1. Introduction

The language of the Sakurabiat people, known as Mekens or Sakurabiat, belongs to the Tupari branch of the Tupí family and is spoken in the northwestern part of Brazil by a small group of less than 30 speakers. The name Mekens is traditionally found in the literature, while Sakurabiat is the self-denomination of the people and, more recently has also been used in reference to their language. In this paper I keep the use of the term Mekens, referring to the language of the Sakurabiat people. All the five languages that compose the Tupari family – Akuntsu, Wayoro, Makurap, Mekens, and Tupari – are spoken today in the same state of Rondonia, Brazil. The study of these languages is essential for comparative and historical work within the large Tupí family, as well as for typological and areal studies.

In this paper, I will investigate the different morphosyntactic and semantic properties of the distinct forms of deverbal nominalizations in Mekens, trying to uncover the typological properties of this language. I apply

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the definition of nominalization as a functional, rather than morphological or formal, notion referring to the creation of referring expressions (Shibatani & Makhashen 2009). These authors make a distinction between lexical nominalization and grammatical nominalization. While both processes yield referring nominal expressions that may function syntactically as argument or predicate nominals, like regular nouns, these two forms of nominalization differ in that lexical nominalization creates lexical items belonging to the class of nouns in the lexicon, whereas grammatical nominalization does not create lexical items; it forms nominal expressions that do not have lexical status.¹ As we will see in the paper, this distinction between lexical and grammatical nominalization is relevant for Mekens. Grammatical nominalization is further classified in event nominalization, argument nominalization and genitive nominalization, according to the characterization of the referring entity in the grammatical context where it is conveyed.

Deverbal nominalization is a recurrent morphosyntactic strategy in Mekens, both as way of creating nouns that belong in the lexicon and as a general strategy for nominal modification. Nominalization is employed as a regular strategy in object focus constructions, object WH-questions and constructions that correspond to relative clauses in European languages. As it is common in a variety of languages, these forms of nominalization show hybrid behavior. Morphologically, they differ from verbs, by not carrying tense and aspect morphemes. Syntactically, however, they maintain verbal properties, such as the ability to retain their arguments and to occur as predicates. Subordinate adverbial constructions are also realized mainly through nominalization, combining deverbal nouns with postpositions. In section 2, I start with the presentation of lexical nominalization in Mekens.

2. Lexical nominalization

Lexical nominalization is expressed in Mekens by means of two morphemes. The circumstantial nominalizer -ap and the participial nominalizer -pit. Both derive nominal forms from transitive and intransitive verbs.

2.1. Circumstantial nominalization: morpheme -ap

The most productive nominalization morpheme in Mekens is the circumstantial nominalizer -ap, which refers to instrumental and locative nouns. Both transitive and intransitive verbs may be nominalized through this morpheme, but the resulting nominalization shows distinct semantic and

¹ See also Comrie & Thompson (1985), for a definition of lexical and event nominalization.
lexical properties, according to the category of the base verb. Generally, the
circumstantial nominalizer suffix derives instrumental nouns from transitive
verbs, and place nouns from intransitive verbs. Examples (1-2) show
instrumental nouns derived from the transitive verbs *poka* ‘to burn; to light’
and *mi* ‘to kill; to shoot’, while examples (3-4) show place nouns derived
from the intransitive verbs *ekwe* ‘to run’ and *to* ‘to lie down’.

(1)  \begin{align*}
\text{otat poka} & \rightarrow \text{otat poka-ap} \\
\text{fire burn/light} & \rightarrow \text{fire burn/light-NMLZ} \\
\text{light the fire} & \rightarrow \text{match or lighter (lit. tool (for) lighting the fire)}
\end{align*}

(2)  \begin{align*}
\text{kwe mi-a} & \rightarrow \text{mi-ap} \\
\text{animal shoot/kill-TH.V} & \rightarrow \text{shoot/kill-NMLZ} \\
\text{shoot/ kill an animal} & \rightarrow \text{weapon}
\end{align*}

(3)  \begin{align*}
\text{se-ekwe-a-t} & \rightarrow \text{iki ekwe-ap} \\
\text{3c-run-TH.V-PST} & \rightarrow \text{water run-NMLZ} \\
\text{he ran} & \rightarrow \text{rapids (lit. part of a river where the current is swift)}
\end{align*}

(4)  \begin{align*}
\text{otoa kot öt} & \rightarrow \text{o-to-ap} \\
\text{1s-lie FUT I} & \rightarrow \text{1s-lie-NMLZ} \\
\text{I will lie down} & \rightarrow \text{my hammock or my bed} \\
\text{(lit. place where I lie down (to sleep))}
\end{align*}

The deverbal nouns formed by attaching this morpheme to the verb
stem show default nominal properties in the language. Like Mekens
underived nouns, these lexical nominalizations (deverbal nouns) can be
modified by adjectives and other noun modifiers, they can be verb
arguments, and they can also occur as any of the constituents in nominative
clauses. Each of these nominal properties is illustrated in examples (5-7).

