by selecting the i-allomorph as host, the bound form allomorph is the only winner, as intended.

(24)

<table>
<thead>
<tr>
<th></th>
<th>*COMPLEX</th>
<th>DEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textsuperscript{\textcircled{24}}p^{\text{h}}-amxta^-</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>p^{\text{h}}-j-amxta^-</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

To sum up, the Jakobsonian view that *i- is a prothetic vowel is superior to the pronominal view in the following two points. First, it captures the generalization that allomorphy of i-transitive verbs is phonologically driven; the otherwise illicit combination of clitic + i-allomorph is allowed only when the genuine combination clitic + bound form allomorph yields phonologically marked structure. Second, the long-standing problem of the pleonastic nature of *i- can be explained without being annoyed by case-clash. Being a bound morpheme, the bound form allomorph

\[13\] Strictly speaking, the prothetic *i- cannot be excluded by a faithfulness constraint like DEP, if we follow Kager (1996) or Rubach and Booij (2001) who claim that elements of allomorph are immune to faithfulness constraints. As mentioned in section 1, *i- constitutes an inevitable part of the i-allomorph at the underlying level, its exact distribution and quality being unpredictable.
cannot stand alone without a phonological host, i.e. its complement (an Optimality-Theoretic analysis along this line is proposed in the Appendix). This situation can be remedied by using the free form allomorph, namely the i-allomorph instead. This is what happens whenever the complement is preposed and cannot serve as the host of the verb.

Unfortunately, the Jakobsonian view is not without problems. Ironically, it is now difficult to account for the simple fact that i- can occasionally be pronominal, as was mentioned in the beginning of this section (18). So if we assume that i- is a prothetic vowel, we ought to hypothesize that either a) third person is referred to by a zero morpheme, or b) the prothetic vowel in such a case may exceptionally be pronominal.

There is evidence that, at least for some speakers, the i- itself is third person singular referring. During the fieldwork conducted in August 2000, two speakers judged the sentence below as unacceptable.

(25) *ŋ-ŋtʃk eŋa-kे liʒ-kे i-ŋ-
    1SG-father cow-COM wolf-COM i-kill
     'My father killed the cow and wolf.'

Both speakers (V. Ivanova and V. Khejn) told me that the sentence sounds odd because ŋ- 'to kill ~' has plural objects (cow and wolf). According to their explanation, ŋ- may refer only to singular object because it contains i-. The correct way of saying is to use the combination third person plural pronoun imŋ + bound form allomorph kʰu- instead of a single i-allomorph.

(26) ŋ-ŋtʃk eŋa-kे liŋ-kे imŋ kʰu-
    1SG-father cow-COM wolf-COM 3PL-kill (bound form)

It is important to note that both speakers accepted the pleonastic usage of i- (examples listed in (21)). In addition, both speakers accepted the sentence shown in footnote 12 (ii), which apparently lacks number agreement between the preposed NP and the i-allomorph. It is therefore highly possible that the unacceptability of (25) has reasons specific to this structure. For instance, the comitative postpositions might have biased the peculiarity of using ŋ-, which is singular referring. Alternatively, the heavy complement might have forced to interpret the sentence as a left-dislocation like structure ('Cow and wolf, my father killed them.'),
forcing the complement and *i*- to be coreferential. In any case, the speakers were convinced that *i*- refers to third person singular object. In order to account for these facts, the Jakobsonian view should be relaxed so that the prothetic *i*- can refer to third person singular object (= hypothesis b) of above). The function of *i*- is thus two-fold; phonologically, it is a prothetic vowel without pronominal content. This guarantees the pleonastic use of *i*- (21) and phonologically driven allomorphy (9) to arise. On the other hand, the *i*- itself may function as third person singular referring (pronominal use) for i-transitive verbs (18). This explains the unacceptability of (25) where the complement and *i*- are forced to be coreferential. Sentences with pleonastic use of *i*- differ from (25) in that they lack this forced coreferentiality, hence the pleonastic use of *i*- certified.

From a historical point of view, then, we can add the following to Jakobson's hypothesis; after the indefinite person prefix *i*- was reinterpreted as a prothetic vowel in contemporary Nivkh, the *i*- has been reinterpreted, this time as a third person singular prefix (at least for the speakers who rejected the sentence (25)).