(5)  \begin{align*}
\text{otat poka-a-r=õt} & \rightarrow \text{otat poka-ap} \\
\text{fire burn/light-TH.V-PST=I} & \rightarrow \text{fire burn/light-NMLZ} \\
\text{I lit the fire.}
\end{align*}

(6)  \begin{align*}
\text{o-ike otat poka-ap oetobeka-pit ar-a-t} & \rightarrow \text{otat poka-ap} \\
\text{1s-old.brother fire burn/light-NMLZ lose-ADJR get-TH.V-PST} & \rightarrow \text{My older brother got the lost lighter.}
\end{align*}

(7)  \begin{align*}
\text{o-to-ap i-pagop} & \rightarrow \text{otat poka-ap} \\
\text{1s-lie-NMLZ 3s-new} & \rightarrow \text{my hammock is new.}
\end{align*}
2.2. Participial deverb alization: morpheme -pit/-ipit

The second morpheme that derives deverbal stems in Mekens is the participial derivational morpheme, which has two forms -pit, after vowel final stems, and -ipit after consonant final stems. This morpheme can also occur with both transitive and intransitive verbs. However, it is does not create a noun, but rather an adjective stem. Thus, I gloss it as adjectivizer. The derived stem corresponds to the resulting state of the event described in the base verb, and refers to the patient affected by that event. Examples (8-10) show the application of this morpheme to an intransitive verb. In (8), there is a complex noun, which undergoes derivation forming an intransitive verb as shown in (9). In example (10), the whole derived word takes the participial derivational morpheme (adjectivizer) -pit, forming a deverbal stem with the meaning of ‘someone grown up’.²

(8) pagop-taip
    new-male
    boy

(9) se-e-pagop-taip-kwa
    3C-INTRVZ-new-male-TR.TH.V
    he grew up

(10) s-e-pagop-taip-kwa-pit    so-a ke
    3S-INTRVZ-new-male-TR-ADJR see-TH.V DESID.12
    I want to see him a grown up boy

Examples (11-12) illustrate the use of the participial deverb alizer with a transitive verb stem.

(11) taose-pïk    mar-a=Ôt
    caititu-black tie-TH.V=I
    I tied up the peccary

(12) i-mar-ipit    so-a-r=Ôt
    3S-tie-ADJR see-TH.V-PST=I
    I saw the one that was tied up

The derived stems formed with the participial morpheme -pit are adjectival stems in Mekens, having all the properties associated with adjectives in the language. The structural distribution of these deverbal forms is the same as that of underived adjective stems: they are bound stems and they modify the noun with which they form a noun phrase (NP).

² This morpheme -pit/-ipit is cognate with the morpheme -pîr (-pit) in Tupi-Guarani languages, that has been analyzed as patient nominalizer, following the analysis of Tupinambá (Tupi Antigo) by Rodrigues (1953).
In the following example (13), the deverbal participial stem [V-pit] modifies the derived noun *otat pokaap* ‘matches; lighter’. Examples (10) and (12) above showed the deverbal participial stem modifying the third person personal prefix, *s/-i*.

(13)  

\[
\begin{array}{cccccc}
\text{o-ike} & \text{otat} & \text{pok-a-ap} & \text{oetoeka-pit} & \text{ar-a-t} \\
1S-older.brother & fire & burn/light-TH.V-NMLZ & lose-ADJR & get-TH.V-PST \\
\end{array}
\]

My older brother got the lost lighter.

One could also entertain the analysis of these deverbal participial stems as derived nouns instead of derived adjectives. Since the categories of adjectives and inalienable nouns share many properties, there is also the question of whether the whole category of adjectives could be dispensed with in the language. However, even though the categories of nouns, specially [+possessible, -alienable] nouns, and adjectives are similar in that both are bound stems, never occurring as free forms or forming a phrasal unit by themselves, there are, nonetheless, crucial distinctions separating these two categories. Inalienable nouns and adjectives differ in the nature and direction of the relation established between the corresponding stem and the preceding material, be it a noun or a personal prefix. While an inalienable noun stem stands in a possessive relationship with the preceding prefix or noun, an adjective stem stands in a modification relationship, as seen in examples (14) to (16) below. Note the difference in the gloss of these examples. While they can translate as just ‘foot’, ‘hot’ and ‘tied up’, the possessive relation between the prefix and the inalienable noun stem and the modification relationship between the prefix and the adjective stem is evidentiated by the complete gloss of each example, which is ‘his/her/someone’s foot’ (14), ‘someone/something hot’ (15), and ‘someone/something tied up’ (16), respectively.

(14)  

\[
\begin{array}{c}
i-piso \\
3s-foot \\
his/her foot
\end{array}
\]

(15)  

\[
\begin{array}{c}
s-akop \\
3s-hot \\
Hot, someone/something hot
\end{array}
\]

(16)  

\[
\begin{array}{c}
i^4-mar-ipit \\
3s-tie-ADJR \\
someone/something tied up
\end{array}
\]

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3 There is phonetically conditioned allomorphy: The morpheme is realized as *s-* before vowel initial stems, and as *i-* before consonant initial stems.

4 It should be noted that the 3rd person prefix *i-* is homophonous with the nominalizer prefix *i-* discussed in section 4, examples (24-26) on.
Another distinction between inalienable nouns and adjective stems can be observed in the direction of the modification inside the NP, which is reversed for these two categories. In the case of inalienable nouns, the possessed noun is the head of the NP, determined by the possessor. Whereas in the case of adjectives, the adjective stem modifies the preceding noun or prefix, which is the actual head of the noun phrase. As the above examples (14-16) show the modification applies leftwards going from the adjective to the preceding noun or prefix, but rightwards in the case of inalienable noun stems, as it is instantiated in the above examples (14-16).5

Furthermore, nouns and adjectives also differ with respect to the derivational affixes they take. For instance, adjectives, but not nouns, can take the transitivizer suffix -ka which forms transitive verb stems with the meaning ‘make Y have the property of X’, where X is the base adjective stem, as in s-akop-ka ‘to heat something’ (3S-hot-TR).

I maintain the analysis of these deverbal participial constructions formed with -pit as derived adjective stems, since they present those properties associated to adjective stems and not those associated to inalienable nouns. The deverbal participial constructions stand in a modification relationship with the preceding noun or prefix.

3. Event grammatical nominalization in subordinate adverbial constructions

Nominalization is also the main strategy applied for the realization of adverbial constructions in Mekens. The circumstantial nominalizer -ap forms the basis for temporal-conditional, causal and purposive adverbial constructions. Both temporal-conditional and causal adverbial constructions use the same morphosyntactic strategy that combines nominalization with postpositions, resulting in postpositional phrases that encode the adverbial modification.

5 For further details and examples of this distinction see Galucio (2001, chapter 2).
3.1. Conditional-temporal and causal adverbial constructions: 
[Nominalization + Postposition]_{PP}^{6}

Conditional-temporal and causal adverbial modification are expressed through a postpositional phrase composed of a deverbal noun and a specific postposition. The verb that indicates the circumstance (condition, temporal nexus or cause) of an event in relation to the main event is nominalized with the circumstantial nominalizer suffix -ap. This derived nominal form functions as the object (argument) of the postpositional phrase. Conditional-temporal adverbial constructions employ the locative postposition -ese. Causal adverbial constructions employ mainly the ablative postposition -eri. In all cases, the postpositional phrase may either precede or follow the main clause (17-18).

(17)  
\[ o-ib-ra-ab=ese \quad tabir=eri \quad ka \quad ki-po-e-mot-kwa \]
\[ 1S\text{-come-REP-NMLZ}=LOC \quad field=ABL \quad go/come \quad 1PL.INCL\text{-hand-INTRVZ-make-TR} \]
When I come back from the field, we will work
(lit. at my coming back from the field, we work).

(18)  
\[ ki-po-e-mot-kwa \quad [o-ib-ra-ab=ese \quad tabir=eri \quad ka] \]
\[ 1PL.INCL\text{-hand-INTRVZ-make-TR} \quad 1S\text{-come-REP-NMLZ}=LOC \quad field=ABL \quad come/go \]
We will work when I come back from the field
(lit. we work at my coming back from the field).

When applied to intransitive verb stems, this derived postpositional phrase [nominalization + POSP] maintains the subject indexing expressed through the person prefix, which functions in the derived noun (phrase) as the possessor of the nominalization, as shown in (19).

(19)  
\[ ôt \quad o-akara \quad ôt \quad o-etayapka-ab=ese \]
\[ I \quad 1S\text{-fall} \quad I \quad 1S\text{-slip-NMLZ}=LOC \]
I fell down because I slipped
(lit. I fell down at my slip).

On the other hand, nominalized transitive verbs show two possibilities for expressing the original subject of the base verb. It is either expressed in an oblique phrase (20) or it is omitted under coreference with the main clause subject (21).

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6 In Galucio (2001), the nominalizing suffix -ap + the locative postposition ese, when used in these adverbial constructions, had been analyzed as a single word abese ‘if, when’, classified as a subordinator. The same analysis was made for the postpositional phrase kaab=ese, classified in that work as a morphological variant of abese. This analysis was later revised to reflect the analysis presented here. See also Galucio (2011) for a comprehensive analysis of all subordinate adverbial constructions in Mekens.
The nominalization used as the object of a postposition in adverbial constructions functions as an event nominalization, referring to the circumstance of an event in relation to another. The lexical nominalizations shown in (1-4) above denote an entity and create a lexical item (instrument or place). In the lexical nominalizations, the nominalizer morpheme -ap directly follows the verb root, while in event nominalization (17-21), the nominalizer appears after the thematic vowel and other inflectional morphemes. Furthermore, the event nominalization maintains the syntactic properties (specifically the argument structure) of the verb, while the lexical nominalization holds only a morphological and semantic association to the base verb. These distinctions between the two types of nominalization can be observed in examples (22a-b) and (23), repeated from (2) and (20) respectively.

3.2. Purposive adverbial constructions

Purposive adverbial constructions also employ a related strategy that may involve nominalization. The information about the purpose of a proposition is expressed either through a derived verb phrase or through a complex structure involving motion auxiliary verbs. Relevant for this paper is the strategy that employs a derived verb phrase, which is formed with the copula or verbalizer particle na, meaning ‘be X; become X’. Such derived VPs [NP = nã] can be based either on underived (24) or on derived nouns (25-26). In the latter, the same circumstantial nominalizer -ap is employed, forming a deverbal noun that is the base for the particle nã to apply.
(24) sete i-õp [se-kip aisi na]  
s/he 3s-give 3c-young.brother wife COP  
He gave her to be his brother’s wife.

(25) āsi asisi perop-ka-a-t [tiero mot-kwa-ap na]  
mother corn cook-TR-TH.V-PST chicha make-TR-NMLZ COP  
My mother cooked corn to make chicha (type of fermented drink)  
(lit. My mother cooked corn to become that which makes chicha).

(26) koikopit se-top i-maot kakwa [se-ekwe-ap na]  
type.of.tree 3c-father NMLZ-transform habitual 3c-climb-NMLZ COP  
It is koikopit tree that his father used to transform for him to climb up  
(lit. koikopit tree is what his father used to transform in order to be his climbing object).

4. Argument grammatical nominalization

There is a group of constructions in Mekens that are organized around the syntactic function of direct object and that have a similar structure in the language. I have termed these constructions in previous works as object focus constructions (OFC), since they include so-called object cleft constructions, object WH-questions and constructions that correspond to object relative clauses in European languages. My point here is to show that these constructions are nominalized clauses functioning as nominal arguments and predicates, as proposed, for instance, for Sasak and other Austronesian languages by Shibatani (2009).