5. Conclusion
In this paper I have highlighted the problem of the nature of *i*-, inspired by a case of phonologically driven allomorphy observed for pronominal clitic + i-transitive verbs combinations. In the past, *i*- was considered either to be pronominal or zero, i.e., a prothetic vowel. The latter analysis has several advantages since it enables us to capture the phonological function of *i*- directly; phonologically driven allomorphy and the pleonastic usage. On the other hand, it is problematic when explaining certain cases where the *i*- itself revealed third person singular referring. This nature of *i*- is subject to further investigation in which we need to examine its exact usage and distribution in more detail.

14 The 'exceptional' use of *i*- as third person prefix cannot be simply due to haplology, that disfavors a sequence of third person singular pronominal clitic i^n + i-allomorph, e.g., *j-i-γ- ‘to kill him/her/it.’ In fact, the pronominal clitic i^n-may cliticize to the bound form allomorph of i-transitive verbs.

(i) i-k bú  ‘to kill him/her/it’

As was the case with non-i-transitive verbs, the referent in this case should be a definite object (19). It is not clear to me, however, how the combination pronominal clitic + bound form allomorph (i) differs from i-allomorph (18) in usage when the referent is definite.
Appendix; The pleonastic use of *i*- as interaction of constraints

In this section I will argue how the pleonastic use of *i*- can be dealt with and motivated in an Optimality-Theoretic framework. As mentioned in section 2, the bound form allomorph of i-transitive verbs can surface only when its complement is overt and stands immediately to its left; in all other contexts, i-allomorph should be used. Since i-allomorph is a free form, it is allowed to project a Prosodic Word. On the other hand, the bound form allomorph cannot be pronounced in isolation; it is phonologically deficient and may not project Prosodic Word. The only way for it to surface is to lean to a phonological host. The phonological host can consist only of a complement (what counts as a complement for each verb is a syntactic/semantic matter, see Kaisse 1985 for discussion). Since the bound form allomorph may not lean to a non-complement, and may not project a Prosodic Word of its own either, it cannot surface when a syntactic operation has moved the complement from its governing position (i.e., immediately to the left of the verb). In the absence of a phonological host, the i-allomorph is the only alternative form which can surface. From a phonological point of view, the difference between the bound form allomorph and i-allomorph is prosodic; whether it can project Prosodic Word or not. In Optimality-Theoretic terms, prohibition of the bound form allomorph to project a Prosodic Word will be expressed by the following constraint.

(27) *[bound form]*$_{pwd}$: Bound form morpheme cannot project PWd of its own.

(Selkirk 1995)

As mentioned in footnote 1, we cannot predict from the phonological shape alone whether a verb has bound form allomorph. This information should be stored in the lexicon. Hence the actual form of this constraint would be something as *[kʰu]-$_{pwd}$ 'to kill ~'. All bound form allomorphs are subject to this constraint by definition.

By ranking this constraint above the anti-epenthesis constraint DEP, which penalizes any i-allomorph to surface, the i-allomorph candidate wins in case the complement (phonological host) has been preposed.
On the other hand, when the complement stands immediately to the left, the i-allomorph candidate loses because of the additional DEP violation.

Acknowledgments
I would like to thank our Nivkh language consultants, in particular, N.Bessonova, E.Chirik, V.Ivanova, V.Khein, Z.Ljutoba, G.Lok, S.Polet’eva and the late L.Kimova. I am grateful to Prof. T.Kaneko and J.Mattissen for comments on earlier versions of this paper. Needless to say, I am alone responsible for the content of this paper.

Abbreviations
Adv adverb NP noun phrase 1 first person
ALL allative PL plural 2 second person
COM comitative PWd prosodic word 3 third person
ENU enumerative REF reflexive
INS instrumental SG singular
LOC locative V verb

References


Krejnovich, Erohim (1933) Yuru-bity [a reader in Nivkh], Moscow - Leningrad: Uchpedgiz.


_______ (1958) Ob inkorporirovanii v nivxskom jazyke, Voprosy jazykoznanija no. 6, 21-33.


Mattissen, Johanna (1999) 'Dependent-Head synthesis in Nivkh- with an outlook on


Mattissen, Johanna and Werner Drossard (1998) *Lexical and syntactic categories in Nivkh (Gilyak)*, Institut für Sprachwissenschaft Universität zu Köln.


_______ (2000b) 'Nivkh consonant alternation does not involve hardening', *Proceedings of the 120th meeting of the Linguistic Society of Japan*, 42-47.