4.1. Object focus constructions: object cleft constructions, object WH-questions and object relative clauses

Descriptively, in these three constructions the verb is prefixed with an i- morpheme, and appears in its non-finite form, without morphological tense-aspect marking. That is, the verb is reduced to the verb root, and does not take the thematic vowel -a or the tense suffixes. Furthermore, when these three constructions have a pronominal subject, the transitive verb shows an apparent reversal of the general pattern of morphosyntactic alignment in the language. It should also be noted that these constructions have the same distribution as nominal phrases in the language. An example of each of these OFC constructions is provided below, portraying an object cleft construction in (27), an object WH-question in (28), and an object relative clause in (29).

(27) ƞwāē te āsi i-õp ơr=ơ  
pan FOC mother NMLZ-give I=DAT  
It is a pan that my mother gave to me.
What did you really kill?

The man that the dog bit was sleeping.

The structure of these three constructions is similar in that they all have the notional object NP occurring outside the VP, and the verb prefixed with the morpheme *i-* . It should be noted that the canonical word order in Mekens is SOV, with OV being a tight unit (Galucio 2002b).

In the case of WH-questions and cleft sentences, the construction with a non-finite verb form (not marked for tense-aspect) only occurs when the focused and/or questioned constituent is the direct object, as in (27) and (28) above. When the focus is on the subject, as in (30a-b) below, the verb takes the regular verbal tense-aspect markers. Notice that there is also an *i-* morpheme prefixed to the verb in (30a), but, as it will be demonstrated in the remainder of this paper, a crucial point for the current analysis of these constructions is that the *i-* morpheme in (30a) is distinct from the *i-* morpheme that appears in the object focus constructions, shown in (27) to (29) above.

(30)a. ameko ebô i-sogo-a-t
   jaguar/dog really 3S-bite-TH.V-PST
   It was really a dog that bit it/him/her.

b. arob=čp ameko mi-at
   thing=really jaguar/dog kill/shoot-TH.V-PST
   Who killed the jaguar?

Contrary to the situation with WH-questions and cleft constructions, relative clauses always employ a non-finite verb form (without tense-aspect markers), regardless of the grammatical function of the relativized nucleus. The following examples show subject (31) and object (32) relativization. In both cases, the verb is non-finite but only (32) has the morpheme *i-* prefixed to the verb root.

(31) ameko aose sogo se-er-a naat top
    jaguar/dog man bite 3C-sleep-TH.V ?COP AUX.lying.PRG.NPST
    The dog that bit the man is sleeping now.

(32) aose ameko i-sogo se-er-a i-toa
    man jaguar/dog NMLZ-bite 3C-sleep-TH.V 3S-AUX.lying.PRG.PST
    The man that the dog bit was sleeping.
For the purpose of the present discussion, only the object relative clauses are taken into consideration, since we are focusing on the analysis of the \textit{i-} morpheme, in examples like (32).\footnote{For a general overview of relative constructions in Mekens, the reader is directed to Galucio (2006).} The occurrence of the \textit{i-} morpheme in object relative clauses (32) should not be seen as part of the relativization strategy, since this same morpheme also occurs in non-relativized declarative and interrogative sentences, as shown in examples (27) and (28) above.

### 4.2. Object focus constructions and morphosyntactic alignment

Another relevant property of the object focus constructions under consideration is the alignment pattern they present. In simple transitive clauses in Mekens, the object of a transitive verb is realized either by a noun, as in (33) or by a personal prefix (34), but not both at the same time (34'). On the other hand, the subject of a transitive verb is expressed by an NP external to the VP, which can be either a noun (33-34) or a pronoun (35), but not a personal prefix. Example (35’) shows that the personal prefix in the transitive verb cannot be indexed to the verb subject, but only to its object.

\begin{align*}
(33) & \quad \text{aose ameko so-\textit{a-t}} \\
& \quad \text{man jaguar/dog see-TH.V-PST} \\
& \quad \text{The man saw the jaguar.}
\end{align*}

\begin{align*}
(34) & \quad \text{aose i-so-\textit{a-t}} \\
& \quad \text{man 3S-see-TH.V-PST} \\
& \quad \text{The man saw it/him/her.}
\end{align*}

\begin{align*}
(34') & \quad *\text{aose ameko i-so-\textit{a-t}} \\
& \quad \text{man jaguar/dog 3S-see-TH.V-PST} \\
& \quad \text{(the man saw the jaguar.)}
\end{align*}

\begin{align*}
(35) & \quad \text{ameko so-\textit{a-t} õt} \\
& \quad \text{jaguar/dog see-TH.V-PST I} \\
& \quad \text{I saw the jaguar.}
\end{align*}

\begin{align*}
(35') & \quad \text{ameko o-so-\textit{a-t}} \\
& \quad \text{jaguar/dog 1s-see-TH.V-PST} \\
& \quad \text{The jaguar saw me (*I saw the jaguar).}
\end{align*}

In addition, in sentences with pronominal arguments, the general alignment pattern for pronominal distribution in Mekens is ergative-absolutive: pronouns refer to transitive subjects (A), whereas personal prefixes refer to intransitive subjects (S) and to objects (O). Sentences (36) and (37) show the use of personal prefixes as subject markers with
intransitive verbs. The brackets indicate that the pronouns can be used optionally for emphasis.

(36) \( e-er-a-t \) \( \text{en}i=ese \)  
2S-sleep-TH.V-PST (you) hammock=LOC  
You slept in the hammock.

(37) \( o-er-a-t \) \( \text{o}t \)  
1S-sleep-TH.V-PST (I)  
I slept.

The same series of prefixes mark the direct object of transitive verbs, as shown in sentences (38) and (39), whereas the transitive subject is referred by the series of pronouns, which in the case of transitive verbs are obligatory, except for third person. Sentence (40) shows that there is an \( i- \) third person prefix in the language, which parallels the first and second person prefixes \( o- \) and \( e- \), respectively, and which functions as the direct object of the transitive verb.

(38) \( o-so-a-r=\text{et} \)  
1S-see-TH.V-PST=you  
You saw me.

(39) \( e-so-a-r=\text{ot} \)  
2S-see-th.v-pst=I  
I saw you.

(40) \( i-so-a-r=\text{ot} \)  
3S-see-th.v-pst=I  
I saw him/her/it.

At first sight it might appear that in the object focus constructions (cleft sentences, object relative clauses, and object WH-questions) the pattern of verbal agreement is not only reversed, but also duplicated. All these constructions have a morpheme \( i- \) immediately to the left of the verb root, and the series of personal prefixes, as opposed to pronouns, is employed to index the external argument of the verb (A).

Observe the object focus constructions in sentences (41) and (42). Sentence (41) is an object WH-question, and sentence (42) is the answer to this question, given in a cleft sentence that also puts the object in focus position. Note that the verb is in the non-finite form, without tense-aspect markers, shows an inner prefix \( i- \) and a personal outer prefix referring to the verb external argument.

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8 There is an \( i- \) third person prefix in the language, as we have seen in previous examples.
(41)  arrob=êp  te  te  e-i-mi
      thing=EMPH true  FOC  2S-NMLZ-shoot/kill
What did you really kill?

(42)  isii  ebõ=êp  te  o-i-mi
      deer  really=EMPH  FOC  1S-NMLZ-shoot/kill
It was really a deer that I killed.

The pattern shown in these cleft and WH-constructions is the same pattern found in object relative clauses, as illustrated in (43), in which the notional external argument of the verb ‘to kill/to shoot’ is referred to by the first person prefix o-.

(43)  kwe  te  pii=p  o-i-mi  so-a  kot
      game  true  yesterday  1S-NMLZ-shoot/kill  see-TH.V  IM.FUT
I will see the same game animal that I shot yesterday.

The important fact here is that this pattern of verbal agreement is directly related to the absence of tense-aspect morphology in the verb combined with the inner prefix i-. However, as it will be argued in the remaining of the paper, the inner prefix i- in these object focus constructions (41-43) is not an agreement marker, but rather an homophonous nominalizer morpheme, and the outer prefix has the function of a possessive marker.

4.3. Homophony: the multiple morphemes {i-} and their functions

Mekens has three distinct prefixes i-, which are homophonous and potentially misleading since they occur in the same position, and related structures. One such prefix is the third person pronominal prefix {i-}, seen, for instance, in sentence (40) and also in examples (14-16) above. The other two morphemes are the object nominalizer prefix {i-}, seen in sentences (41-43), and the antipassive morpheme {i-} attached to transitive verbs when the direct object is demoted to oblique. Examples of these three distinct morphemes with contrasting opposition in each paradigm are presented below: (44a-c) for the third person prefix i-, (45a-b) for the antipassive morpheme i-, and (46) for the nominalizer i-.

(44)a.  ameko  o-so-a-t
      jaguar/dog  1S-see-TH.V-PST
The jaguar saw me.

9  All three morphemes have two allomorphs: i- before consonant initial stem and s- before vowel initial stem.
b. *ameko e-so-a-t*
   jaguar/dog 2s-see-TH.V-PST
   The jaguar saw you.

c. *ameko i-so-a-t*
   jaguar/dog 3s-see-TH.V-PST
   The jaguar saw him/her/it.

(45)a. *i-\(\textit{taip}\) kwirisa asak\(\textit{w}a\)ira pirig-\(\alpha\)*
   3s-son bee (sp.) beehive throw.down-TH.V
   His son threw down the beehive.

b. *i-\(\textit{taip}\) i-pirig-\(\alpha\) pe=kwirisa asak\(\textit{w}a\)ira*
   3s-son \(\textit{ANTIP}\)-throw.down-TH.V OBL= bee (sp.) beehive
   His son threw down the beehive (lit. his son threw (it) down, the beehive).

(46) *is\(\textit{i}\) eb\(\textit{\textdegree}\) te o-\(\textit{i-mi}\)*
   deer really= EMPH FOC 1s-NMLZ-shoot/kill
   It was really a deer that I killed.

That the *i*- morphemes prefixed to the verb in sentences (45b) and (46) are distinct from the third person prefix, shown in (44c) is demonstrated by the fact that both in the demoted object construction (45b) and in the focused object construction (46) that morpheme is invariably *i-*, that is, it does not show agreement with the semantic NP object. Note in the following examples that there is no agreement between the *i*- prefix and the demoted object in (47) or between the *i*- prefixed and the focused constituent in (48).

(47) *ar\(\textit{\textdegree}\)p sete i-so-a pase pe=\(\textit{\textdegree}\)t (…)*
   then she/he \(\textit{ANTIP}\)-see-TH.V all OBL=I
   Then she looked well at me (…)

(48) *\(\textit{\textdegree}\)t te o-i-sop ik\(\textit{\textdegree}\)o*
   you FOC 1s-NMLZ-see DEM
   It was you that I saw at that time.

Another evidence of the distinction between the third person prefix *i*- and the *i*- prefix found in the object focus constructions comes from the distributional properties of these morphemes. Compare examples (49a-b’) to example (50) below. The former illustrate a possessed construction with pronominal possessor, showing that a nominal possessor cannot co-occur with a third person prefix *i-*. On the other hand, sentence (50) shows that in the object focus construction it is possible for the *i*- morpheme prefixed to the verb root and the nominal that refers to the notional A argument to co-occur. In this case, the nominal referring to the notional A is structurally a possessor of the nominalized verb form, as it will be line out in the next
section. Since a third person prefix does not co-occur with a nominal possessor (49b’), the \(i\)-morphemes in (49b) and (50) are justifiably analyzed as distinct morphemes.

(49)a. kwamoa tek
    shaman’s house
b. i-tek
    his own house
b’ *kwamoa i-tek
    (shaman’s house)
(50) \(\hat{s}\)\(\hat{s}\) ko pa ōt [Manoel i-mi]
dereer ingest fut I Manoel NMLZ-shoot/kill
  I will eat the deer that Manoel killed (lit. I will eat the deer, Manoel’s killing).

**Object focus constructions versus demoted object constructions**

Let’s turn now to the distinction between the morphemes \(i\)- in the two types of constructions shown in (47) and (48) above. It is clear that these two sentences present a different morphosyntactic structure. The sentence in (47) is a verbal sentence, where the object has been demoted to an oblique position, the verb shows its regular verbal morphology, and is prefixed with a morpheme \(i\)-. Sentence (48), on the other hand, is a predicative nominal sentence where the verb does not have tense-aspect verbal morphology, but also shows an \(i\)-morpheme prefixed to the verb root. I propose that this structural difference is also related to the distinct \(i\)- morphemes employed in each case, which consequently trigger different verb behavior.

In Galucio (2002a), I tried to give a unified analysis for these two \(i\)-morphemes exemplified in (47) and (48), by entertaining two hypotheses. I considered the \(i\)- morpheme(s) to be either an antipassive marker (as defined by Silverstein, 1976) or an incorporated pronominal argument (as defined by Baker, 1988). Compelled by my view, at the time, of those \(i\)-morphemes as being a single linguistic entity, I concluded in that article that the prefix \(i\)-, in both types of sentences above, was the same morpheme, an incorporated pronominal argument. The analysis put forwarded there was that this \(i\)- morpheme was an incorporated object marker functioning as the verb internal argument of object WH-questions cleft object focus constructions, object relative clauses, and also in clauses where the object is demoted. That is, I opted to analyze as a single morpheme all instances of the \(i\)- morpheme that precedes the verb every time the NP referring to the notional object does not occur in the canonical direct object position in the language, i.e., immediately to the left of the
verb. Therefore, both the object focus constructions and the antipassive (object demotion) construction were analyzed as carrying the same i-morpheme incorporated to the verb root.

While this latter generalization is correct in the sense that when the NP that refers to the thematic or notional object does not occur in the canonical direct object position in the language, the verb is prefixed with i-, there is also another important observation to be made. By taking the prefix i- in sentences like those in (47) and (48) to be the same morpheme, we failed to acknowledge the fact that these morphemes i- serve different functions and cause different effects on the verb, or, to say it in another way, they co-occur with different verbal morphology. Therefore, admitting the existence of these distinct morphemes i- in Mekens, allows for a more comprehensive analysis of the object focus constructions, in terms of nominalization structures, rather than in terms of double agreement and reversed alignment pattern.

For the sake of argumentation, compare the two sentences below. What is crucially different between sentences (51) and (52) is that in the former the verb shows tense-aspect morphology, but does not allow a personal prefix referring to the A argument, whereas in the latter, the verb does not show tense-aspect morphology, and employs personal prefixes to refer to the verb’s external argument (A), in an apparent reversion of the pronominal alignment pattern in the language.

(51) o-met i-k-a-r-ap sìrap=pe
1S-husband ANTIP-ingest-TH.V-PST-NEG yuka.puree=OBL
My husband did not eat it, the yuka puree.

(52) sìrap te o-i-ko
yuka.puree FOC 1S-NMLZ-ingest
It was yuka puree that I ate.

Admitting that the morpheme i- preceding the verb root in (51) is a distinct morpheme from the i- preceding the verb root in (52), what would the category of these two morphemes be. It should be clear by now that both i-morphemes, in (51) and (52), are functional categories, in the multi-dimensional sense defined by Muysken (2008).

The i-morpheme in the demoted object constructions (51) has been glossed as ANTIP ‘antipassive’ in anticipation of an analysis of this morpheme as an antipassive morpheme, but this topic will not be further
4.4. The object focus constructions as grammatical nominalizations

Based on the morphosyntactic properties of the object focus constructions (object cleft constructions, object WH-questions and object relative clauses) as outlined in this and the previous subsections, I analyse the $i$-morpheme in these OFC as a nominalization marker. Shibatani & Makhashen (2009) define grammatical nominalization in terms of a ‘process that yields referring expressions that can fill the syntactic function of arguments or predicate nominals, and refers to an entity characterized in terms of the event in which it has crucial relevance, but which has no lexical status, class identification or names’.

In the case of the object-focus constructions of Mekens, the nominalization expressions formed by the verb root plus the nominalization morpheme $i$- refers to the entity characterized in terms of the event described by the verb in which it is involved as the object. Therefore, the $i$- morpheme of those constructions could be characterized as an object grammatical nominalization. It follows from this definition that the object WH-questions, object cleft sentences and object relative clauses are in fact clear examples of grammatical nominalizations in Mekens. These grammatical nominalizations have the same distribution of other non-derived noun phrases in this language, and can function as nominal arguments or nominal predicates.

This analysis explains the lack of tense-aspect morphology on the verb, since the nominalization prevents the use of verbal morphology, in

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10 A complete analysis of these demoted object constructions is the topic of another paper in preparation, that should also include comparative work with other Tupian languages.

11 There are cognates of this morpheme $i$- of Mekens object focus constructions occurring in similar constructions in various other Tupian languages, including all of the Tupari languages (Aragon 2008, Rodrigues et al. 2006), and also in other language families (Franceschini 1999, Gabas Jr. 1999, Storto 1999), even though they have not all been analyzed as nominalizers. In the languages of the Tupi-Guarani family there is a derivational morpheme $(e)mí$ that is traditionally analyzed as an object nominalizer (Dietrich 1990, Rodrigues 1953, Seki 2000, among others). Based on the examples presented in Galucio (2001, 2002a), Rodrigues et al. (2006) include the Mekens $i$- morpheme found in the object focus constructions as a cognate to the object nominalizer morpheme $(e)mí$ found in the Tupi-Guarani languages.
Mekens. It also explains the apparent reversal of alignment pattern. In the nominalized construction, the person prefix referring to the external argument of the described event is formally the possessor of the nominalized verb. Comparing the examples of nominal possession in (53a-e) to the examples of object focus constructions in (54-56), it is clear that the same paradigm is present in both sets of examples. In the paradigm of nominal possession, the prime examples (53a'-53c') are non-grammatical examples showing that the personal pronouns cannot be used as possessors. Example (53d'), repeated from (49b') shows that a nominal possessor cannot co-occur with a third person prefix i-.

(53)a  o-tek  my house  
a'  *  ŏt tek  (my house)  
b.  e-tek  your house  
b'  *  ĕt tek  (your house)  
c.  i-tek  his house  
c'  *  sete tek  (his house)  
d.  kwamoa tek  shaman’s house  
d'  *  kwamoa i-tek  (shaman’s house)  
e.  se-tek  his own house

The following sentences (54-56) show that the same paradigm of nominal possession is employed in the nominalization expressions used in the object focus constructions. The extraposed nominalized relative clauses in these examples are parallel to first, second and third persons nominal possession, as given in (53a-c). Note that the expressions i-at (54) and i-mi (55-56) refer, respectively, to the thing that has been caught and the thing that has been shot or killed.

(54)  kiypit  ko  pa  ŏt  [o-i-at]  
fish  ingest  FUT  I  1S-NMLZ-catch  
I will eat the fish that I caught (lit. I will eat the fish, my catch (what I caught))

(55)  isii  te  kēra  e-i-mi  
deer  FOC  NASSERT  2S-NMLZ-shoot/kill  
Was it a deer that you killed? lit. is it a deer, your killing?

(56)  isii  ko  pa  ŏt  [s-i-mi]  
deer  ingest  FUT  I  3S-NMLZ-shoot/kill  
I will eat the deer that he killed (lit. I will eat the deer, his killing).
It follows from the analysis of the *i*-morpheme in the object focus constructions as nominalizer that all these OFC (object cleft constructions, WH-object questions and object relative clauses) are cases of nominal modification in Mekens. They can all be analyzed as having a predicative nominal structure in which there is a noun phrase or a WH-pronoun referring to the object nominal topic and a nominalized expression functioning as predicate and modifying the object nominal topic. That is the same structure found in basic predicative sentences, which are formed in Mekens by simply juxtaposing two nominal phrases, as shown in (57) below.

(57)  
\[
\begin{align*}
o-top & \quad kwamao \\
1s-father & \quad shaman
\end{align*}
\]
My father is a shaman.

The following examples (58-59), repeated from (41) and (42) above, show the proposed structure for an object WH-question and an object cleft constructions given in response to a question. The focus particle *te* helps to set the limit between the focused nominal and the nominalized expression in predicate position.

(58)  
\[
\begin{align*}
[arob=\tilde{e}p & \quad te] \quad [e-i-mi] \\
\text{thing=} & \quad \text{EMPH} \quad \text{true} \quad \text{FOC} \quad 2s-NMLZ\text{-shoot/kill}
\end{align*}
\]
What did you really killed?

(59)  
\[
\begin{align*}
[isii \quad eb\tilde{o}=\tilde{e}p] & \quad te \quad [o-i-mi] \\
\text{deer} & \quad \text{really=} \quad \text{EMPH} \quad \text{FOC} \quad 1s-NMLZ\text{-shoot/kill}
\end{align*}
\]
It was really a deer that I killed.

The same analysis applies also to the nominalized expressions that occur modifying a noun in constructions that correspond to object relative clauses, as shown in (60), repeated from (29) and (32) above. The nominalized expression *ameko i-sogo* ‘what was bitten by the dog’; ‘the dog’s bite’ modifies the NP *aose* ‘man’, and the whole expression corresponds to an object relative clause that is the subject of the complex sentence.

(60)  
\[
\begin{align*}
aose \quad [ameko \quad i-sogo] & \quad se-er-a \quad i-toa \\
\text{man} & \quad \text{dog/jaguar} \quad \text{NMLZ-bite} \quad 3c\text{-sleep-TH.V} \quad 3s\text{-AUX.lying.PRG.PST}
\end{align*}
\]
The man that the dog bit was sleeping.

It also follows from the definition of grammatical nominalization given above that these nominal expressions have the same distribution and functions of non-derived noun phrases in the language. They can be the argument or part of a verbal argument, either object or subject. In example (61) the nominal expression *o-i-sara-kwa* ‘my made bad’; ‘what I turned
into bad’ functions as modifier of the noun \( kwe \) ‘animal’, and the whole nominal expression (an object relative clause) is the object argument of the verb \( so\rangle p \) ‘to see’. In (62), the nominal expression \( o\rangle i\rangle m\rangle y \) ‘my telling’ is the object of the clause.

(61) \( p\rangle i\rangle p \) te \( kwe \) o\rangle i\rangle s\rangle a\rangle r\rangle a\rangle k\rangle w\rangle a \) so\rangle p saa kot
    yesterday FOC animal 1S-NMLZ-bad-TR see-? yet IM.FUT
    I will first see the animal that I shot yesterday.

(62) \( o\rangle i\rangle m\rangle y \) piro\rangle apo\rangle =\rangle o\rangle t \)
    1S-NMLZ-tell have-NEG=I
    I do not have anything to tell (lit. my say I don’t have).

These nominalized constructions can also occur by themselves without the modified noun as either the topic nominal (subject) or the predicate nominal in predicative sentences in Mekens, as shown in (63). We have seen above that these predicative sentences are formed by simple juxtaposition of two noun phrases in Mekens.

(63) \([e\rangle i\rangle s\rangle o\rangle p]\rangle \) \( [o\rangle i\rangle m\rangle i] \)
    2S-NMLZ-see FOC 1S-NMLZ-shoot/kill
    What you saw is what I killed (lit. your seeing is my killing).

These nominal expressions also occur as the nominal base for the copula or verbalizer particle \( na \). This particle has scope over nominal phrases only, as seen in section 3.2 above. Sentence (64) shows a demonstrative pronoun as the topic nominal and the nominalized clause as the predicate in the scope of the particle \( na \).

(64) \( e\rangle k\rangle e \) \([e\rangle i\rangle a\rangle t ] \rangle \) \( na \) i\rangle no nop
    This.one 2S-NMLZ-catch=VBLZ 3S-other no
    This one is for you, the other one is not
    (lit. this one (is) to be what you take, the other one (is) not).

There are also lexicalized instances of these nominalized expressions. That is, examples of nominalization formed with the morpheme \( i\rangle -\) that refers to the object of the event described by the verb which have been lexicalized as generic nouns. Sentences (65-68) show how the lexical noun for ‘food’ was initially based on the nominalization of the verb -\( ko \) ‘to ingest’. (65) is a regular transitive clause, in (66) there is an object WH-question formed with the nominalized clause -\( i\rangle ko \), (67a-e) present an inflected paradigm of possessive construction with the word for food -\( i\rangle ko \) derived from the nominalized clause and lexicalized as a non-alienable noun, and (68) shows this lexicalized word as the object of the verb \( ko \) ‘to ingest’.
5. Summary

Nominalization is a common strategy in Mekens. It is a very productive way to form lexical items (lexical nominalization). The circumstantial and participial deverbalizers described in section 2 are typical examples of lexical nominalization in Tupian languages. The distinction between lexical and grammatical nominalization (Shibatani & Makhashen 2009) was found to be relevant for the analysis of nominalization in Mekens. As we have seen, there are two major cases of grammatical nominalization in the language. In subordinate adverbial constructions, the nominalization process creates nominal expressions characterized in terms of events denoted by the clause. Though the same circumstantial lexical nominalizer is employed in such adverbial constructions, there are morphological, semantic and functional differences between lexical nominalization and the event grammatical nominalization found in adverbial constructions. The main insight of this paper is to distinguish between homophonous morphemes i- in Mekens. Only by making this distinction, we open the possibility for the nominalization analysis argued for in section 4. The object focus constructions (object cleft constructions, object WH-questions and object relative constructions) are analyzed in terms of an argument grammatical nominalization process that creates a referring nominal denoting the object of the clausal event.

12 The last vowel of the verb root ko ‘to ingest’ is fused to the thematic vowel suffix -a, giving the verb form ka.
We argue for a structure of these constructions as predicative nominal constructions, similar to all other predicative nominal clauses in the language. In previous works (Galucio, 2002a), I had already put forwarded an analysis of these object-focus constructions in terms of nominalization. The current analysis presented here differs from my own previous analysis first in considering the occurrence of three homophonous morphemes $i$- in Mekens, and secondly in treating the $i$- morpheme of such object focus constructions as the effective nominalizer, whereas in Galucio (2002a), that prefix was taken to be an incorporated pronominal argument, and the nominalization was considered to occur without overt nominalizing morphology. The analysis of object relative clauses in terms of argument nominalization deserves still further consideration, but it allows for an unified account of all these object focus constructions and is well justified for the object WH-questions and the so-called object cleft sentences.

**Abbreviations and symbols**

? = unidentified gloss; 1PL.INCL = first person plural inclusive; 1S = first person; 2S = second person; 3S = third person; 3C = third person co-referential; ABL = ablative; ADJR = adjectivizer; ANTIP = antipassive AUX = auxiliary; COP = copula; DAT = dative; DEM = demonstrative; DESID.12 = first and second person desiderative; EMPH = emphasis; FOC = focus; FUT = future; IM.FUT = immediate future; INTRVZ = intransitivizer; LOC = locative; NASSERT = non-assertive; NEG = negation; NOM = nominal expression; NMLZ = nominalizer; NP = noun phrase; NPST = non-past; OBJ = direct object; OFC = object focus construction; OBL = oblique; POSTP = postposition; PP = postpositional phrase; PRG = progressive; PST = past; REP = repetition; TR = transitivizer; VBLZ = verbalizer; TH.V = theme vowel; V = verb; VP = verb phrase; WH = topic (what, which, where, when) questions.
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